Primo Back Office Guide

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Getting Started

This section includes:

Overview of the Primo Back Office

Return to menu

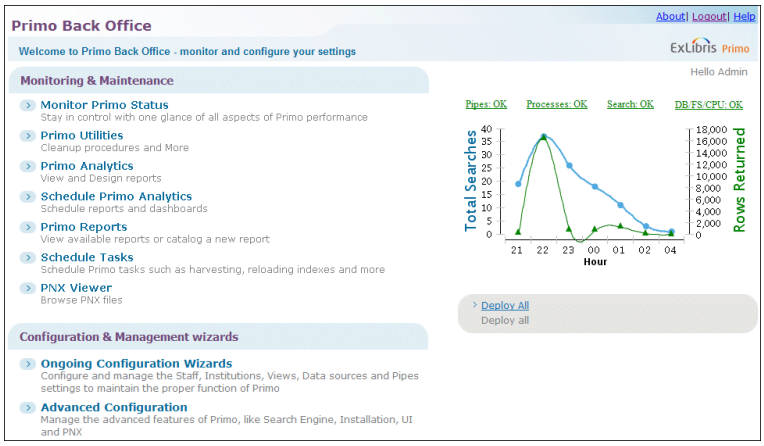
It is important to understand the main purposes of Primo's Back Office (see Primo Back Office Home Page), the Back Office components, and how these components relate to each other.

Note

It is not recommended for staff users to perform Back Office configurations from multiple windows and tabs.

The basic purpose of the Back Office is to provide for the following:

- Configuring Primo's Front End
- Configuring the Publishing Platform Pipe Flow
- Monitoring Primo Status



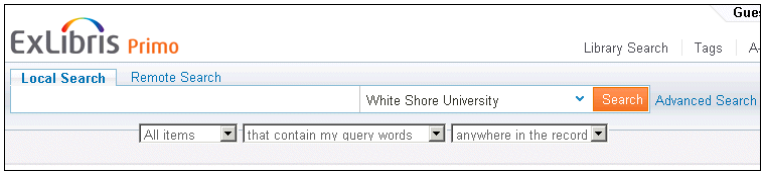
Primo Back Office Home Page

Configuring Primo's Front End

Through the Back Office, Primo administrators can configure the settings and functions of Primo's Front End user interface. Although the system's out-of-the-box settings can be used, it is necessary to perform a minimal amount of customization to your system.

The Primo Front End user interface is made up of views, which are the sole means of user interaction with Primo. Each institution can have its own fully customized view, which must be configured through the Back Office.

Every view can have one or more tabs. Defining tabs enables you to divide the Primo repository and records from remote resources into resource groups or types. For example, the search box in the following figure has a tab for local searches and another tab for remote searches.



Primo Front End Search Box

Within each tab, one or more search scopes can be defined. A search scope groups records so that a search can be restricted to only those records.

After discovery, Primo indicates the availability of the resource in the source system. Primo interacts with the source system to provide more information about the resource or to deliver the resource.

Configuring the Publishing Platform Pipe Flow

The Back Office is used to configure and control the applications that manage the publishing platform. The publishing platform is software that enables a Primo site to consolidate its full range of resources, regardless of the resource's media type. The Publishing Platform harvests and then normalizes the source records of the various resources to a standard and enriched format. The new record format is called the PNX (Primo Normalized XML).

The Primo publishing platform also enables the user to schedule unattended harvesting and processing of the data sources, while letting the user monitor and control the entire process of the pipe run. The publishing platform is capable of working with various data sources and data formats. To differentiate between the Publishing Platform processes, pipes are defined for every data source.

Stages

The publishing pipe consists of the following stages:

- Harvesting
- Splitting Records
- Normalization
- Enrichment
- Load to Primo Database

Once the records are loaded into the Primo database, they go through the following additional stages (see Dedup and FRBR)

- Duplicate Record Detection (Dedup)
- FRBR

Harvesting

The first stage in a Primo pipe is harvesting, which is basically copying the source data to the Primo system. Primo supports several harvesting methods including FTP, Copy, and OAI. These harvesting methods can copy the files from a remote server, any mounted drive, or a server that stores metadata in Dublin Core and supports OAI-PMH harvesting.

Splitting Records

During the second stage, the records are split into two groups. The first group is a bulk of normal records, which are sent through the publishing pipe to the Normalization and Enrichment stages. These normalized records include new and updated records received during the Harvesting stage. The second group of records is deleted records. These records were deleted from the data sources, and thus do not need to be normalized or enriched, but the records still need to be deleted from the Primo index.

Normalization

Every pipe also works with a set of normalization rules. Normalization rules can be shared by different pipes. The normalization process converts the group of normal records to the PNX format, using the normalization rules set of the pipe.

Enrichment

Once the records are normalized, they may be enriched with additional data. Every publishing pipe can be assigned an enrichment set, which includes one or more enrichment routines.

Load to Primo Database

The normalized and enriched data is loaded into the Primo database. The Primo database stores the PNX records (in the P_PNX table) so that they can be retrieved and loaded into the search engine. In addition, the pipe stores the original source records in the database (in the P_SOURCE_RECORD table). After the records are loaded into the Primo database, the Duplicate Record Detection and FRBRization processes are performed.

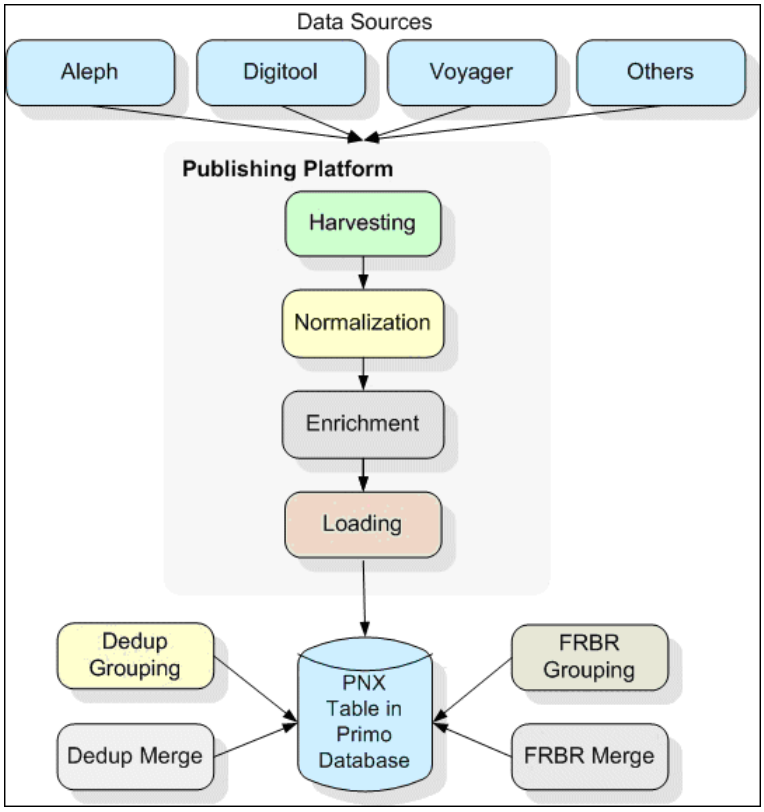
Dedup and FRBR

During the Duplicate Record Detection (Dedup) process, the publishing platform locates duplicate records and groups them together based on predefined algorithms.

The FRBRization process groups records that represent the same intellectual work based on the principles published by IFLA in Functional Requirements for Bibliographic Records: Final Report and IFLA Study Group on the Functional Requirements for Bibliographic Records. For more information on the Dedup and FRBR processes, refer to the *Primo Technical Guide*.

Once the Publishing process is complete, the search engine can retrieve the PNX records from the Primo database.

The above process describes the standard flow of a “regular” pipe. There are additional types of pipes which include variations. For more information on pipe types, refer to Defining a Pipe.



Primo Publishing Platform Pipe Flow

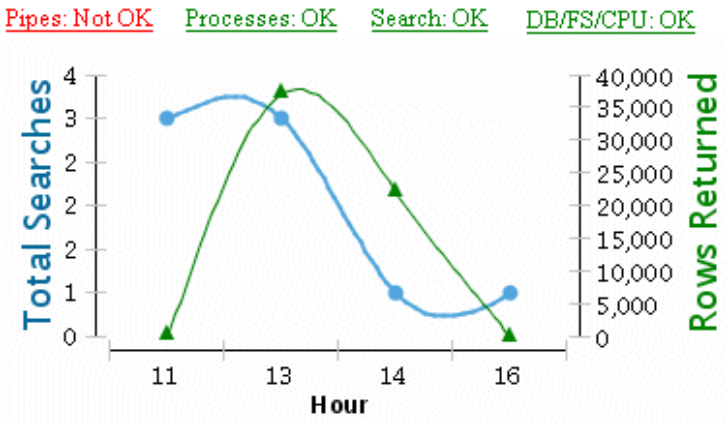
Monitoring Primo Status

The Back Office allows you to monitor the system's performance, including the status of the system's pipes, processes, and search engines. Monitoring Primo status enables you to ensure the system is running properly. The status information is displayed in status boxes on the Back Office's home page, so that you can know right away whether the different parts of the system are functioning properly or not. These system parts include Primo's pipes, processes, and search engines.

Note

For cloud installations, the SEs and many of the processes are monitored and can only be maintained by Ex Libris.

Beneath the status boxes (see Dashboard Monitor in Back Office) is a graph of search statistics. The graph displays the total amount of searches that were performed within the last six hours and the average amount of records returned for these searches.



Dashboard Monitor in Back Office

In addition to the status boxes displayed on the main page, you can monitor the pipes and processes used by your system. Monitoring the pipes and processes helps determine which pipes and processes need to be executed, cleaned, or edited. You can also monitor the slices within the Primo search engine to ensure that the search engine is functioning properly.

Primo Concepts, Components, and Relationships

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This section describes the concepts, components, and relationships that are used in the Primo system.

Primo Configuration Levels

For on-premises customers Primo's configuration data can be managed at different levels to allow institutions in multi-tenant environments to work more independently of each other. The configuration data in Primo's Back Office is split into the following levels of configuration:

- **Out of the Box** (OTB) – Configuration data (such as normalization rules and view templates) that is supplied by Ex Libris and managed by Ex Libris Support.
- **Installation** – Configuration data that belongs to the whole installation (such as a consortium) and can be shared by all institutions in the installation, but must be configured by installation-level staff users.

  The following data must be configured at the installation level:

  - Search engine processes
  - General configuration
  - Some code and mapping tables (For details, see sections Code Table Configuration Restrictions and Mapping Table Configuration Restrictions.)
  - Tools – Create X-ref, Import/Delete PNX Extensions, Export User Generated Data, and PNX Extensions Loader.
- **Institution** – Configuration data that belongs to a specific institution and can be configured by installation-level and institution-level staff users.

  The following data must be configured at the institution level:

  - Data sources
  - Pipes
  - Scopes
  - Restricted delivery and search scopes
  - Some mapping tables

The above configuration levels are indicated by the **Owner** field that appears for each relevant configuration element in the Back Office. For more information, see The Owner Field.

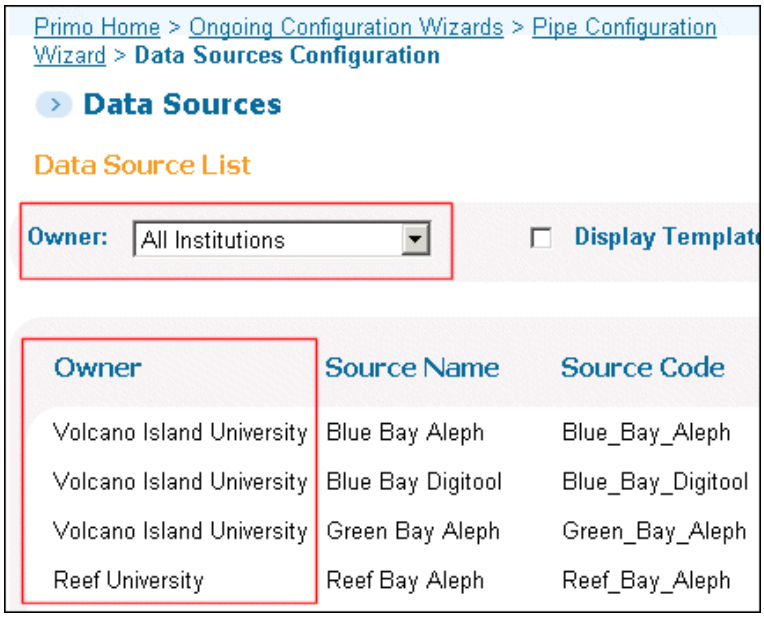
Note

Search engine configurations (not processes) can be configured at the installation or institution level.

The Owner Field

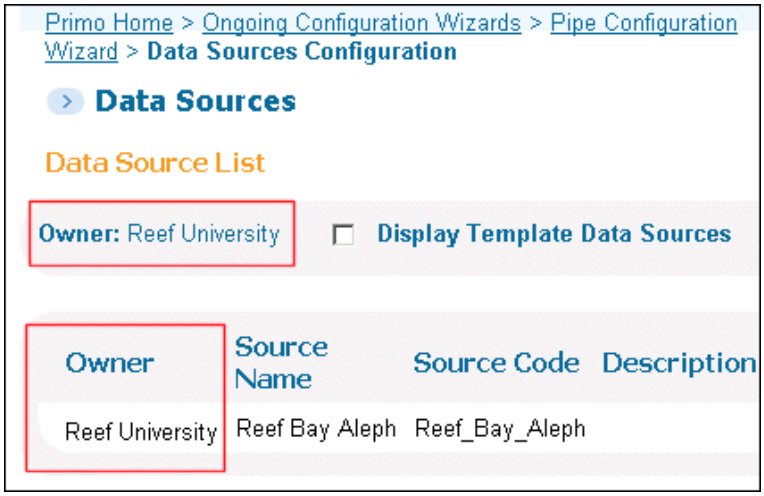
Each configuration element in the Back Office contains an Owner field that is used to separate institution-specific data from shared and common data.

Installation-level staff users will need to select an owner from a drop-down list (see Owner Field Drop-Down List (Data Sources Example)) that includes all of the institutions and the installation name if the data element allows it to be configured at the installation level. For more information on the installation name, refer to The Installation Name.



Owner Field Drop-Down List (Data Sources Example)

For institution-level staff users, their institution will always be pre-selected.



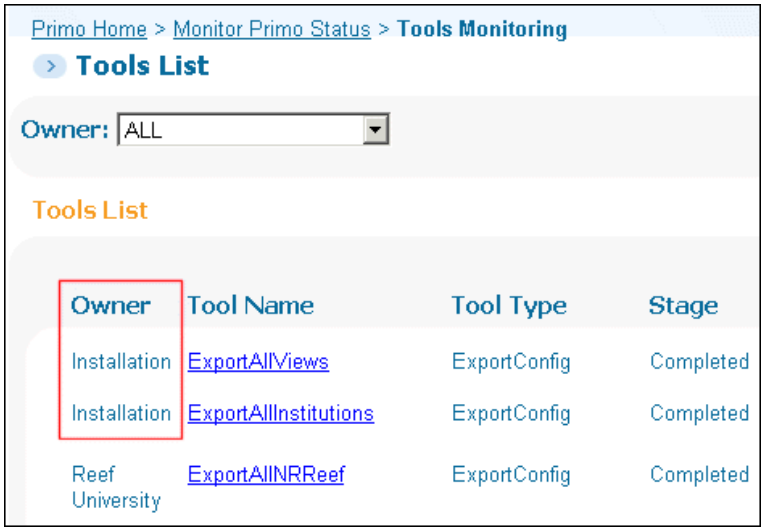
Preselected Owner Field (Data Sources Example)

The Installation Name

A name is given to all Primo installations. For consortia with multiple institutions, this can be defined as the name of the consortium. For installations with a single institution, this can be defined as the name of the institution with **Installation**

added as a suffix. For example, if the institution name is Central College, the installation name would be Central College Installation.

By default, the installation name is set to **Installation** unless you specify a different name in the **Installation Name** parameter on the Primo Home > Advanced Configuration > General Configuration > Installation subsystem page.



Default Installation Name

Institutions

The Primo institution is a main element of the Primo system and many aspects in the system can be linked to an institution. All users and resources belong to a specific institution. Resources can also belong to a specific library within an institution. A single Primo site may have multiple delivery systems and Primo must know to which delivery system each user belongs.

The following is defined for each institution:

- **IP Addresses** – Every institution has a defined set of IP ranges. Specifying the range of the IP addresses of the institution enables the system to assign a default institution to users who have not signed in to the system.
- **Base URLs** – For each institution you must define base URLs. This information is used to access the institution's appropriate delivery system, including MetaLib, SFX, digital repository, and ILS (such as Aleph).
- **Libraries** – The Primo library is mainly used to manage the system's physical resources. Although all resources belong to an institution, not all resources belong to a library within an institution.

A multi-institution site may want to define a "central" institution to represent the consortium level. The "central" institution can be used in the following cases:

- To create a cross-institutional or "central" view. Every view must be linked to a default institution, which could be one of the member institutions or a "central" institution.
- There is a data source that belongs to some or all of the institutions. Data sources must belong to an institution.

It should be emphasized that a "central" institution has no special functionality and is just like a regular institution.

How are Users Linked to an Institution?

In the Primo Front End, users always belong to an institution. The assignment of the institution is based on the user's credentials. If the user is not signed-in, the assignment is either based on the user's IP address or the default institution of the view (which is configured in the Views Wizard). If the user is off campus and not signed-in, the institution will always be the default institution of the view.

Staff Users

Primo allows you to provide different levels of access to the Back Office interface by assigning specific roles to staff users. The following roles are valid:

- **Superadmin** – For on-premises customers this role provides users with access to all views and functions in the Back Office user interface. This role can only be assigned at the installation level.
- **Admin** – This role provides users with access to most menus and functions, but it does not provide access to the Configure User Groups and PDS Configuration wizards (on-premises customers only).
- **Data Administrator** – This role provides users with access to the Pipe Monitoring page, Pipe Configuration wizards, and pages that are related to pipes, such as scheduling pipes, importing/exporting PNX extensions, and creating the PNX X-Reference table (on-premises customers only).
- **Pipe Operator** – This role provides users with access that is similar to the Data Administrator role, but these users cannot configure pipes, data sources, and scope values.
- **Normalization Rules Editor** – This role is particularly concerned with creating and maintaining normalization rules and mapping tables.
- **Staff User** – This role provides users with access to tags and reviews management (on-premises customers only), monitoring, and reporting.
- **View Manager** – This role provides users with access to the Views wizard and other pages that are related to creating and managing views.
- **Reporting** – This role provides users with access to the Primo Reports page to view BIRT reports.
- **Operational** – This role provides users with access to the Monitor Primo Status menu and the Scheduling page.
- **Total Care User** – This role provides users with access to the Primo Reports page to view BIRT reports and the File Uploader utility.
- **Utility user** – This role provides users with access to the File Uploader utility only.

Note

For on-premises customers staff users may be given installation-level or institution-level permissions.

Publishing Pipes

The pipe is the set of steps that the source records go through before being turned into the PNX record. Every pipe includes the following steps: harvesting, normalization and enrichment, loading into the Primo database, dedup and

FRBRization. Before configuring your system's pipes, you must configure the data sources, normalization rules, and enrichment sets to be used with your pipe.

- **Data sources** – You must first identify and configure your institution's existing and planned data sources that will be harvested by Primo, to ensure a successful implementation of the system. There are three types of data sources:
  - Data sources from an Ex Libris product, such as Aleph, Voyager, DigiTool, MetaLib, or SFX.
  - Data sources that are not from an Ex Libris product, but are based on a standard format such as MARC21 and Dublin Core.
  - Data sources that are not from Ex Libris products and are not in any standard format.
- **Normalization rules** – Normalization rules are sets of rules that convert source records to the Primo Normalized XML record - the PNX. Generally every data format requires its own set of Normalization rules. These Normalization rules can be shared by multiple publishing pipes.

  Primo has normalization rule templates for standard formats and specific systems. In most cases, it is necessary to localize the templates to a certain extent. The normalization rules that generally require localization are listed in PNX Mandatory Fields in the Normalization Rules section of the Pipes Configuration wizard. You can create your own normalization rules by copying the most suitable rule set and then localizing it.
- **Enrichment sets** – An Enrichment set is a group of routines that enrich the source records based on external data or additional programs. Primo has a number of default enrichment sets for standard formats and/or systems which can be used when a publishing pipe is defined. It is also possible to define new sets.

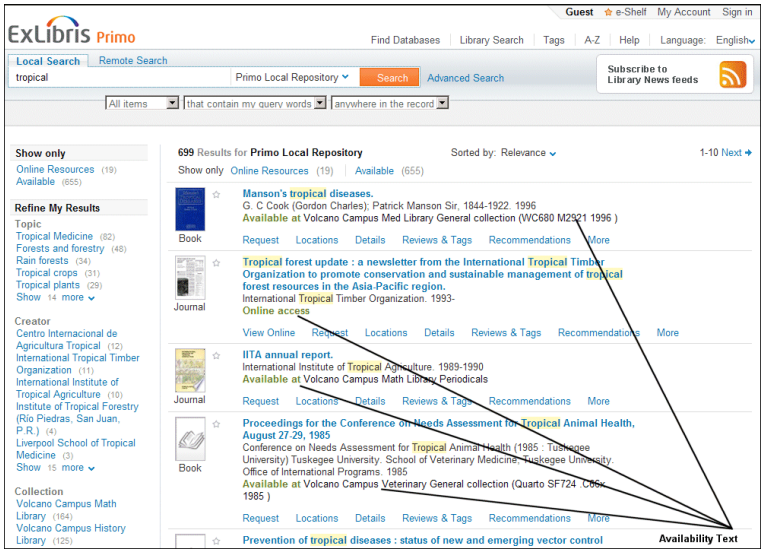
Delivery Functionality and Configuration

Delivery of resources is one of Primo's two basic functions, alongside discovery of resources. In terms of delivery, Primo offers the following:

1. **Availability status** – The availability status appears in the Search Results page of the Front End interface and indicates to the user the availability of the resource.

   The availability indicator displays the availability status for the following types of items:

   - **Physical** – the availability text indicates whether the item is in the library.
   - **Online** – the availability text indicates whether access to the resource is restricted. Restrictions can be defined by creating restricted delivery scopes.
   - **Remote (MetaLib) and Primo Central** – the availability status indicates whether full text is available for the item.



Front End Availability Text

For physical items, Primo uses three basic statuses:

- **Available** – Indicates that at least one copy is available.
- **Unavailable** – Indicates that no copies are available.
- **Check_holdings** – Indicates that the status is unknown and users will need to check detailed holdings by either linking to the ILS or fetching the data if your ILS supports OPAC via Primo. This status is generally used for journals and other multi-volume titles, because Primo does not know which volume the user wants.

The availability status is stored in the PNX record and can be updated in real time using RTA (Real-Time Availability). For more details about RTA, see the *Primo Interoperability Guide*.

The system displays an availability status per Primo location in the Locations tab. For more information on how to create Primo locations, refer to the *Primo Technical Guide*.

In addition to the availability per location, Primo displays a calculated availability status in the brief results list. This status is considered calculated because a single PNX (Primo normalized XML record) may include multiple locations. Deduped records will usually include multiple locations. The availability status that Primo displays in the brief results accounts for the status of all the locations in the record.

The calculated availability status can be determined in different ways. This is especially relevant in multi-institution sites where deduped records can belong to different institutions.

The system default is to display availability in relation to the default institution of the view, or if a specific library is searched, the library. It is also possible to display an availability status that takes the availability of all the institutions into account. This is determined by the basic setup that is defined during the initial setup period. If you are a multi-institution site and are not setup in this way, consult with Ex Libris Support. For more information, refer to Calculated Availability Status.

By default, the system displays a single location within the calculated availability status for physical items (delivery category = **Physical Item** or **Microform**). For example:

- Available in Green Library Main stacks DD987.F2
- Checked out - Green Library Main stacks DD987.F2

The system will attempt to display the most relevant location based on the calculated availability status. The location is added to the Calculated Availability Text code table using a placeholder. If the placeholder is removed, the location will not display. For more details, refer to “Calculated Availability Text” in Code Tables.

2. **GetIt! links** – There are two GetIt! links. The first GetIt! link offers the optimal delivery option based on the resource type and availability. The second GetIt! link offers additional services that may be relevant to the item.

The following aspects of the delivery functionality can be configured via code and mapping tables in the Primo Back Office:

- Calculated and fixed availability status texts.
- GetIt! links (which defines Primo delivery options), GetIt! tabs, and GetIt! text.

The configuration of availability status texts and GetIt! links is explained in the following sections:

- Delivery Category
- The "Virtual" Delivery Category
- Calculated Availability Status
- Data Source

Delivery Category

The delivery category divides resources in groups that may behave differently during their delivery. The categories that are currently used are described in the following table:

Delivery Categories

Delivery Category	Description
Physical items	All types of physical items, including books, CDs, and tapes, with the exception of microforms.
Microform	Includes any form of microform. **Note** In the default delivery configurations, microforms behave as physical items. Microforms are added as a separate category in order to assign them lower priority when records are merged during the Dedup and FRBR processes.
SFX resource	Includes all resources in the SFX KnowledgeBase.
Online resources	Includes digital and electronic resources.

Delivery Category	Description
Remote search resources	These are records located via MetaLib or Primo Central.
MetaLib resources	Resources loaded from the MetaLib knowledgebase.
Alma-P	Used for physical items from Alma.
Alma-E	Used for electronic items from Alma.
Alma-D	Used for digital items from Alma.
Alma-C	Used for collections from Alma.

The "Virtual" Delivery Category

A record that is available online may also have physical items. In this case, Primo assigns a "virtual" delivery category of Physical Item so that the record will have two GetIt 1 links: one for the Online delivery category and a second for the Physical delivery category. In addition, Primo indicates whether there are physical items in the availability status.

Calculated Availability Status

The availability status is used to indicate different types of availability options for the different groups of delivery categories.

- For physical items and microforms, there are fixed statuses (which display in the Locations tab) and calculated availability statuses (which display in the Brief Results list). Refer to the following table for descriptions of the availability statuses.

Physical Item Delivery Status

Availability Status	Description
Fixed:	
Available	The item is available.
Unavailable	The item is unavailable.

Availability Status	Description
Check_ holdings	Primo does not have enough information and detailed library holdings must be checked. This status is typically used for journals and other multi-volume records for which Primo does not include a complete listing of the institution's holdings.
Calculated (see Calculated Availability Text code table for more details):	
Available in main institution	There is an available item in the institution of the view. `default.delivery.code.available_in_maininstitution`
Unavailable in main institution - more	The item is not available in the institution of the view, but it belongs to additional institutions. `default.delivery.code.unavailable_in_maininstitution_more`
Unavailable in main institution - no more	The item is not available in the institution of the view and does not belong to additional institutions. `default.delivery.code.unavailable_in_maininstitution_nomore` **Note** In order to display a different label in the Front End, Primo distinguishes between this status and the **Unavailable in the main institution - more** status.
Check holdings in the main institution	The institution of the view has the item, but because Primo does not have enough information, the user must check the detailed holdings in the ILS. `default.delivery.code.check_holdings_in_maininstitution`
Does not exist in the main institution	The institution of the view does not have a copy of the item. `default.delivery.code.does_not_exist_in_maininstitution`
Available in institution	The item is available in the institution being searched. This status is only used if the user searches a specific institution and **INSTITUTION_AVAILBILITY** is set to **Y** (system default) on the General Configuration (Delivery) page. `default.delivery.code.available_in_institution`
Unavailable in institution	The item is not available in the institution being searched. This status is only used if the user searches a specific institution and **INSTITUTION_AVAILBILITY** is set to **Y** (system default) on the General Configuration (Delivery) page. `default.delivery.code.unavailable_in_institution`

Availability Status	Description
Check holdings in institution	The institution being searched has the item, but because Primo does not have enough information, the user must check the detailed holdings in the ILS. This status is only used if the user searches a specific institution and **INSTITUTION_AVAILBILITY** is set to **Y** (system default) on the General Configuration (Delivery) page. `default.delivery.code.check_holdings_in_institution`
Available in library	The item is available in the library being searched. This status is only used if the user searches a specific library and **LIBRARY_AVAILBILITY** is set to **Y** (system default) on the General Configuration (Delivery) page. `default.delivery.code.available_in_library`
Unavailable in library	The item is not available in the library being searched. This status is only used if the user searches a specific library and **LIBRARY_AVAILBILITY** is set to **Y** (system default) on the General Configuration (Delivery) page. `default.delivery.code.unavailable_in_library`
Check holdings in library	The library being searched has the item, but because Primo does not have enough information, the user must check the detailed holdings in the ILS. This status is only used if the user searches a specific library and **LIBRARY_AVAILBILITY** is set to **Y** (system default) on the General Configuration (Delivery) page. `default.delivery.code.check_holdings_in_library`
Available in my Institution	There is an available item in the user's institution. `default.delivery.code.available_in_my_institution`
Available in other Institution	The user's institution has the item, but it is unavailable. However, the item is available in another institution. `default.delivery.code.available_in_other_institution`
Unavailable in all Institutions	The item is not available in any institutions. `default.delivery.code.unavailable_in_all_institutions`
Check holdings	The user's institution has the item, but Primo does not have enough information and detailed holdings in the ILS must be checked. `default.delivery.code.check_holdings`
Does not exist in my Institution	The user's institution does not have the item and: ◦ **Check holdings** – other institutions have the item, but there is not enough information and detailed holdings in the ILS must be checked. `default.delivery.code.does_not_exist_in_my_institution_check_holdings`

Availability Status	Description

	◦ **Available in other institutions** – the item is available in another institution.
	`default.delivery.code.does_not_exist_in_my_institution_available`
	◦ **Unavailable in all institutions** – the item is not available in any other institution.
	`default.delivery.code.does_not_exist_in_my_institution_unavailable`

- For online resources, SFX journals, and MetaLib resources, Primo calculates the availability status by matching the user with the restricted delivery scopes that are defined for the record. The restrictions and delivery configuration settings are defined in Restrictions and Delivery Configuration Wizard. Refer to the following table for descriptions of the calculated availability statuses.

Online Resource Delivery Statuses

Calculated Availability Status	Description
Not restricted	The item can be accessed by the user.
Restricted access	The user cannot access the item.
May be restricted	Primo cannot calculate whether the user's access is restricted or not.

- For remote source resources, such as records retrieved via Primo Central or MetaLib, the availability status indicates whether there is full text or not for the item. The availability of full text is checked via SFX. Refer to the following table for descriptions of the availability statuses.

Remote Source Delivery Statuses

Availability Status	Description
Fulltext	The item's full text is available.
No full text	The item does not have full text.
Full text unknown	Primo does not know whether or not there is full text for the item. This status is used when it is not possible to check via SFX.
Citation available	The item does not have full text, but it does have a citation.

Data Source

By default, all the data sources share the same configuration. You can configure GetIt! links and text for tabs per data source. For example, for a specific data source you can define a different GetIt! link than the link specified for the rest of the records with the same delivery category and availability status. To do this, you must add a configuration for a specific data source. For instructions on adding a configuration for a specific data source, see Editing Data Sources.

Scopes

The term “scope” is used for various entities in Primo. The following table summarizes the various entities, their purpose, and how they are configured in Primo.

Summary of Scopes

Entity	Description	Back Office Configuration
Scope values	Scope values are used to tag local PNX records as belonging to a specific group of records. There are three types of scope values: • Search • Restricted Search • Restricted Delivery	1. Scope values are defined on the Scopes Values Configuration page (**Primo Home> Ongoing Configuration Wizards > Pipe Configuration Wizard > Scopes Values Configuration**). You can configure each scope to be one or more of the following types of scopes: search, restricted search, and restricted delivery. 2. During the normalization process, PNX records are tagged as belonging to a specific scope by adding the scope value to dedicated fields. The search scope and restricted search scope are then copied to the generic **search/scope** field in the PNX. The rules are included with the out-of-the-box normalization templates.
Search scope values	Used to group records for use in searches.	1. On the Scopes Values Configuration page (**Primo Home > Ongoing Configuration Wizards > Pipe Configuration Wizard > Scopes Values Configuration**), define the scope values that are used for searches. Note that every Primo institution is added automatically as a search scope value. 2. Add the search scope value to the **search/searchscope** field in the PNX using the normalization rules. 3. In the View Wizard (**Primo Home > Ongoing Configuration Wizards > Views Wizard**), add the search scope value to a search scope.
Restricted Search Scope	Used to group records that should be restricted in terms of search. Only users that match specified criteria are permitted to search for these records. For more information, see Restricted Search Scopes.	1. On the Scopes Values Configuration page (**Primo Home > Ongoing Configuration Wizards > Pipe Configuration Wizard > Scopes Values Configuration**), define the scope values that are used for restricted searches. 2. Add the scope value to the **search/ressearscope** field in the PNX via the normalization rules. 3. On the Define Restrictions for Search Scopes page (**Primo Home > Ongoing Configuration Wizards > Restrictions and Delivery Configuration Wizard > Define Restrictions for Search Scopes**), define the users who are allowed to discover the restricted search scope records.

Entity	Description	Back Office Configuration
Restricted Delivery Scopes	Used to group e-resource records that are restricted in terms of delivery. Restricted Delivery scopes can be used in combination with the following delivery categories: • Online Resource • MetaLib Resource • SFX Resource • Alma-E • Alma-D Users that do not have access to the e-Resource will get one of the following availability statuses: • **Restricted access** • **Maybe Restricted**	1. On the Scopes Values Configuration page (**Primo Home > Ongoing Configuration Wizards > Pipe Configuration Wizard > Scopes Values Configuration**), define the scope value in the list of scopes values as being used for restricted delivery. 2. Add the scope value to the **delivery/resdelscope** field in the PNX using the normalization rules. 3. On the Define Restrictions for Delivery Scopes page (**Primo Home > Ongoing Configuration Wizards > Restrictions and Delivery Configuration Wizard > Define Restrictions for Delivery Scopes**), define the users who are allowed to discover the restricted search scope records.
Search Scopes	Search scopes define the groups of records from which end users can search in the Front End UI. Search scopes may include any of the following sources: • PNX records from the local Primo database – represented by search scope values • Primo Central • MetaLib quick-sets • Other search engines accessed via a Deep Search adaptor	Search Scopes are defined in the Views Wizard (**Primo Home > Ongoing Configuration Wizards > Views Wizard**) and can include one or more local search scope values, a single MetaLib quick-set, and one or more Deep Search adaptors including Primo Central.

Restricted Search Scopes

This section explains what restricted search scopes do and when they should be configured. See Scopes for a more general explanation of the scope entities used in Primo.

It is important to understand how Restricted Search Scopes work because they affect all searches within an environment. If a large number of restricted search scopes are defined, response times can be affected and even cause a crash of the SE. For this reason a limit of 20 restricted search scopes has been defined for the entire environment.

When are Restricted Search Scopes not Needed?

Many library catalogs include records that need to be suppressed from public view for some reason (such as the record is no longer relevant). These are records may have also been suppressed in OPACs and should not be discoverable in Primo

as well. Restricted Search Scopes are *not intended to handle these kinds of records*. Instead, these records should be suppressed as follows in Primo:

- The records should be suppressed from the data source and never published into Primo. All of the Ex Libris ILSs and most non-Ex Libris ILSs enable the suppression of groups of records during the publishing stage.
- If it is not possible to suppress these records during the publishing stage, another option is to ensure that the records are not added to any of the scopes in the **search/searchscope** field of the PNX during the normalization stage. If the records do not belong to any scope, they cannot be discovered in Primo.

When are Restricted Search Scopes Needed?

Restricted search scopes can be used to restrict searches within a record or group of records to specific types of users. In other words, the records must be searchable in the Primo but not by everyone. In general, most Ex Libris customers (such as academic libraries) do not need this functionality. In most libraries the records harvested into Primo are open to all (note that delivery to the full text or to a library request may be limited). The need is more common in corporate libraries but there can be exceptions in academic libraries.

Restricted Search Example

Library A harvested the results (which includes a description and link to the full text) from an unpublished physics experiment into Primo that should be discoverable only by users linked to the Physics department.

In order to restrict access, the customer can include these records in their standard institutional search scope and also tag them as having a restricted search scope. Only users belonging to the Physics Faculty (based on user group returned by PDS/Primo Authentication Manager) will be able to discover these records. The following section explains how this works.

How do Restricted Search Scopes Work?

Restricted search scope are tags that are added to PNX records and indexed by the SE. When restricted search scopes are defined within a Primo environment, the SE automatically appends the restricted search scopes to all queries with a Boolean “AND NOT” unless the active user is allowed to discover the restricted scope. Specific user groups can be defined as “allowed” to access the restricted scopes in the Define Restrictions for Search Scopes option, which is explained below.

Because the system does not currently take the owning institution into account for multitenant environments, restricted search scopes defined for institution A are appended to all searches, including those invoked from a view that belongs to another institution.

The following is an example of a debug log in which all Restricted Search scopes defined in the environment were added to the query because a user was not permitted to access any of them:

```
2015-08-27 07:20:51,145 DEBUG [t-http-bio-1701-exec-677] [c-JaguarSearchEngineImpl] [O
-(31261958,161861139,null)] - Users query:((history)) AND NOT scope:(48WAT_ukryty) AND
NOT scope:(32EUC_COLLJRC) AND NOT scope:(47STAT_ML_DS) AND NOT
scope:(44NHM_CALM_SUPPRESS) AND NOT scope:(47STAT_LMS_DS) AND NOT
scope:(351EDP_CISION_RS) AND NOT scope:(39USA_NOT) AND NOT scope:(44CCC_SUPPRESSED) AND
NOT scope:("45DDA" ) AND NOT scope:(351EDP_SFX_RS) AND NOT scope:(44SGUL_SUPPRESS) AND
NOT scope:(33UBO_ALEPH_TOHIDE) AND NOT scope:(44NHM_ALMA_DEL_RS) AND NOT
scope:(39BRG_NOT) AND NOT scope:(351EDP_ALEPH_RS) AND NOT scope:("NOT") AND NOT
```

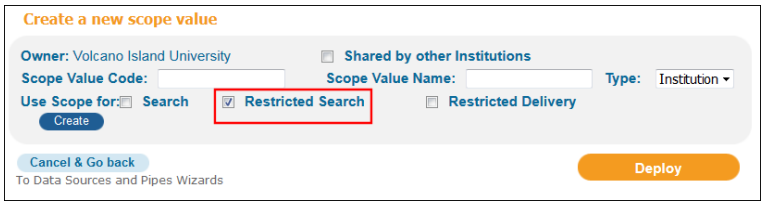
```
scope:("NOT_953") AND NOT scope:(47STAT_SFX_DS) AND NOT scope:(MIT_ALEPH_STA) AND
(scope:("39UDN"))
```

Configuring Restricted Search Scopes

The Scope Values Configuration page (**Primo Home > Ongoing Configuration Wizards > Pipe Configuration Wizard > Scope Values Configuration**) allows you to define all three types of scopes: Search, Restricted Search, and Restricted Delivery.

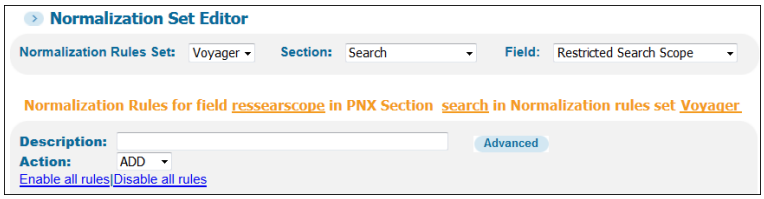
To define a restricted search scope:

1. On the Scope Values Configuration page, use the **Create a new scope value section** to create new scope value, making sure that you select the **Restricted Search** check box.



Scope Values Configuration Page

2. On the Full Normalization Rule Configuration page (**Primo Home > Advanced Configuration Wizards > Full Normalization Rule Configuration**), edit your normalization rules set and add a rule (such as the following rule) to the **search/ressearchscope** field:



Normalization Set Editor

3. On the Define Restrictions for Search Scopes page (**Primo Home > Ongoing Configuration Wizards > Restrictions and Delivery Configuration Wizard > Define Restrictions for Search Scopes**), define the user groups that are permitted to access the restricted search scope. Users can be identified by institution, whether they are on or off campus, and user group.

Deep Search Adaptors

Deep Search adaptors are Primo plug-ins that enable you to extend Primo search capabilities beyond Primo local searches and remote searches via MetaLib, using the standard Primo services and view. Out of the box, Primo provides an EBSCO plug-in, which is configured with search scopes in the Views wizard. For more information, see Configuring the EBSCO Plug-In.

In addition, on-premises customers can create their own adapters to extend Primo's search capabilities. For more information on Deep Search adaptors, refer to the following page in the Ex Libris Developer Network:

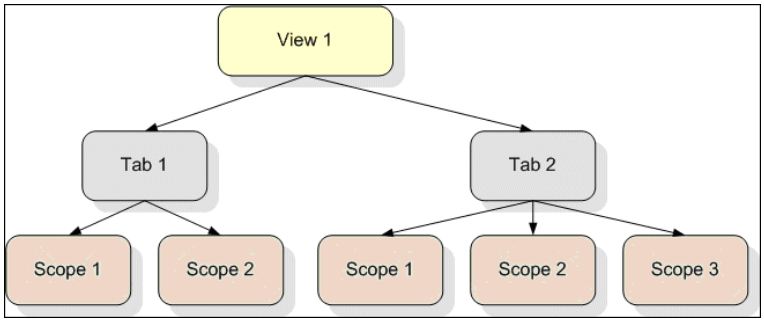
https://developers.exlibrisgroup.com/primo/integrations/search/deepsearch

Primo Central Index

Primo Central Index (PCI) is a centralized Primo index that encompasses hundreds of millions of records of global or regional significance that are harvested from primary and secondary publishers and aggregators. PCI is maintained by Ex Libris and offered as a service to all Primo customers. For more information on PCI, refer to the *Primo Central Index Configuration Guide*.

Views

The view is the Primo Front End user interface, which is the way end-users interact with the Primo system. Your institution can have its own fully customized view with one or more tabs. Tabs enable a site to divide the Primo repository and records from remote resources into resource groups or types. Within a tab, one or more search scopes can be defined based on the values defined in the scope values section of the Pipes wizard.



View Components and Relationships

Mapping Tables

The Back Office uses mapping tables for configuring different aspects of the system. Most of the mapping tables are parameter tables that configure different aspects of the system, except for the normalization mapping table which maps the normalization rule source to its target. The mapping tables are divided into subsystems according to the various sub-modules of the Back Office.

Deployment

The Back Office enables you to configure many different aspects of the system, such as end-user views, search scopes, and mapping tables. These changes are not applied to the Primo Front End until you decide to deploy them. You may deploy them individually as you make configuration changes with the configuration wizards or you may decide to wait and deploy them all at once using the Deploy All page.

Note

The system can process only one deployment at a time. If several users attempt a deployment at the same time, Primo places the requests in a queue.

PNX Extensions

Primo allows you to import enrichment content (such as full text, abstracts, and tables of contents), which are indexed to help users find relevant results. In addition, you can configure Primo to display snippets of this content in your view.

Primo allows you to use the following methods to import (load) enrichment content into the P_PNX_EXTENSION database table:

- **File splitter plug-ins** (such as the XML, HTML, or user-defined file splitters that allow you load extensions) – This method is meant to be used while you are loading source records into Primo. It allows you to load source records and add extensions at the same time, using the IFileSplitter interface. For more information, refer to the following section:

  File Splitter Plug-in section in EI Commons:

- **Import PNX Extensions tool** – This method is meant to be used after you have already loaded your PNX records, allowing you to associate extensions from third-party sources (such as Brooks & Taylor, LibraryThing, and Syndetics) with the PNX records. For more information, refer to the following sections:
  - The Create XREF Tool
  - The Import PNX Extensions Tool
  - PNX Extension Plug-In section in EI Commons
- **PNX Extensions Loader tool** – This method allows you to add extensions after you have already loaded your source records into Primo. It is much faster than the Import PNX Extensions tool and utilizes the IFileSplitter interface, which is more intuitive to implement than the PNXExtensionPlugin interface. For more information, refer to the following sections:
  - The PNX Extensions Loader Tool
  - PNX Extensions Loader Tool section in EI Commons:

  Each of the above methods has its own advantages and should be used in cases where it best fits the application.

Primo Configuration Wizards

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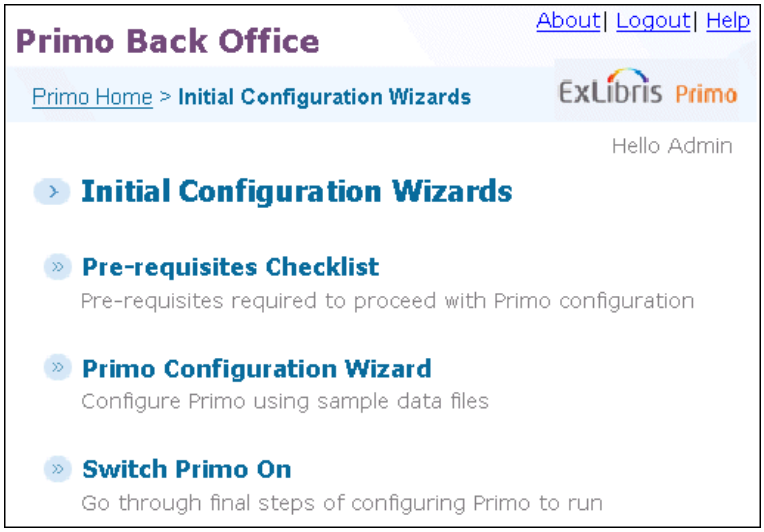
To configure the Front End and pipes, the Back Office provides the following main wizards:

- The Initial Configuration Wizard (on-premise customers only)
- The Ongoing Configuration Wizard
- The Advanced Configuration Wizard
- The Primo Configuration Wizard (on-premise customers only)

The Initial Configuration Wizard

When configuring the Primo system for the first time in an on-premise installation, the home page of the Back Office displays a link to the Initial Configuration Wizard. This wizard steps you through the initial configuration of your system.

Prior to the initial configuration, you should fill out the tables provided in the *Customer Profile for Primo* document to plan and gather the configuration data for your system.



Initial Configuration Wizard

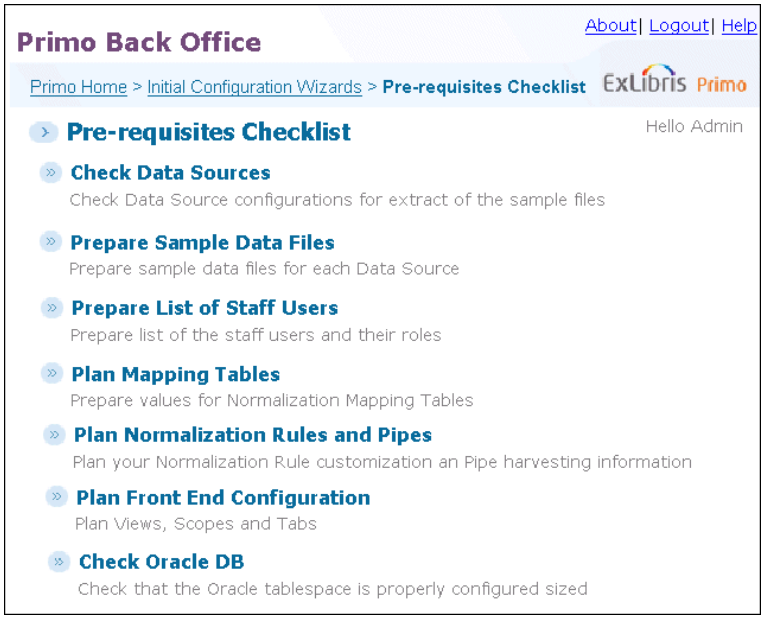
The initial configuration consists of the following steps:

1. Prerequisites
2. The Primo Configuration Wizard
3. Switch Primo On

Once you have completed the initial configuration in the Back Office, the Ongoing Configuration Wizard link appears and the Initial Configuration Wizard link disappears since it is no longer necessary in the Back Office.

Prerequisites

The first step in performing initial configuration is to ensure that all prerequisite requirements are met. It is important that all necessary decisions about the system are made in advance so that the configuration only consists of entering information into the correct fields. Viewing the checklist helps determine whether you are ready to begin the configuration of your system.



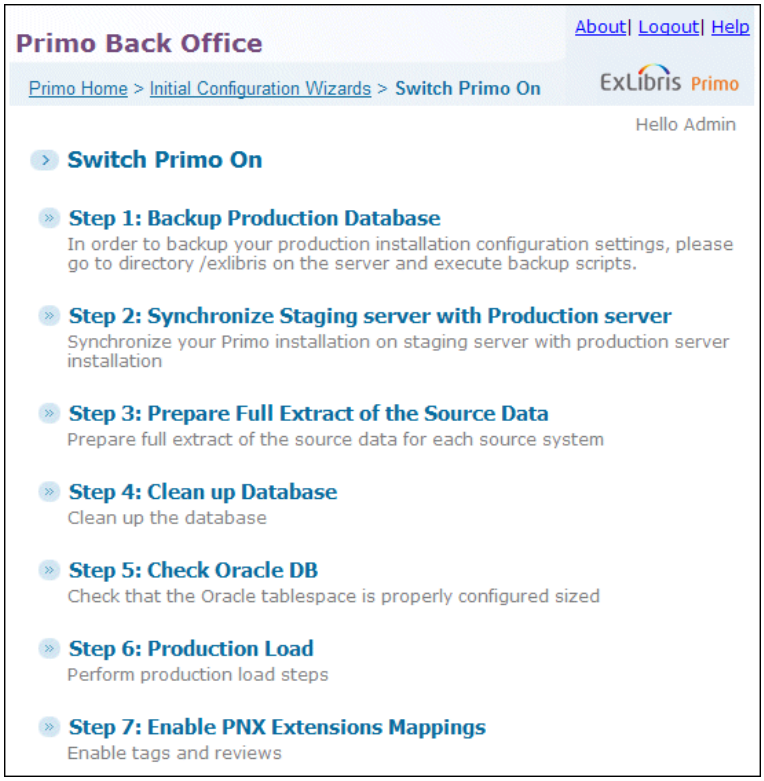
Pre-requisites Checklist Page

Before you start configuring your system, select each of the items on the pre-requisites checklist and ensure that you have completed each procedure:

1. **Check Data Sources** – Check that all necessary information can be extracted from your data sources.
2. **Prepare Sample Data Files** – Follow the instructions provided to prepare sample data files.
3. **Prepare List of Staff Users** – Follow the instructions provided to ensure you have a list of the system's staff users and their roles.
4. **Plan Normalization Rules and Pipes** – Follow the instructions provided to ensure your Normalization rules and pipes are planned correctly.
5. **Plan Mapping Tables** – Verify that the standard mappings exist. The first mapping is between the Primo institution code and the value from the source data, and the second mapping is between the Primo library code and the value from the source data.
6. **Plan Front End Configuration** – Follow the instructions provided to ensure that your views, tabs, and scopes are defined properly.
7. **Check Oracle DB** – Follow the instructions provided to ensure the space in the database is properly sized to fit the amount of data that you plan to upload.

Switch Primo On

After completing the initial configuration and testing the configuration settings using sample data, you can use the Switch Primo On page to complete the final steps of the initial configuration.



Switch Primo On Page

The Switch Primo On page contains the following steps:

1. **Backup Production Database** – The page that opens contains instructions on creating a backup of the production.
2. **Synchronize Staging server with Production server – This runs a script that copies the setup from the production server to the Staging server.**
3. **Prepare Full Extract of the Source Data** – The page that opens contains instructions for full data extract from the source systems.
4. **Clean up Database** – This runs a script that cleans the database before the data load.
5. **Check Oracle DB** – The page that opens contains instructions on checking the space in the database to verify there is enough available space for the resources that are about to be loaded.
6. **Production Load** – The production load process contains the following steps:
    1. **Execute and Monitor Pipes** – The Monitoring Pipe page opens (see Pipe Monitoring - Pipes List)

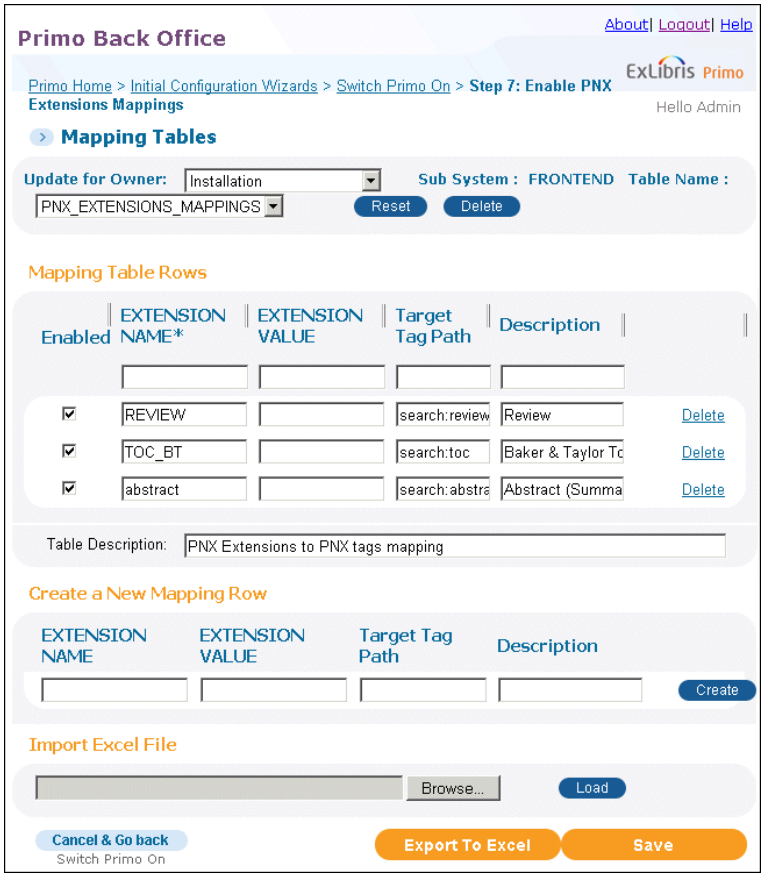
       Click **Execute** to start running the pipe.
       Data is uploaded into the database. For further instruction on monitoring pipes, see Monitoring Pipe Status.
    2. **PNX Viewer** – The PNX Viewer page opens (see PNX Viewer Page).

       Use the PNX Viewer to view the PNX records that were created. You can compare the PNX records to the source records to ensure that the PNX records were converted accurately and your normalization rules are defined correctly. For further instructions on using the PNX Viewer, see Accessing the PNX Viewer.
    3. **Indexing and Swapping** – The Search Engine Monitoring page opens (see Search Engine Monitoring Page).

       Click **Full Index** to index the PNX records to ready the records for searching. For more information on monitoring the search engine, see Monitoring Search Engine Status.

4. **Schedule Tasks** – the Schedule Tasks page opens (see Schedule List Page), enabling you to determine the frequency of the pipe run.

7. **Enable PNX Extensions Mappings** – the PNX_EXTENSIONS_MAPPINGS mapping table opens for editing. To enable tag and popularity searching, click the **Enabled** check box next to the PNX extension entries.

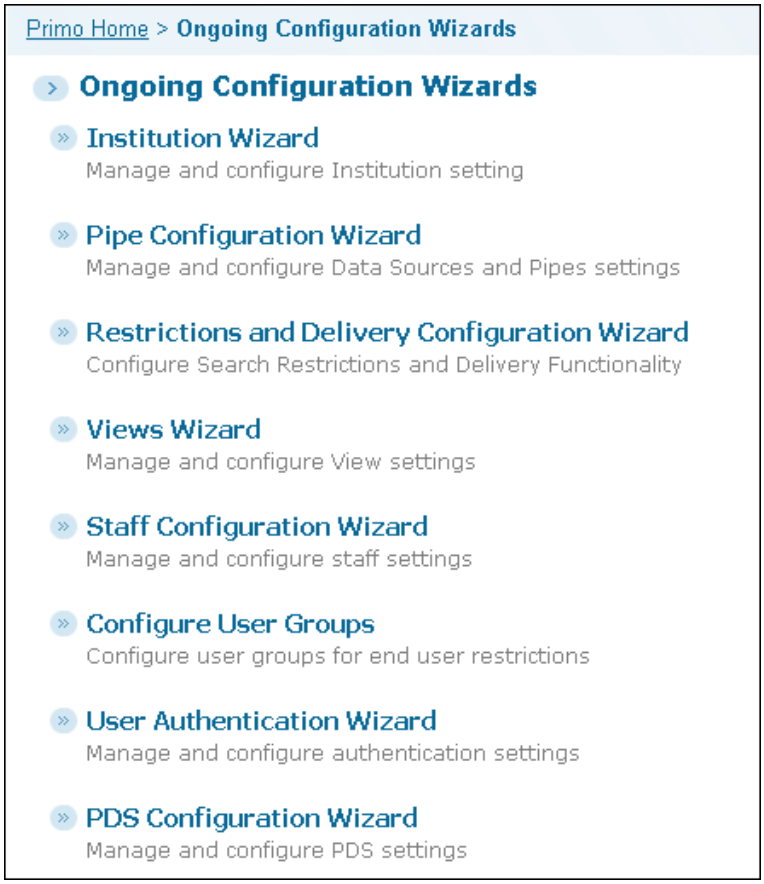


Enable PNX Extensions Mappings

The Ongoing Configuration Wizard

The Ongoing Configuration Wizards page allows you to update and maintain your system. For instructions on how to perform the configurations on the main page of the Ongoing Configuration wizard, refer to the following sections in this guide:

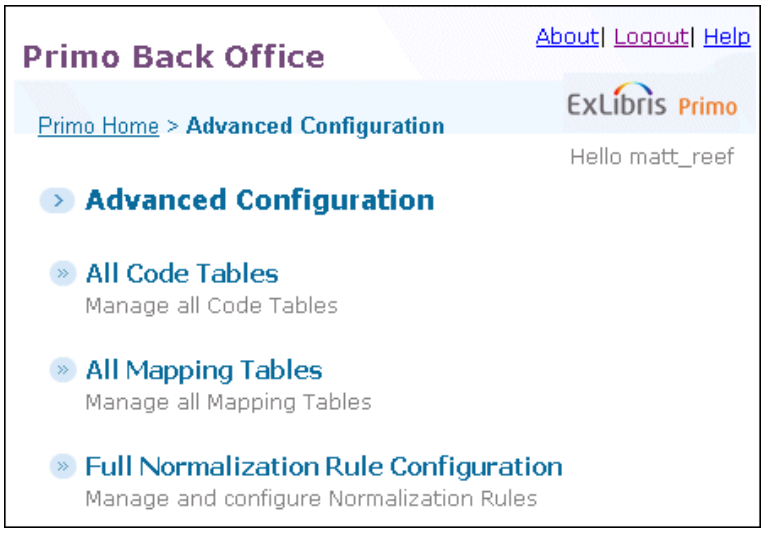
- Institution Wizard
- Pipe Configuration Wizard
- Restrictions and Delivery Configuration Wizard
- Views Wizard
- Staff Configuration Wizard
- User Groups Configuration Wizard
- The Primo Authentication Manager
- Using PDS for User Authentication



Ongoing Configuration Wizard

The Advanced Configuration Wizard

The Advanced Configuration page allows you to set general and search engine parameters and update configuration tables.



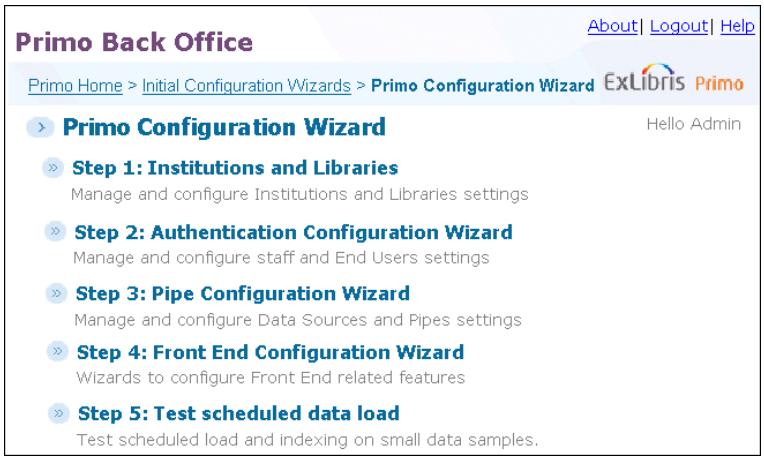
Advanced Configuration Wizard - Cloud Environments

For instructions on how to perform the configurations on the main page of the Ongoing Configuration wizard, refer to the following sections in this guide:

- General Configuration Wizard (on-premise customers only)
- Code Tables
- Mapping Tables
- Using Normalization Rules Sets
- Tags and Reviews (on-premise customers only)
- Search Engine Configurations (on-premise customers only)

The Primo Configuration Wizard

During the initial configuration, on-premise customers enter information in the Back Office based on configuration decisions that were entered in the *Customer Profile for Primo* document. As the Initial Configuration wizards prompt you for information regarding your system's settings, use the links provided and reference your *Customer Profile for Primo* document for your system's specific information. All of the system configuration decisions should be made before you begin the configuration itself to ensure that the initial configuration goes smoothly.

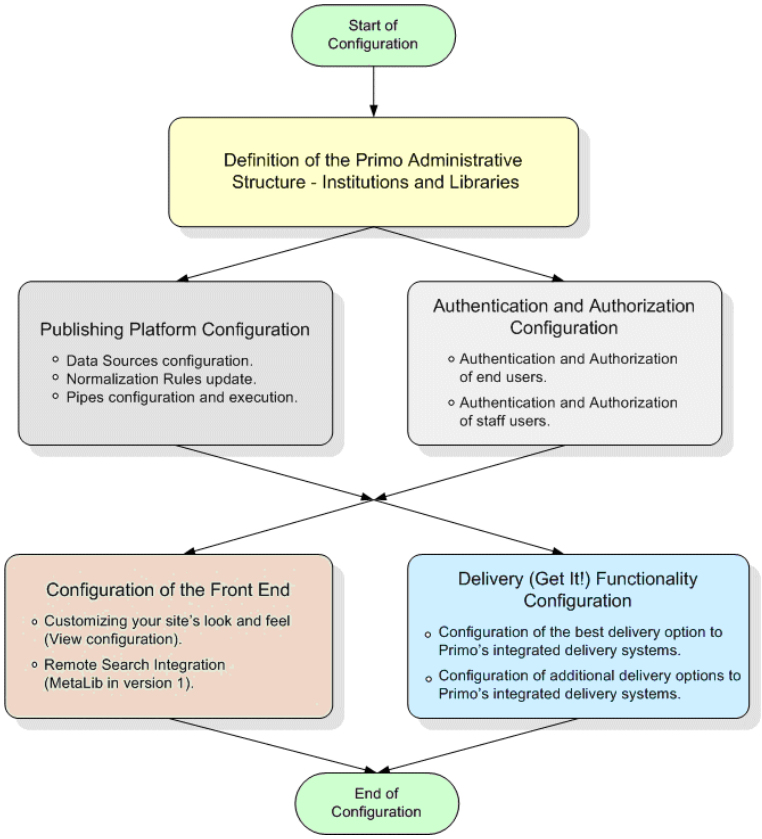


Primo Configuration Wizard Page

For instructions on how to perform the steps on the main page of the Primo Configuration Wizard, refer to the following sections in this guide:

1. Institution Wizard
2. Authentication Configuration Wizard
3. Pipe Configuration Wizard
4. Front End Configuration Wizard
5. Test Scheduled Data Load

Although you must work according to these steps, there are some steps that may be performed simultaneously, as described in the following figure.



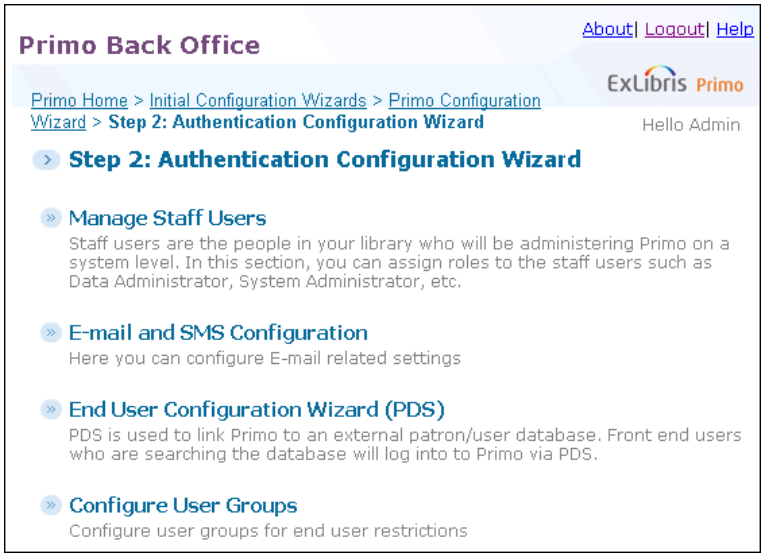
Workflow of the Primo Configuration

Authentication Configuration Wizard

The Authentication Configuration Wizard page (see Authentication Configuration Wizard Page) enables on-premise customers to define the system's authentication settings for the staff users, end users, and user groups.

For instructions on how to perform the steps on the main page of the Authentication Configuration Wizard, refer to the following sections in this guide:

- Staff Configuration Wizard
- E-Mail and SMS Configuration
- Using PDS for User Authentication
- User Groups Configuration Wizard



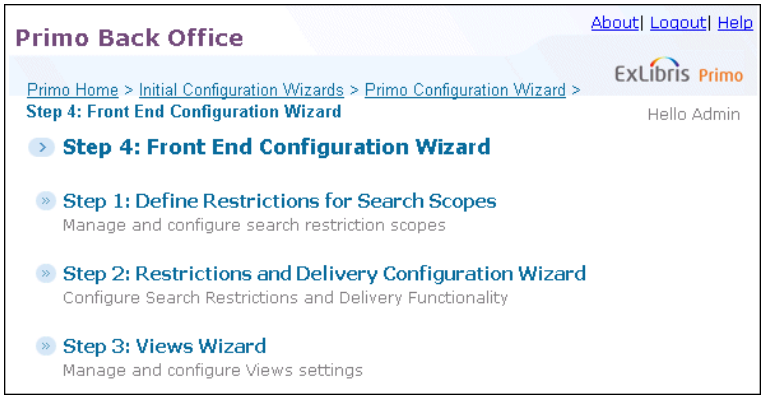
Authentication Configuration Wizard Page

Front End Configuration Wizard

After searching and discovering the resource using the Front End, Primo indicates the availability of the resource in the source system. Then Primo interacts with the source system to provide more information about the resource or deliver the resource.

For instructions on how to perform the steps on the main page of the Front End Configuration Wizard, refer to the following sections in this guide:

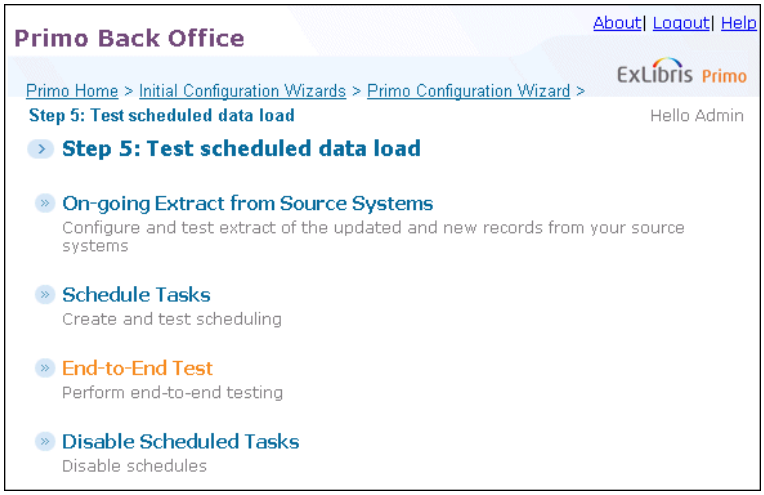
- Search Scope Restrictions
- Restrictions and Delivery Configuration Wizard
- Views Wizard



Front End Configuration Wizard Page

Test Scheduled Data Load

The last step of initial configuration is to test the load using the Test Schedule Data Load page. Testing the load ensures that the system and all of its new settings function properly.



Test Scheduled Data Load Page

From this page, you can perform the following steps to test your scheduled data load.

- **On-going Extract from Source Systems** – the On-going Extract from the Source Systems page opens, providing you with instructions on how to extract data from different delivery systems.
- **Schedule Tasks** – the Schedule Tasks page opens, enabling you to determine the frequency of the pipe run.
- **End-to-End Test** – the End-to-End Test page opens, providing you with instructions on how to perform end-to-end testing. End-to-end testing consists of updating records in the source system (or updating the availability statuses), extracting records from the database, running the pipe, and retrieving the data via the Front End and verifying that the information has been updated.
- **Disable Scheduled Tasks** – the Schedule Tasks List page opens, enabling you to disable the scheduled task used for testing and to schedule a real full data load.

Demonstration Data in the Back Office

Return to menu

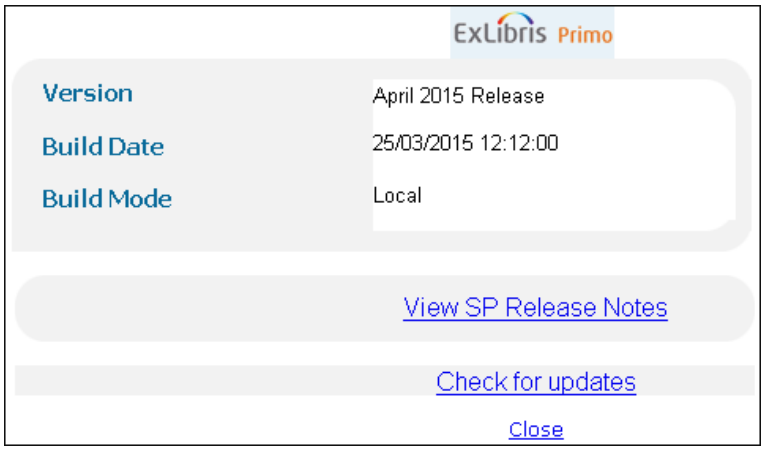
Primo installation includes predefined data that can be used for testing the system. This includes the following elements:

- **Primo institution** – All of the predefined data elements belong to this institution.
- **Pipes** – There are out-of-the-box pipes for several different types of data sources (for example, Aleph, SFX, MetaLib, DigiTool). These are ready-to-use pipes that are configured to use demonstration data that is part of every installation.
- **Data sources** – These are predefined data sources that are used by the out-of-the-box pipes.
- **View** – Every Primo installation includes a default view that can be copied to create new views. The default view belongs to the Primo institution.
- **Scope Value** – A Primo institution search scope and restricted search scope values are pre-defined to be used by the pipes that load the demo data.
- **Staff Users** – Every installation has two predefined users: `Admin` and `ExlibrisSupport`. The `ExlibrisSupport` user is intended to be used by Ex Libris support staff only. Ex Libris will not be responsible for any changes that you make using the `ExlibrisSupport` user. You can change the password or delete either of these users. However, Ex Libris requires the `ExlibrisSupport` user to provide support.

Getting Primo Service Pack Updates

Return to menu

In addition to the version and build date, the About page allows on-premises customers to check for updates, download updates, and install the updates. Initially, this page contains a **Check for updates** link that allows you to check for a new update. For more information on installing SPs, see the *Primo Service Pack Installation Guide*.



About Page

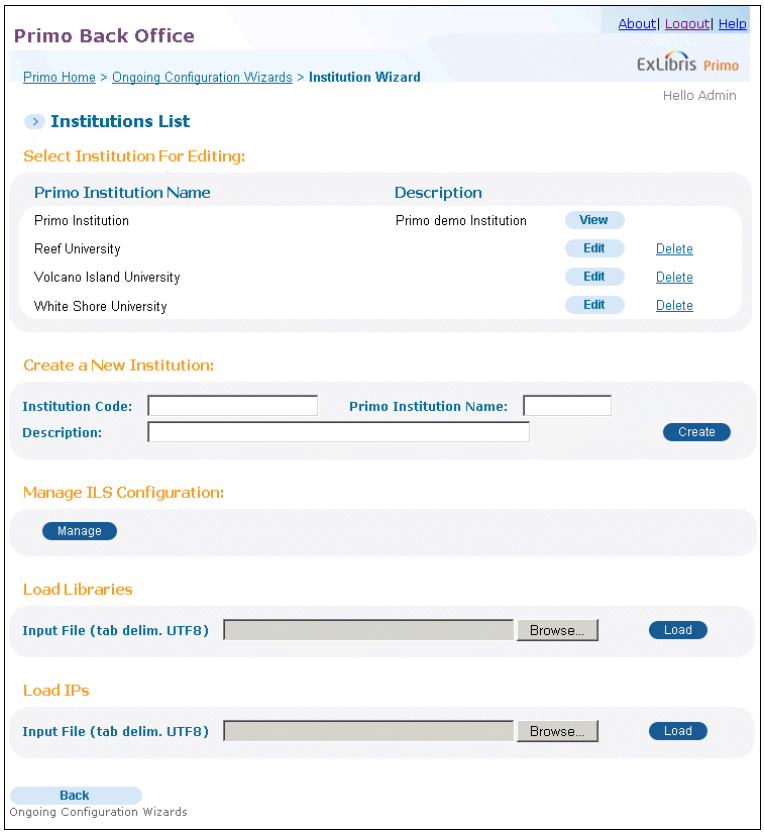
Configuring Primo Institutions and Libraries

The Institution Wizard allows you to configure institutions, libraries, and IP ranges. This section includes:

Institution Wizard

Return to menu

The Institutions List page lists all of the institutions configured for your site and allows you add new institutions to the list and to edit the settings of each institution and its associated libraries and IP ranges.



Institutions List Page

To access the Institutions List page:

1. Click **Ongoing Configuration Wizards** on the Back Office's home page.

   The Ongoing Configuration Wizards page opens.

2. Click **Institution Wizard**.

   The Institution Wizard page opens, listing the institutions that have been defined for your site. This page allows you to perform the following operations:

   - Create an institution – see Creating an Institution.
   - Edit an institution's settings – see Editing an Institution.
   - Delete an institution – see Deleting an Institution.
   - Create a library – see Creating a Library.

- Edit a libraries settings – see Editing a Library.
- Delete a library – see Deleting a Library.
- Create an IP range – see Creating an IP Range.
- Edit an IP range – Editing an IP Range.
- Delete an IP range – see Deleting an IP Range.
- Synchronize MetaLib – see Synchronizing MetaLib Access Information.

Creating an Institution

Return to menu

The Institutions List page allows on-premises customers to add institutions to their Primo installation.

Only installation-level staff users that are assigned the Superadmin role are permitted to create institutions.

To create an institution:

1. In the Create a New Institution area, enter your institution's information (see Create a New Institution Details for a list of fields).

Create a New Institution Details

Field name	Description
Institution Code	The institution's internal ID code as appears in the institution field of the PNX. **Note** Since lowercase letters cannot be used in institution codes, the system will automatically save all lowercase letters to uppercase letters.
Primo Institution Name	The name of the institution, specifying where the field is displayed in the system.
Description	Descriptive information about the institution.

2. Click **Create**.
   The new institution appears on the Institutions List page.
3. Configure the details for the new institution. For more information, see Editing an Institution.

Editing an Institution

Return to menu

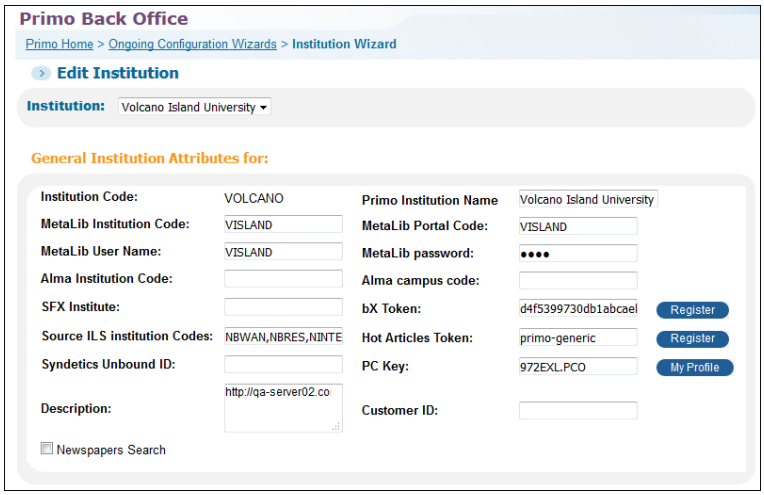
Editing a new institution enables you to define advanced information in addition to the basic information defined when you created the institution. If you would like load a list of libraries at one time, you can create a tab-delimited file and export the list into Primo. For more information, see Loading Libraries.

When modifying parameters (such as the **Primo Institution Name**) other than the **Delivery Base URLs** and **IP Range** parameters**,** it is necessary to deploy the changes by clicking the **Deploy** button in the Institution Wizard.

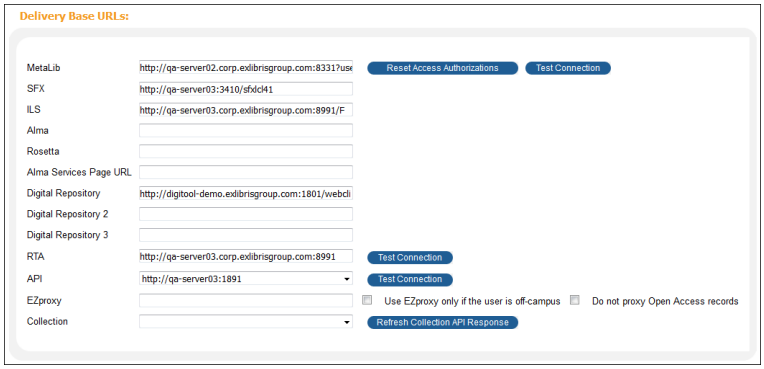
To edit institution details:

1. On the Institutions List page, click **Edit** next to the institution that you want to update.

   The Edit Institution page opens.

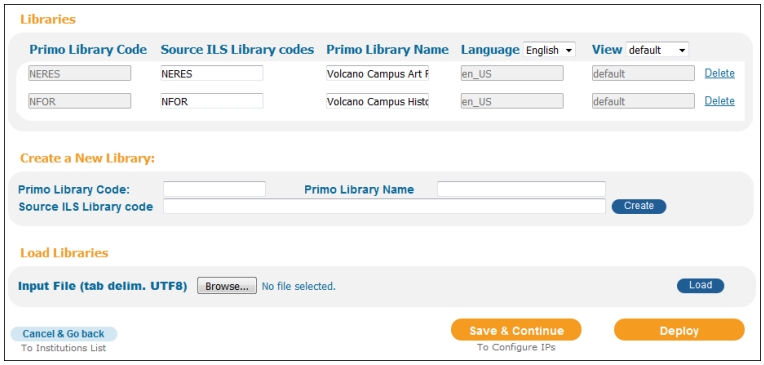


Edit Institution Page (1 of 4)



Edit Institution Page (2 of 4)

Edit Institution Page (3 of 4)



Edit Institution Page (4 of 4)

2. In the General Institution Attributes for area, edit the attributes for the institution (see General Institution Attributes Details for a list of fields).

General Institution Attributes Details

Field name	Description
Institution Code	Primo institution ID code. This cannot be edited. **Note** Since lowercase letters cannot be used in institution codes, the system will automatically save all lowercase letters to uppercase letters.
Primo Institution Name	The name of the institution.
MetaLib Institution Code	Indicates to the system which MetaLib institution to use during a remote search for this institution.*
MetaLib Portal Code	Specify the portal code if it is different from the MetaLib Institution Code.
MetaLib User Name	If you want to use a user name other than the MetaLib institution to access QuickSets in MetaLib, specify the user name.

	Note If this field is left blank, the system will use the MetaLib institution for the user name.
MetaLib password	If you want to specify a password other than the MetaLib institution to access QuickSets in MetaLib, specify the user name. **Note** If this field is left blank, the system will use the MetaLib institution for the password.
Alma Campus Code	The Alma Campus Code identifies the Alma inventory network group, which represents a set of campuses and/or libraries for which you want to manage electronic resources as a group.
Alma Institution Code	The Alma institution code that the system converts to the Primo institutution code via the out-of-the-box Alma templates.
Source ILS Institution Codes	The ILS data-source codes that can be mapped to the Primo institution code. If there is more than one code mapped to the same institution, separate the entries with commas.* For example, Aleph uses the ADM library or sub-library codes.
SFX Institute	Specify the SFX institute that is sent in the request to the SFX Journal Subscription API to determine if full-text results are available.
bx Token	Specify the bX authentication token received during the registration of bX recommendations. For more information on configuring bX, see the *Primo Interoperability Guide*. **Note** You cannot use the authentication token that was obtained while registering for bX via SFX.
Hot Articles Token	Defines the token that the system uses to authenticate the bX Hot Articles service for use in Primo. By default, the system uses the **primo-generic** token. If your institution has already registered for this service, you can replace the generic token with your institution's token. If you want to create a token for your institution, click the **Register** button to register for the service. For more information, see bX Hot Articles.
PC Key	Specify the PC Key received during the registration of Primo Central. For more information, see Primo Central Index Configuration Guide.

Customer ID	Specify the Customer ID received during the registration of Primo Central. For more information, see the *Primo Central Index Configuration Guide*.
Institution is part of the shared user database/ Resource sharing	Resource sharing indicator (on-premises customers only). This field indicates whether the institution is part of a shared resource/user database. **Note** This field only displays when the **Shared User Database & Resource sharing** field is set to **P** on the **Primo Home > Advanced Configuration > General Configuration > Delivery** subsystem page.
Description	Descriptive information about the institution.
Newspapers Search	This check box enables the Newspapers Search feature for your entire institution, but you must also enable it per view (see Views Wizard). **Note** When enabled, newspaper content will no longer be provided by Primo Central scopes.

* These codes are mapped to the Primo institution code and used by the Normalization mapping table.

3. In the Delivery Base URLs section, enter the base URLs of the servers providing access to the following delivery systems:

Delivery Base URLs

Field Name	Description
MetaLib	This URL requires the `mladmin` user name and password for MetaLib 4.3 and later releases. **Note** If the MetaLib server is configured to send responses to Primo in ZIP format, set the **Data is Compressed** field to **Yes** for the institution in the MetaLib Institution Configuration mapping table.
SFX	The base URL of the SFX link resolver.
ILS	The base URL of your ILS.
Alma	The base URL of the Alma U-resolver, which is formatted as follows: `http://<Alma server>:<port>/view/uresolver/<Alma institution code>/openurl`

Field Name	Description
	If you have defined an Alma campus code, it should be appended to the Alma base_url to ensure that delivery is specific to the campus: `http://<Alma server>:<port>/view/uresolver/<Alma institution code>/openurl-<Alma campus code>`
Alma Services Page URL	Defines the base URL that bX uses to send requests to Alma via Primo. For more information on this field, see bX Hot Articles.
Digital Repository	The base URLs for your digital repositories.
RTA	The base URL of the RTA service.
API	Enables OPAC via Primo functionality if supported by the institution. If this field is left blank, Primo will provide OPAC via link functionality.
EZproxy	The base URL of the EZproxy server, which is used to provide access to articles when direct links are invoked from Primo Central and EBSCO records. These links display in the Links section in the Details tab and in some cases may be used as the basis for the main delivery links. If you are using an EZproxy server, specify the following as needed: ◦ **Use EZproxy only if the user is off-campus** – select this check box if you want to use the EZproxy server for direct links when the user is off campus only. Otherwise, the EZproxy server is used for all direct links regardless of the user's location. ◦ **Do not proxy Open Access records** – select this check box if you do not want to use the EZproxy server for open access Primo Central records.
Collection	The base URL of the collection repository. For Alma customers who are using Alma for collections, the Collection field should be set to the same value as the API field. If Rosetta is used for collections, set this field to the base URL for Rosetta. A collection API request is sent once an hour and is cached in memory. The **Refresh Collection API Response** button (which appears next to the Collection field) allows you to refresh the API response manually as needed.

If necessary, you can add new types of delivery base URLs to the list. To do so, add the new delivery base URL to the Institution Base URL mapping table, using the instructions in Edit a CSS Mapping Table.

4. In the New UI Migration section, specify the following options as needed:
   - **Display new UI link in classic UI** – Displays a link to the new Primo UI from the classic UI to allow users to try the new UI during the migration away from the classic UI.
   - **New UI Enabled** – Indicates that the new UI is the prominent user interface and URLs to deep links and the Services page in the classic UI will be redirected to the new UI.

- **Disable the classic interface** – Prevent access to the classic UI. When selected, the system will redirect most URLs used in the classic UI (except for URLs to deep links and the Services page) to the home page of the new UI.
- **Select New UI View** – When the **New UI Enabled** option is selected, select the view used for the new Primo UI if it is different from the view used for the classic UI. This allows the system to use the new view configuration when deep links and Services Pages URLs contain the view used to configure the classic UI.

5. To add libraries to your institution, see Creating a Library or Loading Libraries.
6. Click **Save & Continue** to save your changes to the institution and continue to the Edit IPs page. If you want to configure IPs, see Creating an IP Range and Editing an IP Range.

   The institution's details are updated and appear in the Institutions List page (see Institutions List Page).

Note

If you want to edit an institution other than the one you are currently editing, select the institution in the **Institution** drop-down list and repeat Steps 2 through 5.

Deleting an Institution

Return to menu

On-premises customers can delete any institutions from Primo if they are no longer necessary.

When you delete an institution, you are also deleting all of the institution's libraries, IP addresses, and base URLs. Institution-level staff users are not allowed to delete their own institution.

To delete an institution:

1. On the Institutions List page, click **Delete next to the institution that you want to delete.**
   A confirmation dialog box opens.

   Note

   You cannot delete an institution while the institution's data sources or views are in use. If you try to delete a referenced institution, an error dialog box opens.

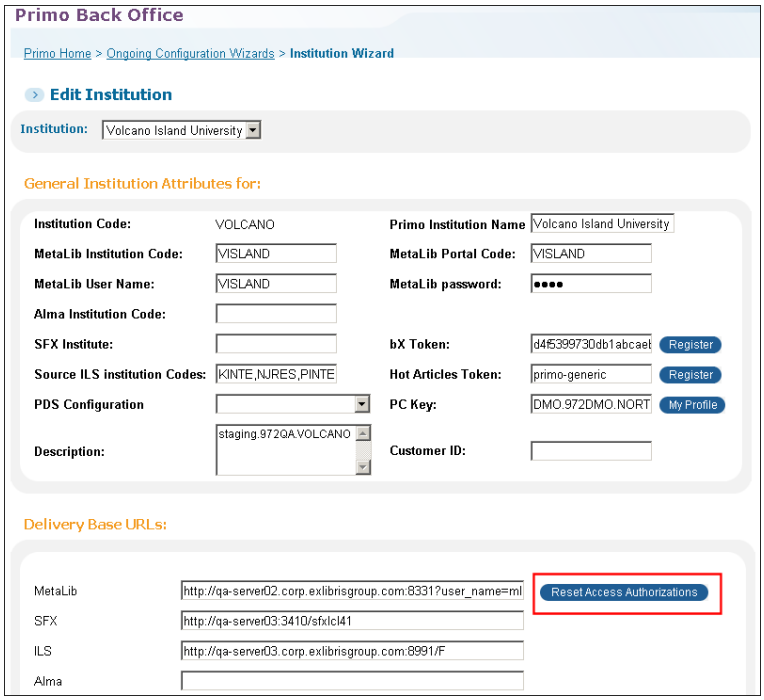
2. Click **OK**.
   The institution and all of its libraries, IP addresses, and other associated information are removed from Primo.

Synchronizing MetaLib Access Information

Return to menu

Primo indicates to end users what kind of access they have to the MetaLib QuickSets and databases. This information is fetched from MetaLib via the MetaLib API and then cached to increase performance. Because the access information is cached, changes to the users access rights may not be current in Primo.

To update changes to access information for MetaLib quickSets and databases, click the **Reset Access Authorization** button next to the **MetaLib Base URL**.



Institution Wizard - Reset Access Authorizations

The MetaLib Connection Timeout general configuration parameter allows you to set the maximum time to allow MetaLib to reset the authorizations.

Creating an IP Range

Return to menu

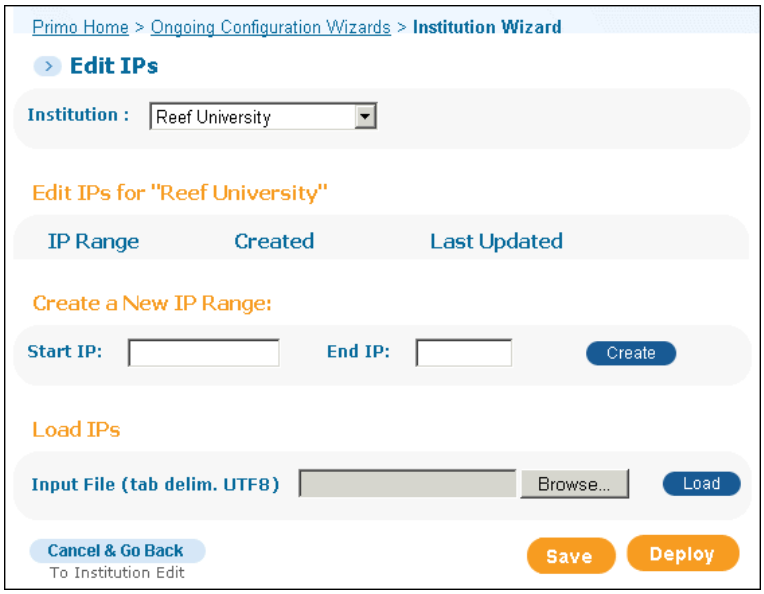
When end users access the Front End without signing in, Primo uses the user's IP or the view (depending on the value of the **Default Institution** parameter in the Views wizard) in order to determine the user's institution.

IP ranges are also used to determine whether the users are on or off campus. Only signed-in users or users within the IP range will be able to search restricted search resources.

The Edit IPs page allows you to create one or more groups of IP address ranges per institution. When users log on to Primo, their IP-based user group determines specific settings and restrictions. You can also load a list of IPs from a tab-delimited file. For more information, see Loading IPs.

To create a new IP range:

1. On the Institutions List page, click **Edit** next to the institution to which you want to add an IP range.
   The Edit Institution page opens.
2. Click **Save & Continue** to continue to the Edit IPs page.
   The Edit IPs page opens.



Edit IPs Page

3. In the Create a New IP Range area, enter the IP ranges for the institution.

Create a New IP Range Details

Field name	Description
Start IP	The start of the institution's IP addresses range, in IP address format.[1]
End IP	The end of the institution's IP addresses range, in IP address format.*

[1] Each group of numbers within the IP address must be 0 to 255—for example, 204.171.64.2.

4. Click **Create**.
   The new IP range appears in the IPs list.
5. Click **Save**.
6. Click **Deploy** to deploy your changes to the Front End.

Editing an IP Range

Return to menu

You can edit IP range details for various user groups in your institution.

In addition, you can load a list of IPs from a tab-delimited file. For more information, see Loading IPs.

To edit an IP range:

1. In the IP Range fields, enter the start and end IP addresses in IP address format.
2. Click **Save**.
   The updated IP range fields appear in the Edit IPs list.

Deleting an IP Range

Return to menu

You can delete the institution's IP range for user groups.

Note

The Front End servers must be restarted after changes are made to the IP ranges.

To delete an IP Range:

1. On the Institutions List page, click **Save** to continue to the Edit IPs page.
   The Edit IPs page opens (see Edit IPs Page).
2. On the Edit IPs page, in the Edit IPs list, click **Delete** next to the IP range that you want to delete.
   A confirmation dialog box opens.
3. Click **OK**.
   The IP range is deleted from Edit IPs list.

Creating a Library

Return to menu

A single institution can have several libraries, just as there can be more than one physical library in large institutions.

When you create a library, the system automatically performs the following configurations:

- Copies the values from the Primo Library Code and the Primo Library Name fields to the Library Names code table.
- Copies the values from the Primo Library Code and the Source ILS Library Code fields to the ILS Library Codes mapping table.

To create a library:

1. On the Institutions List page, click **Edit** next to the institution to which you want to add a library.
   The Edit Institution page opens (see Edit Institution Page (1 of 3)).
2. In the Create a New Library area, enter the new library's information (see Add Library Details for a list of fields).

Add Library Details

Field name	Description
Primo Library Code	The Primo library code. This is a view-only field.
Source ILS Library codes	The ILS data source code that is mapped to the Library Code. This mapping is used by the normalization rules. If there are several codes that need to be mapped to the same library, separate the codes with commas.
Primo Library Name	The name of the library.
Language	By default, the Libraries section of this page opens only the **en_US** language translations for each library. To view translations for another language, select a language from the **Language** drop-down list at the top of the column.

3. Click **Create**.
   The library is created and appears in the list of libraries.
4. Click **Save**.
   The Creating an IP range page opens.

Editing a Library

Return to menu

You can edit your institution's library details that were defined when you created the library.

To edit a Library:

1. On the Institutions List page, click **Edit** next to the institution whose library you want to edit.
   The Edit Institution page for that institution opens (see Edit Institution Page (1 of 3)).
2. On the Edit Institution page, in the Libraries area, edit the library information (see Edit Library Details).

Edit Library Details

Field name	Description
Primo Library Name	The name of the library.
Source ILS Library Codes	The ILS data source code that is mapped to the Library Code. This mapping is used by the normalization rules. If there are several codes that need to be mapped to the same library, separate the codes with commas.
Language	By default, the Libraries section of this page opens only the **en_US** language translations for each library. To view translations for another language, select a language from the **Language** drop-down list at the top of the column.

3. Click **Save**.
   The library details are updated and appear in the Edit Institution page.

Deleting a Library

Return to menu

You can delete any of the institution's libraries that are no longer necessary.

To delete a Library:

1. On the Institutions List page, click **Edit** next to the institution whose library you want to delete.
   The Edit Institution page for that institution opens (see Edit Institution Page (1 of 3)).
2. In the Libraries section, click **Delete** next to the library that you want to delete.
   A confirmation dialog box opens.
3. Click **OK**.
   The library is removed from the Libraries list.

Loading Libraries

Return to menu

The Institution wizard allows you to load a list of libraries into the database from a tab delimited file. The file can be loaded on the following pages of the Institution Wizard:

- Institutions List (see Institutions List Page) – this load is intended for sites that want to load libraries from multiple institutions in a single file.
- Edit Institution (see Edit Institution Page (1 of 3)) – this load is intended for sites that want to load the libraries for a single institution.

During the load process, the system validates the file before loading the libraries into the database. If an error occurs during the following checks, the file is not loaded:

- All mandatory columns are filled in.
- The Institution codes are valid.
- Primo Library codes are unique within the file and the database.
- The field lengths are valid.
- The Language codes are valid.

If validation is successful, Primo loads the new libraries, replaces any existing libraries, and deletes any libraries that are marked for deletion. The match is performed on the combination of institution and library code.

Results of the load display in a log, which opens either error messages or a confirmation message for a successful load.

The Structure of the Library List File

The input file that is used to load a list of libraries must be a text file that has UTF-8 encoding. It must contain the following fields delimited by tabs:

- Column 1 – Primo institution code. Maximum length is 255.
- Column 2 – Source Library code. All possible values should be in the same cell separated by commas. In addition, it is possible for the source library code to be created from two or more strings by adding a space. Primo treats them like a single value. For example:
  - ABC,XYZ – two source codes.
  - ABC XYZ – single source code.

  The maximum length of each source code for the same Primo Library is 100.
- Column 3 – Primo Library code. Maximum length is 255.

Note

In Primo Version 4.7 and earlier releases, the import process converts column 3 to uppercase. If you attempt to re-import the same value (non-uppercase), you will receive an error indicating that this library code has already been added. To resolve this issue, change this column to uppercase values. In subsequent releases, you will be allowed to specify case-sensitive codes like you can with the **Create a New Library** section in the Institution Wizard.

- Column 4 – Primo Library name. Maximum length is 255. This is the library name in the default language (en_US). Names in additional languages can be defined in the following columns. This column is mandatory. If you use the English interface, the Primo copies the Library name from column 7 to column 4 as the English name. If you only use a single language interface, you can fill in only this column because the English version is used as the default for all languages.
- Column 5 – This column contains the delete flag. If you want to delete the library, enter DEL in this column.
- Column 6 – Language code of additional language 1.
- Column 7 – Library name in additional language 1.
- Column 8 – Language code of additional language 2.
- Column 9 – Library name in additional language 2.
- Column *x* – as needed.

The following figure shows an example of a tab-delimited file.

```
NORTH NARCH,NARCC NARCH North Campus Archives fr_FR Name in French

NORTH NAR BB NARBB North Campus BBBBB fr_FR Name in French2

NORTH AINTE AINTE Internet fr_FR Internete
```

Sample Tab Delimited File

To load a library file on the Institutions List page:

1. In the Load Libraries section on the Institutions List page, enter the input file or click **Browse** to select a file.
2. Click **Load**.

To load a library file on the Edit Institution page:

1. On the Institutions List page, click **Edit** next to the institution you want to update.
2. In the Load Libraries section on the Edit Institution page, enter the input file or click **Browse** to select a file.
3. Click **Load**.

Loading IPs

Return to menu

The Institution wizard allows you to load a list of IPs into the database from a tab delimited file. The file can be loaded on the following pages of the Institution wizard:

- Institutions List (see Institutions List Page) – this load is intended for sites that want to load IPs from multiple institutions in a single file.
- Edit IPs (see Edit IPs Page) – this load is intended for sites that want to load the IPs for a single institution.

During the load process, the system validates the file before loading the IPs into the database. If an error occurs, the file is not loaded.

If validation is successful, Primo loads the new IPs and replaces any existing IPs. Because the load process adds and/or replaces all IPs for all institutions specified in the file, you must include all IP ranges, not just new or updated IPs.

Results of the load display in a log, which opens either error messages or a confirmation message for a successful load.

The Structure of the IP File

The input file that is used to load IPs must be a text file that has UTF-8 encoding. It must contain the following fields delimited by tabs:

- Column 1 – Institution code.
- Column 2 – IP from – with periods. Leading zeroes are not required. Length is 30 characters.
- Column 3 – IP to – with periods. Leading zeroes are not required. Length is 30 characters.

To load IPs on the Institution List page:

1. In the Load IPs section on the Institutions List page, enter the input file or click **Browse** to select a file.
2. Click **Load**.

To load IPs on the Edit IPs page:

1. On the Institutions List page, click **Edit** next to the institution you want to update.
2. Click **Save & Continue** on the Edit Institution page to display the Edit IPs page.
3. In the Load IPs section on the Edit IPs page, enter the input file or click **Browse** to select a file.
4. Click **Load**.

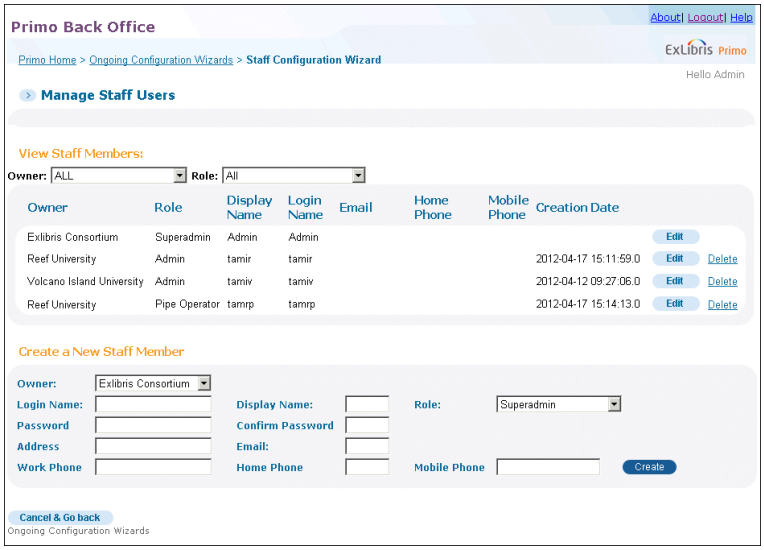
Configuring Staff Users and User Groups

This section includes:

Staff User Configuration

Return to menu

The Manage Staff Users page (**Primo Home > Ongoing Configuration Wizards > Staff Configuration Wizard**) is the opening page of the Staff Configuration wizard. It enables you to manage staff users and to assign specific roles to staff users. For each staff user, use the wizard to assign the appropriate role and enter the staff user's name and contact information.



Manage Staff Users Page

For further instructions, see the following sections:

- Creating Staff Users
- Editing Staff Users
- Deleting Staff Users
- Changing Staff User Passwords

Creating Staff Users

The Manage Staff Users page allows you to add and delete staff users or update configuration information for existing staff users.

For single institution configurations in an on-premises installation, it is recommended to create staff users at the installation level, not the institution level. This will ensure that staff users (as allowed per role) can work with both configuration levels.

Note

If you want to change the configuration level of an existing staff user, you must create a new staff user record.

To create a staff user:

1. In the Create a New Staff Member area on the Manage Staff Users page, enter your staff user's information (see Create a New Staff User Details for a list of fields).

Create a New Staff User Details

Field name	Description
Login Name	The staff user's internal ID code used to log into the system.
Display Name	The name of the staff user as displayed on screen.
Owner	Select the configuration level for the new user. **Note** Only staff users who are assigned either the **Admin** or **Superadmin** role are permitted to add new users. For installation-level staff users who are assigned either the **Superadmin** or **Admin** roles, the valid values are the institution names and the installation name. For institution-level staff users who are assigned the **Admin** role, the system will pre-select your institution and allow you to add staff users to your institution only.
Role	The staff user's role or level of authorization within the system. For more details concerning staff privileges, see Staff User Role Privileges. If the user's role is set to Reporting, the user only has access to the Primo Reports page of the Back Office. All other roles have full access to the Back Office functionality. For more information on staff user roles, see Staff Users.
Password	The staff user's password used to log into the system.
Confirm Password	Confirmation of the password, used to ensure the password is valid.
Address	The staff user's home address.
Email	The staff user's e-mail address.
Work Phone	A phone number where the staff user can be reached at work.

Field name	Description
Home Phone	The staff user's home phone number.
Mobile Phone	The staff user's mobile phone number.

2. Click **Create**.

   The new staff user appears in the View Staff Users list. You can now edit the staff user's details using the instructions in Editing Staff Users. If necessary, you can delete a staff member using the instructions in Deleting Staff Users.

Editing Staff Users

You can change the staff users user names and passwords every once in a while for extra security. You can edit a staff user's personal details if a staff user's role or address changes.

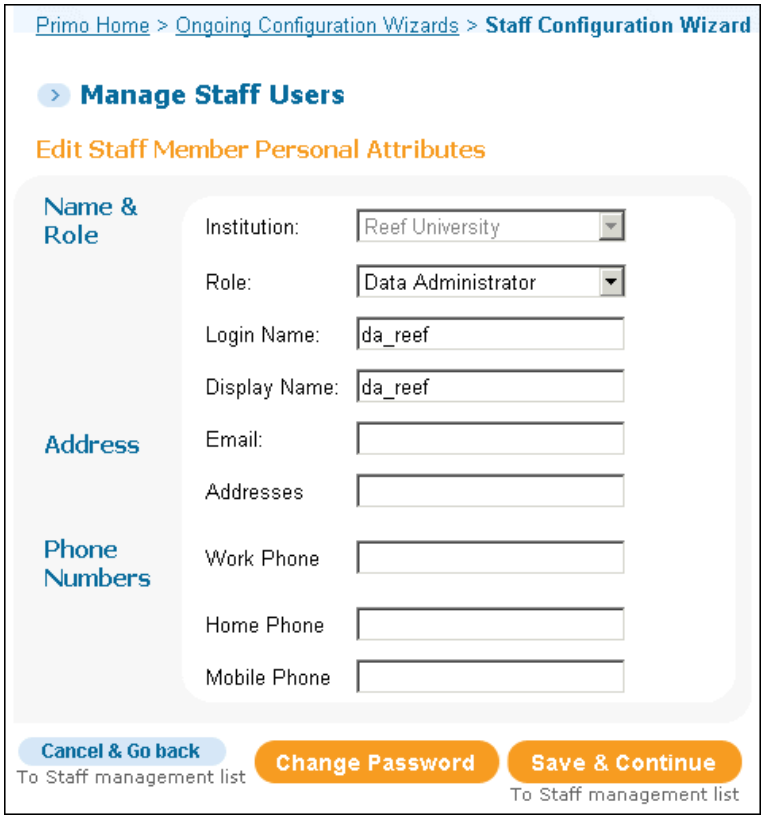
Note

For on-premises customers you must create a new staff user record if you want to change the configuration level of an existing staff user.

To edit staff user details:

1. In the View Staff Users list, click **Edit** next to the staff user that you want to edit.

   The Manage Staff Users page opens.



Manage Staff Users Page for Editing

2. Edit the staff user personal attributes (see Create a New Staff User Details for a list of fields).

3. Click **Save & Continue**.

   The staff user's details are updated and appear in the View Staff Users list on the Manage Staff Users page (see Manage Staff Users Page).

Deleting Staff Users

You can delete any staff users from the staff users list if they are no longer needed.

Note

If you are an institution-level staff user, you can only delete users who belong to your institution.

To delete a staff user:

1. In the View Staff Members list, click **Delete** next to the staff user that you want to delete.

   A confirmation dialog box opens.

2. Click **OK**.

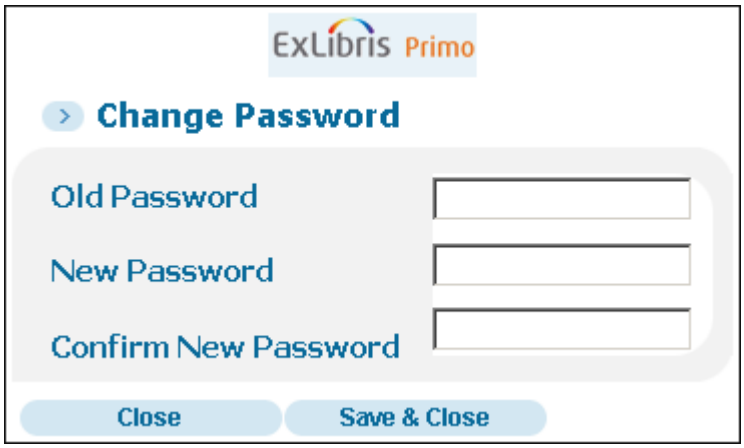
   The staff user details are deleted from the system, and the staff user name is removed from the Institution List.

Changing Staff User Passwords

You can change a staff user's password on the Edit Staff User Personal Attributes page.

To change a staff user's password:

1. On the Edit Staff User Personal Attributes page, click **Change Password** to display the Change Password dialog box.



Change Password Window

2. Type the old password.

Note

Users assigned the Superadmin role are not prompted for the old password.

---

3. Type the new password.
4. Retype the new password to confirm your change.
5. Click **Save & Close** to update your password.

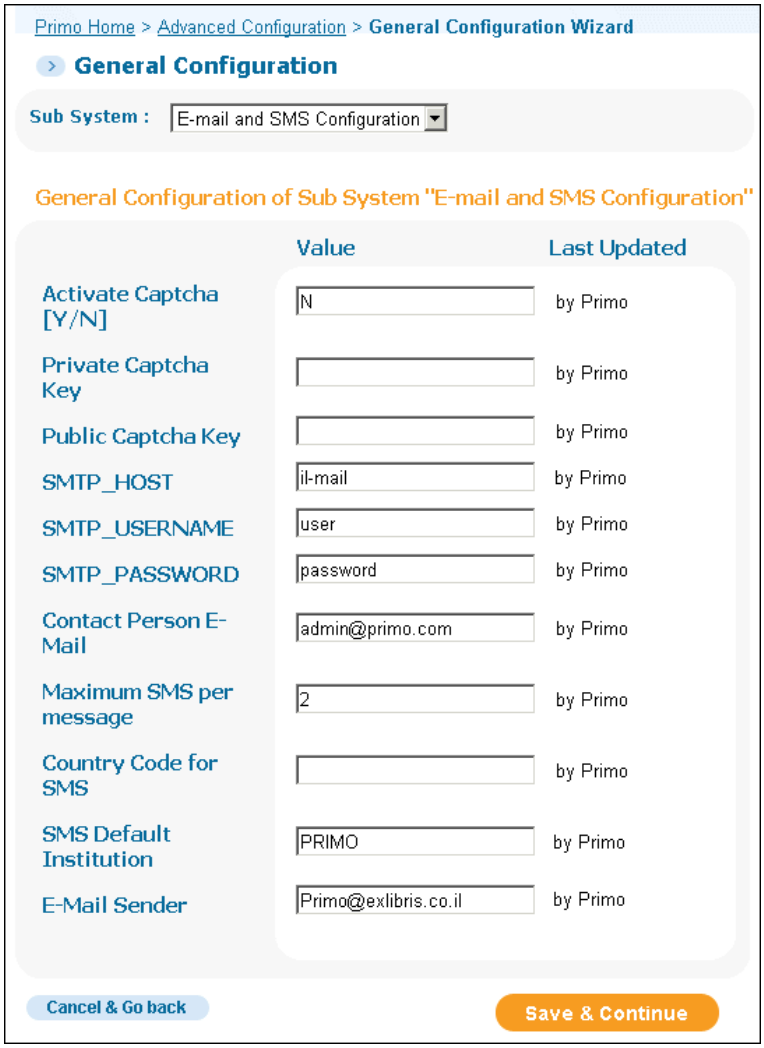
E-Mail and SMS Configuration

Return to menu

The E-mail and SMS Configuration subsystem page (see E-Mail and SMS Configuration Subsystem Page) in the General Configuration wizard enables on-premises customers to configure the e-mail server and SMS system. If the SMTP server requires authentication, you can specify the user name and password.

Note

Only installation-level staff users are permitted to update the General Configuration parameters.



E-Mail and SMS Configuration Subsystem Page

User Groups Configuration Wizard

Return to menu

Every user in the system is associated with a single user group. User groups are used to define the user's search and delivery restrictions. Before the user signs in to the system, the user's user group is **Guest**.

The User Groups Configuration wizard (**Primo Home > Ongoing Configuration Wizards > Configure User Groups**) allows you to manage your user groups via the User Group code table. From this code table, you can perform the following operations on user groups:

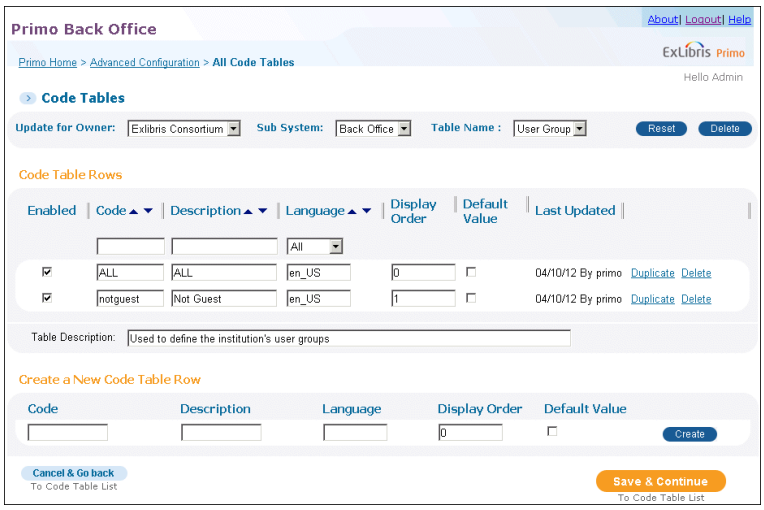
- Creating a User Group
- Editing a User Group
- Deleting a User Group

Note

Changes to the user groups must be deployed before changes take effect. To deploy these changes, click Deploy on the Configure User Groups page (see User Groups Code Tables Page).

Creating a User Group

The User Group code table page allows you to create different user groups for the various users of your institution's system.



User Groups Code Tables Page

To create a User Group:

1. Select the owner of the normalization rules from the **Update for Owner** drop-down list.

For installation-level staff users, select the installation name or a specific institution from the drop-down list. The valid values are **Installation** (if using the default name) or a specific institution.
For institution-level staff users, this field is set to your institution.

2. In the Create a New Code Table Row area, enter the user group information, as described in the following table:

Create a New Code Table Row

Field name	Description
Enabled	Select this check box to enable the the user group.
Code	The user group's ID code.
Description	Descriptive information about the User Group.
Language	The interface language for the User Group.
Display Order	The order in which the value (Description) displays in Back Office drop-down lists. If rows are assigned the same value, the items will appear as they are listed in the table.
Default Value	Whether this is the default User Group.

3. Click **Create**.

   The new user group appears in the list of code table rows.

4. Click **Save & Continue**.

Editing a User Group

The User Group code table page allows you to edit your institution's user groups once they are created.

To edit a User Group:

1. In the Code Table Rows area, edit the code table fields according to Create a New Code Table Row.

2. If the code table rows are grayed out, you will need to click the **Customize** button to create a version for your configuration level (or another institution if you are an installation-level staff user) so that it can be edited.

   For more information on using code tables, see Code Tables.

3. Select the Enabled check box to indicate which user groups are enabled in the system.

4. Click **Save & Continue**.

   The User Groups code table is updated.

Deleting a User Group

The User Group code table page allows you to delete a user group.

To delete a User Group:

1. If the code table rows are grayed out, you will need to click the **Customize** button to create a copy for your configuration level so that it can be edited.

   For more information on using code tables, see Code Tables.

2. In the Code Tables area, click **Delete** next to the row of the user group that you want to delete. Do not confuse this button with Delete button above the table, which deletes the entire table from your configuration level and restores the table to the previous configuration level (such as institution-level to installation-level or installation-level to OTB).

   Deleting a user group deletes all the user group restrictions and the user group's attribute mappings.
   The user group is deleted from the system, and the code table row is deleted from the code table list.

Primo User Authentication

The User Authentication Wizard allows you to configure the following stages of user authentication:

- User authentication – determines whether the user is a valid user.
- User information – obtains more information about the user (such as the user name and group).

Primo allows you to use the following methods for authentication:

- Primo Authentication Manager – With this method, Primo interacts directly with the institution's authentication server and supports authentication using SAML, CAS, LDAP, Aleph, Alma, and social login via Alma. Customers who want to switch from PDS to this method should contact to Ex Libris Support. For more information, see The Primo Authentication Manager.
- Patron Directory Services (PDS) – PDS is a back-end web application that provides a site with shared user authentication and Single-Sign-On (SSO) capabilities for the Ex Libris suite of products. PDS is configured to work with the institution's local authentication server and user database. For more information, see Using PDS for User Authentication.

The following sections describe how to configure the authentication systems that are supported by Primo:

The Primo Authentication Manager

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The Primo Authentication Manager supports the authentication of users using SAML, LDAP, and Alma. Login profiles allow you configure the authentication stages separately so that you can specify different systems for each. The following features are available with the Primo Authentication Manager:

- Login Profile – Each login profile includes the definitions for both user authentication and user information so that you can define user authentication with one system and fetch user information from another system. For example, you can configure the profile to authenticate users with SAML (such as Shibboleth) and fetch user information from Alma.
- Parallel Login – defines two login profiles for different groups within an institution. For example, if students and staff authenticate using Shibboleth (SAML) and temporary library users that are registered in Alma authenticate using Alma, you can define two profiles: one for SAML and another for Alma. The Primo sign-in page will display both sign-in options.
- Cascading Login – You can configure multiple login profiles that are assigned an order of precedence. This allows you to attempt authentication with the profile with the highest precedence and then attempt authentication with the login profile with the next highest precedence if authentication was unsuccessful. Cascading logins are possible only when Primo interfaces directly with the authentication system and the login page is a Primo page, which is provided with LDAP and Alma authentication only.

Defining Login Profiles (User Authentication and User Information)

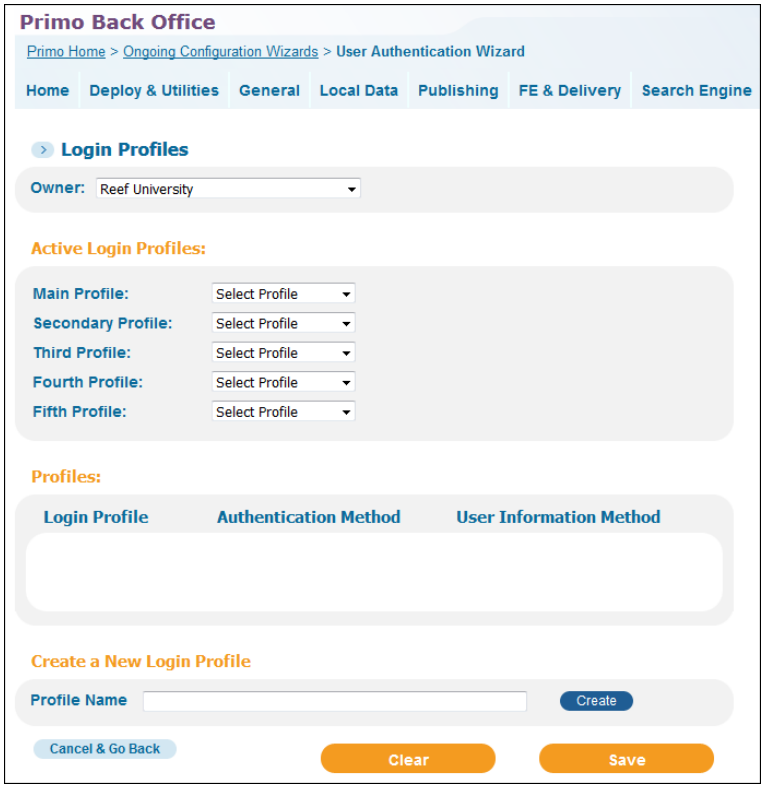
Login profiles include the definition of user authentication and user information using the supported authentication systems: SAML, LDAP, or Alma.

The User Authentication Wizard Page includes the following elements:

- **Owner** drop-down list – For on-premises Primo installations, you can create login profiles at the installation level as well as the institution level. Login profiles are generally defined at the institution level. If an institution does not have its own profile, it will inherit the profile that is defined at the installation level.
- **Active Login Profiles** – Yo can activate up to five parallel logins: a main profile and four additional profiles.e and up to four additional parallel profiles.
- **Profiles List** – The list of login profiles that you have created. For each profile, the list displays the profile name, the authentication method, and the user information method. You cannot delete profiles that have been activated in the Active Login Profiles section.
- **Create a New Login Profile** – This option allows you create a new login profile.

To define a login profile:

1. Open the Login Profiles page (**Primo Home > Ongoing Configuration Wizards > User Authentication Wizard**).



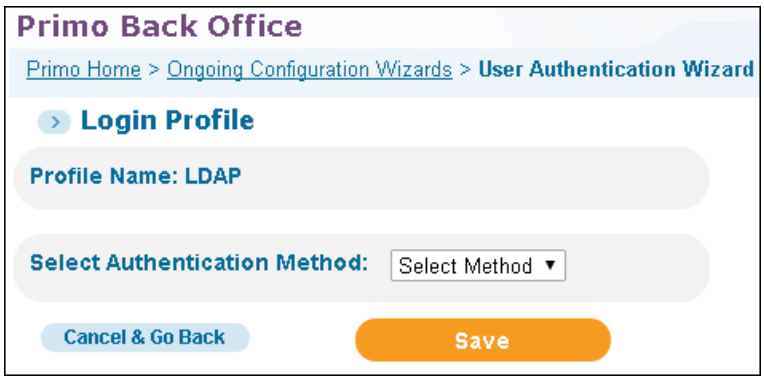
Login Profiles Page

2. For on-premises installations only, if you have installation-level permissions, select **Installation** or a specific institution from the **Owner** drop-down list.

   For institution-level staff users, your institution is selected automatically.

3. In the **Create a New Login Profile** section,specify a profile name and then click the **Create** button.

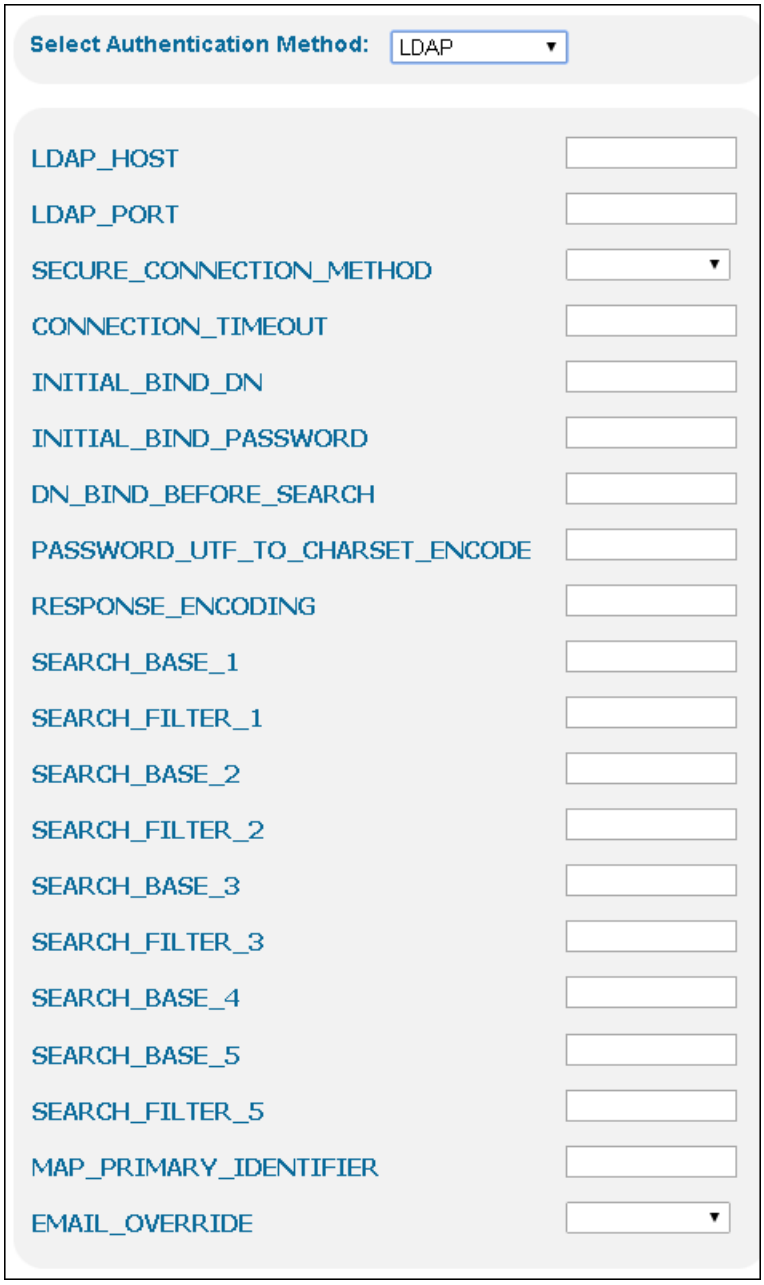
   The Login Profiles configuration page opens.



Login Profiles - Select Authentication Method

4. From the **Select the Authentication Method** drop-down list**,** select the authentication method (**SAML**, **LDAP**, or **Alma**).

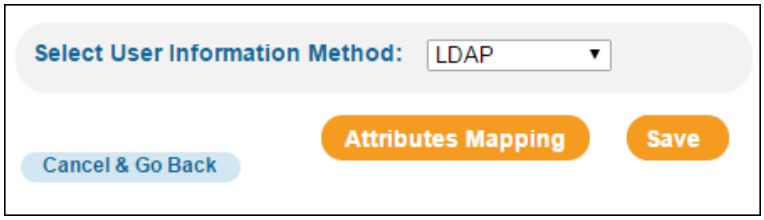
   The method-specific fields appear on the page. For example, the following fields appear for LDAP profiles.



Login Profiles - LDAP User Authentication

5. Fill in the method-specific fields for the user authentication stage. For more information, see the following sections:
   - Using SAML for User Authentication
   - Using LDAP for User Authentication
   - Using Alma for User Authentication
6. From the **Select User Information Method** drop-down list, select the user information method (**SAML**, **LDAP**, or **Alma**).
7. Click **Save** and then re-edit the login profile to configure attribute mapping.

   The Attribute Mapping button appears on the Login Profiles configuration page.

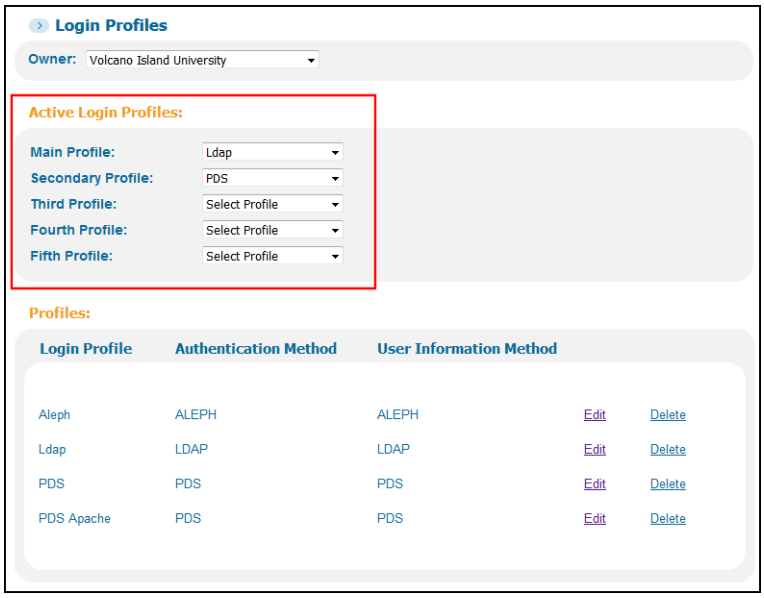


Attribute Mapping Button Added

8. Click the **Attribute Mapping** button to configure how the user attributes are mapped from the user information system to Primo. For more information, see Attribute Mapping.
9. Click **Save** to return to the Login Profiles page.
10. If you want to activate the profile, define it as one of the **Active Profiles** under the Active Login Profiles section.
11. Deploy the **User Authentication Configuration** option on the Deploy all page.

Defining Parallel Login Profiles

If you have user groups that require different authentication methods (or if you want to provide users with alternative methods of user authentication), you can select one authentication method from the **Main Profile** drop-down list and up to four additional authentication methods from the remaining drop-down lists in the Active Login Profiles section. If more than one profile is activated, Primo will display a Parallel Links page in the Front End UI, which allows end users to select an authentication method.



Parallel Login Profiles

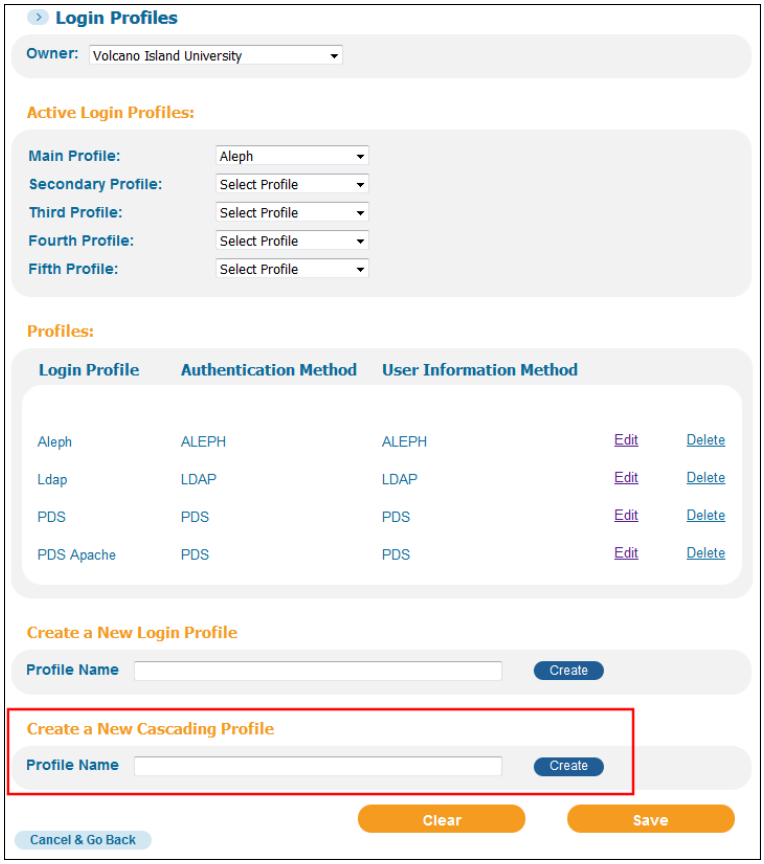
Defining Cascading Profiles

Cascading profiles allow you to authenticate users with a series of authentication methods (LDAP and Alma only) if an authentication attempt is rejected by a system. Subsequent authentication attempts are performed automatically using the next login profile defined in the cascading profile.

To create a cascading profile:

1. Add a profile for each type of authentication method that you want to cascade. The following authentication methods are supported: Alma and LDAP.

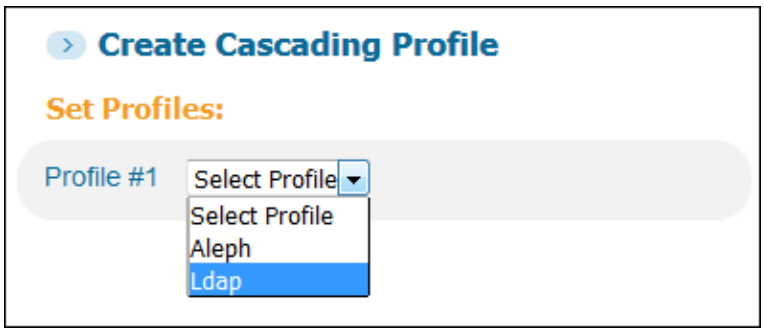
   After you have defined at least two login profiles of the supported authentication methods, the **Create a New Cascading Profile** drop-down list will appear.



Login Profiles - Creating a New Cascading Profile

2. Enter a name for the cascading profile in the **Create a New Cascading Profile** field and click **Create**.

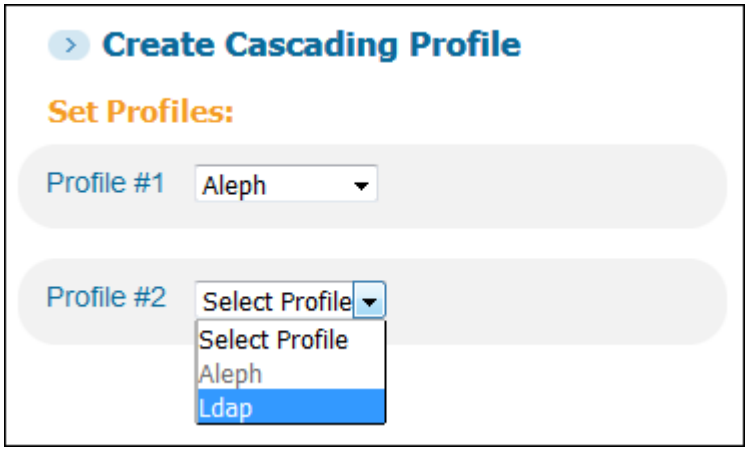
   The Create Cascading Profile pages opens.



Create Cascading Profile - Select First Profile

3. Select the first login profile to use for authentication from the **Profile #1** drop-down list.

   The system displays the next Profile drop-down list.



Create Cascading Profile - Select Next Profile

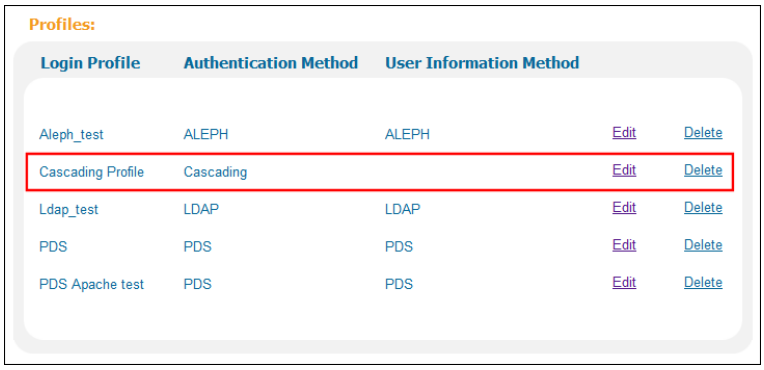
4. Select the next login profile to use for authentication from the **Profile #2** drop-down list.

   The system displays the **Profile #3** drop-down list.

5. If necessary, select the next login profile to use for authentication from the next **Profile** drop-down list.

6. Click **Save** to save your cascading profile.

   The new cascading profile appears in the list of login profiles.



New Cascading Profile Added

7. In the Active Login Profiles section, select the new cascading profile from the relevant **Profile** drop-down list.

8. Click **Save**.

Clearing Active Login Profiles

The Active Login Profiles section on the Login Profiles page (**Primo Home > Ongoing Configuration Wizards > User Authentication Wizard**) allows you to specify the active login profiles and the order in which they appear on the User Login page. To clear all active profiles, click the **Clear** button.

Note

This action does not delete the login profiles listed in the Profiles section

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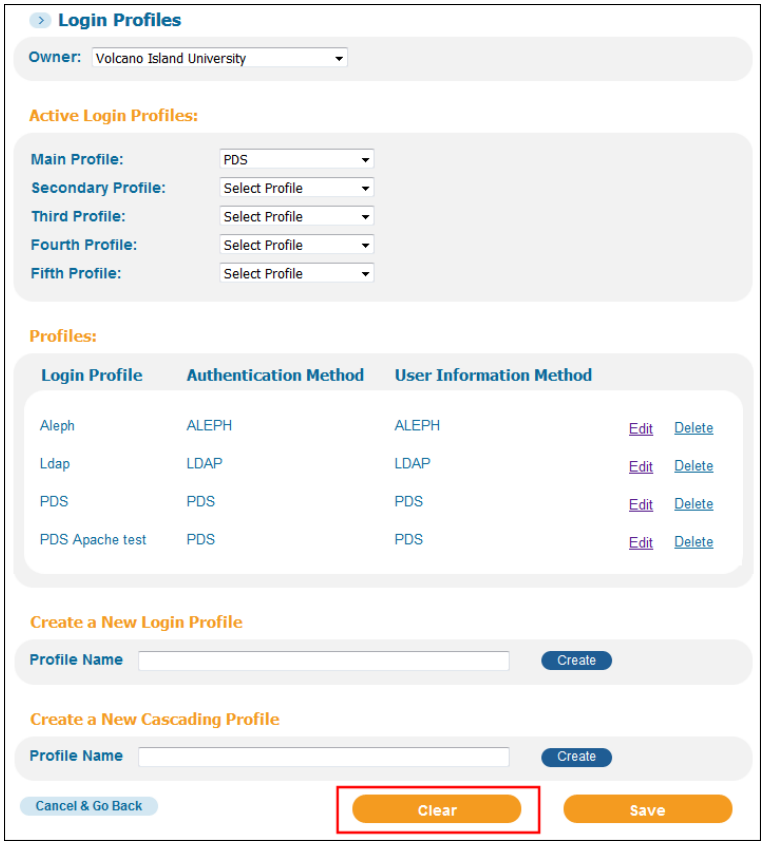

Clearing All Active Login Profiles

Using SAML for User Authentication

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SAML (Security Assertion Markup Language) is an XML-based, open standard data format for exchanging authentication and authorization data between parties (in particular, between an identity provider and a service provider such as Primo). Primo supports the SAML 2.0 Web Browser SSO profile, which enables Primo to exchange authentication and authorization information.

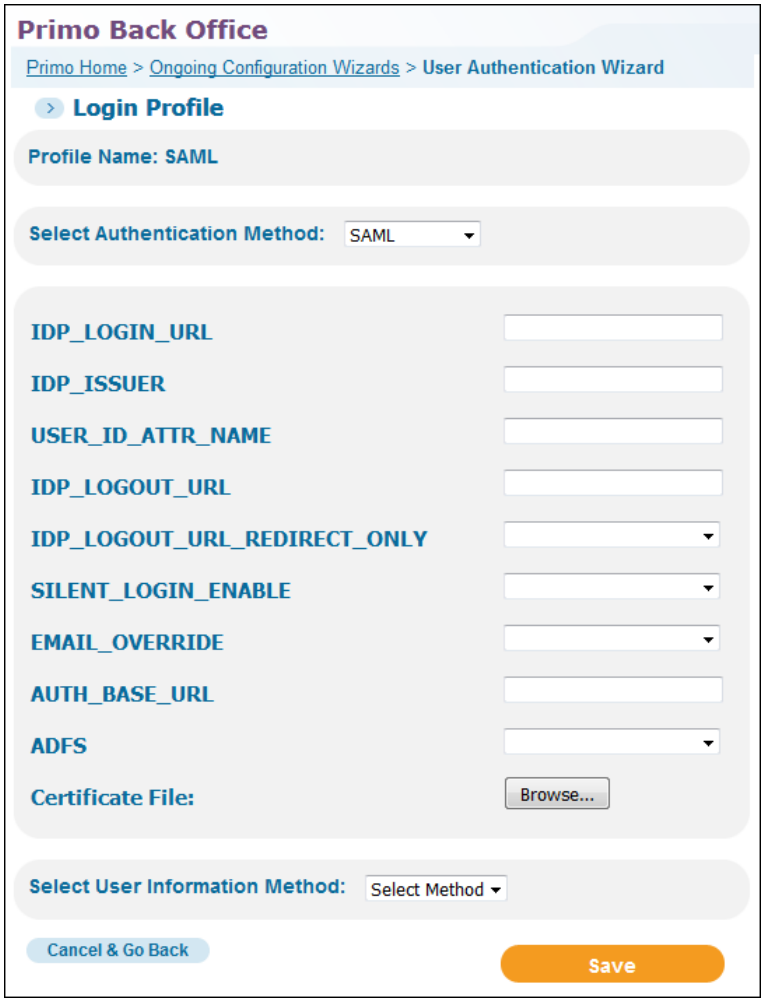
The SAML specification defines three roles: the user, the identity provider (IDP), and the service provider (SP). Primo is the service provider, and for example, Shibboleth is the identity provider. The following steps describe the interaction between the user, Primo, and the IDP to provide authentication and authorization:

1. The user invokes the sign-in option in Primo.
2. Primo sends an authentication request to the IDP using the HTTP-Redirect binding.
3. The IDP performs a single-sign-on check.
4. If the user is not logged on to the IDP, the IDP's login page (which is not Primo's login page) opens.
5. After the user logs on, the IDP redirects back to Primo with a SAML response, which includes an assertion (encrypted or non-encrypted), using the HTTP-POST binding.
6. Primo retrieves the user attributes from the SAML response (or fetches user attributes from Alma or Aleph) and logs the user in.

To configure Primo to use SAML authentication:

1. Gather the necessary information about your IDP provider from your authentication manager. In SAML terms this means to compile IDP metadata.
2. Open the User Authentication Wizard page (**Primo Home > Ongoing Configuration Wizards > User Authentication Wizard).**
3. From the list of profiles, click **Edit** next to the SAML profile that you want to configure.

   The Login Profile page opens.



SAML Login Profile Page

4. Use the following table to configure the SAML authentication fields:

SAML Configuration Fields

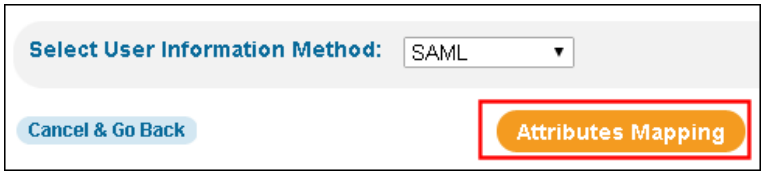
Parameter	Description
IDP_ LOGIN_ URL	(Required) The IDP login URL. This is the URL Primo uses when it sends the authentication request.
IDP_ ISSUER	(Required) The IDP entity ID.
USER_ID_ ATTR_ NAME	Defines the user attribute that should be used as the user's unique ID. If not defined, the SAML default will be used.
IDP_ LOGOUT_ URL	This is the sign-out URL. When users sign-out or the Primo session ends, Primo will redirect them to this URL. Depending on the setting of the **IDP_LOGOUT_URL_REDIRECT_ONLY** field, Primo will also attach a SAML Logout Request to this URL.

Parameter	Description
	Note The IDP logout URL must end with a question mark. For example: `https://login.myInst.edu/logout.jsp?`
IDP_ LOGOUT_ URL_ REDIRECT_ ONLY	This option indicates whether a SAML Logout Request is attached to the IDP logout URL. The following values are valid: ◦ blank or **False** – The user is redirected to the IDP logout URL and a SAML Logout Request is attached to the URL so that the logout process can be handled further by the IDP. Check with your Authentication administrator to make sure that this functionality is supported by your IDP provider. ◦ **True** – The user is redirected to the IDP logout URL only.
SILENT_ LOGIN_ ENABLE	The valid values are **True** (default) and **False**. Enable or disable “silent login” in Primo. If “silent login” is enabled and a new session is opened with the same browser in a new window or tab, the user is automatically logged on to Primo.
EMAIL_ OVERRIDE	The valid values are **True** and **False** (default). If set to **True**, the email returned with the user information will always override the email stored in the user’s profile in Primo.
AUTH_ BASE_URL	The base URL name used by the institution. For example: `https://<institution>-primo.hosted.exlibrisgroup.com` **Note** There is no path after the server name. Use `http` or `https` according to your needs.
ADFS	Indicates whether Active Directory Federation Services (AD FS) is enabled on the system. The valid values are **True** and **False**.
Certificate File	(Required) Click **Choose File** to select which public encryption key certificate file to load from the IDP provider. The certificate file must be in text format and have one of the following extensions: `.cer` or `.pm`.

5. Select **SAML**, **ALEPH** (see Aleph Information Request Fields)**,** or **ALMA** (see Alma Information Request Fields) from the **Select User Information Method** drop-down list.

6. Click **Save** to save your profile and return to the Login Profiles page.
7. From the list of profiles, click **Edit** next to your SAML profile.

   The Login Profile page opens with an additional option.



SAML Login Profile Page - Additional Option

Note

The Attributes Mapping button displays only when the user information method has been selected and saved.

---

8. Map the user attributes that are associated with SAML authentication. For more information, see Attribute Mapping.
9. Click **Save** to save your profile and return to the list of profiles on the Login Profiles page.
10. Create the certificate and send it to your IDPs. For more information, see Managing Certificates for SAML Authentication.

Managing Certificates for SAML Authentication

Return to menu

The Certificate Manager allows you to create (see Creating a New Certificate) or replace (see Replacing a Certificate) a certificate for SAML authentication. A certificate may need to be replaced for security measures or when a certificate is near expiration. The replacement of a certificate is recommended every two to three years.

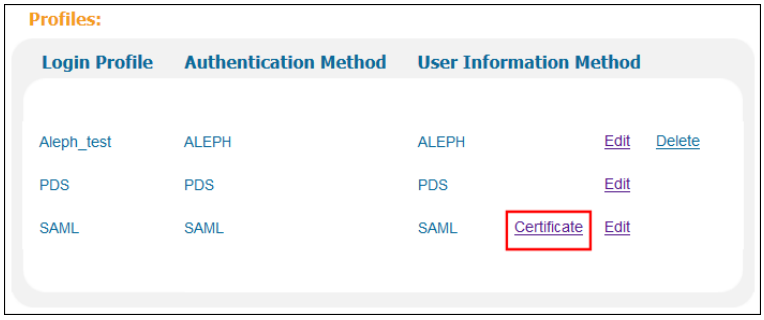
- After you have installed the metadata on the IDP, users will not be able to log on to the Front End UI until the new certificate has been activated in the Primo login profile.
- When activating a new certificate, all SAML profiles associated with your institution are affected. This means that the metadata file must be installed on all IDPs associated with those SAML profiles before the new certificate is activated.

To create a SAML certificate:

1. On the User Authentication Wizard page (**Primo Home > Ongoing Configuration Wizards > User Authentication Wizard**), make sure that your institution appears in the **Owner** field.

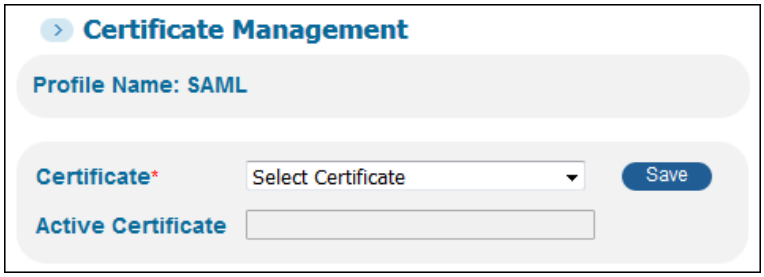
Verify Owner Field on Login Profiles Page

2. In the list of profiles, click **Certificate** next to the SAML profile.



Login Profiles List

3. From the **Certificate** drop-down list, select a certificate. You can choose a certificate based on its expiration date and whether it is self-signed.

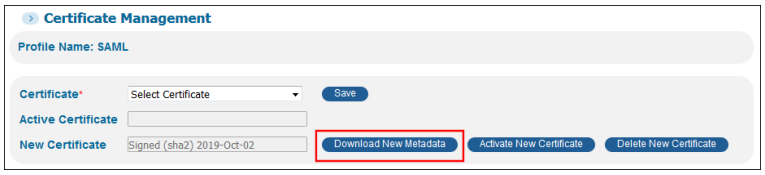


Select Certificate

4. Click **Save**.

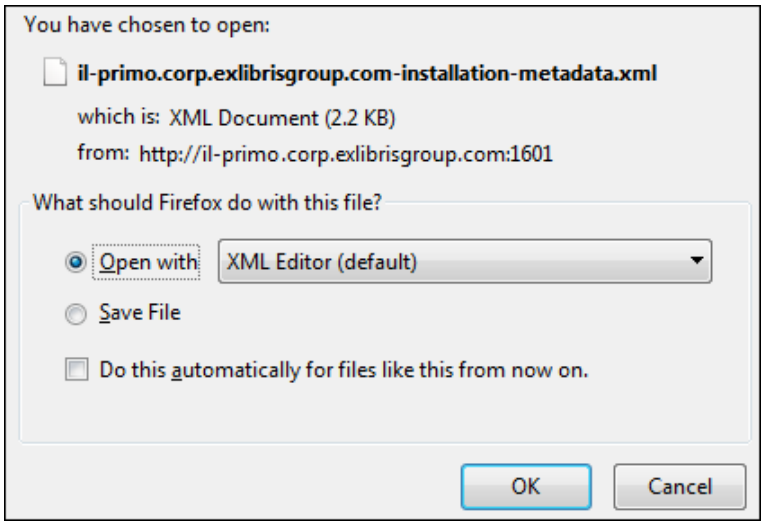
5. Create a file that contains information about Primo as the service provider:

   1. Click **Download Metadata** to get a local copy of the metadata file. If you have configured additional SAML profiles to support additional IDPs, you must perform this operation for each of the profiles..



Download Metadata Button

   2. Depending the browser you are using, a dialog box may appear. Save the file to your machine.



Save File Dialog Box

   3. Send the file to your Authentication Manager.

6. On the IDP, create a backup file for the old metadata file. If you support multiple IDPs for SAML, perform this operation on each of them.

7. On the IDP, upload and install the new metadata file. If you support multiple IDPs for SAML, make sure that you install the appropriate metadata file on each IDP.

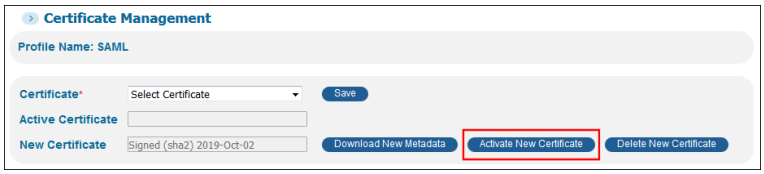
   After the metadata file has been replaced, end users will not be able to log on to the Front End UI until the new metadata file has been activated in the Primo Back Office.

8. Repeat steps 1 through 2 to re-edit the certificate for your login profile.

Note

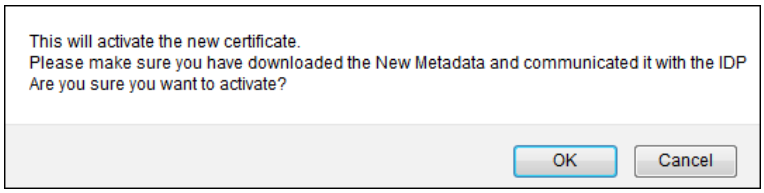
If you decide not to activate the new metadata file, click **Delete New Metadata** and re-install the backup copy of the old metadata file on the IDP.

9. Click **Activate Metadata** to activate the new certificate. If you have configured more than one SAML profile, it is only necessary to perform this operation on one of the profiles.



Activate Metadata Button

10. Click **OK** to continue with the activation.

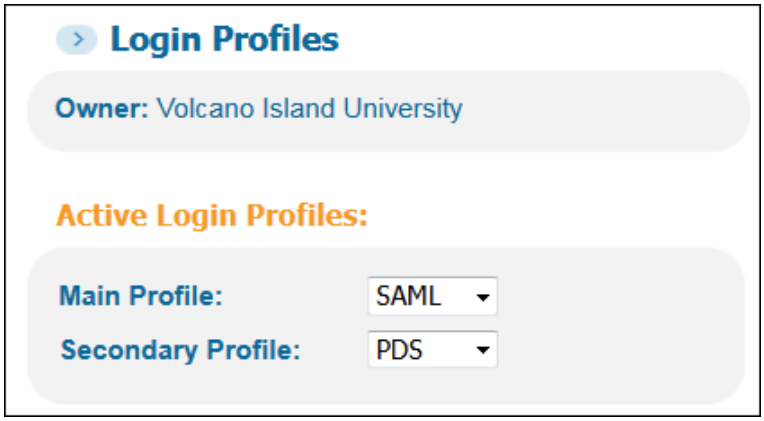


Continue Activation Prompt

11. Verify that users can log on to the Front End UI.

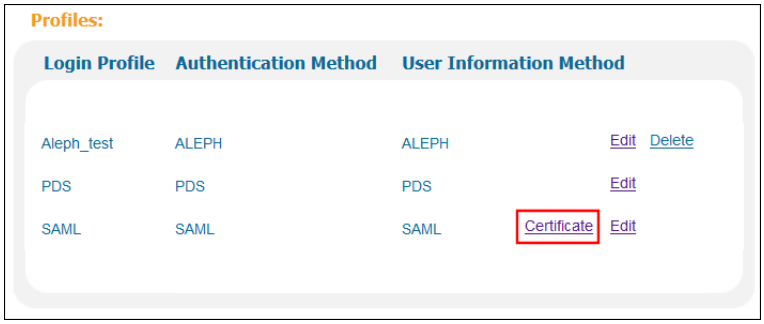
To replace a SAML certificate:

1. On the User Authentication Wizard page (**Primo Home > Ongoing Configuration Wizards > User Authentication Wizard**), make sure that your institution appears in the **Owner** field.



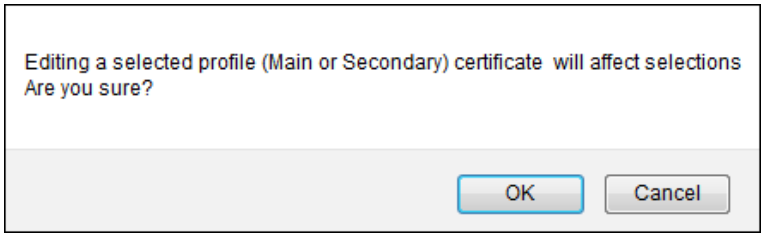
Verify Owner Field on Login Profiles Page

2. In the list of profiles, click **Certificate** next to the SAML profile.



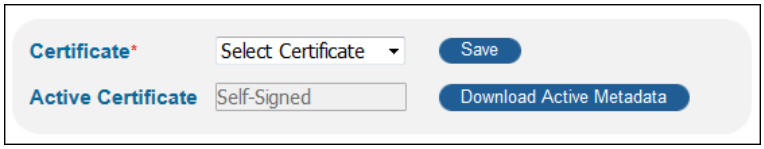
Login Profiles List

3. Click **OK** to continue.



Continue to Certificate Manager

4. From the **Certificate** drop-down list, select a certificate. You can choose a certificate based on its expiration date and whether it is self-signed.

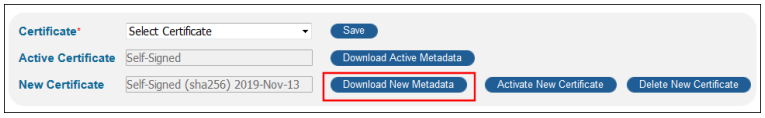


Select Certificate

5. Click **Save**.

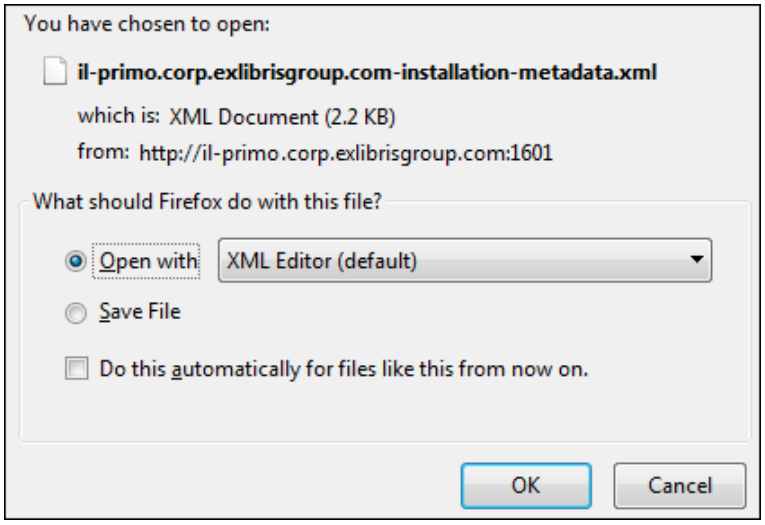
6. Create a file that contains information about Primo as the service provider:

   1. Click **Download Metadata** next to the **New Certificate** field to get a local copy of the metadata file. If you have configured additional SAML profiles to support additional IDPs, you must perform this operation for each of the profiles..



Download Metadata Button

   2. Depending the browser you are using, a dialog box may appear. Save the file to your machine.



Save File Dialog Box

3. If you have configured the **AUTH_BASE_URL** field in your login profile, edit the file and replace the URLs shown in bold below with the contents of the **AUTH_BASE_URL** field.


```
<?xml version="1.0" encoding="UTF-8"?>
<md:EntityDescriptor xmlns:md="urn:oasis:names:tc:SAML:2.0:metadata"
ID="787e867e7d6b404f842faf5bbf5006aa" entityID="https://s.com/primo_library/
libweb/VOLCANO">
<md:SPSSODescriptor AuthnRequestsSigned="false" WantAssertionsSigned="true"
protocolSupportEnumeration="urn:oasis:names:tc:SAML:2.0:protocol">
<md:KeyDescriptor>
<ds:KeyInfo xmlns:ds="http://www.w3.org/2000/09/xmldsig#">
<ds:X509Data>
<ds:X509Certificate>MIIFKDCCBBCgAwIBAgIQDNKHcxHQe79LJSYe7bWJZzANBgkqhkiG9w0BAQsFADBNMQs
EwJVUzEVMBMGA1UEChMMRGlnaUNlcnQgSW5jMScwJQYDVQQDEx5EaWdpQ2VydCBTSEEyIFNlY3Vy
ZSBTZXJ2ZXIgQ0EwHhcNMTYwNzI1MDAwMDAwWhcNMTkxMDAyMTIwMDAwWjByMQswCQYDVQQGEwJV
UzERMA8GA1UECBMISWxsaW5vaXMxEDAOBgNVBAcTB0NoaWNhZ28xHTAbBgNVBAoTFEVYIExJQlJJ
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```

```
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WvHKUsSzDOVAB0dDSw==</ds:X509Certificate>
</ds:X509Data>
</ds:KeyInfo>
</md:KeyDescriptor>
<md:SingleLogoutService Binding="urn:oasis:names:tc:SAML:2.0:bindings:HTTP-
Redirect" Location="https://s.com/primo_library/libweb/samlLogout"/>
<md:NameIDFormat>urn:oasis:names:tc:SAML:2.0:nameid-
format:transient</md:NameIDFormat>
<md:AssertionConsumerService
Binding="urn:oasis:names:tc:SAML:2.0:bindings:HTTP-POST"
Location="https://s.com/primo_library/libweb/samlLogin" index="0"
isDefault="true"/>
</md:SPSSODescriptor>
</md:EntityDescriptor>
```

Example Primo Metadata File

4. Send the file to your Authentication Manager.

7. On the IDP, create a backup file for the old metadata file. If you support multiple IDPs for SAML, perform this operation on each of them.

8. On the IDP, upload and install the new metadata file. If you support multiple IDPs for SAML, make sure that you install the appropriate metadata file on each IDP.

   After the metadata file has been replaced, end users will not be able to log on to the Front End UI until the new metadata file has been activated in the Primo Back Office.

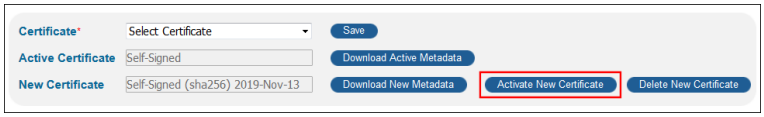
9. Repeat steps 1 through 2 to re-edit the certificate for your login profile.

Note

If you decide not to activate the new metadata file, click **Delete New Metadata** and re-install the backup copy of the old metadata file on the IDP.

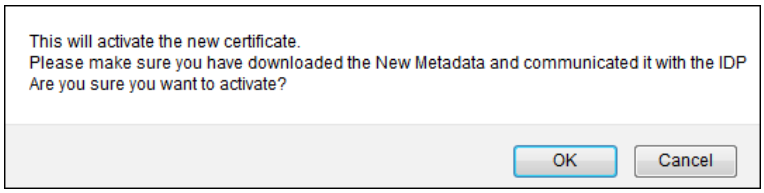
---

10. Click **Activate Metadata** next to the **New Certificate** field to activate the new certificate. If you have configured more than one SAML profile, it is only necessary to perform this operation on one of the profiles.



Activate Metadata Button

11. Click **OK** to continue with the activation.



Continue Activation Prompt

12. Verify that users can log on to the Front End UI.

Using CAS for User Authentication

Return to menu

CAS (Central Authentication Service) is a single sign-on protocol that allows users to access multiple applications while providing their credentials (such as a user ID and password) only once. The following steps describe the interaction between the user, Primo, Alma or Aleph, and the CAS host to provide authentication and authorization:

1. The user invokes the sign-in option in Primo.
2. Primo sends an authentication request to the specified CAS host.
3. The host performs a single-sign-on check.
4. If the user is not logged on to the CAS server, the host's login page (which is not Primo's login page) opens.
5. After the user logs on, the host redirects back to Primo with a CAS response, which includes a ticket for validation.
6. Primo retrieves the user attributes from the CAS response (or fetches user attributes from Alma or Aleph) and logs the user in.

To configure Primo to use CAS authentication:

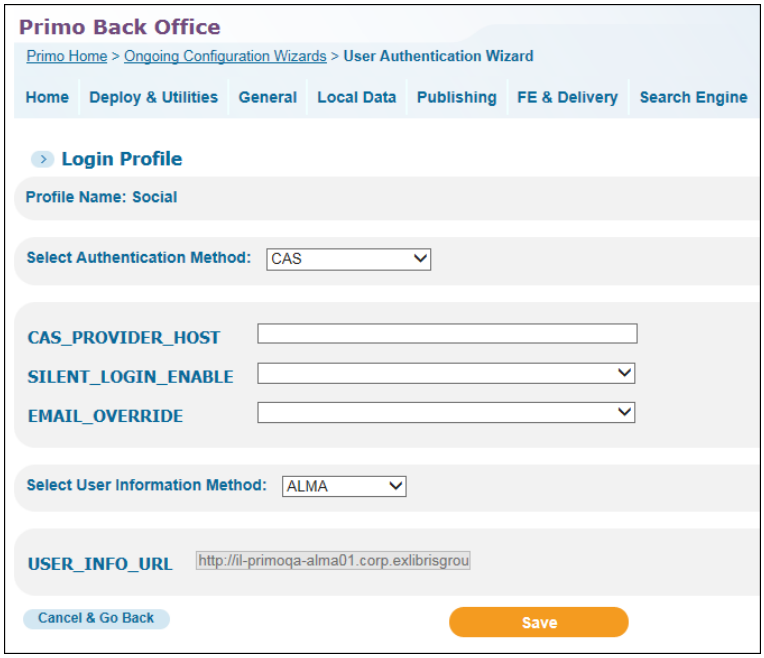
1. Open the User Authentication Wizard page (**Primo Home > Ongoing Configuration Wizards > User Authentication Wizard**).
2. Select your institution from the **Owner** drop-down list.

   Note

   The source of your Primo institution must be Alma in order use Alma user authentication.

3. From the list of profiles, click **Edit** next to the CAS profile that you want to configure.

   The Login Profile page opens.



CAS Login Profile Page

4. Use the following table to configure the CAS authentication fields:

CAS Configuration Fields

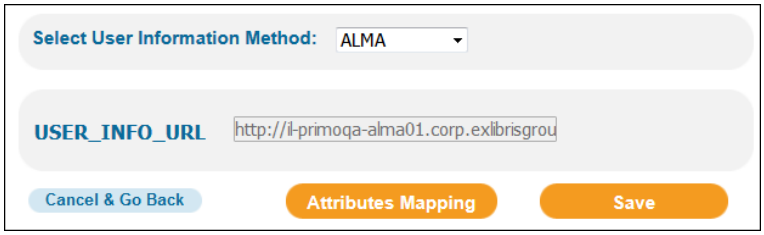
Parameter	Description
CAS_ PROVIDER_ HOST	(Required) The CAS login URL. This is the URL Primo uses when it sends the authentication request.
SILENT_ LOGIN_ ENABLE	The valid values are **True** (default) and **False**. Enable or disable “silent login” in Primo. If “silent login” is enabled and a new session is opened with the same browser in a new window or tab, the user is automatically logged on to Primo.
EMAIL_ OVERRIDE	The valid values are **True** and **False** (default). If set to **True**, the email returned with the user information will always override the email stored in the user’s profile in Primo.

5. Select **ALMA** (see Alma Information Request Fields) or **ALEPH** (see Aleph Information Request Fields) from the **Select User Information Method** drop-down list.

6. Click **Save**.

7. From the list of profiles, click **Edit** next to your CAS profile.

   The Login Profile page opens with additional options.



CAS Login Profile Page - bor-info Options for Alma

Note

The Attributes Mapping button displays only when the user information method has been selected and saved.

---

8. Map the user attributes associated with Alma authentication. For more information, see Attribute Mapping.

Using LDAP for User Authentication

Return to menu

LDAP (Lightweight Directory Access Protocol) is an application protocol for accessing and maintaining distributed directory information services over an IP network. Directory services may provide any organized set of records, often with a hierarchical structure. The usage referred to here is the authentication of user records. The following steps describe the interaction between the user, Primo, and the LDAP server to provide authentication and authorization:

1. The user invokes the sign-in option in Primo.
2. Primo displays the Primo login page.
3. The user enters his or her credentials.
4. Primo sends the user's credentials in a secured authentication request to the LDAP server.
5. The LDAP server sends a response to Primo indicating whether the user has been authenticated.

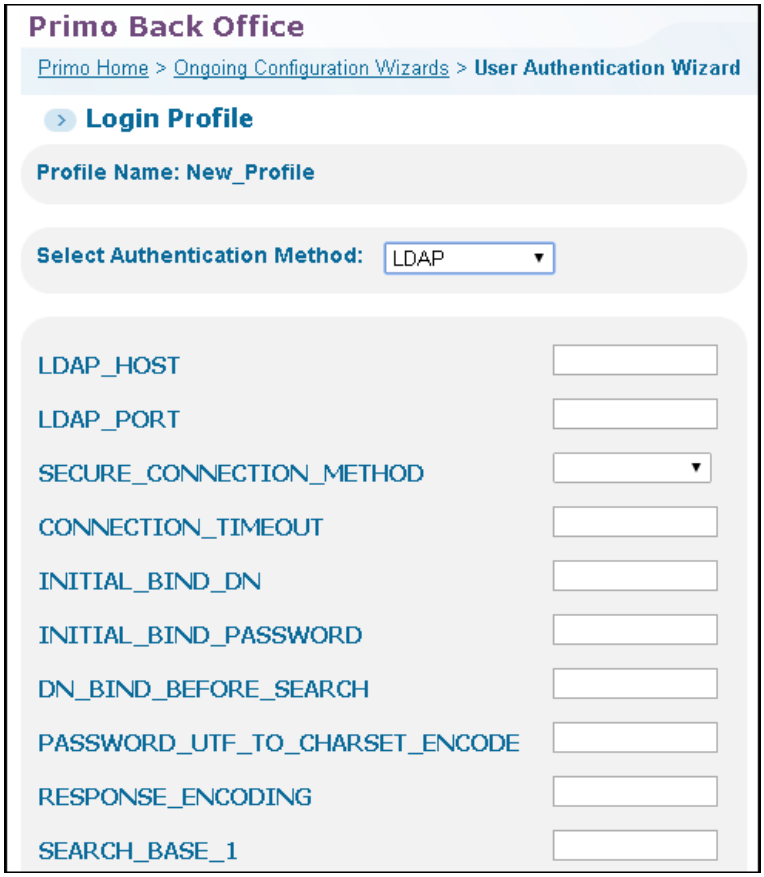
   If the user has been authenticated, the response will also include user information. Otherwise, an error will display on the Primo login page.
6. If the user has been authenticated and the user information method is LDAP, Primo will use the user information sent by the LDAP server and log the user in. If a different method is used to provide user information, Primo will use this method to retrieve user information and log the user on to Primo.

If you need to authenticate against multiple LDAP servers, define multiple login profiles and then define a cascading login profile.

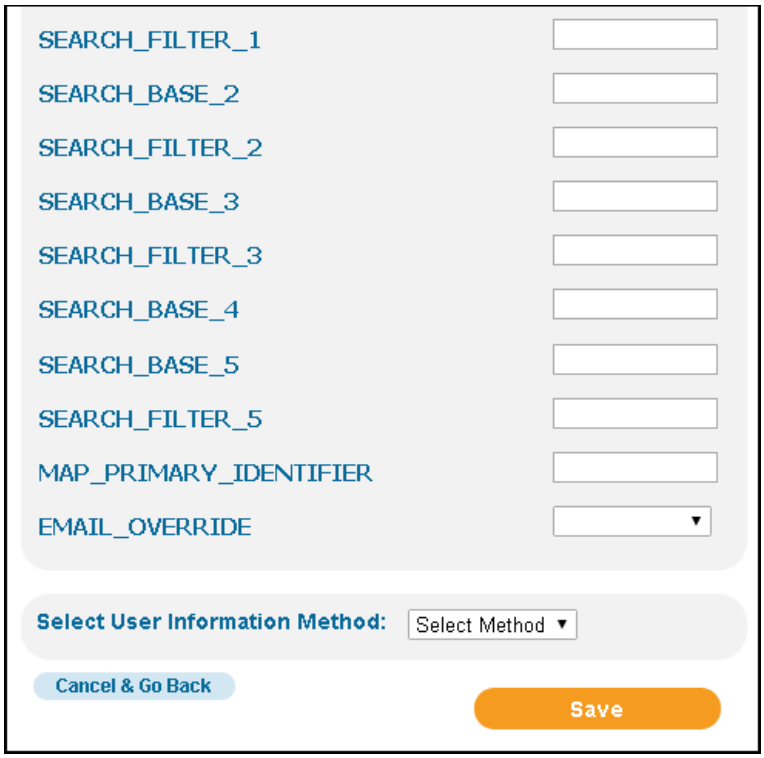
To configure Primo to use LDAP authentication:

1. Gather the necessary information about your LDAP server.
2. Open the User Authentication Wizard page (**Primo Home > Ongoing Configuration Wizards > User Authentication Wizard).**
3. From the list of profiles, click **Edit** next to the LDAP profile that you want to configure.

   The Login Profile page opens.



LDAP Login Profile Page (1 of 2)



LDAP Login Profile Page (2 of 2)

4. Use the following table to configure the LDAP authentication fields:

LDAP Configuration Fields

Parameter	Description
LDAP_HOST	(Required) The host name of the remote LDAP server.
LDAP_PORT	(Required) The port number of the remote LDAP server.
SECURE_ CONNECTION_ METHOD	(Required) Select either LDAP secure mode or Transport Layer Security (TLS) to provide an encrypted connection. **Note** SSL connections must be secured with a certificate issued by a recognized certificate authority (such as Comodo, Verisign, or Thawte). Use of TLS requires LDAP version 3 or later.
CONNECTION_ TIMEOUT	The timeout value in milliseconds. The default value is 60000 (one minute) for the connection timeout.
INITIAL_BIND_ DN	The full DN (distinguished name) for the initial bind.
INITIAL_BIND_ PASSWORD	The DN password for the initial bind.
DN_BIND_ BEFORE_ SEARCH	Specify the DN when you want to use dynamic password binding instead of a hard-coded password for the initial bind.
RESPONSE_ ENCODING	Indicates whether to encode the LDAP response before sending it back to the calling application. The only possible value is UTF8.
SEARCH_ BASE_1 - SEARCH_ BASE_5	Enter the full path search in the LDAP directory tree to the user. The system searches the LDAP tree to locate the user's record based on the Search base and Search filter. At least one SEARCH_BASE and SEARCH_FILTER pair must be defined. **Note** The SEARCH_BASE and SEARCH_FILTER parameters can be repeated to search in more than one tree. If the results of the SEARCH_BASE and SEARCH_FILTER pair are not unique (or a zero-size result), the search step is repeated for the next provided SEARCH_BASE and SEARCH_ FILTER pair.
SEARCH_ FILTER_1 -	Enter the parameter by which you want to filter the results to return only one object. At least one SEARCH_BASE and SEARCH_FILTER pair must be defined.

Parameter	Description
SEARCH_ FILTER_5	The system searches the LDAP tree to locate the user's record based on the SEARCH_BASE and SEARCH_ FILTER pair. (See the note for the SEARCH_BASE field.)
MAP_ PRIMARY_ IDENTIFIER	Defines the LDAP user attribute that should be used as the user's unique ID. If this field is not specified, the LDAP default is used.
EMAIL_ OVERRIDE	The valid values are **True** and **False** (default). If set to **True**, the email returned with the user information will always override the email stored in the user's profile in Primo.

5. Select **LDAP**, **ALEPH** (see Aleph Information Request Fields) , or **ALMA** (see Alma Information Request Fields) from the **Select User Information Method** drop-down list.

6. Click **Save**.

7. From the list of profiles, click **Edit** next to your LDAP profile.

   The Login Profile page opens with the attribute mapping option.

LDAP Login Profile Page - LDAP Attribute Mapping

Note

The Attributes Mapping button displays only when the user information method has been selected and saved.

---

8. Map the user attributes associated with fetching user information using either LDAP or ALMA requests. For more information, see Attribute Mapping.

Using Alma for User Authentication

Return to menu

When using Alma to perform user authentication, typically user information is also requested from Alma.

The following steps describe the interaction between the user, Primo, and Alma to provide authentication and authorization:

1. The user invokes the sign-in option in Primo.
2. Primo displays the Primo login page.
3. The user enters his or her credentials.
4. Primo sends the user's credentials in a secured authentication request to Alma.
5. Alma sends a response to Primo indicating whether the user has been authenticated.

   If the user has been authenticated, the response will also include user information. Otherwise, an error will display on the Primo login page.
6. If the user has been authenticated, Primo will log the user in.

Authentication using Alma does not require much configuration because the relevant information is defined for the Primo institution and displays automatically for you in the login profile.

To configure Primo to use Alma authentication:

1. Open the User Authentication Wizard page (**Primo Home > Ongoing Configuration Wizards > User Authentication Wizard**).
2. Select your institution from the **Owner** drop-down list.

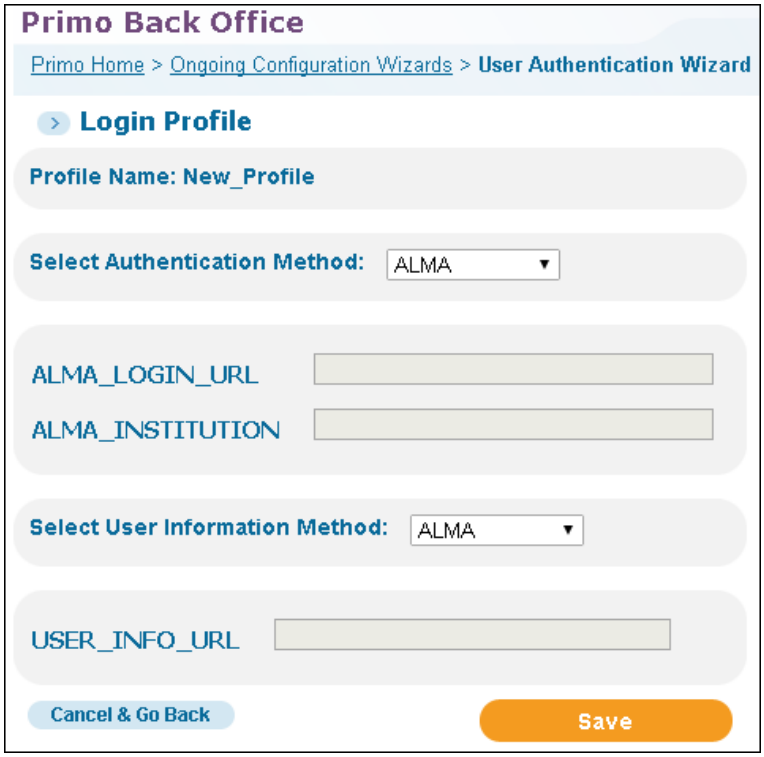
   Note

   The source of your Primo institution must be Alma in order use Alma user authentication.

   ---

3. From the list of profiles, click **Edit** next to the Alma profile that you want to configure.

   The Login Profile page opens.



Alma Login Profile Page

4. Use the following table to configure the Alma authentication fields:

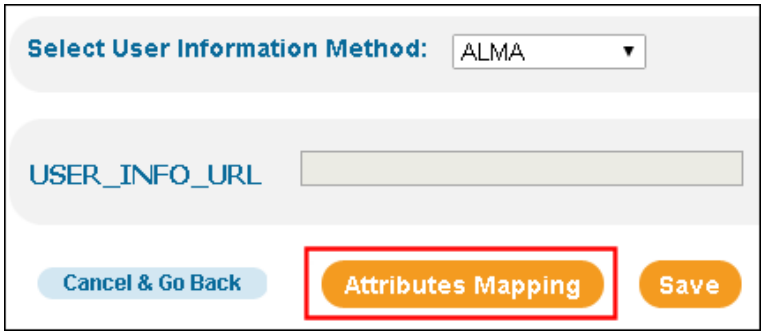
Alma Configuration Fields

Parameter	Description
Alma Authentication Request Fields:	
ALMA_ LOGIN_URL	(Required) The IDP login URL. This is the URL Primo uses when it sends the authentication request (bor_auth). This field is automatically populated for you based on the Alma base URL settings in the Institution Wizard.
ALMA_ INSTITUTION	(Required) The IDP entity ID. This field is automatically populated for you.
Alma Information Request Fields:	
Select User Information Method	For Alma authentication, **ALMA** is selected automatically for you.
USER_INFO_ URL	(Required) The IDP login URL. This is the URL Primo uses when it sends the information request (bor_info). This field is automatically populated for you based on the Alma base URL settings in the Institution Wizard.

5. Click **Save**.

6. From the list of profiles, click **Edit** next to your Alma profile.

   The Login Profile page opens with the attribute mapping option.



Alma Login Profile Page - Alma Attribute Mapping

Note

The Attributes Mapping button displays only when the user information method has been selected and saved.

---

7. Map the user attributes associated with Alma authentication. For more information, see Attribute Mapping.

Using Aleph for User Authentication

Return to menu

When using Aleph to perform user authentication, user information is also requested from Aleph.

The following steps describe the interaction between the user, Primo, and Aleph to provide authentication and authorization:

1. The user invokes the sign-in option in Primo.
2. If the institution has more than one active profile, Primo displays the Primo parallel login page.
3. After the user selects the Aleph profile, the Authentication manager redirects the sign-in request to Aleph using the host X-Server defined in the configuration.
4. The user enters his or her credentials.
5. If the response is positive, the response will also include user information. If the response is negative, an error message will display on the Primo login page.
6. If the user has been authenticated, Primo will log the user in and redisplay the page from which the login was invoked.

To configure Primo to use Aleph authentication:

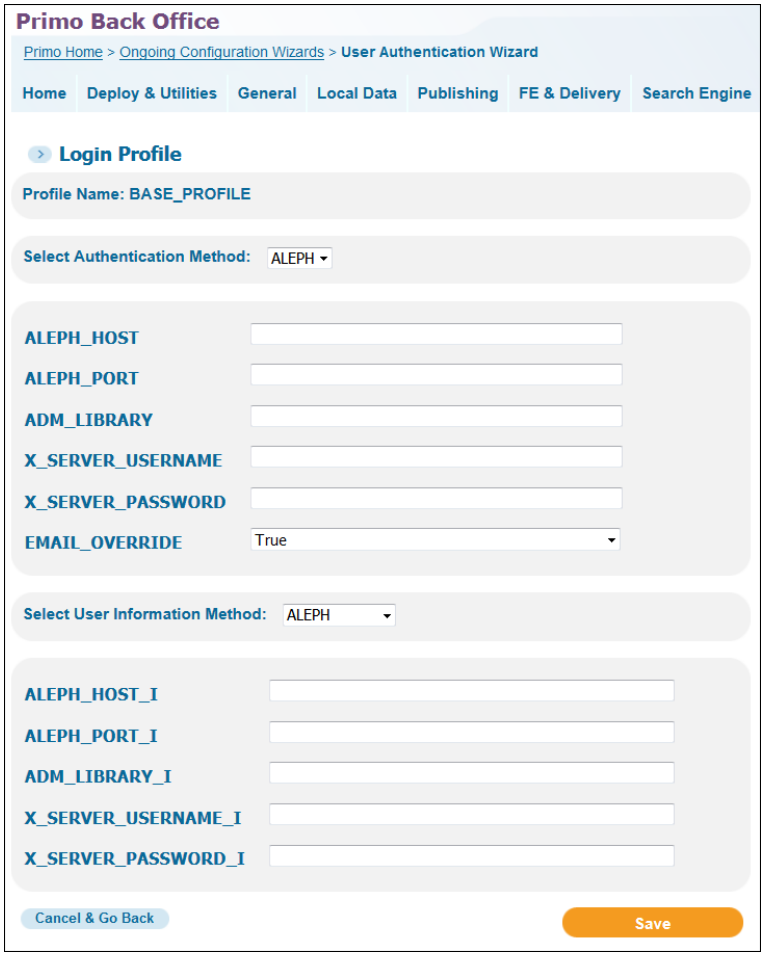
1. Open the User Authentication Wizard page (**Primo Home > Ongoing Configuration Wizards > User Authentication Wizard**).
2. Select your institution from the **Owner** drop-down list.

   Note

   The source of your Primo institution must be Aleph in order use Aleph user authentication.

3. From the list of profiles, click **Edit** next to the Aleph profile that you want to configure.

   The Login Profile page opens.



Aleph Login Profile Page

4. Use the following table to configure the Aleph authentication fields:

Aleph Authentication Fields

Parameter	Description
ALEPH_HOST	Enter the base URL for the Aleph server. For example: `https://myServer.com`
ALEPH_PORT	Enter the port for the Aleph server.
ADM_LIBRARY	Enter the active Aleph ADM library.
X_SERVER_ USERNAME	Enter a valid staff user name that is authorized to use the X-server.
X_SERVER_ PASSWORD	Enter the staff user's password for the specified staff user.

Parameter	Description
EMAIL_OVERRIDE	The valid values are **True** and **False** (default). If set to **True**, the email returned with the user information will always override the email stored in the user's profile in Primo.

5. Use the following table to configure the Aleph user information fields:

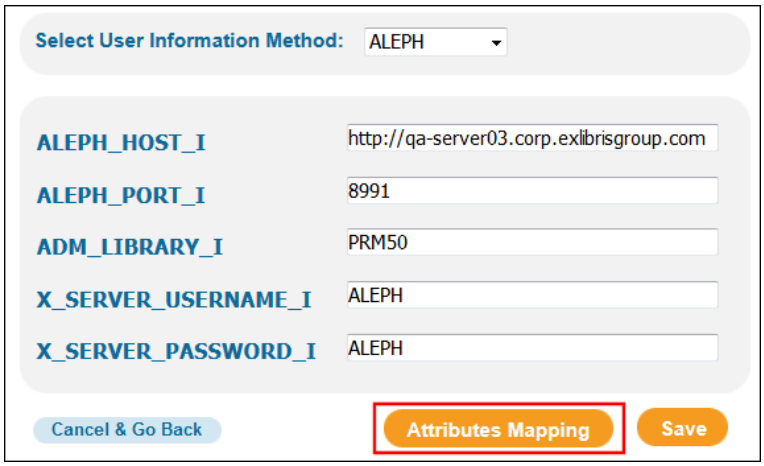
Aleph User Information Fields

Parameter	Description
Select User Information Method	For Aleph authentication, **ALEPH** is automatically populated for you.
ALEPH_HOST_I	Enter the base URL for the Aleph server. For example: `https://myServer.com`
ALEPH_PORT_I	Enter the port for the Aleph server.
ADM_LIBRARY_I	Enter the active Aleph ADM library.
X_SERVER_USERNAME_I	Enter a valid staff user name that is authorized to use the X-server.
X_SERVER_PASSWORD_I	Enter the staff user's password for the specified staff user.

6. Click **Save**.

7. From the list of profiles, click **Edit** next to your Aleph profile.

   The Login Profile page opens with the attribute mapping option.



Aleph Login Profile Page - Aleph Attribute Mapping

Note

The Attributes Mapping button displays only when the user information method has been selected and saved.

8. Map the user attributes associated with Aleph authentication. For more information, see Attribute Mapping.

Using Social Networks for User Authentication

Return to menu

Alma environments support the use of the following social networks to perform user authentication: Google and Facebook. The following steps describe the interaction between the user, Primo, Alma, and the social network to provide authentication and authorization:

1. The user invokes the sign-in option in Primo.
2. Primo displays the Primo login page, which also contains a link to the social login page.
3. The user clicks the link to the social login page, according to the integration profile configured in Alma (see Social Login).

   Note

   If you have configured both Google and Facebook in Alma, the user selects a preferred social network from the Social Network Login page. Otherwise, the user is redirected automatically to the only configured social network.

4. Authentication is handled by Alma and the social network:
   1. If the user has not signed in to the social network, the social network displays a sign-in page for the user to sign in. Otherwise, no additional sign-in is necessary.
   2. After the user signs in, the social network sends a token to Alma.
   3. If the user is not recognized by Alma and self-registration is configured in Alma (see Social Login), Alma prompts the user to perform self-registration. If self-registration is not configured in Alma, the user is sent an error message.
5. If the user has been authenticated, Primo logs the user in.

For information on configuring social logins in Alma and the social networks, see the following pages, respectively:

- Social Login
- Social Logins in the Developer Network

Configuring a Social Login Profile

Authentication using a social network via Alma does not require much configuration because the relevant information is defined for the Primo institution and displayed automatically for you in the login profile.

It is assumed that social authentication will be used in parallel with another authentication method to allow users to select a social network option from the parallel login page, which will display when the user attempts to sign in.

To configure Primo to use social authentication:

1. Open the User Authentication Wizard page (**Primo Home > Ongoing Configuration Wizards > User Authentication Wizard**).

Note

Social authentication is available with the new Primo UI only.

---

2. Select your institution from the **Owner** drop-down list.

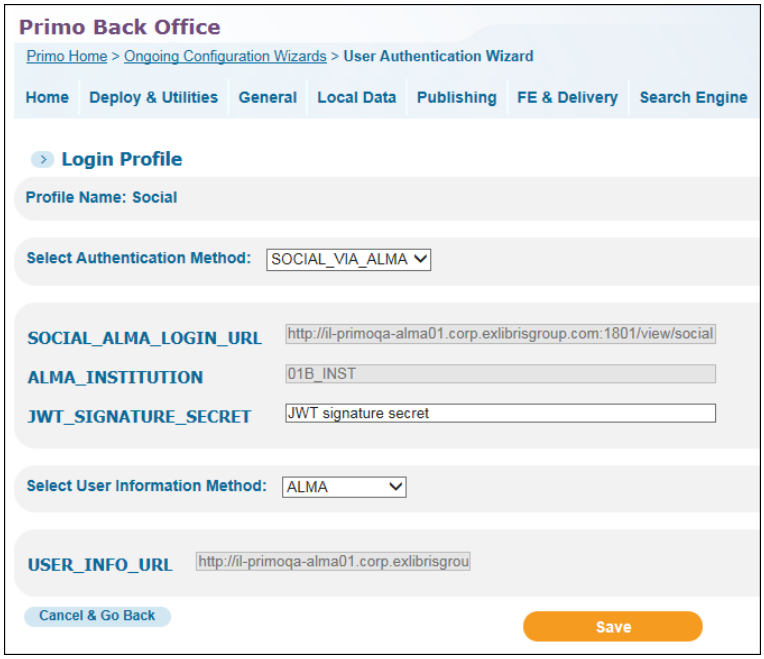
Note

The source of your Primo institution must be Alma in order to configure Alma user authentication.

---

3. From the list of profiles, click **Edit** next to the Alma profile that you want to configure.

   The Login Profile page opens.



Social Login Profile Page

4. Use the following table to configure the Alma authentication fields:

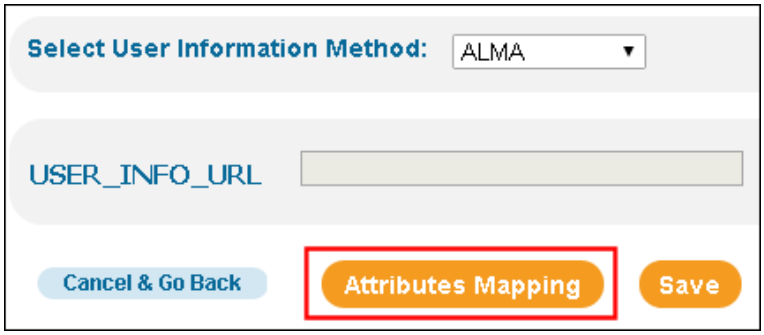
Alma Configuration Fields

Parameter	Description
SOCIAL_ ALMA_ LOGIN_URL	(Required) The IDP login URL. This is the URL Primo uses when it sends the authentication request to Alma.
ALMA_ INSTITUTION	(Required) The Alma institution code, which is defined in the Alma Institution Code mapping table.

Parameter	Description
JWT_ SIGNATURE_ SECRET	(Required) Used for the handshake between Primo and Alma. Any value can be used here as long as it matches the entry defined for Alma's customer parameter **jwt_signature_secret** (**Administration > User Management Configuration > Configuration Menu > General > Other Settings** in Alma; see Configuring Other Settings).

5. Select **ALMA** (see Alma Information Request Fields) from the **Select User Information Method** drop-down list.
6. Click **Save**.
7. From the list of profiles, click **Edit** next to your Alma profile.

   The Login Profile page opens with the attribute mapping option.



Alma Login Profile Page - Attribute Mapping

Note

The Attributes Mapping button displays only when the user information method has been selected and saved.

---

8. Map the user attributes associated with Alma authentication. For more information, see Attribute Mapping.

Attribute Mapping

Return to menu

In addition to authenticating users, Primo also needs some basic information about the users. The user information can be obtained from the same system that is used for user authentication or a different system. The most common combination is to authenticate with an authentication system like Shibboleth (SAML) or LDAP and to fetch user information from the ILS (Alma).

To map attributes:

1. Open the Login Profiles page (**Primo Home > Ongoing Configuration Wizards > User Authentication Wizard**).
2. Under the Profiles section, click **Edit** next to the login profile that you want to configure.
3. The Login Profile configuration page opens.
4. If you have not selected a user information method, select either **SAML**, **ALEPH**, **LDAP**, or **Alma** from the **Select User Information Method** drop-down list. The user information systems that are not compatible with your user authentication system will be disabled.

   If you select **Alma**, the system will automatically enter the URL for your Alma server in the USER_INFO_URL field. For example:

   https://alma.exlibrisgroup.com
5. Click **Save** and re-edit your login profile to continue.
6. Click the **Attributes Mapping** button. If the Attributes Mapping button is not shown, repeat steps 4 and 5.

   The Attribute Mapping dialog box opens.

Attributes Mapping Dialog Box

Note

Depending on the user information system, some fields may be filled in for you.

7. For each of the following Primo attributes, specify the name of the associated attribute from the user information system:

Primo Attributes

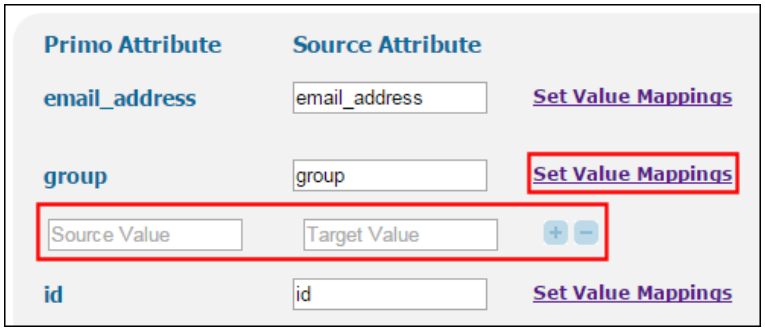
Attribute	Description
email_ address	The user's email address. Primo will use this email address if the user does not have an email address defined in Primo. If the **EMAIL_OVERRIDE** authentication parameter has been enabled, the value of this attribute will override the email address defined for the user in Primo. For Alma, the default mapping is **email_address**. For Aleph, enter **z304-email-address** to use the default setting. There is no default mapping for LDAP and SAML.
group	The user group. For Alma, the default mapping is **group**. For Aleph, enter **z305-bor-status** to use the default setting. There is no default mapping for LDAP and SAML.
id	The user ID. For Alma the default mapping is **id**. For Aleph, enter **z303-id** to use the default setting. There is no default mapping for LDAP and SAML.
ils_api_ id	The ID used for OPAC via Primo in case it is not the same as the regular ID. For Alma there is no default mapping because this attribute is not required for Alma. For Aleph, enter **z303-id** to use the default setting. There is no default mapping for LDAP and SAML.
institute	The Primo institution. This attribute can be used if there is a need to override the institution that the user signed in with (that is the institution of the view). For Alma there is no default mapping because the Primo institution defaults to the institution of the active view. If you want to override the institution of the view, you can specify an Alma attribute. There is no default mapping for Aleph, LDAP and SAML.

Attribute	Description
name	The name that displays for the user in the Primo Front End. For Alma the default mapping is **userName**. For Aleph, enter **z303-name** to use the default setting. There is no default mapping for LDAP and SAML.

8. If you want to map specific values for an attribute, perform the following steps:

   1. Click **Set Value Mappings** next to the attribute that you want to configure.

      An attribute value row displays below the attribute.

      Add Attribute Mapping Value

   2. In the first column specify the name of the value used in the Patron information source.

   3. In the second column specify the name of the value used in Primo.

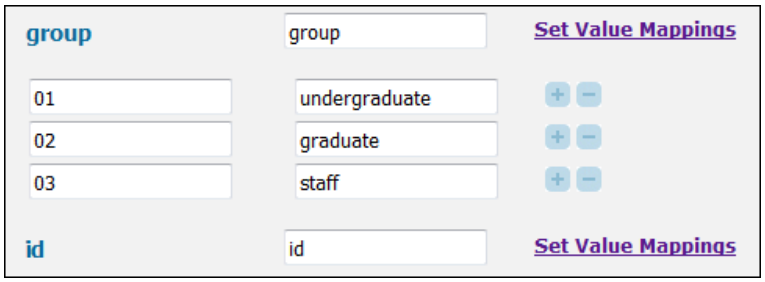
      Note

      Any values that are not defined will retain the value sent by the user information system.

      ---

   4. If you want to add or remove a value, click the plus or minus icon next to the value, respectively.

      The following example shows how the group values from the source can be mapped to the **undergraduate**, **graduate**, **staff** values in Primo:

      Attribute Value Mapping Example

9. Click **Save**.

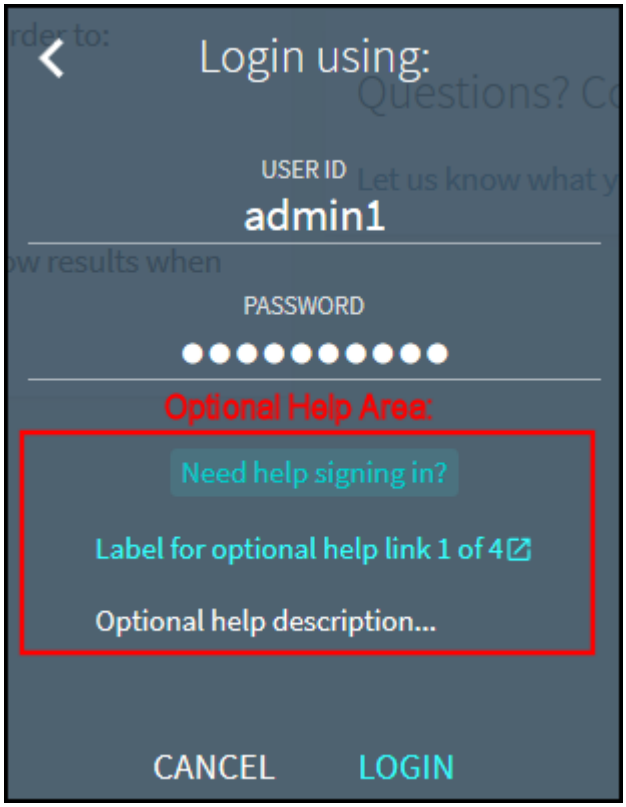
Login Pages for User Authentication

Return to menu

Configuring Login Pages for the New UI

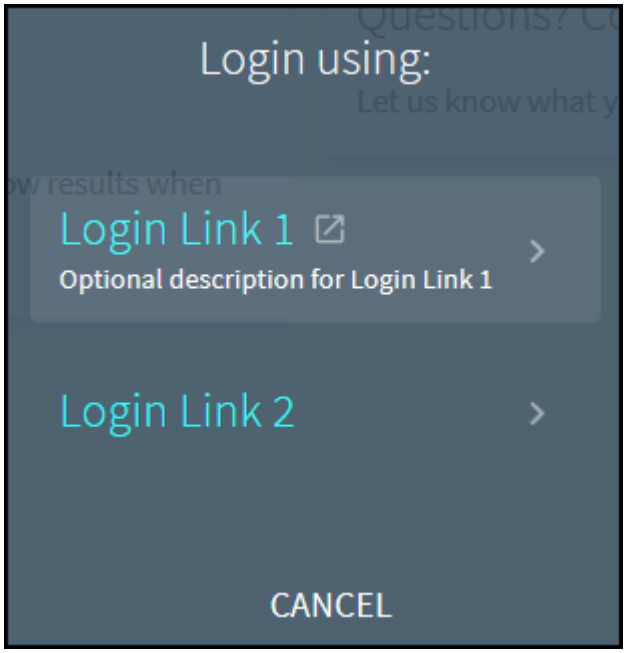
The following pages are used for user authentication in the new Primo UI:

- Login page – The following page opens when signing in locally using LDAP or Alma. It allows users to specify their credentials to gain access to the new Primo UI. An optional help description and up to four links for additional help pages can be configured in the help drop-down area of the Login page.



Login Page

- Parallel Links page – When more than one login profile (maximum of five login profiles) is enabled, the following page allows users to select a user authentication system from which to sign in. Local authentication using Alma or LDAP opens the above Login page. For each login link, you can specify an optional description to help users select a user authentication system.

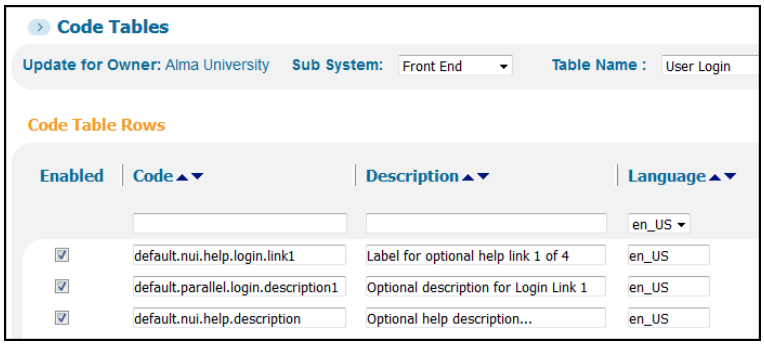


Parallel Links Page

Configuration Options

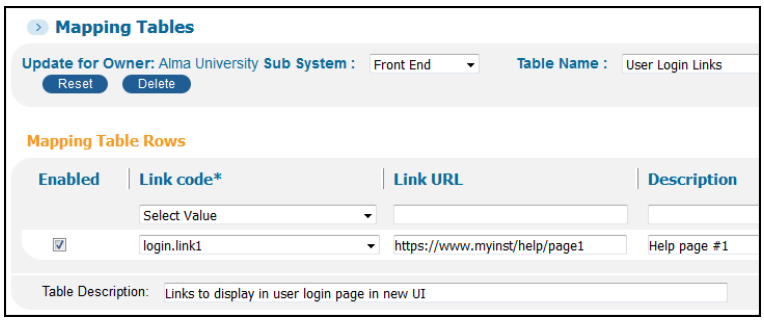
You can use the following tables to customize the login pages:

- User Login code table - This table defines the display labels for all titles, links, buttons, and descriptive text that appear on the Login and Parallel Links pages. The drop-down help area displays only if you have defined either the `default.nui.help.description` code in this table or a help link in the User Login Links mapping table.



User Login Code Table

- User Login Links mapping table - This table defines up to four help links that appear in the drop-down help area on the Login page. When clicked, these links open a custom help page that is specified with the field.

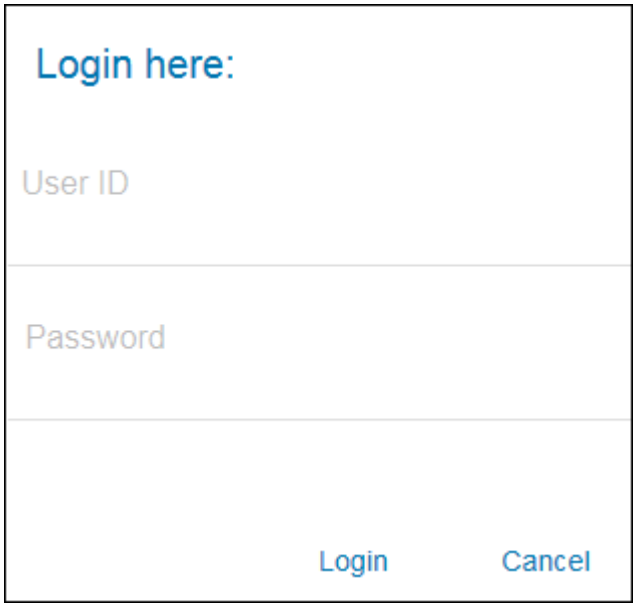


User Login Links Mapping Table

Configuring Login Pages for the Classic UI

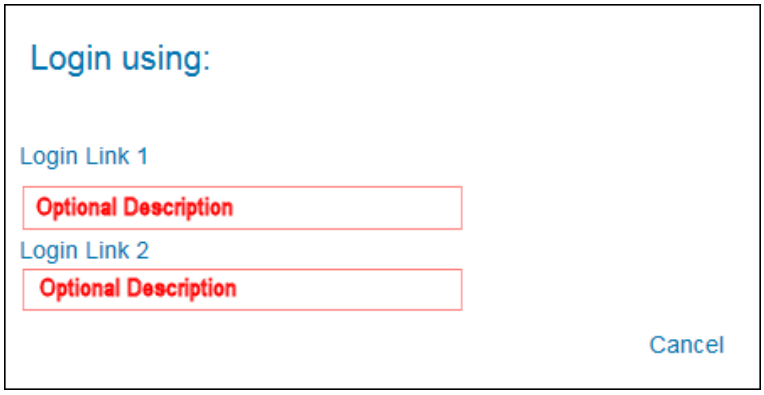
The following pages are used for user authentication in the classic UI:

- Login page – The following page opens when signing in locally using LDAP or Alma. It allows users to specify their credentials to gain access to the Primo Front End. Optional login tips can be added to a new static HTML, which can be displayed at the bottom or the right side of the page.



Login Page

- Parallel Links page – The following page opens when both primary and secondary login profiles are enabled in the login profile. It allows users to select the Login page for either the primary or secondary user authentication system. The links for local authentication open the above Login page. For each link, you can specify an optional description to help users select a specific Login page.



Parallel Links Page

Configuration Options

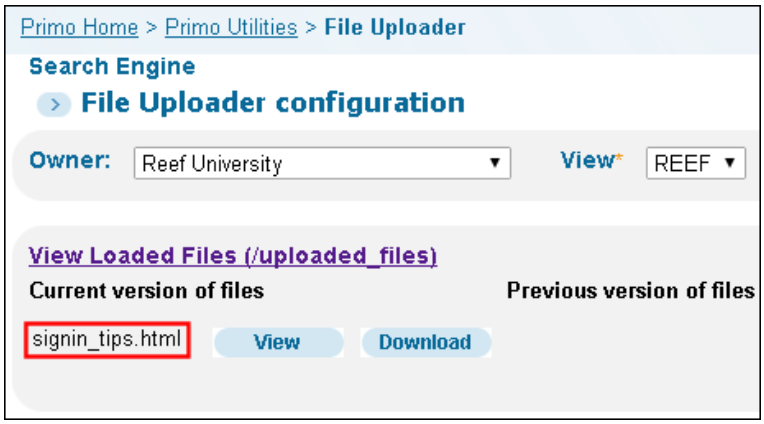
The login pages can be customized using the following methods:

- Code tables – The User Login code table allows you to modify the labels that appear on the login pages and to provide localization as needed.
- Views Wizard – The `signin_tips.html` file (**Home Page > Ongoing Configuration Wizards > Views Wizard > Static HTML** tile) allows you to display login tips on the login page. Out of the box, this file is empty.
- CSS definitions – The following elements allow you to format the login pages:
  - **.EXLPRMLoginInlineTips** – Specify the following properties to hide or display the tool tips on the bottom of the login page, respectively: `{display:none;}` or `{display:block;}`.
  - **.EXLPRMLoginColumnTips** – Specify the following properties to hide or display the tool tips on the right side of the login page, respectively: `{display:none;}` or `{display:block;}`.
  - **.EXLPRMLoginCard** – Includes selectors such as the following to change the look of objects on the login card of the login page and the parallel login page:
    - **a** – Applies formatting to all links.
    - **input** – Applies formatting to all input fields.
    - **md-button** – Applies formatting to all buttons.

To add login tips and display them on the right side of the login page:

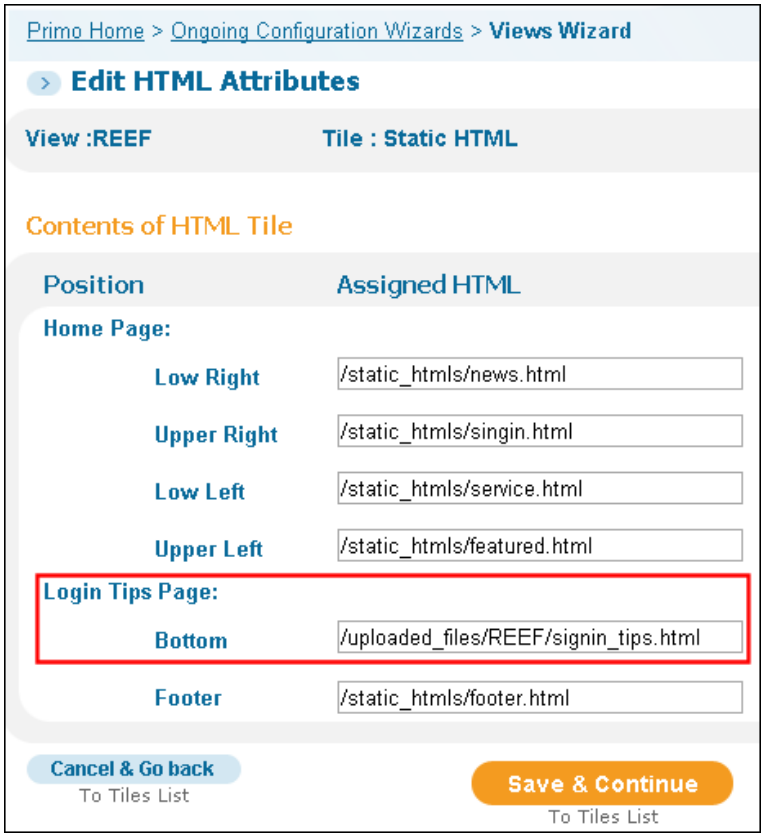
1. Create a static HTML file for your login tips.
2. Use the Uploader tool (**Primo Home > Primo Utilities > File Uploader**) to upload the file to the following directory on the Primo server:

   `/uploaded_files/<view_code>`



Uploaded File to the Server

3. In the Views Wizard (**Primo Home > Ongoing Configuration Wizards > Views Wizard - Home Page > Static HTML** page) change the path of the Login Tips Page field to the path of the uploaded file.



Updated Path to Sign-in Tips Static HTML

4. Save and deploy the view.

5. Make the following changes to your customized CSS file:

   1. Add the following line:

      ```
      .EXLPRMLoginInLineTips {display:none;}
      ```

   2. Change the following line:

      ```
      .EXLPRMLoginColumnTips {display:none;}
      ```

      To:

      ```
      .EXLPRMLoginColumnTips {display:block;}
      ```

Using PDS for User Authentication

Return to menu

The PDS is a back-end web application that provides a site with shared user authentication and Single-Sign-On (SSO) capabilities for the Ex Libris suite of products. PDS is configured to work with the institution's local authentication server and user database.

Primo allows you to connect to multiple PDS servers. This is necessary when using a central Primo instance as the Front End for several instances of MetaLib and at least one MetaLib instance is connected to a different PDS.

To configure Primo to call the PDS:

1. Open the User Authentication Wizard page (**Primo Home > Ongoing Configuration Wizards > User Authentication Wizard).**

   The Login Profiles page opens.

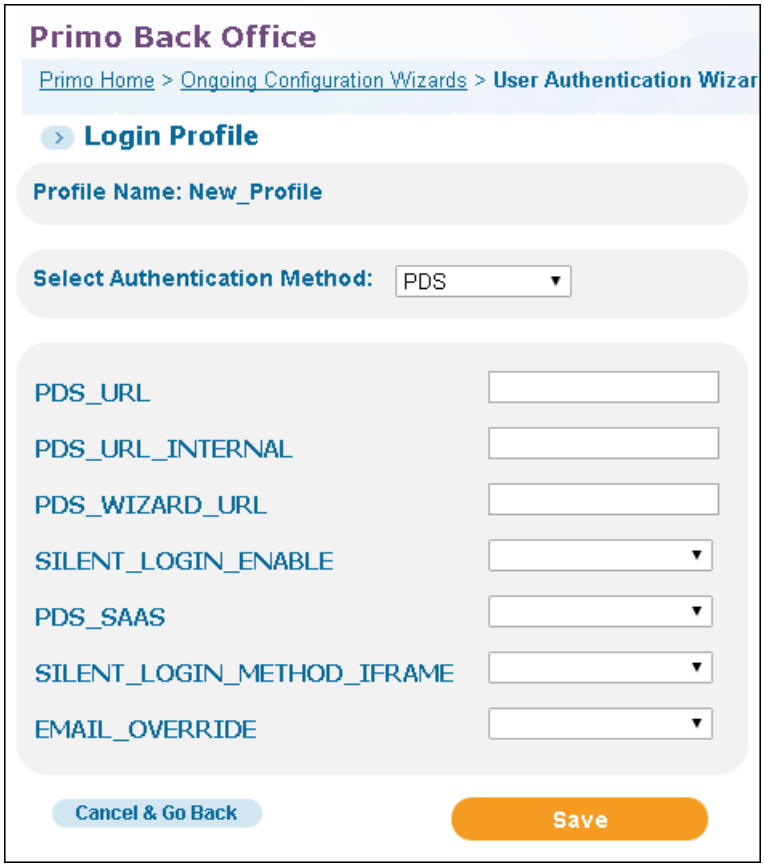
   Note

   If you want to use a different PDS for each institution, select the institution from the **Owner** drop-down list and create the login profile for the associated PDS. Otherwise, you can create login profiles at the installation level so that they may be used by all institutions.

   ---

2. From the list of profiles, click **Edit** next to the PDS profile that you want to configure.

   The Login Profile page opens.



PDS Login Profile Page

3. Configure the following fields:

   - **Enabled** – Select **Yes** from the drop-down list when you are ready to use this user authentication configuration.
   - **Select Authentication Method** – Select **PDS** from the drop-down list.
   - **PDS_URL** – enter the URL of the appropriate PDS instance for redirection calls via the browser (such as load-login and SSO) – for example, `http://primo01.corp.exlibrisgroup.com/pds`.
   - **PDS_URL_INTERNAL** – enter the URL of the appropriate PDS instance for internal server-to-server calls (such as user attribute retrieval) – for example, `http://primo01.corp.exlibrisgroup.com/pds`.

     Note

     This is usually the same as the PDS_URL.

   - **PDS_WIZARD_URL** – enter the URL of the PDS configuration wizard. For example:

     ```
     http://primo01.corp.exlibrisgroup.com:8993/pdsadmin/
     general_configuration.cgi?backlink=http://primoqa03.corp.exlibrisgroup.com:1603/{backLin
     Configuration
     ```

     Note

     If you are using SSL, replace HTTP in the above URLs with HTTPS.

- **PDS_SAAS** – If set to **True**, the call to the PDS Wizard from the Primo Back Office will indicate whether the operator is an installation- or institution-level user, and PDS will display the relevant options in the PDS Wizard accordingly (all institutions for installation level and the specific institution for institution level).

  Refer to the PDS documentation for more information on setting up SaaS Mode in PDS. The PDS must be configured to work with the Oracle database to support this mode.

- **SILENT_LOGIN_ENABLE** – select **True** if you want to sign in users automatically when a new session is started in the same browser — for example, starting a session in a new tab.

- **SILENT_LOGIN_METHOD_IFRAME** – Defines the method that Primo uses to execute the Single Sign On (SSO) call to PDS. The default value is **True**, which indicates that the method introduced in Primo V4.5 will continue to be used. Changing this parameter to **False** changes the SSO method to direct URL redirection, which was the method used prior to Primo V4.5.

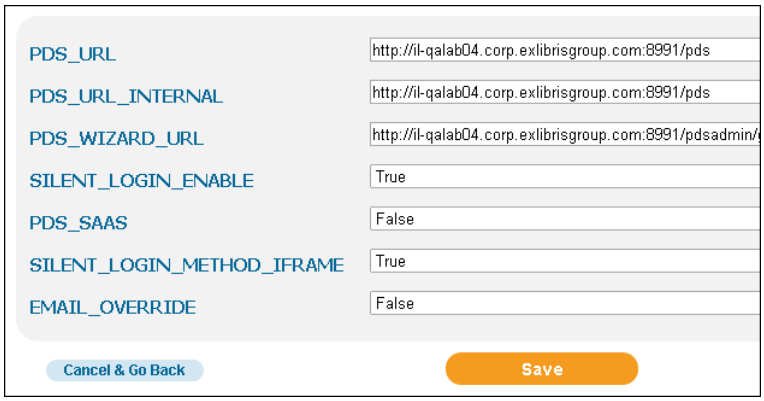
  It is not recommended to change this parameter unless your SSO implementation requires it.

  Note

  This parameter is not used by the new Primo UI (see SILENT_LOGIN_ENABLE).

- **EMAIL_OVERRIDE** – select **True** if you want the email ID that is returned with the user information to override the email ID stored in the user's profile in Primo.

The following is an example of a PDS configuration:



User Authentication Wizard - PDS

4. Click **Save** to save your configuration settings.

5. Access the PDS Configuration wizard (which requires administrative permissions at the installation level):

   1. Click **Primo Home > Ongoing Configuration Wizards > PDS Configuration Wizard** in the Back Office.

      The Primo Institution list page opens.

Primo Institution List Page

2. Click an institution to configure its PDS settings.

   A login page opens.

3. Enter the login and password for PDS administration.

   The PDS-SSO Configuration page opens.

   The PDS - SSO Configuration page is the opening page of the PDS Configuration wizard. It lists all of the calling applications used for SSO. For more information on configuring PDS, refer to the *Patron Directory Services Guide*.

Pipe Configuration Wizard

The Pipes Configuration wizard lets you define the pipe settings used by your system for harvesting and normalizing the data. Before defining a pipe, you must define the pipe's data source, harvesting method, normalization rules set, and enrichment set. In addition, it is possible to define scopes and mapping tables as needed. Although the Pipes wizard is used during both initial and ongoing configurations, you can only manage the Normalization mapping tables during ongoing configuration. Refer to the following sections to configure pipes:

- Parallel Processing of Pipes
- Accessing the Pipe Configuration Wizard
- Configuring Data Sources
- Managing Scope Values
- Using Normalization Mapping Tables
- Using Normalization Rules Sets
- Using Enrichment Sets
- Configuring Pipes

For more information on pipes, refer to the following sections:

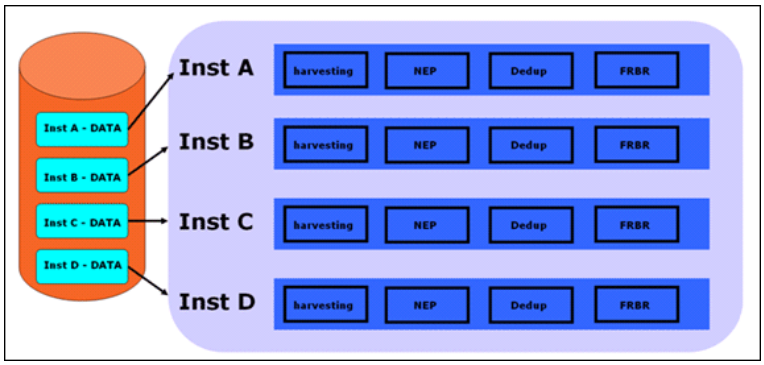
- Publishing Pipes
- Monitoring Pipe Status

Parallel Processing of Pipes

Return to menu

The **Parallel Processing of Pipes Mode** parameter under the Installation subsystem on the General Configuration page allows you to choose from the following types of pipe modes:

- **Harvesting only** – This mode was available in Primo V3, but it only allows parallel processing through the harvesting stage. This is the out-of-the-box option.
- **Harvesting, NEP, Dedup-FRBR** – This mode allows parallel processing of pipes through the Dedup and FRBR stages. Only one pipe per institution can run at a time.



Harvesting, NEP, Dedup-FRBR Mode

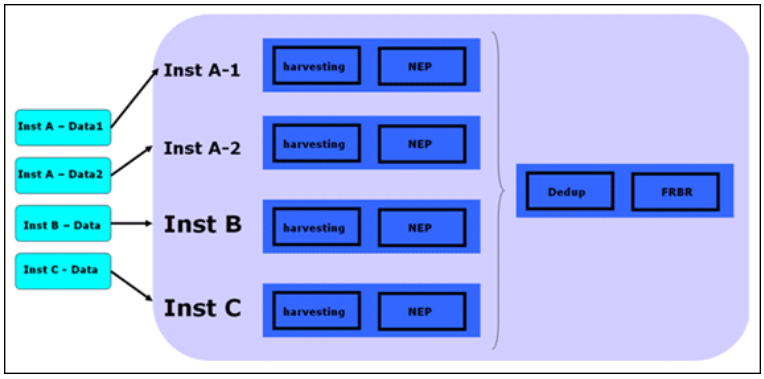
This mode is intended for multi-institution sites where there is no need to Dedup and FRBRize the entire database, and Dedup and FRBR are relevant only within the records that belong to a specific institution. Such sites previously prevented Dedup and FRBR between institutions by adding the institution code to the Dedup and FRBR keys. With this mode, adding the institution code is no longer necessary because the system only groups records that belong to the same institution.

Note

The institution must be the owner the data source and the pipe. If you have a scenario in which a single data source belongs to multiple institutions, dedup and FRBR will occur across these institutions. If you want to prevent this, you should add the institution code to the Dedup and FRBR keys.

- **Harvesting, NEP** – This mode has been added to allow parallel processing of pipes through the NEP (Normalization, Enrichment, and Persistence – that is load to the database) stage. In this mode, the Dedup and FRBR stages must be run separately with a new pipe, which is called Dedup_Frbr. For more information, see Dedup_Frbr Pipe.

  If you want a pipe's records to be excluded from the Dedup and/or FRBR processes, clear the **Include DEDUP** and/or **Include FRBR** check boxes on the Define Pipe page.



Harvesting, NEP Mode

Note

If you are using the **Harvesting, NEP** mode for a multi-institutional environment, Dedup and FRBR will process all pipes even if another institution's pipe does not have Dedup/FRBR defined. If you want to limit Dedup and FRBR to specific institutions, use either of the following methods:

- setting the **Parallel Processing of Pipes Mode** parameter to **Harvesting, NEP, DEdup/FRBR** in the General Configuration Wizard
- adding the institution code to the Dedup and FRBR keys

Pipe Restrictions

Pipes cannot run in parallel with the following processes:

- Indexing and Hotswapping
- Delete Pipe – which runs after a successful hotswap
- Tools – except for the Generate Site Map tool
- Dedup_Frbr pipe

Note

The failure of a single pipe will not prevent the running of another pipe, indexing, or the Dedup_Frbr pipe.

Configuring the Maximum Number of Pipes

The number of pipes that can run in parallel depends on the system resources of the Back Office server (such as number of processors and cores). If there are not enough resources available, the system will not start a pipe.

Each pipe requires four threads in order to run. If more threads are available, the pipe runs faster.

Out of the box, the Primo allows two pipes to run in parallel. On-premises customers can modify this setting with the **primo.process.ParallelProcessing.NumThreads** parameter under the Installation subsystem in the General Configuration Wizard. For more information, see General Configuration Wizard.

Changing Parallel Processing Modes

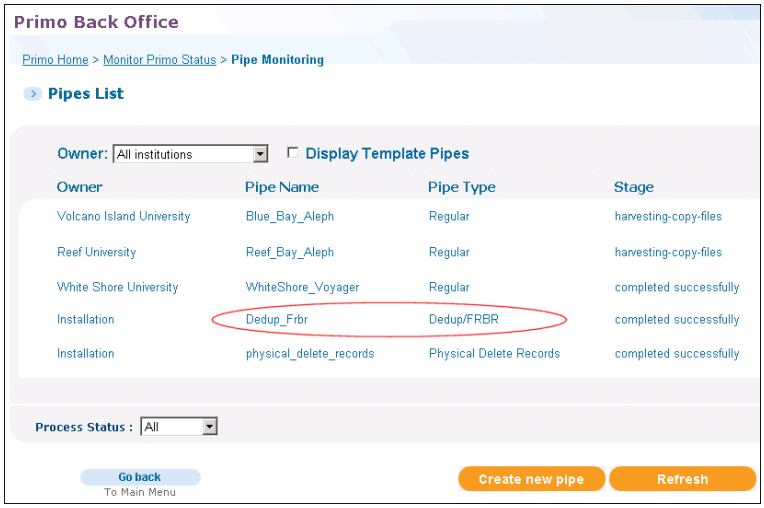
In most cases, your installation will switch from the **Harvesting only** mode (which is the out-of-the-box mode) to either the **Harvesting, NEP** or **Harvesting, NEP, Dedup-FRBR** mode, but it is also possible to switch between the modes. The following table summarizes the actions required after changing the parallel processing mode. For more information on the modes, refer to Parallel Processing of Pipes.

Changing Parallel Processing Modes

Current Mode	New Mode	Actions
Harvesting only	Harvesting, NEP	Change the mode and then deploy the **System Configuration** option on the Primo Home > Deploy All page.
Harvesting only or Harvesting, NEP	Harvesting, NEP, Dedup-FRBR	If you have not run dedup/FRBR for any of the data sources, or you prevented cross-institution grouping by adding something (such as the institution code) to the Dedup/FRBR keys, you will need to deploy the **System Configuration** option on the Primo Home > Deploy All page after changing the mode. Otherwise, you will have to create the database from scratch. Consult with Ex Libris support before making this type of change.
Harvesting, NEP, Dedup-FRBR	Harvesting only or Harvesting, NEP	Change the mode and then deploy the **System Configuration** option on the Primo Home > Deploy All page. Run an update pipe on all data sources to ensure that dedup/FRBR is cross-institution.

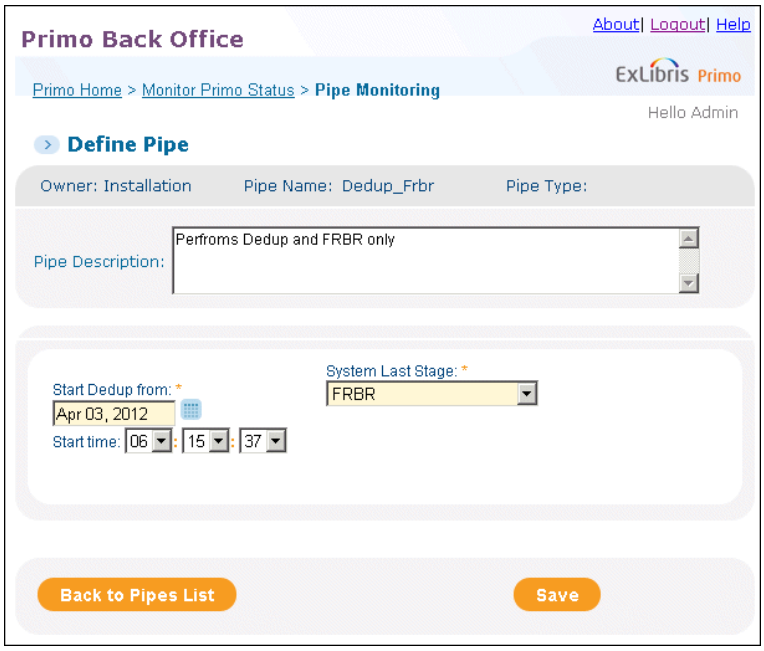
Dedup_Frbr Pipe

When the parallel processing mode is set to **Harvesting, NEP**, the system will add the Dedup_Frbr pipe to the pipes list (see Pipes List). It runs like any other pipe, and it can be executed manually or scheduled. It should be run before indexing and hot-swapping are executed.



Pipes List

The Define Pipe page allows you to schedule the pipe to be run:



Define Pipe Page

Starvation Mode

If pipes run for a long time, indexing or the execution of the new Dedup_Frbr pipe may be delayed. To prevent this from happening, the **Starvation Mode** parameter has been added to the Installation subsystem on the General Configuration page. The following options are available:

- **By Schedule** – This is the default option. Indexing and the Dedup/FRBR Pipe will wait until all of the scheduled pipes have finished. Note that a failed a pipe will not prevent indexing or the execution of the Dedup/FRBR pipe.
- **Force** – Prevents scheduled pipes from starting if indexing or the Dedup-FRBR pipe is waiting to be executed.

Note

It is not necessary to perform a deploy or restart the Back Office after changing this parameter.

Accessing the Pipe Configuration Wizard

Return to menu

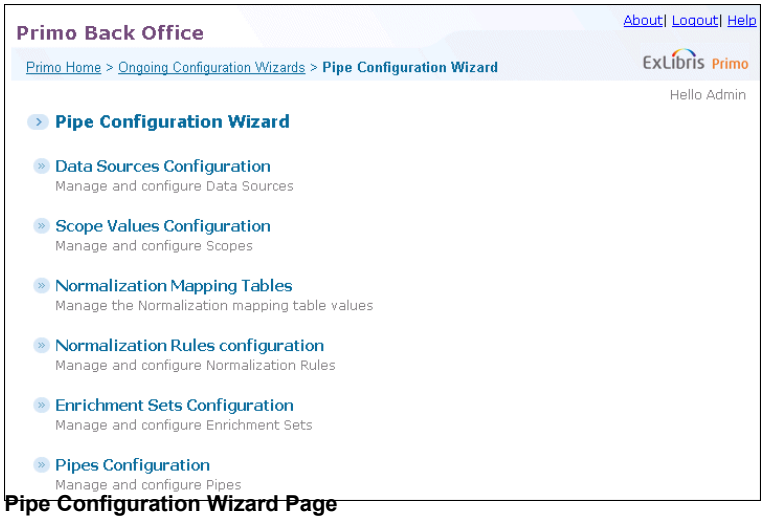
To access the Pipe Configuration wizard:

1. Click **Ongoing Configuration Wizards** on the Back Office's home page.

   The Ongoing Configuration Wizards page opens.

2. Click **Pipe Configuration Wizard**.

   The Pipe Configuration Wizard page opens.



Pipe Configuration Wizard Page

Configuring Data Sources

Return to menu

The Data Sources Wizard allows you to manage and configure the data sources. You can define new data sources for your institution, or edit or remove existing data sources.

Data sources are stored at the institution level only.

You can perform the following actions on the Data Sources page:

- Creating Data Sources
- Editing Data Sources
- Deleting Data Sources

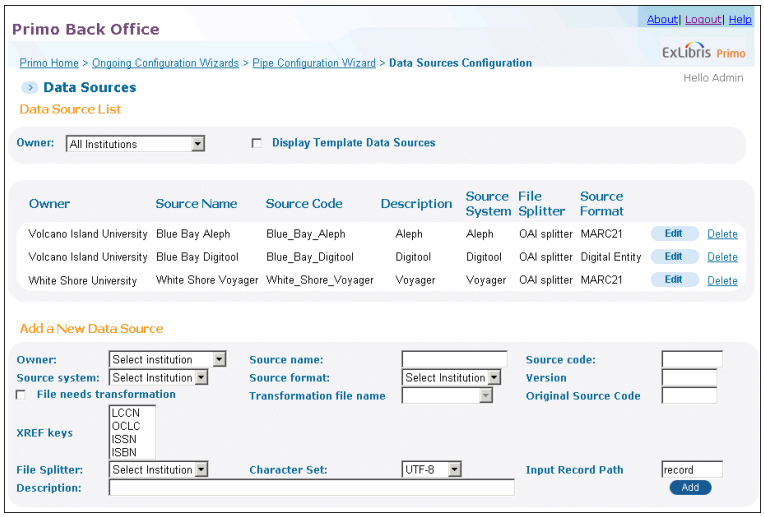
Creating Data Sources

The Data Sources page allows you to define your institution's data sources and their format.

To create a Data Source:

1. On the Pipes Configuration Wizard page, click **Data Sources Configuration**.

   The Data Sources page opens.



   Data Sources Page

   If you want to view the data source templates, select the Display Template Data Sources check box that appears above the list of data sources on the Data Sources page and then click **View** next to the template you want to see.

2. In the Add a New Data Source area, enter the information in the appropriate fields according to Add Data Source Fields.

Add Data Source Fields

Field Name	Description
Owner	Select the name of the institution from the drop-down list. For institution-level staff users, your institution will already be selected. **Note** For installation-level users, you must select an institution before the associated values appear in the drop-down lists that display the **Select Institution** value.
Source name	The name of the data source.
Source code	The data source code, used as a prefix in the Primo Record ID.
Source format	The format of the source data. To harvest bibliographic records using MARC exchange (ISO 2709) format, select **MARC Exchange** and select the appropriate character set. Primo will add the OAI header as long as the Record does not include OAI header field is not checked. If the records status in LDR/05 is d, the OAI header will include the deleted status and the record will be deleted.
Source system	The source's data system, such as an ILS.
Institution	The institution to which the data source belongs.
Version	The version of the source system.
Input Record Path	This field contains the path of the record in the harvested records and enables you to harvest XML files of any format. The default setting is dependent upon the source specified in the Source Format field. The following defaults are used: ◦ **record** – MARC21, MAB, DANMARC2, UNIMARC, Digital Entity, XML, MARC Exchange, and KORMARC ◦ **dc:dc_oai** – DC ◦ **knowledge_unit** – MetaLib
File Splitter	The file splitter plug-in used to parse the harvested files. Primo supports the following file splitter plug-ins: ◦ **OAI splitter** – This file splitter is used for pipes that harvest OAI XML files. ◦ **Static OAI splitter** – This file splitter is used for pipes that harvest static OAI XML files. This option replaces the **Static OAI Repository** field.

Field Name	Description
	◦ **MARC Exchange splitter** – This file splitter is used for pipes that harvest MARC exchange files. It supports all encodings defined in the Character Sets code table. ◦ **SFX XML splitter** – This file splitter is used for pipes that harvest SFX XML files. In previous releases of Primo, this field required the `SFXOAI.xsl` transformation program to include the OAI header. ◦ **WARC splitter** – This file splitter is used for pipes that harvest WARC files. It parses WARC files, splitting the components (HTML, PDF, MS Word, MS Excel, and MS Powerpoint, and other) of the file, and then generates XML output for normalization.
Character Set	This field indicates the character set of the data. The valid values are **UTF-8** (default) and **MARC-8**. **Note** If you want to enable additional character sets, use the Character Set code table under the Publishing subsystem.
File needs transformation	Allows you to specify an XSL transformation routine to include an OAI header or other changes to the source records.
Transformation file name	When the previous check box is selected, you must indicate which XSL transformation file should be used. For more information, refer to the *Primo Interoperability Guide*. With the addition of file splitters in Primo Version 3, you should mainly use file splitters to handle the transformation of harvested files. This option should be used on rare occasions only and should be done with care. It is recommended to avoid using transformation programs for the following reasons: ◦ Performance ◦ Memory – transformation programs must load the complete file into memory before performing the transformation. This may cause the Back Office to fail due to insufficient memory allocation if the harvested file is very large. Because transformation programs are run before the file is passed to the file splitter, the file splitter should know how to process the outcome of the transformation program. This means that when you test your file splitter, the input file for the test should be the output of the transformation program.
Original Source Code	The code of the data source in the system, and can be used to link back to the original system.
Description	A description of the data source.
XREF Keys	Select one or more of the following keys to build the P_PNX_XREF table during the execution of the pipe: ISBN, ISSN, LCCN, and OCLC. For more information, see The Create XREF Tool.

3. Click **Add**.

The Data Source information appears in the data source list.

4. Click **Cancel & Go back** to return to the Pipe Configuration Wizard page.

Editing Data Sources

The Data Sources Attributes page allows you to modify the details for a data source.

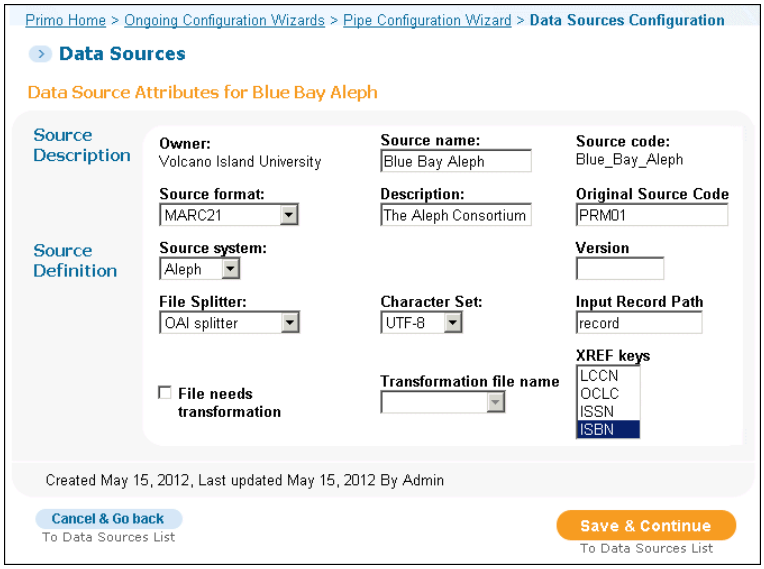
To edit the details of a data source:

1. On the Pipe Configuration Wizard page, click **Data Sources Configuration**.

   The Data Sources page opens (see Data Sources Page).

2. In the Data Source list, click **Edit** next to the data source that you want to edit.

   The Data Sources Attributes page opens.



Data Sources Attributes Page

3. In the Data Source Attributes area, edit the Source Description and Source Definition fields according to Add Data Source Fields.

4. Click **Save & Continue**.

   The Data Sources page opens (see Data Sources Page).

5. Click **Cancel & Go back** to return to the Pipe Configuration Wizard page.

Deleting Data Sources

The Data Source List page allows you to delete data sources if they are no longer needed.

To delete a Data Source:

1. On the Pipe Configuration Wizard page, click **Data Sources Configuration**.

The Data Sources page opens (see Data Sources Page).

2. In the Data Source list, click **Delete** next to the data source that you want to delete.

   A confirmation dialog box opens.

3. Click **OK**.

   The data source is deleted from the Data Source list.

4. Click **Cancel & Go back** to return to the Pipe Configuration Wizard page.

Managing Scope Values

Return to menu

The Scopes Values Configuration page is used to define the search scope values that appear in the Views wizard. Search scopes are created from one or more search scope values.

Scope values are stored at the institution level only.

You can manage the scope values for one or more of the following scope types:

- Search scopes.
- Restricted search scopes.
- Restricted delivery scopes.

Note

A scope used for search purposes is automatically created after an institution is defined via the Institution wizard (see Institution Wizard). It is given the same name as the institution.

If an institution-based scope is deleted for any reason, it should be redefined in order to provide location-based availability.

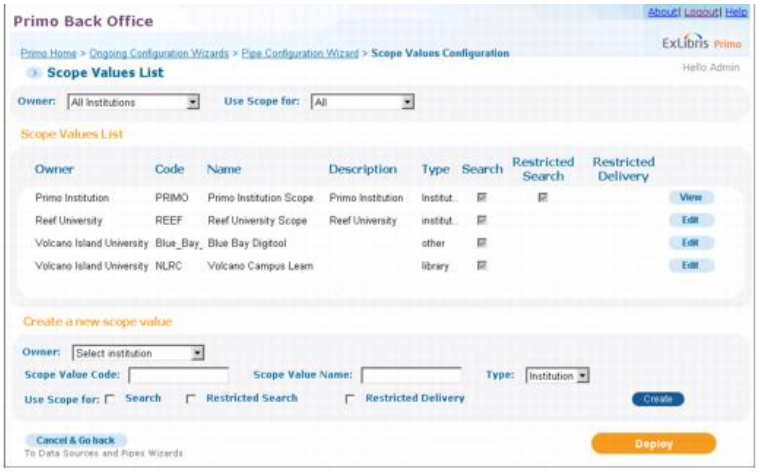
Creating Scope Values

The Scope Values List page allows you to add scope values to your institutions.

To create a Scope Value:

1. On the Pipes Configuration Wizard page, click **Scope Values Configuration**.

   The Scope Values List page opens.



Scope Values List Page

2. In the Create a new scope value area, enter the scope value information (see Create a New Scope Value Details for a list of fields).

Create a New Scope Value Details

Field name	Description
Owner	Select the name of the institution from the drop-down list. For institution-level staff users, your institution will already be selected. **Note** For installation-level users, you must select an institution before the associated values appear in the drop-down lists that display the **Select Institution** value.
Shared by other Institutions	Indicates whether this scope can be used by all institutions if your installation contains multiple institutions (on-premises and dedicated installations only).
Scope Value Code	The scope value's internal ID code as appears in the PNX records.
Scope Value Name	The name of the scope value.
Type	The scope value is based on one of the following types: **Institution**, **Library**, a **Collection**, or **Other**. **Note** Scopes that have a type set to **Institution** must be valid institution codes, and scopes that have a type set to **Library** must be valid library codes. The system will display an error message if they are not valid.

Field name	Description
Use Scope for	Select the purpose of the scope: **Search**, **Restricted Search**, or **Restricted Delivery**. **Note** A single scope value can be used for any or all of the above purposes.

3. Click **Create**.

   The new scope value appears in the Scope Values List.

Editing Scope Values

Editing a newly created scope value enables you to define advanced information in addition to the basic information defined when you created the scope value. You can edit the scope value details at any time.

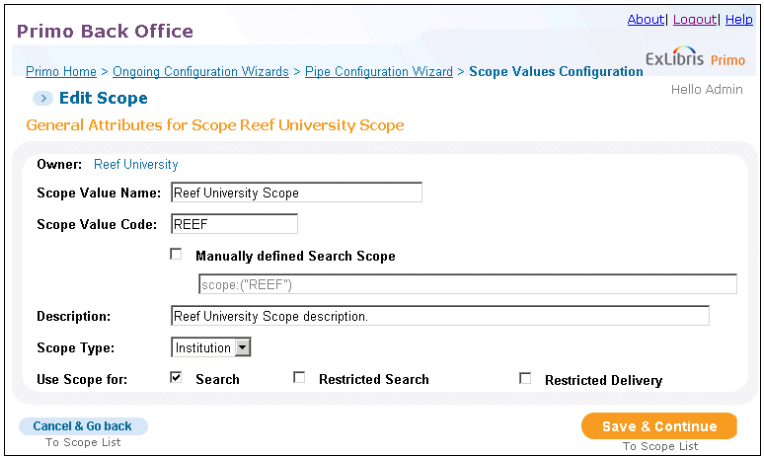
To edit scope value details:

1. On the Pipes Configuration Wizard page, click **Scope Values Configuration**.

   The Scope Values List page opens (see Scope Values List Page).

2. In the Scope Values List, click **Edit** next to the scope value that you want to update.

   The Edit Scope General Attributes page opens.



Edit Scope General Attributes Page

3. In the General Attributes area, edit the attributes for the scope value (see General Scope Value Attributes Details for a list of fields).

General Scope Value Attributes Details

Field name	Description
Owner	Select the name of the institution from the drop-down list. For institution-level staff users, your institution will already be selected.

Field name	Description
	Note For installation-level users, you must select an institution before the associated values appear in the drop-down lists that display the **Select Institution** value.
Scope Value Name	The name of the scope value.
Scope Value Code	The scope value's internal ID code as it appears in the Primo database.
Manually defined Search Scope	Search scopes are usually created based on values in the search scope field of the PNX. This field indicates whether to create a search scope from any field in the search section of the PNX. This is only relevant for scope values to be used as search scopes.
Description	Descriptive information about the scope value.
Scope Type	The scope value is based on one of the following types: **Institution**, **Library**, a **Collection**, or **Other**.
Use Scope For	The purpose of the scope: **Search**, **Restricted Search**, or **Restricted Delivery**. **Note** A single scope value can be used for any or all of the above purposes.

4. Click **Save & Continue**.

   The scope value details are updated and appear on the Scope Value List page (see Scope Values List Page).

Deleting Scope Values

You can delete any unnecessary scope values from the Scope Values List.

To delete a scope value:

1. On the Pipe Configuration Wizard page, click **Scope Values Configuration**.

   The Scope Values List page opens (see Scope Values List Page).

2. In the Scope Values List, click **Delete** next to the scope value that you want to delete.

   A confirmation dialog box opens.

3. Click **OK**.

   The scope value is deleted and the name of the scope value is removed from the Scope Value List.

Using Normalization Mapping Tables

Return to menu

Normalization mapping tables are used to translate one set of codes to another. Primo uses several pre-defined normalization tables for its template normalization rules. These rules can be modified. You can create, edit, or delete the normalization mapping tables during ongoing configurations.

Note

The Normalization Mapping Table section enables you to manage only the normalization mapping tables. If you want to manage other mapping tables, use the instructions in Mapping Tables.

To manage the normalization mapping tables, you must first access the Pipes Configuration wizard. After accessing the Normalization Mapping Tables Configuration wizard, you can perform the following:

- Creating Normalization Mapping Tables
- Editing Normalization Mapping Tables
- Creating Normalization Mapping Table Rows

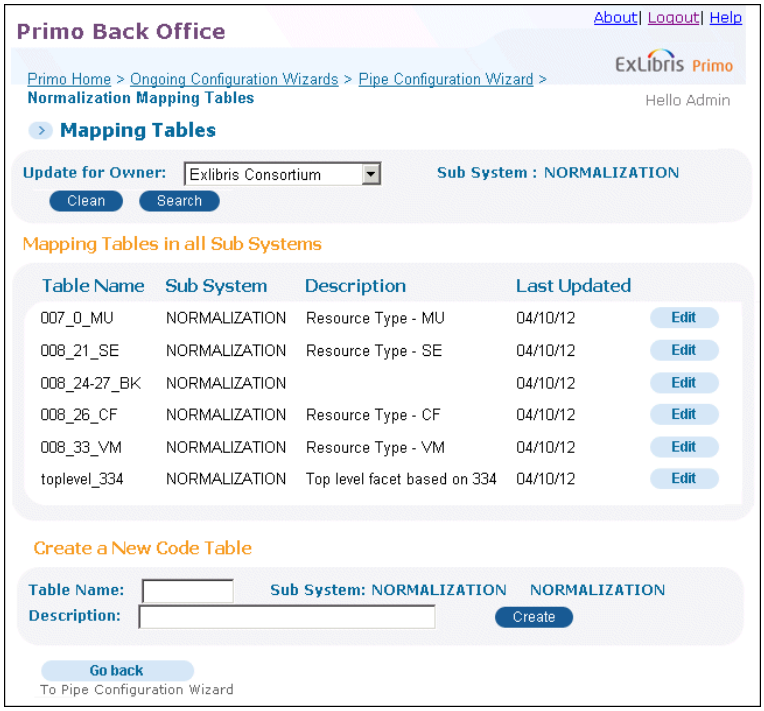
Creating Normalization Mapping Tables

You can create new mapping tables for your normalization rules.

To create a Mapping table:

1. On the Pipe Configuration Wizard page, click **Normalization Mapping Tables Configuration**.

   The Mapping Tables page opens (see Mapping Tables Page).



Mapping Tables Page

2. Select the owner of the normalization rules from the **Update for Owner** drop-down list.

   For installation-level staff users, select the installation name or a specific institution from the drop-down list. The valid values are **Installation** (if using the default name) or a specific institution.
   For institution-level staff users, this field is set to your institution.

3. In the Create a New Code Table area, enter your mapping table information (see Create a New Normalization Mapping Table Details for a list of fields).

Create a New Normalization Mapping Table Details

Field name	Description
Table Name	The name of the table as used in the Normalization rules. (In the Normalization Editor page use the Use Mapping Table transformation routine.)
Sub System	The sub system to which the table is added. For this table, the subsystem is **Normalization**.
Description	Descriptive information about the table.

4. Click **Create**.

   The new mapping table appears in the Mapping Table List page. You can now edit the mapping table.

Editing Normalization Mapping Tables

You can use the instructions in this section to add mapping table rows. You can edit the mapping details at any time.

To edit Mapping Table details:

1. On the Pipe Configuration Wizard page, click **Normalization Mapping Tables Configuration**.

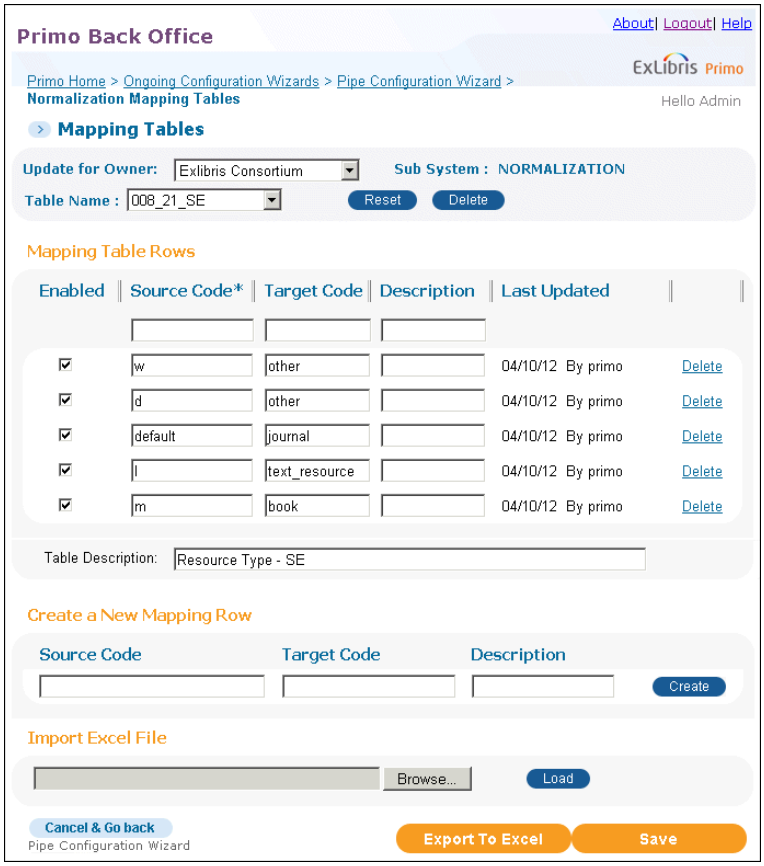
   The Mapping Tables page opens, displaying the normalization mapping tables (see Mapping Tables Page).

2. Click **Edit** next to the mapping table that you want to update.

   The Mapping Tables page for editing appears.

3. Select the owner of the normalization rules from the **Update for Owner** drop-down list.

   For installation-level staff users, select the installation name or a specific institution from the drop-down list. The valid values are **Installation** (if using the default name) or a specific institution.
   For institution-level staff users, this field is set to your institution.



Mapping Tables Page for Editing

4. If the mapping table rows are grayed out, you will need to click the **Customize** button to create a version for your configuration level (or another institution if you are an installation-level staff user) so that it can be edited.

Note

See Mapping Tables for a description of the normalization mapping tables.

---

5. In the Mapping Table Rows area, edit the mapping table rows. The out-of-the-box mapping rows have specific names for the source and target fields. If the mapping table is not an out-of-the-box mapping table, the mapping row field names are generic, and can be edited according to the following table:

General Mapping Table Rows Details

Field name	Description
Source Code	The source value.
Target Code	The target value to which the source is being mapped.
Description	A description of the mapping rows.

6. Click **Save** to save all changes to the mapping rows.

Creating Normalization Mapping Table Rows

You can create a new mapping table row during ongoing configuration.

To create a new Mapping table row:

1. On the Pipe Configuration Wizard page, click **Normalization Mapping Table**.

   The Mapping Tables page opens (see Mapping Tables Page).

2. Click **Edit** next to the mapping table to which you want to add a row.

   The Mapping Tables page for editing opens (see Mapping Tables Page for Editing).

3. If the mapping table rows are grayed out, you will need to click the **Customize** button to create a version for your configuration level (or another institution if you are an installation-level staff user) so that it can be edited.

4. In the Create a New Mapping Row area, enter the mapping row's information (see General Mapping Table Rows Details for a list of fields).

5. Click **Create**.

   The new mapping table row appears in the Mapping Table page for editing.

6. Click **Save** to save other changes to the mapping rows.

Using Normalization Rules Sets

Return to menu

This section contains a brief explanation of managing normalization rule sets. For more in-depth information on using the advanced and basic editors, see Editing Normalization Rules Sets in the *Primo Technical Guide*.

A normalization rule set defines how a specific data source or group of data sources is converted from its original source format, to the Primo Normalized XML record - the PNX. The normalization rule sets section of the Pipes Configuration wizard enables you to create a normalization rule set for a specific source format. This is performed by using existing rule sets and changing the necessary details to make the rule set appropriate for your format conversion needs.

The following out-of-the-box normalization rule sets are currently available:

- Generic danMARC2
- Generic MARC
- Generic Dublin Core
- Generic UNIMARC
- ALEPH danMARC2
- ALEPH KORMARC
- ALEPH MARC
- ALEPH MAB
- ALEPH UNIMARC
- Voyager Marc
- DigiTool - Dublin Core
- DigiTool - MARC21
- SFX
- MetaLib KB
- Unicorn
- XML – intended for data sources that are not MARC21 or Dublin Core.

Note

Out-of-the-box template normalization rule sets cannot be edited or deleted.

You can configure normalization rule sets during ongoing configuration. You can update the normalization rules sets to suit your system's needs. You can edit or delete normalization rules sets that you created.

Note

For instructions on editing your normalization rule's local fields, see Managing Local Fields.

To manage the normalization rule sets, you must first access the Normalization Rules Configuration section of the Pipes wizard. After accessing the wizard, you can:

- Creating Normalization Rule Sets
- Editing Normalization Rules Sets
- Editing Advanced Normalization Rules Sets

After working with normalization rule sets, you must deploy the rule set for the changes to take effect on the user interface of the system. Follow the instructions in Deploying Normalization Rule Sets.

Creating Normalization Rule Sets

You can add a customized normalization rules set to your Primo system.

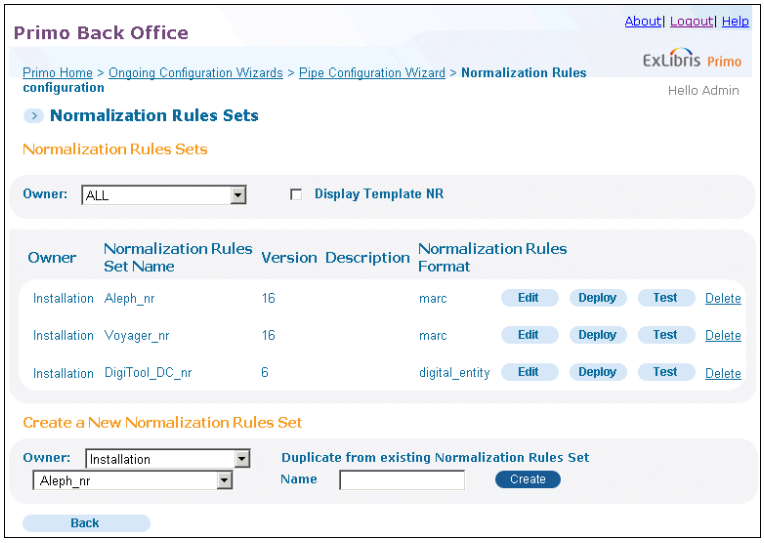
Note

You can also edit the normalization rules sets by clicking **Full Normalization Rule Configuration** on the Primo Home > Advanced Configuration page.

To create a new normalization rules set:

1. On the Pipes Configuration Wizard page, click **Normalization Rules Configuration**.

   The Normalization Rules Sets page opens.



Normalization Rules Sets Page

Note

To display the templates, check the **Display Template NR** check box. The templates have an OTB (out-of-the-box) owner and cannot be modified by staff users.

2. Select the institution or installation version from the **Owner** drop-down list. Note that the institution will be pre-selected for institution-level staff users.

3. In the Create a New Normalization Rules Set area, select the normalization rule set that you want to duplicate from the drop-down list.

4. In the Name field, enter a name for the normalization rules set and click **Create**.

   The Duplicate Rule Set dialog box opens.

Duplicate Rule Set Dialog Box

5. Click **OK**.

   The new normalization rules set appears in the Normalization Rules Sets list. You can now edit the PNX fields using the instructions in Editing Normalization Rules Sets.

Editing Normalization Rules Sets

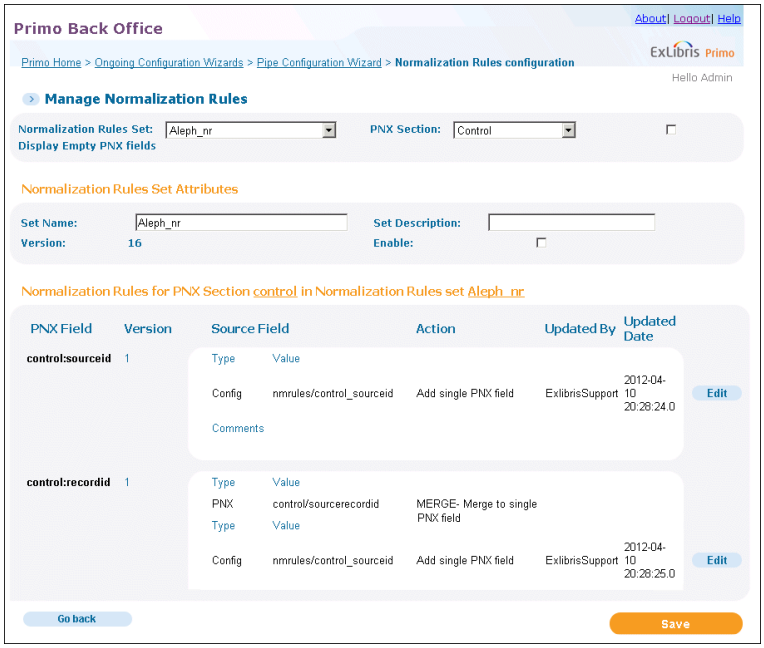
Editing a normalized rule set enables you to define and edit the PNX fields that are used in the normalization rules set. You cannot edit the normalization rule set templates.

1. On the Pipe Configuration Wizard page, click **Normalization Rules Configuration**.

   The Normalization Rules Sets page opens (see Normalization Rules Sets Page).

2. In the Normalization Rules Set List, click **Edit** next to the normalization rule set that you want to update.

   The Manage Normalization Rules page opens, showing the PNX fields that can be edited.



Manage Normalization Rules Page

Note

To edit PNX fields that are not configured, select the **Display Empty PNX** check box to show all fields.

The following table lists the mandatory PNX fields that can be modified in this section. Pipe errors will be returned if the following fields cannot be mapped from the source: sourcerecordid, sourceid, recordid, type, title, and delcategory.

PNX Mandatory Fields

PNX Section	PNX Field	Field Description
Control	Source ID, Record ID, Additional Source Record ID	The Additional Source Record ID is sometimes used when a data source has more than one ID for the record.
Delivery and Scoping	Institution, Delivery Category, and Restricted Delivery Scope	Fields relevant to the delivery functionality.
Facet	Collection	Can include physical, electronic or logical collections.
Display	Resource Type	A description of the material and its location.
	Library Level Availability	Also known as `availlibrary` in the Normalization Set Editor. Includes availability and location information for the record at the library level.

PNX Section	PNX Field	Field Description
Links	Title	
	All Fields	A definition of the link templates.
Enrichment	All Fields	Additional information to add to standard data.
	Availability	Used for ILS systems other than ALEPH and Voyager and may include temporary availability information that an enrichment program uses to create the Library Level Availability field in the Display section.
Search	Search Scope and Restricted Search Scope	Relevant to the search scopes. For more information, see Search Scope Restrictions.

3. From the PNX section drop-down list, select the PNX section that contains the fields that you want to edit.

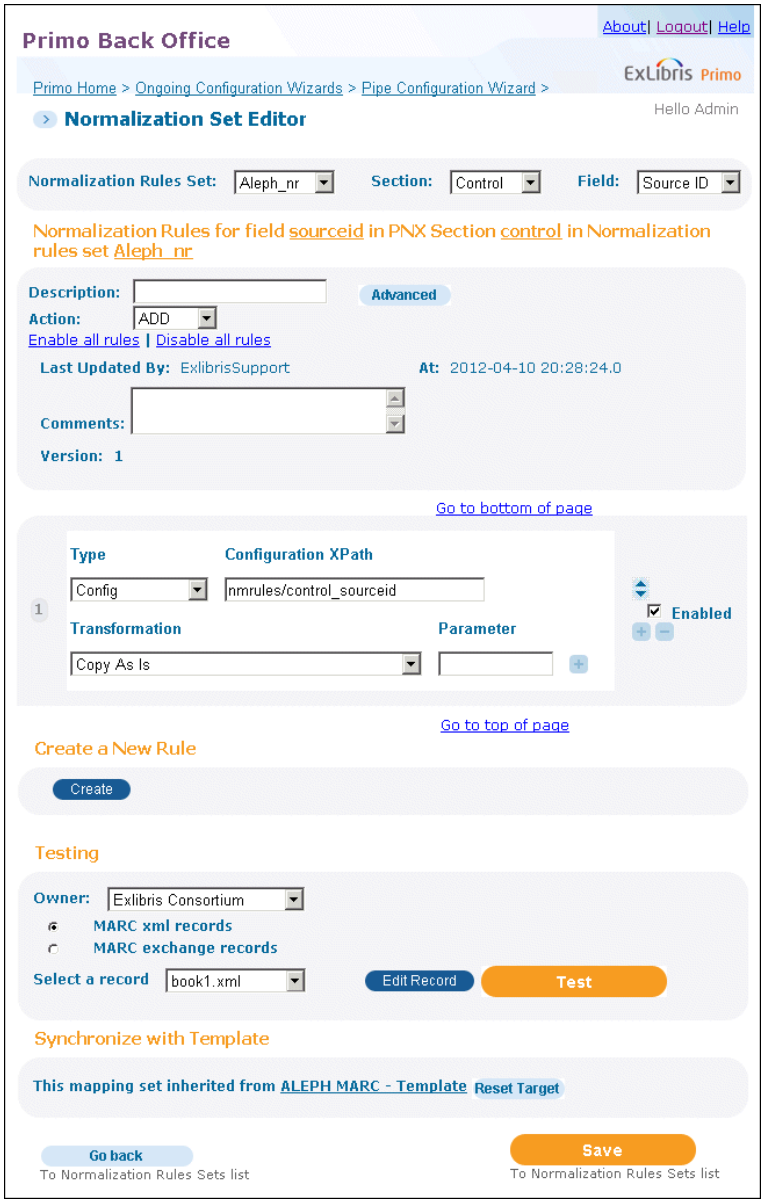
   The fields within the selected section of the normalization rule display.

4. Optionally, you can select **Display Empty PNX** to view the empty PNX fields that are not being used by the normalization rule.

   All of the PNX section's fields appear in the PNX Field list.

5. Click **Edit** next to the PNX field that you want to edit.

   The Normalization Set Editor page opens.



Normalization Set Editor Page

6. In the Normalization Rules for the PNX Field area, enter the fields that are described in General Details of the Normalization Set Editor.

Note

You can configure advanced normalization rules by clicking **Advanced**. For instructions on configuring advanced normalization rules, see Editing Advanced Normalization Rules Sets.

General Details of the Normalization Set Editor

Field name	Description
Description	A description of the Normalization rules for the PNX field.
Action	Indicates the action taken by all the rules.

Field name	Description
	◦ **ADD** – Indicates that the new PNX fields are added for every source field. ◦ **OR** – Indicates that a single PNX field is created. Once the field is created, the system stops checking the remaining source fields. ◦ **MERGE** – Indicates that the system merges all occurrences of the source fields to a single PNX field. See example below.
Enable all rules	Enables all the rules.
Disable all rules	Disables al of the rules.
Last Updated By	The name of the user who last updated the rules.
At	The date and time upon which the rules were updated.
Version	The rule's version number.
Advanced	Toggle to Advanced Set Editor.

In the following example, you can see the PNX fields that are created when you use the **ADD**, **OR**, or **MERGE** actions. If the data sources contain three different fields called 700:

- $$aJohnson, Melvin
- $$aKennelman, Anne
- $$aAdams, Mark

The different PNX fields that are created by using the various actions are described in the following table:

Example of the Created PNX Fields

Action Used	Description
ADD	Johnson, Melvin Kennelman, Anne Adams, Mark
OR	Johnson, Melvin

Action Used	Description
MERGE	Johnson, Melvin; Kennelman, Anne; Adams Mark

7. In the middle of the Normalization Rules for field area, edit the fields according to the source format type.
   - If you selected **MARC** from the **Type** drop-down list, enter the rest of the fields according to the following table:

Marc Source Type Details

Field name	Description
Type	Marc.
Field	The Marc three character tag.
Ind1	The first indicator. ▪ To use all indicators, leave this field blank. ▪ To use multiple indicators, separate indicators with a comma. ▪ To exclude an indicator, add the minus symbol before the excluded indicator.
Ind2	The secondary indicator. Edit the field the same way as the Ind1 field.
Subfield	The Subfield drop-down list indicates whether the subfields entered in the following fields are included or excluded from the rule. In the text box next to the Subfield drop-down list, enter the rules to be excluded or included. You can enter multiple rules either by separating them with a comma or by entering an asterisk to select all subfields.

   - If you selected **MAB** from the **Type** drop-down list, enter the rest of the fields according to the following table:

Mab Source Type Details

Field name	Description
Type	Mab.
Field	The start of the range of tags the system is going over. Because MAB repeats the same data element in several tags, you can create a rule for a range of tags.
Ind1	The file type of the rule's source format.

Field name	Description
Ind2	The secondary file type of the rule's source format.
Last	The last tag in the range.
Step	The step value for the range. This field allows you skip tags in a range. For example, if Field is **208**, Last is **296**, and Step is **4**, the rule would apply to the following tags: 208, 212, 216, ..., 296.
Subfield	Whether the subfields entered in the following fields are included or excluded from the rule. In the text box next to the Subfield drop-down list, enter the rules to be excluded or included. You can enter multiple rules either by separating them with a comma or by entering an asterisk to select all subfields.

- If you selected **XML** from the **Type** drop-down list, enter the rest of the fields according to the following table:

XML Source Type Details

Field name	Description
Source Type	XML.
Path	The path of the XML field.
Attribute	The specific field based on the attribute.[1]
Value	The specific field based on the attribute value.*

[1] This is used optionally when the XML file uses attributes.

- If you selected **XML** from the **Type** drop-down list, enter the rest of the fields according to the following table:

Complex XML Source Type Details

Field name	Description
Source Type	Complex XML
XPath	This source type supports the use of full X-path capabilities.

Field name	Description

	It allows you to create rules that are based on any attribute in the path, not just the last attribute as provided with the XML source type.
	
	To use this source type, you must first use the **Complex Xml - Template** template to create your normalization rules.
	
	Note
	You cannot use the Complex XML source type in normalization rules that have the source format set to **xml**.
	
	In the following XML record, you can create a rule that uses the AuthorName attribute, which is a <subitem> element.</subitem>
	
	`<item name="PagesEnd">110</item>`
	`<item name="AbstractSupplied"/>`
	`<subitem name="AbstractText"/>`
	`<subitem name="AbstractLang">English</subitem>`
	`<subitem name="AbstractLangCode">EN</subitem>`
	`<subitem name="AbstractSource">ABSTRACT FROM AUTHOR</subitem>`
	`<item name="Author"/>`
	`<subitem name="AuthorName">Vishnuvardhanarao, Elaprolu</subitem>`
	`<subitem name="AuthorAffil">1</subitem>`
	
	For this example, you would set Xpath to the following value:
	
	`XPath='item[@name='Author']/subitem[@name= 'AuthorName']'`

- If you selected **PNX** from the **Type** drop-down list, enter the rest of the fields according to the following table:

PNX Source Type Details

Field name	Description
Type	PNX.
X-path	The PNX section and field code separated by a slash. For example, to use the Resource Type field in the Display section, enter **display/type**.

- If you selected **Config** from the **Type** drop-down list, enter the rest of the fields according to the following table:

Config Source Type Details

Field name	Description
Type	Config
X-path	The name of the field located in the Configuration file. The only configuration in use is the Data source configuration. The x-path is entered as `nmrules/`*<field/>*. The following are available: ▪ `nmrules/control_sourceid` ▪ `nmrules/control_originalsourceid` ▪ `nmrules/control_sourcesystem` ▪ `nmrules/control_sourceformat`

- If you selected **Constant** from the **Type** drop-down list, enter the rest of the fields according to the following table:

Constant Source Type Details

Field name	Description
Type	Constant.
Value	The name of the constant.
Subfield	The Subfield drop-down list indicates whether the subfields entered in the following field are included or excluded from the rule. In the text box next to the Subfield drop-down list, enter the rules to be excluded or included. You can enter multiple rules either by separating them with a comma or by entering an asterisk to select all subfields.

8. In the middle of the Normalization Rules for field area, you can continue editing the Transformation drop-down list. The transformation indicates the way that the rule manipulates the data. The default transformation is **Copy as is**, which transfers the data from the source field to the PNX field with no changes. For some transformations, an additional parameter field is necessary. Additional transformations include **Move** and **Delete**. For more information on these transformations, refer to the *Primo Technical Guide*.

Note

Every normalization rule must have at least one transformation routine. To add an additional transformation routine, click

next to the transformation routine that you want to duplicate. To delete a transformation routine, click

next to the routine that you want to delete.

---

9. If you want to create a new rule, click **Create** in the Create a New Rule section, or you can create a new rule or create new fields within a rule by clicking

   next to the rule or field that you want to duplicate. To delete a condition, click

   next to the condition or field that you want to delete.

Note

The Normalization Set Editor page opens the normalization rules for one PNX field at a time. To edit another PNX field's normalization rules, repeat Steps 3 through 7.

---

10. Click **Save** to save your changes and return to the Normalization Set list. If you want to test your rule before saving, see Testing a Field's Normalization Rules.

Editing Advanced Normalization Rules Sets

This section contains instructions for performing advanced configuration of the modifiable PNX fields. For more in-depth information about managing the rule sets, refer to the *Primo Technical Guide*.

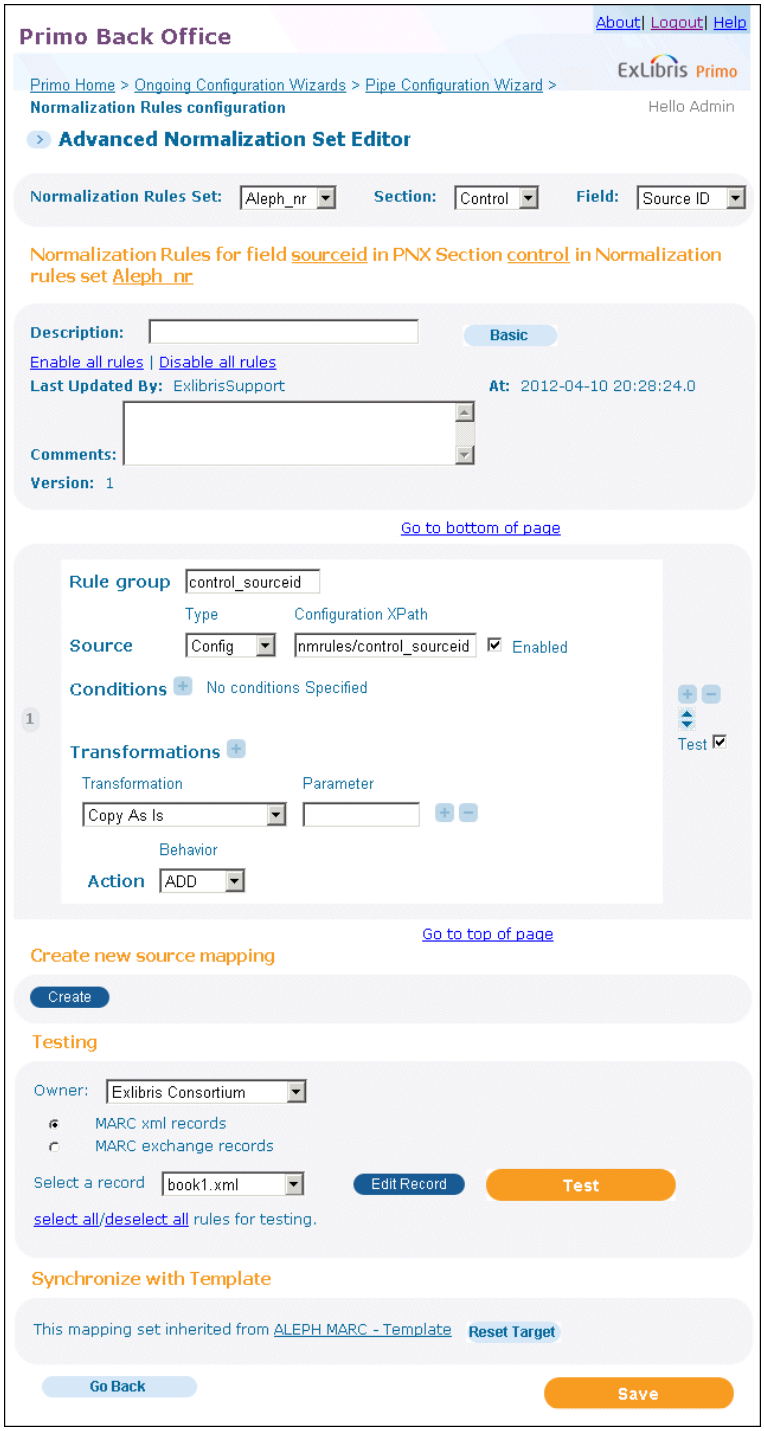
Note

To edit PNX fields that are not listed here, select the **Display Empty PNX** field to show all fields.

To edit the advanced Normalization rules:

1. Follow the Steps 1 to 5 in Editing Normalization Rules Sets.
2. In the Normalization Set Editor, click **Advanced**.

   The Advanced Normalization Set Editor page opens.



Advanced Normalization Set Editor Page

Note

You can return to the basic Normalization Set Editor page by clicking **Basic**. For instructions on configuring basic normalization rules, see Editing Normalization Rules Sets.

---

3. In the Description field, enter a description for the rule set.

Note

You can enable or disable each rule individually for each PNX field.

4. In the **Rule group** field, specify the name of the rule group.

   By default, the system sets this field to the name of the PNX section and tag and processes all rules that share the same source as a group.
   If you want to process multiple sources together, you must reassign the group for each of these sources. It is recommended that you append a unique number to the default setting. For example, if the default Rule group is **display_creator**, change it to **display_creator_1** so that you can create several groups for the target.
   For more information on rule groups, see the *Primo Technical Guide*.

5. In the Source area, edit the PNX fields of the normalization rule according to the source format type.
   - If the source format type is **Marc**, edit the table according to Marc Source Type Details.
   - If the source format type is **Mab**, edit the table according to Mab Source Type Details.
   - If the source format type is **XML**, edit the table according to XML Source Type Details.
   - If the source format type is **Complex XML**, edit the table according to Complex XML Source Type Details.
   - If the source format type is **PNX**, edit the table according to PNX Source Type Details.
   - If the source format type is **Config**, edit the table according to Config Source Type Details.
   - If the source format type is **Constant**, edit the table according to Constant Source Type Details.

6. In the Conditions area, edit the PNX fields of the normalization rule, using the field descriptions provided in Conditions Details of the Normalization Rule.

Conditions Details of the Normalization Rule

Field name	Description
Conditions Logic	A condition is defined as either positive or negative. This parameter allows you to assign condition logic to all conditions in a group.
Conditions Relation	This appears when there are more than one conditions defined. The available values are: ◦ **AND** – Indicates that all conditions must be met for the condition to be true. ◦ **OR** – Indicates that at least one of the conditions must be met for the condition to be true.
Conditions Source	The source field on which the condition is based. Any type of source can be defined.
General Parameter	Not in use.

Field name	Description
Condition n Logic	A condition is defined as either positive or negative. This parameter allows you to assign condition logic to an n condition.
Condition n Source	The source field on which the condition is based. Any type of source can be defined.
Condition n Routine	You can use transformation routines to effect the way the data is manipulated in the rule. For a complete list, refer to the *Primo Technical Guide*.
Routine Parameter	An optional parameter, which is necessary for certain routines.
Success if	Indicates when the condition is met. ◦ **Match any** – indicates that the condition is true for any occurrences of the source field. ◦ **Match current** – indicates that the condition is true in the current source field. ◦ **Match all** – indicates that the condition is true for all occurrences of the source field. ◦ **Match last** – indicates that condition is true for the last occurrence of the source field. This is the default.
Enabled	Indicates whether the normalization rule is enabled.

You can create a new condition or create new fields within a condition by clicking

next to a condition or field to duplicate it. To delete a condition click

next to the condition or field you want to delete.

7. In the Transformations area, you can edit the transformation drop-down list. The transformation indicates the way the Rule manipulates the data. The default transformation is **Copy as is**, which transfers the data from the source field to the PNX field with no changes. For some transformations, an additional parameter field is necessary. Additional transformations include **Move** and **Delete**. For more information on these transformations, refer to the *Primo Technical Guide*.

8. Select the type of action for the rule according to the following table:

Example of the Created PNX Fields

Action	Description	Example
ADD	Indicates that the new PNX fields are added for every source field.	Johnson, Melvin

Action	Description	Example
OR	Indicates that a single PNX fields is created. Once the field is created, the system stops checking the remaining source fields.	Johnson, Melvin Kennelman, Anne Adams, Mark
MERGE	Indicates that the system merges all occurrences of the source fields to a single PNX field.	Johnson, Melvin; Kennelman, Anne; Adams Mark

Unlike the basic normalization editor, the advanced editor allows you to define a different action for each of the set's rules. See Example of the Created PNX Fields for an example of the different fields created when using the various actions.
In addition, there is a special type of delimiter called **new**, which indicates to the system to start a new field even when the action is **MERGE**.

9. Click **Save** to return to the Normalization Set list.

Note

To edit a different field in the same PNX section, select the desired field from the **Field** drop-down list. To edit a different section in the rule set, select the desired section from the **section** drop-down list. To edit a different rule set, select the desired rule set from the **Rule Set** drop-down list.

Your Normalization Rule sets are configured.

Testing a Field's Normalization Rules

Before you save a new or modified normalization rule for a PNX field, you can run tests with sample records that are provided with Primo.

On the Normalization Rule Set Editor page, you must test all of the rules for a PNX field, but the Advanced Normalization Rule Set Editor page allows you to select specific rules.

Note

You can test an entire normalization rule set by clicking **Test** next to a normalization rule set on the Normalization Rules Sets page (see Normalization Rules Sets Page).

To test the normalization rules for a PNX field:

1. On the Manage Normalization Rules page (see Manage Normalization Rules Page), select a PNX section from the drop-down list.

2. Click **Edit** next to the PNX field that you want to test.

   The Normalization Set Editor page opens (see Normalization Rules Sets Page).

3. Configure the Testing section:

1. Select the institution or installation version from the **Owner** drop-down list. Note that the institution will be pre-selected for institution-level staff users.

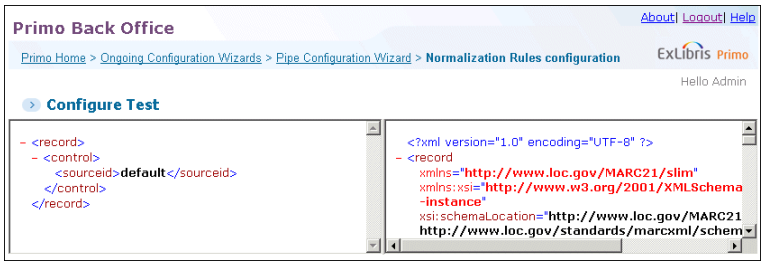
2. Select a file from the **Select a Record** drop-down list.

3. Select either MARC or MARC exchange files by selecting the corresponding radio button.

4. Click **select all** to select all rules for the field.

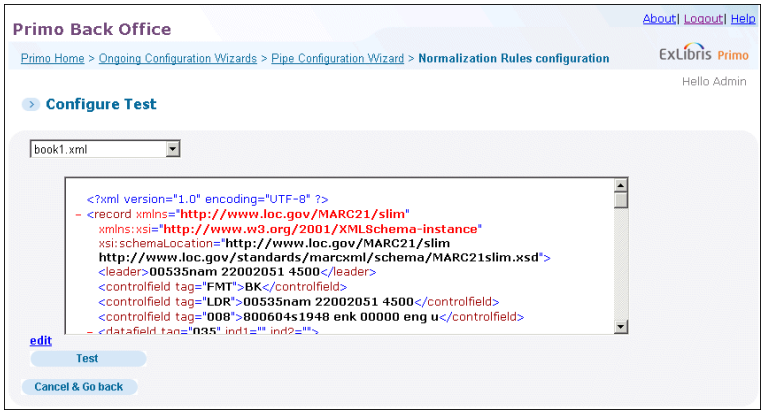
5. Click **Test**.

   The Configure Test page opens, showing the results on the left side of the page and the sample record on the right side of the page.



Configure Test Page (Results)

If you want to edit the sample record before running the test, click **Edit Record**. The Configure Test page opens only the sample record.



Configure Test Page (Edit Record)

Click **Edit**, make your changes, and then click **Save & Test** to test the normalization rules.

To test specific normalization rules for a PNX field:

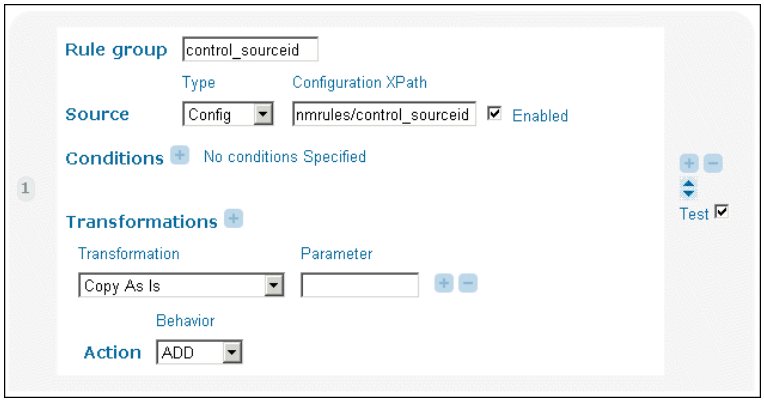
1. On the Manage Normalization Rules page (see Manage Normalization Rules Page), select a PNX section from the drop-down list.

2. Click **Edit** next to the PNX field that you want to test.

   The Normalization Set Editor page opens (see Normalization Rules Sets Page).

3. Click **Advanced** to display the Advanced Normalization Set Editor page (see Advanced Normalization Set Editor Page).

4. Select the **Test** check box next to each rule that you want to test.



Advanced Normalization Set Editor (Enabled Rule)

Note

If you want to clear all fields, click the **deselect all** link in the Testing section.

---

5. Configure the Testing section:

    1. Select the institution or installation version from the **Owner** drop-down list. Note that the institution will be pre-selected for institution-level staff users.

    2. Select a file from the **Select a Record** drop-down list.

    3. Select either MARC or MARC exchange files by selecting the corresponding radio button.

    4. Click **Test**.

    The Configure Test page opens (see Configure Test Page (Results)). The results display on the left side of the page and the sample record opens on the right side of the page.
    If you want to edit the sample record before running the test, click **Edit Record**. The Configure Test page opens only the sample record (see Configure Test Page (Edit Record)). Click **Edit**, make your changes, and then click **Save & Test** to test the normalization rules.

Deploying Normalization Rule Sets

You must deploy the normalization rule set before your normalization rules can be used by the pipe. Deploying the normalization rule set updates the system's user interface to display the updated normalization rules sets and enables you to choose from the new normalization rule when defining your pipe. After you create, edit, or delete a normalization rule set, you must deploy the rule set.

Note

If you would like to deploy your settings later, click **Deploy All** on the Primo Back Office home page. For more information, see Deploy All Configuration Settings.

To deploy a normalization rule set:

1. Click **Normalization Rules Configuration**.

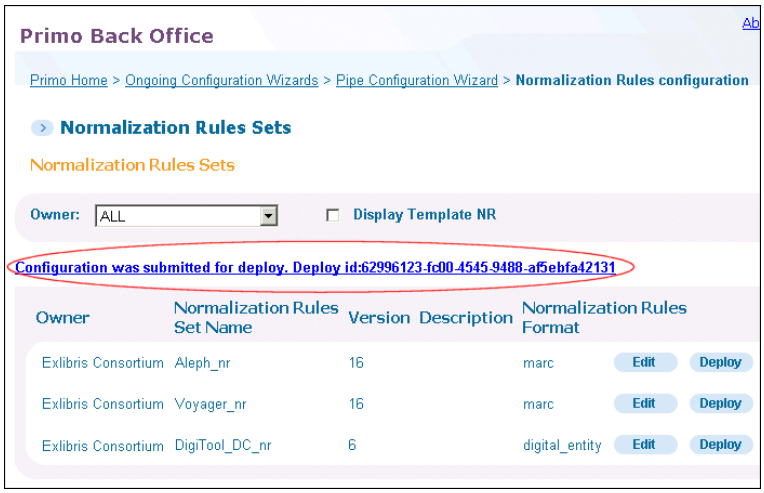
    The Normalization Rules Sets page opens (see Normalization Rules Sets Page).

2. In the Normalization Rules Set page, click **Deploy** next to the normalization rule that you want to deploy.

   The Deploy Rule Set confirmation box opens.

3. Click **OK** to deploy the set.

4. To monitor the deployment, click the deployment process link above the normalization rules sets list.



Deployment Link on Normalization Rules Sets Page

For more information on monitoring deployments, see Deploy Monitoring.

Using Enrichment Sets

Return to menu

The Enrichment set section of the Pipes Configuration wizard enables you to create an enrichment set for a specific source format. This is performed by using existing sets and changing the necessary details to make the set appropriate for your format conversion needs.

To work with enrichment sets, you must first access the Pipes Configuration wizard. After accessing the wizard, you can:

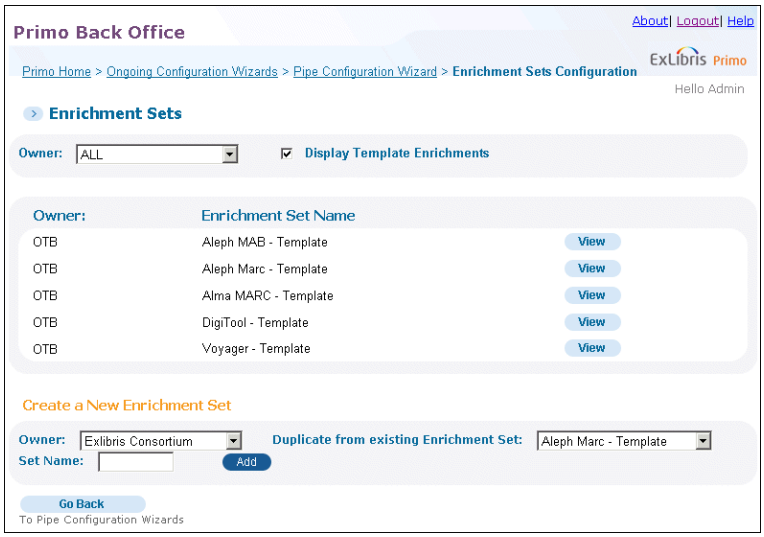
- Creating Enrichment Sets
- Editing Enrichment Sets
- Deleting Enrichment Rule Sets

Creating Enrichment Sets

To create a new Enrichment Rule Set:

1. On the Pipe Configuration Wizard page, click **Enrichment Sets Configuration**.

   The list of enrichment sets appear on the Enrichment Sets page.



Enrichment Sets Page

Note

The OTB enrichment sets can only be viewed or duplicated. If you do not want to display them in the list, clear the **Display Template Enrichments** check box.

---

2. Configure the Create a New Enrichment Set section:

1. Select the institution or installation version from the **Owner** drop-down list. Note that the institution will be pre-selected for institution-level staff users.
2. Select the rule set that you want to duplicate from the drop-down list.
3. In the **Set Name** field, enter a name for the normalization rules set.
4. Click **Add**.

Note

A duplicate enrichment set has been added to the list. If you want to modify this enrichment set, refer to Editing Enrichment Sets.

Editing Enrichment Sets

Editing a newly created enrichment set enables you to define advanced information in addition to the basic information defined when you created the enrichment set. You can edit the enrichment set details at any time.

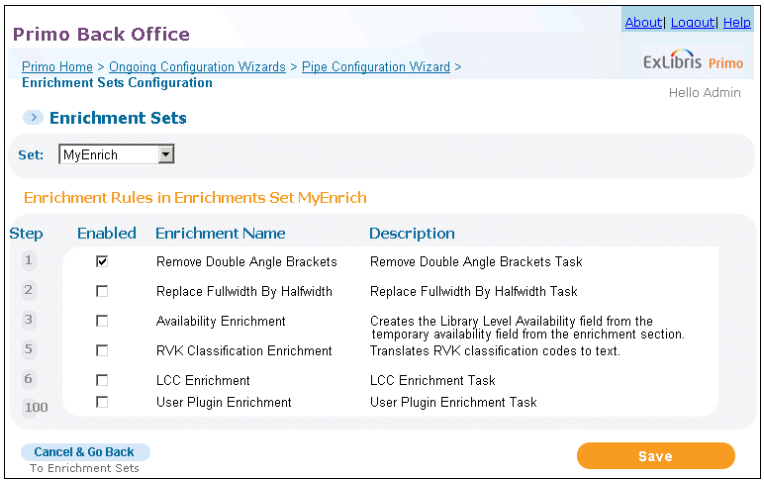
To edit an enrichment set:

1. On the Pipe Configuration Wizard page, click **Enrichment Sets Configuration**.

   The list of enrichment sets appear on Enrichment Sets page.

2. In the Enrichment Set Name list, click **Edit** next to the enrichment set that you want to update.

   The set's enrichments appear on the Enrichments Sets page.



Enrichments Sets for Editing Page

3. Select **Enabled** to enable or disable the following enrichments:
   - **Availability Enrichment** – creates the `availlibrary` fields in the PNX for ILS systems other than Aleph and Voyager. For more information, see the *Primo Interoperability Guide*.
   - **LCC Enrichment** – translates LCC classification numbers to keywords, using a file.

- **Remove Double Angle Brackets** – removes double-angle brackets. By default, this routine is enabled to remove double angle brackets.
- **Replace Fullwidth By Halfwidth** – replaces full-width characters with half-width characters.
- **RVK Classification Enrichment** – translates RVK classification numbers to keywords, using a file.
- **User Plugin Enrichment** – allows on-premises customers to specify a user-defined enrichment plug-in. For more information, see the following page on the Developer Network:

  Primo > Plugins > Back Office > Enrichment

4. Click **Save**.

Deleting Enrichment Rule Sets

You can delete an Enrichment rule set if it is no longer used by any pipe.

To delete an enrichment set:

1. Click **Enrichment Sets Configuration**.

   The Enrichment Sets page opens (see Enrichment Sets Page).

   Note

   Before deleting an enrichment set, it is recommended that you check to see that none of your pipes are still using it.

2. On the Enrichment Set Name list, click **Delete** next to the enrichment set that you want to delete.

   A confirmation dialog box opens.

3. Click **OK**.

   The enrichment set is deleted from the system.

Configuring Pipes

Return to menu

Harvesting source records and creating PNX records are managed by the Publishing Platform. The publishing platform supports scheduled and unattended harvesting and processing of various data formats, allowing interactive monitoring and control over the entire set of activities.

Within the publishing platform, PNX records are created by publishing pipes. Every data source has its own pipe. Each data source may have its own set of normalization rules, or several data sources may be linked to one set of normalization rules.

This section covers the following aspects of pipes:

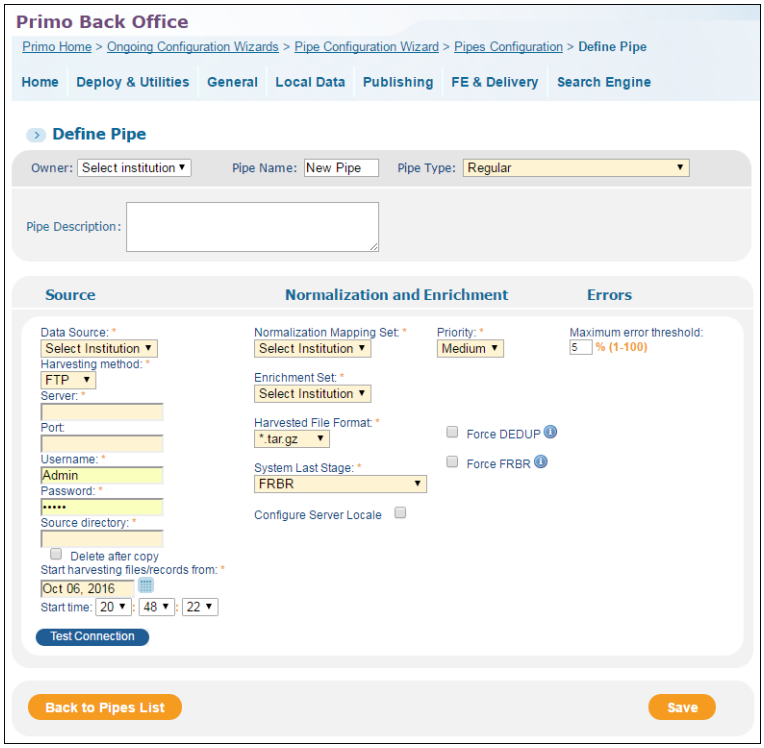
- Defining a Pipe
- Editing a Pipe
- Deleting a Pipe

Defining a Pipe

The Define Pipe page allows you to add and update pipes. After you have created or updated a pipe, you will need to execute the pipe to create or update the PNX records. For information on executing and monitoring pipes, see Monitoring Pipe Status.

Note

To create an effective pipe for your system, first create your data sources, normalization mapping sets, and enrichment sets.



Define Pipe Page

To define a new pipe:

1. Click **Pipe Configuration Wizard** on the Ongoing Configuration Wizard page.

   The Pipe Configuration Wizard page opens.

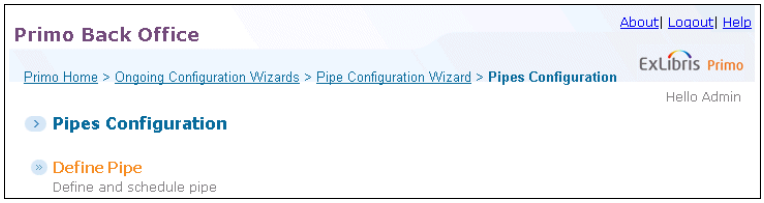
   Note

   You can also access the Define Pipe page by clicking **Create new pipe** on the Primo Home > Monitor Primo Status > Pipe Monitoring page.

   ---

2. Click **Pipes Configuration**.

   The Pipes Configuration page opens.



Pipe Configuration Page

3. Click **Define Pipe** to open the Define Pipe page.

4. Select the name of the institution from the **Owner** drop-down list. For institution-level staff users, your institution will already be selected.

Note

For installation-level users, you must select an institution before the associated values appear in the drop-down lists that display the **Select Institution** value.

5. In the **Pipe Name** field, enter the name of the new pipe.

Note

The Pipe name is composed of letters, numbers, and/or the underscore character.

6. In the **Pipe Description** field, enter a description for the new pipe.
7. Enter the remaining fields as described in the following table.

Define Pipe Details

Field name	Description
Pipe Type	Indicates the type of pipe. The following types are valid: ◦ **Regular** – This type of pipe uses records harvested from the data source to create, update, and delete PNX records. For more information on the stages of pipe execution, see Configuring the Publishing Platform Pipe Flow. ◦ **Delete Data Source** – This type of pipe is used to delete a data source from the Primo database, including data from dedup and FRBR groups. It removes all previously harvested records from the P_PNX and P_SOURCE_RECORD tables for the specified data source. In addition, it removes all tags and reviews. ◦ **No Harvesting – Update Data Source** – This pipe is similar to a "Regular" pipe, but records are not harvested from the data source. It uses all of the previously harvested source records from the P_SOURCE_RECORD table instead of the data source. This type of pipe is typically used when it is necessary to re-normalize and/or enrich all records from a specific data source (for example, due to a change in normalization rules). ◦ **Delete Data Source and Reload** – This pipe is similar to the Regular pipe, but if first removes all harvested records from the P_PNX and P_SOURCE_RECORD tables before reloading the PNX records from the data source. This option is intended for data sources (such as MetaLib) that have to harvest the entire database each time. This ensures that deleted records from the data source are removed from Primo. The default value is **Regular**. **Note** When running pipes (such as pipes set to **No Harvesting - Update Data Source**) that add or change a large amount of data, it is recommended that you stop Oracle archiving, as this slows down the process and fills up the disk. Immediately after the process is complete, perform a full cold backup and then turn archiving back on. Records that are deleted and re-inserted using the **Delete Data Source and Reload** option may be included with the tally of the updated records (instead of the deleted and inserted records) in the pipe's log.
Data Source	The data source of the pipe.

Field name	Description
Normalization Mapping Set	The normalization set used to map the source records to the PNX.
Priority	This field defines the priority of the pipe: **Low**, **Medium**, **High**, and **Critical**. Pipes with the highest priority run first. The default setting is **Medium**.
Maximum error threshold	The maximum percent of errors allowed until the system stops running the pipe.
Harvesting method	The method used to harvest the source information. The following methods can be selected: **FTP**, **Copy**, **OAI**, and **SFTP**. If **Copy** is selected, the user must have read permission for the directory.
Enrichment Set	The enrichment set used to enrich the records.
Harvested File Format	Indicates the format of the harvested file. The following values are valid: ***.tar.gz**, ***.tar**, ***.gz**, ***.warc**, ***.warc.gz**, and ***.zip**. This field is not available with all types of pipes, such as **Delete Data Source**. **Note** The ***.gz**, ***.warc**, ***.warc.gz**, and ***.zip** formats require the data source to use the WARC file splitter.
Start harvesting files/records from	The date from which to harvest the records. ◦ For **FTP**/**Copy** this is the date and time of the file to harvest. Following harvesting, this date is updated with the date of the latest harvest file. ◦ For **OAI** this is the date and time on which the file is to be updated. Following harvesting this is updated with the date of the request. **Note** This date is updated after each successful run of the pipe to ensure that all harvested files have been processed completely.
Start time	The time from which to harvest the records.

Field name	Description
System Last Stage	This field allows you to change the last stage that is run during the execution of a pipe. By default, this field is set to **FRBR**, the last stage of pipe execution. The following values are valid: ◦ **PERSISTENCE** – This option stops the execution of the pipe after loading records to the database. Note that the Dedup and FRBRization stages are not executed. ◦ **DEDUP** – This option stops the execution of the pipe after the Dedup stage. Note that the FRBRization stage is not executed. ◦ **FRBR** – This default option stops the execution of the pipe after the FRBRization process completes. ◦ **FRBR WITHOUT DEDUP** – This option skips the Dedup stage and stops the execution of the pipe after the FRBRization process completes. **Note** This field does not display when the Parallel Processing of Pipes mode is set to **Harvesting, NEP** on the General Configuration page.
Include DEDUP	Indicates whether the Dedup stage will be executed when the Parallel Processing of Pipes mode is set **Harversting, NEP** on the General Configuration page.
Include FRBR	Indicates whether the FRBR stage will be executed when the Parallel Processing of Pipes mode is set **Harversting, NEP** on the General Configuration page.
Force DEDUP	Indicates whether Dedup processing is performed on PNX records that have no changes to the dedup section. This allows you to apply changes made to the Dedup rules. **Note** If the pipe is not configured to run the Dedup stage, Dedup processing will not be forced regardless of this setting.
Force FRBR	Indicates whether FRBR processing is performed on PNX records that have no changes to the frbr section. This allows you to apply changes made to the FRBR rules. **Note** If the pipe is not configured to run the FRBR stage, FRBR processing will not be forced regardless of this setting.
Server	The IP used to access the server. This field appears only if the harvesting method is **OAI**, **FTP**, or **SFTP**. **Note** For **OAI**, the system supports the HTTPS protocol for harvesting.

Field name	Description
Username	The user name used to access the server. This field appears only if the harvesting method is **FTP** or **SFTP**.
Password	The password used to access the server. This field appears only if the harvesting method is **FTP** or **SFTP**.
Metadata format (OAI only)	All OAI-PMH compliant repositories can return records in Dublin Core format. The Dublin Core format is usually expressed as **oai_dc**, but some repositories use a different code. Enter the term used by your repository. This field appears only if the harvesting method is **OAI**.
Set (OAI only)	OAI repositories may organize items into sets, allowing you to selectively harvest information. Specify the name of the set if you want to harvest only a specific part of the OAI repository. This field appears only if the harvesting method is **OAI**.
Encode Resumption Token (OAI only)	Indicates whether to encode the resumption token (such as characters like @) within the OAI protocol. The valid values are **true** and **false**. The default value is **false**. This field appears only if the harvesting method is **OAI**.
Source directory	The directory of the source record. This is used for copy only. This field appears only if the harvesting method is **Copy**, **FTP**, or **SFTP**.
Delete after copy	Indicates whether the system should delete the source files after the harvest. If selected, the files are deleted as follows, per **Harvesting method**: ◦ **Copy** – The files are removed from the directory on the Primo server. ◦ **FTP**/**SFTP** – The files are removed from the directory on the source server. If the staff user does not have write permissions to the source files, the system will stop the pipe and log the following error: `stop harvest error` If this check box is not selected, the source files are not removed from their respective directories after harvesting. After the harvest, the system stores a copy of the source files in the harvest directory. To view the harvested files, enter the following commands: ◦ `be_pipes` ◦ `cd` *<pipe_name>*`/`*<data_source>*`/`*<timestamp-of-the-pipe_run>*`/harvest`
Configure Server Locale	When this field is selected, this page opens the Server Locale field. This field appears only if the harvesting method is **FTP**.

Field name	Description
Server Locale	Select a locale from the drop-down list. This field appears only if the harvesting method is **FTP** and the **Configure Server Locale** check box is selected. **Note** By default, the harvester assumes the locale of the server is English. If the locale of your server is different, you must select the relevant locale.

8. For FTP, OAI, and SFTP harvesting methods, click **Test Connection** to verify the connection to the server.
9. Click **Save**.

Editing a Pipe

You can edit the pipe details if the pipe is not running.

To edit a Pipe:

1. On the Primo Home > Monitor Primo Status > Pipe Monitoring page, click **Edit** next to the pipe that you want to update.

   The Define Pipe page opens, showing the details of the specified pipe (see Define Pipe Page).
2. Edit the fields according to Define Pipe Details.
3. Click **Save** to update the pipe's settings.

Deleting a Pipe

You can delete a pipe that has not been executed. After it has been executed, you must open a Support ticket to have it deleted.

Note

When a pipe is deleted, the system will also delete any schedules created for the pipe.

To delete a Pipe:

1. On the Primo Home > Monitor Primo Status > Pipe Monitoring page, click **Edit** next to the pipe that you want to delete.

   The Define Pipe page displays the specified pipe's details (see Define Pipe Page).
2. Click **Delete Pipe** to delete the pipe.

Configuring Primo's Front End

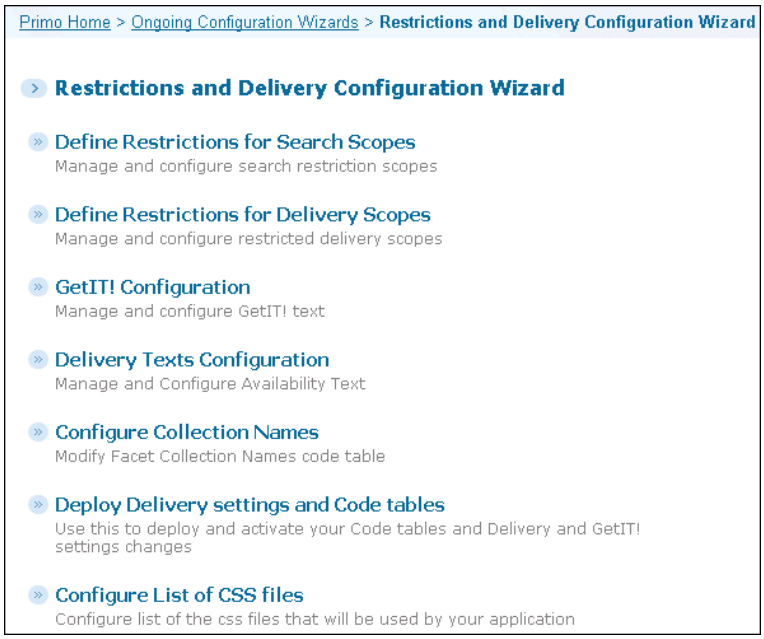
This section includes:

Restrictions and Delivery Configuration Wizard

Return to menu

The Restrictions and Delivery Configuration Wizard **(Primo Home > Ongong Configuration Wizards > Restrictions and Delivery Configuration Wizard)** allows you to define the following settings for Primo's Front End.

- Search Scope Restrictions
- Define Restrictions for Delivery Scopes
- Configuring the GetIt! Text Codes
- Configure Delivery Display Texts
- Configuring Collection Names
- Configure List of CSS Files
- Deploy Delivery Settings



Restrictions and Delivery Configuration Wizard Page

Search Scope Restrictions

Restricted search scopes enable you to limit discovery of a group of records to a specific user group. The restricted search scope values are added to PNX records during the normalization process. In this section, you can define the user group that is allowed to search the records that belong to the restricted search scope.

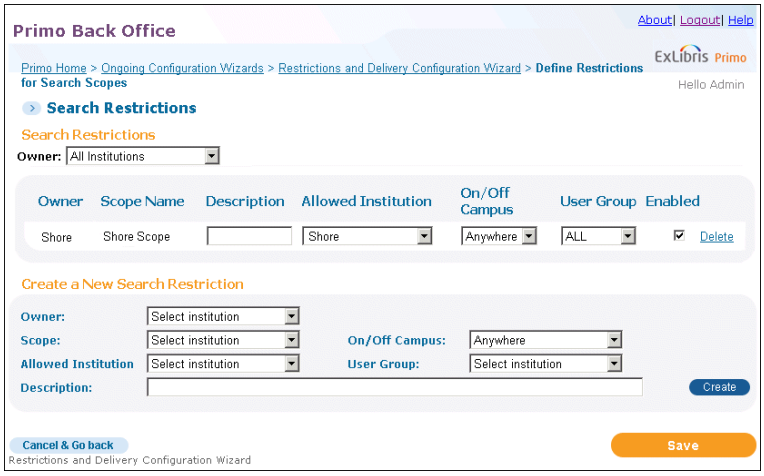
To access the Search Restrictions page:

1. On the Ongoing Configuration Wizards page, click **Restrictions and Delivery Configuration Wizard**.

   The Restrictions and Delivery Configuration Wizard page opens.

2. Click **Define Restrictions for Search Scopes**.

   The Search Restrictions page opens.



Search Restrictions Page

On the Search Restrictions page, you can perform the following operations:

- Defining Search Restrictions
- Editing Search Restrictions
- Deleting Search Restrictions

Example of Defining Restricted Search Scopes for Demo Customer

There is a manuscript collection in Law library of North University that can be searched by either logged in or on-campus users only. The collection is identified by the source data (AVA$$cMANUS field). To create the restricted search scope we'll need the information described in Restricted Search Scopes Example.

Restricted Search Scopes Example

Scope Code Data	Source	Scope Description	Institution Code	On/Off Campus	End User Group
NORTH LAW	AVA$$cMANUS	Restricted for search by either On Campus users or logged users only	NORTH	ON	Non Guest

Defining Search Restrictions

The Search Restrictions page allows you to define search restrictions for your institutions.

To create a search scope restriction:

1. In the Create a New Search Restriction area, enter the search restriction information in the appropriate fields according to the following table:

Create a New Search Restriction

Field name	Description
Owner	Select the name of the institution from the drop-down list. For institution-level staff users, your institution will already be selected. **Note** For installation-level users, you must select an institution before the associated values appear in the drop-down lists that display the **Select Institution** value.
Scope	The name of the restricted search scope.
On/Off Campus	Indicates whether users that are allowed to search a restricted scope must be located on or off campus, or anywhere to receive search results. The following options are valid: ◦ **On Campus** – Users must be off campus to receive results from the restricted search scope. ◦ **Off Campus** – Users must be on campus to receive results from the restricted search scope. ◦ **Anywhere** – Users can be on or off campus to receive results from the restricted search scope.
User Group	The user group that is allowed to search the restricted scope. Use the Not Guest user group to indicate that users must be signed in.
Institution	The institution that is allowed to search the restricted scope.
Description	A description of the restriction.

Note

The relationship between the parameters is a logical conjunction (**AND**). In some cases, it may be necessary to have more than one parameter per restricted scope. For example, if there is a scope that is limited to users that are on campus or have signed in, then define the following parameters:

- **Off campus** – any user group
- **Anywhere** – Not Guest.

2. Click **Save**.

The new search restriction appears in the Search Restrictions list.

Editing Search Restrictions

The Search Restrictions page allows you to edit your institution's search restrictions.

To edit a Search Restriction:

1. On the Search Restrictions page, edit the desired Search Restrictions fields according to Create a New Search Restriction.
2. Click **Save**.

   The search restrictions are updated and appear in the Search Restrictions list.

Deleting Search Restrictions

The Search Restrictions page allows you to delete search restrictions that your institution no longer needs.

To delete a search restriction:

1. On the Search Restrictions page, click **Delete** next to the row of the search restriction that you want to delete.
2. Click **Save**.

   The search restriction is deleted from the system and is removed from the Search Restrictions list.

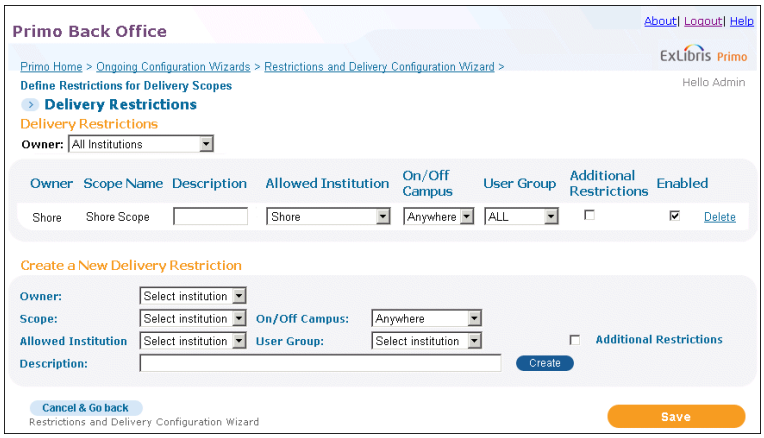
Define Restrictions for Delivery Scopes

You can create and edit restricted delivery scopes. Before managing your delivery scopes, you must access the Restrictions and Delivery Configuration Wizard. For more information on defining scopes with delivery restrictions, see Editing Scope Values.

To create delivery scopes restrictions:

1. On the Restrictions and Delivery Configuration Wizard page, select **Define Restrictions for Delivery Scopes**.

   The Delivery Restrictions page opens.



Delivery Restrictions Page

2. In the Create a New Delivery Restriction area, enter the delivery restriction information according to the following table:

Create a New Delivery Restriction

Field name	Description
Owner	Select the name of the institution from the drop-down list. For institution-level staff users, your institution will already be selected. **Note** For installation-level users, you must select an institution before the associated values appear in the drop-down lists that display the **Select Institution** value.
Scope	The name of the restricted delivery scope.
On/Off Campus	Indicates whether the user must be located on campus, or if the user can be anywhere.
User Group	Indicates whether the user must belong to a specific user group, any user group, or the Not Guest group. Specifying the Not Guest group indicates that the user must be signed in.
Institution	Indicates the institution to which the user must belong.
Additional Restrictions	Indicates whether there are any additional restrictions. This parameter is the basis for the “Maybe restricted” availability status.
Description	A description of the delivery restriction.

Note

The relationship between the parameters is a logical conjunction (**AND**). In some cases, it may be necessary to have more than one parameter per restricted delivery scope. For example, if there is a scope for resources that are limited to users that are on campus or have signed in, then define the following parameters:

- **On campus** – any user group
- **Anywhere** – Not Guest.

3. Click **Save**.

   The created delivery restriction appears in the Delivery Restrictions list.

To edit a Delivery Restriction:

1. In the Delivery Restrictions page, edit the desired delivery restrictions fields.

2. Click **Save**.

   The delivery restrictions are updated and appear in the Delivery Restrictions list.

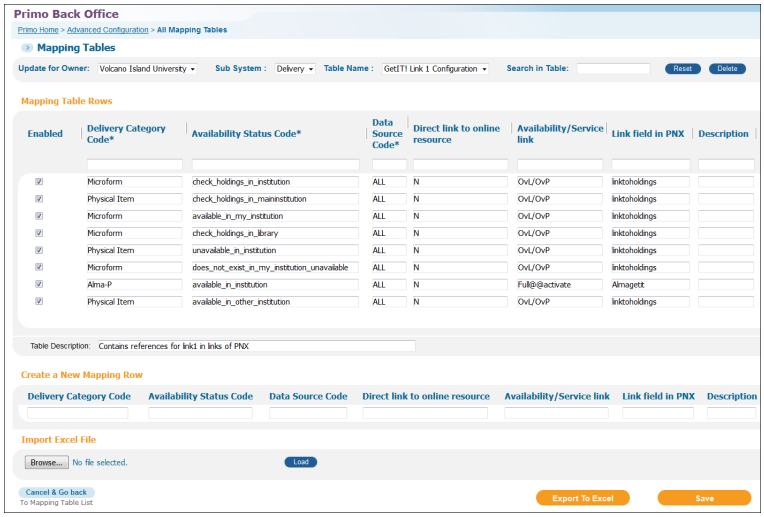
To delete a Delivery Restriction:

1. In the Delivery Restrictions page, click **Delete** next to the row of the delivery restriction that you want to delete.
2. Click **Save**.

   The delivery restriction is deleted from the system and removed from the Delivery Restrictions list.

Configuring the GetIt! Text Codes

To manage the text codes in the Front End, you must access the GetIt! Configuration page (**Primo Home > Ongoing Configuration Wizards > Restrictions and Delivery Configuration > GetIT! Configuration**). By default, the GetIt! Link 1 Configuration mapping table opens first.



GetIT! Link 1 Configuration Mapping Tables Page

This page allows you to modify or create mapping rows in the following mapping tables under the Delivery subsystem:

GetIt! Mapping Tables

Mapping Table	Description
GetIT! Text Configuration	The code of the GetIt! link text. For more information, see GetIt! Text.
GetIT! Tab 1 Configuration	The template used for the main GetIt! tab. For more information, see GetIt! Tabs.
GetIT! Tab 2 Configuration	The template used for the secondary GetIt! tab. For more information, see GetIt! Tabs.
GetIIT! Link 1 Configuration	The template used for the main GetIt! link. For more information, see GetIt! Links.

Mapping Table	Description
GetIT! Link 2 Configuration	The template used for the secondary GetIt! link. For more information, see GetIt! Links.
Template	The GetIt! link templates. For more information, see Templates.
URLs Attributes	The URL attributes for GetIt! links. For more information, see URL Attributes

To create a GetIt! Mapping row:

1. On the GetIt! Configuration page, select a delivery mapping table to modify in the **Table Name** drop-down list.

   For installation-level staff users, select the installation name or a specific institution from the **Update for Owner** drop-down list. The valid values are **Installation** (if using the default name) or a specific institution.
   For institution-level staff users, the **Update for Owner** field is set to your institution.

2. In the Create a New Mapping Row section, enter the information according to the selected table name.

3. Click **Create**.

   The new row appears in the Mapping Table Rows list.

4. Click **Save**.

To edit a Get It! mapping row:

1. On the GetIt! Configuration page, select the mapping table (see GetIt! Mapping Tables) from the **Table Name** drop-down list:

2. In the Mapping Table Rows section, update the fields according to the selected table name.

   The updated row appears in the Mapping Table Rows list.

3. Click **Save**.

   You have configured your GetIt! mapping table rows.

GetIT! Links

The GetIt! links are the most important aspect of GetIt! configuration. The links determine the delivery option that is offered to the user. These links are calculated by the system in real time using the following logical flow:

1. The following is determined about the record:

   - The record's delivery category.

     For deduped records that have several delivery categories, priority is given to the Online Resource category as long as the user is not restricted by delivery scope and the **Always Prefer Online Resources in Multi-Institution Records** parameter is set to **Y** on the Primo Home > Advanced Configuration > General Configuration Primo UI subsystem page.

   - The calculated availability of the record.

- The data sources to which the record belongs.

2. Based on this information, the appropriate row in each of the GetIt! link1 and GetIt! link2 mapping tables is accessed. These mapping tables define which link field in the PNX links section is selected and used as the basis for the creation of the GetIt! URL.

   The following table describes the GetIT! Link Configuration mapping table fields:

GetIt! Links Mapping Table Description

Field name	Description
Delivery Category Code	The delivery item falls under one of the following categories: Physical Item, SFX Resource, Online Resource, Remote Search Resource, or MetaLib KB Resource For more information refer to Primo Concepts, Components, and Relationships. This column should not be modified.
Availability Status Code	The calculated availability status of the delivery item. For more information refer to Primo Concepts, Components, and Relationships. This column should not be modified.
Data Source Code	The code of the data source. This is optional, and defaults to ALL. Use this only if you need special delivery options for a specific data source.
Direct link to online resource (GetIT! Link 1 Configuration only)	The direct link to online resource indicator. Set this field to **Y** only if the online resource allows end users to link directly to it. **Note** If a GetIt! 1 link is not configured to link directly to the online resource (value = **N**), the title cannot be clicked in the Brief Results tile if the **Link to online resource** field is selected. For more information, see Edit Brief Results Attributes Page.
Availability/Service Link (GetIT! link 1 Configuration only)	This field is used for the new UI only and indicates how the system should handle the availability links on the Brief Results page, and the display of the services, which may display on the Full Display page or a new page. This field consists of two parameters that are separated by two `@@` characters: `<availability>@@<service_link>`. In some cases, only the first parameter is needed. Out-of-the-box settings are configured for each availability status. The parameters are configured as follows: ◦ ***<availability>*** – This parameter indicates whether the system should open a new page or display the Full Display page. The valid values are: ▪ **Out** – The availability link directs to an external link on a new page. ▪ **Full** – Used for Alma only to open the full display page with focus on the Alma's Get It 1 service. ▪ **OvL/OvP** – This option allows the system to determine automatically whether your environment is using OvP or OvL. For OvL an external link to the OPAC opens on a new page. For OvP the record's full display opens with focus on the Get It 1 service. This option does not use the *<service_link>* parameter.

Field name	Description
	▪ **SP** – This option is used internally for use with the Alma Services page. ▪ **bX** – This option is used internally for use with bx recommendations. ◦ ***<service_link>*** – This parameter indicates whether to display Alma's mashups, force Alma to display full text, or display links to the external sites. The valid values are: ▪ **activate** – Required by Alma to display its mashups or force display of full text. Use **Full@@activate** to open the Alma's mashup in the record's full display, or use **Out@@activate** to force Alma to display full text on a new page. ▪ **display** – For all other online categories, specify this value to display the links to the external sites. For example: **Out@@display**. For more information on how to configure the new UI, see Back Office Configuration for the New UI.
Service link (GetIT! Link 2 Configuration only)	This field is used for the new UI only and indicates how the system should handle the service links in the record's full display. The text that appears for the link is taken from the GetIT! Tab2 code table. The following values are supported: ◦ **activate** – Required by Alma to display its mashups on the Full Display page. ◦ **display** – For all other online categories, specify this value to display the links to the external sites. For more information on how to configure the new UI, see Back Office Configuration for the New UI.
Link Field in PNX	The code of the PNX link field.
Description	A description of the Get It! Link.

An example from the out-of-the-box setup for **GetIt! Link 1** is as follows:

- **Delivery Category** – physical item
- **Calculated Availability Status** – available_in_my_institution
- **Data Source Code** – ALL
- **Direct link to online resource** – N
- **Availability/Service link** – OvL/OvP
- **Link field in PNX** – linktoholdings

If the user invokes GetIt! for a record that has a delivery category of physical item, a calculated availability status of **available_in_my_institution**, and comes from any data source, then **linktoholdings** is used as the primary GetIT link field in the PNX links section.

3. Once the required PNX field is located, the PNX record is retrieved and the relevant link field is examined. The link fields in the PNX can contain two types of elements:
   - A static or complete URL
   - A template code for calculated URLs

If the PNX field contains a static URL, Primo uses this link as the GetIt! URL. However, most often calculated URLs are used and the PNX contains the code of the URL template. In this case, the Template mapping table is accessed to locate the template URL. For more information on adding links, refer to the Adding Links to the PNX section in the *Primo Interoperability Guide*.

Templates

1. Using the template code, the system accesses the Templates mapping table to locate the appropriate row. The Template mapping table is described in the following table:

GetIt! Template Mapping Table Description

Field name	Description
Code	Code names of various available templates.
Template Code	The URL template.
Description	A description of the URL template.

URL Templates have two elements:

- Unchanging URL parameters.
- Placeholders for data that is added during run time. Placeholders are indicated by squiggly brackets and can be of several types:
- Base_urls – enter the code of the Base URL. For institution URLs you can use ils_base for the Base URL of the ILS system or SFX_base for the Base URL of the SFX system.
- Fields from the PNX – enter the section/field code. For example, if the source record ID is part of the link, enter {control/sourcerecordid}} in the Subfield field in the PNX link field. Additional data required by the URL can be added to the PNX link field by using numeric delimiters and then used by the template. For example, {$$1}}.

  For more information, see the Placeholders section in the *Primo Interoperability Guide*.

2. Using the information in the PNX field and the template, the system calculates the URL. For example, the **ils_holdings** field from our previous example has the following template definition:

```
{{ils_base}}?func=item-global&

doc_library={{control/originalsourceid}}&

local_base={{control/originalsourceid}}&

doc_number={{control/sourcerecordid}}
```

Each of the parameters in curly brackets is a placeholder that is filled in as follows:

- **{ils_base}}** – the Base URL defined for the institution's user is used. For example, **http://needle8.lib.edu:8991/F**

- **{control/originalsourceid}}** – this is the original source ID of the record, in the control section in the PNX. For example, PRM01.
- **{control/originalsourceid}}** – this is the original record ID in the source system. For example, 092345789.

The resulting URL is `http://needle8.lib.edu:8991/F?func=item-global&doc_library=PRM01&local_base=PRM01&doc_number=092345789`

Note

Both GetIt! URLs are calculated using the same flow. If you do not want to use the secondary GetIt! link, you can disable the relevant row.

GetIt! Tabs

The GetIt! tab1, GetIt! tab2, and GetIt! text are used to configure the text that opens at the top of the GetIt! tab. The mapping tables are used to configure the code, and not the text itself. Based on the code, the text is defined using the GetI1! tab1 and GetIt! tab2 code tables. The system uses the delivery category, calculated availability status, and data source to determine the code.

The GetI1! tab1 and tab2 mapping tables are described in the following table:

Create a New GetIt! Tab Mapping Row

Field name	Description
Delivery Category Code	The delivery item that falls under one of the following categories: Physical Item, SFX Resource, Online Resource, Remote Search Resource, or MetaLib KB Resource For more information refer to Primo Concepts, Components, and Relationships.
Availability Status Code	The available status of the delivery item. This column should not be modified. For more information see Primo Concepts, Components, and Relationships.
Data Source Code	The code of the data source. This is optional and defaults to **ALL**. Use this field only if you need to define special delivery options for a specific data source.
Tab1 or 2 Label Code	The code of the tab1 or tab2 text.
Description	A description of the Get It! tab row.

An example from the out-of-the-box setup for GetIt! tab1 is:

- Delivery Category – physical item

- Calculated Availability Status – available_in_my_institution
- Data Source Code – ALL
- Link field – tab1_avail

In the GetIt! tab1 code table, the code is translated to the text “Holdings list” for English and displayed in the Front End.

GetIt! Text

The GetIt! text configuration defines the code of the GetIt! text. The code is translated for display in the Front End using the GetIt! Text code table.

Note

In Primo Version 3 and later releases, the system no longer displays the GetIt button out of the box.

The GetIt! text mapping table is described in the following table:

GetIt! Text Mapping Table Details

Field name	Description
Delivery Category Code	The delivery item that falls under one of the following categories: Physical, Electronic, Remote, Print, MetaLib. This column should not be modified.
Availability Status Code	The available status of the delivery item. This column should not be modified. For more information see Primo Concepts, Components, and Relationships.
Get It! Text Code	The code of the GetIt! text.
Description	A description of the GetIt! text.

In the out-of-the-box setting the same text is used for all delivery categories and all availability statuses. The code used is `getit` and it is translated to GetIt for display in the English version of the Front End.

URL Attributes

During the creation of GetIt! links, Primo checks the URL Attributes mapping table to see if it should attach an attribute to the GetIt! links that have a specific URL prefix. This attribute, for example, may direct Primo to open the GetIt! link in a new window to provide users access to browser functions, such as print. The URL Attributes mapping table contains the following parameters:

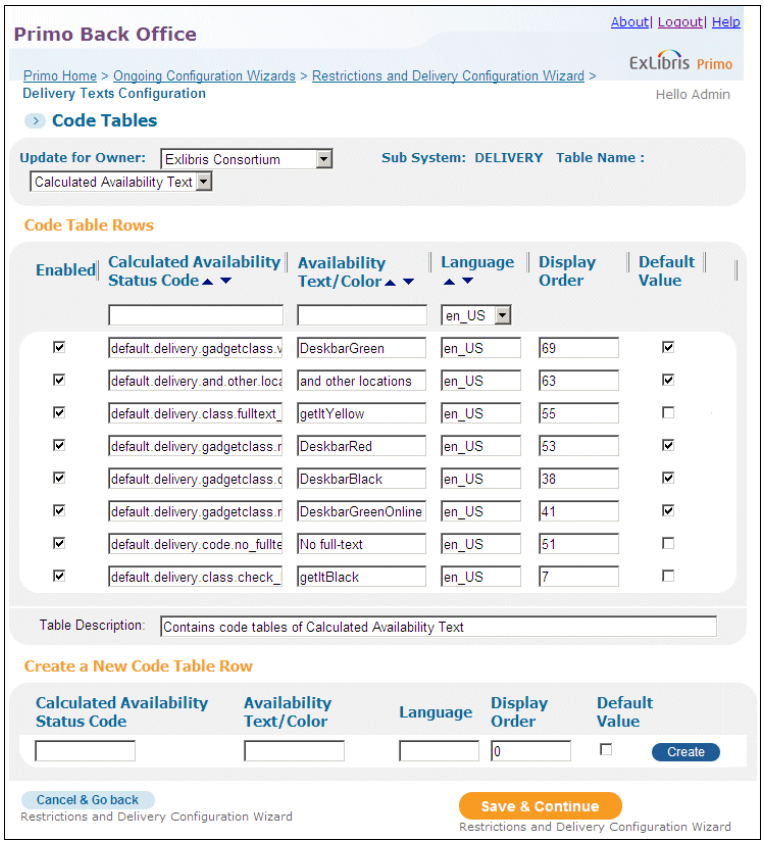
URL Attributes Mapping Table Details

Field name	Description
URL Prefix	The base URL of the GetIt! links to which Primo attaches an attribute.
Attribute Name	The name of the attribute to attach to the GetIt! link. The following attributes are supported: The OpenInNewWindow attribute directs Primo to open the GetIt! link in a new window. The valid values are **true/True** (activate) or **false/False** (deactivate).
Attribute Value	The value assigned to the attribute. See the description for Attribute Name for a list of valid attributes and associated values.
Description	A description of the URL attribute.

Configure Delivery Display Texts

The availability text appears next to an item in the search results, and shows the availability of the item. You can modify the availability texts settings by editing the following tables: Calculated Availability Status, GetIt! Tab1, GetIt! Tab2, GetIt! Text, and Library Names.

To manage the delivery display texts, you must first access the Delivery Texts Configuration page in the Restrictions and Delivery Configuration wizard. By default, the Calculated Availability Text code table opens first.



To edit an availability text setting:

1. On the Restrictions and Delivery Configuration Wizard page, select **Delivery Texts Configuration** to open the Calculated Availability Text code table.

   For installation-level staff users, select the installation name or a specific institution from the **Update for Owner** drop-down list. The valid values are **Installation** (if using the default name) or a specific institution.
   For institution-level staff users, the **Update for Owner** field is set to your institution.

2. From the **Table Name** drop-down list, select a code table to modify:

GetIt! Mapping Tables

Code Table	Description

Calculated Availability Text	This text is determined by the calculated availability status and is displayed on the Brief Results page in the Front End. By configuring this table you can set the color and text displayed for each status. Note that it is possible to use the following system-defined placeholders in the calculated availability text:
	◦ **{0}}** – use this placeholder insert the user's institution in the text. For example, this placeholder can be used as follows:
	`default.delivery.code.available_in_my_institution Available at {0}}`
	◦ **{1}}** – use this placeholder to insert a single location in the calculated availability text. The system will attempt to display the most relevant location, using the following logic for calculated availability:
	◦ If the scope is library-specific and LIBRARY_AVAILABILITY is set to **Y**, then the location will be from a specific library. If there are several locations for the library, a location that matches the status will be used. For more information, see LIBRARY_AVAILABILITY in Delivery.
	◦ If the scope is institution-specific and INSTITUTION_AVAILABILITY is set to **Y**, then the location will be from a specific institution. If there are several locations for the library, a location that matches the status will be used. For more information, see INSTITUTION_AVAILABILITY in Delivery.
	◦ In all other cases, the system will display the location that matches the calculated availability status. If there are several locations, the location is based on user and matching status.
	This placeholder can be used in all statuses, as follows:
	`default.delivery.code.available_in_institution Available at {1}}`

GetIt! Tab1	You can configure this table to define the text that is displayed in the first GetIt! tab.
GetIt! Tab2	You can configure this table to define the text that is displayed in the second GetIt! tab.
GetIt! Text	You can configure this table to define the text of the GetIt! link.
Library Names	This table is generally edited in the Institutions wizard, but you can also configure the library names from this table.

3. In the Code Table Rows area, edit the fields according to the following table:

Create a New Code Table Row Details

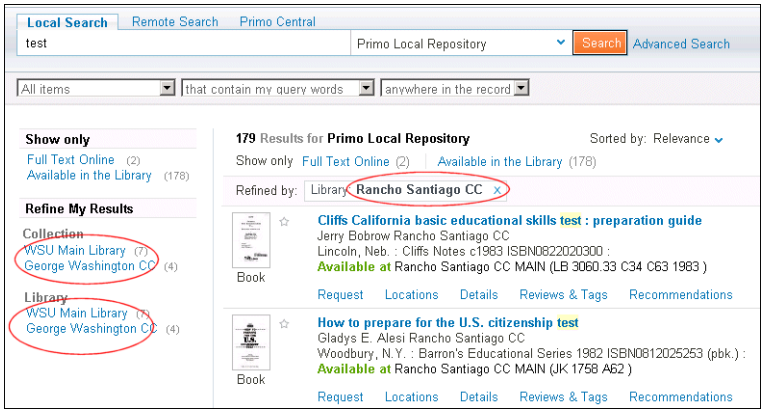
Field name	Description
Enabled	Whether the row is enabled or disabled.
Calculated Availability Status Code and coloring	The availability status of the delivery item, as calculated in the GetIT! Configuration Mapping tables.
Availability Text	For the calculated availability status, the availability text displayed next to the delivery item.
Language	For the calculated availability status, the language used to display the availability text.
Display Order	Not used in this table.
Default Value	Not used in this table.

4. Click **Save & Continue**.

   The edited row appears in the Code Table Rows list.

Configuring Collection Names

The Facet Collections code table defines the display names of the collections that appear in the collection facets (see Collection and Library Facets). You can create, edit, and delete the facet labels using the instructions in this section.

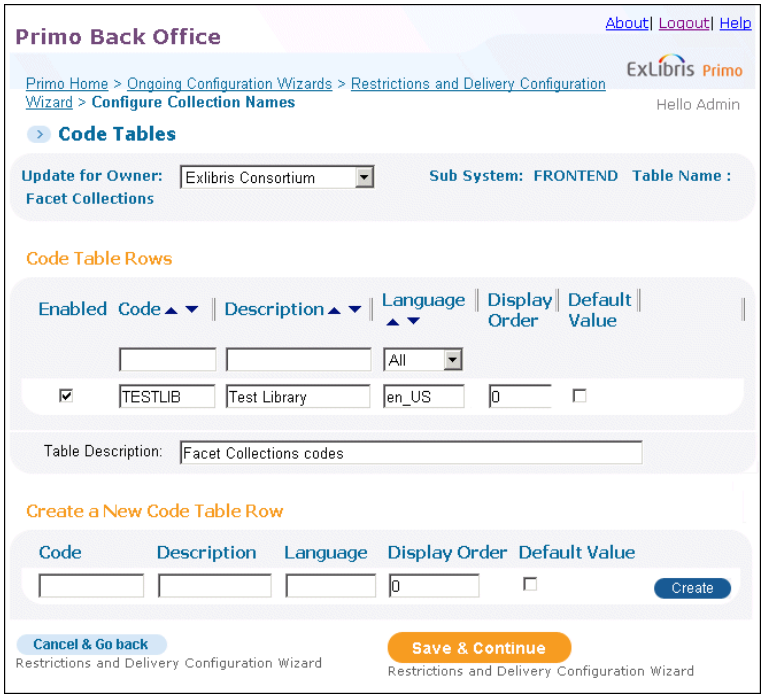


Collection and Library Facets

To add a collection name or library code:

1. On the Restrictions and Delivery Configuration Wizard page, select **Configure Collection Names**.

   The Facet Collections code table opens (see Facet Collections Code Tables Page).



Facet Collections Code Tables Page

2. Select the owner of the table from the **Update for Owner** drop-down list.

   For installation-level staff users, select the installation name or a specific institution from the drop-down list. The valid values are **Installation** (if using the default name) or a specific institution.
   For institution-level staff users, this field is set to your institution.

3. In the **Create a New Code Table Row** section, enter the following fields:

   - **Code** – Enter the collection code. Each entry must be formatted as follows, where *<view>* is the name of the view and is the collection name:

     `<view>.facets.facet.facet_domain.`

     If you want the system to use the same code in all views, enter **default** for view name.

   - **Description** – Enter the display name for the code.

   - **Language** – Enter the language, such as **en_US**.

Note

If you want to modify an existing code, update the fields as needed in the Code Table Rows section and then click **Save & Continue**.

---

4. Click **Create** to add the code to the table.

5. Click **Save & Continue** to save your changes.

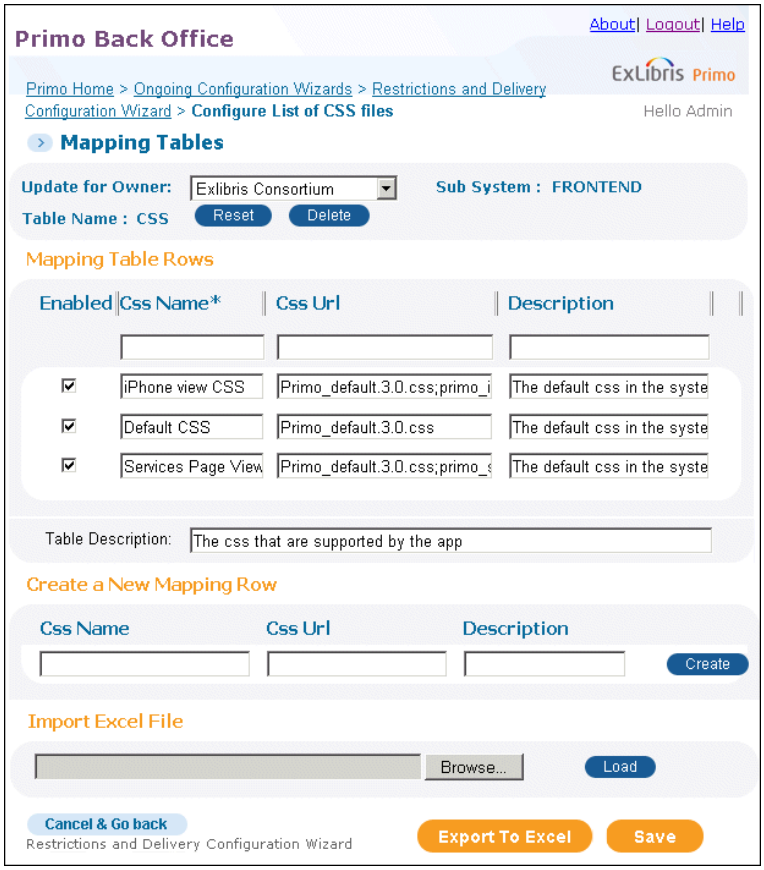
6. Deploy the code tables.

Configure List of CSS Files

The CSS mapping table (see CSS Mapping Tables Page) lists the CSS files that can be used by the system. To use your own CSS file, add the file to this mapping table.

Use the Institution and General Base URLs mapping tables to configure your institution's available Base URLs. Although they are usually updated in the Institutions wizard, they can also be edited here.

Use the CSS mapping table to configure the CSS files that are supported by the application. The Front End mapping tables can only be configured during ongoing configuration.



CSS Mapping Tables Page

On the CSS Mapping Tables page, you can:

- Create a CSS Mapping Table Rows.
- Edit a CSS Mapping Table.

Create a CSS Mapping Table Rows

During ongoing configuration you can add additional CSS rows to your Front End mapping tables.

To create a mapping table:

1. On the Restrictions and Delivery Configuration Wizard page, select **Configure List of CSS Files** to open the CSS mapping table.

For installation-level staff users, select the installation name or a specific institution from the **Update for Owner** drop-down list. The valid values are **Installation** (if using the default name) or a specific institution.
For institution-level staff users, the **Update for Owner** field is set to your institution.

2. In the Create a New Mapping Row area, enter your mapping table information (see Create a New Mapping Table Details for a list of fields).

Create a New Mapping Table Details

Field name	Description
Css Name	The name of the CSS used with the Front End mapping.
Css Url	The URL of the CSS used with the Front End mapping.
Description	The description of the CSS file.

3. Click **Create**.

   The new mapping table appears in the list of CSS files on the CSS Mapping Tables page. You can now edit the mapping table.

Edit a CSS Mapping Table

You can edit a sub system's mapping table during ongoing configuration. This includes updating existing rows, as well as adding new rows to a table.

To edit a mapping table:

1. On the Restrictions and Delivery Configuration Wizard page, select **Configure List of CSS Files** to open the CSS mapping table.

   For installation-level staff users, select the installation name or a specific institution from the **Update for Owner** drop-down list. The valid values are **Installation** (if using the default name) or a specific institution.
   For institution-level staff users, the **Update for Owner** field is set to your institution.

2. In the Mapping Table Rows area, edit the CSS mapping table fields according to the following table:

CSS Mapping Table Row Details

Field name	Description
Enabled	Whether the mapping row is enabled.
Css Name	The name of the CSS used with the Front End mapping.
Css URL	The URL of the CSS used with the Front End mapping.

Field name	Description
Last Updated	The date the CSS file was last updated.
Description	A description of the mapping row.

3. Click **Save** to store your changes.

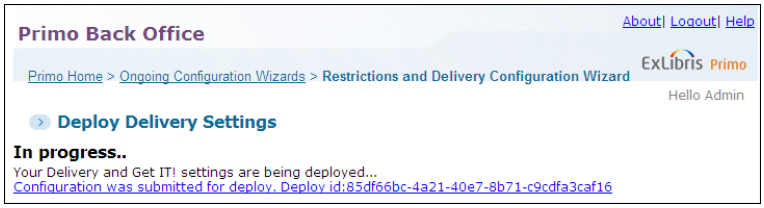
Deploy Delivery Settings

To deploy the delivery settings, you must click **Deploy Delivery Settings and Code Tables** in the Restrictions and Delivery Configuration Wizard.

Note

If you would like to deploy your settings later, click **Deploy All** on the Back Office's home page. For more information, see Deploy All Configuration Settings.

The Deploy Delivery Settings page opens, displays a message and a link you can click to monitor the progress of the deployment.



Deploy Delivery Settings Page

Views Wizard

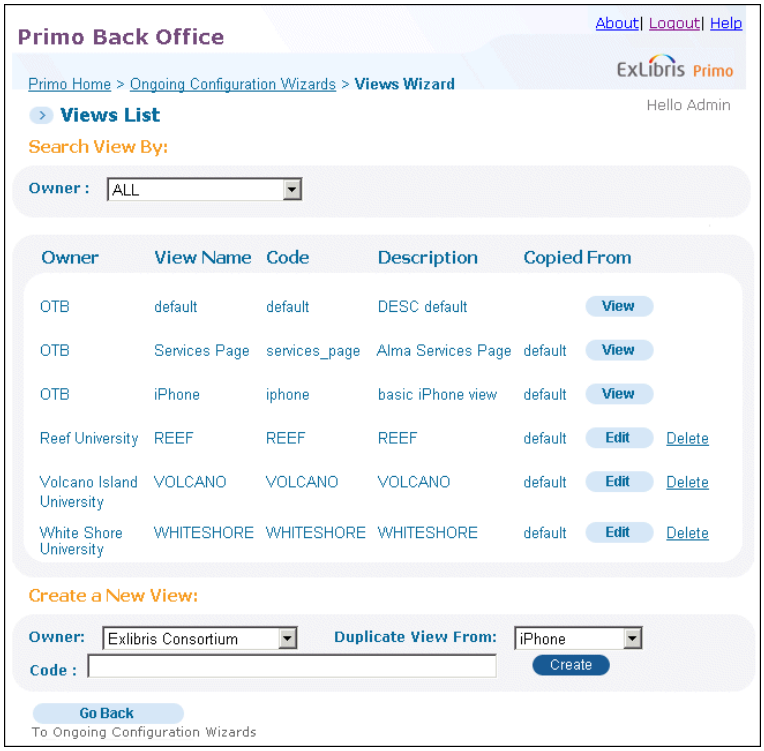
Return to menu

The Views wizard allows you to define the following aspects:

- A different look-and-feel for different user groups. Every view can have its own logo, header, header links, and more.
- A different set of tabs and search scopes to be displayed for different user groups.

Each institution can have its own fully customized views, and each view can have a different list of search scopes, as well as the default scope.

On the Views List page (**Primo Home > Ongoing Configuration Wizards > Views Wizard**), you can create a new view or modify an existing view.



Views List Page

Note

The Views list is filtered by institution.

As you edit or create a view, the wizard will guide you through the following steps:

1. General View Attributes
2. Search Scopes
3. Tabs

4. Tiles

The last step of the Views wizard is to deploy the view.

Note

If you would like to deploy your settings later, click **Deploy All** on the Primo Back Office home page. For more information, see Deploy All Configuration Settings.

General View Attributes

The General View Attribute page allows you to define attributes that apply to the entire view. In addition, you can define parent and child views, which allow you to easily maintain a group of views that have areas in common. For more information, see View Inheritance.

To access this page, create a new view or edit an existing view. After you have configured the settings, you can create scopes for the view. For more information, see Managing Scope Values.

Create a View

You can create a new view by copying an existing view and editing it to suit your needs.

To create a view:

1. In the Create a New View area on the View List page, select a view to duplicate in the **Duplicate View From** drop-down list.

   For installation-level staff users, select the installation name or a specific institution from the **Owner** drop-down list. The valid values are **Installation** (if using the default name) or a specific institution. For single-institution installations, your institution will be selected for you.

2. Select a view to duplicate in the **Duplicate View From** drop-down list.

3. In the **Code** field, enter the view's code. The code can be modified in the View codes table.

4. Click **Create**.

   The new view appears in the Views List. You can now edit the view's details by using the instructions in Edit a View.

Edit a View

Editing a newly created view enables you to customize the duplicated view to suit your user group and institution's needs.

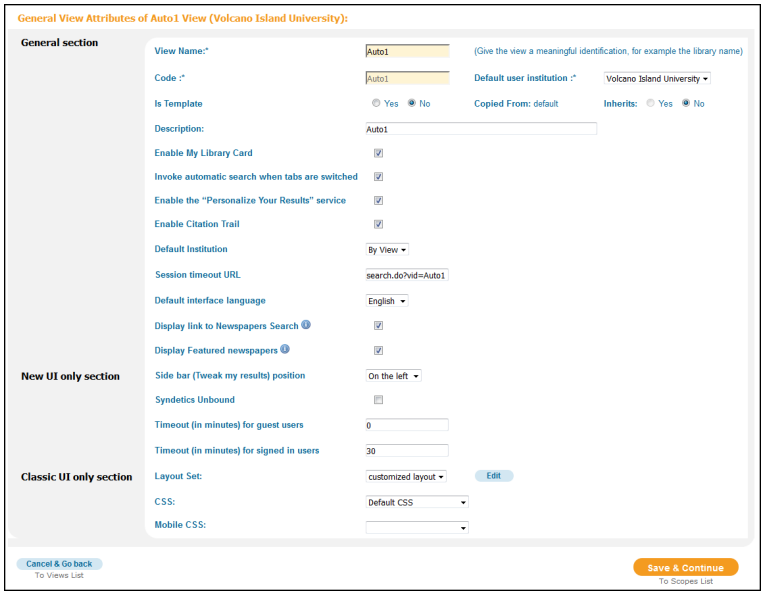
Note

Out-of-the-box views are read-only and cannot be edited. To edit a view, you must first create a view.

To edit view details:

1. On the Views List page, click **Edit** next to the view you want to update.

The Edit View Attributes page opens.



Edit View Attributes Page

2. In the General View Attributes area, edit the attributes for the view (see General View Attributes Details for a list of fields).

General View Attributes Details

Field name	Description
General section:	
View Name[1]	The name of the view.
Code[1]	The Primo view ID code.
Copied From	The original view from which this view was copied.
Default Institution	Indicates how the default institution is determined if the user is not signed in. The valid values are: ◦ **By IP** – The system will use the institution that is assigned to the IP address from which the user has accessed Primo. If the user is not within an institution's IP range, the system uses the default institution for the view. ◦ **By View** – The system will use the default institution for the view. The default value is **By View**. **Note** In a local institution view, it makes sense to base the institution on the view. In a central view that is used by many institutions, it may be better to base the institution on the IP range.

Field name	Description
Default interface language	The default interface language of the interface.
Display link to Newspapers Search	When selected, the link to the Newspaper Search page will appear in the following areas: ◦ The Main Menu bar. This link opens the Newspapers Search page, which allows users to perform searches within the newspapers collection search index only. ◦ The bottom of Primo Central Search results. This link allows users to view newspaper content that matches their search query. ◦ A Resource Type facet value in Primo Central Search results. This link allows users to view newspaper content that matches their search query. **Note** The Newspapers Search feature must be enabled first by selecting the **Newspapers Search** check box in the Institution Wizard.
Display Featured newspapers	When selected, this check box indicates whether the following will appear on the Newspaper Search page: ◦ The Featured Newspapers section displays each time the Newspapers Search page is opened. ◦ **Featured newspapers** appears as a search option in the search box. **Note** The Newspapers Search feature must be enabled first by selecting the **Newspapers Search** check box in the Institution Wizard.
Description	A description of the view.
Enable Citation Trail	Enables the **Citation** and **Cited By** links in the results for Primo Central records. It allows users (such as researchers and graduate students) to display the lists of cited and cited by records for Primo Central records retrieved in the brief results and to follow the trails of each citation. By default, this functionality is enabled. The Results Tile code table allows you to modify the associated labels that display in the Front End.
Enable My Library Card	Whether this view enables My Library Card on the e-Shelf.
Enable the “Personalize Your Results” service	Enables the **Personalize your results** area on the results page in the Front End. This area allows users to specify personalized settings that are used to rank results from Primo Central. For more information, see Personalized Ranking for Primo Central.

Field name	Description
Inherits	Whether this view inherits attributes from the parent view or not. **Note** A view that inherits from a parent view cannot be a parent to another view.
Institution*	The institution to which this view belongs.
Invoke automatic search when tabs are switched	Whether auto-search is enabled when users switch between tabs on a view. This field is checked/enabled by default.
Is Template	Whether this view is a parent view or a child view. Select Yes to make this a parent view. The default value is No. **Note** By default, any view that is created from a template becomes a child view.

Session Timeout URL	This field specifies the page to which the user will be redirected after a session times out.
	To configure the Session Timeout URL to be any file:
	1. Enter the URL of the file, using the following format:
	`http://<server>:<port>/primo_ library/libweb/static_htmls/<file>`
	2. Enter the following commands to access the `static_htmls` directory:
	`fe_web`
	`cd static_htmls`
	3. Place the file in the `static_htmls` directory.

New UI Only section:	
Side bar (Tweak my results) position	(New UI only) The position of the Tweak My Results section in the Front End: ◦ **On the right** – Positions the Tweak My Results section on the right side. ◦ **On the left** – Positions the Tweak My Results section on the left side.
Syndetics Unbound	(New UI only) Enables the Syndetics Unbound section on records' full display page.

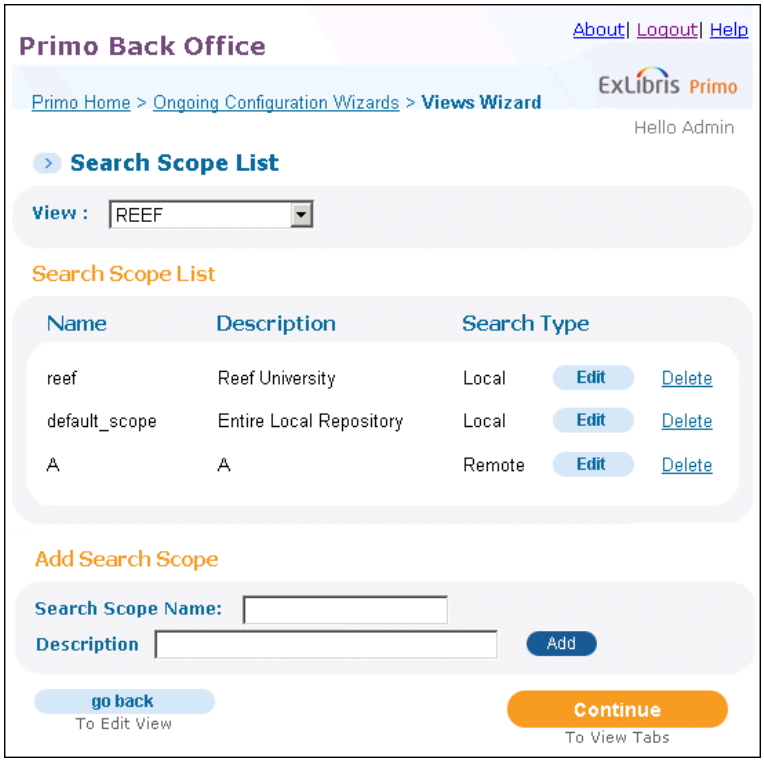
Field name	Description
Timeout (in minutes) for guest users	(New UI only) The time in minutes when a session is timed out due to inactivity for guest users. By default, this parameter is set to 0, which indicates that there is no timeout period. If this parameter is set to a value that is greater than 0 and the session times out, the system will reset all parameters and continue to display the current page.
Timeout (in minutes) for signed in users	(New UI only) The time in minutes when a session is timed out due to inactivity for signed-in users. By default, this parameter is set to 30. A value of 0 indicates that there is no timeout period. If this parameter is set to a value that is greater than 0 and the session times out, the system will continue to display the current page and upon the user's next next action, the system will sign the user out, refresh and display the Primo home page, and prompt the user to sign in.
Classic UI only section:	
Layout Set	(Classic UI only) The Layout Set used with the view. The following options are available: ◦ **Standard** – opens facets on the right side. ◦ **Facets on the Left** – opens facets on the left side. ◦ **Customized layout** – allows you to create customized view layouts. Select the Edit button that appears for this option to modify the layouts. For more information on customization, see Custom Layout Editor.
CSS	(Classic UI only) The name of the CSS used with the view. This can be Primo's default CSS, iPhone view CSS, or a customized CSS file that you upload. To customize your CSS file, refer to the *Primo Technical Guide*.
Mobile CSS	(Classic UI only) The name of the CSS file that automatically adjusts the display for devices that have smaller screens, such as smartphones. The default value is **Mobile CSS**, which enables the mobile view functionality. **Note** If this field is left empty, the system will disable the mobile view functionality.

[1]This is a mandatory field.

3. Click **Save & Continue** to save your changes and display the Search Scope List page.
4. Once you have created or edited your view's header attributes, you can configure the search scopes using instructions in Search Scopes.

Search Scopes

You can define and customize the different search scopes for every view on the Search Scope List page. To do this, first define the scope values with the Pipes Configuration wizard. In this section, you can define which of the scope values should be used by the search scopes created for each view.

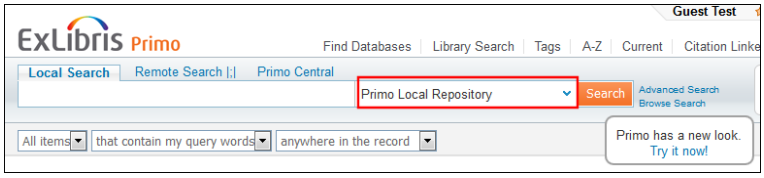


Search Scope List Page

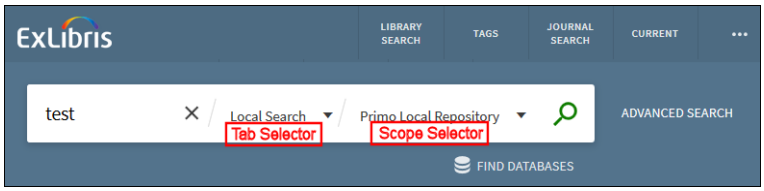
You can add a remote search scope to the system by defining MetaLib QuickSets. These QuickSets are lists of databases configured for specific user groups. The Quicksets must be defined in MetaLib. Refer to the *Primo Interoperability Guide* for more information on setting up MetaLib.

Add a Search Scope

You add an additional search scope to a view in your Primo system. After adding a view, you can edit it to further customize your search scope with more advanced information.



Classic UI - Scope Selection on the Home and Brief Results Pages



New UI - Scope Selection on the Brief Results Page

To add a search scope:

1. In the Add Search Scope section, enter the search scope name in the Search Scope Name field (see Search Scope List Page).

2. In the Description field, enter a description of the search scope.

3. Click **Add**.

   The new search scope appears in the Search Scope List. You can now edit the search scope details using the instructions in Edit a Search Scope.

Edit a Search Scope

Editing the search scope enables you to add and remove search scope values created for the local repository and add a single remote quickset for remote searches.

Note

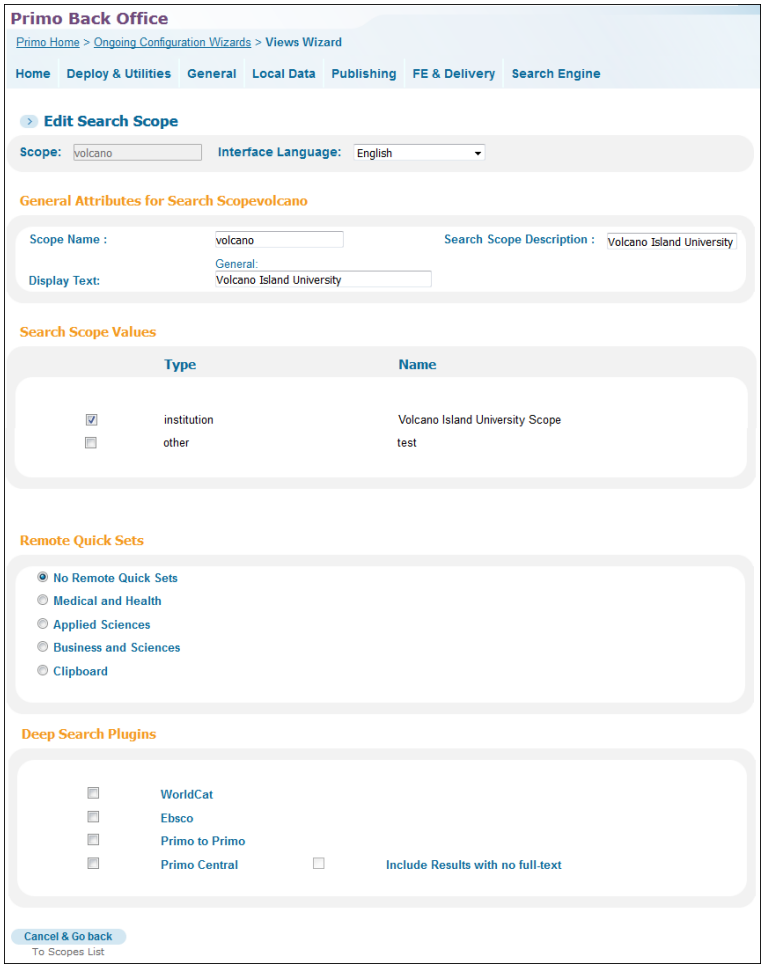
A quickset is a group of remote databases that is defined in MetaLib. Refer to the *Primo Interoperability Guide* for more information on setting up quicksets in MetaLib.

Generally, a single search scope includes either local search scope values or a quickset, but it is also possible to combine both local and remote scopes in a single scope. The remote search scope values are added to the PNX records during the normalization process.

To edit search scope details:

1. On the Search Scopes List page, click **Edit** next to the search scope that you want to update.

   The Edit Search Scope page opens (see Edit Search Scope Page).



Edit Search Scope Page

2. Update the fields shown in the following table to configure the search scope:

General Search Scope Attributes Details

Field name	Description
Scope Name	The name of the view's search scope.
Search Scope Description	A description of the search scope.
Display Text	The name of the search scope as it is displayed in the Front End.

3. In the Search Scope Values area, add or remove the search scope values from the local repository. If no search scopes or quicksets are selected, the scope includes the entire local repository. If a quickset is selected, the scope does not include any search scopes in the local repository.

Note

The values displayed in the Search Scope Values list are defined in the instructions for the Managing Scope Values.

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4. In the Remote Quick Sets area, choose a remote MetaLib QuickSet for your search scope by checking the desired quickset. If this section is left blank, there are no remote quicksets for the search scope.

   If no scope values or remote quicksets are selected, there are no local or remote search scopes defined and the entire local index is searched.

5. In the Deep Search Plugins area, select additional search plug-ins that you want to include with this view and search scope: **WorldCat**, **EBSCO** (see Configuring the EBSCO Plug-In), **Primo to Primo**, and **Primo Central**.

   If your institution is registered for the Primo Central service and the Primo Central plugin is selected, you can also specify the following option:

   - **Include Results with no full-text** – By default, Primo displays only the PC records that contain full text, but users may select the **Expand My Results** option in the Front End to display other PC records as well. If you want to display all PC records by default, select this check box.

     When selected, the **Expand My Results** option will not display in the Front End, but users may click the **Full Text Online** facet to display only the records that contain full text.

   For more information on Primo Central, refer to the *Primo Central Configuration Guide*.

Note

To edit another search scope, select the search scope in the Search Scope drop-down list.

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6. Click **To Scopes List** to continue to the Search Scopes List page.

Note

To manage search scopes for another view, select the view in the **view** drop-down list.

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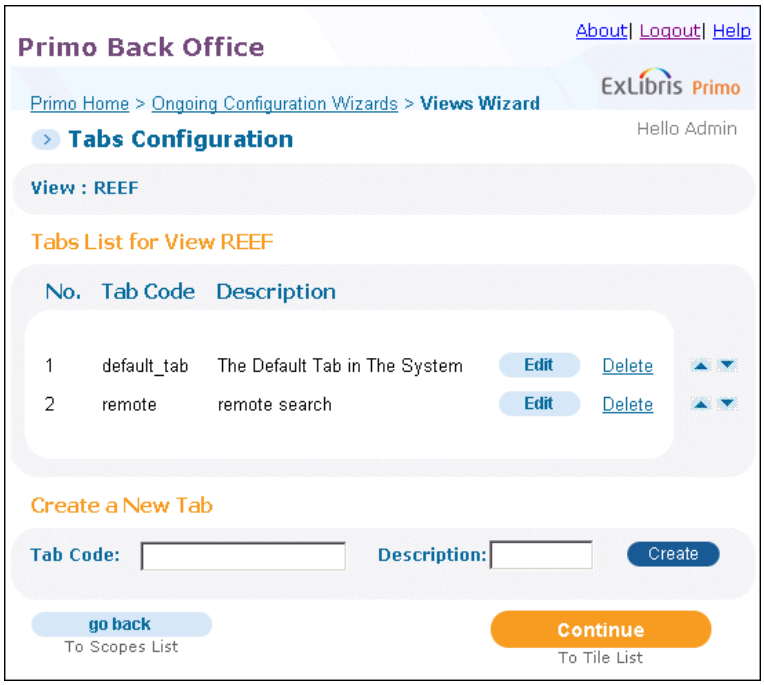
7. On the Search Scopes List page, click **Save & Continue**.

   The Tabs Configuration page opens.

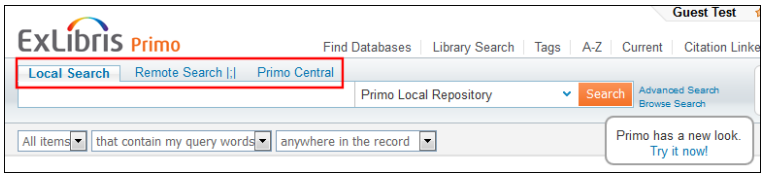


Tabs Configuration Page

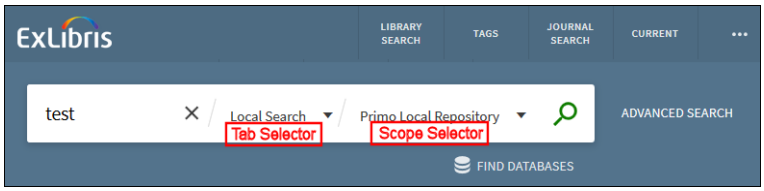
You can now create and edit the tab details using the instructions in Tabs.

Tabs

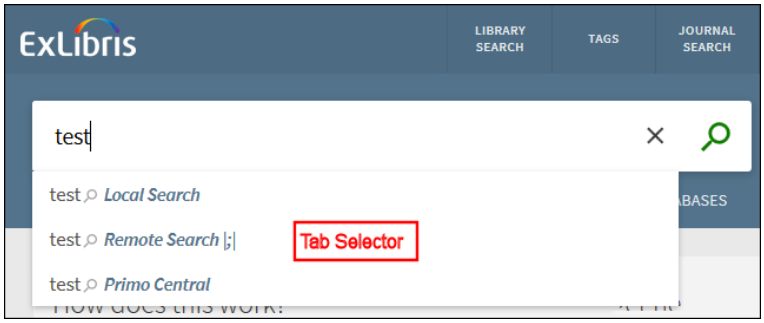
You can define one or more tabs for each view. Tabs allow you to divide the data search within each view into different sections, matching the different search scopes that are defined for the view. A view can include a single search scope or several search scopes that appear in the Front End in a search box drop-down list.



Classic UI - Tab Selection on the Home and Brief Results Pages



New UI - Tab Selection on the Brief Results Page



New UI - Tab Selection on the Home Page

In this section you can create tabs, edit the display name appearing on the tab, and select the search scopes that are to appear in the drop-down list in the Front End search box.

Using tabs in Primo is similar to using links in Google to locate resources of different types such as images and maps.

Because a primary advantage of Primo is to provide a unified search interface for all library resources, Primo is initially configured with a single tab. You are encouraged to carefully consider whether to implement a multi-tab configuration after your switch to production.

Create a Tab

The default tab can be used if the site has only one tab. Otherwise, new tabs should be created.

To create tab details:

1. In the Create a New Tab area, enter the name of the tab in the **Tab Code** field.
2. In the **Description** field, enter a description of the tab.

3. Click **Create**.

   The new tab appears in the Tabs List. You can now edit the tab details and define the tab's search scope using the instruction in Edit a Tab.

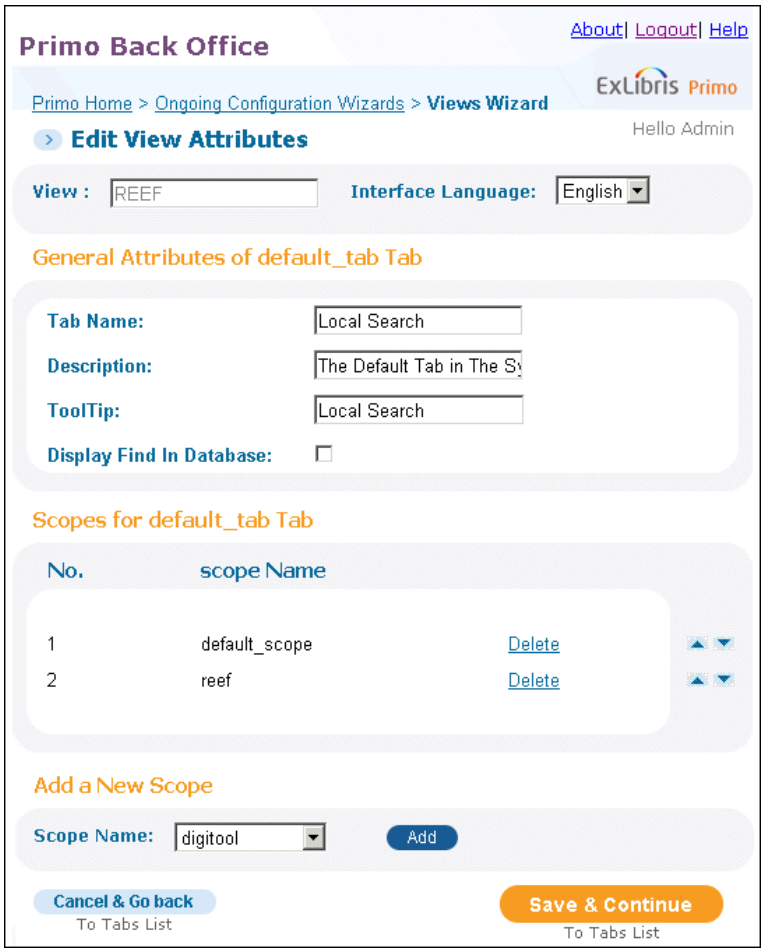
Edit a Tab

Editing a newly created search tab enables you to define the tab's search scopes. The Edit View Attributes page allows you to edit the general tab details or the tab's search scope.

To edit tab details:

1. On the Tabs Configuration page, click **Edit** next to the tab you want to edit.

   The Edit View Attributes page opens.



Edit View Attributes Page

2. Edit the General Attributes for the tab (see General Tab Attributes Details for a list of fields).

General Tab Attributes Details

Field name	Description
Tab Name	The name of the view's tab.

Field name	Description
Description	A description of the tab.
ToolTip	Text used in the ToolTip tab in the Front End.
Display Find in Database	Select this check box to display the Find Database link for this search tab. **Note** By default, the Find Database link displays only for search tabs that have remote search scopes.

The tab's General Attribute details are updated and appear on the Tab List page (see Tabs Configuration Page).

3. Click **Save & Continue**.

   The updated tabs appear in the Tabs List.
   After creating your tabs, you can:

   - Delete a Tab
   - Add a Scope to the Tab
   - Delete the Tab's Scope

   To configure your view's tiles, use the instructions in Tiles.

Delete a Tab

You can delete tabs from your system during ongoing configuration. Although all out-of-the-box tabs are read-only and cannot be deleted, you can remove any tabs that you created that are no longer necessary.

When you delete a tab, you are also deleting the search scopes associated with the tab.

To delete a tab:

1. In the Tabs List of the Tabs Configuration page, click **Delete** next to the tab that you want to delete.

   A confirmation dialog box opens.

2. Click **OK**.

   The tab and the association to the tab's search scopes are deleted from the system, and the tab is removed from the Tab List.

Add a Scope to the Tab

You can define one or more search scopes for a tab. Having tabs with different search scopes enables you to create different search categories within the different tabs.

To create a tab's search scope:

1. On the Tabs Configuration page, click **Edit** next to the tab to which you want to add a search scope.

   The Edit View Attributes page opens (Edit View Attributes Page).

2. In the Add a New Scope area, select a search scope in the **Scope Name** drop-down list.

3. Click **Add** to add the search scope to the tab.

   The new search scope appears in the Search Scopes area.

4. On the Search Scopes List page, click **Save & Continue** to return to the Tabs Configuration page.

Delete the Tab's Scope

You can delete any of the tab's search scopes that are no longer necessary.

To delete a tab's search scope:

1. In the Tabs List, click **Edit** next to the tab whose search scope you want to delete.

   The Edit View Attributes page opens (see Edit View Attributes Page).

2. In the Scopes List, click **Delete** next to the search scope that you want to delete.

   A confirmation box opens.

3. Click **OK**.

4. Click **Save & Continue** to return to the Tabs Configuration page.

   The search scope is removed from the Search Scope list and the association between the tab and the search scope is deleted from the system.

Tiles

Every page within the Primo system is comprised of several tiles. Each tile is configured once for all of the pages on the site. The following table lists which tiles you can configure per page:

Configuration Tiles

Page	Tiles
Home Page	Each of the pages can contain the following tiles, but are defined once under the Home Page configuration tile: • Basic Search • Advanced Search • Main Menu • Static HTML **Note** All of these tiles are required except for the Static HTML tile.

Page	Tiles
Full Display	The Full Display page can also contain the following tiles: • Full Results • Send To
Brief Display	The Brief Display page can also contain the following tiles: • Brief Results • Refine My Results (Facets) • Locations

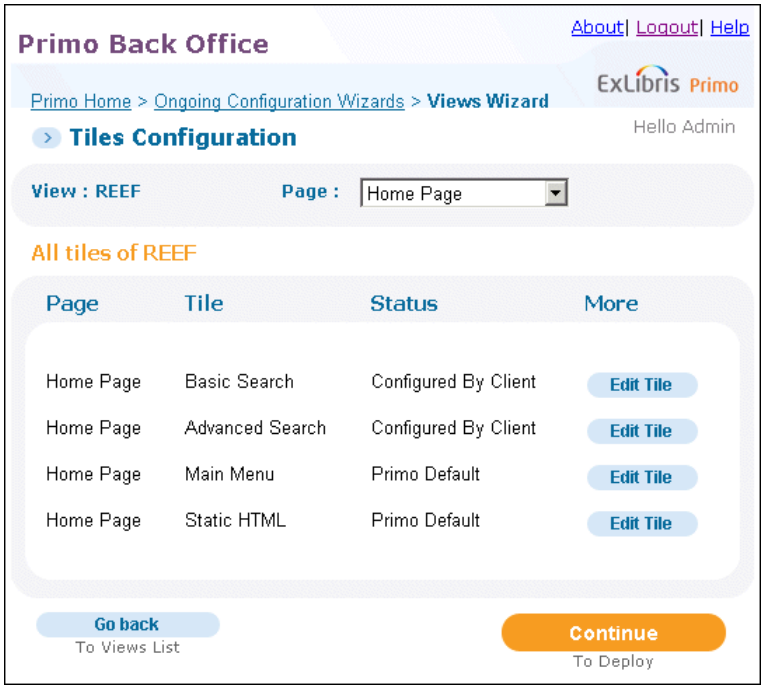
Edit a Tile

You can edit your view's tiles.

To edit a tile:

1. On the Tabs Configuration page, click **Save & Continue**.

   The Tiles Configuration page opens.



Tiles Configuration Page

2. In the Page drop-down list, select the name of the page that contains the tile that you want to edit.

   The page's tiles appear in the All Tiles of area.

3. In the All Tiles of area, click **Edit Tile** next to the tile you want to edit.

Depending on the tile you selected, the following page opens:

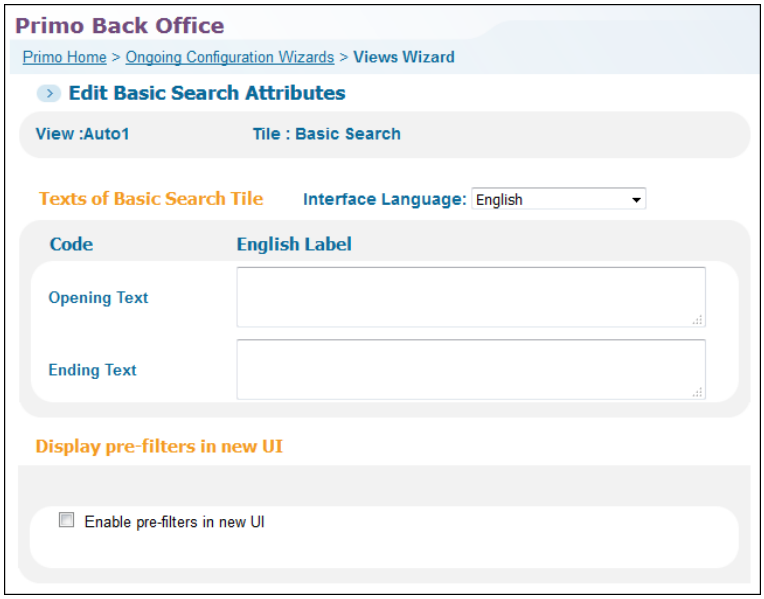
- For the Basic Search tile, see Edit Basic Search Attributes Page
- For the Advanced Search tile, Edit Advanced Search Attributes Page
- For the Main Menu tile, Edit Main Menu Attributes Page
- For the Static HTML tile, Edit HTML Attributes Page
- For the Full Results tile, Edit Full Details Attributes Page
- For the Send To tile, Edit Keeping This Item Attributes Page
- For the Brief Results tile, Edit Brief Results Attributes Page
- For the Refine My Results (Facets) tile, Edit Facets Attributes Page
- For the Locations tile, Edit Locations Details Attributes Page

4. Click **Save & Continue** to return to the Tiles page.

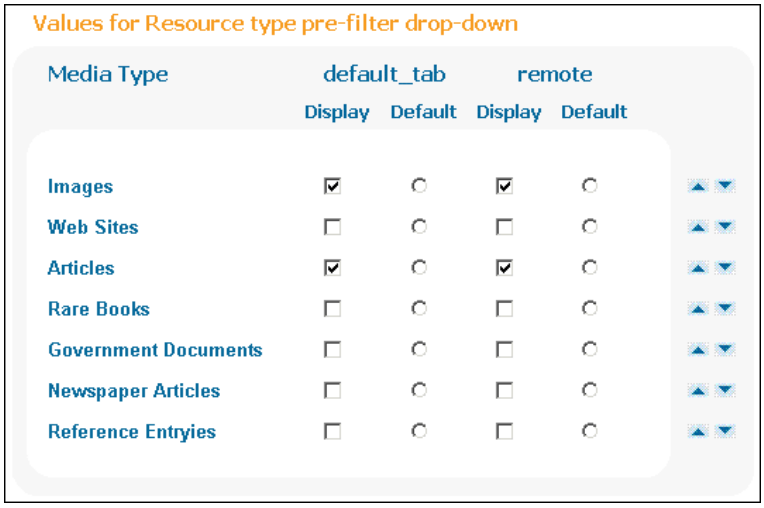
   The tile details are updated and appear in the Tiles List page (see Tiles Configuration Page).
   If you want to edit another tile for the selected page, select the desired tile in the **Tile** drop-down. If the tile belongs to another page, select the page in the **Page** drop-down list and the tile in the **Tile** drop-down list. After selecting the desired page and tile, repeat Steps 3 through 5.
   To edit a tile that belongs to another view, select the desired view in the **View** drop-down list and repeat Steps 3 through 5.

Edit Basic Search Attributes Page

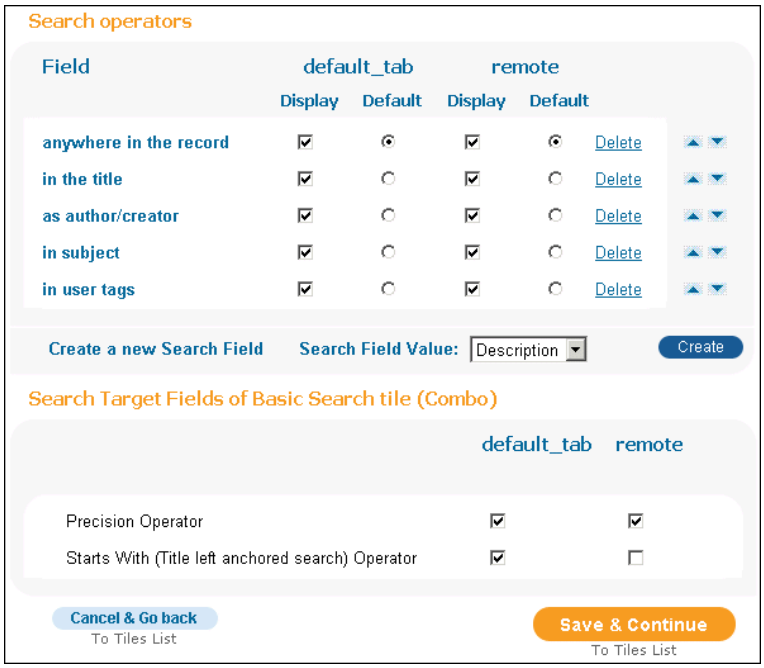
This page defines the attributes for the Basic Search tile. For information on accessing this page, see Views Wizard.



Edit Basic Search Attributes Page (Part 1 of 3)



Edit Basic Search Attributes Page (Part 2 of 3)

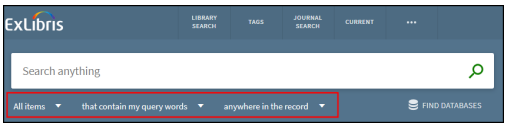


Edit Basic Search Attributes Page (Part 3 of 3)

Edit the Basic Search Attributes details according to the following table:

Basic Search Attribute Details

Field	Description
Texts of Basic Search Tile:	
Interface Language	The interface language of the tile.
Opening Text	The text displayed at the top of the tile.

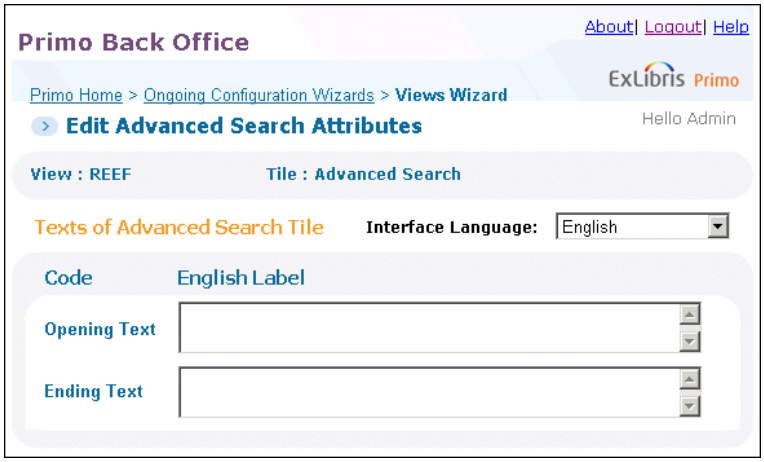
Field	Description
Ending Text	The text displayed at the bottom of the tile.
Display pre-filters in new UI:	
Enable pre-filters in new UI	When selected, the pre-filter parameters will also display in the new UI. 
Value for Resource type pre-filter drop-down:	
Display	The media types displayed in the media type pre-filter in the search box. Available media types are: articles, audio visual, books, conference proceedings, databases, dissertations, government documents, images, journals, legal documents, maps, newspaper articles, rare books, reference entries, reviews, scores, statistical data sets, Web sites, and all items. **Note** To add, delete, or update media types, use the facet_pfilter_values mapping table.
Default	The media type that is to be displayed as the default in the media type pre-filter in the search box.
Search operators:	
Display	The list of available default search fields that appear in the search field pre-filter in the search box.
Default	The search field that is to be displayed as the default in the search field type pre-filter in the search box.
Search Target Fields of Basic Search tile (Combo):	
Precision Operator	When selected, this indicates that the **search for the exact phrase** option is offered in the basic search box.
Starts With (Title left anchored search) Operator	When selected, this indicates that the **starts with** option is offered in the basic search box. **Note** This option allows users to perform left-anchored title searches only.

Edit Advanced Search Attributes Page

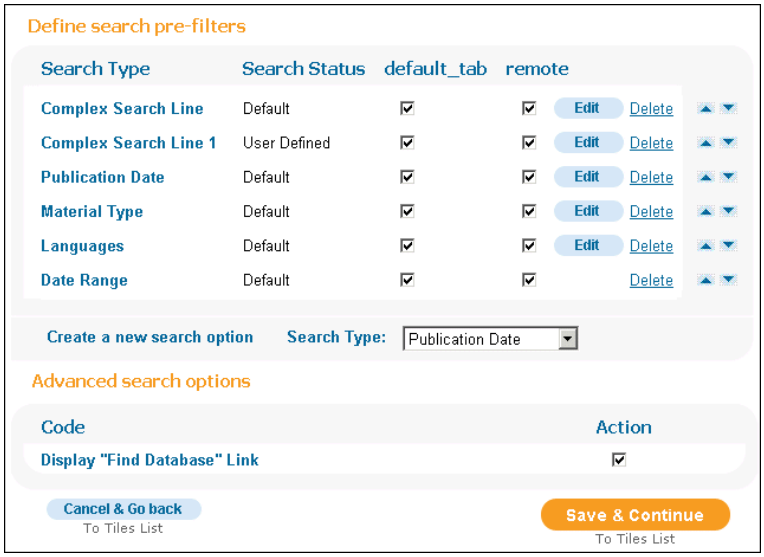
This page defines the attributes for the Advanced Search tile. For information on accessing this page, see Views Wizard.

Note

Advanced searches using the NOT and OR operators are not supported in remote searches (MetaLib).



Edit Advanced Search Attributes Page (Part 1 of 2)



Edit Advanced Search Attributes Page (Part 2 of 2)

Edit the Advanced Search Attributes details according to the following table:

Advanced Search Attributes Details

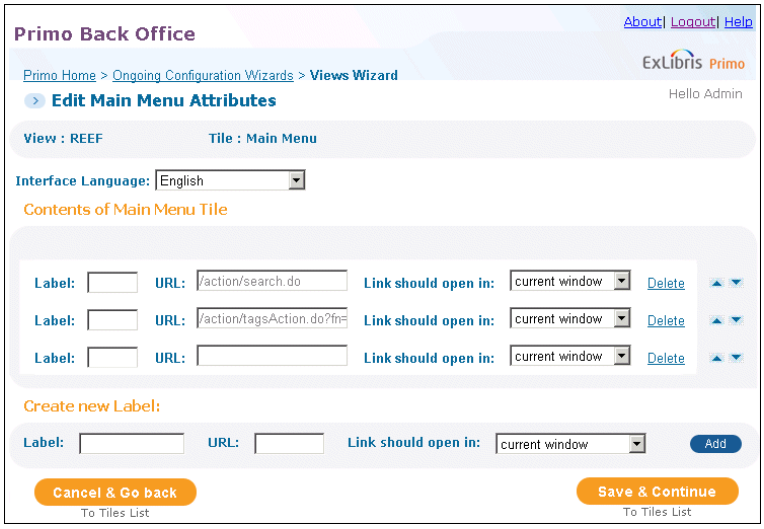
Field/ Button	Description
Texts of Advanced Search Tile:	

Field/ Button	Description
Interface Language	The interface language of the tile.
Opening Text	The text displayed at the top of the tile.
Ending Text	The text displayed at the bottom of the tile.
Define search pre-filters:	
Search Type	The search options available through the Advanced Search tile. Each of the options is displayed as an individual tab in the Advanced Search tile. Both the **Publication Date** and **Date Range** options can be configured to filter by date, but providing both options may be confusing to end users. For more information on the Data Range option, see Configuring Date Ranges.
Search Status	Definitions of the search type. This can be the default definitions or user defined.
Tabs	A check box displays for each tab defined in the view. If you want to display the advanced search box for a tab by default, select the corresponding check box.
Edit button	Click the **Edit** button that displays next to a search type in the list to modify its settings. Each search type corresponds to a line in the Advanced Search box in the Front End. The following search types are valid: • **Simple Search Line** – The complex search line displays a query box and a drop-down list that contains only the **contains** and **is (exact)** search operators. **Note** You can add multiple simple search lines to the Advanced Search box, but only the first listed simple search line is used in the new Primo UI. • **Complex Search Line** – The complex search line contains a query box and the following configurable drop-down lists: • **Target Field** – This option allows you to configure which target fields the user can select in the **Target Field** drop-down list in the Front End. The valid target fields are **any**, **author**, **title**, **subject**, **user tags**, and so forth. • The title target searches the following fields in the Search section of the PNX: **title, alttitle, and addtitle**. All other target fields are associated with a single field in Search section of the PNX. For example, the subject target searches the **subject** field in the search section of the PNX. • **Search Operators** – This option allows you configure a search operator drop-down list. The valid options are **contains**, **is (exact)**, and **starts with**. If no option is selected, the search operator will default to **contains** and this drop-down list will not display in the Front End. The **starts with** operator allows users to perform left-anchored title searches only.

Field/ Button	Description
	Note You can add multiple complex search lines to the Advanced Search box, but only the first listed complex search line is used in the new Primo UI. • **Publication Date** – Allows users to filter their searches by publication date. To configure the publication date, specify the following fields: • **Number of Years** – enter the number of years to be searched for the publication date (from the present working backwards). • **Label** – enter the label corresponding to the number of years. To remove a label entry, click **Delete**. • **Material Type** – This option defines the list of media types that display in the Material Type drop-down list. To specify a default, select the corresponding check box. To remove a media type from the list, click **Delete**. • **Languages** – This option defines the list of languages that display in the Languages drop-down list. To specify a default, select the corresponding check box. To remove an item from the list, click **Delete**.
Delete button	Click the **Delete** button that displays next to a search type to remove it from the Advanced Search box in the Front End.
Create a new search option	This field allows you to add search options to the Advanced Search box in the Front End. To add a search option, select a search option from the drop-down list and then click **Create**. For more information on each type, refer to the **Edit** button above.
Advanced search options:	
Display "Find Database" Link	This field indicates whether the Find Database links will display on the Advanced Search page. Select this field to display the link. **Note** The Find Databases link always displays on the Front End for remote scopes, regardless of this setting..

Edit Main Menu Attributes Page

This page defines the attributes for the Main Menu tile. For information on accessing this page, see Views Wizard.



Edit Main Menu Attributes Page

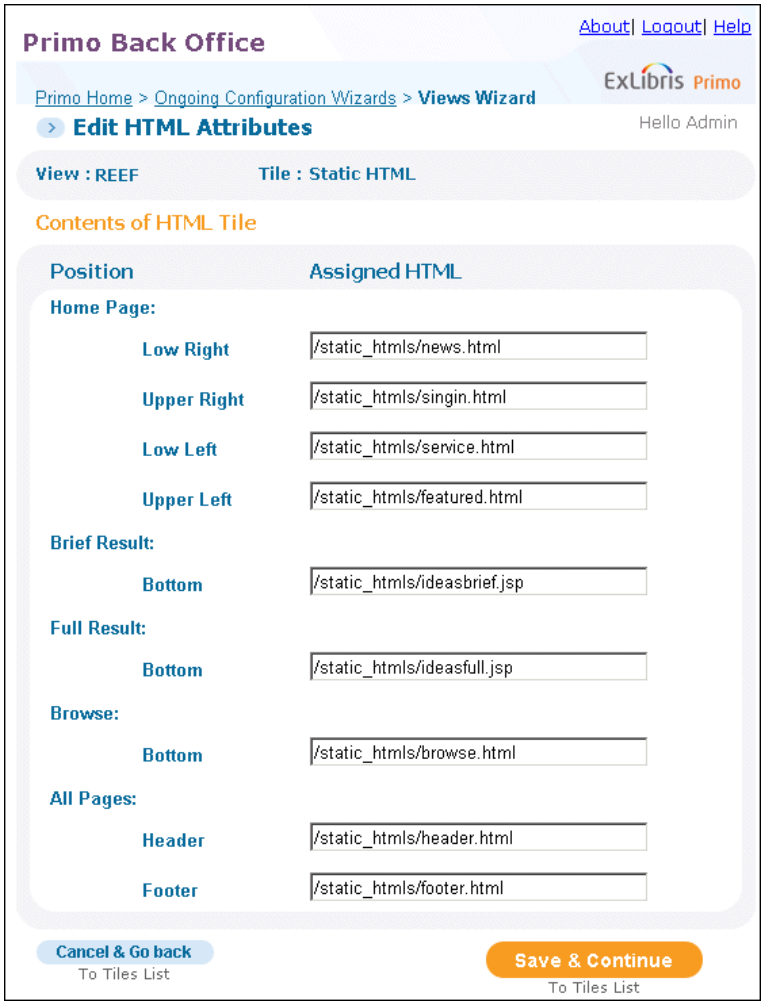
Edit the Main Menu Attributes details according to the following table:

Main Menu Attributes Details

Field	Description
Interface Language	The interface language of the tile.
Contents of Main Menu Tile:	
Label	The label that appears at the top of the header.
URL	The URL of the label.
Link should open in	Indicates whether the link should open in the current window or in a new window/tab. The default is current window.
Create new Label:	
Label	The label that appears at the top of the header.
URL	The URL of the label.

Edit HTML Attributes Page

This page defines the attributes for the Static HTML tile. For information on accessing this page, see Views Wizard.



Edit HTML Attributes Page

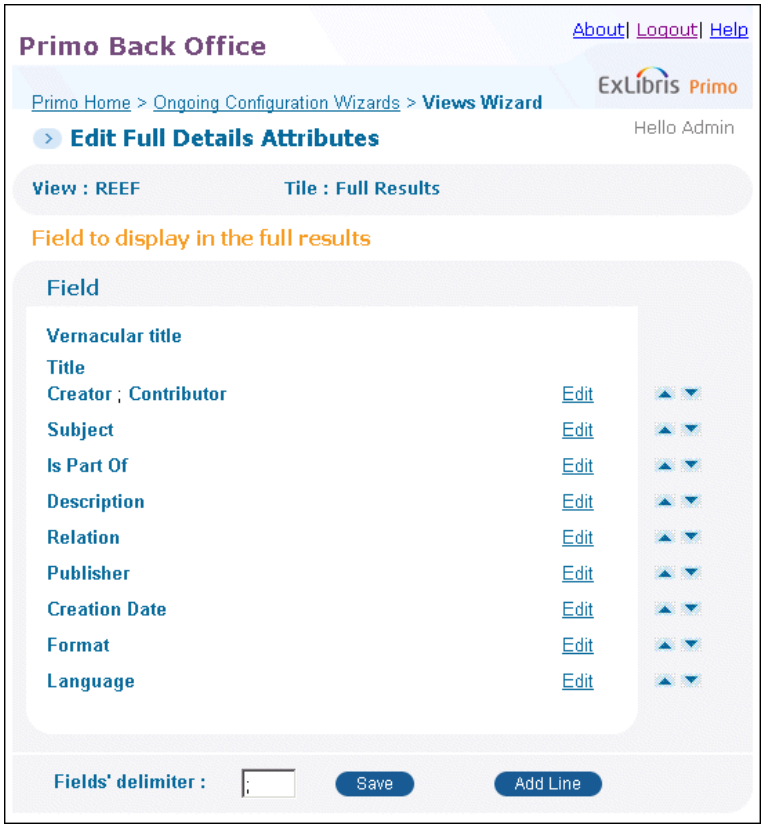
Edit the Static HTML Attributes details according to the following table:

Static HTML Attributes Details

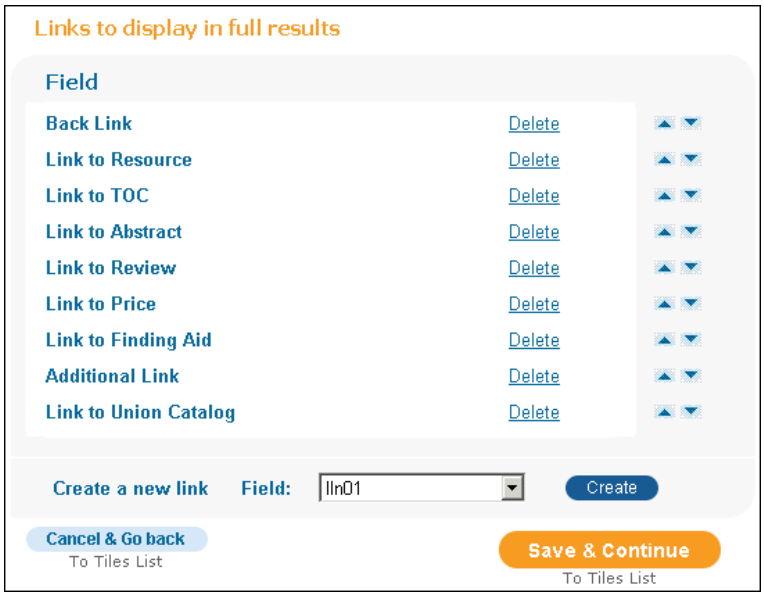
Field	Description
Contents of HTML Tile:	
Position	The various positions in the tile.
Assigned HTML	The HTML code that is to appear in the specific position.

Edit Full Details Attributes Page

This page defines the attributes for the Full Results tile. For information on accessing this page, see Views Wizard.



Edit Full Details Attributes Page (Part 1 0f 2)



Full Details Attributes Page (Part 2 0f 2)

Edit the Full Details Attributes details according to the following table:

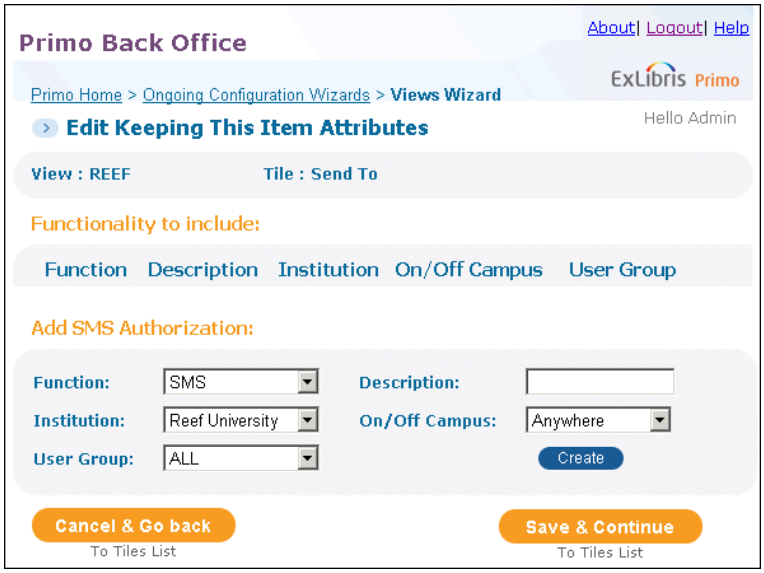
Full Details Attributes Details

Field	Description
Field to display in full results:	

Field	Description
Field column	The list of fields that are displayed in the Full Display. To reorder the fields, click the arrows next to the fields to move the fields up or down as needed. The Snippet field allows you to display the text in the Search section from the PNX that includes the query terms, illustrating why the record was found. **Note** The system automatically adds the vernacular title and title to the first two lines.
Edit	This button opens a display line for editing. You can perform the following operations on a display line: • Add a field to a display line by selecting a field in the **Field** drop-down list and then clicking **Create**. • Remove a field from a display line by clicking **Delete**. To exit Edit mode, click **Close**.
Add Line	This button opens a new display line to allow you to add a new field. To add a new field, select the field type in the **Field** drop-down list and click **Create**. Otherwise, click **Cancel** to exit without making changes.
Fields' Delimiter	This field defines the field separator, which is used to separate multiple fields per display line. To update the delimiter, fill in the field and click Save. The default value is a semicolon. To display multiple fields per display line, refer to the description on the Edit button.
Links to display in full results:	
Field column	The list of links that are displayed in the Full Display.
Delete	Deletes the link.
Create a link	Select the field type in the **Field** drop-down and click **Create**.

Edit Keeping This Item Attributes Page

This page defines the attributes for the Send To tile. For information on accessing this page, see Views Wizard.



Edit Send To Attributes Page

Edit the Send To Attributes details according to the following table:

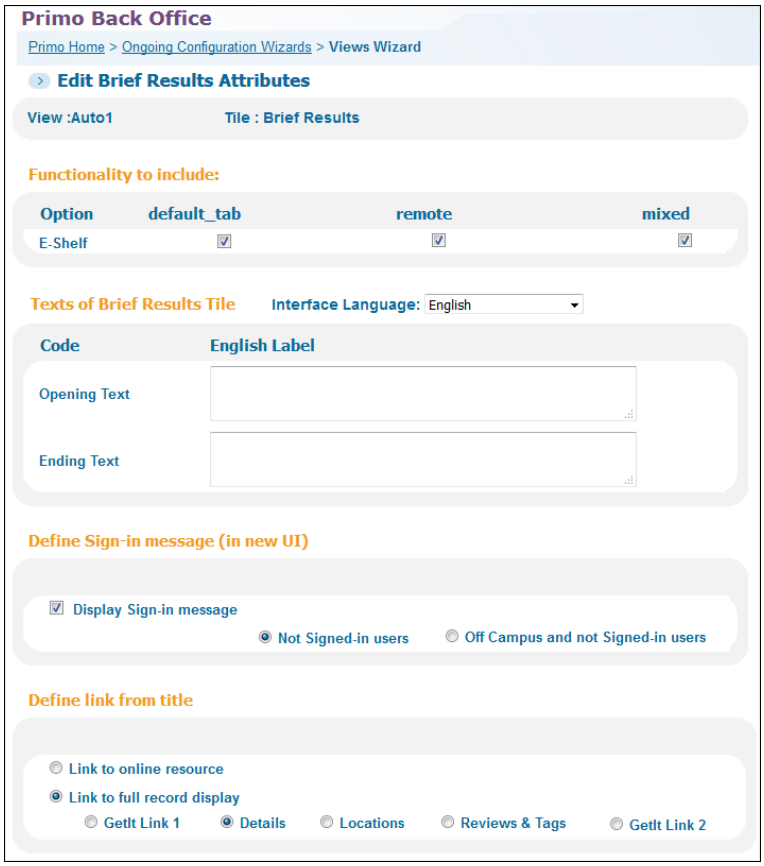
Send To Attributes Details

Field	Description
Functionality to Include:	
This section configures SMS authorization for the SMS option provided in the **Actions** drop-down list in the full and brief results.	
Add SMS Authorization:	
Function	Indicates the function to configure. The only valid value is **SMS**.
Description	Contains the description of the function.
Institution	Indicates the institutions to which this function applies. To apply this function to all institutions, select **All**. For institution-level staff users, your institution will already be selected. **Note** For installation-level users, you must select an institution before the associated values appear in the drop-down lists that display the **Select Institution** value.
On/Off Campus	Indicates whether the user should be within the institution's IP range.

Field	Description
User Group	Specify **Not Guest** to enable SMS only for signed-in users.
Create button	Click this button to add the specified function to the Actions drop-down list.

Edit Brief Results Attributes Page

This page defines the attributes for the Brief Results tile. For information on accessing this page, see Views Wizard.



Edit Brief Results Attributes Page (Part 1 of 4)

Define FRBR (Primo Local) display

Preferred Record

Generic Record

Order of Tabs

Field

GetIt! Link 1

Locations

Details

Reviews and Tags

Recommendations

GetIt! Link 2

Field to display in 1st line of the brief results

Field

Vernacular title Delete

Title Delete

Create a new field to Items Title Field: Type Create

Fields' delimiter

Brief Results Attributes Page (Part 2 of 4)

Field to display in 2nd line of the brief results

Field

Creator Delete

Contributor Delete

Creation Date Delete

Create a new field to Items Title Field: Type Create

Fields' delimiter

Field to display in 3rd line of the brief results

Field

Create a new field to Items Title Field: Type Create

Fields' delimiter

Sort Fields of the brief results

Field Select default for FRBR versions list

rank

date Delete

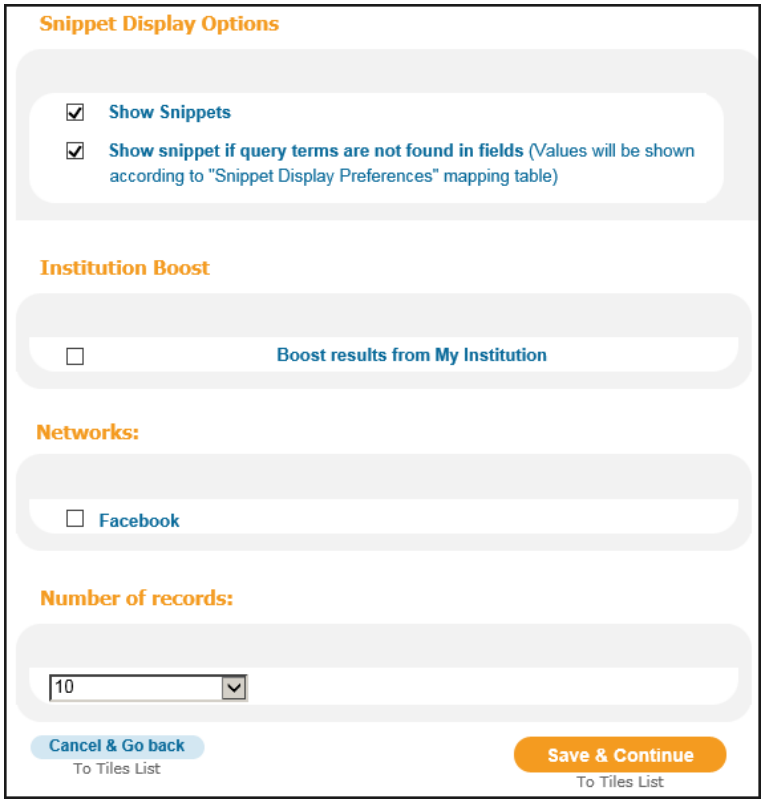
popularity Delete

author Delete

title Delete

Create a new sort field Field: popularity Create

Brief Results Attributes Page (Part 3 of 4)

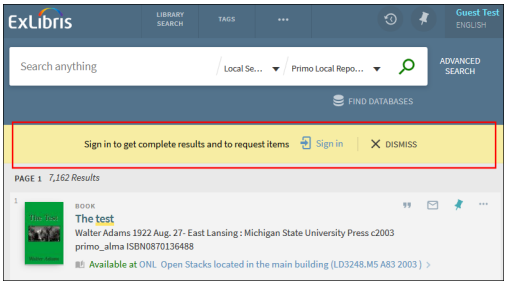


Brief Results Attributes Page (Part 4 of 4)

Edit the Brief Results Attributes details according to the following table:

Brief Results Attributes Details

Field	Description	
Functionality to include:		
E-Shelf	This field allows you to enable the add to e-Shelf option per tab in your view. To add this option to your view, select the relevant tabs.	
Texts of Brief Results Tile:		
Interface Language	The interface language of the tile.	
Opening Text	The text displayed at the top of the tile.	
Ending Text	The text displayed at the bottom of the tile.	

Field	Description
Define Sign-in message (in new UI):	
Display Sign-in message	(New UI only) Indicates whether to display the sign-in message on the Brief Results page. The following options are valid: • **Not Signed-in users** – When the sign-in message is enabled, the message displays only for users who have not signed in. • **Off-campus and not Signed-in users** – When the sign-in message is enabled, the message displays only for users who are off campus or have not signed in.  **Sign-In Message Enabled in Brief Results**
Define link from title:	
Link to online resource	Specify this option to allow users to display the online resource by clicking the title in the Brief Record display. **Note** If a GetIt! 1 link is not configured to link directly to the online resource, the title cannot be clicked. By default, the online resources are configured, based on availability, to allow direct linking. To update these settings, refer to GetIt! Links.
Link to full record display	Specify this option to allow users to display the full record by clicking the title in the results. Select one of the following tabs to display it initially: • GetIt Link 1 • Details • Locations • Reviews & Tags The default is the Details tab.
Define FRBR (Primo Local) display:	
Preferred Record	This option displays the preferred record (based on ranking) for the FRBR group. This is the default display type.

Field	Description	
Generic Record	This option displays a generic record for the FRBR group. The generic record serves as a placeholder for the group and does not include the data and functionality that is relevant to a specific record (such as the availability status, tabs, and save to e-shelf). It only indicates that multiple versions of the title have been found. End users can click either the title or the **View versions** link to display the versions for the FRBR group. In addition, generic records display two rows in the brief results: • The first row displays what is configured to display in the first line of the brief results. • The second row displays the **display/creator** and **display/contributor** PNX fields.	
Order of Tabs:		
	This section allows you to specify the order of the tabs in the Brief Record display. Click the arrows next to each of the following tabs to move the tab up or down in the list: • GetIt! Link 1 • Locations • Details • Reviews and Tags • Recommendations • GetIt! Link 2 **Note** If GetIt! Link 1 is a link to an online resource, it will always display in the first tab, regardless of these settings.	
Fields to display in 1st line of the brief results:		
Field	The list of fields that are displayed in the first line of the Brief Results. **Note** By default, the system includes the Title and Vernacular title fields in the first line.	
Delete	Deletes the field.	
Create a new field to Item's Title	Select the field type in the **Field** drop-down list and click **Create**.	

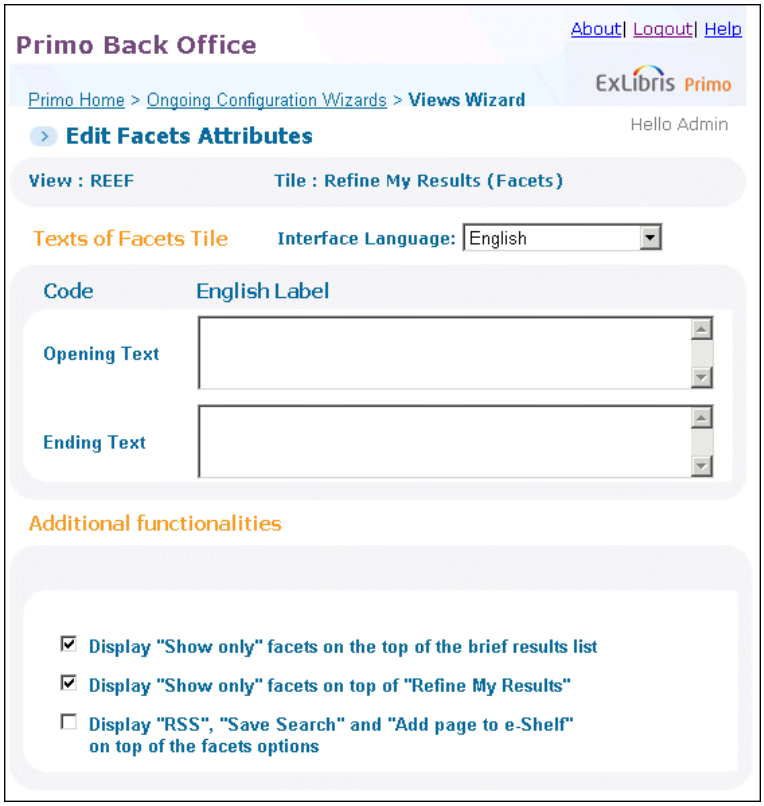
Field	Description	
Fields' delimiter	Characters used to separate fields per line. If no delimiter is specified, the system defaults to a new line.	
Fields to display in 2nd line of the brief results:		
Field	The list of fields that are displayed in the second line of the Brief Results. **Note** By default, the system includes the Creator, Contributor, and Creation Date fields in the second line.	
Delete	Deletes the field.	
Create a new field to Item's Title	Select the field type in the **Field** drop-down and click **Create**.	
Fields' delimiter	Characters used to separate fields per line. If no delimiter is specified, the system defaults to a space.	
Fields to display in the 3rd line of the brief results:		
Field	The list of fields that are displayed in the third line of the Brief Results. **Note** The system always displays the information stored in the **display/ispartof** field in the third line of the Brief Results. If you do not want to display this information, omit the **display/ispartof** field in the normalization rules.	
Delete	Deletes the field.	
Create a new field to Item's Title	Select the field type in the **Field** drop-down and click **Create**.	
Fields' delimiter	Characters used to separate fields per line. If no delimiter is specified, the system defaults to a space.	

Field	Description
Sort Fields of the brief results:	
	This section lists the fields that will appear in the Sort By drop-down list in the search results. For more information, see Sort Fields Config*. **Note** Because the popularity sort applies to local records only, it is recommended to remove it for blended searches.
Select default for FRBR versions list	Allows you to specify the default sort used for the FRBR versions list in the Front End. The FRBR versions list opens after clicking the **View versions** link in the record's brief display.  **View Versions Link** **Note** During an update pipe, the FRBR versions list will return no results until the hotswapping process has completed.
Create a new sort field	To add a new sort field, specify a sort field in the **Field** drop-down list and then click **Create**. The **date2** field is a virtual field that allows you sort by date in ascending order. For more information on the sort fields, see the Sort Fields Config mapping table.
Snippet Display Options Primo allows you to display snippets in search results retrieved from PC Index and remote and local Primo collections. If the following criteria are met, the system displays the snippet for an item: • The search term is found in any of the following fields: • **abstract** field in the PNX record • **fulltext** field in the PNX extensions (for local and remote collections only) • **toc** field in the PNX extensions (for local and remote collections only) • The search term is not found in the above fields and the **Show snippet if query terms are not found in fields** field has been selected. • The snippet is 145 to 160 characters in length. To display snippets, configure the following fields:	

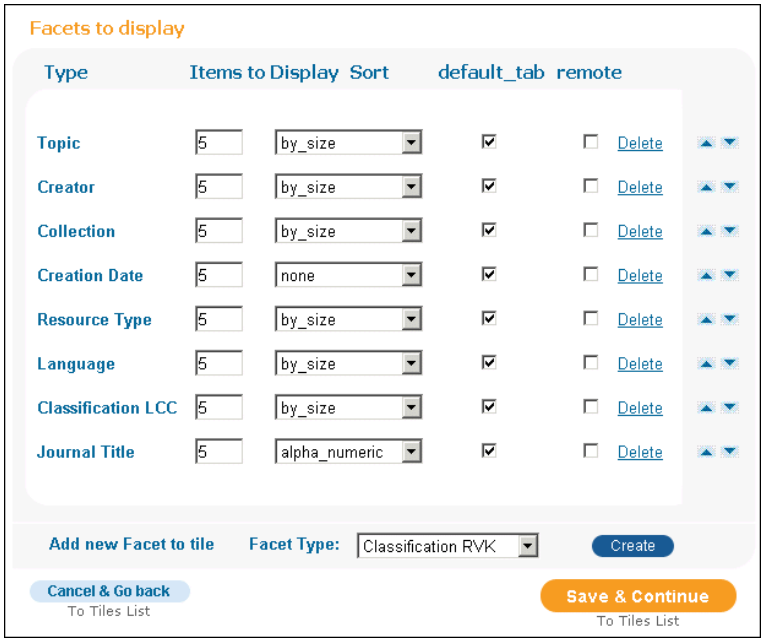
Field	Description	
Show Snippets	Select this field to display snippets when the search term is found in the abstract, toc, or fulltext fields.	
Show snippet if query terms are not found in fields	Select this field if you want to display snippets when the search term is not found in the abstract, toc, or fulltext fields. To select this field, you must also select the **Show Snippets** field. If the search term is not found in the abstract, toc, or fulltext fields, the system displays the first 160 characters of the highest priority field specified in the Snippet Display Preferences mapping table. For more information, see Snippet Display Preferences.	
Institution Boost		
Boost results from my institution	Select this field if you want to boost the search results for records in your institution. To configure the boost level, see Results Boosting – Institution Boost.	
Network		
Facebook	Enables the Facebook Like button for local Primo and Primo Central records on the Brief Results page so that users can share content with their friends on Facebook. **Note** The browser's language selection overrides Primo's display language for the Facebook Like button.	
Number of records	Indicates the maximum number of records that will display in the search results unless overridden by the user's preferences. The valid values are **10**, **20**, **30**, and **50**. The default value is **10**. **Note** This setting does not apply to the number of results returned from Alma's A-Z list.	

Edit Facets Attributes Page

This page defines the attributes for the Refine My Results (Facets) tile. For information on configuring facets, see Facets.



Edit Facets Attributes Page (Part 1 of 2)



Edit Facets Attributes Page (Part 2 of 2)

Edit the Facets Attributes details according to the following table:

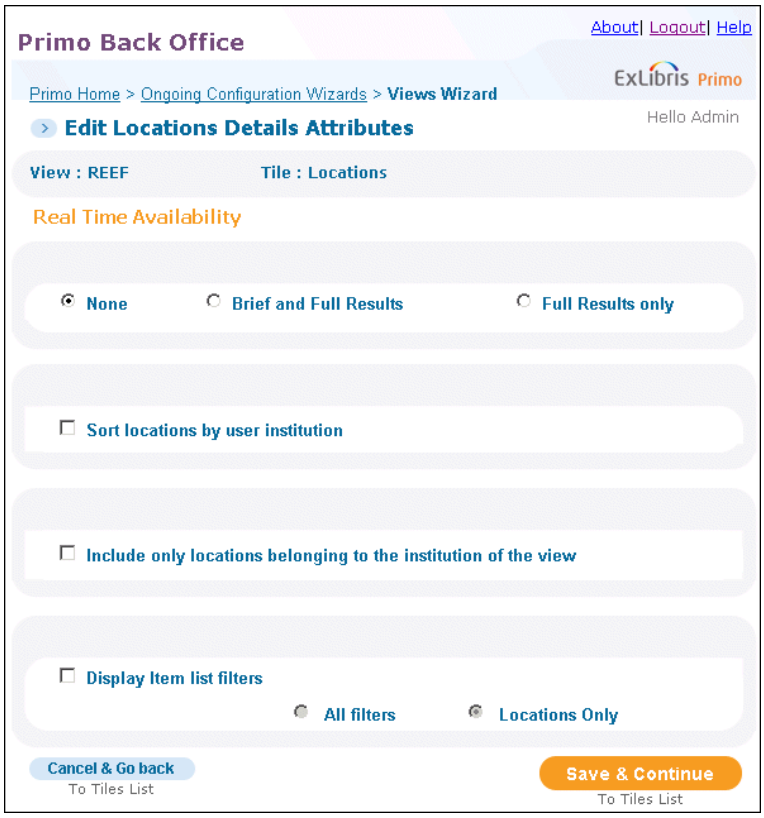
Facets Attributes Details

Field	Description
Texts of Facets Tile:	

Field	Description
Interface Language	The interface language.
Opening Text	The text displayed at the top of the tile.
Ending Text	The text displayed at the bottom of the tile.
Additional functionality:	
Display “Show Only” Facets on the top of the brief results list	Select this field if you want to display the Show Only section (which contains the top-level facets) above the list of the results on the Brief Results page.
Display “Show Only” Facets on the top of “Refine My Results”	Select this field if you want to display the Show Only section (which contains the top-level facets) above the Refine My Results section on the Brief Results page.
Display "RSS", "Save Search" and "Add page to e-Shelf" on top of the facets options	Indicates whether the **rss**, **Save search**, and **Add page to e-Shelf** links appear above or below the Facets section on the Brief Results page.
Facets to display:	
Type	The type of facet to be displayed.
Items to Display	The maximum amount of items to be displayed for this facet. **Note** Because the system creates five groups for the Creation Date facet, a value greater than 5 will only display five groups. For information on how facet groups are created for the Creation Date facet, see Facets Section in the *Primo Technical Guide*.
Sort	Indicates the order in which the facets are displayed.
Default tab	Indicates whether to add to the default tab.
Delete	Click this button to delete the facet.

Edit Locations Details Attributes Page

This page defines the attributes for the Locations tile. For information on accessing this page, see Views Wizard.



Edit Locations Details Attributes Page

Edit the Locations attributes according to the following table:

Locations Attributes Details

Field	Description
Real Time Availability	This field controls the display of real time availability information in this view. One of the following check boxes may be selected: • **None** – indicates that no real time availability information opens in this view. • **Brief and Full Results** – indicates that the real time availability information opens on both results pages. • **Full Results only** – indicates that the real time availability information opens only on the Full Results page.
Sort locations by user institution	Select this option to sort the locations by the user's institution.
Include only locations belonging to the institution of the view	Select this option to display only locations that match the institution of the view.

Field	Description
Display Item list filters	For sites using OPAC via Primo for Aleph, select this check box if you want to provide filter drop-down lists in the Locations tab on the Brief Results page. **Note** This option is not valid for Voyager customers. When this check box is selected, you can select one of the following filter options: • **All Filters** – Provides drop-down lists for locations, years, and volumes. • **Locations only** – Provides a drop-down list only for locations. To change the text for the drop-down lists, label, and button, modify the following codes in the Location Tab code table: • **default.fulldisplay.locations.locationfilter** • **default.fulldisplay.locations.yearfilter** • **default.fulldisplay.locations.volumefilter** • **default.fulldisplay.locations.select** • **default.fulldisplay.locations.go**

Deploy View

After configuring the view's header, search scopes, tabs, and tiles you must deploy the view. Deploying the view updates the user interface with the new view configuration settings.

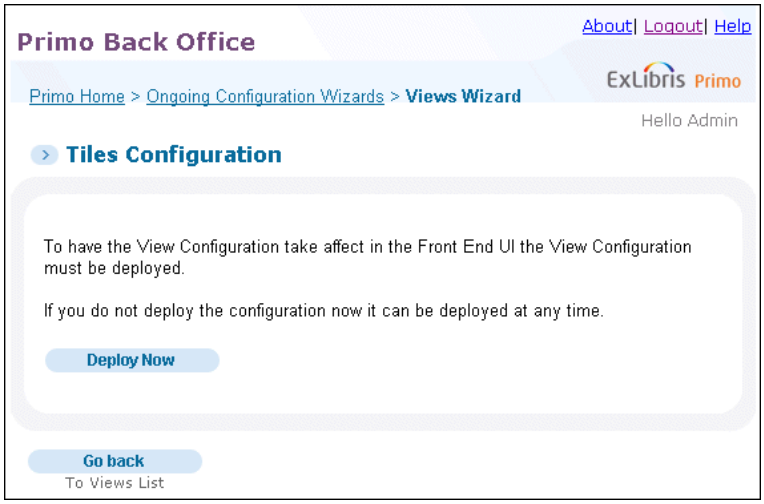
Note

To deploy your settings at a later time, you can click **Deploy All** on the Back Office's home page. For more information, see Deploy All Configuration Settings.

To deploy the view:

1. On the Tiles Configuration page, click **Save & Continue**.

   The Deploy page opens.



Deploy Page

2. Click **Deploy Now**.

   A deploy job is added to the queue. If you want to monitor the deploy job, click the deploy job link (see). For more information on monitoring jobs, see Deploy Monitoring.

Deploy Job Link

3. Click **Go back** to return to the Views List page:

   The Front End view has been created and deployed to the Front End.

View Inheritance

Return to menu

View inheritance allows Primo sites that have multiple views with similar characteristics to update a single view and propagate the changes to common areas in the other views. This is accomplished by defining a parent view and one or more child views, which inherit elements from the parent view.

Note

Parent views are regular views and in principle can be used by the Front End. From a management perspective, it may be easier to use them only as templates for the creation and update of other views.

The child views can inherit the following elements from the parent view:

- Layout (from General Attributes)
- CSS (from General Attributes)
- List of search scopes
- Tabs (except for the specific search scopes that are defined per tile. Note that these tabs often differ between views.)
- Tiles – every tile as a separate and complete element

Note

Since a lot of tile functionality is defined per tab, child views must have the same tab structure as the parent view to inherit tiles. If they differ, the child view cannot inherit the tiles.

Defining Parent and Child Views

The Edit View Attributes page (see Edit View Attributes (Parent View)) allows users to define parent and child views.

Note

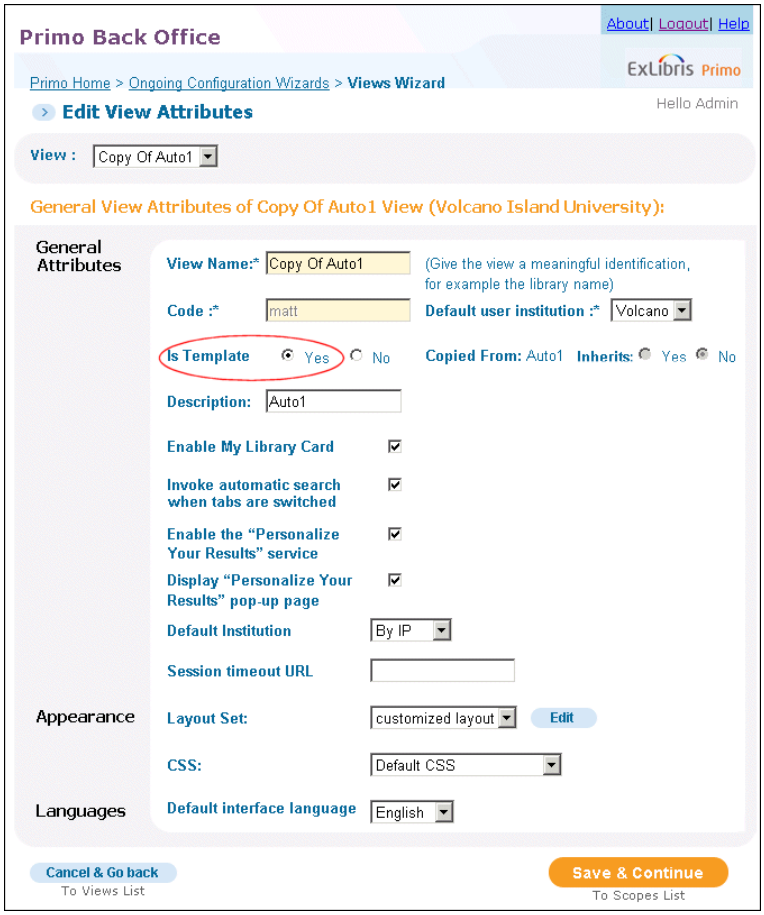
A view that is copied from a parent view is automatically a child view.

To define a view as a parent view, set the **Is Template** field to Yes. Note that a child view cannot be a parent view, too.

To define a view as a child view, set the **Inherits** field to Yes.

Note

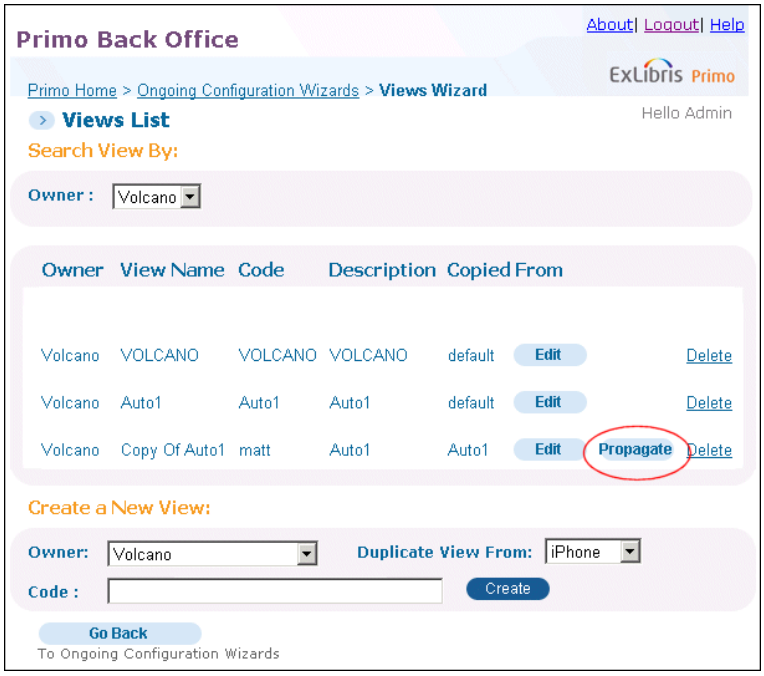
The view from which the child view was copied must be a parent view.



Edit View Attributes (Parent View)

Propagating Views

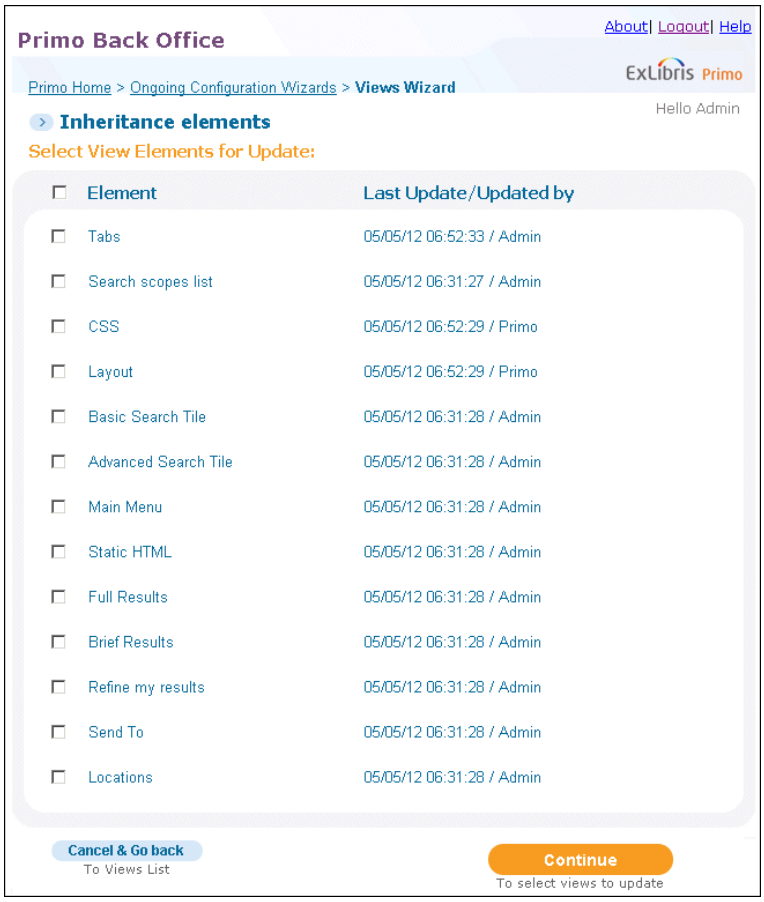
Parent views can propagate certain parts of their setup to their child views. To do this, a user must select the **Propagate** button on the Views List page (see Views List - Propagate Button). The child views appear under the parent view in the list.



Views List - Propagate Button

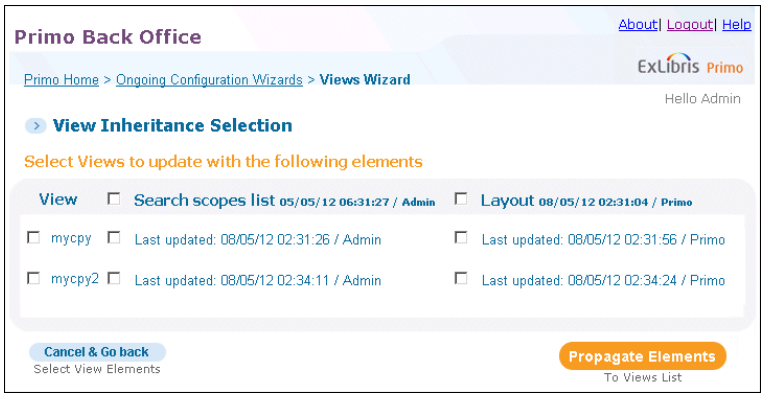
During propagation, the system displays the following pages:

- **Inheritance elements** – This view allows you to select elements to update in the child views. After you have selected one or more items, click **Continue** to display the next page.



View Inheritance Elements

- **View Inheritance Selection** – This page opens each child view and each element you selected on the previous page. It allows you to update specific views and elements for each. To update the views, select **Propagate Elements**.



View Inheritance Selection

Note

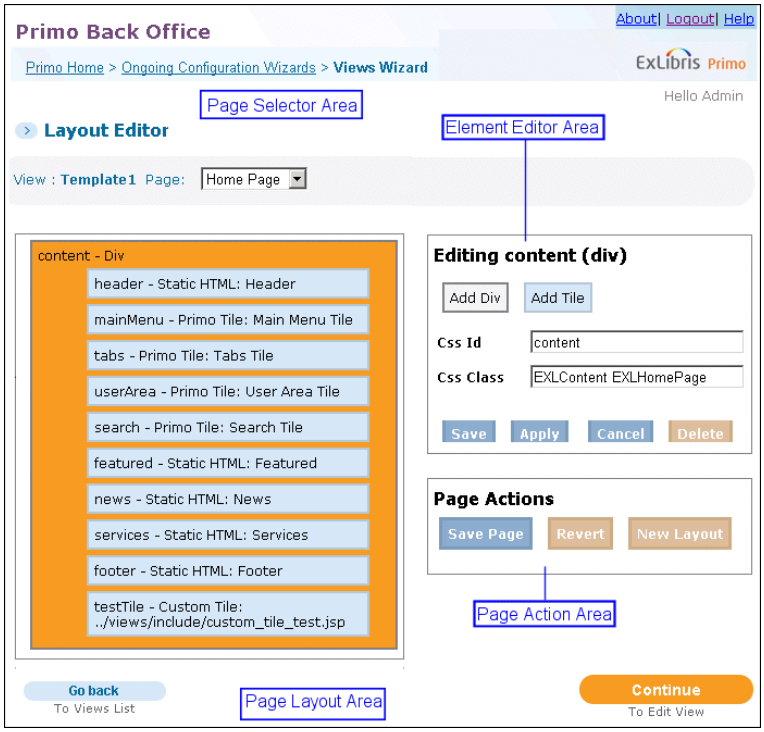
Child views must be deployed before the changes will appear in the Front End user interface.

Custom Layout Editor

Return to menu

The Custom Layout Editor allows users to create customized views for the following pages: Full Display, Brief Display, and Home Page. To customize the page layout, the Layout Editor page (see Custom Layout Editor) allows users to add their own elements (such as JSP, JS, and HTML) as well as standard Primo elements (tiles and static HTML). Note that the editor only adds the elements in a linear fashion to the customized page. The actual format and styles are controlled by the CSS styles and files that are included for each element.

For more information on customizing the CSS styles, refer to the *Primo Technical Guide*.



Custom Layout Editor

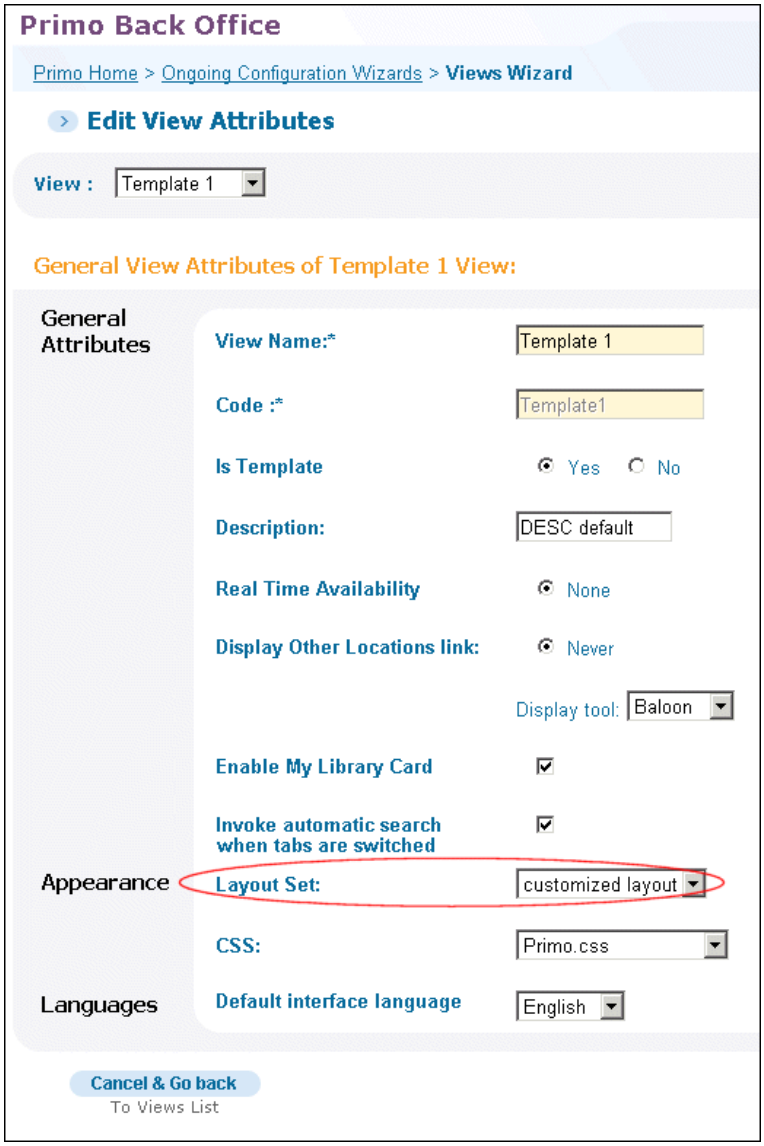
The Layout Editor contains the following areas:

- **Page Selector** – opens the current view and allows users to select a page to edit.
- **Page Layout** – shows the elements that appear on the page.
- **Element Editor** – allows users to add and configure elements.
- **Page Action** – contains the actions (such as saving and resetting) that apply to the page.

To access the Layout Editor page:

1. Select a view to edit on the **Primo Home > Ongoing Configuration Wizards > Views Wizard > Views List** page.

   The Edit View Attributes page opens (see Edit View Attributes (Parent View)).



Edit View Attributes - Custom Layout

2. On the Edit View Attributes page, make sure that the **Layout Set** field is set to **customized layout**.

   The Edit button opens next to the field.

3. Click **Edit** to display the Layout Editor page.

Page Selector Area

The Page Selector area opens the current view and allows you to select the following pages to edit from the drop-down list:

- Home Page
- Full Display
- Brief Display

Page Selector Area

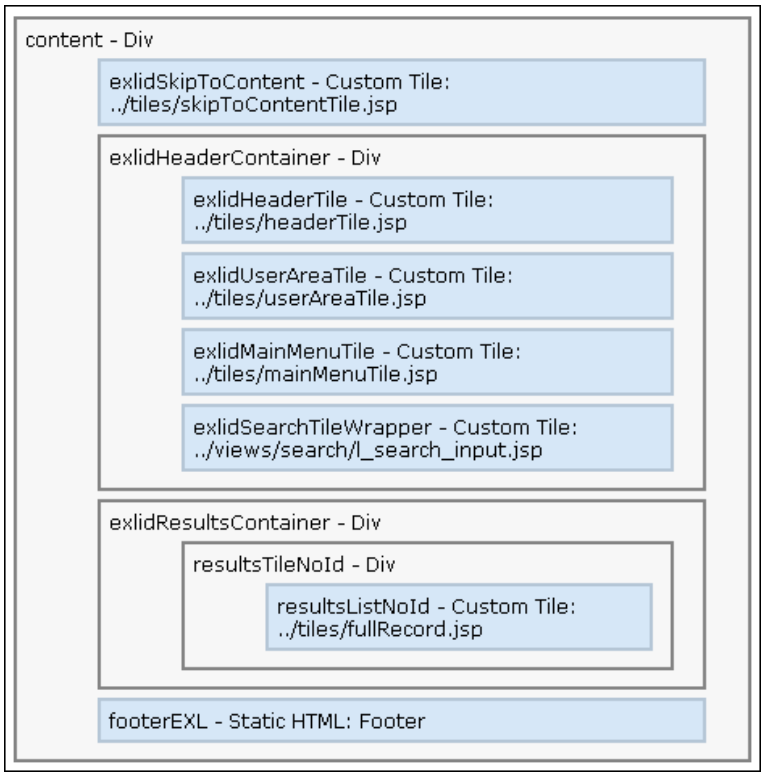
After the page type is selected, the Page Layout area displays the elements included on the page.

Page Layout Area

The Page Layout area opens the elements that will appear in the selected view and page. From this area, users can add Div or Tile elements and reorganize the order of the elements linearly by dragging the elements to the new location.

Note

The format of each element is determined by the CSS class and styles.



Page Layout Area

The structure of a page layout can consist of nested Div elements, which can have many Tile elements each. Note that the top-level element must be a Div element, and all other elements must be contained within the uppermost Div element, which is indicated by the content element (see Page Layout Area).

Adding Elements on the Page

To add tiles in the Page Layout area, select a Div element to highlight it. When the section is highlighted, the Element Editor area opens, which allows you to add either Tiles or Div elements. For more information on configuring Div and Tile elements, see Element Editor Area.

Modifying Elements on the Page

To modify tiles in the Page Layout area, select a Div element to highlight it. When the section is highlighted, the Element Editor area opens, which allows you to modify the element in the Element Editor area. For more information on configuring Div and Tile elements, see Element Editor Area.

Moving Elements on the Page

To move an element in the Page Layout area, select the element and drag it to the desired location on the page.

Removing Elements on the Page

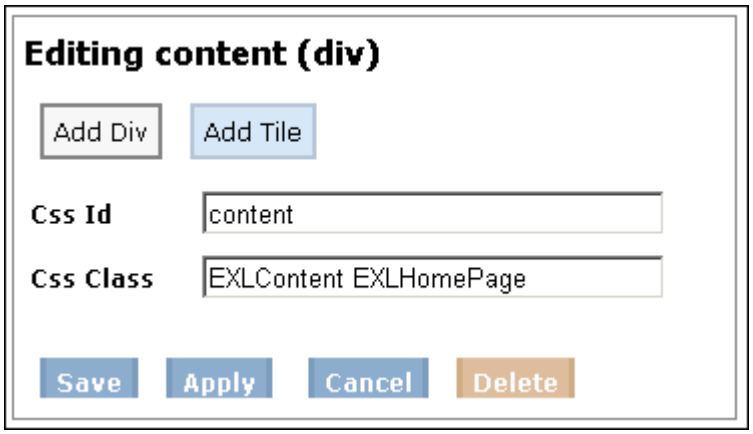
To delete an element in the Page Layout area, select the element and then click **Delete** in the Element Editor area.

Copying Tile Elements on the Page

To copy a Tile element on the Page Layout area, select the Tile element and then click **Copy** in the Element Editor area to place a duplicate copy in page layout.

Element Editor Area

The Element Editor area allows users to configure the settings of the Div and Tile elements.



Element Editor Area - Div Elements

The content of the editor is determined by the type of element (Div or Tile) that is selected in the Page Layout area.

Div Elements

Div elements are used structurally to define divisions or sections within the HTML page layout, while Tile sections add functionality (such as the Facets and Tagging tiles). When a Div element is selected in the Page Layout area, the configuration parameters for Div elements appear in the Element Editor area (see Element Editor Area - Div Elements).

To add a Div element, click **Add Div** in the Element Editor area and fill in the fields shown in Div Element Parameters.

If you don not specify valid CSS IDs and CSS Classes, the system will not be able to deploy the layout to the Front End.

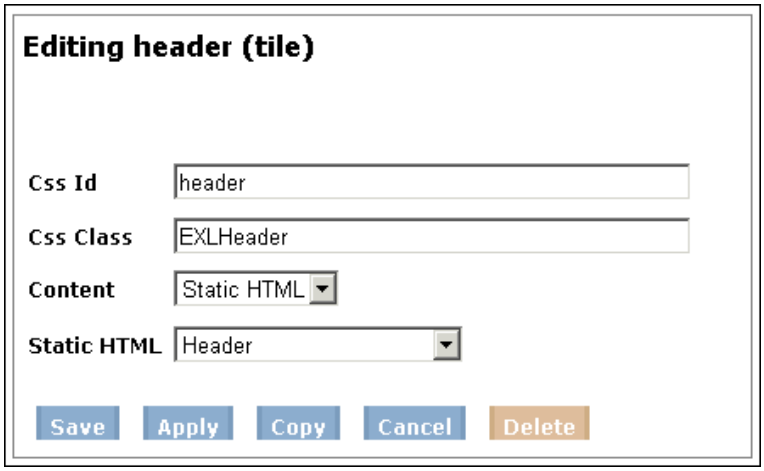
Div Element Parameters

Parameter	Description
Css ID	Indicates the CSS ID used in the CSS file.
Css Class	Indicates the CSS Class used in the CSS file.

To save the element settings for this session, click **Save** on the Element Editor area. Otherwise, select **Cancel** to abort the changes. Note that you must click **Save** in the Page Action area to save element changes to the page layout.

Tile Elements

Tile elements are used to add functionality (such as pre-defined tiles, static HTMLs, and customized tiles) to the page. When a Tile element is selected in the Page Layout area, the configuration parameters for Tile elements appear in the Element Editor area.



Element Editor Area - Tile Elements

To add a Tile element, click **Add Tile** in the Element Editor area and fill in fields shown in Div Element Parameters.

If you don not specify valid CSS IDs, CSS Classes, and URLs, the system will not be able to deploy the layout to the Front End.

Tile Element Parameters

Parameter	Description
Css ID	Indicates the CSS ID used in the CSS file.
Css Class	Indicates the CSS Class used in the CSS file.
Content	Indicates the type of content this tile opens. The following values are valid: • **Primo Tile** – Opens the Tile parameter for editing. • **Static HTML** – Opens the Static HTML parameter for editing. • **Custom Tile** – Opens the Url parameter for editing.
Tiles	Allows users to include tiles created by Ex Libris. These tiles perform core functions defined for Primo. Select a tile from the drop-down list.
Static HTML	Allows user to include static HTMLs created for Primo. Select a static HTML file from the drop-down list.
Url	Enter the URL of the custom tile. The custom tiles may utilize any modern web technology as long as it outputs HTML fragments. **Note** If the tile is meant to be interactive, the links or Javascript must relate back to the proper server through full paths. AJAX and Javascript interactions are preferred since they can be integrated into the existing page.

To save the element settings for this session, click **Save** in the Element Editor area. Otherwise, click **Cancel** to abort the changes. Note that you must click **Save** in the Page Action area to save element changes to the page layout.

Page Action Area

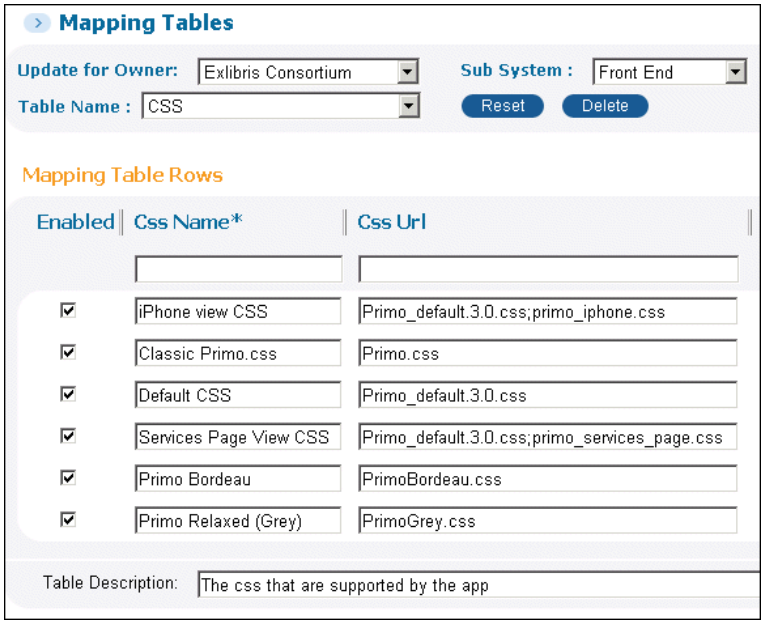
The Page Action Area performs the following action:

- **Save Page** – Saves changes to the page layout.
- **Revert** – Aborts changes and reverts the page layout to the last saved configuration.
- **New Layout** – Clears the entire layout and removes default elements from the page layout.

Page Action Area

Loading Multiple CSS Files

With customized layouts, the previously mandatory `Primo_default.3.0.css` file is initially disabled to allow more control of customization. This file defines many of the styles that are used by Primo tiles and static HTML files. You may continue to use this file and include additional CSS files by separating them with semicolons in the **Css Url** field of the CSS mapping table, as shown in the following figure:



CSS Mapping Table - Css URL Field

Collection Discovery

Return to menu

Collection Discovery is a feature in Primo that enables users to navigate the hierarchy of collections and subcollections to locate and view their associated items. The following rules apply to collections:

- A top-level collection is the main collection. It cannot belong to another collection.
- A subcollection is a collection that belongs to another collection. It may not belong to more than one collection.
- The items are your inventory and may belong to one or more collections.

Users can use the following methods to discover collections:

- The Collection Lobby is a page dedicated to collection discovery in the Front End. It may display all of your institution's collections, a specific collection, or a collection's subcollections. Ultimately, this hierarchy allows users to view a collection's inventory in the standard results page.
- The Primo Search Box allows users to search for collections in the existing scopes or with a dedicated collection scope (if enabled for the view). In the search results, collections contain a link that opens the collection in the Collection Lobby, and for both collections and items, the Details tab displays the complete collection path.

This section contains the necessary information to configure collection discovery for Alma and Rosetta.

Configuring Discovery for Alma Collections

This section contains the steps needed to enable Alma collection discovery in the Front End. Many of the configurations are out of the box and are explained in Configuration Details for Collection Discovery.

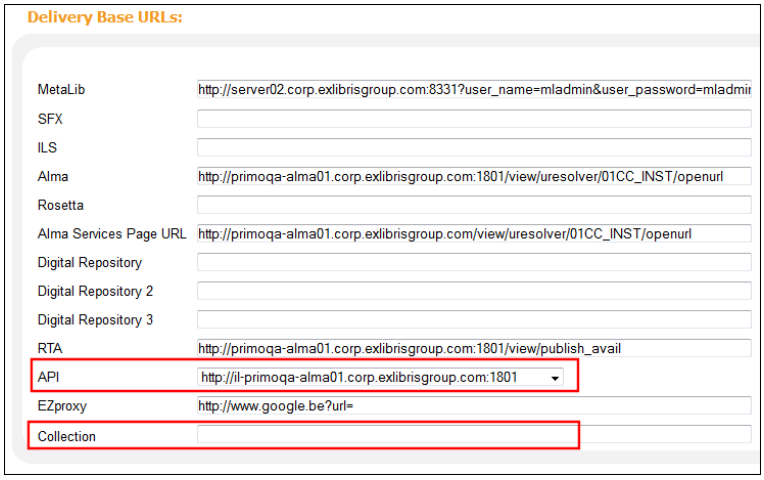
To configure discovery for Alma collections:

1. Update your normalization rules in the Primo Back Office to include the changes associated with collection discovery. For more information, see Alma MARC Normalization Rules.
2. Create a set of digital titles in Alma:
    1. Run an Advanced search for Digital Titles where IE PID is greater than 1.

Advanced Search in Alma

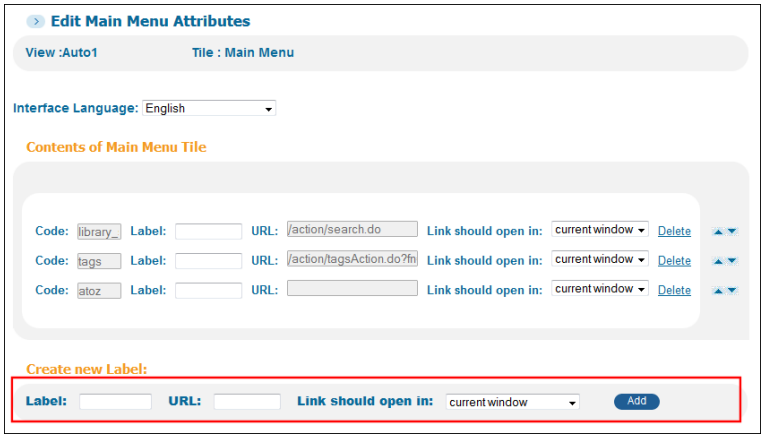
    2. Click **Save Query**, specify a set name (`all digital titles`), set **Status** to **Active**, and then click **Save**.

3. Run publishing in Alma:
    1. On the Jobs List page (**Administration > Manage Jobs > Run a job**), select **Primo Republish Set of Titles** and then click **Next**.
    2. Select the set you created (for example, **all digital titles**) and then click **Next**.
    3. Click **Next**.
    4. Schedule the job to run as soon as possible and then click **Next**.
    5. Click **Submit**.
4. In the Institution Wizard (**Primo Home > Ongoing Configuration Wizards > Institution Wizard**), set the **Collection** field under the **Delivery Base URLs** section to the same value as the **API** field.



Collection - Delivery Base URL

5. Add the **Collection Discovery** button to the Main menu in the Front End:
    1. Edit your view in the Views Wizard (**Primo Home > Ongoing Configuration Wizards > Views Wizard**).
    2. On the Tiles Configuration page in the Views Wizard, edit the Home Page > Main Menu tile.



Edit Main Menu Tile

    3. On the Edit Main Menu Attributes page, specify the following fields under the **Create New Label** section and then click **Add**:
        - **Label** - Specify `Collection Discovery`.

- **URL** - Specify the following URL:

  Classic UI:

  ```
  /action/collectionDiscovery.do?vid=<your view>&colayout=grid&inst=<your institution>
  ```

  New UI:

  ```
  /primo-explore/collectionDiscovery?vid=<View_Code>
  ```

- **Link should open in** - Select **current window** from the drop-down list.

6. If you want to localize any of the labels on the Front End, see Collection Discovery Labels.

7. If you want users to be able to search the dedicated collection scope, add it to your view in the Views Wizard (**Primo Home > Ongoing Configuration Wizards > Views Wizard**).

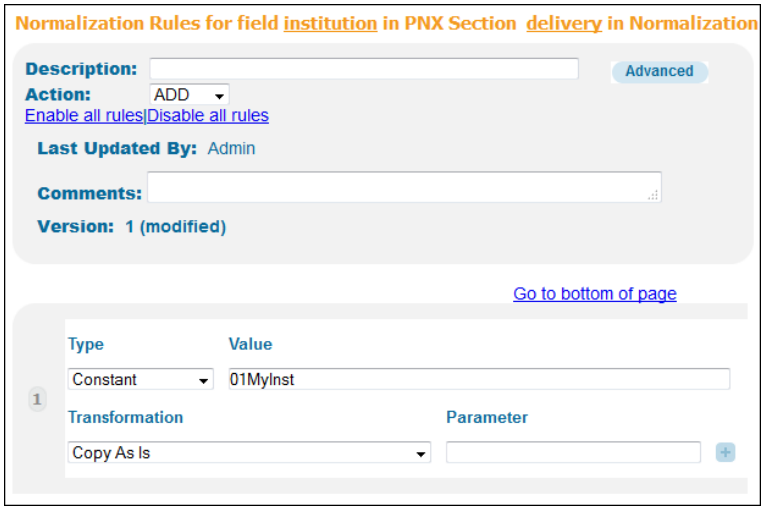
Configuring Discovery for Rosetta Collections

This section contains the steps needed to to enable Rosetta collection discovery in the Front End. Many of the configurations are out of the box and are explained in Configuration Details for Collection Discovery.

To configure discovery for Rosetta collections:

1. Update your normalization rules. For more information, see Rosetta Normalization Rules.

   In addition, verify that the normalization rules map the Primo Institution Code to the **delivery/institution** field in the PNX record. For example:



   Primo Institution Code Defined as Constant in the Normalization Rules

2. Publish all collections and items from Rosetta.

3. Run both pipes from the Primo Back Office: collection pipe and item pipe. For more information, refer to the following document:

   https://developers.exlibrisgroup.com/rosetta/integrations/PrimoCollections

Since there is no option to selectively harvest just the collection and its items (assuming that the items have already been published to Primo), it will be necessary to run a complete set of all records.

4. In the Institution Wizard (**Primo Home > Ongoing Configuration Wizards > Institution Wizard**), set the **Collection** field under the **Delivery Base URLs** section to the Rosetta base URL and port (for example, `http://il-dps12:1801`).

5. Configure the ILS adaptor to support collections:

    1. On the All Mapping Tables page, edit the ILS Adaptors Template mapping table under the ILS Gateway subsystem (**Primo Home > Advanced Configuration > All Mapping Tables**)

    2. Configure the ILS adaptor template settings:

    For an Alma ILS, update the following fields in the row containing the **ALMA_01_0028** ID:

    - XSLT file – Change to **get_collections_rosetta.xsl**.
    - Call Template – Change to **{{collection_base}}/delivery/services/collections**

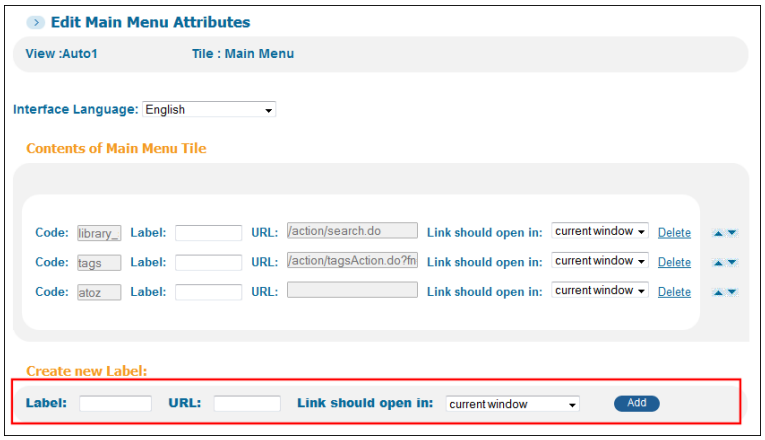
    For a Voyager ILS, create and enable the following mapping row:

    - ID – Enter a unique ID.
    - Adaptor ID – Enter **VOYAGER_7**.
    - Service Name – Enter **get_collections**.
    - XSLT file – Enter **get_collections_rosetta.xsl**.
    - Call Template – Enter **{{collection_base}}/delivery/services/collections**

6. Add the **Collection Discovery** button to the Main menu in the Front End:

    1. Edit your view in the Views Wizard (**Primo Home > Ongoing Configuration Wizards > Views Wizard**).

    2. On the Tiles Configuration page in the Views Wizard, edit the Home Page > Main Menu tile.



Edit Main Menu Tile

    3. On the Edit Main Menu Attributes page, specify the following fields under the **Create New Label** section and then click **Add**:

    - **Label** - Specify `Collection Discovery`.

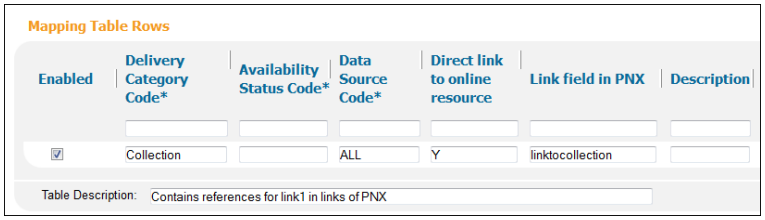
    - **URL** - Specify the following URL:

```
/action/collectionDiscovery.do?vid=<your view>&colayout=grid&inst=<your
institution>
```

- **Link should open in** - Select **current window** from the drop-down list.

7. For the February 2016 release, update the delivery mapping tables:

   1. Add the following row to the GetIT! Link 1 Configuration mapping table:



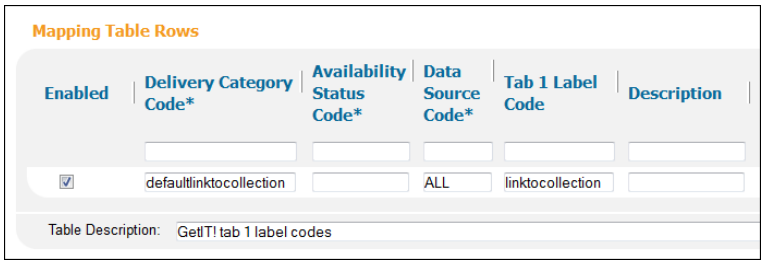
Mapping Table Rows

Enabled	Delivery Category Code*	Availability Status Code*	Data Source Code*	Direct link to online resource	Link field in PNX	Description
☑	Collection		ALL	Y	linktocollection	

Table Description: Contains references for link1 in links of PNX

GetIt! Link 1 Configuration Mapping Table

   2. Add the following row to the GetIt! Tab 1 Text Configuration mapping table:



Mapping Table Rows

Enabled	Delivery Category Code*	Availability Status Code*	Data Source Code*	Tab 1 Label Code	Description
☑	defaultlinktocollection		ALL	linktocollection	

Table Description: GetIT! tab 1 label codes

GetIt! Tab 1 Text Configuration Mapping Table

8. If you want to localize any of the labels on the Front End, see Collection Discovery Labels.

9. If you want users to be able to search the dedicated collection scope, add it to your view in the Views Wizard (**Primo Home > Ongoing Configuration Wizards > Views Wizard**).

Refreshing the Collection API

The Collection API communicates with Alma and Rosetta to get information regarding their local collections. The API returns the complete collection hierarchy and the key information for every collection including the collection title, description, and link to the thumbnail. Primo refreshes this information every hour.

To refresh the collection information manually:

1. In the Institution Wizard (**Primo Home > Ongoing Configuration Wizards > Institution Wizard**), edit your institution.

2. Next to the **Collection** field in the **Delivery Base URLs** section, click **Refresh Collection API Response**.

Creating Deep Links for Collection Discovery

You can use the following URL to create a deep link for the Collection Discovery page:

- **Classic UI:**

```
http://<Primo server and port>/primo_library/libweb/action/
collectionDiscovery.do?vid=<view ID>&inst=<institution>&colayout=<type>
```

- **New UI:**

```
http://<Primo server and port>/primo-explore/
collectionDiscovery?vid=<view_ID>&collectionId=<collection_ID>&lang=<lang>
```

Collection Discovery deep links support the following parameters:

- **vid** – the view ID.
- **inst** – the institution of the view.
- **colayout** – (Classic UI only) the format of the collections in the Collections Lobby. Specify either **grid** or **list**.
- **collectionId** (optional) – the ID of the collection to which you want to give focus on the page.

Examples:

- **Classic UI**:

```
http://myuniversity.exlibrisgroup.com/primo_library/libweb/action/
collectionDiscovery.do?vid=MYVIEW&colayout=grid&inst=MYUNIVERSITY
```

- **New UI**:

```
http://myuniversity.exlibrisgroup.com/primo-explore/
collectionDiscovery?vid=MYVIEW&collectionId=1757493&lang=en_US
```

Disabling the Collection Path

The Details table displays the full collection path for collections and their inventory out of the box.

If you do not want to display the collection path:

1. Edit your view in the Views Wizard (**Primo Home > Ongoing Configuration Wizards > Views Wizard**).
2. On the Tiles Configuration page in the Views Wizard, edit the Full Display > Full Results tile.

Edit Full Results Tile

3. On the Edit Full Details Attributes page, add the **Collection Discovery** field to the list of fields in the **Field to display in the full results** section.

Configuration Details for Collection Discovery

This section describes the out-of-the-box configurations as well as the configurations that may require your attention to enable collection discovery in the Primo Front End.

Alma MARC Normalization Rules

This section describes the normalization rules that are used for Alma collection discovery. The changes are included in the Alma MARC Template, but you may need to update these rules manually if you have localized your normalization rules.

To support collection discovery, Alma publishes the following information about collections:

1. The **COL** field includes the following subfields:
    - **a** - parent collection ID
    - **b** – collection title
    - **c** – collection name
    - **A** – the owning institution. Currently, this field is added only for centralized publishing, but it will be used for standard publishing in the future.

    For example:

```
<datafield tag="COL" ind1=" " ind2=" ">

<subfield code="a">81160000000151</subfield>

<subfield code="b">Photographs of America</subfield>

<subfield code="c">Photographs of America</subfield>

<subfield code="A">WST</subfield></datafield>
```

2. For standard publishing, collections are indicated by a value of **C** in INT subfield a.
3. For centralized publishing, collections are indicated by a value of **C** in INST subfield b.

The following table lists the relevant changes to the Alma normalizations rules. Refer to the Alma MARC Template for complete details.

PNX Field	Description
control/colldiscovery	Rules map information from the COL field.
display/type	Rule creates the type='collection' based on INT $$a=C / INST $$b=C
search/cdparentid	Rules map information from COL $$a unless the record is a collection (i.e only items are included).
search/searchscope	Rules create the collections search scope, which is based on the existence of the COL field/resource type='collection.
dedup/t	Because collections should not be deduped, a rule was added set t to 99 for collections.
delivery/delcategory	Rules map the Alma-C delivery category.

Rosetta Normalization Rules

This section describes the normalization rules that are used for Rosetta collection discovery. The changes are included in the Rosetta - Template, but you may need to update these rules manually if you have localized your normalization rules.

To support collection discovery, Rosetta publishes the following information about collections:

1. The ID of the parent collection is indicated by the dcterms:isPartPf field when xsi=collection. This is included in subcollections and item records.
2. **The dc:type field indicates whether the record is a collection.**

Refer to the Rosetta documentation for harvesting instructions.

For example:

```
<dc:type>collection</dc:type>

<dcterms:isPartOf xsi:type="collection">16017873</dcterms:isPartOf>
```

The following table lists the relevant changes to the Rosetta normalizations rules. Refer to the Rosetta - Template for complete details.

PNX Field	Description
control/colldiscovery	Rules for this field are based on the dcterms:isPartOf field and dc:type fields. This field also uses the PNX delivery/institution field. It is recommended to add rules for this field if they are not already defined.
display/type	Rule creates the type='Collection' based on dc:type=collection.
search/cdparentid	Rules map the ID from the from dcterms:isPartOf unless dc:type=collection (only items are included in this index).
search/searchscope	Rules create the collections search scope, which is based on the existence of either dc:type='collection' or dcterms:isPartOf.
delivery/delcategory	Rules map the Collection delivery category based on dc:type="collection."

Availability and Delivery for Collections

Delivery categories have been added to support collection discovery for Alma and Rosetta, respectively: **Alma-C** and **Collection**.

The following table lists the changes to the Delivery mapping and code tables to support collections:

Delivery Mapping and Code Table Changes

Table	Description
Mapping Tables:	
GetIt! Link 1 Configuration	The following mapping rows configure the delivery links for Alma and Rosetta collections, respectively: 1. Delivery Category Code: Alma-C, Data Source Code: ALL, Direct link to online resource: Y, Link field in PNX: linktocollection 2. Delivery Category Code: Collection, Data Source Code: ALL, Direct link to online resource: Y, Link field in PNX: linktocollection

GetIT! Tab 1 Text Configuration	The following mapping rows configure the text for the Alma and Rosetta delivery links, respectively: 1. Delivery Category Code: Alma-C, Data Source Code: ALL, Tab 1 Label Code: linktocollection 2. Delivery Category Code: Collection, Data Source Code: ALL, Tab 1 Label Code: linktocollection
Templates	The following mapping row configures the template that is used to create the Alma and Rosetta delivery links: • Code: linktocollection • Template Code: {{primo_base}}/primo_library/libweb/action/collectionDiscovery.do?collectionId={{coll_id}}&vid={{view}}&colayout=grid&inst={{coll_institution}}
Code Tables:	
GetIT! Tab1	The following table row defines the code for the collections link: • GetIT! Tab1 Code: default.linktocollection • GetIT! Tab1 Text: View Collection

Collection Discovery Labels

The following table lists the changes to the mapping and code tables to support collection discovery:

Collection Discovery Table Changes

Table	Description
Mapping Tables:	
Format mean	The following row defines the Collections resource type: collection > collections
Pre_filter	The following row defines the pre-filter drop-down list value: collection > collections
facet_rtype_values	The following row defines the Collections value under the Resource Type facet: Collections > collections
Code Tables:	
Collection Discovery (new)	This new code table (Front End subsystem) defines the labels on the Collection Discovery page.
	The following code displays the first node in the collection path and in the full display of an item: default.colldiscovery.collpath.topnode > Collections

	The following code displays the View Collection link on top-level collection page of the Collections Lobby: default.colldiscovery.viewcoll.toplevel > View collection
	The following code displays the View Collection link on a subcollection page of the Collections Lobby: default.colldiscovery.viewcoll.sub > View collection
	The following code displays the View Items link in the Collections Lobby: default.colldiscovery.viewitems > View items
View Labels	The following code displays the link to the collection discovery from the Main menu in the Front End: default.mainmenu.label.colldiscovery > Collection Discovery
Icon Codes	The following code displays the resource type: default.mediatype.collection > Collection
Full Display Labels	The following code displays the collection in the full display for an item: default.fulldisplay.collection > Collection
Basic Media type	The following code displays the pre-filter option for basic searches: default. search-simple.mediaType.option.collections > Collections
Advanced Media type	The following code displays the pre-filter option for advanced searches: default.search-advanced.mediaType.option.collections > Collections
Facet Resource Type	The following code displays the facet resource type for collections: default.facets.facet.facet_rtype.collections > Collections

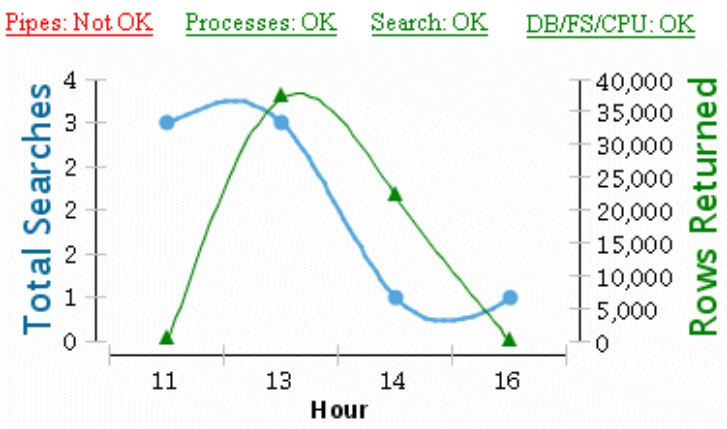
Monitoring and Maintaining Primo

This section includes:

Dashboard Monitoring

Return to menu

On the Back Office's home page, you can quickly monitor the status of your search engines via the Dashboard Monitor, which displays graphically the total amount of searches performed within the last six hours and the average amount of records returned for those searches.



Dashboard Monitor

In addition, status indicators above the graph display an overall status of the system's processes, pipes, search engines, file system, CPU load, and database. You can click on the status indicator links to display more in-depth information.

Monitoring Pipe Status

To monitor the status of Primo's pipes:

1. View the pipes status indicator located above the search statistics graph on the Back Office's home page.
   - **Pipes: OK** – Indicates that the pipes are functioning properly.
   - **Pipes: Not OK** – Indicates that the system disabled one or more of the pipes.
2. Click the status indicator to display more in-depth information on the status of the pipes.

   The Pipes Monitoring page opens, listing the system's pipes. The status of each pipe is provided in the Process Status and Process Stage fields. For additional information on Monitoring the system's pipes, see Pipe Monitoring.

Monitoring Process Status

Note

You can view your processes, but Ex Libris will monitor and maintain all processes for cloud installations.

To monitor the status of Primo's processes:

1. View the processes status indicator located above the search statistics graph on the Back Office's home page.
   - **Processes: OK** – Indicates that the system's processes are functioning properly.
   - **Processes: Not OK** – Indicates that the system has disabled one or more of the processes.
2. Click the status indicator link to display more in-depth process status information.

The Process Monitoring page displays the system's processes. Any disabled processes appear in red, allowing you to view a log of the process and a list of the specific errors that caused the system to disable the process. For additional information on Monitoring the system's processes, see Process Monitoring.

Monitoring Search Engine Status

Note

You can view the status for the SEs, but Ex Libris will monitor and maintain the SEs for cloud installations.

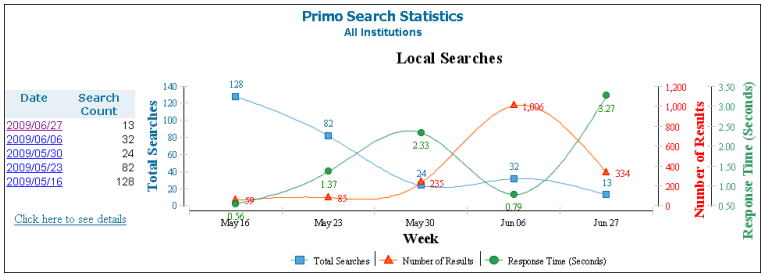
To monitor the status of Primo's search engines:

1. View the search engine status indicator located above the search statistics graph on the Back Office's home page.
   - **Search: OK** – Indicates that the search engine is functioning properly.
   - **Search: Not OK** – Indicates that the search engine is not functioning properly.
   - **Search: Slow** – Indicates that the search engine has a high volume of activity.
2. Click the status indicator link to display more in-depth search engine status information.

   Note

   You can also access the search engine statistics by using the instructions provided in Primo Reports.

   The Primo Search Statistics page displays graphs of your system's local and remote searches.



Primo Search Statistics Page

Each of the graphs display statistics about the searches performed on your Primo system. You can view the total number of searches performed on a particular day, the total number of results returned for those searches, and the average time it took for the system to return those results.

Note

You can click a date link on the left side of the page to display the statistics for a specific week. You can return to the weekly view by clicking the **View Grouped by Week** link.

3. Click the **Click here to see details** link to display the search statistics in a tabular format.

   The search statistics display in a table beneath the graph.

View Grouped by Week

Date	Number of Searches	Average Number of Results	Average Response Time (Seconds)
local			
Feb 5, 2007	3	0	183.67
Feb 1, 2007	2	0	4,727.50
	5	0	2,001.20
Total	5	0	2,001.20

Primo Search Statistics Details

Search Statistics Details describes the search statistics details.

Search Statistics Details

Field	Description
Date	The date on which the search statistics are based.
Number of Searches	The number of searches included in the statistic.
Average Number of Results	The average number of results returned for the searches.
Average Response Time (Seconds)	The average number of seconds it took the system to return the search results.

You have successfully monitored your system's Primo search engine.

Monitoring Database Status

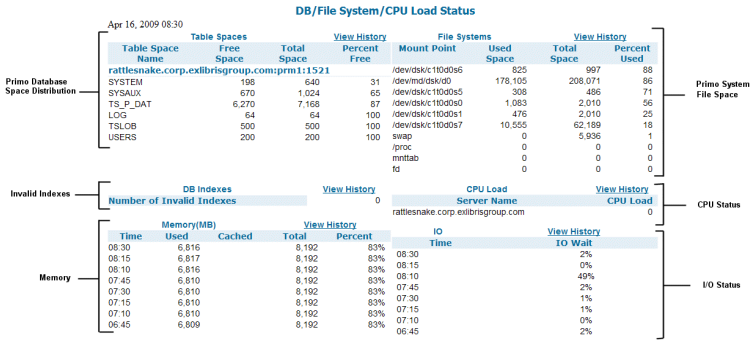
To monitor the status of Primo's database, file system, and CPU:

1. View the DB/FS/CPU status box located above the search statistics graph on the Back Office's home page.
   - **DB/FS/CPU: OK** – Indicates that the database, file system, and CPU are functioning properly.
   - **DB/FS/CPU: Not OK** – Indicates one of the following:
   - The database is about to run out of available space
   - The folder containing the file system is full
   - CPU is not functioning properly

- There are invalid indexes being used.

2. Click the status box to display more in-depth information regarding the database, file system, and CPU.

   The DB/FS/CPU Load Status page opens, showing the distribution of the space in the Primo database, the space used for the system files, invalid indexes, CPU status, and I/O and memory status.



DB/FS/CPU Load Status Page

DB/FS/CPU Load Status Description

Column Name	Description
Table Spaces:	
Table Space Name	Lists all the tables in Primo's database. A table name that appears in red indicates that the database's free space is under the minimum requirement.
Free Space	Lists the number of free kilobytes in each of the tables.
Total Space	Lists the total number of kilobytes allotted for each of the tables.
Percent Free	Lists the percentage of free space in each of the tables.The minimum amount of free space necessary is ten percent.
File Systems:	
File System Name	Lists the path of the system files in the directory.
Used Space	Lists the number of free kilobytes being used for each of the files.
Total Space	Lists the total number of kilobytes allotted for each of the files.

Column Name	Description
Percent Used	Lists for each file the percentage of space being used. The maximum amount of free space necessary is 90 percent.
Indexes:	
Number of Invalid Indexes	Displays the number of invalid indexes in the system.
CPU Load:	
Server Name	Lists the servers used with the system.
CPU Load	Lists the number of loads on each of the system's servers.
Memory:	
Time	Displays the time.
Used	Displays the amount of memory used.
Cached	Displays the amount that was cached.
Total	Displays the total memory used.
Percent	Displays the percentage of memory that was used.
I/O:	
Time	Displays the time.
I/O Wait	Displays the percentage.

3. Click **View History** in Table Spaces, File Systems, Indexes, or CPU Loads to view each section's history.

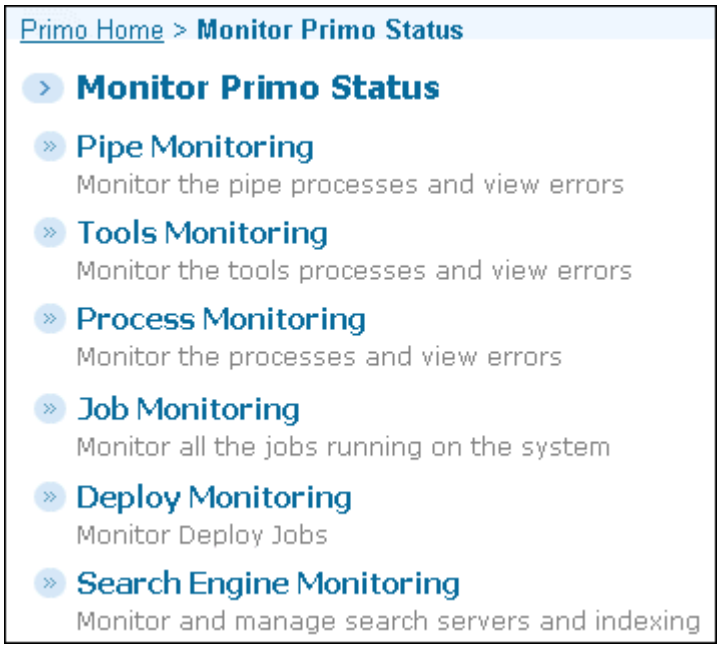
   The History page opens, showing the history information for each of the system's servers.

Monitoring Primo Status

Return to menu

The Monitor Primo Status page provides access to the following monitors:

- Pipe Monitoring
- Tools Monitoring
- Process Monitoring
- Job Monitoring
- Deploy Monitoring
- Search Engine Monitoring
- Watchdog Monitoring

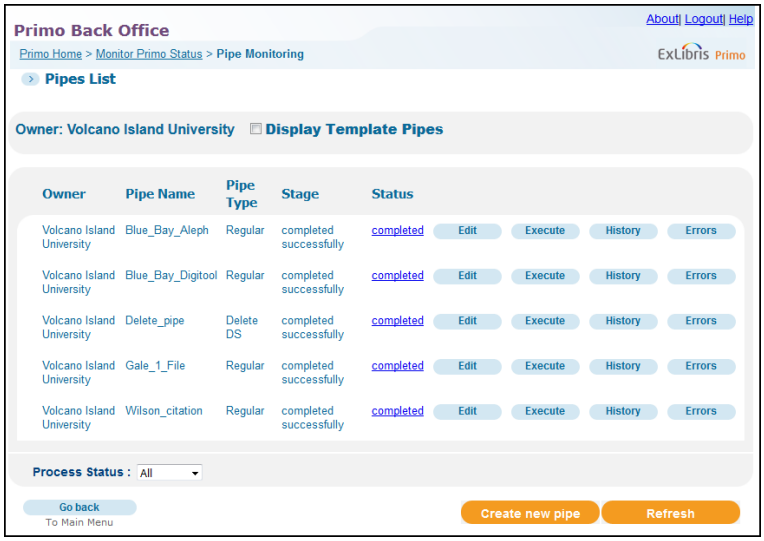


Monitor Primo Status Page

To access this page, select **Monitor Primo Status** on the Back Office's home page.

Pipe Monitoring

The Pipes List page (**Primo Home > Monitor Primo Status**) lists the pipes that are configured in Primo. You can filter the pipes by institution using the **Owner** drop-down list and include the pipe templates by selecting the **Display Template Pipes** check box.



Pipe Monitoring - Pipes List

Institution-level staff users can view pipes that are owned only by their institution.

The Status and Stage columns on the Pipes List page allow you to quickly determine the status of each pipe. The following table describes all of this page's columns and buttons.

Pipes List Components

Component	Description
Pipe Name	This field contains the name of the pipe.
Pipe Type	This field indicates the type of pipe. For more information, see Define Pipe Details.
Status	This column displays the current status of the pipe. The following statuses may display: • **completed** – indicates that the work completed successfully or there were no files/records to harvest. • **not started** – indicates that a pipe has been executed, but the process has not started. • **pending resume** – indicates that the pipe has been resumed, but the process has not started. • **pending suspend** – indicates that a suspend request has been sent, but the process has not been suspended. • **pending termination** – indicates that the pipe has been terminated, but the process has not been started. • **resumed** – indicates that the pipe has resumed execution. • **running** – indicates that the pipe is executing. • **stopped error** – indicates that the pipe has been stopped due to an error that is generally caused by a technical error in the system. • **stopped harvest error** – indicates that the pipe was stopped due to an error in the harvesting stage. • **stopped threshold exceeded** – indicates that the pipe stopped because the number of records that failed exceeded the error threshold. • **suspended** – indicates that the execution of the pipe has been suspended. • **terminated** – indicates that the execution of the pipe was terminated

Component	Description
	Click the status to display more detailed information on the job. For more information, see Viewing a Pipe's Details.
Stage	This column displays which stage of the process the system is running for the pipe. The following stages may display: • **pending for harvest** – indicates that the pipe has been placed in the harvesting queue. • **harvesting-copy-files** – indicates that the pipe is copying files from the data source. • **harvesting** – indicates that the pipe is harvesting from the data source. • **pending for bulkage** – indicates that the pipe has started and will retrieve the source data from the Primo database (P_SOURCE_RECORD). • **bulkaging** – indicates that the pipe is splitting the records into bulks from the Primo database (P_SOURCE_RECORD). • **harvest-nep** – indicates that the harvest stage and normalization, enrichment, and persistence (NEP) stage are running in parallel. • **pending_nep** – indicates that the pipe is waiting for the NEP stage to start. • **nep** – indicates that the pipe is running the NEP stage. • **dedup** – indicates that the pipe is at the dedup stage. • **dedup_merge** – indicates that the pipe is created the merged deduped records. • **frbr** – indicates that the pipe is at the FRBRization stage. • **frbr_merge** – indicates that the pipe is creating the merged FRBR records. • **completed** – indicates that the execution of the pipe finished successfully.
Edit button	This button provides access to the Define Pipe page, which allows you to modify the settings of a pipe. For more information, see Editing a Pipe.

Execute button	This button starts the execution of the pipe.
	During the execution of a pipe, the following stages are performed: Harvesting, NEP (which includes normalization, enrichment, and persistence), Dedup, Dedup merge, FRBR, and FRBR merge. Each pipe is run as a job, which you can monitor via the Job Monitor page. For more information, see Job Monitoring.
	Log files for each pipe are stored in the harvest and log directories under the following directory on the Primo server, where *<n>* is the Primo copy:
	`/exlibris/primo/p1_<n>/ng/primo/home/profile/publish/publish/production/pipes/<pipe_name/>`
	In addition, a general log file called `publish_server.log` is stored under the following directory:
	`/exlibris/primo/p1_<n>/ng/primo/home/profile/publish/publish/production/log`
	Note
	If a pipe fails, an e-mail message is sent to the e-mail address specified in the Contact Person E-mail parameter (**Primo Home > Advanced Configuration > General Configuration > E-mail and SMS Configuration**) page. Pipe email addresses defined at the installation and institution levels in the E-Mail Addresses mapping table override the value specified in the **Contact Person E-mail** parameter.

Component	Description
History button	This button displays the Job Monitor page, which displays an entry for each execution of the pipe. For more information, see Viewing a Pipe's History.
Errors button	This button displays the errors that occur during the execution of a pipe. For more information, see Viewing a Pipe's Errors.
Create New Pipe button	This button provides access to the Define Pipe page, which allows you to add a pipe to the system. For more information, see Defining a Pipe.
Delete button	Deletes an existing pipe from the list. For more information, see Deleting a Pipe. This button does not appear after the pipe has been executed.

Viewing a Pipe's Details

The Job Details page displays detailed information on the execution of a pipe.

Pipe Details Page - Completed Status

This information is split into sections by stage, as follows:

- **Pipe name** and **overall pipe status** – includes the Job ID, stage, status, and start and end times. To view the Pipe's settings on the Define Pipe page, click **Configure**.
- **Harvest** – This section displays the results of the harvest stage:
  - **Files Copied** – the number of files that were copied.
  - **Failed Records** – the number of failed records.
  - **Normal Records** – the number of inserted and updated records.
  - **Deleted Records** – the number of records that were marked for deletion.
  - **Normal/Deleted Bulks** – the number of normal and deleted bulks, respectively. Each bulk contains up to 1000 unique records, and a record may span multiple bulks.
  - **Num Inserts** – the number of new records that were harvested.

- **Num Updates** – the number of updated records, which includes duplicate records that span across bulks.
- **Num Duplications** – the number of duplicate records, which includes the duplicate records deleted from a bulk (only the latest record is saved in a bulk) and the duplicates that span other bulks.
- **Failed Files** – the number of files that could not be completely processed due to parsing error. Note that some of the records in the file may have been saved to the `M_P_SOURCE_RECORD` database table, while the failed record is added to the count in the Failed Records field.
- **Empty Files** – the number of empty files that were processed.
- **Start/End Time** – the job's start and end times, respectively.

- **NEP** – includes the number of successful and failed records and the start and end times. In general, the sum of the NEP succeeded records and the NEP failed records should be equal to the number of harvested normal records. In some cases, the number of duplicate records may have some effect on the sum.
- **Dedup** – includes the number of single records, member records (such as the number of records that belong to a dedup group), and merged records. In addition, this section displays the number of dedup vectors that were created in the NEP stage, and the start and end times.
- **FRBR** – includes the number of single records, member records (such as the number of records that belong to a FRBR group), and merged records. In addition, this section displays the number of FRBR keys that were created in the NEP stage, and the start and end times.

On the Job Details page, you can select the following options:

Pipe Details Page Options

Button/ Link	Description
Resume button	Resumes the execution of a pipe that has been suspended by a user or has been stopped by the system due to an error. After a resume request, the work status changes to **pending resume** and will not resume immediately. Execution will begin when process activity decreases. Resume tries to restart the work from its last point of execution for most cases. Otherwise, it will resume from a previous stage. During a resume, Primo loads and processes bulks that were previously failed, but it does not process individual failed records. If a pipe is stopped during the harvest stage, a status of **stopped harvest error** is returned. Since a pipe cannot be resumed when it is stopped in the harvest stage, you can terminate the pipe and then restart it. If there were many failed records as a result of problems in normalization, the best solution is to terminate the pipe, fix the normalization rules, and then execute the pipe again. This will override previous changes to the database and update records that were already saved.
Suspend button	Suspends a running pipe. When a pipe is suspended, the work status changes to **pending suspend**, and when it completes, the status changes to **suspended**. **Note** A suspend request is not permitted during the harvest phase.

Button/ Link	Description
Terminate button	Stops the execution of a currently running pipe.
Configure link	Used to modify a pipe's definition. For more information, see Editing a Pipe.
View Log link	Displays the errors and processes that occurred during each stage of the pipe's execution except for the Harvest stage.
View Harvest Log link	Displays the errors and processes that occurred during the Harvest stage.
View Dedup Log link	Displays the errors and processes that occurred during the Dedup stage.
View FRBR Log link	Displays the errors and processes that occurred during the FRBR stage.
Restore Files link	Restores the harvested files to the original directory so that the pipe can be run again from scratch. This link displays only for a pipe job that is associated with a pipe that is marked as **Delete after copy** and its current status is **stopped error**, **threshold exceeded error**, or **terminated**. **Note** The Restore Files option is not relevant for OAI harvesting.

To display the Job Details page:

1. On the Back Office's home page, click **Monitor Primo Status**.

   The Monitor Primo Status page opens.

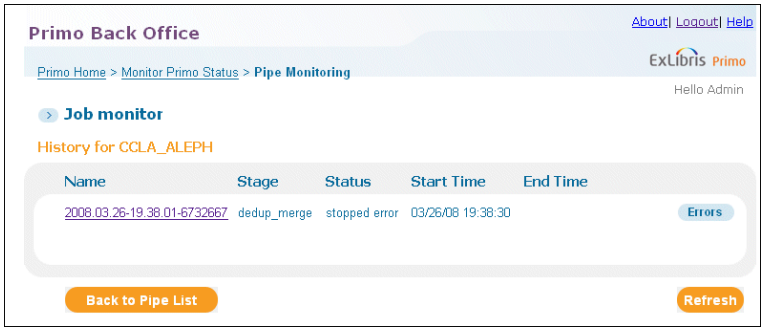
2. Click **Pipe Monitoring** on the Monitor Primo Status page.

   The Pipe Monitoring page opens, showing the lists of pipes.

3. Click the **Process Status** link next to the pipe you want to monitor to display the Job Details page.

Viewing a Pipe's History

The Job Monitor page displays the execution history for a pipe.



Job Monitor - History Page

From this page, you can display additional information by performing the following actions:

- View error information by clicking an **Errors** button next to a job in the list.
- View job details by clicking a link in the Name column.

To view the history for a job:

1. On the Back Office's home page, click **Monitor Primo Status**.

   The Monitor Primo Status page opens.

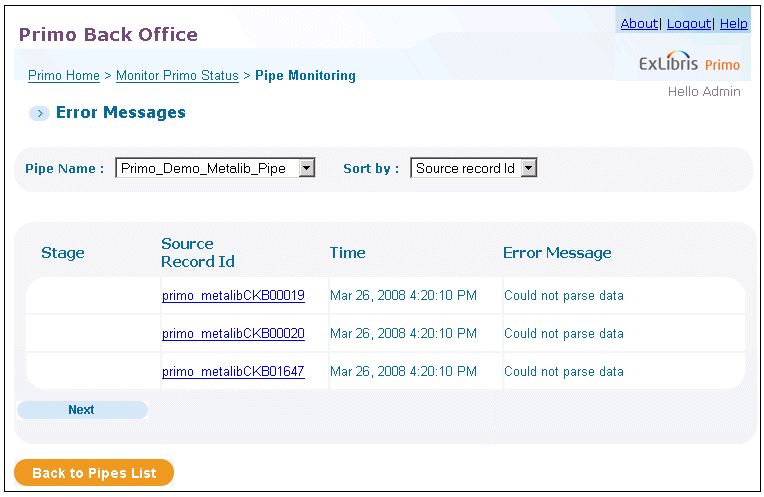
2. Click **Pipe Monitoring**

   The Job Monitor page displays the list of jobs.

3. Click **History** next to the job that you want to view.

Viewing a Pipe's Errors

The Error Messages page allows you to view more information on the specific records that contained errors during the harvesting and NEP stages of the pipe's execution.



Error Messages Page

To view the errors:

1. On the Back Office's home page, click **Monitor Primo Status**.

The Monitor Primo Status page opens.

2. Click **Pipe Monitoring**.

   The Pipe Monitoring page opens, showing the list of pipes.

3. Click **Errors** next to the pipe whose errors you want to view.

   The Errors page opens, showing the error details for the specified pipe.

4. Click the link in the Source Record Id column to view the source record.

   The errors that occur most frequently are listed in the following table:

Errors While Running the Pipes

Error	How to Solve the Problem
TEMP table space is full in oracle	Talk to your DBA about increasing the TEMP table space.
TS_P_DAT table space is full	The table space used for storing Source Records and PNX is full. Talk to your DBA about increasing the TS_P_DAT table space.
The Oracle user lacks privileges (this is important during the initial dedup stage)	Talk to your DBA to give **create any directory** privileges to the `primo_library` Oracle role.
No physical disk space left on the production directory partition	File system for storing bulk zip files is full. Talk to your System Administrator about increasing the available disk space.
Input data is not in a valid XML format	The source data is not valid XML. Check with the owner of the source system.

Input records are missing mandatory fields	The source data is missing mandatory fields: **sourcerecordid**, **sourceid**, **recordid**, **type**, **title**, and **delcategory**. For example:
	`Invalid content was found starting with element 'creationdate'. One of '{"":title}}' is expected.`
	`The part "[...] One of '{"":title}}' is expected`
	This indicates that the required `display/title` field could not be created for the record. To diagnose this problem, check the source record and the normalization rules.
	In some cases, you may need to check with the owner of the source system.

The source directory is not open for reading by the Primo user	The source directory accessed by Primo by the pipe Harvesting module is not accessible for viewing. Talk to your System Administrator.

Error	How to Solve the Problem
Files in source directory have an earlier modification date than pipe	The harvesting date on the file must be more recent than the date configured for the pipe. Talk to your System Administrator and/or owner of the source system.

5. On the Errors Messages page, click **Back to Pipes List** to return to the Pipe Monitoring page.

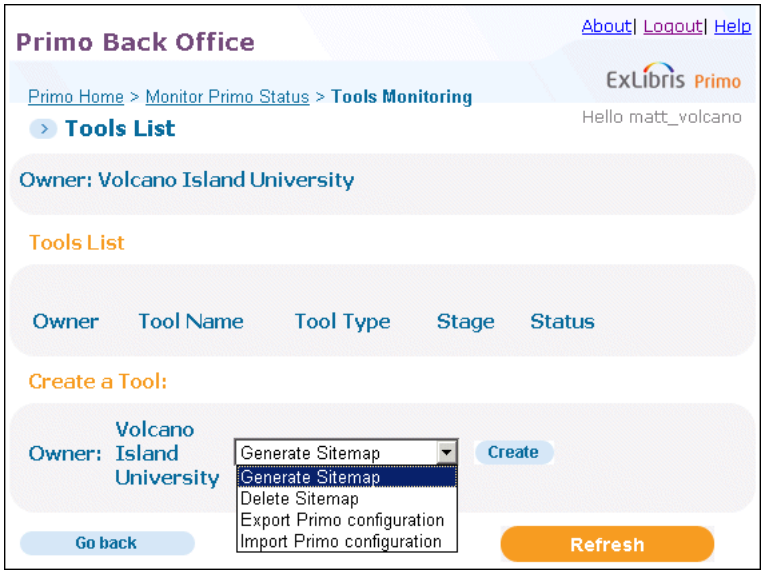
Tools Monitoring

The Tools List page (**Primo Home > Monitor Primo Status > Tools Monitoring**) lists all of the tools that you have created and displays the status for each tool job. You can filter the tools by institution using the **Owner** drop-down list. For institution-level staff users, your institution is selected for you.

Note

For information on how to create tools, see Primo Tools.

Although you can monitor all tool jobs for your institution, you are permitted to create and execute the following tools only: Generate Sitemap, Delete Sitemap, Export Primo configuration, and Import Primo configuration.



Tools List Page

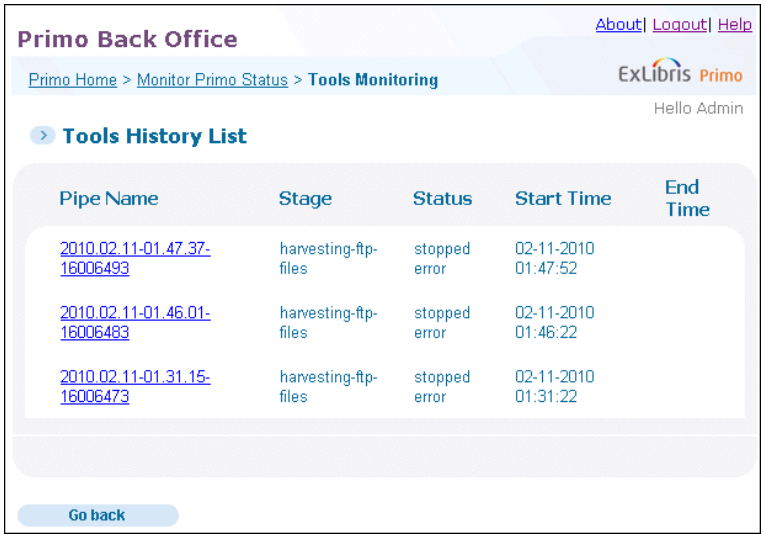
From the Tools List page, you can perform the following operations on each tool:

- **Execute the tool** – Click the **Execute** button to run the tool. After you have executed the tool, you can monitor its progress on the Tools List page.
- **Edit the tool** – Click the **Edit** button to open the configuration page for the selected tool. For more information on each type of tool, see Primo Tools.
- **View the log file** – Click the **History** button to view the log file. For more information, see Tools History List.

The **Create a Tool** section allows you to create additional tools, which are added to the Tools List page. For information on adding tools, see Primo Tools.

Tools History List

The Tools History List page displays status information for each tool that you have executed.



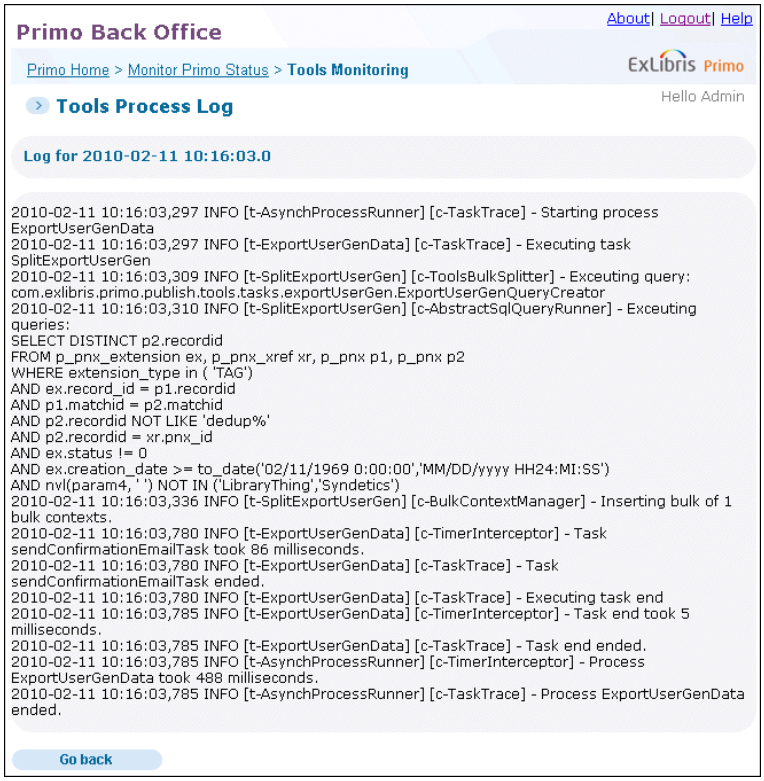
Tools History List Page

For each tool, the following information displays:

- **Pipe Name** – This column displays the name of the tool's process. Click this link to display the tool's log. For more information, see Tools Process Log.
- **Stage** – This column displays the execution stage of the tool.
- **Status** – This column displays the overall status of the tool.
- **Start/End Time** – These columns display the start and end times of the tool's execution.

Tools Process Log

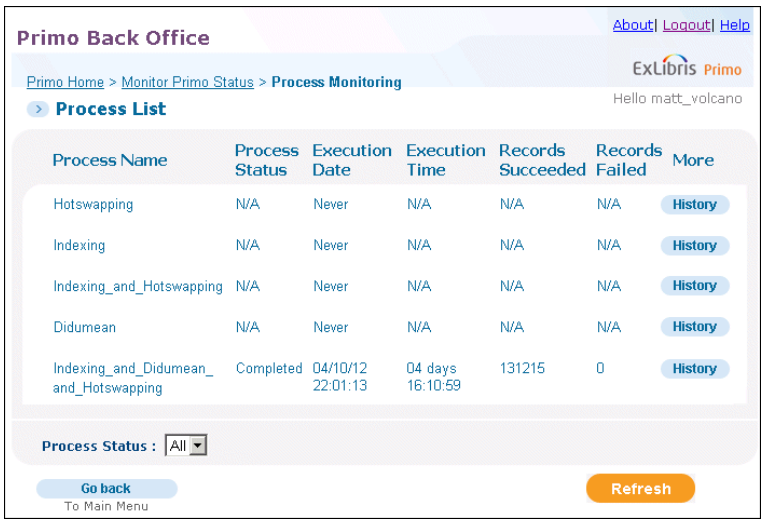
The Tools Process Log page displays the log file for the execution of the tool.



Tools Process Log Page

Process Monitoring

The Process List page allows you to monitor the Primo processes used by your system. From this page, you can view the status of each process, the execution date and time, and the number of succeeded or failed records.



Process List Page

In addition, you can perform the following operations on each process:

- **View the process history** – Click the **History** button to view the log for the process.
- **Execute the process** – Click the **Execute** button to run the process. After you have executed the process, you can monitor its progress on the Process List page (on-premises installations only).

- **Clean up the process** – Click the **Clean-up** button to delete the history of the process and any jobs waiting for execution in the queue (on-premises installations only).

For instructions on creating a new process, see Scheduling Tasks.

To monitor the system's processes:

1. On the Back Office's home page, select **Monitor Primo Status**.

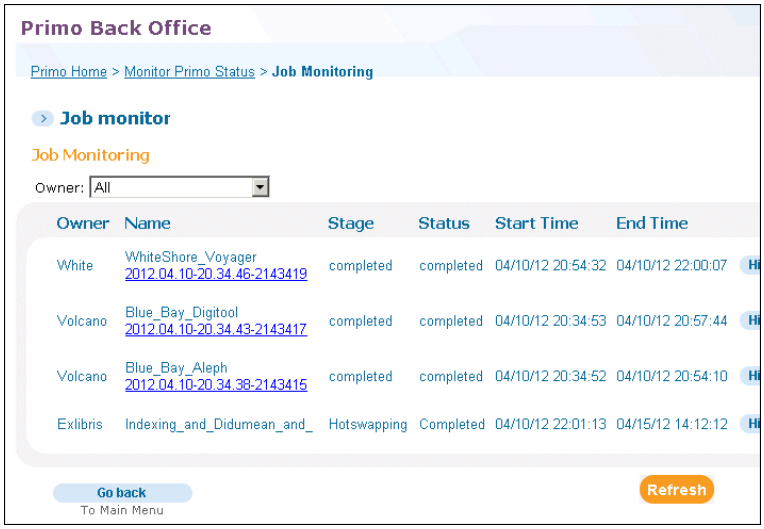
   The Monitor Primo Status opens.

2. Click **Process Monitoring**.

   The Process Monitoring page displays the list of processes. For details on ongoing indexing, see Ongoing Indexing.

Job Monitoring

You can monitor various jobs (such as pipe and indexing jobs) that were executed on your system via the Job Monitor page (**Primo Home > Monitor Primo Status > Job Monitoring**). This page displays the following information: job status, execution date and time, and last stage executed.



Job Monitor Page

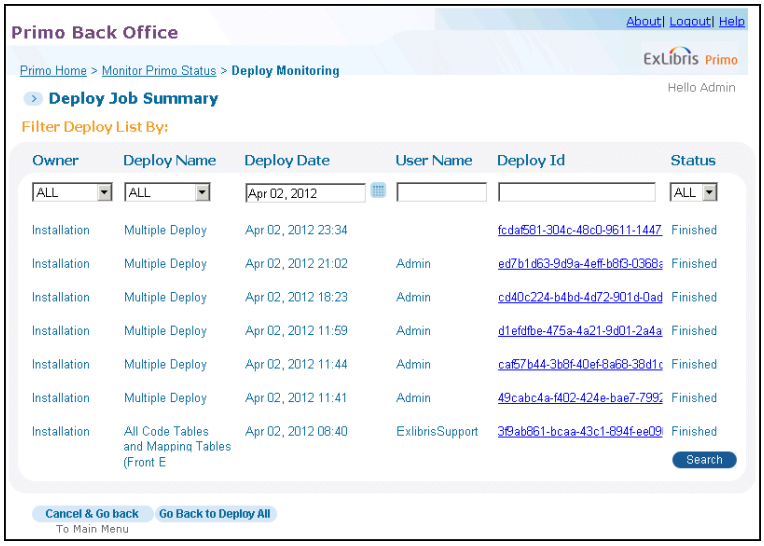
In addition, this page allows you perform the following actions:

- View history information by clicking the **History** button next to the relevant job.
- View error information by clicking the **Error** button next to the relevant job.
- View detailed job information by clicking the link in the **Name** column.

For details on ongoing indexing, see Ongoing Indexing.

Deploy Monitoring

The Deploy Job Summary page (**Primo Home > Monitor Primo Status > Deploy Monitoring**) allows you to filter and display the deploy jobs that have been run on a specified day. By default, this page lists the deploy jobs for the current day, starting with most recent deploy job.



Filter Deploy List Page

On this page, staff users can perform the following actions:

- Click the links in the **Deploy ID** column to display the log for the corresponding deploy job.
- Click **Go Back to Deploy All** to perform a new deploy on the Deploy All page.

To display a deploy log:

1. On the Deploy Job Summary page (see Filter Deploy List Page), use the information in the following table to filter the deploy jobs for a specified day.

   For installation-level staff users, select the installation name or a specific institution from the **Owner** drop-down list. The valid values are **Installation** (if using the default name) or a specific institution.
   For institution-level staff users, the **Owner** field is set to your institution.

Deploy Job Summary Details

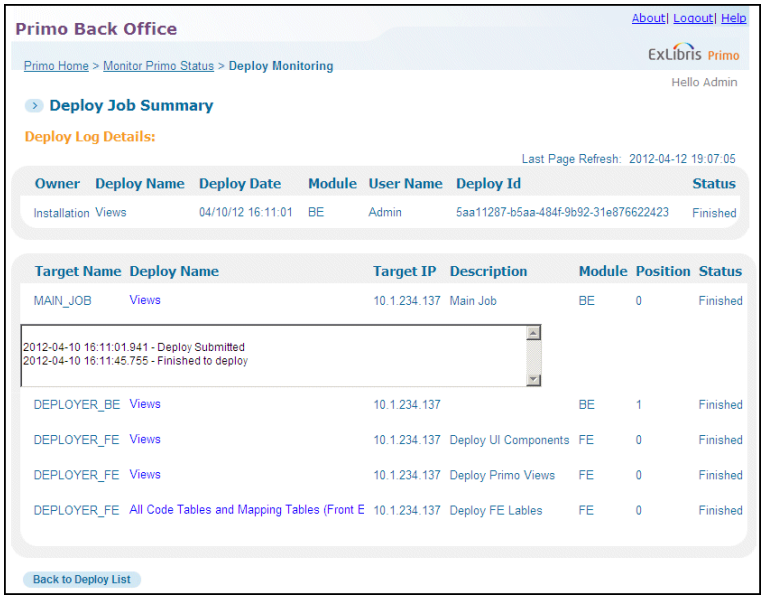
Field	Description
Deploy Name	Indicates the type of deploy the system has run. You can click this link to display the log. If the job is still running or has failed, the system automatically displays the log.
Deploy Date	The date on which the deploy job was executed. The system displays the jobs for the current day by default.
User Name	The user name of the staff user that executed the deploy job.

Field	Description
Deploy ID	The deploy ID process. You can click this link to open the Deploy Log Details page for the corresponding deploy job.
Status	The status of the deploy job. The following statuses are possible: ◦ **Failed** – The deploy job has failed. Refer to the Deploy Log Details for more information. For example, a deploy will fail if the target servers are down. ◦ **Finished** – The deploy job has finished without errors. ◦ **Running** – The job is still running. ◦ **Waiting** – The job is waiting in the queue to be executed.

2. Click **Search** to filter the jobs as specified.
3. Click a link in the Deploy ID column to display the log for the corresponding deploy job. For more information, see Deploy Log Details Page.

Deploy Log Details Page

The Deploy Log Details page allows staff users to view details for each stage of the deploy process.



Deploy Log Details Page

Each stage includes the following information:

- **Target Name** – The name of the stage in the deploy process, which includes the following stages:
  - **MAIN_JOB** – The first stage in the deploy process
  - **DEPLOYER_BE** – Deployment to the Back Office server.

- **DEPLOYER_FE** – Deployment to the Front End server.

Note

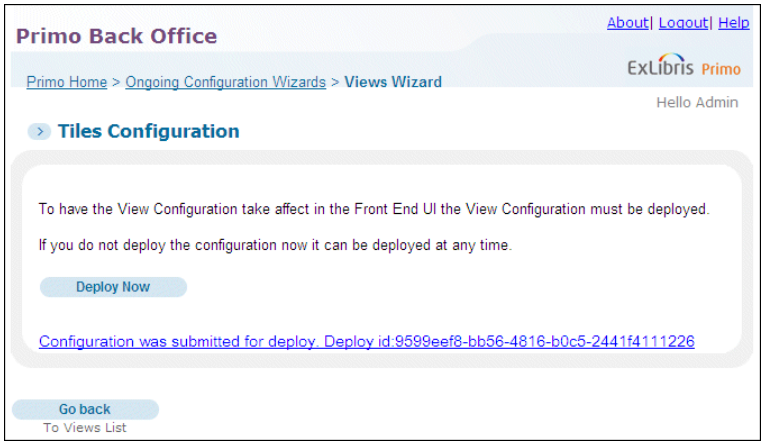
You may see multiple entries for DEPLOYER_BE and DEPLOYER_FE depending on the number servers and the types of configurations that were selected for the deploy job.

- **Deploy name** – The type of configuration that the system is deploying. You can click the Deploy name link to display the log. The system automatically displays the log if the stage is still running or has failed.
- **Target IP** – The IP to which the configuration has been deployed.
- **Description** – The description of the stage.
- **Module** – The module indicates whether the stage took place in Back Office (BE), Front End (FE), or Search Engine (SE).
- **Position** – The position of the deploy stage in the process queue
- **Status** – The same statuses as for the deploy as a whole are possible

The system automatically refreshes this page so that you can monitor each stage in real time. You can stop the automatic refresh by clicking the **Stop Refresh** button.

Wizard-Level Deploys

When deploys are executed on a page other than the Deploy All page (such as the Views wizard), the system will display a message containing a process ID and a link that can be clicked to view the log for the job.



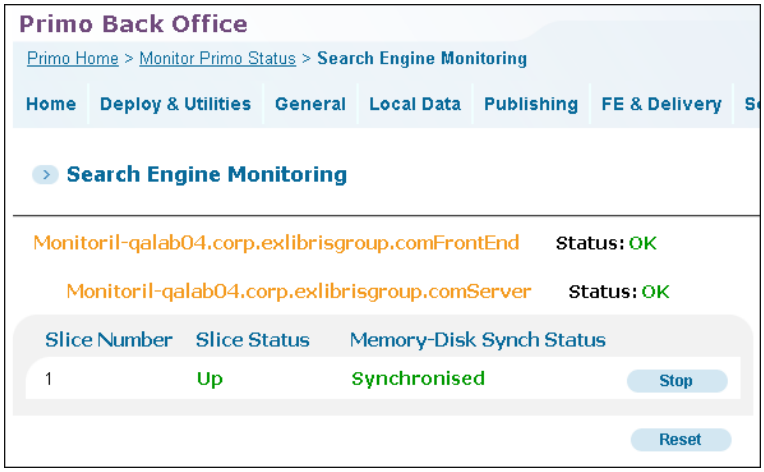
Wizard-Level Deploy

Search Engine Monitoring

The Search Engine Monitoring page allows you to monitor the slices within the Primo search engine to ensure that the search engine is functioning properly.

Note

You can view the status for the SEs, but Ex Libris will monitor and maintain them for cloud installations.



Search Engine Monitoring Page

On this page, you can view the groups of server slices and the statuses of the groups and their slices. Each group of slices is managed by an agent representing a specific computer's search engine.

Search Engine Monitoring Description describes the fields on the Search Servers Monitoring page.

Search Engine Monitoring Description

Field	Description
Search Engine Name	The name of the agent that manages the group of slices. Each agent represents a search engine server. In this example, the search server name is `Monitor il-primo03.corp.exlibrisgroup.comServer`.
Status	The agent's status.
Slice Number	The slice's Id number. Each slice has a unique slice number which is used throughout the system.
Slice Status (on-premises installations only)	Indicates the status of each slice. The status is Up when the slice is available for use and the status is **Down** when the slice is unavailable for use. When the status is **Down**, the **Stop** button changes to **Start**. If the slice is down, then something in the system is not functioning properly. Check your server log to figure out the problem. For more information on the server log, refer to the *Primo System Administration Guide*.
Memory-Disk Synch Status (on-premises installations only)	Each time an indexing of the records is performed, a new version of indexed records is created. After the new version of records is created but before the new records have been loaded into the memory and swapped with the old indexes, the Memory-Disk Status is Unsynchronized. Once the new versions of indexes are swapped with the old indexes in the memory, the Memory-Disk Status changes to Synchronized.

The slices are managed by agents that represent the search engine servers. You can manage Primo's search engine slices by performing one or more of the following actions:

- **Reset** – You can use the reset function to reload the server's agents who then load a new search schema. The reset function is generally only used if one of the servers has been modified, and is normally not used during production.
- **Deploy** – You can use the deploy function to enable the agents to re-initialize themselves with their relevant schemas and then pass along the information received from the search schema. The deploy function is performed automatically and therefore is not necessary to use.
- **Silent deploy** – The silent deploy function is the same as the deploy function in that it sends information to each of the agents to re-initialize themselves with their relevant schemas. The silent deploy function differs from the deploy function in that it does not send a command to execute the information received.

To manage Primo's search engine slices:

1. From the Back Office's home page, click **Monitor Primo status**.

   The Monitor Primo Status page opens.

2. Click **Search Engine Monitoring** to display the Search Engine Monitoring page.

3. Next to the slice, click one of the following buttons:

   - **Start** – to make the slice available for use and change the slice's status to **Up**.

     The slice is available for use.

   - **Stop** – to make the slice unavailable for use and change the slice's status to **Down**.

     The slice is no longer available for use.

     Note

     During the regular process flow, the Stop function should never be used. When the Stop function is used, it indicates that a part of the system is not functioning properly and is unavailable for use.

   Optionally, you can perform one of the following actions:

   - Click **Reset** to reload the server's agents who then load a new search schema.

     Note

     The reset function is generally only used if one of the servers has been modified, and is normally not used during production.

     The agents and new search schema are loaded.

   - Click **Deploy** to enable the agents to re-initialize themselves with their relevant schemas and then pass along the information received from the search schema.

     Note

     The deploy function is performed automatically and therefore is not necessary to use.

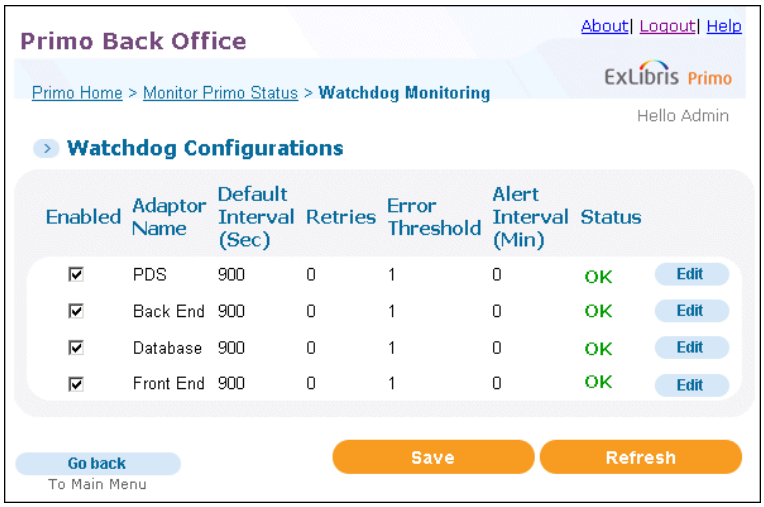
     The agents are re-initialized and the relevant schemas information is executed.

- Click **Silent Deploy** to send information to each of the agents to re-initialize themselves with their relevant schemas.

The agents are configured and are waiting for notification to make the slices available.

Watchdog Monitoring

For on-premises installations the Watchdog Configurations page lists the monitors that are available in Primo.



Watchdog Configurations Page

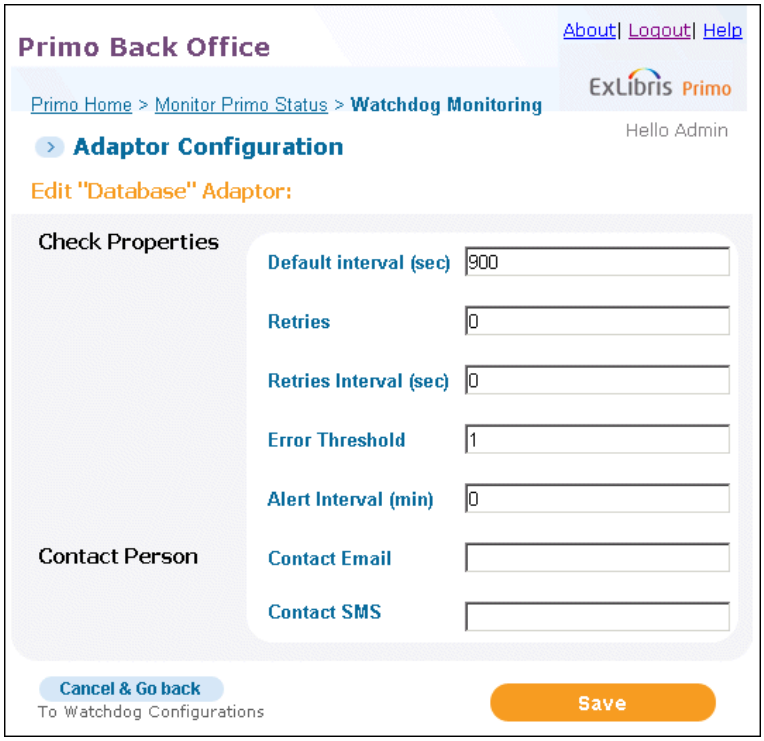
From this page users can enable the Watchdog monitors and edit the configuration settings for each monitor.

To enable a monitor, check the corresponding **Enabled** check box and then click **Save**.

To configure the Watchdog monitors:

1. Click **Edit** to update the configuration settings of a monitor.

   The Edit Watchdog Configuration page opens.



Edit Watchdog Configurations Page

2. Enter the fields as described in Watchdog Configuration Details.

Watchdog Configuration Details

Field	Description
Adaptor Name	The name of the monitor.
Default Interval (sec)	The time interval (in seconds) for availability checks.
Retries	The time interval (in seconds) for retries.
Error Threshold	Notification will be sent only when the error threshold is met.
Alert Interval (min)	The minimum time interval (in minutes) between alerts if positive notification is not sent out.
Contact Email	The contact e-mail address. Multiple email addresses can be separated with a semicolon.
Contact SMS	The SMS contact number.

3. Click **Save** to save your updates.

4. Repeat this procedure for each monitor you would like to configure.

Ongoing Indexing

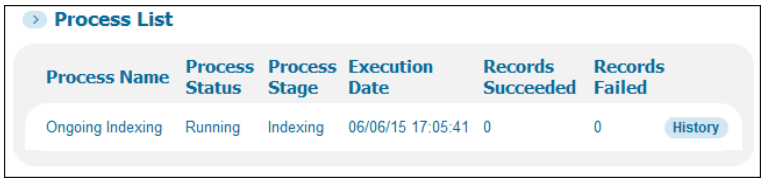
Return to menu

Ongoing indexing is an indexing mechanism that uses a queue to run indexing processes in parallel with other Back Office processes (such as pipes and tools). This allows records added to the queue to be indexed on an ongoing basis until the daily scheduled hotswapping process runs. This means that pipes may be indexed and hotswapped in stages. The status of the pipe in terms of indexing and hotswapping will be available in the Back Office monitoring pages.

Monitoring

For environments in which Ongoing Indexing is active, you can monitor its process from the following monitoring pages in the Back Office:

- The **Primo Home > Monitor Primo Status > Process Monitoring** and **Job Monitoring** pages display a single row for the Ongoing Indexing process.



Process List

Process Name	Process Status	Process Stage	Execution Date	Records Succeeded	Records Failed	
Ongoing Indexing	Running	Indexing	06/06/15 17:05:41	0	0	History

Ongoing Indexing Status Line

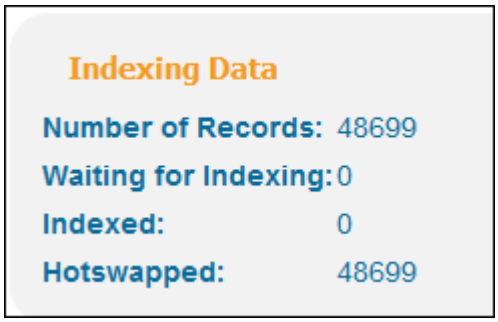
The Ongoing Indexing row includes the following information:

- **Process Name** – Ongoing Indexing
- **Process status** – the following statuses are possible. They are relevant to all the stages except for the Completed stage:
  - **Running**
  - **Stopped** – the indexer has been stopped)
  - **Stopped Error** – Indexer stopped with an error. For example, if the mirror gets corrupted and auto-recovery is set to **false**, the indexer will not start.
  - **Completed** – for the Completed stage
- **Process stage** – The following stages are possible:
  - **Indexing**
  - **Hotswapping**
  - **Re-indexing**
  - **Recovering**
  - **Completed** – This stage is seen on the history monitoring page only.

- **Execution date** – The start time of the active indexing run.
- **Record succeeded** – The number of records that were successfully indexed.
- **Records failed** – The number of records that the system failed to index.
- The **History** option allows you to display a list of the previous runs of the indexing daemon.

- The Indexing Data section on the **Primo Home > Monitor Primo Status > Pipe Monitoring** > **Job Details** page includes the following information:
  - **Number of records** – The number of records that were normalized by the pipe.
  - **Waiting for Indexing** – The number of records remaining in the indexing queue.
  - **Indexed** – The number of records that have been indexed.
  - **Hotswapped** – The number of records that have been hotswapped.

  When the number of hotswapped records equals the number of normalized records, this indicates that all of the records from the pipe have been indexed and are available for discovery.



Indexing Data Section on Job Details Page

Scheduling Tasks

Return to menu

You can schedule the tasks or processes to be performed in your Primo system. The processes should take into account the number of pipes and the number of records that are updated on a regular basis, as well as the server resources. Updated records include records that are added, updated, or deleted from the system.

Institution-level staff users are only permitted to schedule processes that are owned by their institutions. These processes may include pipes and the following tools: Generate Sitemap, Delete Sitemap, Export Primo Configuration, and Import Primo Configurations.

Ex Libris Support recommends the following schedules for ongoing processing:

- Scheduling the ILS availability pipe to run several times a day – for example, on an hourly basis when circulation is active. To run a job at a regular interval, use **Repeat** frequency, which is described in Schedule Process Details.

  Note

  Indexing and hot swapping is not necessary for this type of pipe.

- Scheduling the regular ILS pipe and any additional pipes to run once a day. Although the running of pipes generally has little or no impact on performance, we recommend not scheduling them during peak activity, and if possible, schedule them during the evening.
- Scheduling indexing and hotswapping as a single process to be run during or following the pipes. (Do this by selecting **Indexing_and_Hotswapping** in the **Process Status** drop-down list on the Schedule List page (see Schedule List Page).

  Although indexing and hotswapping generally have little or no impact on performance, we recommend not scheduling during peak activity if possible.

- Scheduling **Didumean** indexing every two weeks. If you add a new data source or a new set of records (which may include many new words), you can run this process as needed.

Note

Our recommendations for scheduling of ongoing processes are guidelines that may need to be modified to suit your particular needs. Contact Primo Support if you have any questions.

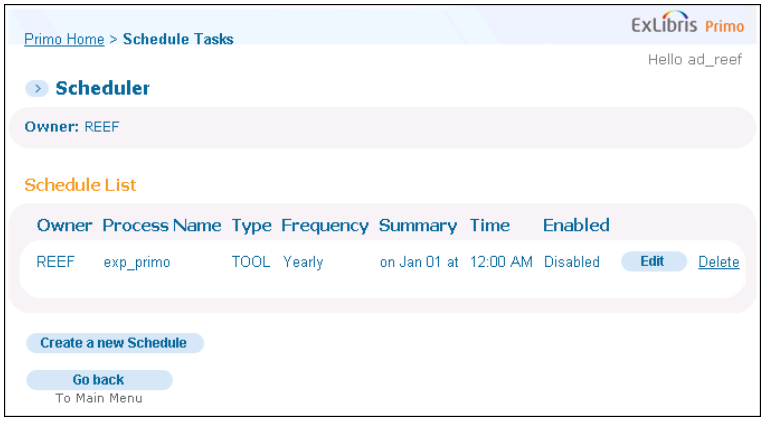
The following processes provide additional maintenance options:

- **Force_Hotswapping** – Unlike the other hotswapping processes, this process forces hotswapping even when there are no changes to the indexes.
- **Rebalancing** – Equally splits the total number of indexed records between all search engine slices. Balancing is performed during regular and ongoing indexing, but this is useful when adding a new slice to ensure that all slices are equally balanced. Previously, full re-indexing was needed to balance all slices.

To schedule a new task:

1. On the Back Office home page, select **Schedule Tasks**.

   The Schedule List page opens.



Schedule List Page

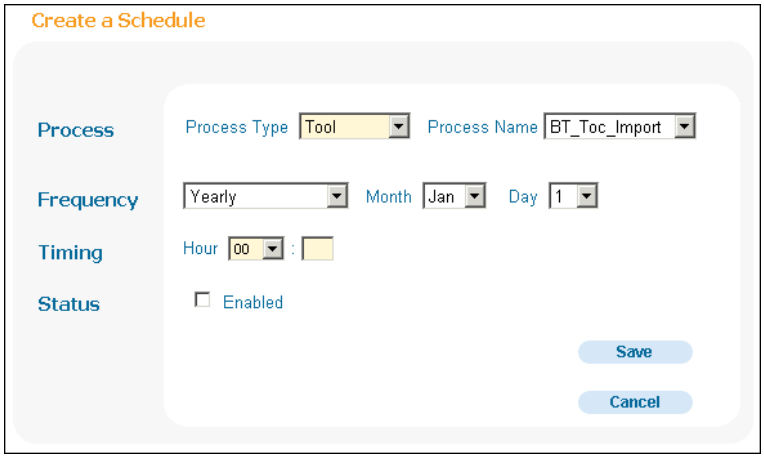
Note

The list may be filtered by the owner of the process.

---

2. Click **Create a new Schedule** to schedule a new task.

   The Create a Schedule section appears on the page.



Create a Schedule Section

3. In the Create a Schedule section, edit the fields according to Schedule Process Details.

Schedule Process Details

Fields	Description
Process Section:	
Process Type	The type of process being scheduled: **Tool**, **Pipe** or **Processes**.

Fields	Description
	Note Institution-level staff users can only schedule pipe and tool processes.
Process Name	The name of the process, tool, or pipe being scheduled. Generally, the following processes need to be scheduled: ◦ Publishing pipes (for ILS there may be both a regular pipe and an availability pipe). ◦ Indexing ◦ Hotswapping of slices in memory so that the newly indexed records are available to the Front End. Generally swapping is done immediately after the indexing. ◦ Did-you-mean indexing **Note** If a pipe job fails, a message is sent to the contact person that is defined in the General Configuration wizard, and scheduled jobs for the pipe are disabled until the problem is resolved. The **Delete harvest files** tool allows you to schedule the removal of harvested files, which are located in the following directory per pipe: `$primo_dev/ng/primo/home/profile/publish/publish/production/pipes` The results of the process are recorded in the Back Office log.
Frequency Options:	
Yearly	This option allows you to run a job once a year by specifying the following fields: ◦ **Month** – The month (Jan - Dec) on which the process is scheduled to be performed. ◦ **Day** – The day of the month (1 - 31) on which the process is scheduled to be performed. ◦ **Hour** – See the description in the Timing section.
Monthly	This option allows you to run a job once a month by specifying the following fields: ◦ **Day** – The day of the month (1 - 31) on which the process is scheduled to be performed. ◦ **Hour** – See the description in the Timing section.
Weekly	This option allows you to run a job once a week by specifying the following fields: ◦ **Day of Week** – The day of the week (Sun, Mon, and so forth) on which the process is scheduled to be performed. ◦ **Hour** – See the description in the Timing section.
Daily	This option allows you to run a job once a day by specifying the following field:

Fields	Description
	◦ **Hour** – See the description in the Timing section.
Once	This option allows you to run a job once by specifying the following fields: ◦ **Date** – The date on which the process is scheduled to be performed. You can click to select a date from a calendar. ◦ **Hour** – See the description in the Timing section.
Repeat	This option allows you to run a job at a regular interval by specifying the following field: ◦ **Date** – The date on which the process is scheduled to be performed. You can click to select a date from a calendar. ◦ **Hour** – See the description in the Timing section. This is useful when running pipes on a regular basis. For example, if you want to run an availability pipe every hour and 30 minutes, enter 01:30 in the Hour field.
Timing Section:	
Hour	Indicates the time of day in hours and minutes (`<hh>:<mm/></hh>`) to run the process. Select the hour from the drop-down list and type the minutes past the hour to run the report. For example, if you specify **01** and **05**, the process will be run at 1:05 AM at the specified frequency—for example, Once, Daily, Weekly, and so forth.
Status Section:	
Enabled	Indicates whether the task is enabled. This allows you to enable and disable tasks quickly without redefining each task. **Note** The system only runs tasks that are enabled.

4. Click **Save**.

   The process appears in the Schedule List.

> **Note**
>
> Scheduled processes are queued and will not run until the previous job has completed.

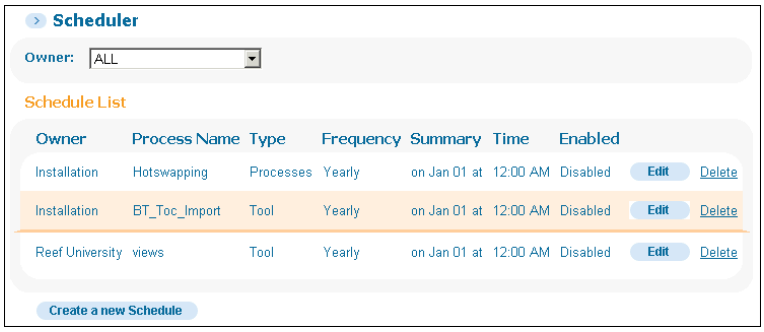
To edit a scheduled task:

1. On the Back Office's home page, select **Schedule Tasks**.

   The Schedule List page opens (see Schedule List Page).

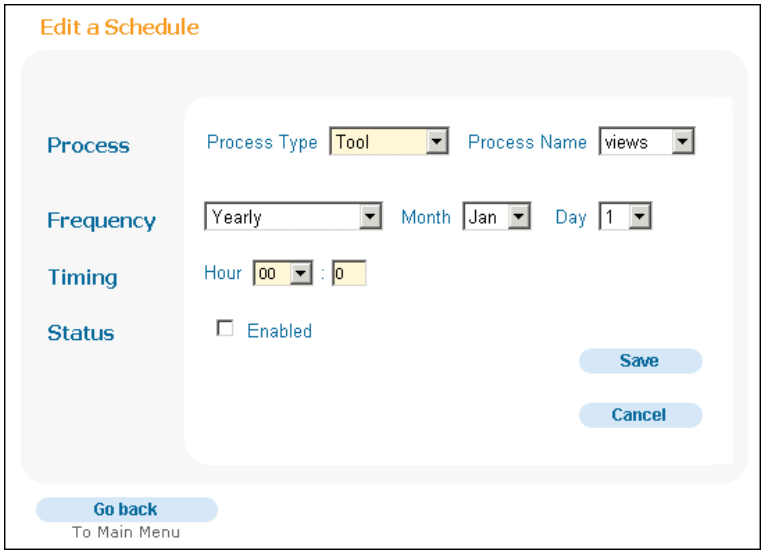
2. Click **Edit** next to the process that you want to edit.

   The Schedule List for Editing page opens. The selected process appears highlighted on the top half of the page (see Schedule List for Editing Page (Part 1 of 2)).



Schedule List for Editing Page (Part 1 of 2)

   The details for the selected process appear on the bottom half of the page (see Schedule List for Editing Page (Part 1 of 2)).



Schedule List for Editing Page (Part 2 of 2)

3. In the Edit a Schedule section, update the fields as needed. For more information on the fields, refer to the descriptions in Schedule Process Details.

4. Click **Save**.

To delete a scheduled task:

1. On the Back Office's home page, select **Schedule Tasks**.

   The Schedule List page opens (see Schedule List Page).

2. Click **Delete** next to the process that you want to delete.

   The process is removed from the schedule.

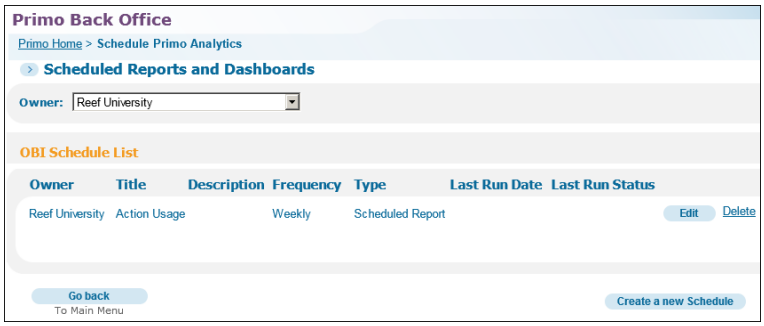
Scheduling Analytics Jobs

Return to menu

The Schedule Reports and Dashboards page (**Primo Home > Schedule Primo Analytics**) allows you to manage your report and dashboard jobs, create new jobs, modify existing jobs, and monitor the status of your jobs (using the **Last Run Date** and **Last Run Status** fields).

For each job, you can specify the following information:

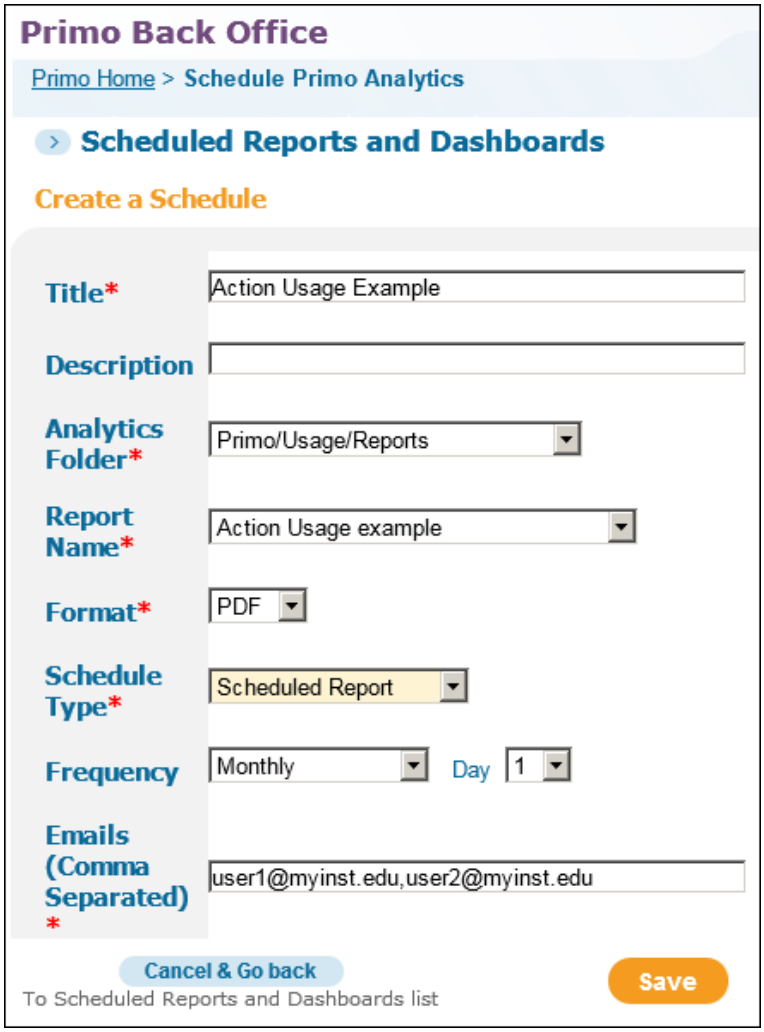
- The report or dashboard located under the Primo and Institutional folders in the Analytics database.
- The scheduling frequency.
- The type of report (dashboard or report).
- The format of the report.



Schedule Reports and Dashboards Page

To create a new Analytics job:

1. On the Scheduled Reports and Dashboards page, click **Create a new Schedule**. The Create a Schedule page opens.



Create a Schedule Page

2. Specify the following fields:
   - **Title** – The report job's name.
   - **Description** – An optional description of the report you are scheduling.
   - **Analytics Folder** – The Primo Analytics folder from which to select a report or dashboard.
   - **Report** – The report or dashboard that you are scheduling.
   - **Format** – The output format of the report or dashboard that you are scheduling. The following options are permitted for reports only: **PDF**, **Excel**, and **Text**. For dashboards, only **PDF** is permitted.
   - **Schedule Type** – Indicates the type of report that you are scheduling. Select either **Scheduled Report** or **Scheduled Dashboard**.
   - **Frequency** – Indicates how the job should be run. When scheduled, the job will run at 2AM on the scheduled day. The following frequencies are supported:
   - **Monthly** – allows you to specify the day of the month.
   - **Weekly** – allows you to specify a day of the week.
   - **Daily**

- **Emails** – A comma-separated list of email addresses to which the report is sent.

The scheduled report or dashboard is sent as an attachment to the email addresses specified in this list. The attachment is limited to 65,000 lines. If the maximum is reached, no report will be sent.

3. Click **Save**.

Using the PNX Viewer

Return to menu

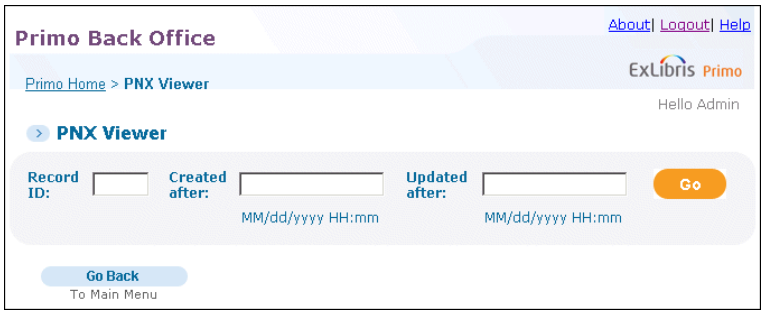
The PNX viewer is a useful debugging tool. It enables you to view converted PNX records from the Primo database. You can view the source records and the converted PNX record side-by-side, and edit the records as needed.

You can search for individual PNX records using the record's ID number and the date of the record creation or update. The PNX viewer displays up to 100 PNX records at a time.

For information on how to view PNX records from the Front End, see Displaying PNX Records from Primo Front End.

To view PNX records:
You have successfully managed your PNX records.

1. On the Back Office's home page, select **PNX Viewer**.
   The PNX Viewer - List page opens.



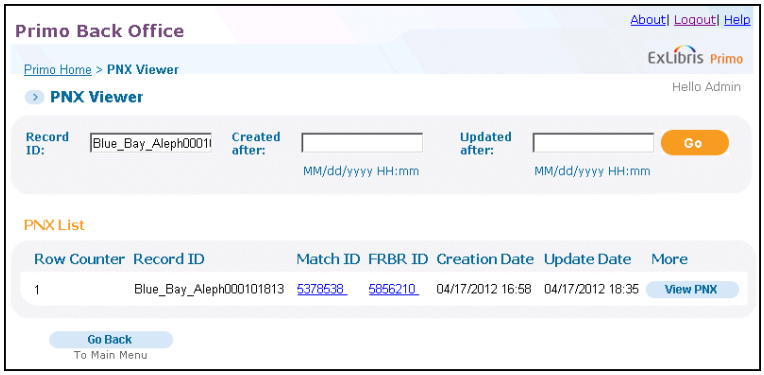
PNX Viewer Page

2. Enter one or more of the following fields:
   - The Record ID of the PNX record for which you are searching, in the Record ID field.

     Note

     You can use the asterisk as a wildcard in the Record ID field to display all records with a specific prefix. For example, if you enter **primo_aleph00*,** the following records are returned: `primo_aleph005743`, `primo_aleph001276`, and `primo_aleph008925`.

   - A date from which the PNX Viewer should display records in the **Created after** field.
   - A date from which the PNX Viewer should display records in the **Updated after** field.
3. Click **Go** to search for the PNX record.
   The PNX Viewer - List page opens, displaying all the PNX records that match your search.



PNX Viewer - List Page

4. Click **View PNX** next to the PNX record you want to view.
   The PNX Viewer - Fields page opens.

PNX Viewer - Fields Page

The following table describes the PNX Viewer page.

PNX Viewer - Fields Page Details

Field name	Description
Section	The PNX section to which the record belongs.
Field	The name of the PNX field.
Value	The value of the PNX field.

5. After viewing the PNX fields, you can:
   - Click **Compare to Source Record** to view the Source record and the converted PNX record side-by-side.
   - Click the Match ID link to view the PNX records grouped together during Dedup. These records all have the same Match ID number.

- Click the **FRBR ID** link to view the PNX records grouped together during FRBRization. These records all have the same FRBR ID number.

The following fields provide additional information regarding the PNX record.

- SE Control ID – For more information, see SECONTROL field in the P_PNX table.
- Persistence Control ID – For more information, see PERSISTCONTROL field in the P_PNX table.

Displaying PNX Records from Primo Front End

Return to menu

Displaying a PNX Record from the UI

While performing searches in the Front End UI, you can view a PNX record from the record's Full Display page.

To display the PNX record from the record's full display:

1. Run a search on the FE.
2. Display the Full Results for an item.
3. Add the following parameter to the end of the search URL and then submit the modified URL:

   ```
   &showPnx=true
   ```

   Note

   It may be useful to paste the updated URL in another window so that you can view both the Full Results page and the PNX record.

Using the REST API to Display a PNX Record

You can also use the showPnx REST API to display the PNX record.

```
<Primo_domain>/primo_library/libweb/webservices/rest/primo-explore/v1/pnxs/
xml/<context>/<record_ID>/?showPnx=true&inst=<Primo_institution_code>
```

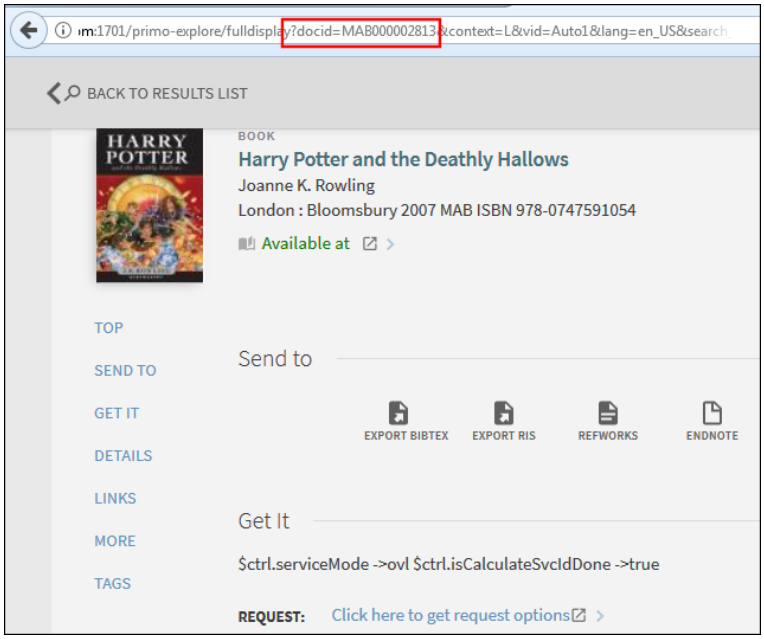
- Primo_domain – Specify the DNS for Primo's UI.
- context – Specify the record's context: **L** (local scope), **PC** (Primo Central), or **ALL** (all scopes).
- record_ID – Specify the record's ID.
- Primo_institution_code – Specify the code for your Primo institution.

Example:

```
http://myprimoinst.com:1701/primo_library/libweb/webservices/rest/primo-explore/v1/pnxs/
xml/L/MAB000002813?showPnx=true&inst=VOLCANO
```

To to use the REST API to display PNX record:

1. Determine the record ID for the record that you want to display. This can be found by inspecting the URL on the record's full display page.



Locate Record ID in Record's URL

2. Open a new tab or window in the browser and enter the showPnx API call.

Primo Tools

This section includes:

Creating Primo Tools

Return to menu

In addition to monitoring and executing Primo tools, Create a Tool section on the Tools List page (**Primo Home > Monitor Primo Status > Tools Monitoring**) allows you to create jobs for the following tools and execute them as needed.

- **Generate Sitemap** – Creates a site map index file to open links in Primo to external search engines. For more information, see The Generate Sitemap Tool.
- **Delete Sitemap** – Deletes site map indexing information. For more information, see The Delete Sitemap Tool.
- **Export Primo Configuration** – Exports Primo configuration data. For more information, see The Export Primo Configuration Tool.
- **Import Primo Configuration** – Imports previously exported Primo Configuration data. For more information, see The Import Primo Configuration Tool.

The following additional tools are available for on-premises installations:

Primo Tools

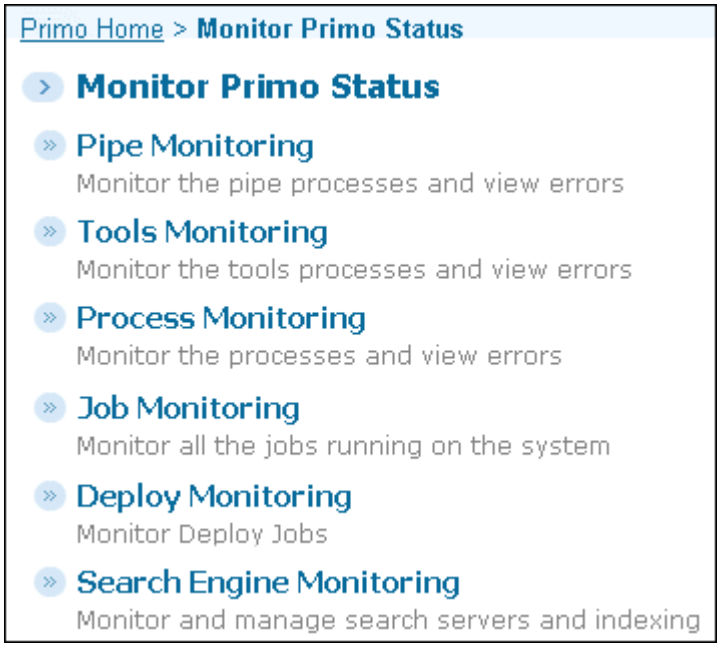
Tool	Description
Create XREF[1]	Builds the enrichment indexing keys for existing PNX records per data source. For more information, see The Create XREF Tool
Import PNX Extensions*	Loads enrichment data to enhance Primo records. For more information, see The Import PNX Extensions Tool
Export User Generated Data*	Exports user-generated data to an XML file. For more information, see The Export User Generated Data Tool
Delete PNX Extensions*	Removes enrichment data from Primo. For more information, see The Delete PNX Extensions Tool
PNX Extensions Loader*	Adds PNX extensions to existing PNX records. For more information, see The PNX Extensions Loader Tool

[1]Requires installation-level permissions to create and execute this tool.

To add a tool to the list:

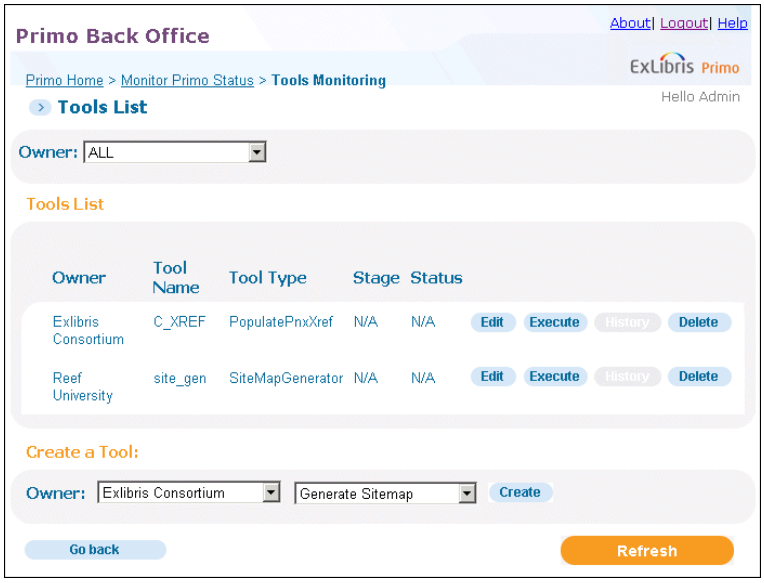
1. Click **Monitor Primo Status** on the Back Office's home page.

   The Monitor Primo Status page opens.



Monitor Primo Status Page

2. Click **Tools Monitoring** to open the Tools List page.



Tools List Page

If you are an installation-level staff user, select the owner of the tool in the **Owner** drop-down list. The valid values are **Installation** (if using the default name) or a specific institution.
For institution-level staff users, this field is set to your institution.

3. Select a type of tool in the **Create a Tool** drop-down list.

4. Click **Create** to configure the specific tool. For specific information on each tool, refer to the following sections.

Note

For information on monitoring tools, see Tools Monitoring.

Executing Primo Tools

Return to menu

To add a tool to the list:

1. Click **Monitor Primo Status** on the Back Office's home page.

   The Monitor Primo Status page opens (see Monitor Primo Status Page).

2. Click **Tools Monitoring**.

   The Tools List page opens.

3. Select a type of tool in the **Create a Tool** drop-down list. These tools are described in the following sections.

4. Click **Create** to configure the specific tool. For specific information on each tool, refer to the following sections.

Note

For information on monitoring tools, see Tools Monitoring.

The Create XREF Tool

Return to menu

To enable the import of enrich-indexing content (such as the tables of contents, tags, and reviews) into Primo, the Create XREF tool builds the P_PNX_XREF table which maps PNX record IDs to one or more keys (such as `ISBN` and `ISSN`). For more information on importing enrichment content, refer to The Import PNX Extensions Tool.

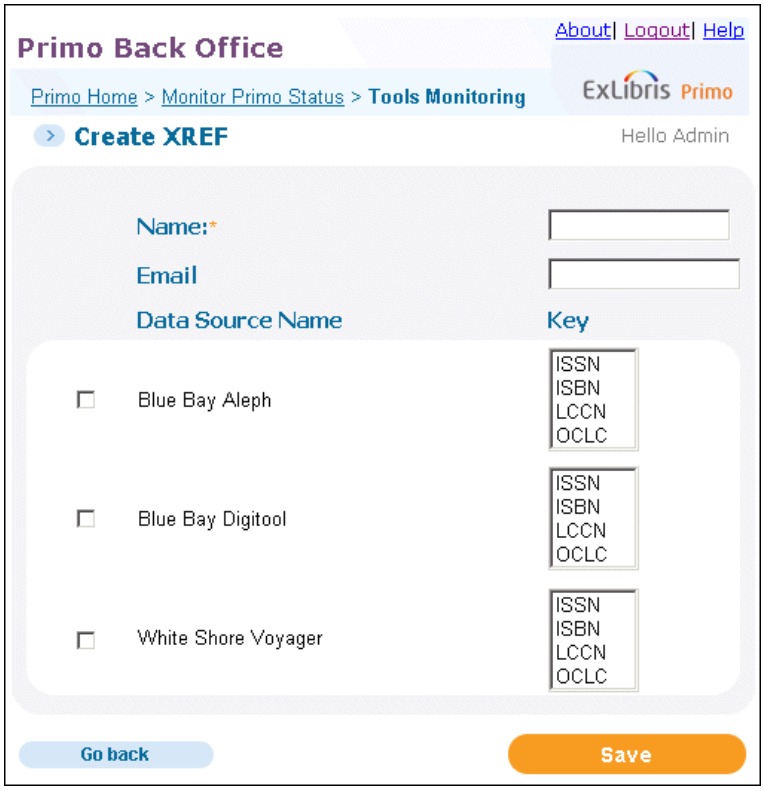
Note

- You must be an installation-level staff user to create and execute this tool.
- The P_PNX_XREF table can be updated by defining the cross-reference keys to the data source. In this case, the keys will be created when pipes are run. This is intended to create keys for new and updated records. For more information, see Configuring Data Sources.

To create the P_PNX_XREF table:

1. On the Tools Monitoring page, select **Create XREF** in the **Create a Tool** drop-down list.

   The Create XREF page opens.



Create XREF Page

2. Enter the fields as described in Create XREF Details.

Create XREF Details

Field name	Description
Name	This required field identifies the tool job, which you can execute and monitor in the Tool Monitoring list.
Data Source Name	The data sources from which to build the table. To include one or more data sources in the build, check the corresponding check boxes.
Key	The keys (**ISBN**, **ISSN**, **LCCN**, and **OCLC**) to which the PNX records are mapped. To include a key, select the item from the drop-down list. To include multiple keys or remove a key, select a key while pressing ctrl. **Note** The key selections for a data source are saved each time this tool is executed for the data source.
Email	The e-mail address to which the completion status of the build is sent.

3. Execute the tool when needed. For information on monitoring tools, see Tools Monitoring.

The Import PNX Extensions Tool

Return to menu

The Import PNX Extensions tool allows users to load enrichment content (such as tables of contents, abstracts, tags, and reviews) to enhance Primo records. This program has been developed as an API plug-in to enable you to add a wide variety of enrich-indexing data from multiple sources by writing your own import programs.

Primo provides import functionality for the following sources:

- Syndetics (Table of Contents, Summaries (abstracts), and Fiction Profiles)
- LibraryThing (Tags and Reviews)
- Baker and Taylor (Table of Contents)

Note

- You must be an installation-level staff user to create and execute this tool.
- Because the import tag process may require intensive database activity and time, Primo Technical Support recommends that you run the import on weekends or during off-peak hours.
- The Import PNX Extensions tool is intended for updates from the data source for existing PNX records.
- Do not add enrichment content during the initial load because the system will not update the necessary flag to indicate that the data needs to be indexed (this function is switched off during the initial load to save on time). Following the initial load of the records, you can run the Create XRef and Import PNX Extensions tools.

Importing PNX Extensions

The import tool performs the following operations:

- Harvests enrichment content (using FTP, SFTP, or copy) from source.
- Converts the source format to a generic Primo XML format.
- Loads to the ENRICHMENTS table, which stores the data that can be used potentially to enrich the Primo indexes.
- Finds matching PNX records using the P_PNX_XREF table.
- Uses the PNX_EXTENSIONS_MAPPINGS mapping table to add enrich-indexing data to the P_PNX_EXTENSION table for matched PNX records, and flags the PNX for indexing.

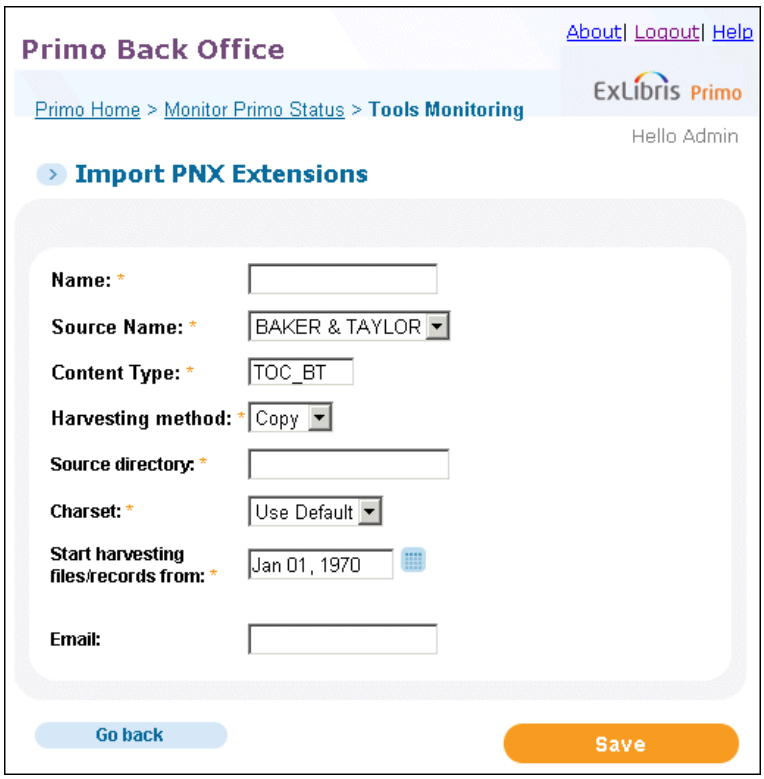
To add enrichment content for new records that are processed by ongoing pipes, an additional stage has been added to the pipe. This additional stage is activated for any data sources for which the creation of the P_PNX_XREF table has been enabled. This process works as follows:

- Once the records have been loaded and the dedup and FRBR processes have completed, cross-references are created (if relevant) for the records, and the PNX records are checked for matching enrich-indexing content in the ENRICHMENTS table.
- If a match is found, the enrichment content is added to the P_PNX_EXTENSION table, and the PNX is flagged for indexing.

To import enrichment content:

1. On the Tools Monitoring page, select **Import PNX Extensions** in the **Create a Tool** drop-down list.

   The Import PNX Extensions page opens.



Import PNX Extensions Page

2. Enter the fields as described in Import Enrich-Indexing Content Details. Required fields are indicated by an asterisk.

Import Enrich-Indexing Content Details

Field name	Description
Name*	This field identifies the tool job, which you can execute and monitor in the Tool Monitoring list.
Source Name*	Indicates the source of the content. Currently, Primo supports the import of Syndetics and LibraryThing content. **Note** Additional sources and content types can be imported by creating import plug-ins and then adding the new sources to the PNX Extension Sources and PNX_EXTENSIONS_MAPPINGS mapping tables. For more information, see EL Commons - Primo documentation.

Field name	Description
Content Type*	Contains the type of content to add to the PNX Extension table for indexing. The following types of content are supported: ◦ For Syndetics: ▪ ABSTRACT ▪ FICTION_PROFILE ▪ TOC – Table of Contents (for searching only) ▪ TOC_DISPLAY – Table of Contents (for display and searching). When imported, this option displays a Table of Contents link in the brief display of the search results and also a Table of Contents tab in the Details tab. To modify the labels for each, use the following code tables, respectively: Results Tile and Details Tab. ◦ For LibraryThing: ▪ TAG ▪ REVIEW ◦ For BAKER & TAYLOR: ▪ TOC_BT To include multiple content types or remove a content type, select a content type while pressing the Ctrl key.
Harvesting Method*	The method used to harvest the source information. The following methods can be selected: **FTP**, **Copy**, or **SFTP**. **Note** If **Copy** is selected, the user must have read permission for the directory.
Source Directory*	The location of the import files.
Character Set*	This field indicates the character set of the data. The valid values are **Use Default, UTF-8**, and **MARC-8**. To keep the character set used with the program, select **Use Default**. **Note** If you want to enable additional character sets, use the Character Set code table under the Publishing subsystem.
Start harvesting files/ records from*	Indicates the date of the source file to harvest. Enter a date or click to select a date with the calendar tool. This date is updated with the date of the latest harvested file.

Field name	Description
Server*	The IP of the site (used only for FTP and SFTP harvest methods).
Username*	The user name used to access the FTP/SFTP site.
Password*	The password used to access the FTP/SFTP site.
Email	The e-mail address to which the completion status of the build is sent.
Configure Server Locale	When this field is selected, this page displays the Server Locale field (FTP only).
Server Locale	Select a locale from the drop-down list (FTP only).

3. Execute the tool when needed. For information on monitoring tools, see Tools Monitoring.

The Export User Generated Data Tool

Return to menu

The Export User Generated tool allows staff users who have installation-level permissions to export user-generated content (such as tags, reviews, and ratings) for an entire Primo installation (not a specific Primo institution).

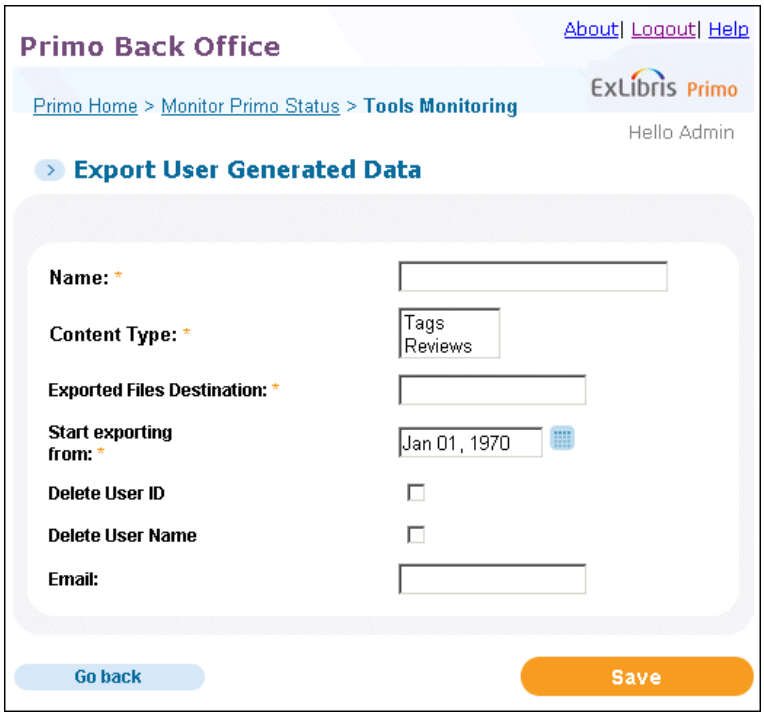
Note

Because this tool exports user data for the entire installation, it is not applicable to multitenant customers. In addition, access to the Back Office server is required to manage the export files created by this tool.

To export user-generated content:

1. On the Tools Monitoring page, select **Export User Generated Data** in the **Create a Tool** drop-down list.

   The Export User Generated Data page opens.



Export User Generated Data Page

2. Enter the fields as described in Export User Generated Data Details. Required fields are indicated by an asterisk.

Export User Generated Data Details

Field name	Description
Name*	This field identifies the tool job, which you can execute and monitor in the Tool Monitoring list.

Field name	Description
Content Type*	Indicates the type of content, such as tags, review, and ratings.
Exported Files Destination*	Specify the full path of the directory on the Back Office server in which to place the exported file, which has the following format: `primo_export_user_gen_<date>-<time>.xml`
Start exporting from*	Indicates the start date of the user-generated data. Only records that begin on this date are included. Enter a date or click to select a date with the calendar tool.
Email	The e-mail address to which the completion status of the export is sent.

3. Execute the tool when needed. For information on monitoring tools, see Tools Monitoring.

Primo Import-Export XML File Format

The export file is an XML file that contains the following structure per PNX record:

- **id** (optional) – For exports, this should be the PNX_ID. For imports, it can be a running number.
- One or more pairs of **key_type**/**key_value**. The key types must be defined in PNX XREF Keys mapping table.
- One or more groups of **data_groups** including the following:
  - **data_type** – the type of data element to import. Currently, the following types are supported:
  - **tags**
  - **reviews**
  - **abstract**
  - fiction
  - **extension –** allows you to specify additional types of PNX extensions. For example, to create the extension LANG, you could specify the following:

```
<extension extension_type="LANG">
  <value>
    <![CDATA[
```

```
      French

    ]]>

  </value>

 </extension>
```

- **data_value** – In the case of a review, this may include a rating.
- **data_userid** – Optionally, a user ID may be added. This should be done only if the user ID might be valid within Primo.
- **data_username** – Optionally, there can be an attribute that indicates whether to display the name (`true`/`false`) or not. This is relevant for the review and rating data types.

The following figure shows an example of an export file:

```
<?xml version="1.0" encoding="utf-8" ?>

<!--

Created with Liquid XML Studio 1.0.8.0 (http://www.liquid-technologies.com)

 -->

<records xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:noNamespaceSchemaLocation="record.xsd">

  <record>

    <keys>

      <key type="issn">0003-391X</key>

    </keys>

    <data_groups>

      <data_group>

        <data_type>TAG</data_type>

        <data_value>history</data_value>

        <data_userid>987654</data_userid>

        <data_username display="true">Tami</data_username>

      </data_group>

    </data_groups>

  </record>

  <record>
```

```
  <keys>
    <key type="LCCN">06032734</key>
  </keys>
  <data_groups>
    <data_group>
      <data_type>REVIEW</data_type>
      <data_value>this book is wonderful...</data_value>
      <data_userid>987654</data_userid>
      <data_username display="true">Tami</data_username>
    </data_group>
    <data_group>
      <data_type>RATING</data_type>
      <data_value>10</data_value>
      <data_userid>987654</data_userid>
      <data_username display="true">Tami</data_username>
    </data_group>
  </data_groups>
</record>
<record>
  <keys>
    <key type="LCCN">06032734</key>
  </keys>
  <data_groups>
    <data_group>
      <data_type>RECOMMENATION</data_type>
      <data_value rank="1" matchtype="isbn">1234567892</data_value>
      <data_value rank="1" matchtype="oclc">BD9899</data_value>
    </data_group>
    <data_group>
```

```
      <data_type>RECOMMENATION</data_type>

      <data_value rank="2" matchtype="isbn">1234567891</data_value>

    </data_group>

   </data_groups>

  </record>

</records>
```

Example Export File

The Delete PNX Extensions Tool

Return to menu

The Delete PNX Extensions tool allows users to remove enrich-indexing data (such as tables of contents and abstracts) from a source (such as Syndetics or LibraryThing).

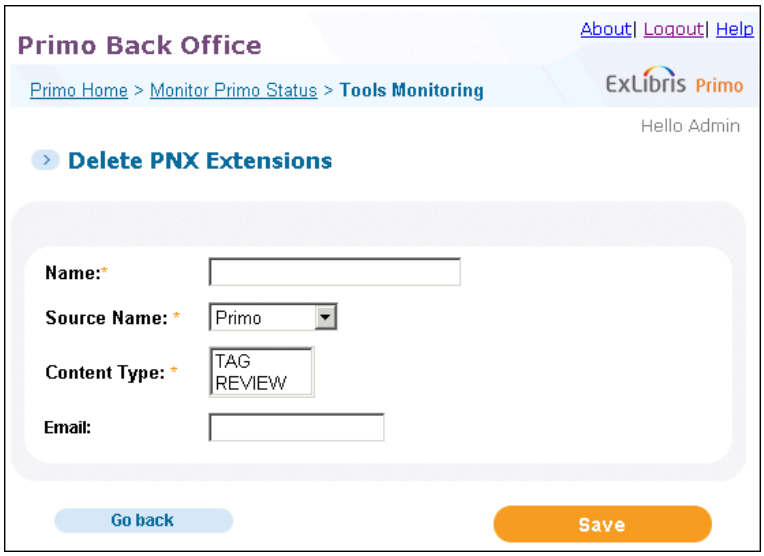
Note

You must be an installation-level staff user to create and execute this tool.

To remove enrichment content:

1. On the Tools Monitoring page, select **Delete PNX Extensions** in the **Create a Tool** drop-down list.

   The Delete PNX Extensions page opens.



Delete PNX Extensions Page

2. Enter a name for the tool, which you can execute and monitor in the Tool Monitoring list.
3. Select a source in the **Source Name** drop-down list.
4. Choose the types of enrichment that you want to remove from the source by selecting items in the **Content Type** field.
5. Specify the e-mail address to which the completion status is sent when this tool completes.
6. Execute the tool when needed. For information on monitoring tools, see Tools Monitoring.

The PNX Extensions Loader Tool

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The PNX Extensions Loader tool allows on-premises customers to add PNX extensions to PNX records that already exist. In order to use this tool, the following conditions must be met:

- You must implement a file splitter program that supports the extensions that you want to add. For more information, see the following page on EL Commons:

  http://exlibrisgroup.org/display/Pri...ns+Loader+Tool

- Because the tool relies on knowing the PNX record ID, you must have the original source record ID of the record to which the extension is to be attached.

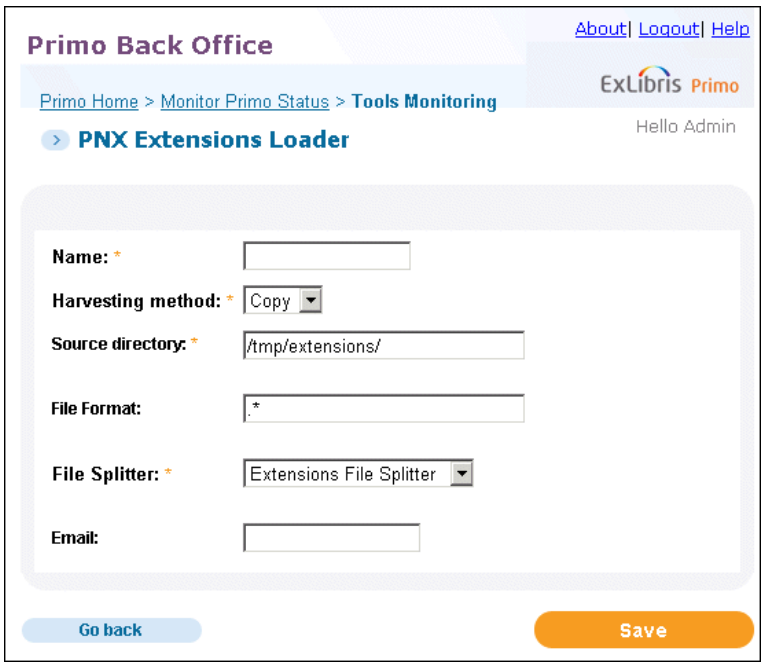
Note

- You must be an installation-level staff user to create and execute this tool.
- This tool will harvest only the files that have been added or modified since the last time the tool was executed.

To load PNX extensions:

1. On the Tools Monitoring page, select **PNX Extensions Loader** in the **Create a Tool** drop-down list.

   The PNX Extensions Loader page opens.



PNX Extensions Loader Page

2. Enter the following fields:
    - **Name** – Enter a name for the tool, which you can execute and monitor in the Tool Monitoring list.
    - **Harvesting method** – Select a harvesting method: FTP, SFTP, or Copy.
    - **Source directory** – Enter the name of the directory that is holding the harvested records.
    - **File format** – Enter a regular expression that describes the format of the files to be harvested. This tool will harvest all files that match the expression.
    - **File Splitter** – Select the file splitter that was implemented to load extensions. For more information on implementing these file splitters, refer to the description of the PNX Extension Loader on EL Commons.
    - **Email** – Enter an e-mail address to which to send a confirmation when the tool completes execution.
3. Click **Save**.
4. Execute the tool when needed. For information on monitoring tools, see Tools Monitoring.

The Generate Sitemap Tool

Return to menu

Because the inner links of Primo records are dynamic (as a result of a search queries), crawling tools that search the Web cannot reach the Primo records to index them. The Primo Sitemap tool externalizes these links for indexing by generating site map files for each Primo view and including one or more of the search scopes linked to the view.

For on-premises customers the following site map files enable search engines to index and search Primo's full display:

- `robots.txt`
- *<view>*`_site_map_index.xml` – *The site map index file, where <view> indicates the name of the view.*
- gz files (such as *<view>*`_primo_sitemap_`*0*`.xml.gz`) – The site map files, where *<view>* is the name of the view and *0* is the number of the sitemap in the index file.

These files are stored in the following directory on the Front End server (where *<v>* is the Primo version and *<c>* is the Primo copy):

```
/exlibris/primo/p<v>_<c>/ng/primo/home/system/tomcat/search/webapps/ROOT
```

The Primo Sitemap tool uses the site map protocol defined at the following URL:
http://www.sitemaps.org/

Note

Because the extract always includes restricted search scopes, sites that use restricted search scopes should take this into account when creating site map files.

The Front End can run on either of the following ports (where *<v>* is the Primo version and *<c>* is the Primo copy):

- Port 170*x* (such as 1703) via Tomcat – The site's root for this configuration is the following directory:

  ```
  /exlibris/primo/p<v>_<c>/ng/primo/home/system/tomcat/search/webapps/ROOT
  ```

- The default port 80 via Apache – The site's root for this configuration is *htdocs*:

  ```
  /exlibris/primo/p<v>_<c>/primoe/apache/htdocs
  ```

  Note

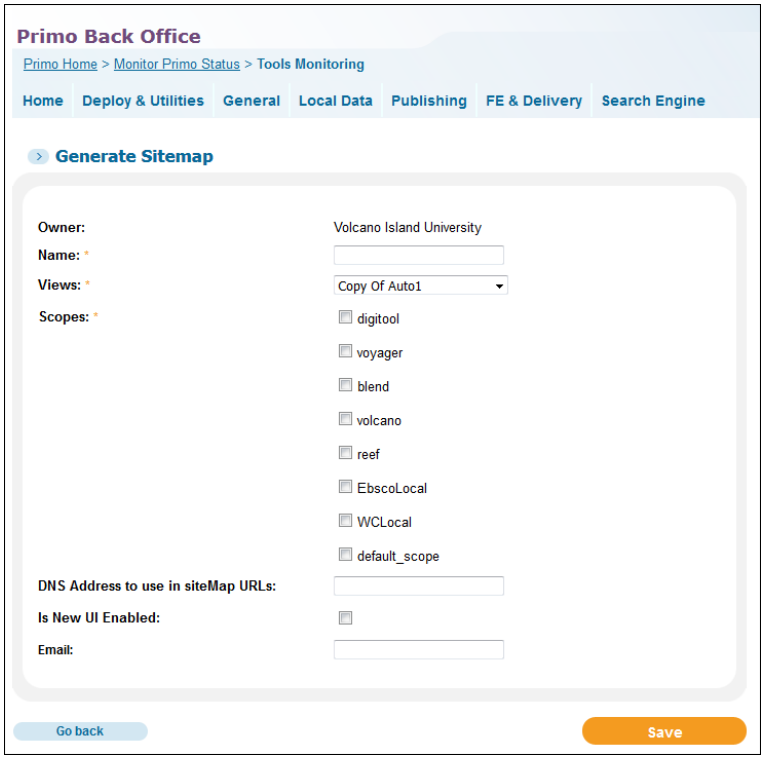
  This configuration requires you to create symbolic links in the `htdocs` directory to the site map files in the `ROOT` directory.

  To set up this configuration, see Redirecting Ports.

To generate a site map:

1. On the Tools Monitoring page, select **Generate Sitemap** in the **Create a Tool** drop-down list.

The Generate Sitemap page opens.



Generate Sitemap Page

2. Enter the following fields on the page:

Generate Sitemap Fields

Field	Description
Name*	The name of the sitemap tool that can be executed and monitored in the Tool Monitoring list.
Views*	The name of the view. Select a view from the drop-down list. **Note** If any scopes are defined for the selected view, the Scopes field displays on the page.
Scopes*	The search scopes for the view. Select the scopes that you want to include in the search.
DNS Address to use in siteMap URLs	If you have defined Front End redirections, you can specify a DNS to replace Primo's base URL in siteMap URLs. For example: `http://sandbox.myinst.library.wgn.edu`
Is New UI Enabled	If selected, the system will use the new UI's format to create deep links.
Email	The e-mail address where the completion message is sent.

3. Click **Save**.
4. Execute the tool when needed. For information on monitoring tools, see Tools Monitoring.
5. If the Primo Back Office runs on default port 80 via Apache, configure the following symbolic links:
   - A link in *htdocs* to `ROOT/robots.txt` (where <*v*> is the Primo version and <*c*> is the Primo copy):

     ```
     ln -s /exlibris/primo/p<v>_<c>/ng/primo/home/system/tomcat/search/webapps/ROOT/
     robots.txt /exlibris/primo/p<v>_<c>/primoe/apache/htdocs/robots.txt
     ```

   - A link in *htdocs* to `ROOT/`<*view*>`_site_map_index.xml` (where <*v*> is the Primo version, <*c*> is the Primo copy, and <*view*> is the name of the view from which the sitemap was generated):

     ```
     ln -s /exlibris/primo/p<v>_<c>/ng/primo/home/system/tomcat/search/webapps/
     ROOT/<view>_site_map_index.xml /exlibris/primo/p<v>_<c>/primoe/apache/
     htdocs/<view>_site_map_index.xml
     ```

6. Configure the Web crawling tools (such as for Google) to use the sitemap files. For more information, see Managing Google Sitemaps.

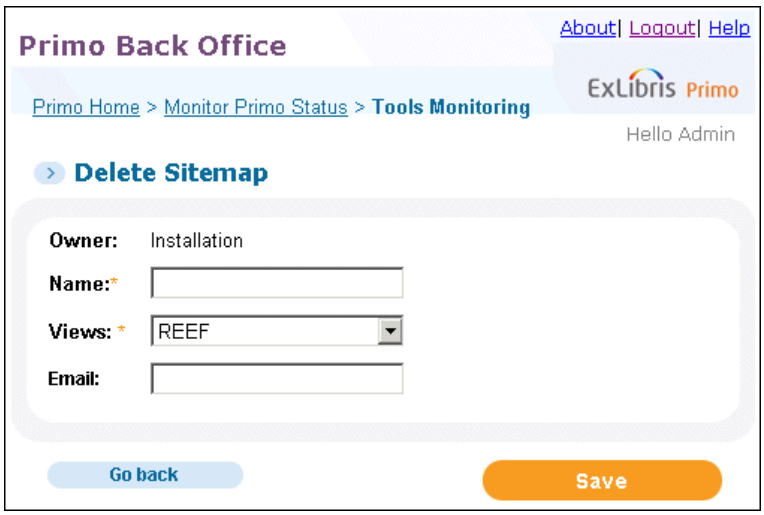
The Delete Sitemap Tool

Return to menu

The Delete Sitemap tool allows you to delete site map files per view.

To delete a sitemap:

1. On the Tools Monitoring page, select **Delete Sitemap** in the **Create a Tool** drop-down list. The Delete Sitemap page opens.



Delete Sitemap Page

2. Enter a name for the tool, which you can execute and monitor in the Tool Monitoring list.
3. Select a view in the Views drop-down list.
4. Specify the e-mail address to which the completion status is sent when this tool completes.
5. Click **Save**.
6. Execute the tool when needed. For information on monitoring tools, see Tools Monitoring.

The Export Primo Configuration Tool

Return to menu

The Export Primo Configuration page (see Exporting a Primo Configuration, below) copies configuration data on the staging server, creates an export package, and places the export package in the following directory on the source and target servers:

```
/exlibris/primo/p4_1/ng/primo/home/profile/publish/exported_files
```

This tool is limited to the SuperAdmin and Admin roles. Installation-level staff users can export all configuration data for all institutions.

What is Exported?

The following data is exported:

- All code and mapping tables
- Search engine configuration
- Institutions
- Scopes and restrictions
- Data sources
- Normalization rules
- Enrichment sets
- Views
- Pipes
- Schedules
- Staff
- Tools (Except for export/import tools)
- Files on server:
  - CSS and locale-specific CSS files in the following directory:

    ```
    .../ng/primo/home/system/tomcat/search/webapps/primo_library#libweb/css
    ```

  - Images files in the following directories:
    - `.../ng/primo/home/system/tomcat/search/webapps/primo_library#libweb/images`
    - `.../ng/primo/home/system/tomcat/search/webapps/primo_library#libweb/locale/<locale>/images</locale>`
  - Help files in the following directories:
    - `.../ng/primo/home/system/tomcat/search/webapps/primo_library#libweb/help/`
    - `.../ng/primo/home/system/tomcat/search/webapps/primo_library#libweb/locale/<locale>/help/</locale>`

- Enrichments files in the following directories:
  - `/home/profile/publish/publish/production/conf/enrichPlugin`
  - `/home/profile/publish/publish/production/conf/plugins/enrichment`
- File splitters in the following directory:

  `/home/profile/publish/publish/production/conf/fileSplitter/lib`
- Data source XSL files in the following directory:

  `/home/profile/publish/publish/production/conf/xsl`
- Dedup algorithm XML files in the following directory:

  `/profile/publish/publish/production/conf`
- RTA Plugin files in the following directory:

  `/home/profile/search/rta`
- Search character normalization files in the following directory:

  `/jaguar/home/profile/analysis/specialCharacters`

Note

The following files on the server are not included:

- Static HTML files
- Additional Search Engine configuration files from the `/analysis` directory (such as `synonyms`).

What is Not Exported?

The following mapping tables (per subsystem) are not exported, because they may differ in the Staging and Production servers:

- Front End:
  - bX Token
  - PC Customers IDs
  - Institution Base URLs
- OPAC via Primo:

  ILS API Configuration

In addition, the export does not include logs and running history.

The Export Package

The export tool creates an export package that includes either the entire exported configuration or the normalization rules sets only. The export package is transferred by the export tool to the source server and target server and stored in the following directory:

```
/exlibris/primo/p4_1/ng/primo/home/profile/publish/exported_files
```

The system uses the following naming conventions for the export type for the export package:

- **ALL**:

  `exp_all.`*<inst_code>*`.`*<inst_name>*`.`*<yyyymmdd_mmss>*`.zip`

  For example:

  ```
  exp_all.VCNO.Volcano University.20120327_070544.zip
  ```

  If the export includes all institutions, the institution code is set to **CUSTOMER** and the institution name is set to **ALL** as follows:

  ```
  exp_all.CUSTOMER.ALL.20120327_070544.zip
  ```

- **NR Sets**:

  `exp_nrset.`*<inst_code>*`.`*<inst_name>*`.`*<yyyymmdd_mmss>*`.zip`

  For example:

  ```
  exp_nrset.VCNO.Volcano University.20120327_070544.zip
  ```

  If the export includes all institutions, the institution code is set to **CUSTOMER** and the institution name is set to **ALL** as follows:

  ```
  exp_nrset.CUSTOMER.ALL.20120327_070544.zip
  ```

Note

For both export types, the institution code, institution name, and normalization rules sets are encoded in the export file name to prevent problems with special characters (such as diacritics). The Primo BO displays the encoded file name during the export and import.

Exporting a Primo Configuration

This tool is limited to the SuperAdmin and Admin roles.

The instructions for exporting are different depending on your deployment level:

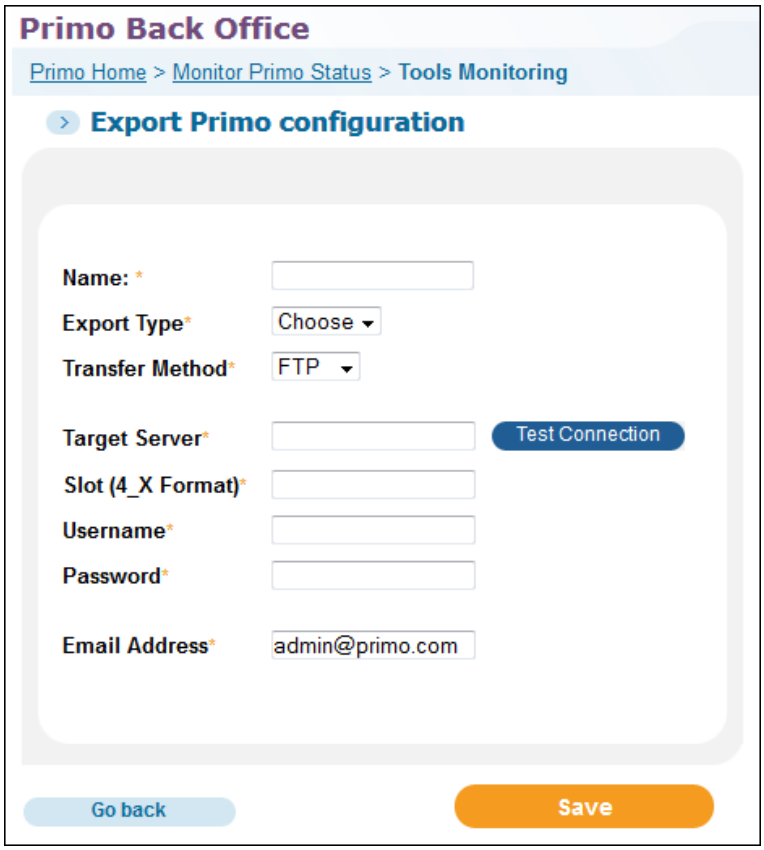
- Local
- Direct or Multi-tenant (without server access)

Exporting a Primo Configuration: Local Customers

To export/import the Primo full configuration (not just the specific institution), follow the instructions in Exporting/Importing the Full Configuration.

To export a Primo configuration:

1. On the Tools Monitoring page (**Primo Home > Monitor Primo Status > Tools Monitoring**), select **Export Primo Configuration** from the **Create a Tool** drop-down list and then click **Create**. The Export Primo Configuration page opens.



Export Primo Configuration Page

2. Enter the following fields:

   - **Name** – Enter a name for the tool, which you can execute and monitor in the Tool Monitoring list.
   - **Export type** – Select the type of configuration you want to export. The valid values are **All** (all data) and **NR Sets** (normalization rules sets and related mapping tables, only).
   - **Institution** – If **Export type** is set to **ALL**, select **All Institutions** or a specific institution. For institution-level staff users, your institution will be selected for you.

     Note

     If the export is done for a specific institution, any installation-level configurations in use are also included. For example, if a pipe uses normalization rules that belong to the installation level, then they will be included in the export. During the import, however, only new installation-level configurations are added and no existing configuration is replaced.

- **Normalization Rules set** – If **Export type** is set to **NR Sets**, select **All NR Sets** or a specific normalization rules set.
- **Transfer method** – Select the method used to transfer the export package to the Production server. The methods are: **FTP**, **SFTP**, **Profile**, or **Copy**. The **Profile** option enables Primo Cloud customers to connect to the server. For more information, see the **Profile** field.
- **Target Server** – For the FTP and SFTP transfer methods, enter the server name. Click **Test Connection** to test the connection to the server.

  Note

  In addition, you can manually copy the package, but it must be placed in the directory `/exlibris/primo/p4_1/ng/primo/home/profile/publish/exported_files`.

- **Slot** – For the FTP and SFTP transfer methods, enter the slot (<*ver*>_<*copy*>) of the Primo installation on the target server. For example, if you have two Primo V4 instances, your slots might be **4_1** and **4_2**.
- **Username** – For the FTP and SFTP transfer methods, enter the user name of the server.
- **Password** – For the FTP and SFTP transfer methods, enter the password of the server.
- **Profile** – For the Profile transfer method, select the profile for your institution (which must be defined by Ex Libris support; if you do not see the required profile, open a support case). Click **Test Connection** to test the connection to the server.
- **Email Address** – Enter an email address to which to send a confirmation when the tool completes execution.

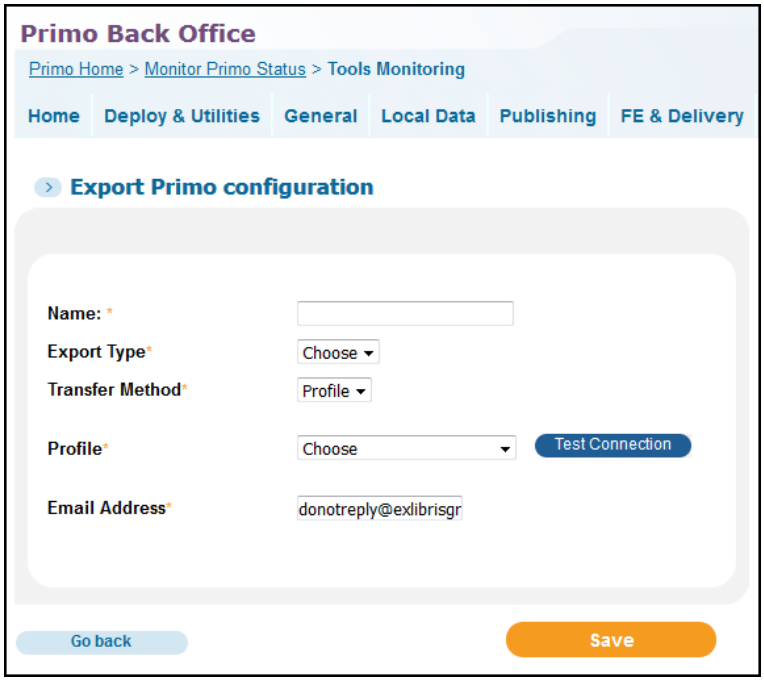
3. Click **Save**.
4. Execute the tool when needed. For information on monitoring tools, see Tools Monitoring.

After exporting, the export file will be on the target server (the environment chosen in the **Profile** field). This file can be imported using the import tool. For more information, see Exporting/Importing the Full Configuration.

Exporting a Primo Configuration: Direct or Multi-tenant Customers

To export a Primo configuration:

1. On the Tools Monitoring page (**Primo Home > Monitor Primo Status > Tools Monitoring**), select **Export Primo Configuration** from the **Create a Tool** drop-down list and then click **Create**. The Export Primo Configuration page opens.



Export Primo Configuration Page

2. Enter the following fields:
   - **Name** - Enter a name for the tool, which you can execute and monitor in the Tool Monitoring list.
   - **Export Type** - Select the type of configuration you want to export. The valid values are **All** (all data) and **NR Sets** (normalization rules sets and related mapping tables, only).
   - **Transfer Method** - Select **Profile** as the method used to transfer the export package to the Production server.
   - **Profile** - Select the profile for your institution (which must be defined by Ex Libris support; if you do not see the required profile, open a support case). Click **Test Connection** to test the connection to the server.
   - **Email Address** - Enter an email address to which to send a confirmation when the tool completes execution.
3. Click **Save**.
4. Execute the tool when needed. For information on monitoring tools, see Tools Monitoring.

After exporting, the export file will be on the target server (the environment chosen in the **Profile** field). This file can be imported using the import tool. For more information, see Exporting/Importing the Full Configuration.

The Import Primo Configuration Tool

Return to menu

The Primo Home > Monitor Primo Status > Tools Monitoring > Import Primo Configuration page (see Importing a Primo Configuration, below) imports configuration data previously exported by the export tool to the following directory on the target servers:

```
/exlibris/primo/p4_1/ng/primo/home/profile/publish/exported_files
```

After the import completes successfully, the export package is copied to the following directory:

```
/exlibris/primo/p4_1/ng/primo/home/profile/publish/imported_files
```

If you are a Local deployment customer, verify that the export package in on the target environment under `/exlibris/primo/p4_1/ng/primo/home/profile/publish/exported_files`.

Importing a Primo Configuration

The instructions for importing are the same for all deployment levels: Local, Direct, or Multi-tenant (without server access).

If a configuration export was done for a specific institution, any installation-level configurations in use were also included in the export. For example, if a pipe uses normalization rules that belong to the installation level, they were included in the export. During the import, however, only new installation-level configuration are added; no existing configurations are replaced.

Use an institution-level export configuration if you are importing a configuration is for a specific institution.

This tool is limited to the SuperAdmin and Admin roles.

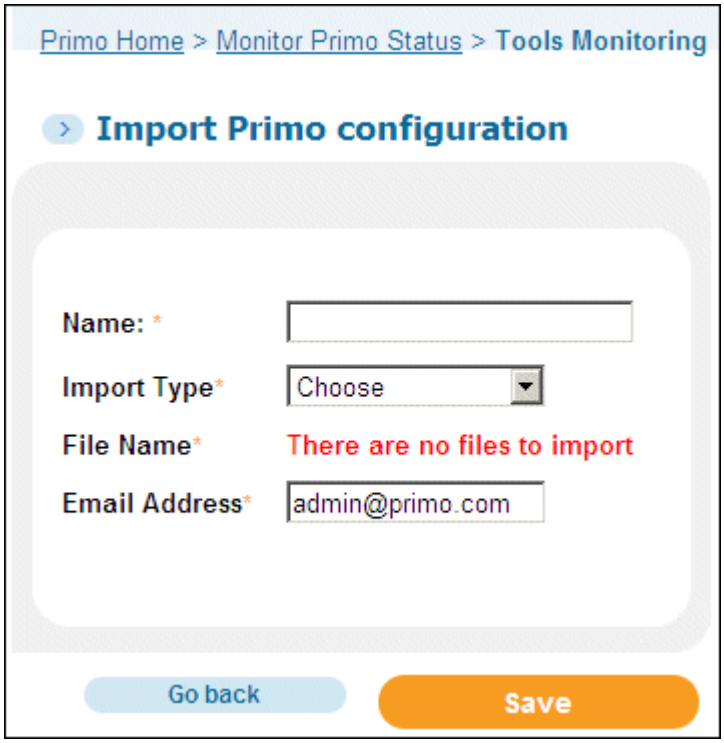
Note

To export/import the Primo full configuration (not just the specific institution), follow the instructions in Exporting/Importing the Full Configuration.

To import a Primo configuration:

1. On the Tools Monitoring page, select **Import Primo Configuration** in the **Create a Tool** drop-down list.

   The Import Primo Configuration page opens.



Import Primo Configuration Page

2. Enter the following fields:
   - **Name** – Enter a name for the tool, which you can execute and monitor in the Tool Monitoring list.
   - **Import type** – Select the type of configuration you want to import. The valid values are **All** (all data) and **NR Sets** (normalization rules sets and related mapping tables only).
   - **File Name** – Select the name of the export file to import. If there are no files matching the configuration you want to import, run the export before creating this tool.
   - **Email Address** – Enter an email address to which to send a confirmation when the tool completes execution.
3. Click **Save**.
4. Execute the tool when needed. For information on monitoring tools, see Tools Monitoring.
5. After the import is complete, deploy the configuration settings; see Deploy All Configuration Settings.

Exporting/Importing the Full Configuration

Return to menu

When exporting the full configuration to another Primo environment, it is necessary to perform additional steps and checks in each environment before and after running the export/import tools.

To create and execute the import/export tools, users must be assigned one of the following roles:

- **Superadmin** – Installation and institution levels for on-premises customers.
- **Admin** – Installation and institution levels for on-premises customers.
- **Admin** – Institution level for Cloud customers.

Before Running the Export Tool

These steps should be run before executing the export tool on the source server.

Perform the following steps on the source server:

1. Make sure that nobody is working on the system.
2. Perform a deploy all on the source server.
3. Make sure that no processes are running.
4. On the **Primo Home > Primo Reports** reports page, run the **General Parameters** report and then export the report to a file to be used on the target server. This is necessary because general parameters are not included in the full configuration export.
5. Create and execute/schedule the export tool. For more information, see The Export Primo Configuration Tool.

Before Running the Import Tool

These steps `should` be run before executing the import tool on the target server.

Perform the following steps on the target server:

1. Enter the following commands to back up custom files under the `fe_web` directory on the FE server:

   ```
   fe_web
   ```

   ```
   tar czf <your_customer_code>_customization_bck_<todays_date>.tar.gz css/static_htmls/
   images/help/
   ```

2. If you developed your own OvP adaptor, enter the following commands to back up the gateway XSL directory:

```
fe_profile

tar czf <your_customer_code>_gateway_bck_<todays_date>.tar.gz gateway/
```

3. Enter the following commands to back up the PDS configuration. The location of the PDS configuration can vary. Contact your PDS consultant for more information.

```
pdsroot

cd ../

tar czf <your_customer_code>_pds_bck_<todays_date>.tar.gz pds/
```

4. Make sure that nobody is working on the system and that no process will run during the import.
5. Perform a deploy all on the target server.
6. On the **Primo Home > Primo Reports** reports page, run the **General Parameters** report and then export the report to a file for backup.
7. Create and execute/schedule the export tool. It will be used as a backup if the import fails. For more information, see The Export Primo Configuration Tool.
8. Review the *Primo Version 4.X - Known Issues* document.
9. After the export tool has completed successfully, create and execute/schedule the import tool. For more information, see The Import Primo Configuration Tool.

After Running the Import Tool

These steps should be run after executing the import tool on the target server.

Perform the following steps on the target server:

1. If you developed your own OvP adaptor, copy the XSL from the source server to the target server. The files are stored under the `fe_profile/gateway` directory.

   Note

   For n-Tier topologies with multiple FEs, copy the files to each FE and BE.

2. In the Primo Back Office, use the Institution Wizard to verify the institution's configuration and populate the following fields, which are blank after an import:
   - PC key and customer ID
   - bX Token
3. In the Primo Back Office, use the Views Wizard to reconfigure the following fields if the paths for the sandbox and production environments are different:
   - Update the Static HTML paths to point to the production versions.
   - Change the CSS option to the production version.

4. On the **Primo Home > Schedule Tasks** page, enable any scheduled tasks that may have been disabled in the sandbox environment.
5. Restart all FE servers to rebuild the entries in the Deploy Targets table.
6. Perform a deploy all on the target server.
7. On the **Primo Home > Advanced Configuration > General Configuration Wizard** page, use the report that was exported from the source server to reconfigure the general parameters, which are not included in the export.
8. If you customized any Primo files in the source environment, copy them to the target environment.
9. Run the UPDATE pipes (or INITIAL pipes if no data was loaded in the target server).
10. Run the Indexing and Hotswapping process.

Primo Utilities

The Primo Utilities page (**Primo Home > Primo Utilities**) provides access to the following utilities:

- The Cleanup Procedures Tool
- The System Tests and Monitor Tool
- The File Uploader Tool
- The UI Customization Package Manager

The Cleanup Procedures Tool

Return to menu

The Cleanup Procedures page (see Cleanup Procedures Page) allows users with administrative permissions at the installation and institution levels to access the following cleanup tools:

- Removing BE Log Files
- Removing Harvested Files
- Removing Pipe Source Files
- Removing Data from the S_SEARCH_SUMMARIES Table
- Removing Data from the S_CLICK_SUMMARIES Table
- Cleaning Up Expired Users' Data

Removing BE Log Files

This tool allows you to delete BE log files if they are older than a specified number of days.

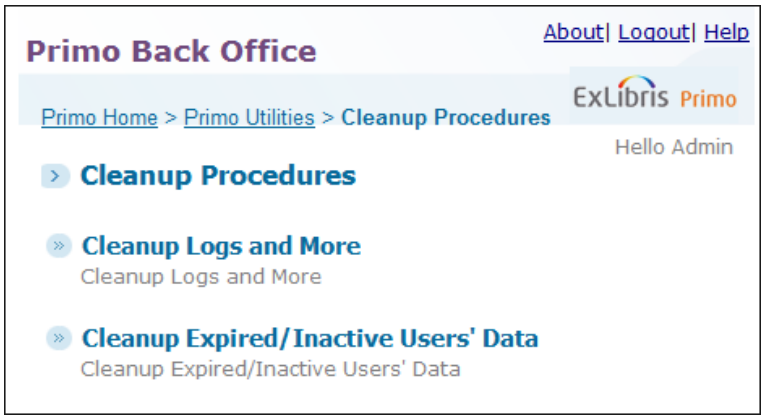
To remove older BE log files:

1. Click **Primo Utilities** on the Back Office home page.

   The Primo Utilities page opens.

2. Click **Cleanup Procedures**.

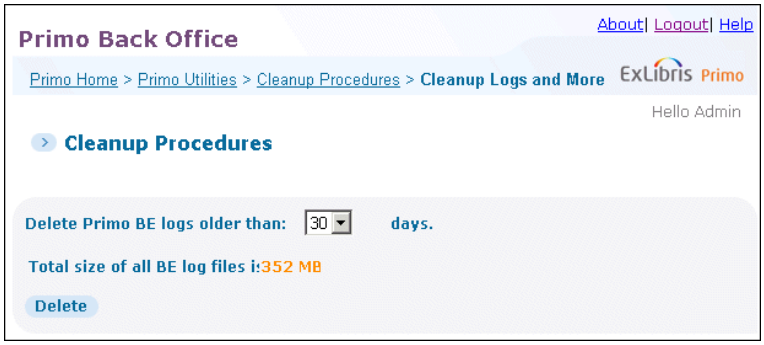
   The Cleanup Procedures page opens.



Cleanup Procedures Page

3. Click **Cleanup Logs and More**.

   The Cleanup Logs and More page opens.



Cleanup Logs and More - BE Log Files Option

4. Specify the age of the log files that you want delete by selecting the number of days in the **Delete Primo BE logs older than** drop-down list.

5. Click **Delete**.

Removing Harvested Files

This tool allows you to delete harvested files if they are older than a specified number of days.

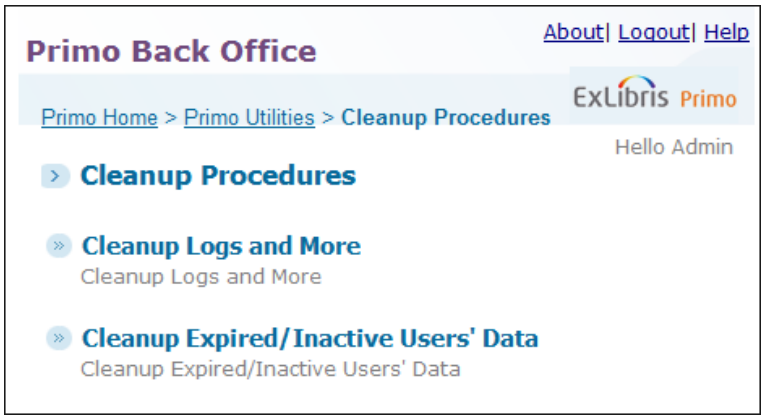
To remove older harvested files:

1. Click **Primo Utilities** on the Back Office home page.

   The Primo Utilities page opens.

2. Click **Cleanup Procedures**.

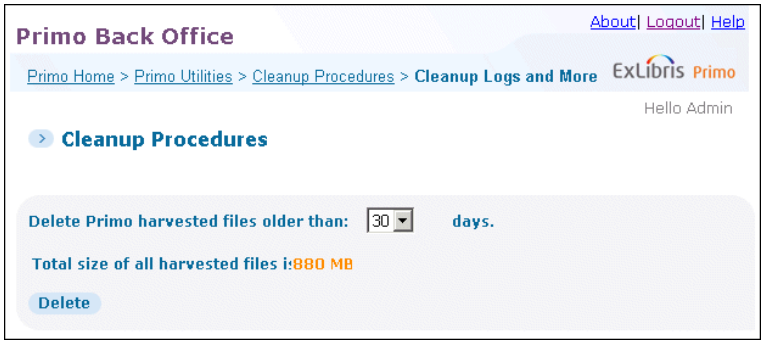
   The Cleanup Procedures page opens.



Cleanup Procedures Page

3. Click **Cleanup Logs and More**.

   The Cleanup Logs and More page opens.



Cleanup Logs and More - Harvested Files Option

4. Specify the age of the harvested files that you want delete by selecting the number of days in the **Delete Primo Harvested files older than** drop-down list.

5. Click **Delete**.

Removing Pipe Source Files

This tool allows you to delete source files for pipes if they are older than a specified number of days.

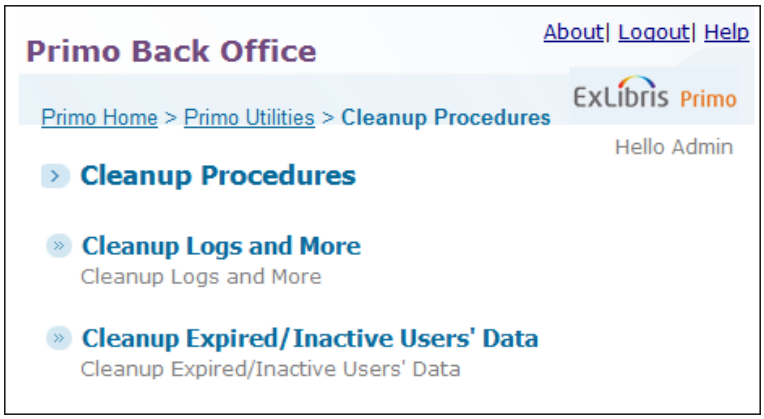
To remove older harvested files:

1. Click **Primo Utilities** on the Back Office home page.

   The Primo Utilities page opens.

2. Click **Cleanup Procedures**.

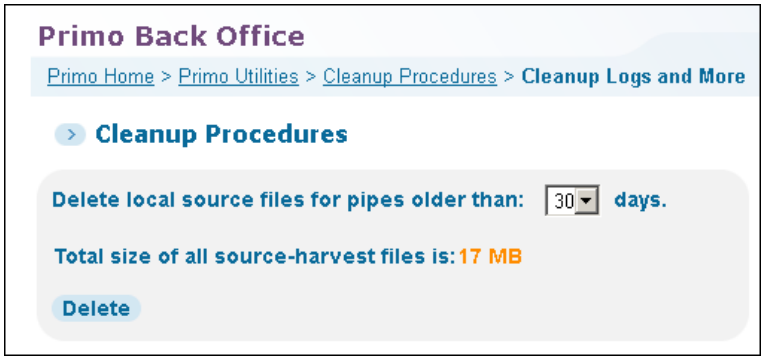
   The Cleanup Procedures page opens.



Cleanup Procedures Page

3. Click **Cleanup Logs and More**.

   The Cleanup Logs and More page opens.



Cleanup Logs and More - Pipe Source Files Option

4. Specify the age of the pipe source files that you want delete by selecting the number of days in the **Delete local source files for pipes older than** drop-down list.

5. Click **Delete**.

Removing Data from the S_SEARCH_SUMMARIES Table

This tool allows you to delete data from the S_SEARCH_SUMMARIES Oracle table if the data was saved prior to a specified date.

To remove older data from the S_SEARCH_SUMMARIES table:

1. Click **Primo Utilities** on the Back Office home page.

   The Primo Utilities page opens.

2. Click **Cleanup Procedures**.

   The Cleanup Procedures page opens.

Cleanup Procedures Page

3. Click **Cleanup Logs and More**.

   The Cleanup Logs and More page opens.

Cleanup Logs and More - S_SEARCH_SUMMARIES Table Option

4. Specify a date in the **Delete Data from S_SEARCH_SUMMARIES DB Table, older than** field. If you would like to search for a date, click

.

5. Click **Delete**.

Removing Data from the S_CLICK_SUMMARIES Table

This tool allows you to delete data from the S_CLICK_SUMMARIES Oracle table if the data was saved prior to a specified date.

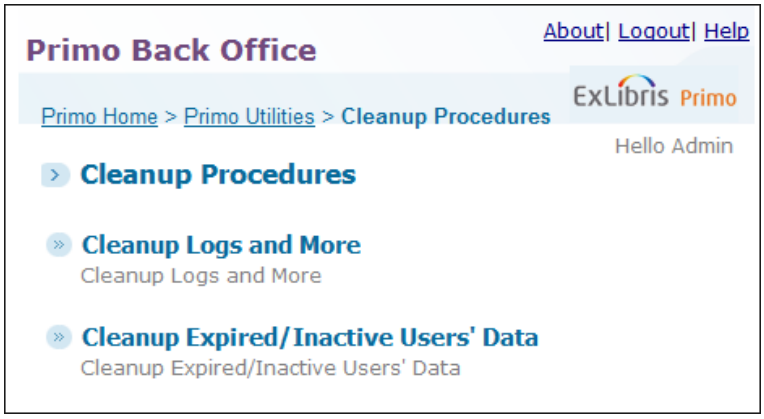
To remove older data from the S_CLICK_SUMMARIES table:

1. Click **Primo Utilities** on the Back Office home page.

   The Primo Utilities page opens.

2. Click **Cleanup Procedures**.

   The Cleanup Procedures page opens.



Cleanup Procedures Page

3. Click **Cleanup Logs and More**.

   The Cleanup Logs and More page opens.

Cleanup Logs and More - S_CLICK_SUMMARIES Table Option

4. Specify a date in the **Delete Data from S_CLICK_SUMMARIES DB Table, older than** field. If you would like to search for a date, click

   .

5. Click **Delete**.

Cleaning Up User Data

Primo allows you to remove user data (such as e-Shelf, preferences, and alerts) for expired or inactive users using the following methods: input file or inactivity date.

Using an Input File to Remove Expired Users' Data

This tool allows you to delete users' data based on an input file, which must have a **.txt** extension (such as `input.txt`).

Each user ID must be placed on separate line in the input file. No spaces or tabs are permitted before or after the user ID. For example:

```
hshrader

sgoodman

jpinkman

wwhite
```

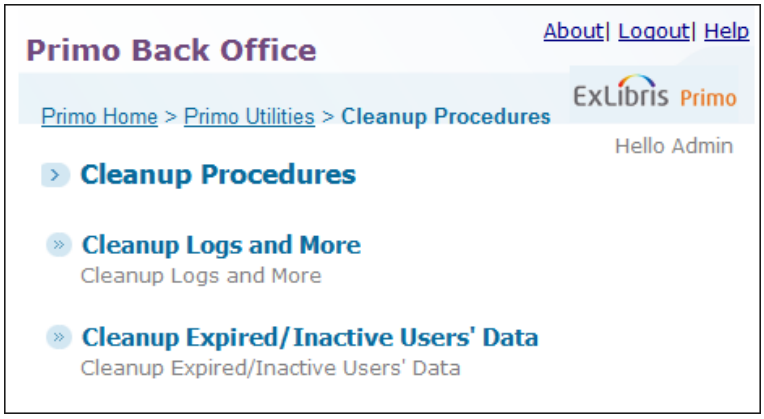
To use an input file to remove expired users' data:

1. Click **Primo Utilities** on the Back Office home page.

   The Primo Utilities page opens.

2. Click **Cleanup Procedures**.

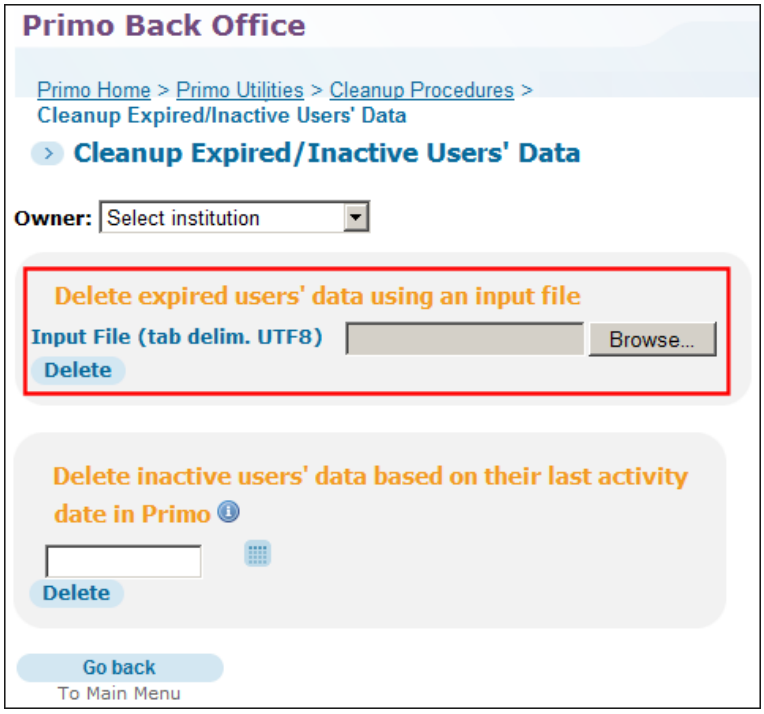
   The Cleanup Procedures page opens.



Cleanup Procedures Page

3. Click **Cleanup Expired/Inactive Users' Data**.

   The Cleanup Expired/Inactive Users' Data page opens.



Cleanup Expired Users' Data - Input File Method

4. Select the name of the institution from the **Owner** drop-down list. For institution-level staff users, your institution will already be selected.

5. Specify the name of the input file in the **Delete expired users' using an input file** field. If you would like to browse for a file name, click **Browse**.

6. Click **Delete**.

Using an Inactivity Date to Remove Expired Users' Data

This tool allows you to delete users' data based on a specified inactivity date. If the date of a user's last action (such as an update to the e-Shelf, tags, reviews, preferences, and saved searches) in Primo occurred prior to the specified date, the user's data is removed from the system.

Note

After an upgrade to Primo version 4.5, sign-ins are also tracked for inactivity.

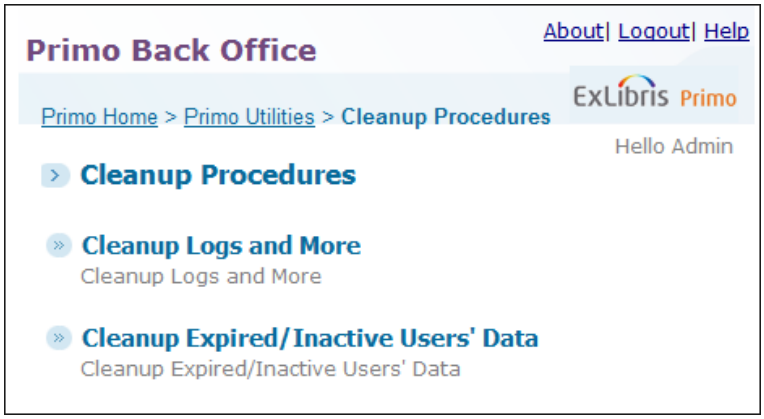
To use an inactivity date to remove expired users' data:

1. Click **Primo Utilities** on the Back Office home page.

   The Primo Utilities page opens.

2. Click **Cleanup Procedures**.

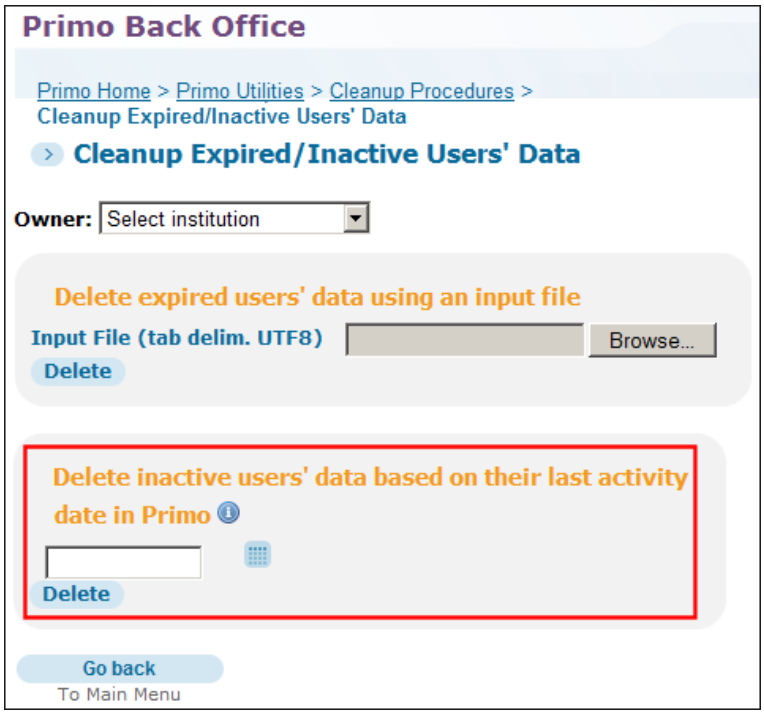
   The Cleanup Procedures page opens.



Cleanup Procedures Page

3. Click **Cleanup Expired/Inactive Users' Data**.

   The Cleanup Expired/Inactive Users' Data page opens.



Cleanup Expired Users' Data - Inactivity Date Method

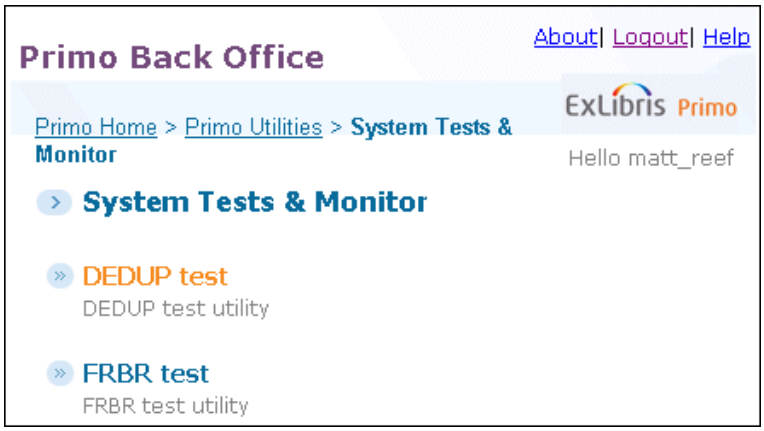
4. Select the name of the institution from the **Owner** drop-down list. For institution-level staff users, your institution will already be selected.
5. Specify a date in the **Delete inactive users' data based on their last activity date in Primo** field. If you would like to use the Date Wizard, click

   .
6. Click **Delete**.

The System Tests and Monitor Tool

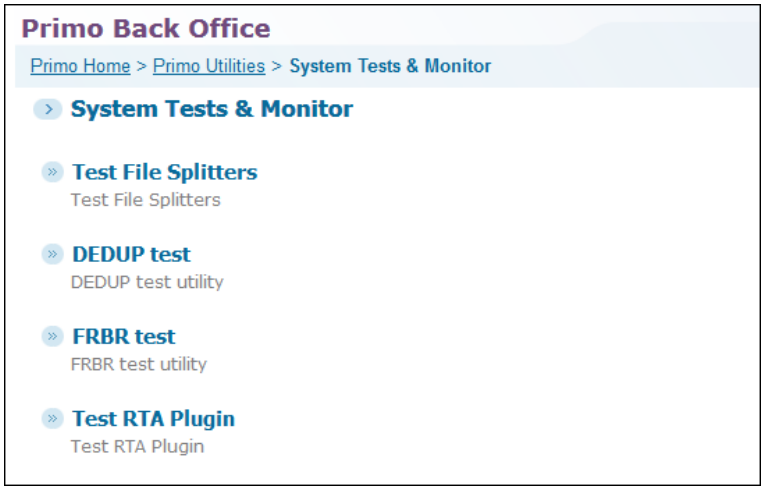
Return to menu

The System Tests & Monitor page (**Primo Home > Primo Utilities > System Tests & Monitor**) allows you to access the test tools, which are used to test DEDUP and FRBR records.



System Tests and Monitor Page

For on-premises installations only, the System Tests & Monitor page allows you to access additional test tools, which are used to test File Splitter plug-ins and RTA plug-ins.



System Tests and Monitor Page (Installation Level for On-Premises Customers Only)

The Test File Splitters Tool

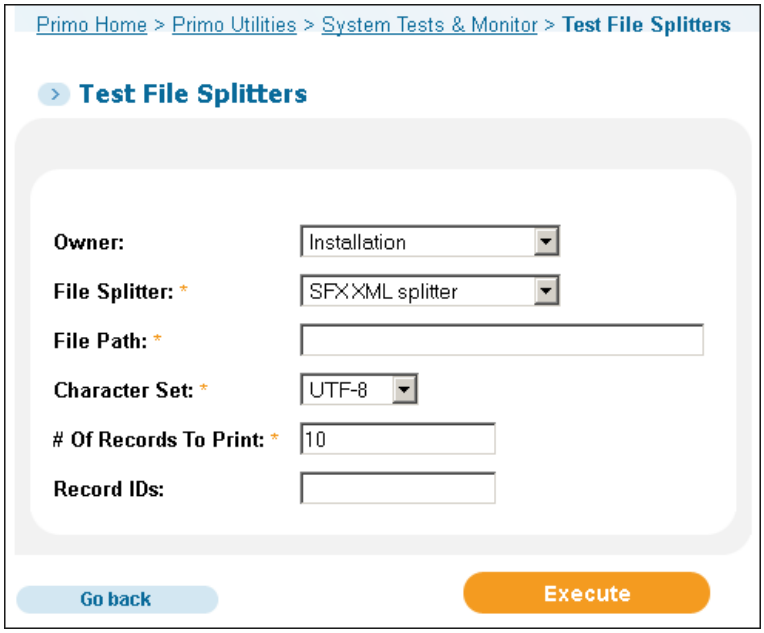
The Test File Splitters tool allows on-premises customers to test file splitters before assigning them to a data source. For information on using file splitters, see Configuring Data Sources.

If you would like to create your own file splitters, see APIs > Plugins > Back Office > File Splitters on the Developer Network

To test a file splitter:

1. Click **Test File Splitters** on the System Tests & Monitor page.

   The Test File Splitters page opens.



Test File Splitters Page

2. Use the following table to fill in the fields on the page:

Test File Splitters Details

Field	Description
Owner	Select the configuration level. For installation-level staff users, select the installation name or a specific institution from the drop-down list. The valid values are **Installation** (if using the default name) or a specific institution. For institution-level staff users, this field is set to your institution.
File Splitter	Select a file splitter to test from the drop-down list. If the file splitter does not appear, check to see that is defined in the File Splitters mapping table.
File Path	Specify the full path name of the uncompressed file to be parsed on your server. Example: `/tmp/MyFile.xls`
Character Set	Select a character set from the drop-down list.
# of Record to Print	Specify the number of records to print.

Field	Description
Record Id's	Enter one or more record IDs separated by commas if you want to display specific records only. Example: 12345, 4689

3. Click **Execute**.

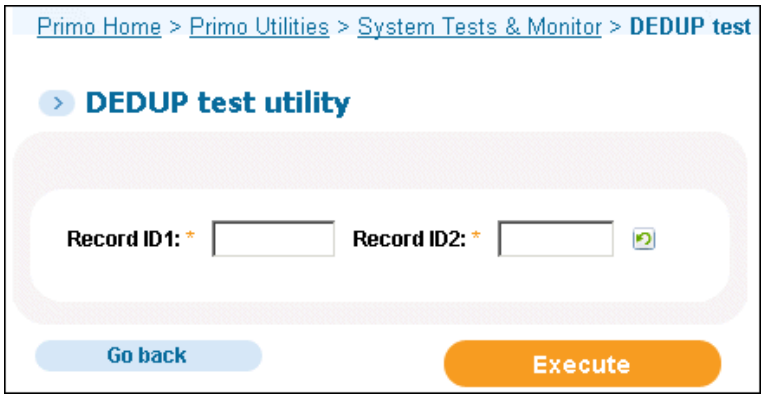
The DEDUP Test Tool

The DEDUP Test tool allows you to test two records to see if they are duplicate records. If the records match, the output contains the criteria the algorithm used to match the records.

To perform a DEDUP test:

1. Click **DEDUP test** on the System Tests & Monitor page.

   The DEDUP Test Utility page opens.



DEDUP Test Utility Page

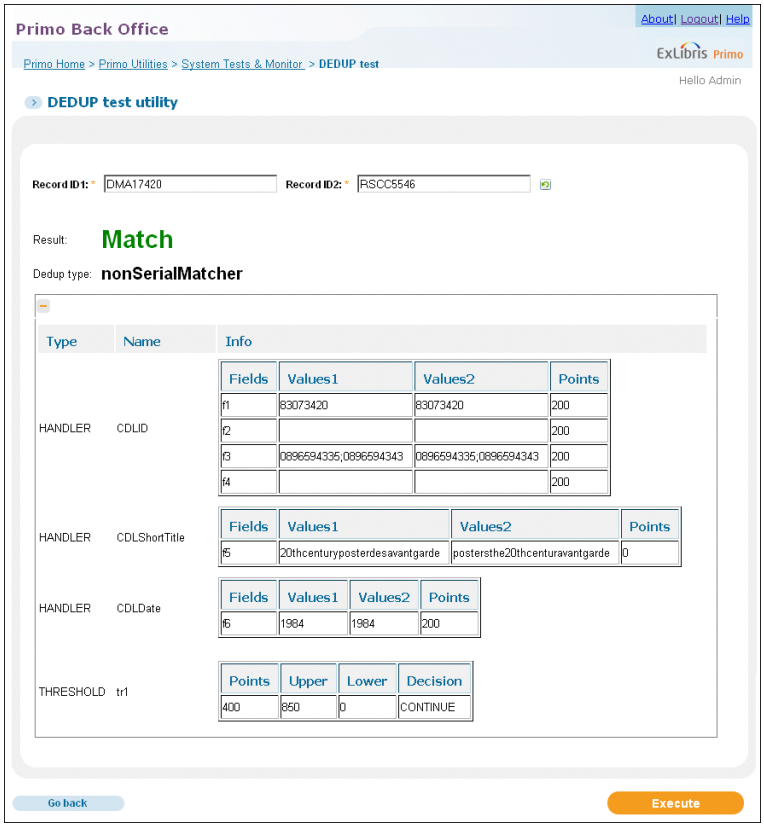
2. Enter the ID of the first record in the Record ID1 field.
3. Enter the ID of the second record in the Record ID2 field.

   To reverse the order of the record IDs, click

   .

4. Click **Execute**.

   The following figure shows the results of two matching records.



Example DEDUP Test

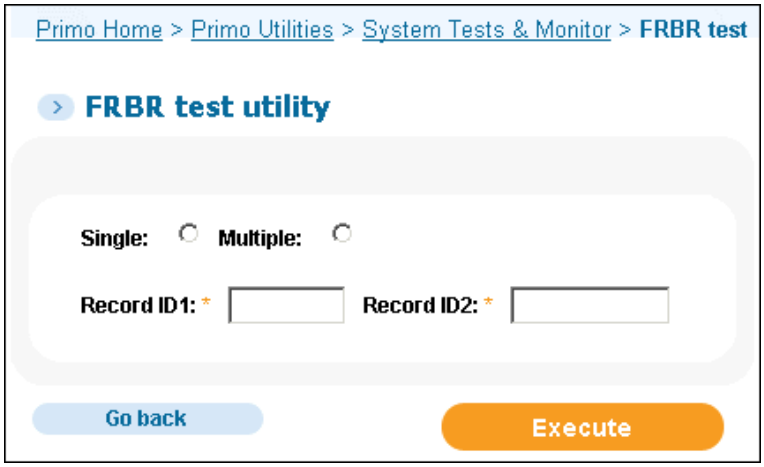
The FRBR Test Tool

The FRBR Test tool allows you to test two records to see if they are in the same FRBR group. If the records match, the output contains the matching keys for each record. In addition, this tool allows you to specify a single record to find its matching records.

To perform a FRBR test:

1. Click **FRBR test** on the System Tests & Monitor page.

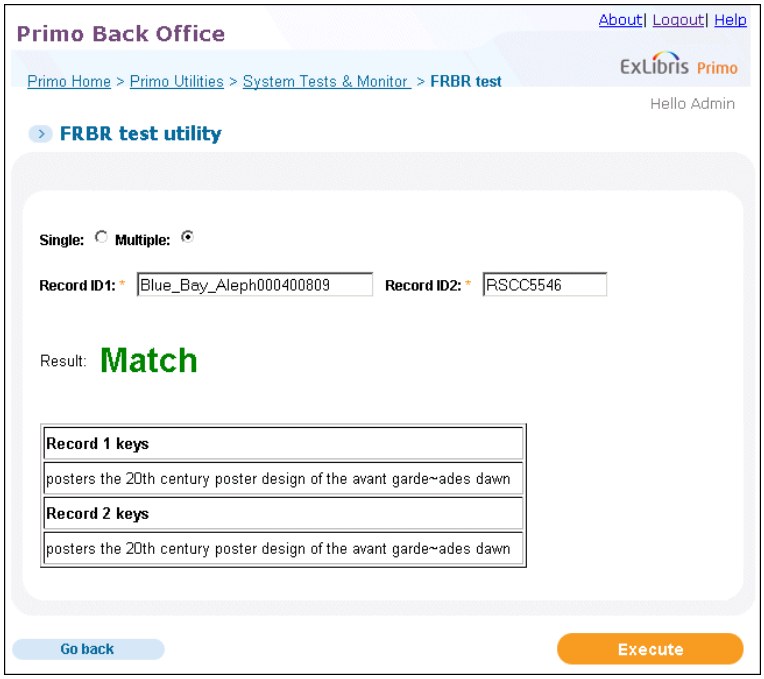
   The FRBR Test Utility page opens.



FRBR Test Utility Page

2. Select one of the following test modes:
   - **Single** – allows you to display the matching record IDs for a single record.
   - **Multiple** – allows you to display the keys for matching records.
3. Enter the ID of the first record in the Record ID1 field.
4. If you are testing multiple records, enter the ID of the second record in the Record ID2 field.
5. Click **Execute**.

   The following figure shows the results of two matching records. For more information, see *FRBRization*.



Example FRBR Test

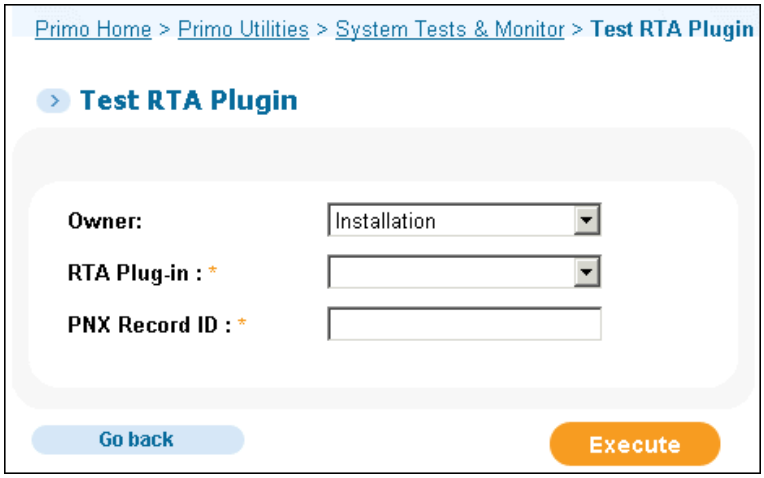
The Test RTA Plugin Tool

The RTA Test tool allows on-premises customers to test a record to see if the RTA plugin provides the latest availability information per location.

To perform an RTA test:

1. Click **Test RTA Plugin** on the System Tests & Monitor page.

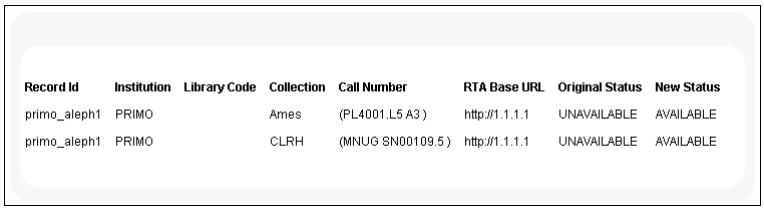
   The Test RTA Plugin page opens.



Test RTA Plugin Page

2. Select the name of the plugin in the **RTA Plug-in** field.
3. Enter the ID of a record to test in the **PNX Record ID** field.
4. Click **Execute**.

   The following figure shows the original and new availability statuses for the PNX record:



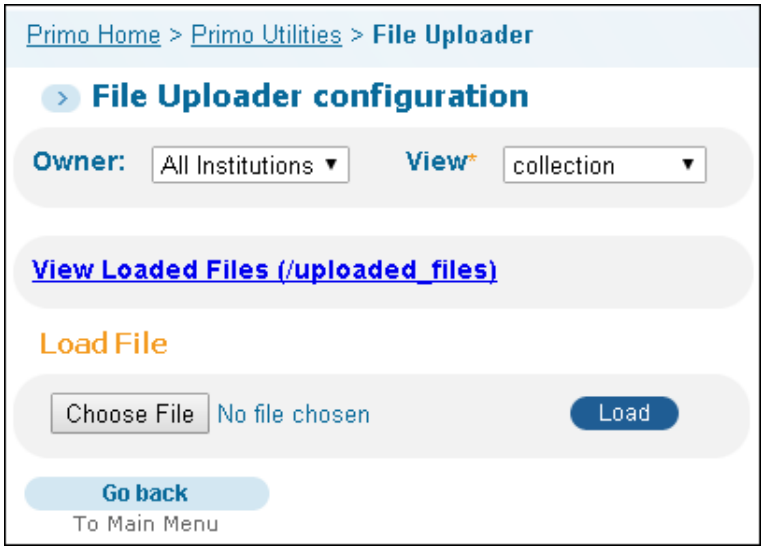
Record Id	Institution	Library Code	Collection	Call Number	RTA Base URL	Original Status	New Status
primo_aleph1	PRIMO		Ames	(PL4001.L5 A3)	http://1.1.1.1	UNAVAILABLE	AVAILABLE
primo_aleph1	PRIMO		CLRH	(MNUG SN00109.5)	http://1.1.1.1	UNAVAILABLE	AVAILABLE

Example RTA Plugin Test

The File Uploader Tool

Return to menu

The File Uploader tool is accessed from the **Primo Home > Primo Utilities** page. It allows you to load FE customization files for a specific view to the server quickly. Changes can be applied at the installation and institution levels. Files with the following suffixes are supported: css, html, htm, gif, jpg, png, bmp, js, xml, xsl, and xslt. The file size limit for each type is 5 megabytes (MB).



File Uploader Page

Before you can access and use this utility, you must have one of the following roles:

- **Superadmin**
- **Admin** – installation and institution level
- **View Manager** – installation and institution level

For Primo Total Care customers, you must have one of the following new roles:

- **Total Care User** – provides access to the File Uploader utility and reports
- **Utility user** – provides access to the File Uploader utility only

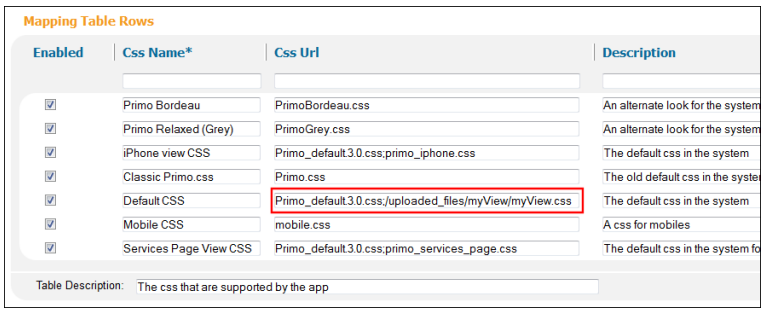
In addition to uploading files, this utility allows you to perform the following functions: view uploaded files, download a file, and switch versions of a file.

Uploading a File

The File Uploader page allows you to upload the following types of files to the `$fe_web/uploaded_files/<view_code>` directory on the Primo server:

- **CSS** – To use uploaded CSS files, you must perform the following:

1. Update the CSS mapping table and add your new CSS file to either an existing mapping row or a new one. For example, if you want to override the CSS settings in the **Default CSS** mapping row, update the row as follows:



CSS Mapping Table

2. Deploy your changes to the mapping table.

3. In the Views Wizard, make sure that your view is using the new CSS file. For example, if you are using the **Default CSS** mapping row, make sure that it is selected as follows for your view:

Views Wizard - CSS Selection

4. Deploy your changes to the view if necessary.

Note

- If the CSS file is replacing a CSS file that is currently in use, no changes are necessary in the Views Wizard or the CSS mapping table.
- For information on debugging your CSS, refer to Debugging CSS and JavaScript - Disabling the wro4j Tool.

- **Static HTMLs** – To use uploaded static HTML files, you must update the links in the static HTML tile in the Views Wizard. Use the following path to reference static HTML files:

  `/uploaded_files/<view_code>/<file_name>`

- **Images** – Links to the updated images should be updated in the CSS and Static HTML files to reference the new location of the image.

If your new CSS or static HTML files reference images stored under the out-of-the-box image location `$fe_web/images`, make sure that you adjust the relative paths to the images. For example, change the following:

```
background-image:url(../images/file.png)
```

To:

```
background-image:url(../../images/file.png)
```

If the image file and the file that references it are stored in the same directory, you can just use the following call to reference the image file:

```
background-image:url(file.png)
```

For more information on customizing the FE, see the *Primo Technical Guide*.

If a file already exists, the system appends the current date and time to the old file in case you need to revert to a previous version of the file. For more information, see Switching Versions of Files.

To upload a file(s):

1. Click **Primo Utilities** on the Back Office home page.

   The Primo Utilities page opens.

2. Click **File Uploader**.

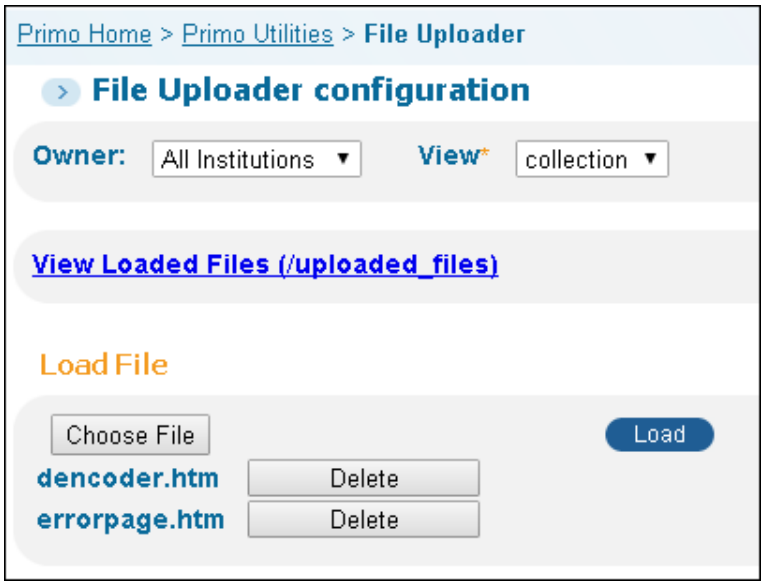
   The File Uploader page opens.

3. Select the institution or installation version from the **Owner** drop-down list. Note that the institution will be pre-selected for institution-level staff users.

4. Select the view from the **View** drop-down list.

5. In the Load File section, click **Browse** to use the Choose File to Upload dialog box to locate a file.

   The file displays in the Load File section.



Load File Section

If you want to load additional files, click **Browse** again to load another file. If you want to remove a file before loading it, click **Delete** next to the name of the file.

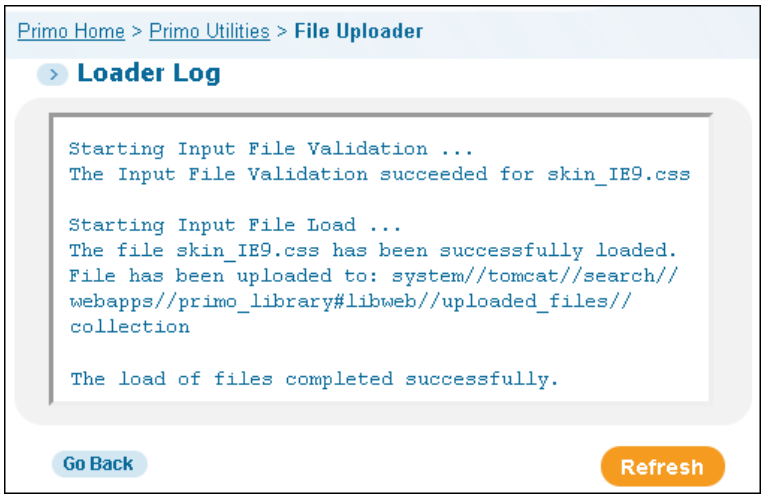
Note

The system does not permit you to upload empty files, and some browsers may notify you of this during file selection.

---

6. Click **Load** to upload the files to the `/uploaded_files` directory.

   After the file begins to upload, the Loader Log page opens and displays the progress of the upload.



Loader Log Page

Note

The system does not permit you to upload empty files, and some browsers may notify you of this on the Loader Log page.

---

7. Click **Refresh** to see updates to the log page, or click **Go Back** to return to the utility.

Viewing Uploaded Files

The File Uploader tool allows you to list the files that you have already loaded or updated on the server. Files that have been overridden by a later version include a time stamp suffix (`yyyymmdd_hhmmss`). In addition, you can view the contents of a file or display an image.

To view uploaded files:

1. Click **Primo Utilities** on the Back Office home page.

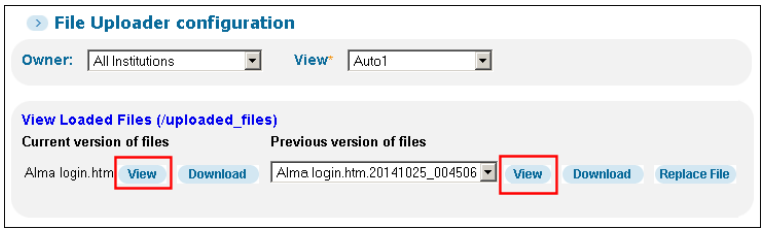
   The Primo Utilities page opens.

2. Click **File Uploader**.

   The File Uploader page opens.

3. Click **View Loaded Files (/uploaded_files)**.

   The list displays the latest file and a drop-down list for any previous versions of the file.



Uploaded Files List - View File

4. Select one of the following options if you want to view the contents of a file or view an image:
5. Display the latest version – Click **View** next to the name of the current file.
6. Display an earlier version – Select a previous version of the file from the drop-down list and click **View**.

Downloading a File

The File Uploader utility allows you to download files that you have already loaded or updated on the server.

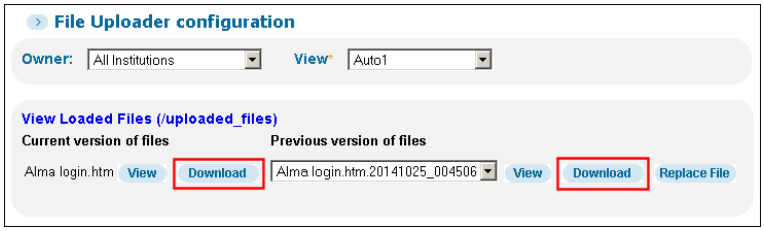
To download a file:

1. Click **Primo Utilities** on the Back Office home page.

   The Primo Utilities page opens.
2. Click **File Uploader**.

   The File Uploader page opens.
3. Click **View Loaded Files (/uploaded_files)**.

   The list displays the latest file and a drop-down list for any previous versions of the file.



Uploaded Files List - Download File

4. Select one of the following options:
5. Download the latest version – Click **Download** next to the name of the current file.
6. Download an earlier version – Select a previous version of the file from the drop-down list and click **Download**.
7. Use the instructions for the browser to save the file locally or view the file.

Switching Versions of Files

The File Uploader tool retains older versions of uploaded files, which you can view by clicking the drop-down list next to the current file in the utility. Each version includes a time stamp suffix (`yyyymmdd_hhmmss`) in case you need to view or revert to an older version.

To switch to another version of a file:

1. Click **Primo Utilities** on the Back Office home page.

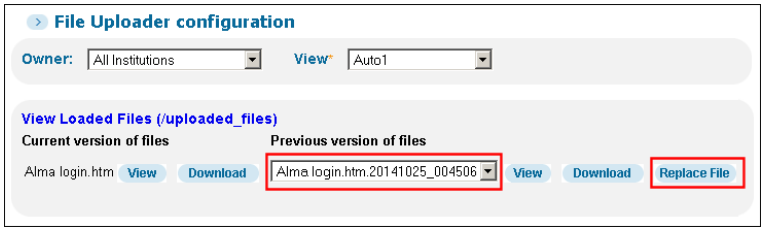
   The Primo Utilities page opens.

2. Click **File Uploader**.

   The File Uploader page opens.

3. Click **View Loaded Files (/uploaded_files)**.

   The uploaded files display below the link.



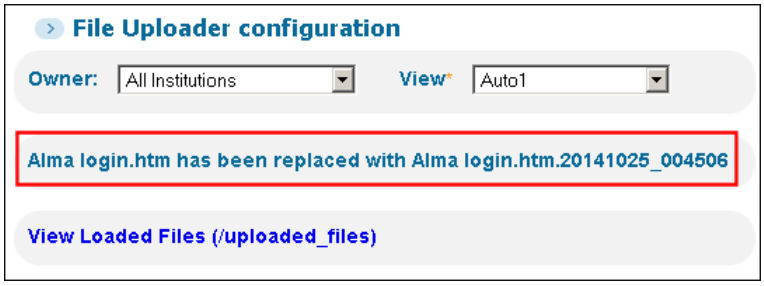
Replace File

4. Select the version of the file that you want to use from the drop-down list and click **Replace File**.

   A message dialog box opens.

5. Click **OK** to confirm the swap.

   The utility adds a time stamp to the active file and removes the time stamp from the selected file, making the selected file the active file. When the swap is complete, a confirmation message displays in the File Uploader page.



Confirmation Message

The UI Customization Package Manager

Return to menu

The UI Customization Package Manager (**Primo Home > Primo Utilities > UI Customization Package Manager**) allows you to create and manage the customization packages that include the CSS, HTML, JavaScript, and image files, which allow you to change the look of the Front End user interface. If no packages are loaded, the system will use only the out-of-the-box configurations. For additional information, see New UI Customization.

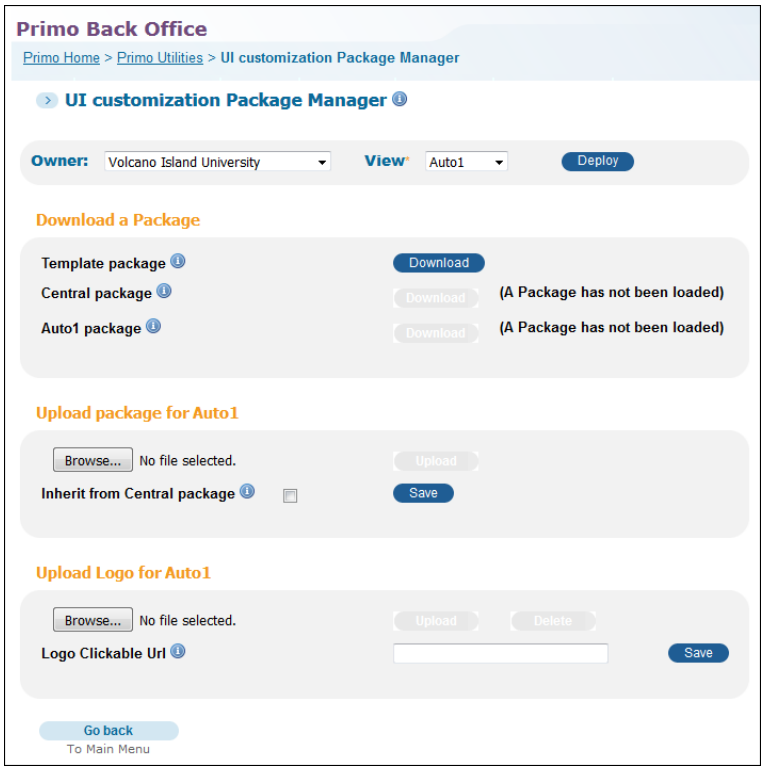
Note

Database files (`.db`) are not permitted in your customization package. If the following error occurs while uploading your ZIP file, remove all `.db` files:

```
Validation error: File type db is not allowed in the zip file
```

You may have to change an option in Windows to display hidden files if you cannot see any `.db` files in your customization package folder.

Currently, only the following configurations are supported: CSS (`custom1.css`), image files, and the HTML file for the home page (`home_en_US.html`).



UI Customization Package Manager Page

This utility allows you to load the following types of packages:

- Central – This package allows a consortium to define a single customization package that can be used directly or as a template by each member institution. Configurations in this package override settings defined in the out-of-the-box configurations. When used as a template, member institutions can create a view-level customization package to override settings in the Central package.

Note

To create and modify the Central package itself, users must have Super Admin permissions.

- View-level – This type of package allows you override the out-of-the-box settings and the Central package (if defined for your consortium).

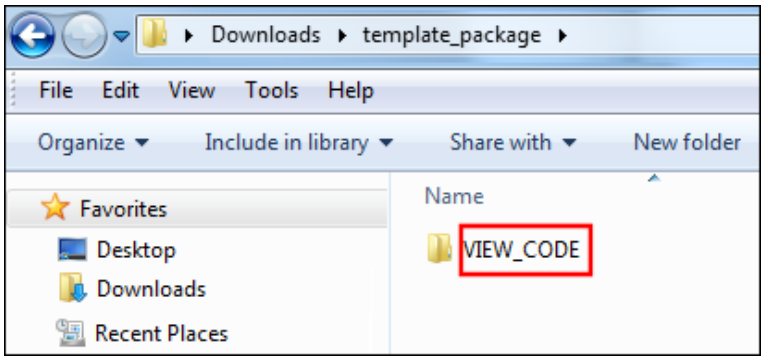
In addition, you can upload a customized logo and make it clickable. For more information, see Uploading a Clickable Logo.

Creating a View-Level Package

Loading a view-level package allows you to override configurations defined in the Central package and the out-of-the-box configurations. If no package is loaded, the system will use the out-of-the-box configurations.

To create a view-level package:

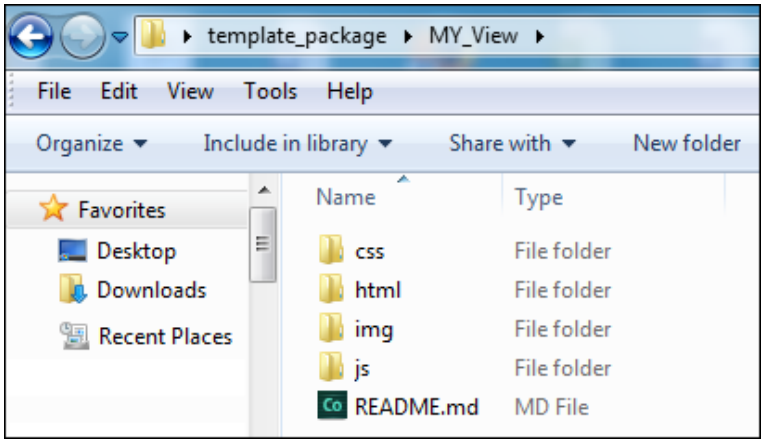
1. From the **Owner** drop-down list, select your institution.
2. From the **View** drop-down list, select your view.
3. Under the **Download a Package** section, click **Download** to select one of the following templates:
   - **Template package** – This template defines a package's folder structure and includes the files (such as `custom1.css` and `home_en_US.html`) needed to create a package.
   - **Central package** – For member institutions in a consortium, download the Central package if you want to override settings from it and the out-of-the-box configuration.
4. Create the new package from the template:
   1. Uncompress the template.
   2. Change the name of the **VIEW_CODE** folder to your view's code.



Change Folder's Name

3. Use the browser's inspect functionality to determine which CSS elements to modify in the new Front End UI.

4. Update the relevant files that are stored under the directories shown in the following figure. Remember to add any new or updated images to the `img` folder.



Package Folder Structure

In order for the system to recognize your customizations, you must retain the package structure (including folder and file names). In addition, it is necessary to retain the file names for images and other files that you modify and include in your customization package.

5. Compress the view's package. In this example, you would compress the **My_View** folder.

Note

To avoid upload errors, it is recommended that you use a compression tool such as **7zip** or **Winrar** instead of Windows **Send to > Compress folder**.

---

5. Upload the new package (for example, `My_View.zip`):

   1. Under the **Upload Package** section, click **Choose File**.

   2. Specify the name of the compressed package.

   3. Click **Upload**.

6. Deploy your view.

Modifying a View-Level Package

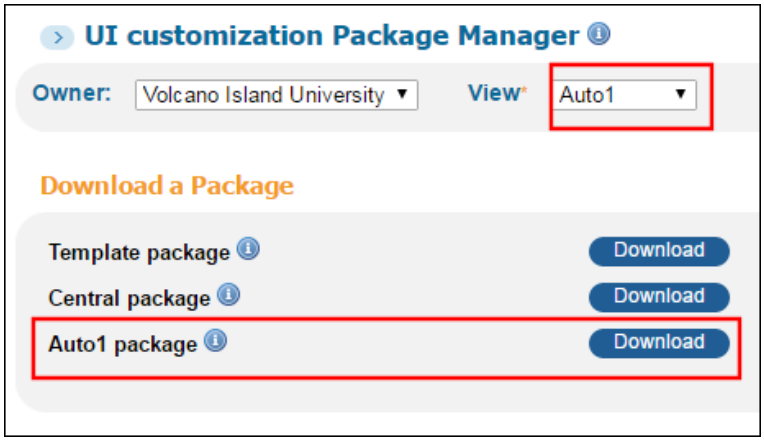
After you have loaded a package, you can download it to make further changes.

To modify a view-level package:

1. From the **Owner** drop-down list, select your institution.

2. From the **View** drop-down list, select your view.

3. Under the **Download a Package** section, click **Download** to download view-level package (which is identified by the view's code).



Download View-Level Package

4. Decompress, modify, and then compress the modified package.

Note

To avoid upload errors, it is recommended that you use a compression tool such as **7zip** or **Winrar** instead of Windows **Send to > Compress folder**.

---

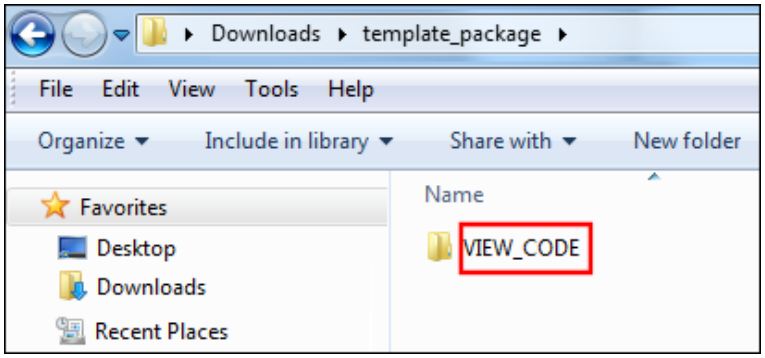
5. Upload the updated package:
    1. Under the **Upload Package** section, click **Choose File**.
    2. Specify the name of the compressed package.
    3. Click **Upload**.
6. Deploy your view.

Creating the Central Package

The Central package defines the base formatting for all member institutions in a consortium.

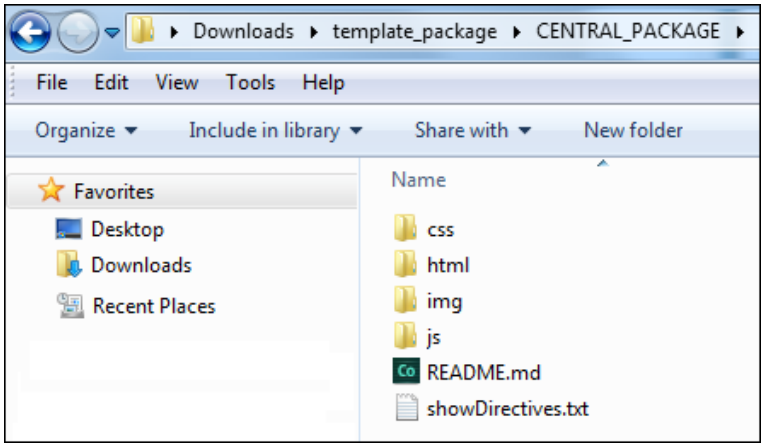
To create the Central package:

1. From the **Owner** drop-down list, select **All Institutions**.
2. From the **View** drop-down list, select **CENTRAL_PACKAGE**.
3. Under the **Download a Package** section, click **Download** to download the **Template package**.
4. Create the new package from the template:
    1. Uncompress the template.
    2. Change the name of the **VIEW_CODE** folder to **CENTRAL_PACKAGE**.



Template's Root Folder

3. Use the browser's inspect functionality to determine which CSS elements to modify in the new Front End UI.
4. Update the relevant files that are stored under the directories shown in the following figure. Remember to add any new or updated images to the `img` folder.



Central Package Folder Structure

5. Compress the view's package. In this example, you would compress the **CENTRAL_PACKAGE** folder.

Note

To avoid upload errors, it is recommended that you use a compression tool such as **7zip** or **Winrar** instead of Windows **Send to > Compress folder**.

---

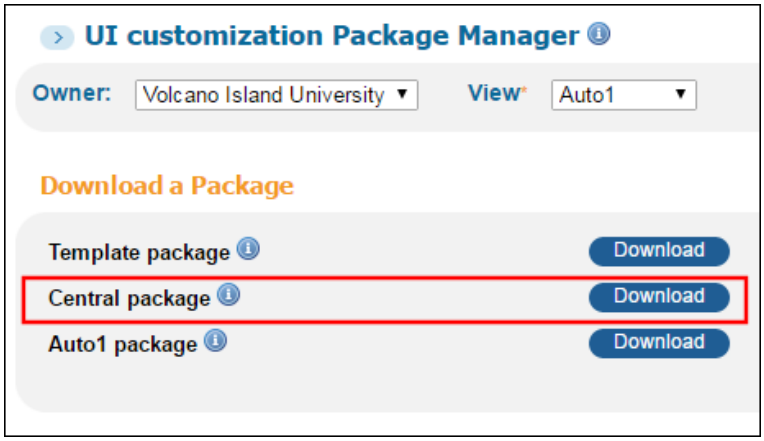
5. Upload the new package:
   1. Under the **Upload Package** section, click **Choose File**.
   2. Specify the name of the compressed package.
   3. Click **Upload**.
6. Deploy your view.

Modifying the Central Package

After you have loaded the Central package, you can download it to make further changes.

To modify the Central package:

1. From the **Owner** drop-down list, select **All Institutions**.
2. From the **View** drop-down list, select **CENTRAL_PACKAGE**.
3. Under the **Download a Package** section, click **Download** to download the **Central package**.



Download Central Package

4. Decompress, modify, and then compress the modified package.

Note

To avoid upload errors, it is recommended that you use a compression tool such as **7zip** or **Winrar** instead of Windows **Send to > Compress folder**.

---

5. Upload the updated package:
   1. Under the **Upload Package** section, click **Choose File**.
   2. Specify the name of the compressed package.
   3. Click **Upload**.
6. Deploy your view.

Inheriting from the Central Package

For consortia, member institutions have the option to enable or disable the Central package after it has been loaded onto the FE server.

To inherit from the Central package:

1. From the **Owner** drop-down list, select your institution.
2. From the **View** drop-down list, select your view.

3. Under the **Download a Package** section, verify that a package has been loaded for the **Central** package field.
4. Under the **Upload Package** section, select the **Inherit from Central Package** check box and click **Save**.
5. Deploy your view.

Disabling Packages While Testing

While testing in the Front End UI, you can temporarily disable the Central and view-level packages so that you can compare your changes to the out-of-the-box CSS.

To temporarily disable your CSS packages:

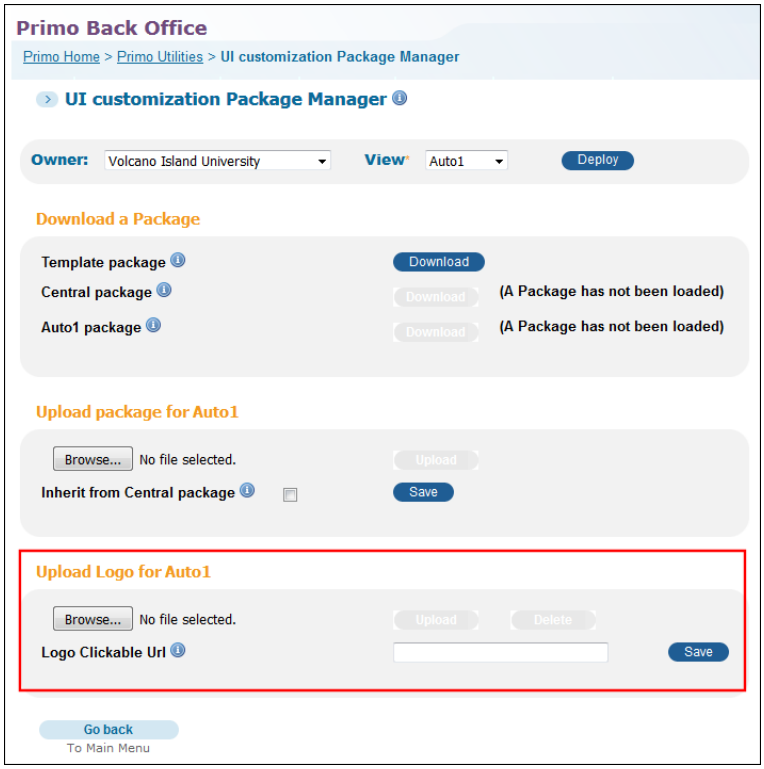
1. Open the new Front End UI in a browser.
2. Add the **`&package=OTB`** parameter to the end of the URL and press **ENTER** to refresh the page. For example:

   `http://my-primoqa02:1701/primo-explore/search?vid=MY_VIEW&lang=en_US`**`&package=OTB`**

3. You can toggle between the out-of-the-box formatting and your customized formatting by adding and removing this parameter.

Uploading a Clickable Logo

The UI Customization Package Manager allows you to upload a clickable logo, which redirects users to a specified URL when it is clicked in the new Primo UI. When using this method, no other configuration is needed to make your logo clickable.



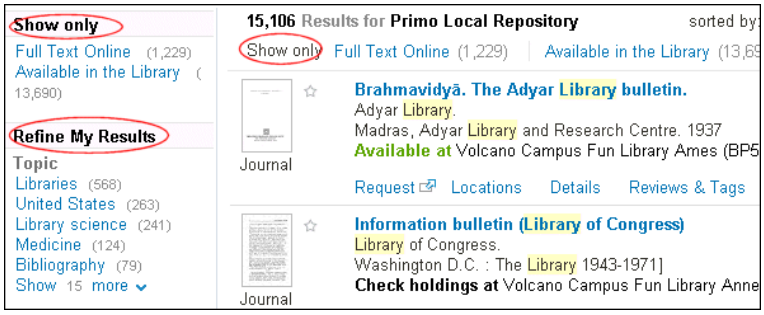
Updated UI Customization Package Manager

To upload a clickable logo:

1. Open the UI Customization Package Manager (**Primo Home > Utilities > UI Customization Package Manager**).
2. In the Upload Logo section, click **Browse** to locate and select the image that you want to use for your institution's logo.
3. Click **Upload** to upload your selection the to Front End server. If you want to remove the logo, click **Delete**.
4. If you want to redirect users to a page other than the Primo Home page, specify a URL in the **Logo Clickable URL** field.
5. Click **Save** to save your changes.
6. Deploy the changes to the Front End.

Facets

Facets are links in the **Show only** and **Refine My Results** sections on the Brief Results page that allow users to filter their search results by a specific category (such as creator, language, and topic).



Facets on the Brief Results Page

Primo allows you to configure the following kinds of facets:

- **Dynamic** – facets in which the values for each facet category (such as topic) are derived from the values stored in the Facets section of the 200 top-ranked PNX records in the search results. Once the system determines which values to display for each category, it will count the matching records from the first 50,000 results per slice and display the count next to the facet value. For more information, see Configuring Facets.

  Note

  - For the classic UI only, a facet value will not appear if it appears in every record in the results set.
  - In general, all facets are dynamic unless you define and enable static values for the facet.

- **Static** – facets in which the values for a facet category are taken from a list of predefined values that is defined in a static facets values mapping table (such as **facet_rtype_values**). Static facets are useful for categories (such as resource type) that have a limited number of possible values and do not exceed 200 values, which is the maximum limit for static facets. It guarantees that a facet will display even if it does not have a matching record in the 200 top-ranked records.

  After the system retrieves the list of facet values for each category, it counts the number of matching records found in the first 50,000 results per slice and then displays the count next to each of the predefined facet values. If a facet value does not have any matching records, it will not display on the Brief Results page.

  Note

  All static facet labels display on the Brief Results page regardless of the value specified in the **Maximum number of Display Facets** field on the Search Engine Configurations page.

  For more information, see Configuring Static Facets.

- **Top-level** – static facets that display in the **Show only** sections of the Brief Results page. Unlike other kinds of facets, top-level facets display even if matching results are found only in one category (such as **Available in the library**). For more information, see Configuring Top-Level Facets.

Configuring Facets

In general, the basic configuration is the same for all kinds of facets. Additional configuration is needed to configure static facets.

To configure facets to display in the Front End:

1. Configure the facets in the Facets section of the normalization rules. For more information, see Facets Section in The PNX Record.
2. Configure static facets as needed. For more information, see Configuring Static Facets.
3. Configure top-level facets as needed. For more information, see Configuring Top-Level Facets.
4. Configure the views to display facets in the Front End. For more information, see Displaying Facets.
5. Configure the facet labels that display in the Front End and Back Office. For more information, see Modifying Facet Labels.

Facets Section in The PNX Record

Primo uses the normalization rules to store a source record's facet information in the Facets section of the PNX record. The normalization rules templates provide out-of-the-box rules for each facet type, but some types (such as collections and libraries) may need customization. For more information on the Facets section, refer to the *Primo Technical Guide*.

Displaying Facets

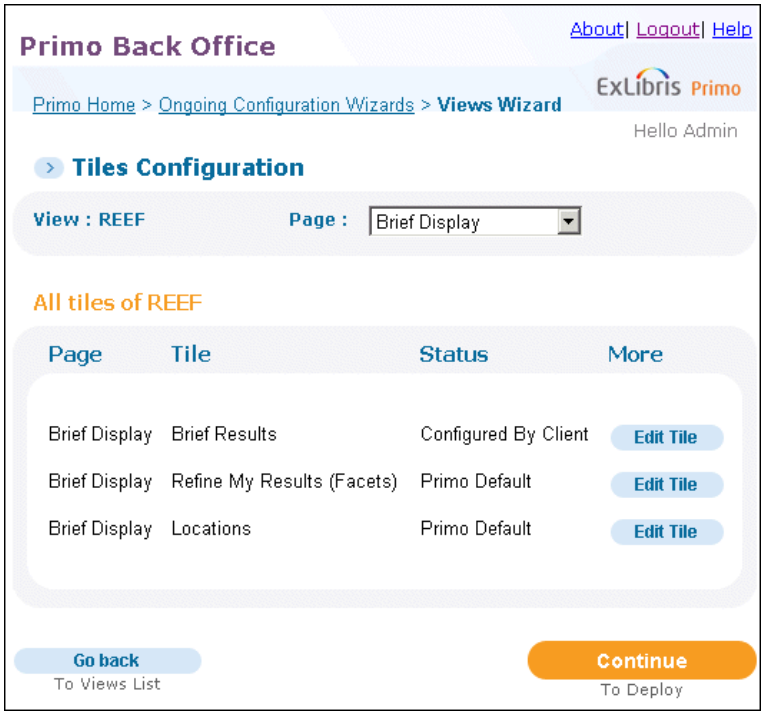
The Refine My Results tile of the Views wizard (see Edit Facets Attributes Page) is used to configure which facets to display in the following sections of the Brief Results page:

- **Refine My Results** – This section displays static and dynamic facets.
- **Show only** – For more information, see Displaying Top-Level Facets in the Show Only Section.

To display facets in the Refine My Results section:
The facet is added to the list of facets to display in the Front End.

1. On the Primo Home > Ongoing Configuration Wizards > Views Wizard > Tiles Configuration page, select **Brief Display** in the **Page** drop-down list.

   The tiles that configure the Brief Results page appear in the list (see Tiles Configuration Page (Brief Display Tiles)).



Tiles Configuration Page (Brief Display Tiles)

2. Click **Edit Tile** in the row that contains the Refine My Results (Facets) tile.

   The Edit Facets Attributes page opens (see Edit Facets Attributes Page).

Edit Facets Attributes Page

3. In the **Facets to display** section, select a facet on the **Facet Type** drop-down list and click **Create**.

4. Update the following columns for the new facet:

5. **Items to display** – Specify the number of items that you want to display for the facet. The default value is 5.

Note

Because the system creates five groups for the Creation Date facet, a value greater than 5 will only display five groups. For information on how facet groups are created for the Creation Date facet, see Facets Section in the *Primo Technical Guide*.

6. **Sort** – Specify the type of sort for the facet. The following values are valid:
   - **alpha_numeric** – Sorts the facet's values alphabetically.
   - **by_size** – Sorts the facets by the number of matching records, in descending order.
7. **Tabs** – Select the check box for each tab in which you want to display the facet.
8. Click **Save & Continue**.

   The Tiles Configuration page opens (see Tiles Configuration Page (Brief Display Tiles)).
9. Click **Continue** to deploy the changes to the Front End.

Modifying Facet Labels

Primo allows you to modify the facet labels that display above each list of facets in the Front End (see Facet Labels in the Front End), the labels and buttons that display in the More options lightbox in the Front End (see Facet Labels in the Front End), the items in the **Facet Type** drop-down lists in the Back Office (see Facet Type drop-down list in the Back Office).

Show only

Full Text Online (219)
Available in the Library (211)

Refine My Results

Topic
National Drug Research Institute (37)
280000 Information, Computing And Communication Sciences (18)
320000 Medical And Health Sciences (18)
School of Information Systems (16)
220000 Social Sciences, Humanities And Arts-General (12)

More options

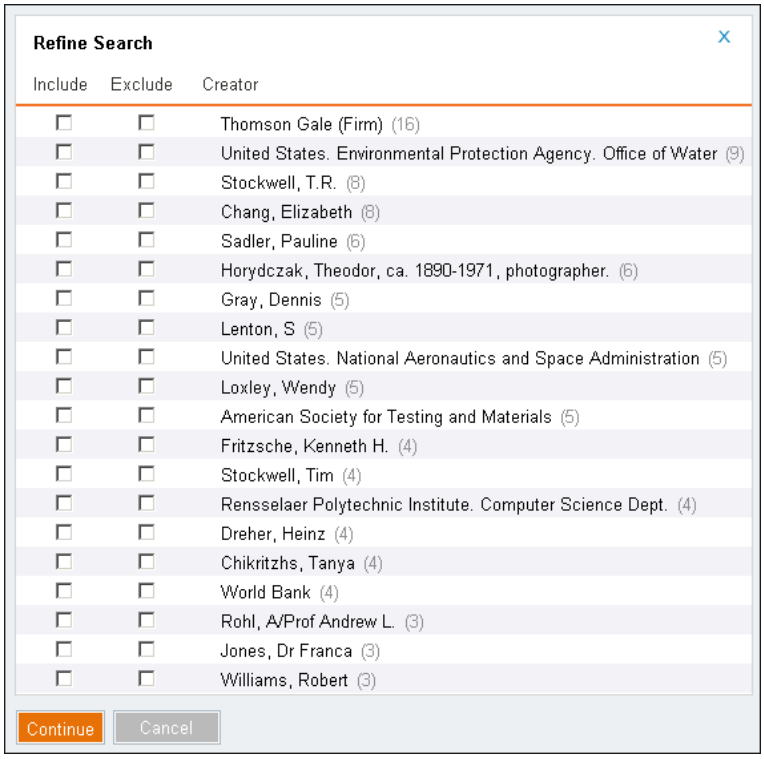
Creator
Thomson Gale (Firm) (16)
United States. Environmental Protection Agency. Office of Water (9)
Stockwell, T.R. (8)
Chang, Elizabeth (8)
Sadler, Pauline (6)

More options

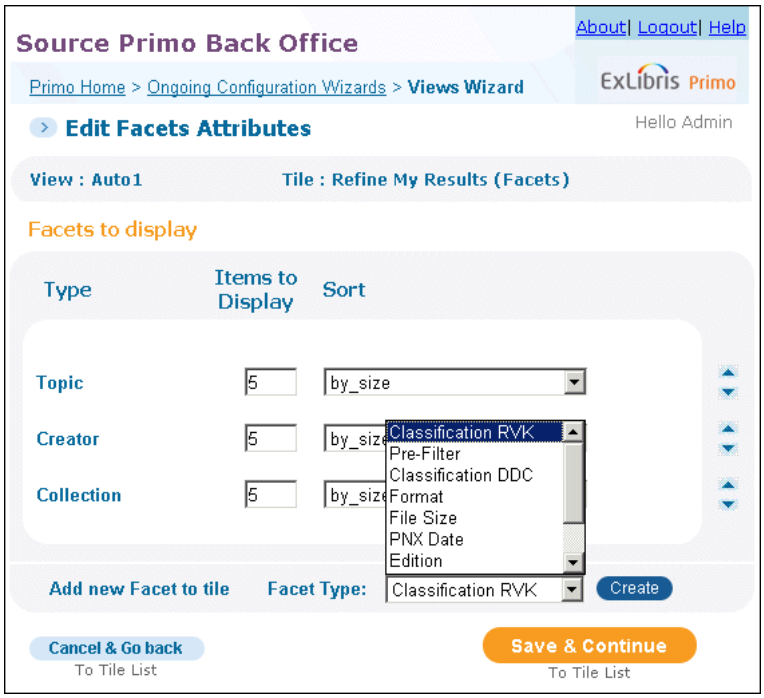
Collection
Volcano Campus Fun Library (95)
Volcano Campus Internet (54)
Volcano Campus Med Library (26)
Reef Campus Library (22)
Volcano Campus Eng Library (15)

More options

Facet Labels in the Front End



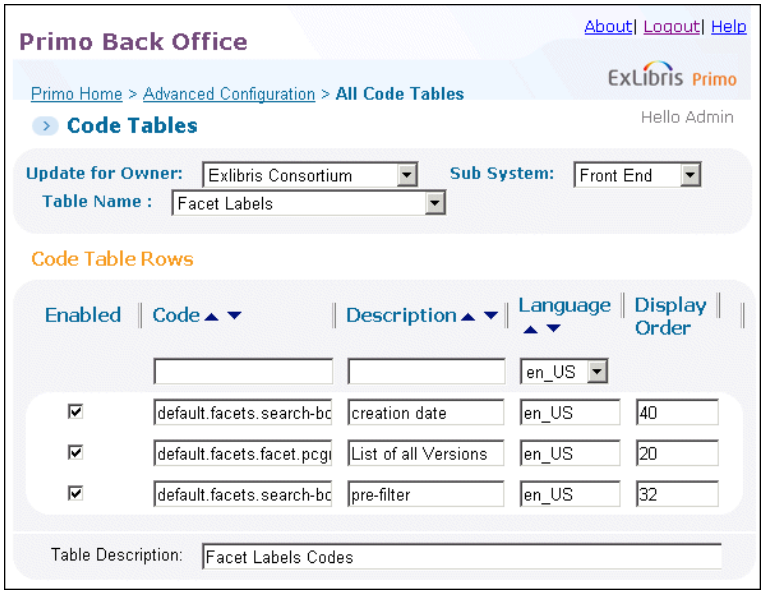
More Options Lightbox in the Front End



Facet Type drop-down list in the Back Office

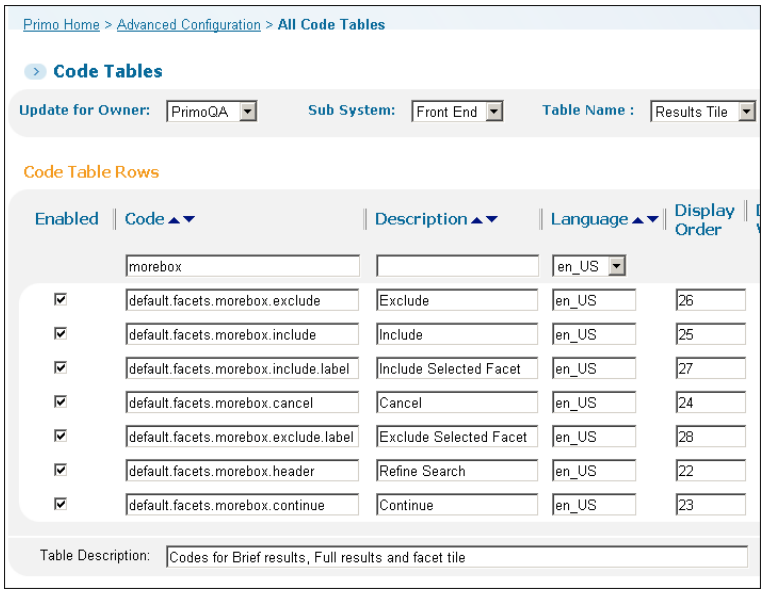
The following code tables allow you to modify the facet labels that display in the Front End and Back Office per view and language:

- **Facet Labels** – Configures the facet labels that display on the results page in the Front End (see Facet Labels Code Table).



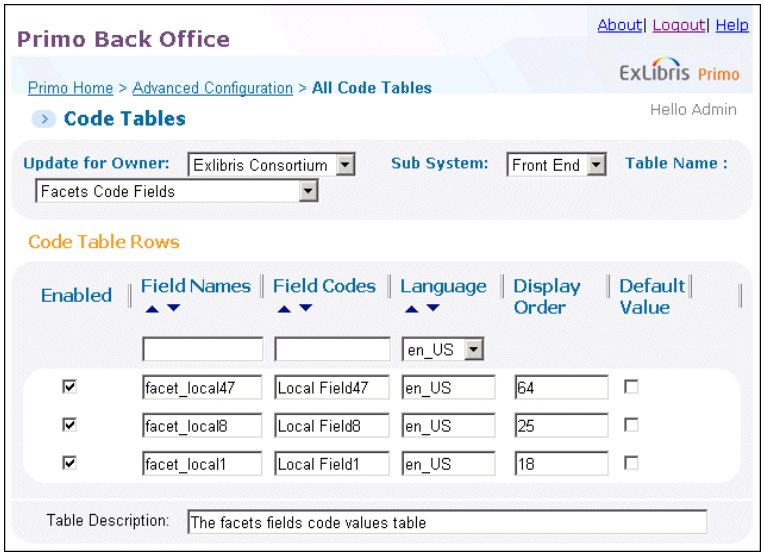
Facet Labels Code Table

- **Results Tile** – Configures the labels and buttons that display in the More options lightbox (see Facet Labels Code Table).



Results Tile Code Table

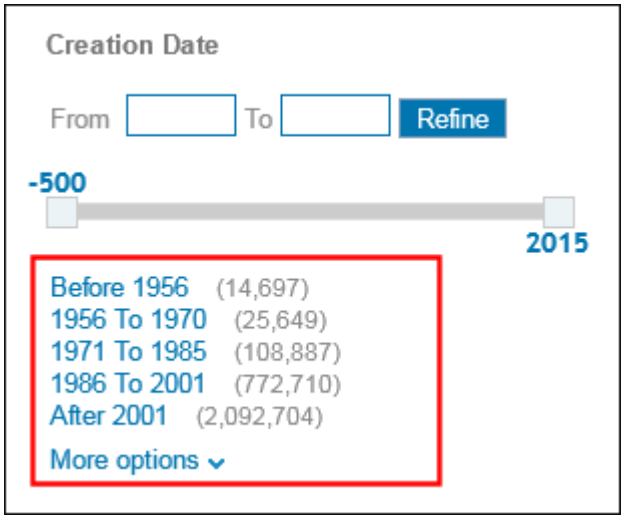
- **Facet Code Fields** – Configures the facet labels that appear in the Facet Type drop-down list in the Back Office (see Facet Code Fields Code Table).



Facet Code Fields Code Table

Enabling the Creation Date Facet Categories

Primo allows you to enable the Creation Date facet categories, which are disabled out of the box. In its place, Primo displays the date slider, which provides more precision.



Creation Date Facet Categories Enabled

For information on hiding the Date slider, refer to the *Primo Technical Guide*.

To enable the Creation Date facet:

1. Log on to the Back Office server as the `primo` user.
2. Enter the following commands to access and open the CSS file that is used to customize your view:

```
fe_web
```

```
cd css

vi <custom_css/>.css
```

Note

It is not recommended to modify the default Primo CSS, which can be overwritten during updates. For more information regarding the customization of Primo views, see the *Primo Technical Guide*.

3. Change **display: none** to **display: block** in the following element in the CSS file:

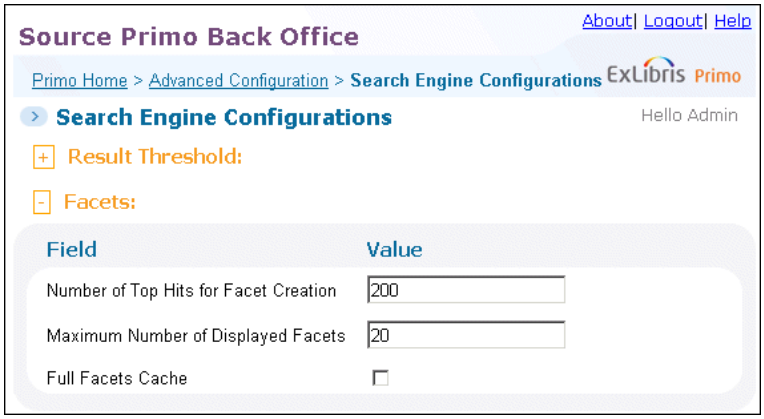
```
.EXLFacetContainer ol li.EXLHiddenFacetCreationDate

display: block;}
```

4. Save the changes to the CSS file.
5. On the **Primo Home > Deploy All** page, select all options and click **Deploy**.
6. Perform a search to verify that the Creation Date facet appears in the view.

Facet Search Engine Parameters

The following parameters on the Primo Home > Advanced Configuration > Search Engine Configurations page (see Facet Parameters on Search Engine Configurations Page) allow on-premises customers to control how the system builds and displays facets:

- **Number of Top Hits for Facet Creation** – This field specifies the number of top-ranked records the system will use to create the list of facet values that are displayed in the Refine My Results section of the Front End. The default value is 200 top-ranked records.
- **Maximum Number of Displayed Facets** – This field specifies the maximum number of facets that can be displayed in the FE (for example, when **More** is invoked).
- **Full Facets Cache** – This field indicates whether cache is used to increase the maximum value of the **Number of Top Hits for Facet Creation** field to 5000. For more information on adding additional memory, see Full Facets Cache (on-premises installations only).



Facet Parameters on Search Engine Configurations Page

Sorting Facets

The system uses custom sort definitions for both search results and facets if you configure custom sorting in the Sorting section on the Search Engine Configuration page and store the necessary sort definitions in the following directory, which is accessible to on-premises customers only:

```
../ng/jaguar/home/profile/analysis/sort/user_defined
```

Note

The system uses the SE Char conversion mapping table to normalize the sort keys that are stored in the Sort section of the PNX for search results only. This mapping table is not used for sorting facets.

For more information on the normalization of characters, see the *Primo Technical Guide*.

Configuring Static Facets

Primo supplies out-of-the-box values for the following static facets:

- Prefilter
- Resource type – For more information, see Adding Resource Types.
- File Size
- Language

You can define additional static facets using any of the predefined fields in the Facets section of the PNX (such as format or genre) and any of the 50 locally defined facets.

Static facets can be configured at the institution level for institutions in multitenant environments. All other environments must configure static facets at the installation level.

The following tables are used to configure static facets in the Back Office:

Tables Used to Configure Static Facets

Table	Description
Static Facets mapping table	Defines each static facet and automatically assigns the following tables to each one: • A static facets values mapping table (see below) • A display values code table (see below) **Note** A change to any static facet mapping table requires you deploy of all code and mapping tables from the Deploy All page.
Mapping tables for the static facet values	Each mapping table defines the list of values for a static facet. **Note** A change to any static facet mapping table requires you deploy of all code and mapping tables from the Deploy All page. When a static facet is defined in the Static Facets mapping table, the system automatically creates a values mapping table for the static facet. For example, the `facet_genre_values` mapping table defines the list of values used for the Genre static facet. **Note** For the Library facet, the system automatically populates the values table with the library codes that have been defined with the Institution wizard and uses this table for all institutions in your Primo installation.

Table	Description
Code tables to display values in the Front End UI	Each code table defines the labels that display in the Front End for each static facet value. This code table allows you to customize the facet labels per view and language. When a static facet is defined in the Static Facets mapping table, either a predefined code table is used or a code table is generated when you first synchronize the static facet's values mapping table. For example, if you define the resource type facet as a static facet, the system uses the predefined Facet Resource Type code table.

To define a static facet:

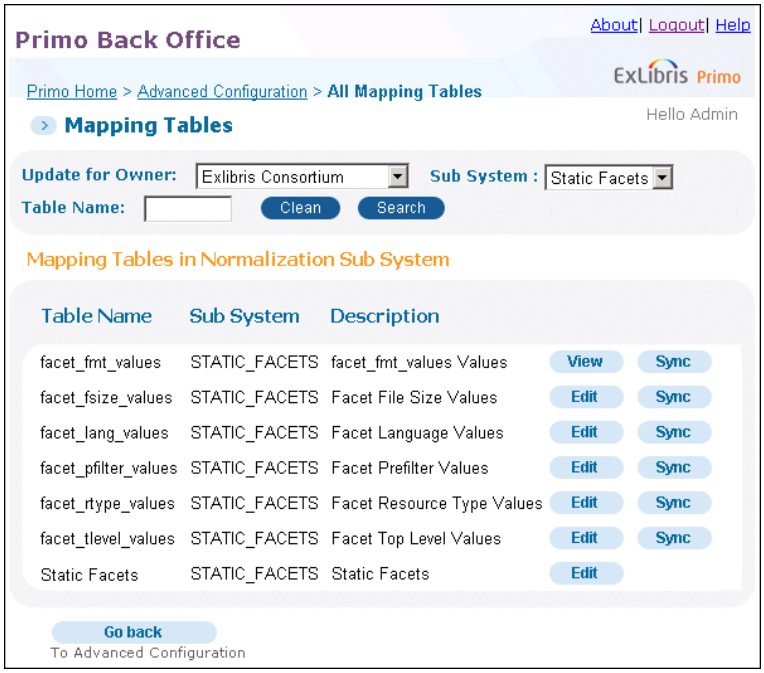
1. On the Back Office's home page, select **Advanced Configuration**.

   The Advanced Configuration page opens.

2. Select **All Mapping Tables**.

   The Mapping Tables page opens (see Static Facets Subsystem).

3. Select the **Static Facets** subsystem to display the list of the static facets mapping tables.



Static Facets Subsystem

4. Click **Edit** to select the Static Facets mapping table for editing.

   The Static Facet Mapping Table page opens.

Static Facets Mapping Table

5. In the Create a New Static Facet section, select a facet in the **Choose a Facet** drop-down list.

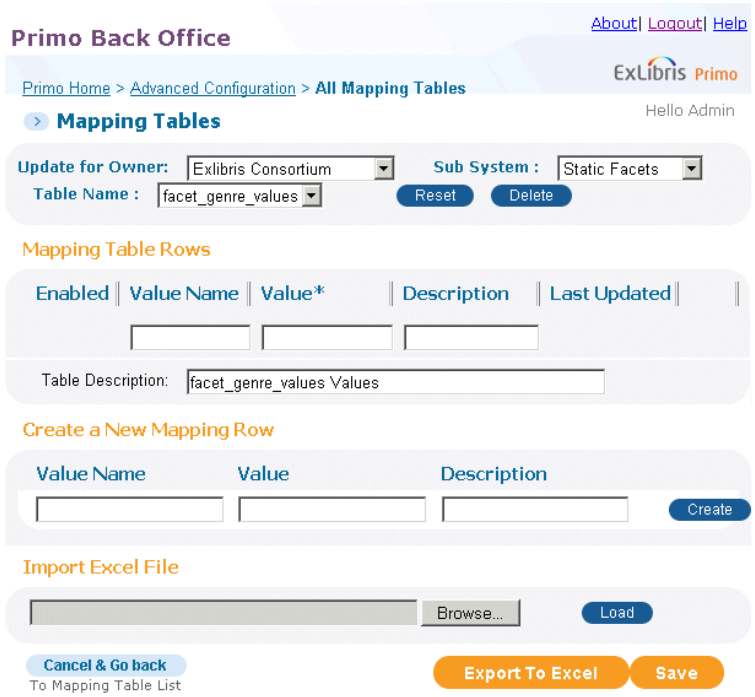
6. Click **Create** to add the new facet to the mapping table.

Note

For every static facet, the Values Table Name and Code Table Name fields are defined automatically by the system and cannot be modified.

7. Click **Save** to save your changes and return to the Static Facets Subsystem page (see Static Facets Subsystem).
8. Click **Edit** to modify the facet values of the facet that you defined – for example, the facet_genre_values table.

   The `facet_genre_values` table opens.



facet_genre_values Mapping Table

9. Enter values in the fields in the Create a New Mapping Row area to add a new facet value to this table.
10. Click **Create** to add the new mapping row to the table.
11. Click **Save** to save your changes and return to the Static Facets Subsystem page (see Static Facets Subsystem).
12. Click **Synch** to propagate the new values to the associated code table (such as the Basic Media Type code table for prefilter facets).

Note

This operation only adds new values to the code table. To override existing values, you must update the code table manually.

13. To view or update the associated code table, edit the code table on the Primo Home > Advanced Configuration > All Code Tables page.
14. Deploy the code and mapping tables.

Adding Resource Types

It is possible for on-premises customers to modify the list of resource types. For example, if you want to add a new resource type that will be used for display, a prefilter, and facets, use the following procedure.

Note

Because prefilter and resource type facets are defined as static facets by default, there is no need to define them as static facets.

To add a new resource type:

1. Add the new resource type to the **Display/Type** field in the normalization rules.
2. Save your changes and then use the Primo Home > Deploy All page to deploy the changes made to the normalization rules.
3. Rerun the pipe to update the PNX.

   Note

   It is now possible to run pipes without harvesting from the data source.

   ---

4. Update the following mapping tables:
   1. **facet_pfilter_values** in the Static Facets subsystem – Add the new resource type to the prefilter values. Save the values.
   2. **facet_rtype_values** in the Static Facets subsystem – Add the new resource type to the resource type values.
5. On the Static Facets subsystem page (see Static Facets Subsystem), click the **Sync** button in the **facet_pfilter_values** and **facet_rtype_values** mapping table rows to propagate the changes to the associated code tables.

   Static Facets Subsystem

6. Update the following mapping tables:
7. **pre-filter normalization rules** in the Normalization subsystem – Add the new resource type to the prefilter facet.
8. **format_mean normalization rules** in the Normalization subsystem – Add the new resource type to the resource type filter.
9. Add the correct labels for the new resource type in the following code tables:
   - Basic Media Type
   - Advanced Media Type
   - Icon Code
   - Facet Resource Type

Note

Include labels for English and any other languages you use in the Front End.

10. Use the Primo Home > Deploy All page to deploy the changes made to the mapping and code tables.
11. Add an icon image for the new resource type to the following directory on the server:

```
fe_web
cd images
```

12. Enable the new resource type in the Front End via the Views wizard:
    1. In the Basic Search tile, select the new resource type.
    2. In the Advanced Search tile, edit the resource type and add the new resource.
13. Use the Primo Home > Deploy All page to deploy the changes made to the views.

Configuring Top-Level Facets

The **toplevel** field in the Facets section of the PNX is used to create top-level facets, which are static facets that display in the Show only and Refine My Results sections on the Brief Results page (see Facets on the Brief Results Page).

By default, Primo displays the following top-level facets on the Brief Results page in the Front End:

- **Full Text Online** – Local records display if the delivery category is **Online Resource**, **Alma-D**, or **Alma-E**. Primo Central records display if the delivery category is **Remote Search Resource** and the **delivery/fulltext** field is either **fulltext** or **fulltext_linktoresrc**.
- **Available in the library** – Local records display if the **display/availability_pnx** field is **available**.
- **Peer-reviewed Journals** – Primo Central records display if the **display/lds50** field is **peer_reviewed**.
- **Open Access** – Primo Central records display if the **display/oa** field is **free_for_read**.
- **Cited Articles** – Records display if they contain citations.

Adding Values for Top-Level Facets

On-premises customers are permitted to add values to top-level facets.

To add a new value to a top-level facet:

1. Add rules to support the new facet value in the Facets section of the PNX. For more information on the PNX record, see the *Primo Technical Guide*.
2. Make sure that the top-level facet has been defined and enabled in the Static Facets mapping table.
3. Add the new facet value to the facet_tlevel_values mapping table.
4. Synchronize the values in the Top Level Facet code table with the changes made to the facet_tlevel_values mapping table.
5. For the new value, modify the Description field in the Top Level Facet code table to display the correct value in the Front End.

   Note

   Include display values for English and any other languages you use in the Front End.

6. Use the Primo Home > Deploy All page to deploy the changes made to the mapping tables, code tables, and normalization rules.

Displaying Top-Level Facets in the Show Only Section

Primo allows you to display the Show only section in the following sections on the Brief Results page in the Front End:

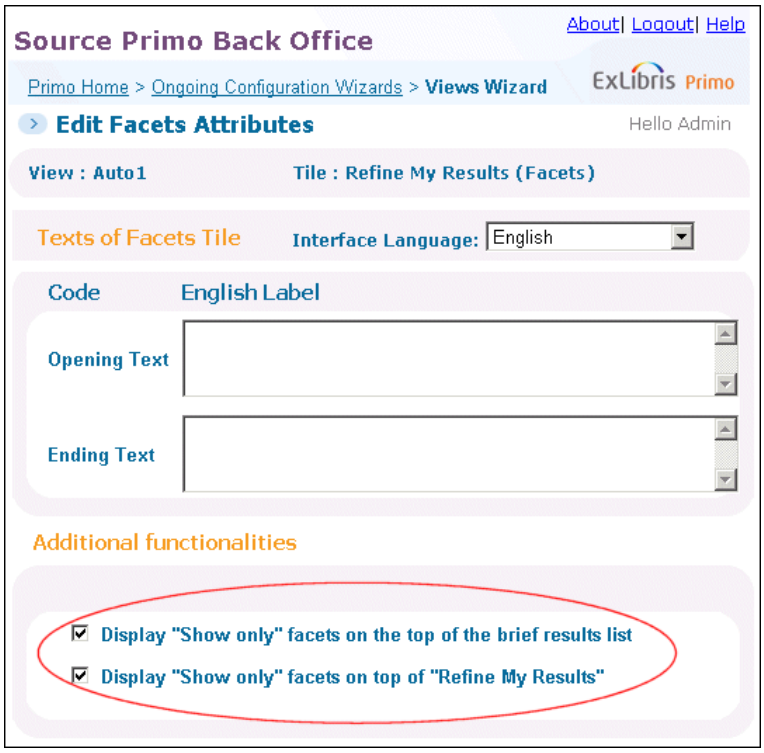
- Above the Refine My Results section on the left side of the page.
- Above the list of results at the top of the page.

You can use the following parameters on the Refine My Results tile page in the Views wizard to configure the top-level facets to display in both areas, either area, or not at all:

- **Display "Show only" facets on the top of the brief results list** – Select this field if you want to display the Show only section above the list of results.
- **Display "Show only" facets on the top of "Refine My Results"** – Select this field if you want to display the Show only section above the Refine My Results section.

Note

If you clear both fields, the Show only sections will not display in the Front End.



Configuring Show Only Section

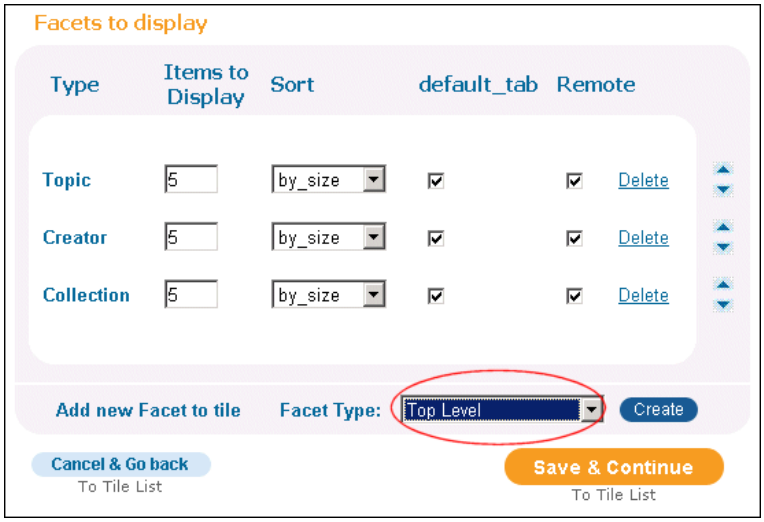
Note

To propagate the view's changes to the Front End, deploy the view from the Views wizard or the Primo Home > Deploy All page.

Displaying Top-Level Facets in the Refine My Results Section

To display the top-level facets in the Refine My Results section:

1. On the Refine My Results tile page in the Views wizard (see Adding Top-Level Facets), select **Top Level** in the **Facet Type** drop-down list then click **Create**.



Adding Top-Level Facets

2. Specify the following fields for the **Top Level** facet type:
   - **Sort** – Specify the type of sort for the facet.
   - **Items to display** – Specify the number of facet values to display initially in the Front End. Note that the patron can access additional top-level facets by selecting **More**.
   - **Tab** - Specify the tabs in which you want to display the top-level facets.
3. Click **Save & Continue**.

Note

To propagate the view's changes to the Front End, deploy the view either in the Views wizard or on the Primo Home > Deploy All page.

Additional Primo Features

This section includes:

General Configuration Wizard

Return to menu

The General Configuration Wizard enables on-premises customers to configure advanced operations in the Back Office. You can use it to edit subsystem settings, including the name and logo that appears on all pages within the subsystem.

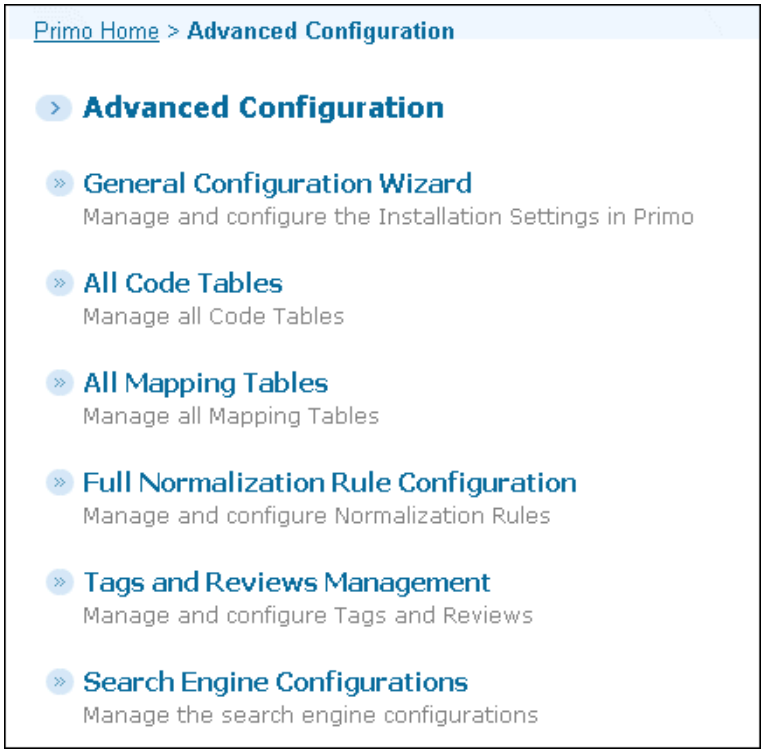
General Configuration parameters can only be configured at the installation level. For hosted environments, contact Ex Libris Support for assistance.

Accessing and Using the General Configuration Wizard

To access the General Configuration wizard:

1. On the Back Office's home page, click **Advanced Configuration**.

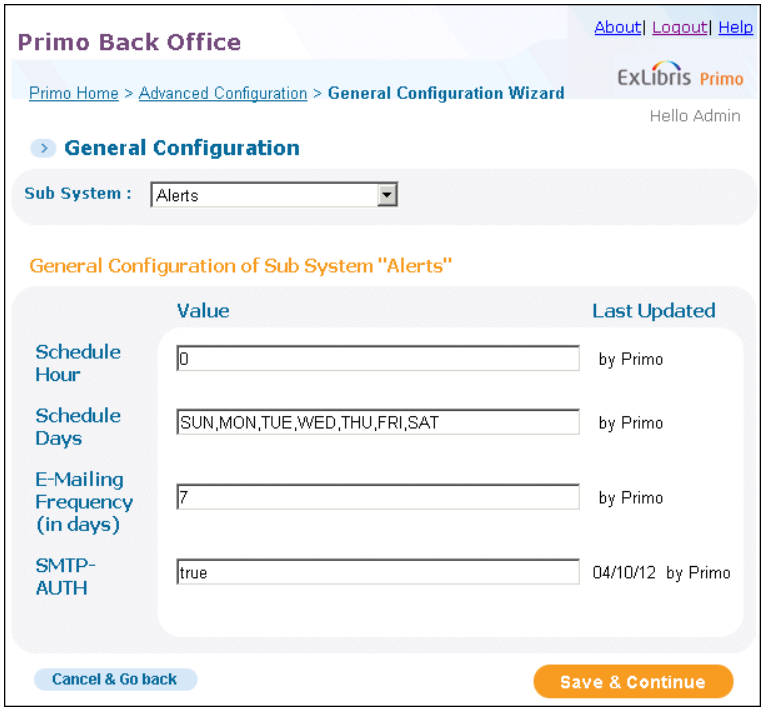
   The Advanced Configuration page opens.



   Advanced Configuration Page

2. Click **General Configuration Wizard**.

   The General Configuration page opens.



General Configuration Page

3. Select a subsystem on the **Sub System** drop-down list.

   The subsystem's fields appear in the Sub System area.

4. Edit the fields according to the following subsystems:

Subsystem Field Descriptions

If the selected subsystem is	Refer to the following table for a list of fields:
Alerts	Alerts Parameters
Back Office	Back Office Parameters
Client IP	Client IP Parameters
Delivery	Delivery Parameters
Email and SMS Configuration	E-mail and SMS Configuration Parameters
Installation	Installation Parameters
Primo UI	Primo UI Parameters

If the selected subsystem is	Refer to the following table for a list of fields:
Publishing	Publishing Parameters
Remote Search	Remote Search Parameters
RTA	RTA Parameters
Security	Security Parameters
Statistics	Statistics Parameters
Thresholds	Thresholds Parameters

Note

To edit the details of another subsystem, select that subsystem in the **Sub System** drop-down list.

5. Click **Save & Continue** to update the subsystem details.

Alerts Parameters

The following table describes the fields for the Alerts subsystem:

Alerts

Field name	Description	Format
E-Mailing Frequency (in days)	Determines how often users will receive an email. An email will be sent only if a sufficient number of days has passed. Beginning with the April 2015 release, you can disable alert emails by specifying a **0** in this field.	number
Number of items included in alert	Indicates the maximum number of records (not to exceed 50) to include in alerts. The default is 25 records.	number
Schedule Days	The days on which the system will check to see if there are new records for the alert queries. The valid values are **SUN**, **MON**, **TUE**, **WED**, **THU**, **FRI**, and **SAT**.	The first three letters of the name of the day. To specify a more than one day, separate the days with a comma. For example: `MON,TUE,WED`

Field name	Description	Format
Schedule Hour	The hour at which the system will check to see if there are new records for the alert queries. The valid values are 0 to 23.	number (such as 0, 1, and so forth)
SMTP_ AUTH	Allows alert e-mails to be sent if SMTP authentication does not require a login and password. If SMTP does not use a login and password for authentication, set this field to false to allow alert e-mails to be sent without authentication. Changes to this field require the FE server to be restarted.	true or false

Back Office Parameters

The following table describes the fields for the Back Office subsystem:

Back Office

Field name	Description	Example
Filter by Institution	This field indicates whether the system will filter areas of the Back Office user interface. If this field is set to **true**, the system will filter the following pages in the Back Office user interface for all staff users that are associated with a specific institution: • **Data Sources** – Display only data sources that belong to the current user's institution. When creating a new data source, staff users can add it only to the their institution. • **Pipes List** – opens only pipes that belong to the user's institution. When defining new pipes, the staff users can associate only data sources that belong to the their institution. • **Views Wizard** – opens only views that belong to the current user's institution. Staff users who are required to work with all institutions should be assigned **All institutions** in the Institution field. Filtering applies to all staff roles except for the Superadmin role.	true
Display BO A-Z List	This field indicates whether to display the A-Z list filters above the lists on the Data Sources Configuration and Pipe Monitoring pages. To display the A-Z filters, specify **true**.	false

Client IP Parameters

The following table describes the fields for the Client IP subsystem. It allows you to specify an IP from a specific header in the request.

Note

If any of the Delimiter, Header Number, and Index In IP Group fields are not specified or incorrect, the system will use the remote address of the request. If the IP found is not valid, Primo will use the remote address IP of the request.

Client IP

Field name	Description	Example
Client IP Proxy Header	The IP header name.	`x-forwarded-for`
Delimiter	If the request contains several IPs, this field allows you to specify the delimiter (such as a comma) used to separate each IP.	,
Header Number	If the request contains multiple headers, this parameter allows you specify the position number of the header in the request. The valid values are 1 to **n**, where **n** is any whole number greater than 1. For example, if you want to use the first header in the request, enter **1**.	2
Index In IP Group	If the request contains multiple IP addresses, this parameter allows you specify the position number of the IP address in the list. The valid values are 1 to **n**, where **n** is any whole number greater than 1. For example, if you want to use the first IP address in the list, enter **1**.	`1`

Delivery Parameters

The following table describes the fields for the Delivery subsystem:

Delivery

Field name	Description	Example
Always check if also Physical Item	This field indicates whether the system will always check to see if an item has a physical resource and provide GetIt links for both online and physical resources if both exist. The following values are valid: • **N** – this option indicates that only a single delivery category is defined, giving preference to online resources. • **Y** – this option indicates that even if the delivery category is an online resource, the system should check if the PNX also represents physical items. The default value is **Y**.	Y
INSTITUTION_AVAILABILITY	For institution-specific searches, this parameter indicates whether the availability of the library should be based on the institution, not the user's institution. The following values are valid: • **Y** – Indicates that availability for institution-specific searches is based on the institution. • **N** – Indicates that availability is always based on the user's institution. The default value is **Y**. The system determines if a search scope is institution-specific by checking all of the individual search scope values within the search scope and checking that their type is defined on the Primo Home > Ongoing	Y

Field name	Description	Example
	Configuration Wizards > Pipe Configuration Wizard > Scope Values Configuration path/page. An institution-specific search scope is one in which only one institution type search scope value has been defined. **Note** This means that only scopes that represent real institutions should be assigned the institution type. An institution that represents a “central” institution which was created, for example, for shared online resources should be assigned the other type.	
LIBRARY_ AVAILABILITY	For library-specific searches, this parameter indicates whether the availability of the library should be based on the library, not the user's institution. The following values are valid: • **Y** – Indicates that availability for library-specific searches is based on the library. • **N** – Indicates that availability is always based on the user's institution. The default value is **Y**. The system determines if a search scope is library-specific by checking all of the individual search scope values within the search scope and checking that their type is defined on the Pipe Configuration Wizard > Scope Values Configuration path/page. A library-specific search scope is one in which only one library type search scope value has been defined. **Note** This means that only scopes that represent physical libraries should be assigned the library type. Libraries that include only online resources should be assigned the other type.	Y
Shared User Database & Resource sharing	For OPAC via Primo configurations, this field indicates whether institutions in a multi-institution site share a database and resources. The following values are valid: • **N** – None of the institutions share a database or resources. • **Y** – All of the institutions share a database or resources. • **P** – Some of the institutions share a database or resources. For these institutions, select the **Institution is part of the shared user database/Resource sharing** check box on the Edit Institution page (**Primo Home > Ongoing Configuration Wizards > Institution Wizard**). For more information on setting this parameter, see the section on configuring OPAC via Primo in the *Primo Interoperability Guide*.	N
Use SFX RSI	This parameter indicates whether the system should use the SFX Rapid Service Indicator (RSI) API instead of the Journal Subscription Information (JSI) API to check if remote search records have full-text or not. Enter **Y** to use RSI. The default value is **N**. RSI is much more accurate than JSI, because it can use additional identifiers (in addition to ISSN/ISBN) to solve scenarios where the SFX JSI returned no full text when in fact there was full text. However, some discrepancies still remain because RSI does not support a check based on the title.	Y

Field name	Description	Example
	Note Because this parameter applies to all Primo institutions, you must upgrade all instances of SFX to RSI. RSI is available with the April 2009 SFX revision and later releases.	

Email and SMS Configuration Parameters

The following table describes the fields for the E-mail and SMS Configuration subsystem:

E-mail and SMS Configuration

Field name	Description	Example
Activate Captcha [Y/N]	Set this field to **Y** to activate the Google CAPTCHA method to secure e-mail in Primo. The valid values are **Y** and **N**. **Note** In addition, you must configure the **Private Captcha Key** and **Public Captcha Key** fields.	Y
Contact Person E-Mail	The Back Office administrator's e-mail address. If a process (such as a pipe, slice, or search agent) fails, an e-mail message is sent to this e-mail address. **Note** This parameter is overridden by the settings in the E-Mail Addresses mapping table at both the installation and institution levels (**Primo Home > Advanced Configuration > All Mapping Tables**).	admin@primo.com
Country Code for SMS	Indicates the country code used for SMS. **Note** Leave this field blank if your site works with many countries. In this case, the user must specify a country code.	972
E-Mail Sender	This field allows you to define the sender for Watchdog e-mails. This field defaults to the following: Primo@exlibris.co.il	MyPrimo@MyInst.edu

Field name	Description	Example
Maximum SMS per message	Indicates the maximum number of messages that can be sent in a session. The default is 2.	2
Private Captcha Key	Enter the CAPTCHA private and public keys to provide secure e-mail in Primo. To request the keys, log on to your Google account at the following URL: https://www.google.com/recaptcha/admin/create	
Public Captcha Key	Enter the CAPTCHA private and public keys to provide secure e-mail in Primo. To request the keys, log on to your Google account at the following URL: https://www.google.com/recaptcha/admin/create	
SMS Default Institution	Indicates the default institution used for SMS.	Y
SMTP_ HOST	The IP address or the host name of the server that provides the SMTP service.	Local host
SMTP_ PASSWORD	The password used if the SMTP server requires a user login.	Password
SMTP_ USERNAME	The user name used if the SMTP server requires a user login.	User

Installation Parameters

The following table describes the fields for the Installation subsystem:

Installation

Field name	Description	Example
Cleanup_Max_Process_Age	The number of days after which cleanup is performed.	50
Console Status Url	The servlet status URL.	http://localhost:1701/status?XML=true

Field name	Description	Example
	It is used in case the JMX information for the current threads is not available.	
Display Initial	Indicates whether the Initial Configuration option is displayed in the main menu.	On/ Off
Display Ongoing	Indicates whether the Ongoing Configuration option is displayed in the main menu.	On/ Off
Help Base URL	The base URL of the FE help pages.	[Currently not active.] http://primo03.com:1601/primo_publishing/admin/help/
IGNORE_SSL_CERTIFICATE	This parameter enables the application to connect to servers using the SSL protocol even when those servers do not have a valid certificate. This may be useful for scenarios (such as testing) in which a certificate is not required. **Note** A change to this parameter will take effect only after restarting the FE server.	true
Installation Logo	The installation logo.	Primo Back Office
Installation Name	The name of the Installation.	Primo
Installation Type	The type of installation.	Test
MFE_CONFIG	The type of multiple FE configuration used. The following values are valid: • **none** • **many_to_one**	many_to_many **Note** For more information on multiple FE configurations, see the *Primo System Administration Guide*.

Field name	Description	Example
	• **many_to_many**	
MFE_FRONTENDS	A comma-separated list of the FE servers that are used in a multiple FE configuration, including the master FE. Use the following format: `<server_name>:<port> [, ...]</port></server_name>`	primo01.exlibrisgroup.com:1701, primo02.exlibrisgroup.com:1701, primo03.exlibrisgroup.com:1701
MFE_MASTER	The fully-qualified name and port of the FE server acting as the master server in a multiple FE configuration. Use the following format: `<server_name>:<port/></server_name>`	primo01.exlibrisgroup.com:1701
Parallel Processing of Pipes Mode	Indicates the mode used to run pipes in parallel. The following modes are valid: • Harvesting Only • Harvesting, NEP • Harvesting, NEP, Dedup-FRBR For more information, see Parallel Processing of Pipes.	Harvesting, NEP
PPS SERVER	Contains a comma-separated list of host names of the Primo Provisioning System, which is used to automatically create a Primo environment for new customers. It is not relevant to customers already working with Primo.	myprimo.hosted.exlibrisgroup.com,il-qtlab01
Primo Central Adaptor Version	The Primo Central adapter version.	1
Primo Service Pack	The service pack used with the Primo system.	0

Field name	Description	Example
Primo Version Number	The version number of the Primo system.	0.02
primo_admin_base		http://primo03.com:1601/primo_publishing/admin/
primo_base		http://primo03.com:1701/primo_library/libweb/
primo.process.ParallelProcessing.NumThreads	Used to determine the number of pipes (number of threads / 4) Primo allows to run in parallel. Out of the box, this parameter is set to **8** (two pipes). If you have the resources and want to raise this value, we suggest doing it in phases. For example, raise the value to **12** to make sure the pipes perform well. If pipes perform well, continue incrementing the value by 4 to determine the maximum number of pipes your environment can run in parallel. **Note** The more pipes running in parallel does not only affect the BO machine's load, it also causes more load on the DB machine. Make sure that you also consider the performance of the DB machine when increasing the number of threads.	12 **Note** A change to this parameter requires you to restart the Back Office.
Process_Run_Indexing_After_Pipe	Indicates whether the process should automatically run indexing after running a pipe.	True/ False
Process_Run_Indexing_and_Didumean_After_Pipe	Indicates whether the process should automatically run indexing and did-u-mean after running a pipe.	True/ False
Proxy_Server	Requests sent to third-party providers (such as Amazon, Google, and Syndetics) to retrieve	https://

Field name	Description	Example
	thumbnails is sent through a proxy server. In case there are several thumbnail links for a record, the following templates are given precedence: 1) syndetics_thumb 2) syndetics_thumb_exl (new template) 3) Google templates 4) Other providers Note: Amazon thumbnail requests will no longer be sent for customers who use the out-of-the-box template code.	
Redirect View	Indicates whether the system should change views without first terminating the session.	false
Reporting Base URL	The URL of the reporting base.	http://primo03.com:1601/birt/frameset?_report=Report
reporting_base	The Base URL of the reporting tool.	http://primo03.com:1601/birt/
Reports URL	The URL of the reports list.	http://primo03.com:1601/birt/run?__report=Report\ReportsList.rptdesign
Request Thread Pool Name	The locate thread pool object name.	jboss.web:name=http-0.0.0.0-1701,type=ThreadPool
Search Statistics Report URL	The URL of the list of search statistics reports displayed in the monitoring area of the site.	/birt/run?__report=Report/PrimoSearchStatisticsMainMenu.rptdesign
Spare Requests Threads Threshold	The minimum spare threads threshold from the maximum thread pool. If the maximum number of threads is set to 360, Primo will start blocking requests at 310.	50

Field name	Description	Example
Start Monitoring Threads Threshold	Interval from the maximum threads threshold to start monitoring. Defines the threshold for monitoring requests and verifies whether there are equal requests from the same IP.	50
Starvation Mode	Indicates how indexing and the execution of the Dedup_Frbr pipe is handled during parallel processing of pipes. The following options are valid: **By Schedule** (default) and **Force**. **Note** It is not necessary to perform a deploy or restart the Back Office after changing this parameter. For more information, see Starvation Mode.	Force
System Last Stage	The last stage of the system's Publishing Platform Process.	
Use local fields 30-39 as lateral links	Indicates whether the local search fields are used for lateral links in the detailed display. The default value is **Y**. If you do not want local search fields to be linkable, you must set this field to **N**. **Note** If you make any changes to this field, you must restart the FE server. For more information on configuring lateral links, refer to the *Primo Technical Guide*.	N

Primo UI Parameters

The following table describes the fields for the Primo UI subsystem:

Primo UI

Field name	Description	Values
CJK IE6 ENCODING	For CJK customers who want to enable CJK encoding for Internet Explorer 6 (IE6), set this field to **ON**. Otherwise, set this field to **OFF**.	ON/OFF
Client IP Proxy Header	This parameter is intended for sites that have an SSO via proxy configuration in which the IP of the client (such as the user) is always transformed to an on-campus IP by the proxy. As a result, IPs of off-campus guests that are not signed in are changed to an on-campus IP, giving these users access to restricted resources. This flag should contain the HTTP Header parameter that contains the user's original IP so that Primo can use the original IP for authorization.	
Default View	This is the default view that the system displays in the Front End if the view ID in the URL is missing or invalid. You can specify any view code that is defined in the Views wizard. By default, this field is set to **UnknownView**, which displays an error message that is defined with the following code in the View Labels code table: `default.unknown.view.Requested_Page_Was_Not_Found` If you have a single view or a main view, it is recommended to change the default value to the view's code.	UnknownView
Display_ Reviews	Indicates whether the Reviews function should be active in the Primo User Interface.	Y/N
Display_Tags	Indicates whether the Tags function should be active in the Primo User Interface.	Y/N

Is Multilingual Interface	This field indicates whether filters are activated in the full record display to support a multilingual thesaurus in Primo.
	
	The Multilingual Interface feature allows you to filter out the following display and facet fields in the full record display if the language code of the subject/facet match the language of the interface:
	
	• **Facets** – Topic, Genre, Format, Creator-Contributor, and Local Field 1
	
	• **Display** – Title, Subject, Description, Format, Creator, Contributor, Local Field 1, and Local Field 20
	
	To implement this feature, the above display and facet fields must contain a `$$8` code and language code (ISO 639 three letter code) in the PNX record, as follows:
	
	`display/subject Urban ecology$$$8eng`
	
	`display/subject Ecologie urbane$$$8fre`
	
	`display/subject Ekologie urbanische$$$8ger`
		true

Field name	Description	Values

	`facets/topic Urban ecology$$$8eng`
	`facets/topic Ecologie urbane$$$8fre`
	`facets/topic Ekologie urbanische$$$8ger`
	For example, if the interface language of the Front End user interface is French, the following subject will display in the full record display and the facets section:
	`Ecologie urbane`
	To disable this feature, set this field to **false**.	

MetaLib Connection Timeout	Indicates the maximum time in seconds that Primo will wait for the resetting of MetaLib access authorizations. For additional information, see Synchronizing MetaLib Access Information.	60
Always Prefer Online Resources in Multi-Institution Records	This field indicates whether preference is given to online resources when deduped records have multiple resource types. The default value is **Y**. If this field is set **Y**, Primo will give preference to the “Online Resources” delivery category if the user has access to the online resource based on the defined restricted delivery scopes. If the user does not have access to the online resource, Primo will use the delivery category of the records that belong to the user's institution. If this field is set **N**, Primo will always use the delivery category of the records that belong to the user's institution. **Note** If restricted delivery scopes are not defined in Primo, you may want to set this flag to N. Otherwise, Primo will consider all online resource as not restricted even if users do not have access to the online resource.	Y/N
Replace full width characters	Latin characters have two representations in Unicode: half- and full-width. Half-width characters are used most often. This option allows you to normalize full-width characters (which may be in use in Japan and other countries) to half-width characters (which is required by Primo). If you modify this parameter, it is necessary to update the pipe and then re-index the relevant data sources. If set to **Y**, it enables the system to convert UTF-8 full-width characters to half-width characters in the PNX so that the search engine can perform searches. The default value is **N**.	N
Session Timeout	The time in minutes in which a session will time out due to inactivity. The valid values are 15 - 60 minutes. The default value is **30** minutes.	30

Field name	Description	Values

Session Timeout URL	This field specifies the page to which the user will be redirected after a session times out.
	
	To configure the Session Timeout URL to be any file:
	
	1. Enter the URL of the file, using the following format:
	
	`http://<server:port>/primo_ library/libweb/static_htmls/<file>`
	
	2. Enter the following commands to access the `static_htmls directory`:
	
	`fe_web`
	
	`cd static_htmls`
	
	3. Place the file in the `static_htmls` directory.
		The system defaults to `search.do`.

Tags_As_List_ Or_ Cloud	Indicates whether Primo's front end defaults to the cloud or list view for tags.	L/C
Use_SSL	Indicates whether to use SSL.	Y/N

Publishing Parameters

The following table describes the fields for the Publishing subsystem:

Publishing

Field name	Description	Example
OAI.harvester. default.timeout	Defines the OAI harvesting timeout in milliseconds. The default value is 60 seconds.	60000
OAI.harvester. default.maxRetries	Defines the number of times a publishing pipe will retry an OAI server after a failed request, such as if there is a connection error to the OAI server or the OAI server returned a 503 (service unavailable) response. The default value is 3.	3
primo.dedup.CDLArticlesMatching Profile	This field defines the file that is used by the dedup algorithm for articles matching.	CDLArticles MatchingProfile.xml
primo.dedup.CDLMatchingProfile	This field defines the file that is used by the dedup algorithm for non-serials matching.	CDLMatchingProfile.xml

Field name	Description	Example
primo.dedup.CDLSeMatchingProfile	This field defines the file that is used by the dedup algorithm for serials matching.	CDLSeMatchingProfile.xml
primo.process.MaxUncompressedFileSize	This field defines the maximum size of an uncompressed file that is harvested. To disable the limitation and accept any file size, change this parameter to **-1**, and then deploy the **System Configuration** option on the Deploy All page. Note that if you are using custom file-splitters that write the entire file to memory, the Back Office server may fail due to lack of memory if the files are too large.	314572800
publish.process. MaxAllowedFailedBulks	This field defines the maximum number of failed blocks that are allowed by the system. The default value is 2.	2
publish.process. PhysicallyDelete Record	This field indicates whether the system will automatically remove records that have been marked for deletion in the P_PNX table. Records that have been marked for deletion cannot be removed from the P_PNX table until the indexes in the search engine (SE) have been removed and the hotswapping process has been run. The physical_delete_records pipe has been created to delete PNX records that were updated between the last SE index run and the previous delete pipe run. By default, the physical_delete_records pipe is enabled. To disable the pipe, set this field to **false**. Note that Primo executes this pipe only after the execution of the following processes: • `Indexing_Hotswapping` • `Indexing_Didumean_Hotswapping` • `Hotswapping`	false

Remote Search Parameters

The following table describes the fields for the Remote Search subsystem:

Remote Search

Field name	Description	Example
Maximum_ Number_Of_ Local_Results	This parameter defines the maximum number of local results to retrieve in mixed search (local and remote). There is no limit on the maximum number.	60

Field name	Description	Example
MetaLib_Version	Indicates the MetaLib version being used.	4.0
Remote_Search_Timeout	The length of time (in seconds) to perform a remote search. If the limit is exceeded, Primo returns the results that have already been retrieved. Further results can be displayed by clicking the Display more results link.	30

RTA Parameters

The following table describes the fields for the RTA subsystem:

RTA

Field name	Description	Example
RTA method for mapping data	This field indicates which RTA method to use for mapping data. The following methods are valid: • **normalization_rules** – This method uses the rules specified in the normalization rules to match the institution, library, and sub-location. • **mapping_table** – This method uses the mapping tables to match the institution, library, and sub-location. **Note** If the normalization rules for your source system modify the location information in the display/`availlibrary` field, you should use the normalization_rules method. For more information on RTA, see the *Primo Interoperability Guide*.	normalization_rules
RTA Timeout	This field indicates how long Primo will wait to get the RTA information. The maximum supported value is 20 seconds, which is the default. If an RTA request aborts because of a timeout, Primo displays the availability information that is stored in the PNX record.	20

Security Parameters

The following table describes the fields for the Security subsystem. Changes to these fields require you to deploy the **System Configuration** option on the **Primo Home > Deploy All** page.

Security

Field name	Description	Example
Access Limit Long Time Period	The maximum duration in seconds that is allowed for the long term limit. The default value is **86400** seconds.	75

Field name	Description	Example
Access Limit Short Time Period	The maximum duration in seconds that is allowed for the short term limit. The default value is **60** seconds.	10
Active clickjack filter	Indicates whether the Open Web Application Security Project (OWASP) recommended clickjacking filter has been enabled. It is used for adding an X-FRAME-OPTIONS HTTP response header to tell IE8 (and any other browsers) not to display content in a frame that is not from the same origin. The valid values are **Y** or **N**. The default value is **N**. **Note** When the clickjacking filter is enabled, it prevents the use of embedded searches if using iframes.	
Blocked List expiration Time	The amount of time in hours that an IP will be blocked. Note that the IP is unblocked when the FE is restarted. The default value is **24** hours.	12
IP DoS Filter-Enabled	Indicates whether the automatic IP-based DoS filter is enabled. The following values are valid: • **false** (default) - Disabled • **print_only** - Logs requests that exceed the maximum number of requests, but the system will not block IP addresses. To view these logs, use the following command: `cat library_server.log | grep 'Attacking request(info):'` • **true** - Enabled. To view these logs, use the following command: `cat library_server.log | grep 'Blocked request;'` When this filter is enabled, the system automatically counts requests from IPs (which do not belong to a session). If the number of requests (mainly search attempts) exceeds the value specified for the **IP DoS Filter-Max Allowed Requests** parameter in the interval specified by the **IP DoS Filter-Interval** parameter, the IP will be blocked. Because this filter does not identify a single user and campuses often use a single external IP (NAT), thresholds should be much higher. **Note** Blocked users will not receive an informative error by design.	false
IP DoS Filter-Interval	Indicates the interval at which requests are counted for the IP-based filters: **IPs to block** and **IP DoS Filter-Enabled**.	5

Field name	Description	Example
IP DoS Filter-Max Allowed Requests	Indicates the maximum number of requests permitted during the interval specified in the **IP DoS Filter-Interval** parameter.	40
IPs to block	Indicates whether the manual IP-based DoS filter is enabled. You can specify a list of IP addresses and IP ranges to monitor by separating each address with a semicolon. For example: `80.191.69.241;80.192.69;80.193;81` **Note** Blocked users will not receive an informative error by design.	
Long Term Access Limit	The maximum number of calls per IP (via API or browser) before IP is blocked to prevent Distributed Denial-of-Service (DDoS) attacks. The default value is **85000**. The long term limit is used to catch IPs that are consistently just below the access short term limit.	5000
Session DoS Filter-Enabled	Indicates whether the automatic session-based DoS filter is enabled. The following values are valid: • **false** - Disabled • **print_only** (default) - Logs requests that exceed the maximum number of requests, but the system will not block sessions. To view these logs, use the following command: `cat library_server.log | grep 'Attacking request(info):'` • **true** - Enabled. To view these logs, use the following command: `cat library_server.log | grep 'Blocked request;'` When this filter is enabled, the system automatically counts requests that have a session ID. If the number of requests (mainly search attempts) exceeds the value specified for the **Session DoS Filter-Max Allowed Requests** parameter in the interval specified by the **Session DoS Filter-Interval** parameter, the IP will be blocked. **Note** Blocked users will not receive an informative error by design.	true
Session DoS Filter-Interval	Indicates the interval at which requests are counted for the session-based filter.	10
Session DoS Filter-Max Allowed Requests	Indicates the maximum number of requests permitted during the interval specified in the **Session DoS Filter-Interval** parameter.	10

Field name	Description	Example
Short Term Access Limit	The maximum number of calls per IP (via API or browser) before IP is blocked to prevent Distributed Denial-of-Service (DDoS) attacks. The default value is **5000**.	500

Statistics Parameters

The following table describes the fields for the Statistics subsystem:

Statistics

Field name	Description	Example
Statistics_Batch_Duration	The length of time used while creating statistical reports.	3600
Statistics_Batch_Size	The size of the batch used for creating statistical reports.	1000

Thesholds Parameters

The following table describes the fields for the Thresholds subsystem:

Thresholds

Field name	Description	Example
High CPU Load	The maximum amount of loads allowed on the CPU.	6
High Used File System Space	The maximum percentage allowed of used file system space.	90
Low Free Table Space	The minimum percentage of free database space required.	10
REDIRECT DOS MAX CALL TIMES	Stops loops if Primo determines that the same request is received too many times for an application.	75

Search Engine Configurations

Return to menu

You can use the Search Engine Configurations page to edit the search engine settings.

Ex Libris maintains an out-of-the-box version of the SE parameters, which cannot be edited by customers. If needed, you can customize a version of them for your institution. Primo will use the lowest SE configuration that is available to an institution.

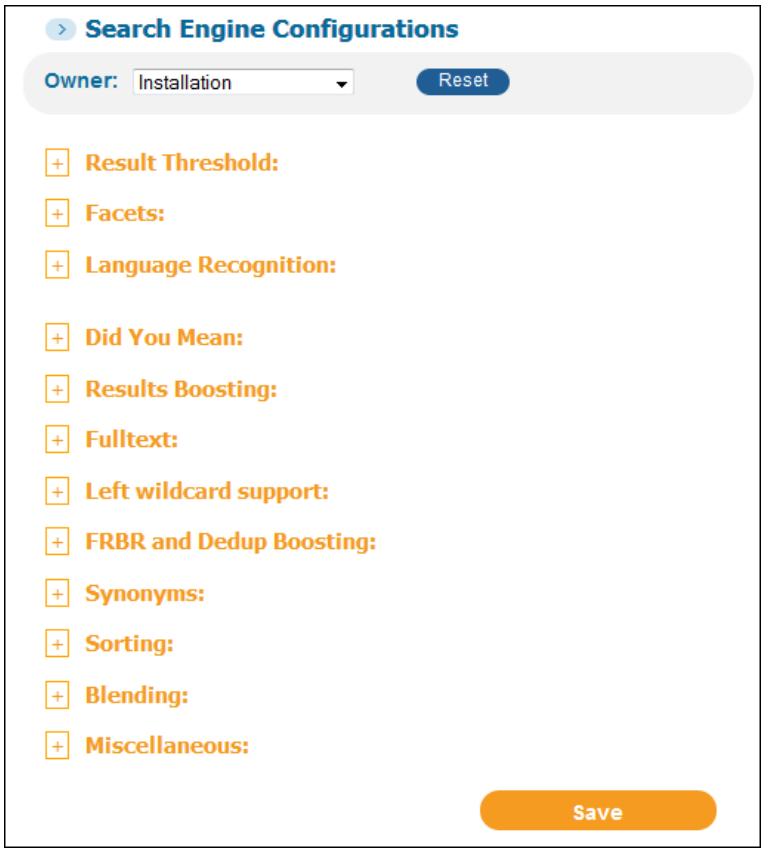
If you attempt to edit an SE configuration that has not been configured at the institution level or a specified higher level, the system will display the SE configurations inherited from the next higher configuration level. In order to edit an SE configuration at a lower configuration level, you will need to click the **Customize** button that displays next to the **Owner** field. After clicking the button, the system will replace it with following buttons:

- **Reset** – Resets all SE parameters to the values provided in the next higher configuration level.
- **Delete** – Resets all SE parameters to the values provided in the next higher configuration level and removes the settings at the current configuration level. Note that the **Customize** button will return.

SE parameters that affect the indexing process can only be configured at the installation level. For more information, refer to Search Engine Configuration Details.

To configure your search engine settings:

1. On the Back Office's home page, click **Advanced Configuration** > **Search Engine Configurations** to open the Search Engine Configurations page.



For installation-level staff users, select the installation name or a specific institution from the **Owner** drop-down list. The valid values are **Installation** (if using the default name) or a specific institution.
For institution-level staff users, the **Owner** field is set to your institution.

Note

Click the **Plus** icon next to a section title to display the fields. Depending on your permissions and configuration level, some sections or fields may not appear.

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2. Edit the search engine fields according to the table below. Use the following list to link to a specific area of the search engine configuration table.
   - Result Threshold
   - Facets
   - Language Recognition
   - Did You Mean – General Properties
   - Did You Mean – Misspell Dictionaries
   - Results Boosting
   - Results Boosting – Fields Boosting
   - Results Boosting – Date Boosting
   - Results Boosting – Institution Boost
   - Fulltext
   - Left Wildcard Support
   - FRBR and Dedup Boosting
   - Synonyms
   - Sorting
   - Blending
   - Miscellaneous
3. Click **Save** to save the settings.
4. On the Primo Home page, click **Deploy All**.

   The Deploy All page opens (see Deploy List Page).
5. Select the **Search Engine Configuration** check box.
6. Click **Deploy** to update the search engine settings.

Note

The Front End must be up during the deployment of the search engine changes.

Search Engine Configuration Parameters

In the following table, the **Institution Level?** column indicates whether you can configure the parameter differently for each institution in your environment (such as for a consortium). Installation-level staff users can apply changes to all institutions

or a specific institution, while institution-level staff users can perform operations only on their own institution. Because of these levels and the type of environment (on-premises or hosted), some parameters may not appear for all staff users.

Search Engine Configuration Details

Section/Field	Description	Example	Institution Level?
Result Threshold			
Maximum Results for Stemming	When a search returns less than this amount of results, stemming is performed on the search query.	25	Yes
Number of active local fields in search section	You can define a maximum of 50 local fields in the Search section of the PNX. This field indicates which local fields are used, starting at lsr01. For example, if you have defined five local fields lsr01, lsr02, lsr05, lsr06, and lsr07 and this field is set to **5**, the search will include only local fields lsr01, lsr02, and lsr05. **Note** Because the number of local fields that are searched may have an impact on search performance, this field defaults to 5.		Yes, but staff users must have installation-level permissions to view and modify this field.
Facets			
Number of Top Hits for Facet Creation	Indicates the number of records in the results set that will be used to create the facet values for dynamic facets. For example, the system takes the top 200 ranked records from a result set (which can include thousands or more), creates a list of facet values from them, and then counts the number of records in the entire set or actually up to 50,000 per slice that have the value. For static facets the system takes the pre-defined list of values and counts them. **Note** Increasing the number beyond the default value of 200 will affect the response time unless you configure cache for facets. For more information, see Full Facets Cache.	200	No
Maximum number of Displayed Facets	Indicates the maximum number of facets that can be displayed in the FE (for example, when **More** is invoked). **Note** Static facets always display all values regardless of this setting.	20	Yes

Section/Field	Description		Example	Institution Level?
Full Facets Cache	Indicates whether cache is used to increase the maximum value of the **Number of Top Hits for Facet Creation** field to 5000. This allows you to build facet values from a larger set of records without affecting response time significantly. To use this feature, you must increase the memory in each slice per the number of records as follows:			No
	Number of Records	**Add Memory**		
	1 million 4 million 6 million 12 million	350 Mb 900 Mb 1650 Mb 2200 Mb		
Language Recognition				
Default Language	The default language used by the Search Engine if it cannot detect the language of the search query. **Note** Changes to this field require a deploy and a re-index from scratch. For more information, see Re-Indexing the Database in the *Primo System Administration Guide*.		English	Yes (not allowed for multi-institution environments that permit sharing between member institutions)
Locale	The default locale used by the Search Engine if it cannot detect the locale of the search query.		English	Yes (not allowed for multi-institution environments that permit sharing between member institutions)
Did You Mean – General Properties				
Maximum Results for Did You Mean	Indicates the number of results below which Did you mean suggestions will be invoked. Did You Mean suggestion will be displayed when a query returns less results than the number specified in this field.		50	Yes

Section/Field	Description	Example	Institution Level?
Maximum Top Hit Rank for Did You Mean	Indicates the ranking score of the top result below which Did you mean suggestions will be invoked. The Rank threshold value is used only when there are less results than the number specified in the **Maximum Results for Did You Mean** field. This value should be greater than **0** and less than **2**. The default value is **.75**. To enable this field, select the **Use Rank Threshold** check box.	.75	Yes
Use Rank Threshold	Select this box to use a rank threshold and enable the threshold value defined in the **Maximum Top Hit Rank for Did You Mean** field. The system will use this value only when there are less results than the number specified in the **Maximum Results for Did You Mean** field.		Yes
Activate Deep Search Did You Mean	Select this box to enable Did You Mean suggestions for deep searches.		Yes
Use Phonetic Algorithm when language is unrecognized for a word	Select this box to use a phonetic algorithm when the language cannot be determined for a word.		Yes
Did You Mean – Misspell Dictionaries			
Loaded Dictionaries Languages			Yes
Results Boosting			
Results Boosting – Fields Boosting **Note** For on-premises installations, changes to the fields in this section require a deploy and a re-index from scratch. For more information, see Re-Indexing the Database in the *Primo System Administration Guide*. For hosted customers, it is sufficient to run an update pipe only.			
in the title (title)	The value of the boost given to a result when the result's title matches the search query.	3.5	Yes

Section/Field	Description	Example	Institution Level?
as author/creator (creator)	The value of the boost given to a result when the result's creator matches the search query.	3	Yes
in subject (sub)	The value of the boost given to a result when the result's subject matches the search query.	2.5	Yes
TOC (toc)	The value of the boost given to a result when the result's table of contents matches the search query.	1.5	Yes
Description (desc)	The value of the boost given to a result when the result's description matches the search query.	1.5	Yes
Language (lang)	The value of the boost given to a result when the result's language matches the search query.	1.0	Yes
ISBN (isbn)	The value of the boost given to a result when the result's ISBN matches the search query.	1.0	Yes
Additional Title (addtitle)	The value of the boost given to a result when the result's additional title matches the search query.	0.01	Yes
Create New Field Boosting	Specify a field and a boosting level and then click **Add** to boost results that match in the specified field.		Yes
Results Boosting – Date Boosting **Note** For on-premises installations, changes to the fields in this section require a deploy and a re-index from scratch. For more information, see Re-Indexing the Database in the *Primo System Administration Guide*. For hosted customers, it is sufficient to run an update pipe only.			
Create New Date Boosting	Specify a single year or range of years and a boosting level and then click **Add** to boost results that have the specified date. To specify a range, place two periods between the start and end date. For example: 2000..2014 Use the following ranges to specify boosts: • Negative boost - Enter a number between 0 and 1. • Positive boost - Enter a number greater than 1.		Yes (not allowed for multi-institution environments that permit sharing between member institutions)

Section/Field	Description	Example	Institution Level?
Results Boosting – Institution Boost			
Note Changes to the fields in this section require a deploy.			
Boost for institution	This option allows you to negatively boost records that are not from your institution. The valid values are **0** to **1**. For example, if you enter: • **0** – the system displays records only from your institution. • **0.00001** – the system will most likely place records from other institutions below the lowest ranking record from your institution. • **1** – the system displays records equally from your institution and other institutions. To use this setting, you must configure each view. For more information, see Boost results from my institution.	.00001	Yes
Fulltext			
Note For on-premises installations, changes to the fields in this section require a deploy and a re-index from scratch. For more information, see Re-Indexing the Database in the *Primo System Administration Guide*. For hosted customers, it is sufficient to run an update pipe only.			
Full Text (ftext)	The system does not index stopwords in the search/fulltext field to minimize the size of the search index. This option allows you to specify additional local fields that the system will not include in the search index.		Yes (not allowed for multi-institution environments that permit sharing between member institutions)
Create New Fulltext Field	Select a field and then click **Add** to add the field to the list.		Yes (not allowed for multi-institution environments that permit sharing between member institutions)
Left wildcard support			
Field	This section lists all of the fields that support searches in which the first letter of a search term begins with a wildcard (*). To support this feature, the system indexes every word several times, each time removing another character from the beginning. For example, the search term "world" is indexed as **world** and the following additional strings:		No

Section/Field	Description	Example	Institution Level?
	• **orld** • **rld** • **ld** **Note** The system uses the additional indexed strings only when left-hand truncation is invoked by the user. Because this option creates multiple indexes per term, it may be necessary to upgrade your memory. For more information, contact Ex Libris Sizing Support at sizing.manager@exlibrisgroup.com. Changes to this field require a deploy and a re-index from scratch. For more information, see Re-Indexing the Database in the *Primo System Administration Guide*.		
Add Field	Select a field from the drop-down list and then click **Add** to add the field to the list of fields that support left-hand truncation. **Note** It is recommended not to include the Full Text field for left-hand truncation. In addition, left-hand truncation of ISBN and ISSN fields using the **Normalize ISBN/ISSN** option is not supported.		No
FRBR and Dedup Boosting **Note** For on-premises installations, changes to the fields in this section require a deploy and a re-index from scratch. For more information, see Re-Indexing the Database in the *Primo System Administration Guide*. For hosted customers, it is sufficient to run an update pipe only.			
FRBR Resource Type Boosting	This section lists the resources that will be boosted for FRBR records. This type of boost is based on the resource type in the search and facets section of the PNX.		Yes (not allowed for multi-institution environments that permit sharing between member institutions)
Create New Resource Type Boosting	Specify a resource and a boosting level and then click **Add** to boost results for FRBR records that contain the specified resource.		Yes (not allowed for multi-institution environments that permit sharing between member institutions)
FRBR Availability Boosting	This field allows you set the boost level for availability. This type of boost is based on the library-level availability field in the display section of the PNX.		Yes (not allowed for multi-institution environments

Section/Field	Description	Example	Institution Level?
			that permit sharing between member institutions)
FRBR Online Boosting	This field allows you set the boost level for online availability. This type of boost is based on the resource type in the search and facets section of the PNX.		Yes (not allowed for multi-institution environments that permit sharing between member institutions)
Dedup Range Boosting	This section lists the ranges that will be used to boost items based on the size of the dedup group.		Yes (not allowed for multi-institution environments that permit sharing between member institutions)
Create New Range Boosting	Specify the following fields and then click **Add** to boost results for ranges of duplicated records: • **Range**—Specify the range (*<number>..<number*), indicating the minimum and maximum number of records in the Dedup group. A range must not overlap another range. • **Boosting Level**—Specify the boost level for the range of dedup groups. **Examples**: • **Range** = 1..100 and **Boost** = 0.4 – A boost of 0.4 is given to merged records in a dedup group that has up to 100 members. • **Range** = 101..300 and **Boost** = 0.8 – A boost of 0.8 is given to merged records in a dedup group that has 101 to 300 members. • **Range** = 301..1000000 and **Boost** = 0.9 – A boost of 0.9 is given to merged records in a dedup group that has at least 301 members.		Yes (not allowed for multi-institution environments that permit sharing between member institutions)
Synonyms			
very high	The value of the boost given to a synonym with a very high ranking.	0.8	Yes
high	The value of the boost given to a synonym with a high ranking.	0.1	Yes
normal	The value of the boost given to a synonym with a normal ranking.	0.01	Yes
low	The value of the boost given to a synonym with a Low ranking.	0.005	Yes

Section/Field	Description	Example	Institution Level?
very low	The value of the boost given to a synonym with a very low ranking.	0.0	Yes
Sorting			
Latin Character Set Sort Definition	This field allows you to take the Latin character set into account for alphabetical sorting. The following options are valid: • **OOTB** – use the out-of-the-box settings. • **Custom** – use the custom settings. When a custom sort is selected, the system creates a copy of the installation file under the following directory for the institution: /ng/jaguar/home/profile/analysis/sort/user_defined/*<institution code>* If you want to modify this file, contact Ex Libris Support. For more information on the normalization of characters, see the *Primo Technical Guide*.		Yes (not allowed for multi-institution environments that permit sharing between member institutions)
CJK Character Set Sort Definition	This field allows you to take the CJK character sets into account for alphabetical sorting. The following options are valid: • **Pinyin OOTB** – use the out-of-the-box settings for Pinyin. • **Pinyin Custom** – use the custom settings for Pinyin. • **Brush Strokes OOTB** – use the out-of-the-box settings for brush strokes. • **Brush Strokes Custom** – use the custom settings for brush strokes. When a custom sort is selected, the system creates a copy of the installation file under the following directory for the institution: /ng/jaguar/home/profile/analysis/sort/user_defined/*<institution code>* If you want to modify this file, contact Ex Libris Support. For more information on the normalization of characters, see the *Primo Technical Guide*.		Yes (not allowed for multi-institution environments that permit sharing between member institutions)
Additional Character Sets Sort Definition	This field allows you to take other character sets into account for alphabetical sorting. The following options are valid: • **OOTB** – use the out-of-the-box settings. • **Custom** – use the custom settings. When a custom sort is selected, the system creates a copy of the installation file under the following directory for the institution: /ng/jaguar/home/profile/analysis/sort/user_defined/*<institution code>* If you want to modify this file, contact Ex Libris Support.		Yes (not allowed for multi-institution environments that permit sharing between member institutions)

Section/Field	Description	Example	Institution Level?
	For more information on the normalization of characters, see the *Primo Technical Guide*.		
Blending This section allows you to boost records per search engine. In most cases, this is the local search engine. There is no need to configure all search engines, only the ones that require more or less boost. For blended searches, Primo selects the highest ranked record from the SE being boosted and checks to see if it matches the setting of the **Minimum hit rank for combining** parameter. If it matches, it places this record in the location that is defined in the **Combine location** parameter. It then assigns the same boost to the additional records (as defined in **Number of results to reward** parameter) as long as they meet the minimum hit rank. For the recommended blending settings, see Salesforce article #000021897 – How Does Blending Work?.			
Search Engine	From the drop-down list, select the search engine that you want to boost in terms of ranking. Boosting is permitted for the following search engines: **Local Search Engine**, **Primo Central**, and every Deep Search.	Local Search engine	Yes
Force blending	Select this field to boost records in the results list for the specified source. This means that one record will be forced to specified location on the first page of the search results. **Note** You must select this field to display the remaining fields in this section.		Yes
Minimum hit rank for combining	This field indicates whether records with a high, medium, or low rank should be boosted.	Medium	Yes
Combine Location	This field specifies the placement of the boosted record on the first page of the search results. The valid values are **Top** (the 2nd record), **Center** (the 5th record), **Bottom** (the 9th record).	Top	Yes
Number of Results to reward	This field specifies the number of records to boost as along as they match the level specified in the **Minimum hit rank for combining** parameter. The recommended value is **3**.	5	Yes
Constant factor	This field specifies a constant boost factor that is added to all of the records in the boosted search engine, regardless of the query. To give a positive boost, enter a number that is higher than 1. To give a negative boost, enter a decimal number that is between 0 and 1, such as **0.1**.	4	Yes

Section/Field	Description	Example	Institution Level?
Miscellaneous			
Cache Search Results	Indicates whether frequently used queries should be cached to improve performance.		Yes
Warm-Up Queries Number	Indicates the number of Warm-up queries. The default is 500.	500	
Max Term Number Indexed per Field	Indicates the maximum number of terms to index per field. The default is 10000. **Note** Changes to this field require a deploy and a re-index from scratch. For more information, see Re-Indexing the Database in the *Primo System Administration Guide*.	10000	Yes (not allowed for multi-institution environments that permit sharing between member institutions)
Slice HotSwap Timeout (minutes)	Indicates the maximum time allowed to hot swap slices.	90	No
Set slices load mode	This field allows you to specify where the search engine indexes will be stored for all slices (**Disk** or **Memory**). By default, the indexes are stored in memory. If you would like to store the indexes to disk, select this field and click the **Disk** radio button. **Note** To activate the changes, you must save and deploy the Search Engine Configuration data changes and then hot swap the slices.		No
Max Memory Allocated (MB)	Indicates the maximum memory allocated per slice.	300	No
Check for Pinyin translations	This field indicates whether Primo should perform Pinyin synonym lookups for searches. Pinyin transliterated Chinese in Latin characters is generally used when a Chinese keyboard is not available. Primo will attempt to expand a query in Pinyin to the equivalent words in Chinese characters if this field is checked. Because Primo uses the synonym mechanism for Pinyin translations, words must be entered without spaces. For example, the Chinese word fotang, which is actually two Chinese characters fo and tang, must be concatenated in the search query.		Yes

Section/Field	Description	Example	Institution Level?
	Note The Pinyin-Chinese character equivalents are defined in the systemSynonym file under the following directory: ng/jaguar/home/profile/analysis/synonyms Customers can add their own synonyms to the userSynonyms file under the same directory. These synonyms override like entries in the system synonym files. All synonym entries must be in UTF-8. Changes to the userSynonyms file require you to deploy the **Search Engine Configuration** to activate the changes.		
Remove hyphens	The standard behavior of the Search Engine is to remove hyphens when normalizing data for indexing and when normalizing search queries. This is problematic for languages (such as Finnish) that have many hyphenated words. By default, this field is selected, keeping the current behavior of the system. If it is cleared, the system will not remove hyphens during normalization of indexing and search queries. **Note** Changes to this field require you to deploy the Search Engine Configuration on the Deploy All page and re-index from scratch. For more information, see Re-Indexing the Database in the *Primo System Administration Guide.*		No
Normalize ISBN/ ISSN	This field indicates how the PNX fields **search/isbn** and **search/issn** are normalized for searches and indexing. If this field is not selected, hyphens will continue to be normalized to spaces for ISBNs and ISSNs. For example, the system will normalize ISBN **952-91-0410-3** to **952 91 0410 3**. If this field is selected: **Note** Changes to this field require you to perform a re-index from scratch so that the records are indexed with the new format. For more information, see Re-Indexing the Database in the *Primo System Administration Guide*. • Hyphens and whitespace will be removed for ISBNs and ISSNs. For example, the system will normalize ISSN **0378-5955** to **03785955**. • Both 10-digit and 13-digit ISBNs will be normalized. ◦ 13-digit ISBN example with hyphens: The system will normalize ISBN **978-952-91-0410-9** to **9789529104109** and **9529104103**.		Yes (not allowed for multi-institution environments that permit sharing between member institutions)

Section/Field	Description	Example	Institution Level?
	◦ 10-digit ISBN example with spaces: The system will normalize ISBN **952 91 0410 3** to **9529104103** and **9789529104109**.		
Use Controlled Vocabulary Search Expansion	This field indicates whether controlled vocabulary search expansions will be included with Primo Central search results.		Yes
Show Slice Down Message	This field indicates whether an error message will display when a slice is down, which may indicate that the user is not receiving full results. You can customize the message in the Error Messages code table.		Yes

Deploy All Configuration Settings

Return to menu

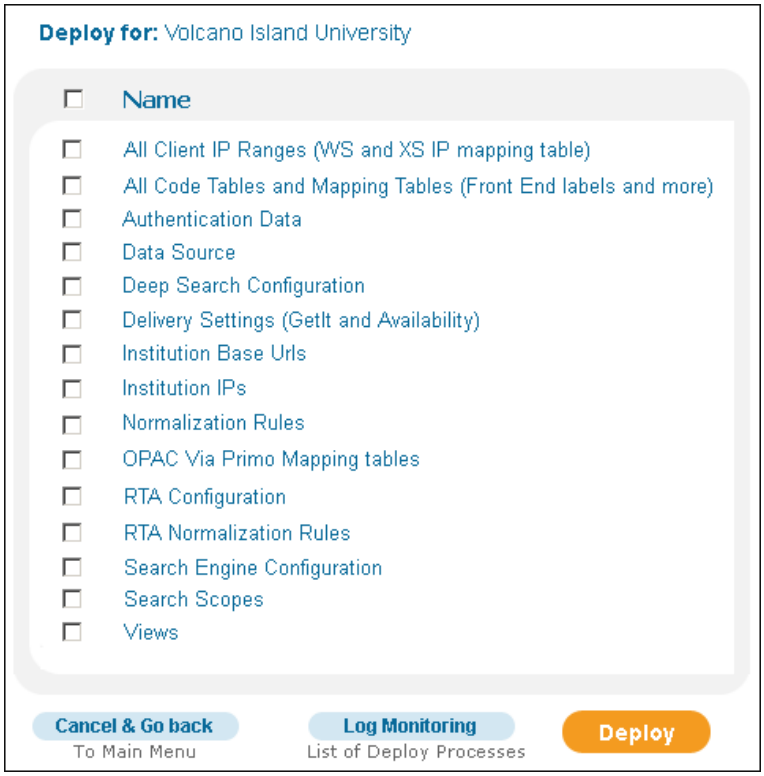
The Deploy All option centralizes the deploy functionality onto a single page, allowing you to deploy one, several, or all of your configuration settings from a single location. In addition, staff users can monitor the deployment queue by selecting the **Log Monitoring** button.

Note

The system can process only one deployment at a time. If several users attempt a deployment at the same time, Primo places the requests in a queue.

To deploy configuration settings:

1. On the Primo Back Office home page, click **Deploy All** to open the Deploy List page.



Deploy List Page

Note

Institution-level staff users are not permitted to deploy the Adaptors Mapping Tables option.

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2. For installation-level staff users, select the institution in the **Deploy for** drop-down list if multiple institutions are available.

3. Select the configuration settings you want to deploy (see Deploy All List).

Deploy All List

Field name	Description
Name	Selects deployment of all configurations settings with a single click.
Adaptors Mapping Tables (on-premises installations only)	Selects deployment of changes to the Adaptor mapping tables (RTA and PushTo).
All Client IP Ranges (WS and XS IP mapping table)	Selects deployment of changes to the WS and XS IP mapping table. For more information, see Mapping Table Reference.
All Code Tables and Mapping Tables	Selects deployment for configuration changes to the code and mapping tables.
Data Source	Selects deployment for configuration changes to data sources.
Deep Search Configuration	Selects deployment for configuration changes to the Deep Search Plugins and Deep Search Plugin Parameters mapping tables.
Delivery Settings	Selects deployment for configuration changes to the delivery settings.
Institution Base URLs	Selects deployment for configuration changes to the institution base URLs.
Institution IPs	Selects deployment for configuration changes to the institution base IPs.
Normalization Rules	Selects deployment for configuration changes to the normalization rules. For more in-depth information, refer to the *Primo Technical Guide*.
OPAC Via Primo Mapping tables	Selects deployment of changes to the mapping tables under the OPAC Via Primo subsystem.
Authentication Data	Selects deployment for configuration changes to the User Authentication Wizard.
RTA Configuration	Selects deployment of changes to the RTA configuration tables.

Field name	Description
RTA Normalization Rules	Selects deployment of changes to the RTA (using normalization rules) mapping table.

Search Engine Configuration	Selects deployment for configuration changes to the SE Configuration parameters. In addition, this option deploys changes to the following files:
	◦ The language analysis files that are stored in the following directory:
	`./ng/jaguar/home/profile/analysis/langDB`
	◦ The sort configuration files that are stored in the following directory:
	`./ng/jaguar/home/profile/analysis/sort`

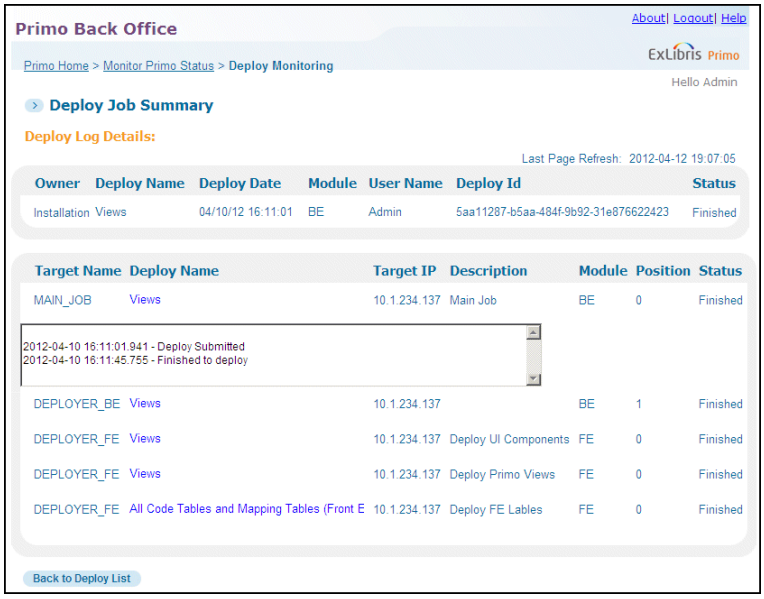
System Configuration (on-premises installations only)	Selects deployment for configuration changes to the General Configuration parameters. In addition, this option deploys changes to the Dedup algorithm XML files that are stored under the following directory: `./ng/primo/home/profile/publish/publish/production/conf` The system deploys the files that are defined in the **primo.dedup** parameters on the General Configuration > Publishing subsystem page.
Search Scopes	Selects deployment for configuration changes to the search scopes.
Views	Selects deployment for configuration changes to the front end's views.

4. Click **Deploy**.

   The Deploy Log Details page opens. It displays information for each stage of the deploy. As a stage completes successfully, the window for that stage closes. You can reopen this window, by clicking the corresponding link in the **Deploy Name** column.

Note

This page automatically refreshes to display the status of each stage. If you want to stop the automatic refresh, click the **Stop Refresh** button.



Deploy Log Details - All Stages Finished

5. Click **Back to Deploy List** to mange all deployment jobs on the Deploy Job Summary page.

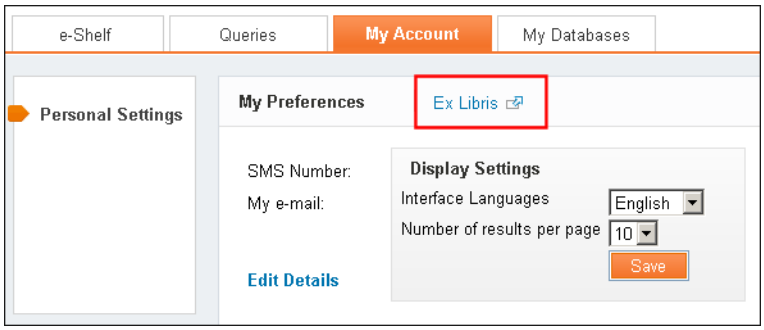
6. Click **Go Back to Deploy All** if you want to perform another deployment.

Adding Links to My Account

Return to menu

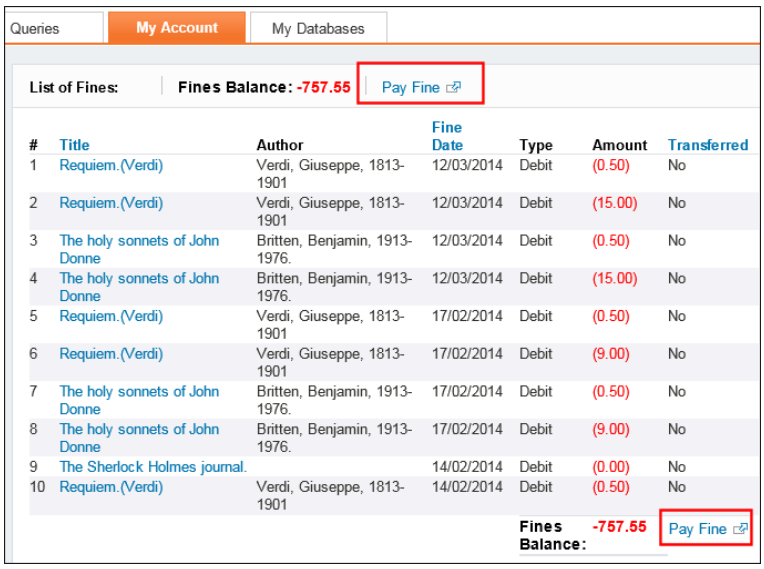
Primo allows you to add up to three external links to Personal Settings and My Library (for OPAC via Link), and to each of the following sections in My Account: Loans, Requests, Fees & Fines, Blocks & Messages, Personal Settings (for OPAC via Primo).

The external links that can be added to each of the My Account options display next to the title. For example:



Link Added to My Account > Loans

The links are generic with the exception of the link that is defined with the **fines.payfinelink** link code, which is intended to link to an external payment system. If the **fines.payfinelink** link is defined in the My Account Links mapping table, it will display above and below the fines list, as shown below:



Link to External Payment System

Note

The **get_loans** service, which is configured in the ILS Adaptors Templates mapping table, returns the balance of the fines.

You can include the following placeholders in the external links as is currently done with delivery templates:

- Institutional base_urls – {{ils_base}} or {{alma_base}}
- Interface language – {{language}} or {{language_bibliographic}}
- Primo server IP – {{primo_server_ip}}
- User IP – {{user_ip}}
- PDS handle – {{pds_handle}}
- Timestamp – {{timestamp}}
- Code of active view – {{view}}

For more information on placeholders, refer to the Linking to Delivery Systems section in the *Primo Interoperability Guide*.

Back Office Configuration

For information on configuring external links in My Account, refer to the following tables:

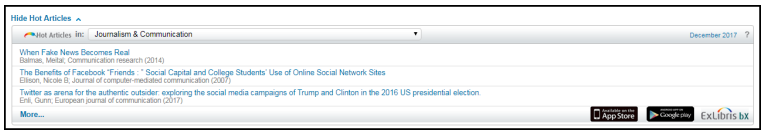
- My Account Links mapping table – See Mapping Table Reference.
- My Account Links Labels code table – See Code Table Reference.

bX Hot Articles

Return to menu

bX Hot Articles is a free service that reports monthly on the most used articles in different disciplines. The Hot Articles tile can be integrated into the Primo Front End.

A link to the bX Hot Articles tile has been added above the brief results in the Front End UI. End users have the option to show or hide the list of articles, which is based on the top-ranked ISSNs (up to five ISSNs) that Primo sends to bX for comparison. If there are no ISSNs to send, bX displays generic subjects (as shown below).



bX Hot Articles List

Back Office Configuration

By default, this feature is enabled and does not require any additional configuration. If you want to disable this feature, refer to Disabling bX Hot Articles.

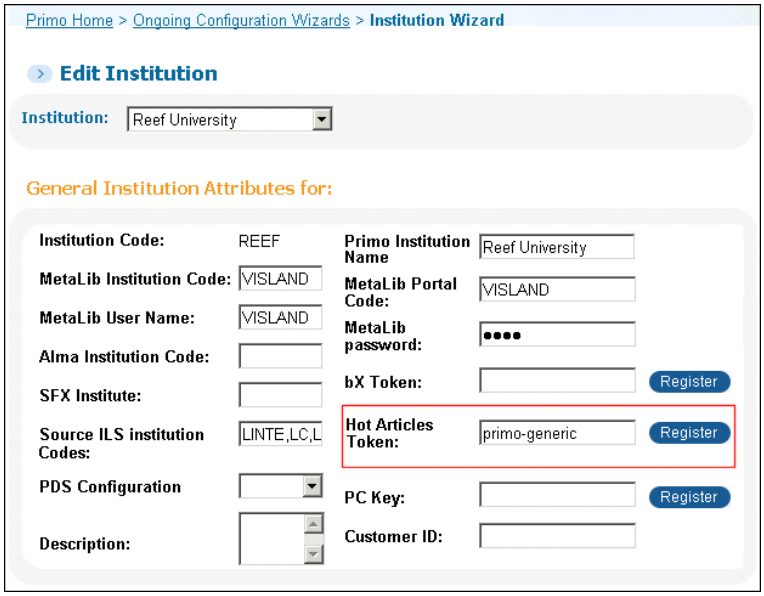
If you want to update the configuration settings for this feature, use the Primo Home > Ongoing Configuration Wizards > Edit Institution page to update the following fields for your institution:

- **Hot Articles Token** – Defines the token that the system uses to authenticate the bX Hot Articles service for use in Primo. By default, the system uses the **primo-generic** token.

  Customers who have already registered for the bX Hot Articles service or want to do so (click the **Register** button) can use their institution's token instead of the generic token.

  Note

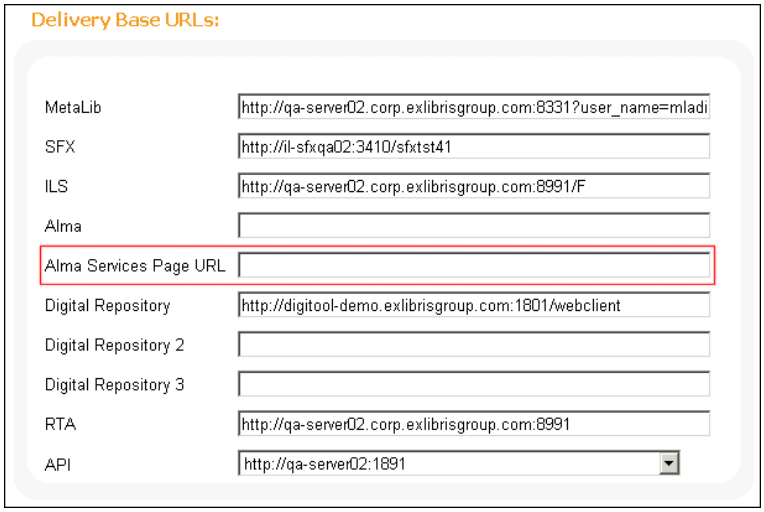
  - If you use an institutional token, Primo no longer sends the base URL of the link resolver that is defined in either the **SFX** or **Alma Services Page URL** base URL field.
  - If you do not specify a token, the system displays an authentication error message in the bx Hot Articles tile.



Institution Wizard Page 1 of 2

- **Alma Services Page URL** – Defines the base URL that bX uses to send requests to Alma via Primo. Use the following format to specify the link resolver for the dedicated Alma Services Page view:

  `http://`*<primo server host:port>*`/openurl/`*<primo_institution_code>*`/`*<primo_view_code>*`?`



Institution Wizard Page 2 of 2

Disabling bX Hot Articles

By default, this feature is enabled and can only be disabled by removing the bX Hot Articles tile from your view's layout.

Note

Removing the token via the Institution wizard only prevents the bX Hot Articles service from authenticating your institution. It will not remove the tile from the Front End.

To disable bX Hot Articles:

1. On the Primo Home > Ongoing Configuration Wizards > Views Wizard page, click **Edit** next to the relevant view.

   The Edit View Attributes page opens.

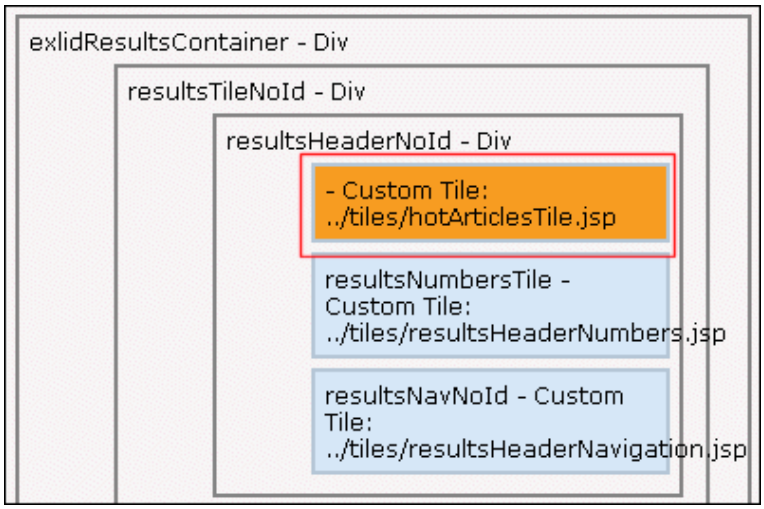
2. For the **Layout Set** field, click **Edit** to update the customized layout for your view.

   The Layout Editor page opens.

3. In the **View** drop-down list, select **Brief Display** to display the layout that contains the bX Hot Articles tile.

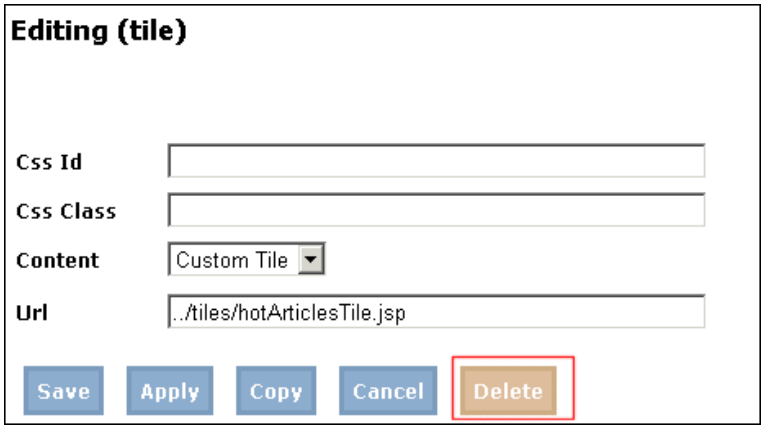
4. In the **resultsHeaderNoId - Div** tile, select the following custom tile to highlight it:

   ```
   ../tiles/hotArticlesTile.jsp
   ```



Highlight Hot Articles Tile

5. In the Editing (tile) area, click **Delete** to remove the tile.



Delete Hot Articles Tile from Layout

6. In the Page Actions area, click **Save Page**.

Note

To re-enable bX Hot Articles, add the `hotArticlesTile.jsp` custom tile to the top of the resultsHeaderNoId - Div tile list.

Page Actions - Save Page

7. Click **Continue** at the bottom of the Layout Editor page.

8. Deploy the view.

Configuring Alerts

Return to menu

Based on the configuration settings under the Alerts subsystem in the General Configuration Wizard, the system checks alerts for changes and sends emails to users.

This section describes the configuration changes needed to send email for alerts.

Alert settings are configurable by on-premises customers at the installation level and cannot be configured per institution.

To configure alerts to run and send e-mail:

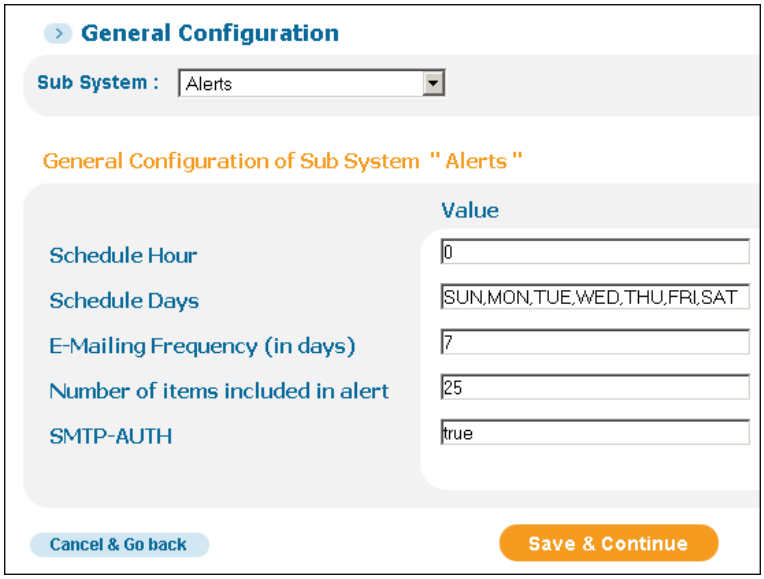
1. On the Back Office's home page, select **Advanced Configuration**.

   The Advanced Configuration page opens.

2. Select **General Configuration Wizard**.

   The General Configuration page opens. For more information, see General Configuration Wizard.

3. Select the **Alerts** subsystem to display a list of the alert configuration fields.



Alerts Sub System - General Configuration Page

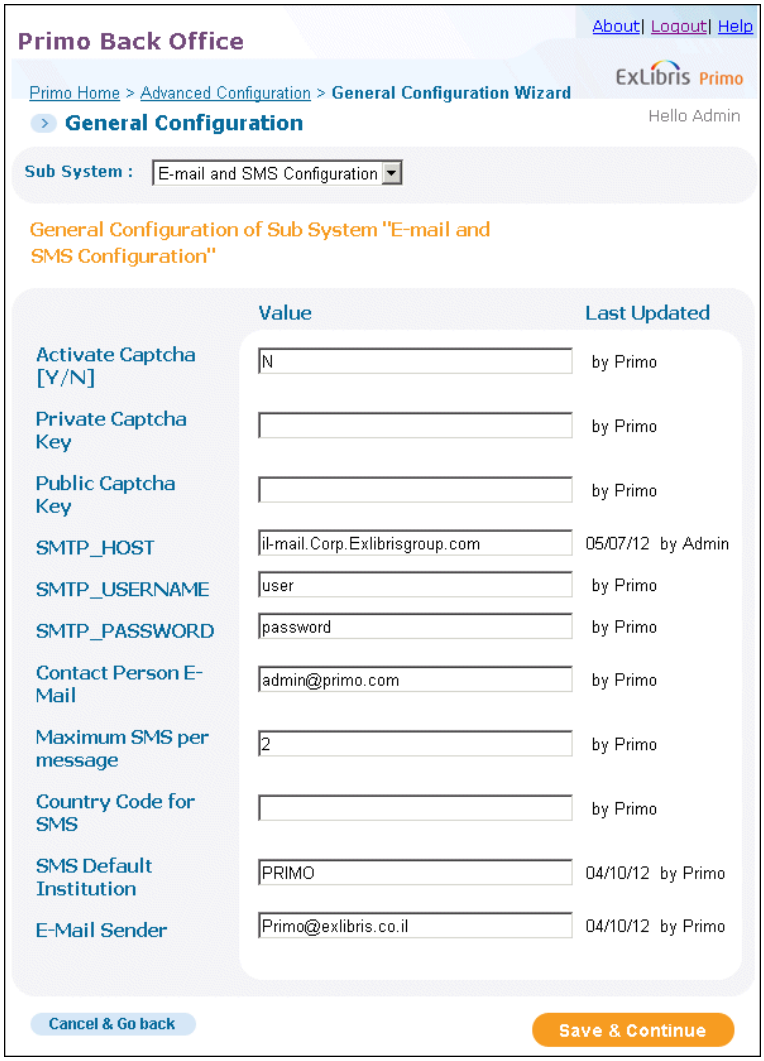
4. Refer to Alerts to fill out the fields.

   For example, the following settings indicate that the system will check alerts daily at midnight, and if there are any changes, it will send an email to users who have not received an email in the last seven days:

   - Schedule Hour: 0
   - Schedule Days: SUN,MON,TUE,WED,THU,FRI,SAT
   - E-Mailing Frequency (in days): 7

5. Click **Save & Continue** to save your settings.

6. Select the **E-mail and SMS Configuration** subsystem to display a list of the e-mail and SMS configuration fields.



E-Mail and SMS Configuration Sub System - General Configuration Page

7. Use E-mail and SMS Configuration to fill out the SMTP fields.

8. Click **Save & Continue** to save your settings.

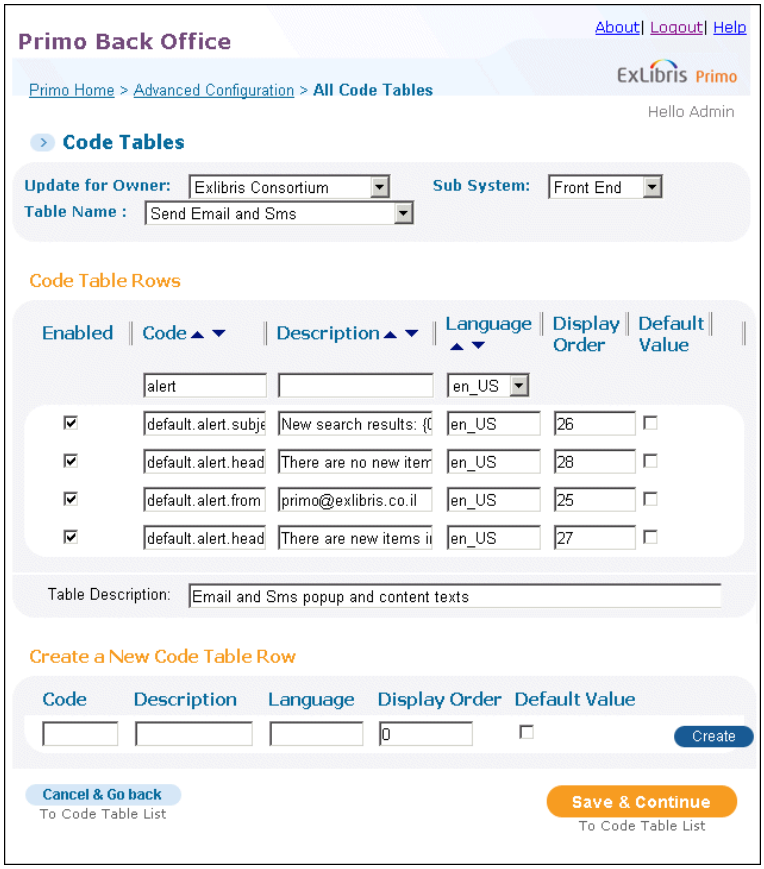
9. On the Back Office's home page, select **Advanced Configuration**.

   The Advanced Configuration page opens.

10. Select **All Code Tables**.

    The Code Tables page opens. For more information, see Code Tables.

11. Select the **Edit** button next to the Send Email and SMS code table in the list.



Send Email and SMS Code Table

12. Enter the following fields to update the alert information that is sent in e-mails:

    - **default.alert.from** – enter a valid address, which opens in the header of the alert e-mail. By default, this field is set to **Primo@exlibris.co.il** to enable alert e-mails.
    - **default.alert.subject** – enter a default subject header, which opens in the header of the alert e-mail.
    - **default.alert.heading** – enter a default heading, which opens as the title in the alert e-mail.
    - **default.alert.headingNoResults** – enter a default heading, which opens as the title in the alert e-mail when there are no new items in the saved search.

```
From: admin@my_primo_site.com [mailto: admin@my_primo_site.com]

Sent: Monday, November 24, 2008 4:01 PM

To: Susan Smith

There are new items in your saved search

Subject: New search results: 'Farallon remote alert medical'

JAMA$$V41895

http://il-qalab02:1701/primo_library/libweb/action/
display.do?fn=display&doc=RS_13072863
```

```
American Medical Association$$V93544

http://il-qalab02:1701/primo_library/libweb/action/
display.do?fn=display&doc=RS_13072864
```

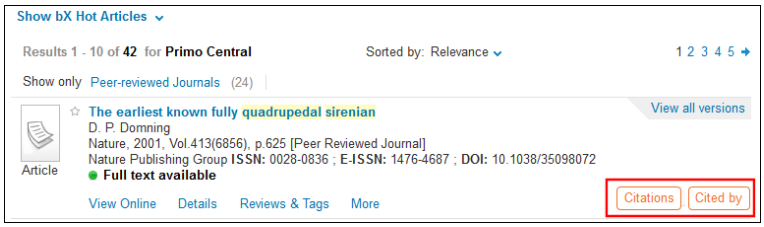
Sample Alert E-Mail

13. Click **Save & Continue** to save your settings.

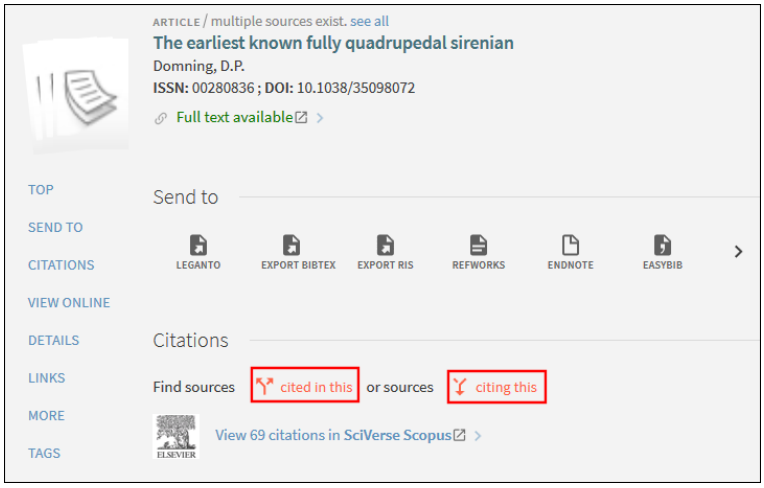
Configuring Citation Trails

Return to menu

This enhancement enables users (such as researchers and graduate students) to display the list of cited and cited by records for Primo Central records returned in search results. In addition, it allows users to follow the trails of each citation.



Citation Links in the Brief Results (Classic UI)



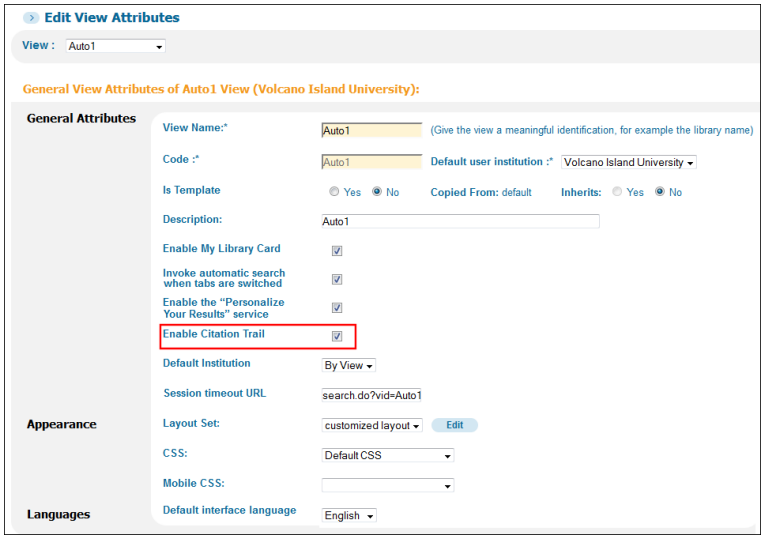
Citation Links in the Full Display (New UI)

For more details regarding end user display, see the following sections in the Highlights documents:

- Citation Trails in the Classic UI
- Citation Trails in the New UI

Enabling Citation Trails

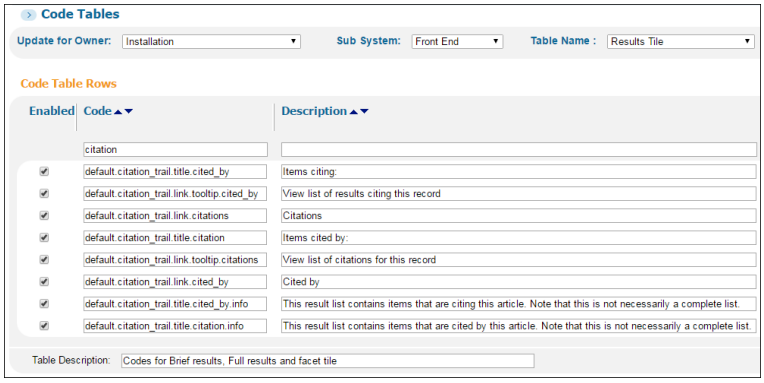
By default, this functionality is enabled in the Views Wizard (**Primo Home > Ongoing Configuration Wizards > Views Wizard**) for each view. You may disable this functionality by clearing the **Enable Citation Trail** check box:



Views Wizard - Enable/Disable Citation Trails

Configuring Display Labels for Citation Trails

The following codes in the Results Tile code table (**Primo Home > Advanced Configuration > All Code Tables**) allow you to localize the citation trail labels that appear in the Front End:



Results Tile Code Table - Modify Citation Trail Labels (Classic UI)

Code Tables

Update for Owner: Reef University Sub System: Front End Table Name : Results Tile

Search in Table:

Code Table Rows

Enabled	Code	Description	Language
	nui.citation		en_US
☑	default.nui.citation_trail.link.Find	Find	en_US
☑	default.nui.citation_trail.link.active_Seed	Active Seed	en_US
☑	default.nui.citation_trail.link.or	or sources	en_US
☑	default.nui.citation_trail.link.citedin.activeSeed	NOW LISTING SOURCES CITED IN:	en_US
☑	default.nui.citation_trail.link.right.tooltip	Slide right	en_US
☑	default.nui.citation_trail.link.citing	citing this	en_US
☑	default.nui.citation_trail.link.left.tooltip	Slide left	en_US
☑	default.nui.citation_trail.link.citedin	cited in this	en_US
☑	default.nui.citation_trail.link.sources	sources	en_US
☑	default.nui.citation_trail.link.citedin.tooltip	Find sources cited in this	en_US
☑	default.nui.citation_trail.link.pages.tooltip	More pages	en_US
☑	default.nui.citation_trail.link.header	Your current citation path	en_US
☑	default.nui.citation_trail.link.citing.activeSeed	NOW LISTING SOURCES CITING:	en_US
☑	default.nui.citation_trail.link.citing.tooltip	Find sources citing this	en_US

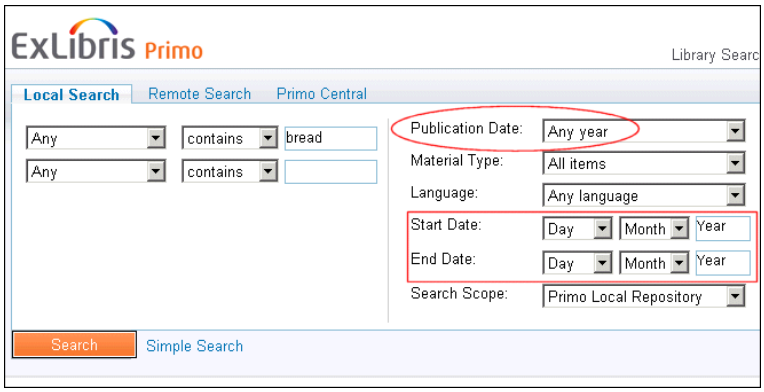
Table Description: Codes for Brief results, Full results and facet tile

Results Tile Code Table - Modify Citation Trail Labels (New UI)

Configuring Date Ranges

Return to menu

In the Front End UI, users are able to select from a pre-defined list of date ranges using the **Publication Date** drop-down list or specify their own date range using the **Start Date** and **End Date** fields.



Advanced Search Box - Date Ranges

Note

Either or both of these options can be enabled to search within a date range, but providing both options may be confusing to end users.

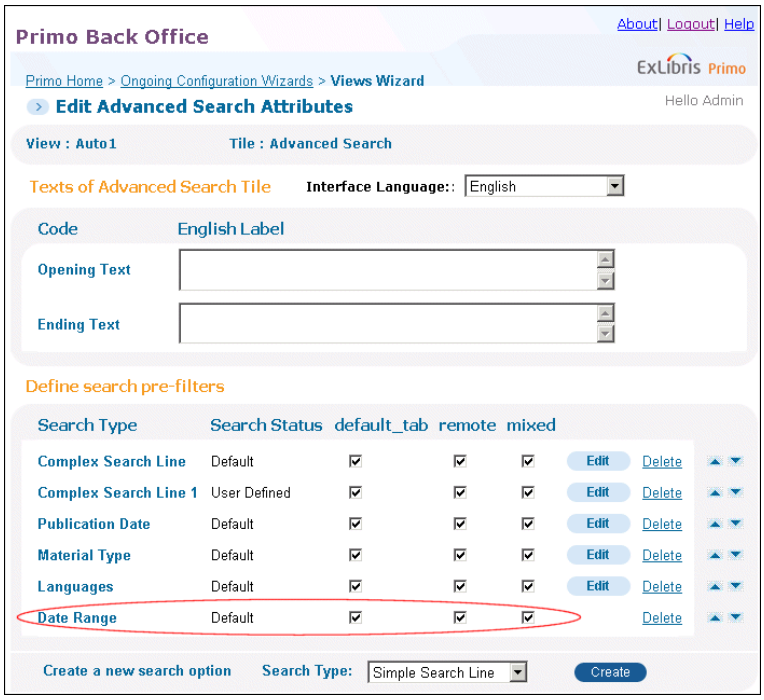
Types of Date Ranges

The date range search option allows users to perform the following types of searches:

- A date range that includes the following:
  - Range of years – from 1995 to 2000
  - Range of complete dates (which includes the month and day) – from 19950101 to 19950630
  - Range of BCE dates (where each date starts with a minus sign) – from -89 to -100
- An open ended date that includes either a start date or an end date, but not both dates.
  - Start date only – The system searches for records from the specified date and later.
  - End date only – The system searches for all records prior to and including the specified date.
- A specific date by entering the same date for the start and end dates. For example: from 1990 to 1990

Enabling the New Date Range Option

The **Date Range** pre-filter is configured on the Home Page > Advanced Search tile page in the Views wizard.



Date Range Filter - Advanced Search Tile

Note

Before activating this pre-filter, it is necessary to normalize the data and re-index so that the dates can be found by the SE.

Normalization Rule Changes

The **startdate** and **enddate** fields have been added to the Search section of the PNX. To create these fields in the PNX, rules have been added to all of the out-of-the-box normalization rules. They can be applied to your local normalization rules via the templates.

Note

If the **startdate** and **enddate** fields do not display in your normalization rules, you may need to select the **Display Empty PNX fields** check box at the top of the page.

The out-of-the-box normalization rules support the following date formats:

- Complete year (which may include additional text) – Examples: 1993 and c1993
- Unknown year where the characters **?** and **u** can be used to express an unknown year. Examples: 199? and 199u.
- Year ranges using the format Y[YYY]-Y[YYY] or Y[YYY]/Y[YYY]. The characters **?** and **u** can be used to denote an unknown year (such as 1900-1950, 1900-195?). The format Y[YYY] indicates that the year must be one to four digits long.

- Open ended years in the format Y[YYY] – Example: 1990-
- Complete date (YYYYMMDD or YYYYMM) – Complete dates require a complete year, which has four digits.

In all of the above formats, a minus sign before the year indicates that it is a BCE date. BCE dates can only be entered as years, excluding the month and day (such as -980).

Associated Transformation Routines

The following transformation routines are used to normalize the different types of date ranges:

- **Format Start Date** – Extracts the start date from the input and formats the date, eliminating most non-digit characters and substituting digits for unknown dates.
- **Format End Date** – Extracts the end date from the input and formats the date, eliminating most non-digit characters and substituting digits for unknown dates.
- **Complete Start Date** – Changes the formatted start date to a complete date, which includes the month and day.
- **Complete End Date** – Changes the formatted end date to a complete date, which includes the month and day.
- **Substitute string (using reg. exp.)** – Substitutes one string for another string.
- **Replace nonnumeric chars in range** – Replaces all non-numeric characters in a range.

Implementing the Date Range Search

After the upgrade to V4, you will need to perform the following procedure to enable this functionality.

Enabling date range search functionality:

1. Update your normalization rules.

   The Date Range search is based on the following fields that were added to search section in the PNX: **startdate** and **enddate**. You will need to update your normalization rules to include these new fields. The out-of-the-box templates have been updated to include rules for the new fields.

2. Execute the pipe (there is no need to re-harvest) and then re-index.
3. Activate the Date Range option with the Views wizard.
4. Deploy your changes to the Front End.

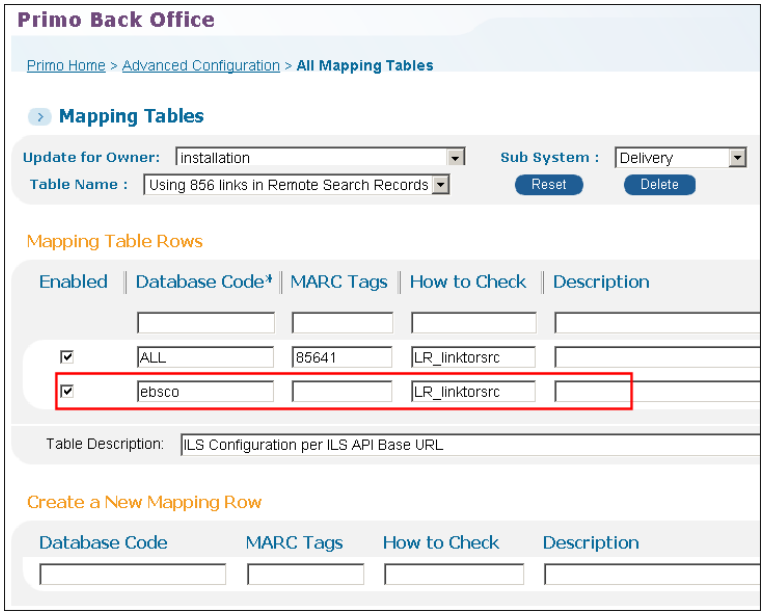
Configuring EBSCO Availability and Delivery

Return to menu

Availability and delivery for EBSCO records returned from the EBSCO API is based on the configuration in the Using 856 Links in Remote Search Records mapping table. The first column of this table can be set to the source system code (which is from the `control/sourcesystem` field in the PNX) as well the data source code.

An additional row has been added to the default configuration to define the **LR_linktorsrc** method for records from EBSCO.

By default, all EBSCO databases are configured to use the **LR_linktorsrc** method, which means that if the link resolver indicates that full text is available, it will be the basis for both the availability status and delivery. If the link resolver indicates that no full text is available, the system will check if the record from EBSCO includes a link to full text. If it does, the system will display the **Full text available** availability status and use the link from the EBSCO record for delivery.



Using 856 Links in Remote Search Records Mapping Table

Customers who use other link resolvers can use the **linktorsrc_only** method so that the system relies only on the information in the EBSCO record.

It is possible to configure different methods for specific EBSCO databases by defining a row using the EBSCO database code.

Configuring the Citation Linker and Fetch Item

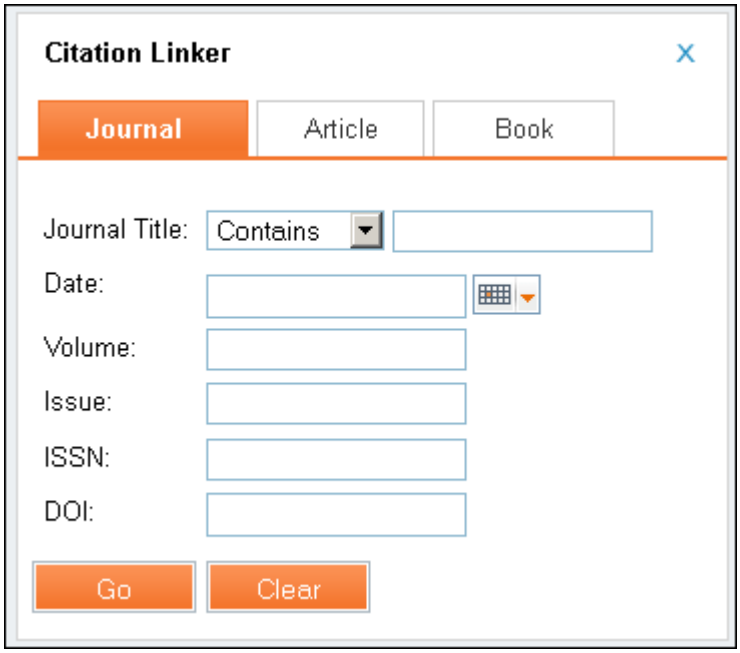
Return to menu

Introduction

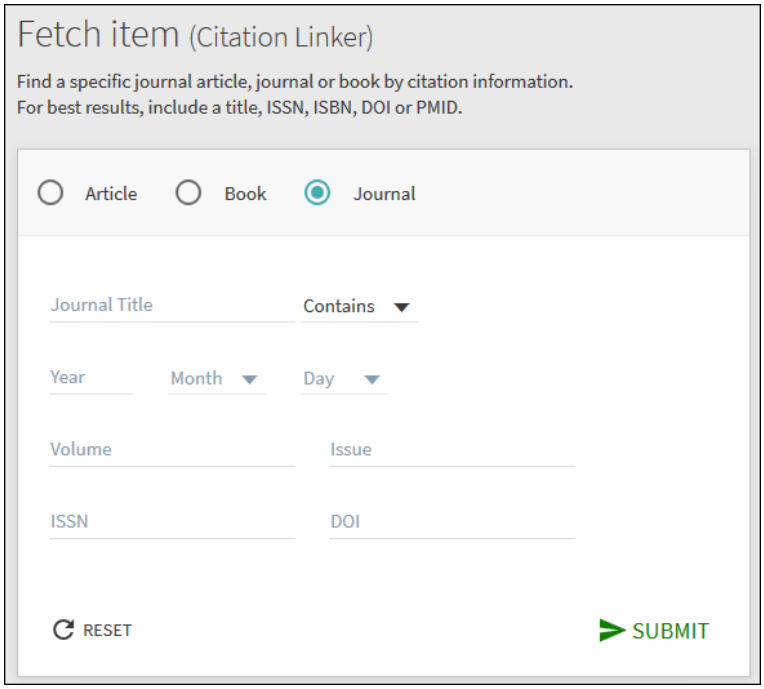
The Citation Linker (which is also known as Fetch Item in the new UI) does not search for records in the same way as a regular Primo search, which may return many results. Instead, it allows users who have metadata (such as a title, ISBN, ISSN, and so forth) for a specific book, article, or journal to retrieve available services (such as full text or ILL) for that item only.

When a query is submitted, the Citation Linker sends an OpenURL request based on the specified metadata to your link resolver (such as Alma or SFX) and then displays the link resolver's results on either the SFX Service page (for SFX) or the Alma Services page (for Alma). Because the link resolver returns services based on its own information, it may also return services that are not indexed in your local Primo database or are not covered by your activated Primo Central collections. In addition, your link resolver may offer other services (such as to purchase or request items that your library does not hold).

The Citation Linker dialog box provides a tab for books, journals, and articles so that users can specify search criteria (such as volume, author, and so forth) for the selected citation type.

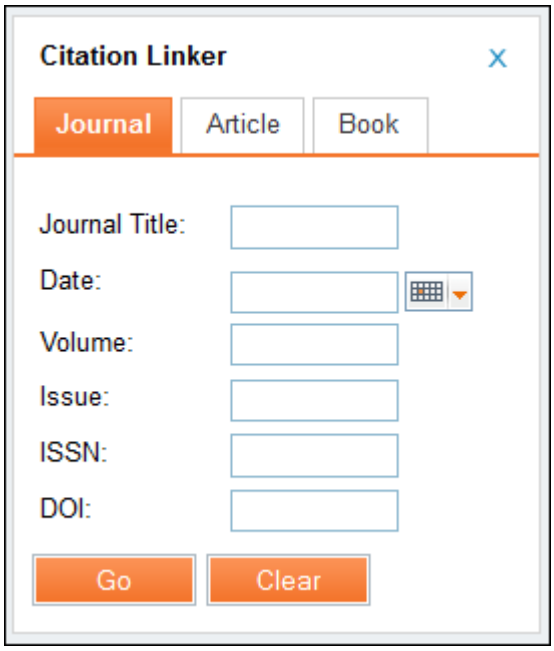


Citation Linker Dialog Box (Classic UI)

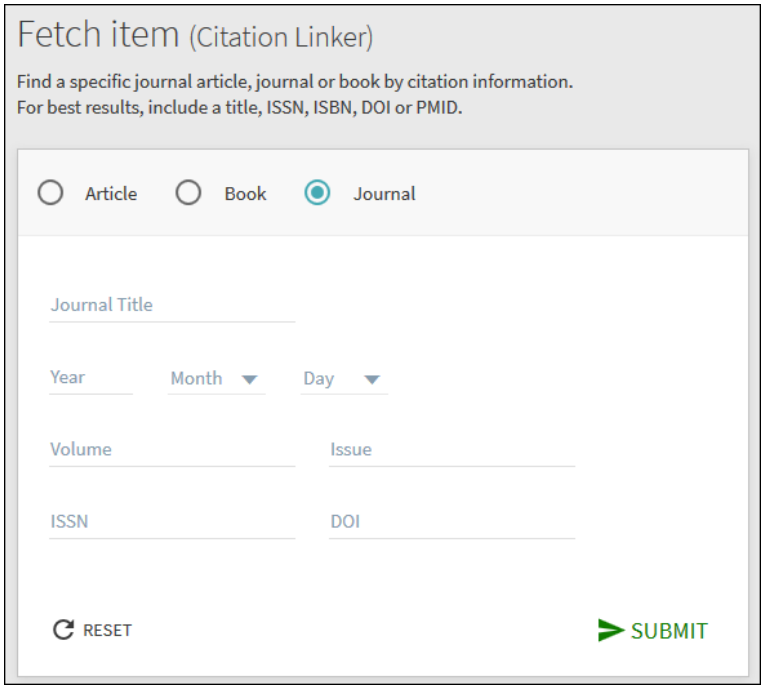


Fetch Item Page (New UI)

Because Alma only supports the **Exact** precision option for title searches (see below), the precision drop-down field will not appear in the dialog box for Alma users.



Citation Linker Lightbox for Alma Users (Classic UI)



Fetch Item Page for Alma Users (New UI)

Back Office Configuration

The following table lists the changes that are needed in the Back Office to configure the Citation Linker/Fetch Item functionality:

Configurations for the Citation Linker

Configuration Page	Description
Citation Linker Labels code table	This table allows you to personalize the text that displays in the Citation Linker lightbox.
Citation Linker Definitions mapping table	This table defines which OpenURL fields can be entered per citation type. You may remove fields or change the order of fields.
Views Wizard > Home Page > Main Menu tile	This page defines the links that display in the main menu. To add the Citation Linker button to the main menu if it has not already been defined: 1. Enter the following fields in the **Create new Label** section: ◦ **Label** – Enter **citationlinker**. This field initially defines the Label and Code fields. You can rename the label later.

Configuration Page	Description

	Note
	Do not use the **citationlinker** code if you want to link to the Citation Linker as a stand-alone page. Instead, specify a unique code, add a stand-alone link to the **URL** field as explained in Linking to the Citation Linker, and specify whether you want the Citation Linker to open in the same window or another window.
	◦ **URL** – Enter the following URL:
	`/action/citationLinker.do?openInSeperateWindow=Y&isCitationLinker=Y`
	If you want to use the CSS defined for your Services Page view (not the default Services Page defined in Alma), append the following parameter to the URL:
	`&spvid=<view_id>`
	◦ **Link should open in** – Indicates whether the results open in the current window or a new window/tab. This field is relevant only for the links that open a stand-alone Citation Linker page. The default value is **current window**.
	2. Click **Add**.
	3. Change the **Label** field to **Citation Linker** in the Contents of Main Menu Tile section.
	4. Click **Save & Continue**.
	5. Click **Continue** to deploy.
	6. Click **Deploy Now**.
	Note
	If the Citation Linker button already exists and you want to modify the URL information (such as including your own Services Page view), delete the existing Citation Linker row and then perform the above procedure to update the URL.

Linking to the Citation Linker

Primo allows you to access the Citation Linker using the following linking options:

- **Linking to the Citation Linker lightbox via a deep link (Classic UI only)** – The following parameter can be added to any Primo deep link to open the Citation Linker lightbox:

  `&openCitationLinker=true`

  You can also pre-fill the fields in the Citation Linker by including the names of the OpenURL fields as parameters (which are defined in the Citation Linker Definitions mapping table), using the following format:

  `&rft.<mapping table field>=<value>`

  For Alma customers, you can use the CSS defined for your Services Page view by adding the following parameter to the link:

  `&spvid=<services_page_view_id>`

  For example:

```
http://myInst:1701/primo_library/libweb/action/
dlSearch.do?institution=VOLCANO&query=any,contains,leukemia&vid=Auto1&fromPreferences=false&c
```

- **Linking to a stand-alone Citation Linker page** – Use the following links to access a stand-alone page of the Citation Linker:

  Classic UI:

  ```
  http://<primo server:port>/primo_library/libweb/action/
  citationLinker.do?vid=<view_code>&openInSeperateWindow=Y
  ```

  You can also pre-fill the fields in the Citation Linker by including the names of the OpenURL fields as parameters (which are defined in the Citation Linker Definitions mapping table), using the following format:

  ```
  &rft.<mapping table field>=<value>
  ```

  For Alma customers, you can use the CSS defined for your Services Page view by adding the following parameter to the link:

  ```
  &spvid=<services_page_view_id>
  ```

  For example:

  ```
  http://myInst:1701/primo_library/libweb/action/
  citationLinker.do?vid=Auto1&openInSeperateWindow=Y&rft.jtitle=test1&spvid=services_page
  ```

  New UI:

  ```
  http://<primo server:port>/primo-explore/citationlinker?vid=<view_code>
  ```

Configuring the EBSCO Plug-In

Return to menu

The EBSCO plug-in enables Primo to query and receive results from the EBSCOhost API. End users that are logged on to Primo or using an on-campus terminal do not need to log on to EBSCO to search for EBSCO content.

Note

The EBSCOhost API does not support the **starts with** option for title searches. The API will return all results, not just the titles that start with the search term.

By default, the EBSCO plug-in maps the following EBSCO facets into Primo facet codes in order to display EBSCO facets in Primo:

- **JN** (Journal) maps to **jtitle** in Primo
- **ZE** (SubjectThesaurus) maps to **topic** in Primo

If the EBSCOhost API does not return a SubjectThesaurus facet, the EBSCO plug-in will attempt to use one of the other EBSCO subject facets in the following order: **QZ** (Subject), **ZG** (SubjectCompany), **ZO** (SubjectGeographic), or **QN** (SubjectNAICS).

For blended searches, Primo maps the Resource type facet to the equivalent EBSCO search index. This means that the facets values do not come from EBSCO, but if chosen, a search is sent to EBSCO. If any other facet is selected, a search is not sent to EBSCO.

It is possible to add additional conversions by modifying the `FacetConversion` and `QueryConversion` parameters. For more information, see EBSCO Plug-In Parameters and Facet Code Mappings.

Because the EBSCOhost API does not return count values for facets, Primo handles the display of facet values as follows if the Primo view displays facets based on size:

- For blended searches, Primo will not display the counts for any facets returned in the search.
- For EBSCO-only searches, the order in which the facets values display is based on the order sent by the EBSCO API.
- For blended searches, EBSCO facet values display at the bottom of the list, and their order is based on the order sent by the EBSCO API.

To configure an EBSCO plug-in:

1. On the Mapping Tables page (**Primo Home > Advanced Configuration > All Mapping Tables**), edit the Deep-Search Plugins mapping table and specify the following fields for the EBSCO local plug-in if it has not been defined or has been removed:
    - Enabled – Select this check box to enable the plug-in.
    - Plugin ID – **EbscoLocal**

You can configure a different EBSCO plug-in for each institution so that they insert their own EBSCO API key. At the institution level, use the following naming convention to define a different deep search plug-in for an institution:

EbscoLocal_<*institution_code*>

- Plugin Class – **ebsco.local.EbscoDeepSearch**
- Plugin Display Name - Enter the display name (such as **EBSCO**).
- Description – Enter an optional description (such as **Primo to EBSCO search**).

2. On the Mapping Tables page (**Primo Home > Advanced Configuration > All Mapping Tables**), edit the Deep Search Plugin Parameters mapping table and specify the following fields for each EBSCO parameter that you want to modify:
   - Enabled – Select this check box to enable the parameter.
   - Param name – Specify the name of the parameter (see EBSCO Plug-In Parameters).
   - Param value – Specify the value of the parameter if encryption is not needed (see EBSCO Plug-In Parameters).
   - Param value - Encrypted – Specify the value of the parameter if encryption is needed. Use this field to encrypt sensitive information (such as keys and passwords).
   - Plugin – Select the plug-in ID of the plug-in that uses the parameter.
   - Description – Specify text that describes the functionality of the parameter. This field is optional.
3. On the Deploy All page (**Primo Home > Deploy All**), select the **Deep Search Configuration** option and click **Deploy**.
4. Add the deep search plug-in to the search scope in the Views Wizard.
5. Deploy the view.
6. EBSCO availability and delivery can also be configured at the institution level. For more information, see Configuring EBSCO Availability and Delivery.

EBSCO Plug-In Parameters

The following table lists the valid parameters for the EBSCO plug-in:

EBSCO Parameters

EBSCO Parameter	Description
URL	Enter the following URL for the EBSCOhost API: `http://eit.ebscohost.com/Services/SearchService.asmx/Search`
USERNAME	Enter your EBSCO user name.

EBSCO Parameter	Description
PASSWORD	Enter your EBSCO password.

DB	Enter a list of the short EBSCO database names separated by a comma. For example:
	`rlh,ahl,8gh,lxh,eoh,buh,rvh,oah,rfh,reh,`
	`vah,sbh,loh,jph,rph`

TIMEOUT	Specify the timeout period for EBSCO queries in milliseconds (such as **30000**).
FacetConversion	If you want to display additional facets for EBSCO results, you must list the mapping details for each additional EBSCO facet, separated by a semicolon. Each facet mapping must contain the EBSCO facet code followed by the Primo facet code, separated by a comma. For example: `JN,jtitle;ZE,topic` For more information, see Facet Code Mappings.
QueryConversion	If you want to display results that have been filtered by clicking an EBSCO facet within Primo, you must list the mapping details for each additional EBSCO facet, separated by a semicolon. Each facet mapping must contain the Primo facet code followed by the EBSCO facet code, separated by a comma. You must prefix each Primo facet code with **facet_**. For example: `facet_jtitle,JN;facet_topic,ZE` For more information, see Facet Code Mappings.

rtype_to_ebsco	This parameter maps the Primo resource type to the EBSCO types. Every Primo type should be mapped to a single EBSCO type, but different Primo types can be mapped to the same EBSCO type. The format should be *<primo type>*, *<ebsco type>*, and each additional mapping should be separated by a semicolon. For example:
	`other,Abstract;articles,Article;other,`
	`Bibliography;`
	Note
	If this parameter is not specified, Primo will use the default mappings (see Resource Type Mappings).

ebsco_to_ display_type	This parameter maps the EBSCO resource type to the Primo display/type field. Every EBSCO type should be mapped to a single Primo type. The format should be *<ebsco type>*, *<primo type>*, and each additional mapping should be separated by a semicolon. For example:
	`Abstract,other;Article,article;`
	`Bibliography,other;`
	Note
	If this parameter is not specified, Primo will use the default mappings (see Display Type Mappings).

EBSCO Parameter	Description
ebsco_to_ris_type	This parameter maps the EBSCO resource type to the Primo addata/ristype field. Every EBSCO type should be mapped to a single Primo type. The format should be *<ebsco type>*, *<primo type>*, and each additional mapping should be separated by a semicolon. For example: `Abstract,GEN;Article,JOUR;Bibliography,GEN;Biography,BOOK;` **Note** If this parameter is not specified, Primo will use the default mappings (see RIS Type Mappings).
ebsco_to_format_type	This parameter maps the EBSCO resource type to the Primo addata/format field. This is a one-to-one relation, which means that every EBSCO type must be mapped to a single Primo type. The format should be *<ebsco type>*, *<primo type>*, and different mappings should be separated by a semicolon. For example: `Abstract,book;Article,journal;Bibliography,book;Biography,book` **Note** If this parameter is not specified, Primo will use the default mappings (see Format Type Mappings).
ebsco_to_genre_type	This parameter maps the EBSCO resource type to the Primo addata/genre field. This is a one-to-one relation, which means that every EBSCO type must be mapped to a single Primo type. The format should be <ebsco type>, <primo type>, and different mappings should be separated by a semicolon. For example:<primo><ebsco> `Abstract,unknown;Article,article;Bibliography,unknown;Biography,book;` **Note** If this parameter is not specified, Primo will use the default mappings (see Genre Type Mappings).
port	Not in use for EBSCO.
scope	If you want to specify a default scope, enter the scope name. Otherwise, enter **none**.
cache/enable	Set to **true** to enable result caching. **Note** When disabled, every full display initiates a new search.
cache/batchsize	Specify the number of results to store in the cache. Do not configure a large number. Between 10 to 20 results are recommended.

EBSCO Parameter	Description
primo_services/ primo_rank	If you blend EBSCO with other SEs (such as Primo local and Primo Central), it is recommended to set this parameter to **true**, which indicates that Primo will apply its own ranking algorithm to the records returned by EBSCO to blend the results.
primo_services/ primo_facets	If set to **true**, Primo will build the facets in the results set and will base them on the facet section of the PNX, assuming that it exists. If set to **false**, the results set is assumed to already have a facets section.
primo_services/ primo_ highlighting	Set to **true** if you want highlighting to appear in the returned results.
warmup/enable	Set to **false**. If set to **true**, Primo will warm up the plug-in by sending queries to your plug-in before adding it to Primo's search. This is not necessary for the EBSCO plug-in.

Facet Code Mappings

The following table lists the valid Primo facet codes and their associated fields in the PNX.

Primo Facet Codes

Facet Code	PNX Facet Section Field Name
creator	creatorcontrib
lang	language
rtype	rsrctype
topic	topic
tlevel	toplevel
pfilter	prefilter

Facet Code	PNX Facet Section Field Name
creationdate	creationdate
domain	collection
fsize	filesize
fmt	format
jtitle	jtitle
library	library
local<*n*>	lfc<*n*>

Resource Type Mappings

The following table lists the default mappings for the Primo resource type to EBSCO resource type:

Primo Resource Type to EBSCO

Primo r_type	EBSCO
other	Abstract
articles	Article
other	Bibliography
books	Biography
books	Book
book_chapter	Book Chapter

Primo r_type	EBSCO
reviews	Book Review
books	Case Study
conference_proceedings	Conference Paper
reviews	Course Review
images	Cover Art
books	Directory
other	Editorial
reviews	Entertainment Review
other	Erratum
books	Essay
other	Excerpt
images	Image
other	Interview
other	Letter
books	Literary Criticism
other	Obituary

Primo r_type	EBSCO
other	Poem
reviews	Poetry Review/Criticism
conference_proceedings	Proceeding
reviews	Product Review
other	Recipe
reference_entrys	Reference Entry
other	Science Experiment
books	Short Story
reviews	Short Story Review
other	Speech
books	Table of Contents

Display Type Mappings

The following table lists the default mappings for the EBSCO resource type to the Primo display type:

EBSCO Type to Primo Display Type

EBSCO Type	Primo display/type
Abstract	other
Article	article

EBSCO Type	Primo display/type
Bibliography	other
Biography	book
Book	book
Book Chapter	book_chapter
Book Review	review
Case Study	book
Conference Paper	conference_proceeding
Course Review	review
Cover Art	image
Directory	book
Editorial	other
Entertainment Review	review
Erratum	other
Essay	book
Excerpt	other
Image	image

EBSCO Type	Primo display/type
Interview	other
Letter	other
Literary Criticism	book
Obituary	other
Poem	other
Poetry Review/Criticism	review
Proceeding	conference_proceeding
Product Review	review
Recipe	other
Reference Entry	reference_entry
Science Experiment	other
Short Story	book
Short Story Review	review
Speech	other
Table of Contents	book

RIS Type Mappings

The following table lists the default mappings for the EBSCO resource type to the Primo RIS type:

EBSCO Type to Primo RIS Type

EBSCO Type	Primo addata/ristype
Abstract	GEN
Article	JOUR
Bibliography	GEN
Biography	BOOK
Book	BOOK
Book Chapter	BOOK
Book Review	GEN
Case Study	BOOK
Conference Paper	JOUR
Course Review	GEN
Cover Art	GEN
Directory	BOOK
Editorial	GEN
Entertainment Review	GEN
Erratum	GEN
Essay	BOOK

EBSCO Type	Primo addata/ristype
Excerpt	GEN
Image	GEN
Interview	GEN
Letter	GEN
Literary Criticism	BOOK
Obituary	GEN
Poem	GEN
Poetry Review/Criticism	GEN
Proceeding	JOUR
Product Review	GEN
Recipe	GEN
Reference Entry	GEN
Science Experiment	GEN
Short Story	BOOK
Short Story Review	GEN
Speech	GEN

EBSCO Type	Primo addata/ristype
Table of Contents	BOOK

Format Type Mappings

The following table lists the default mappings for the EBSCO resource type to the Primo format type:

EBSCO Type to Primo Format Type

EBSCO Type	Primo addata/format
Abstract	book
Article	journal
Bibliography	book
Biography	book
Book	book
Book Chapter	book
Book Review	book
Case Study	book
Conference Paper	book
Course Review	book
Cover Art	book
Directory	book

EBSCO Type	Primo addata/format
Editorial	book
Entertainment Review	book
Erratum	book
Essay	book
Excerpt	book
Image	book
Interview	book
Letter	book
Literary Criticism	book
Obituary	book
Poem	book
Poetry Review/Criticism	book
Proceeding	journal
Product Review	book
Recipe	book
Reference Entry	book

EBSCO Type	Primo addata/format
Science Experiment	book
Short Story	book
Short Story Review	book
Speech	book
Table of Contents	book

Genre Type Mappings

The following table lists the default mappings for the EBSCO resource type to the Primo genre type:

EBSCO Type to Primo Genre Type

EBSCO Type	Primo addata/genre
Abstract	unknown
Article	article
Bibliography	unknown
Biography	book
Book	book
Book Chapter	book
Book Review	book
Case Study	book

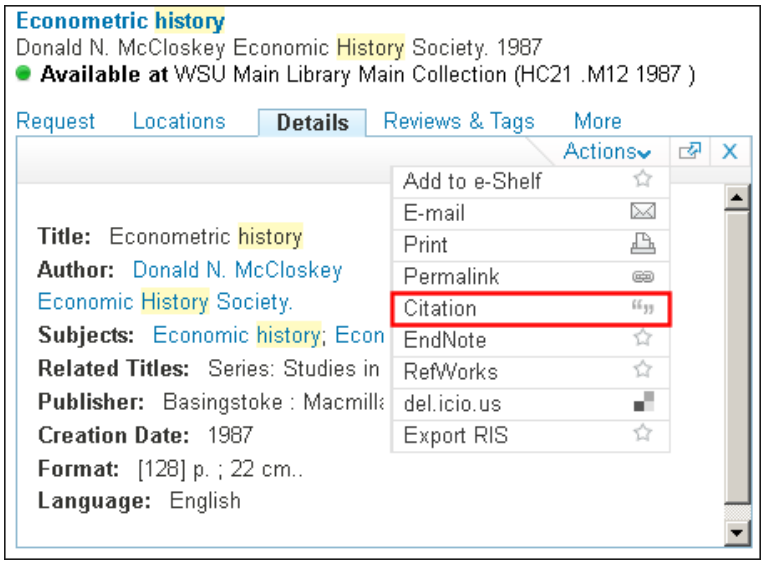
EBSCO Type	Primo addata/genre
Conference Paper	journal
Course Review	unknown
Cover Art	unknown
Directory	book
Editorial	unknown
Entertainment Review	unknown
Erratum	unknown
Essay	book
Excerpt	unknown
Image	unknown
Interview	unknown
Letter	unknown
Literary Criticism	book
Obituary	unknown
Poem	unknown
Poetry Review/Criticism	unknown

EBSCO Type	Primo addata/genre
Proceeding	journal
Product Review	unknown
Recipe	unknown
Reference Entry	unknown
Science Experiment	unknown
Short Story	book
Short Story Review	unknown
Speech	unknown
Table of Contents	book

Copy Citation for Record

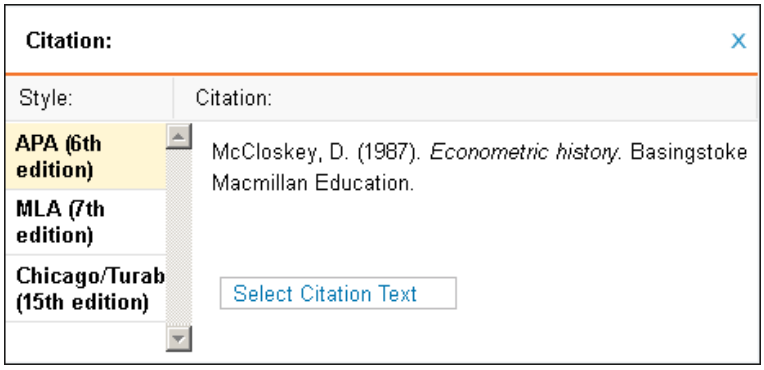
Return to menu

The **Citation** action has been added to the **Actions** drop-down list (which was previously named **Send to**) in the search results and the e-Shelf to allow end users to copy citations in different styles (APA, MLA, and Chicago/Turabian) for individual records in their search results and e-Shelf. This option utilizes the EasyBib API to create the citations.



Citation Action in Actions Drop-Down List

This action opens the Citation dialog box, which displays the record's citation in the default style. Users may select a different style (APA, MLA, or Chicago) and then click the **Select Citation Text** button to select the citation so that it can be copied and pasted to wherever it is needed.



Citation Dialog Box

Back Office Configuration

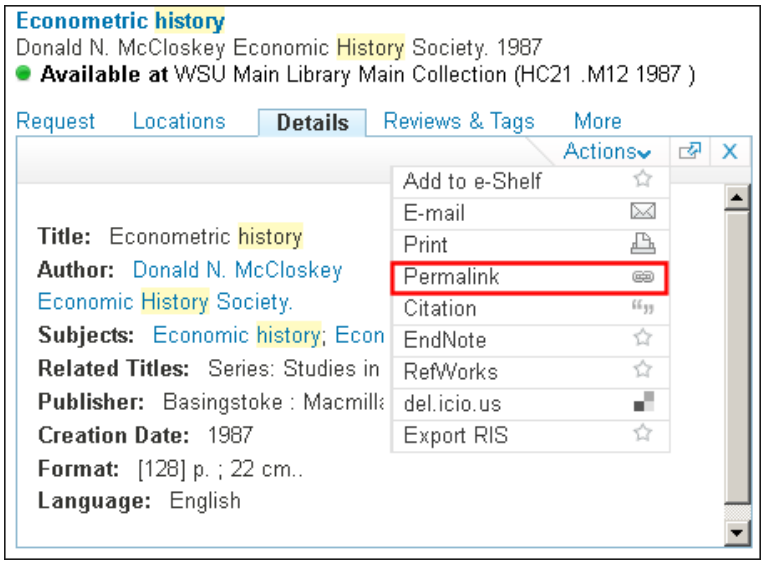
The following table lists the related Back Office configuration for this enhancement.

Table	Description
Keeping This Item Tile code table	The following codes allow you to modify the name of the Citation option that appears in the Actions drop-down list and its tooltip, respectively: • `default.fulldisplay.command.permalink` • `default.link.title.commands.permalink`
Citations Label code table (new)	This table allows you to modify the labels that appear in the Citation dialog box.
Citation Source Types mapping table (new)	This table maps Primo resource types to EasyBib source types. If you have created additional resource types in Primo, you can map each of them to an EasyBib source type. The following source types are supported: book, chapter, newspaper, journal, and website. **Note** If no mapping is defined, the EasyBib source type defaults to **book**.

Creating a Permalink for a Record

Return to menu

The **Permalink** action in the **Actions** drop-down list (which was previously named **Send to**) in the search results and the e-Shelf allows end users to copy simplified deep links to individual records in their search results and e-Shelf.



Permalink Action in Actions Drop-Down List

This action opens the Permalink dialog box, which displays a simplified static URL to the record. The user may select the URL and then copy and paste it to wherever it is needed.

Permalink URL

The system uses the following simplified format to create the permalink, which is based on the deep link to the record's full view:

```
http://<Primo server+port>/<View ID>:<Search Scope Name>:<PNX record ID>
```

Back Office Configuration

The following table lists the related Back Office configuration for this enhancement.

Back Office Configurations

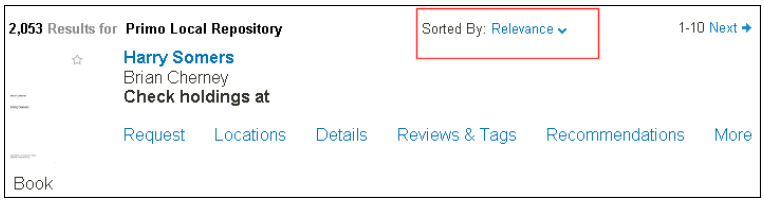
Table	Description
Keeping this item Tile code table	The following codes allow you to modify the Permalink label that appears in the Permalink URL dialog box, the name of the Permalink option that appears in the Actions drop-down list, and the tool-tip, respectively: • `default.fulldisplay.label.permalink` • `default.fulldisplay.command.permalink`

Table	Description
	• `default.link.title.commands.permalink`

Defining Local Sort Fields

Return to menu

The Sorted By drop-down list at the top of the Brief Results page allows the end user to sort the results by author, title, and customizable local fields.



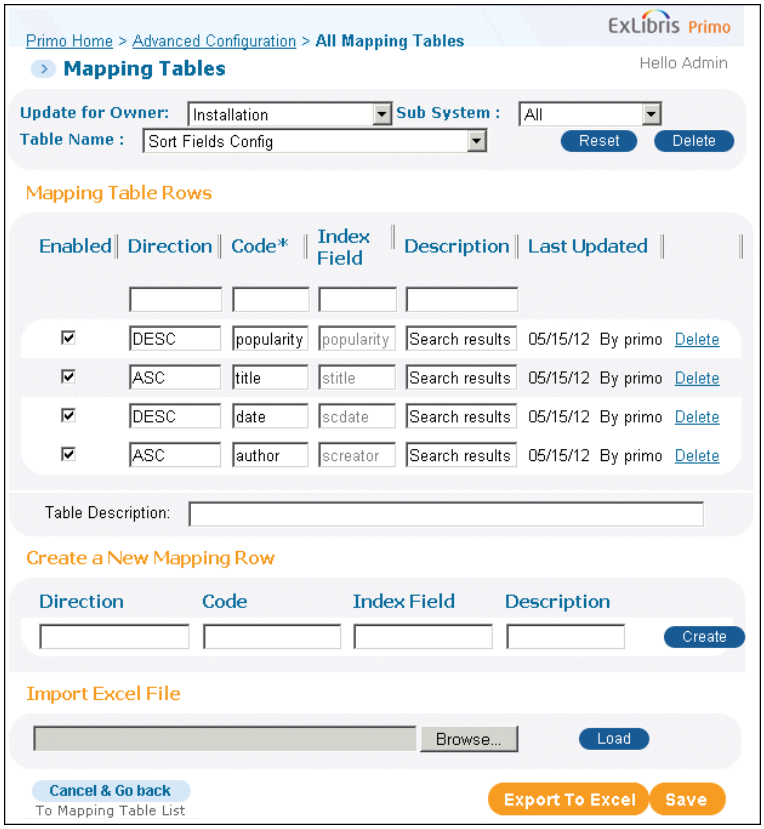
Sorted By Drop-Down List

Local sort fields can be added for a variety of purposes. One purpose is to create an ascending sort by date so that users will be able to perform both descending and ascending sorts by date in the Front End user interface.

Each additional sort field requires an additional index, which in turn requires 550 MB of RAM for every 3.5 million records that are added with the sort key.

To define a local sort field:

1. In the Sort Fields Config mapping table (see Modifying Sort Field Labels), use the following fields to add a mapping row for the local sort field:
    - **Enabled**—If selected, this field indicates that the sort field is enabled.
    - **direction**—Specify the direction of the sort. The valid values are **DESC** (descending sort) and **ASC** (ascending sort).
    - **code**—Specify the sort field.
    - **Index Field**—This is read-only field that applies to the specified code.
    - **Description**—Enter a free-text description for the sort field.



Modifying Sort Field Labels

2. On the **Primo Home > Deploy All** page, deploy the **Search Engine Configuration** changes.
3. Add the new sort field to the PNX by updating the normalization rules.

Note

The new code must be one of the local fields (such as **lso01**) in the Sort section of the PNX record.

---

4. Run an update on the records for which you want to create the sort key.
5. Index the updated records.
6. If you want to modify the label for the new sort code, use the Sort Values code table to modify the text for the appropriate languages.
7. On the Brief Results Tile in the Views wizard (see Adding Sort Fields to Drop-Down List), add the local sort field to the drop-down list in the Front End user interface.

Adding Sort Fields to Drop-Down List

8. Deploy the view.

Display of Local Fields

Return to menu

Primo allows you to suppress local display fields and local facets so that only fields and facets belonging to the institution (based on the institution of the user) display in the search results. The same functionality is also available for the Top Level facet.

It is possible to link a local display and facet fields to a specific institution by appending $$I<institution> to the value. For example:

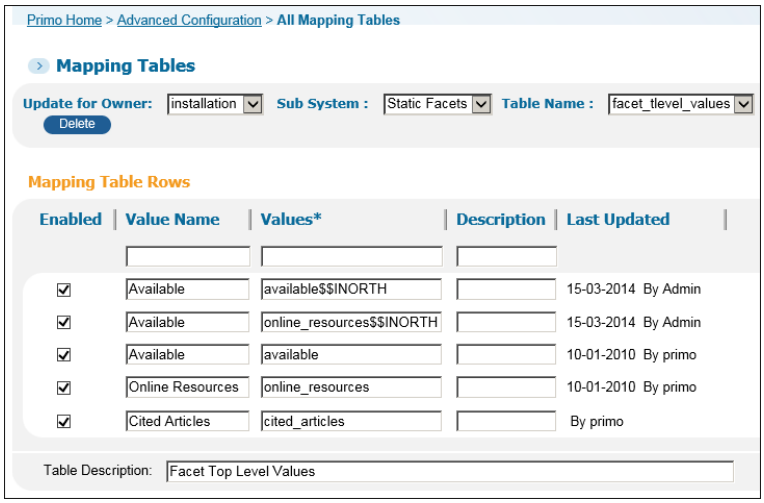
```
<lds02>Applied Math 374$$INORTH/lds02>

<lfc02>Applied Math 374$$INORTH</lfc02>
```

The system will suppress all facet values and display fields that do not match the institution of the user in the Front End. This can be useful for local data that is stored in local display and facet fields and is relevant only to the specific institution — for example, course reserves information.

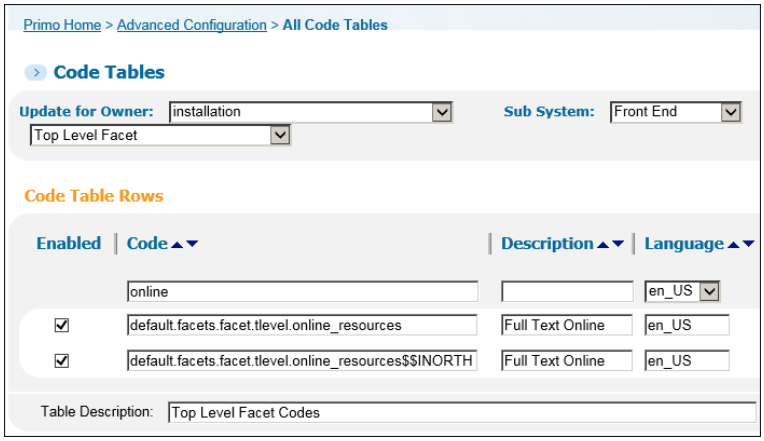
If the **Use local fields 30-39 as lateral links** option is enabled on the Installation subsystem page (**Primo Home > Advanced Configuration > General Configuration**), and the lds30 - lds39 fields are linked to a specific institution, the search will include all institutions.

This functionality is also available for the Top Level facet since this facet includes availability for electronic and physical resources. Because the Top level facet is a static facet, it is necessary to define the values with the institution codes in the facet_tlevel_values mapping table in the Static Facets subsystem. For example:



facet_tlevel_values Mapping Table

In addition, the institution must be added to the code of the labels in the Top Level Facets code table:



Top Level Facets Code Table

Back Office Configuration

The following table lists the related Back Office configuration for this enhancement.

Back Office Configurations

Table	Description
Normalization rules	Add `$$I`*<institution code>* to any local display or facet field or top-level facet value that you want to filter by institution.
facet_tlevel_values mapping table	If you add `$$I`*<institution code>* to the top-level facets, the values must include `$$I`*<institution code>*.
Top Level Facets code table	If you add `$$I`*<institution code>* to the top-level facets, the label codes for the values must include the `$$I`*<institution code>* .

Enhanced Hypertext Linking

Return to menu

Previously, both the old and new UIs supported hypertext linking in the following PNX display fields: creator, contributor, subject, and lds30-lds39 fields. When a link was clicked, the system performed an advanced search using the exact contents of the entire field, which was created from multiple subfields.

This functionality includes the following enhancements:

- For your local repository only, hypertext linking has been extended to the following PNX display fields: **ispartof**, **unititle**, and **relation**.
- Each field continues to display all subfields, but advanced searches are performed using the subfields that are prefixed with the new **$$Q** parameter. For example:

  `<creator>Fitzgerald-Jones, Sandra 1938- interviewer`**`$$QFitzgerald-Jones, Sandra`**`</creator>`

- Allow exact and contains search operations in the Advanced search. The Hypertext Linking Definitions mapping table has been added to allow you to configure the search operator used for each of the supported display fields. For more information, see Defining a Field's Search Operator.

Back Office Configurations

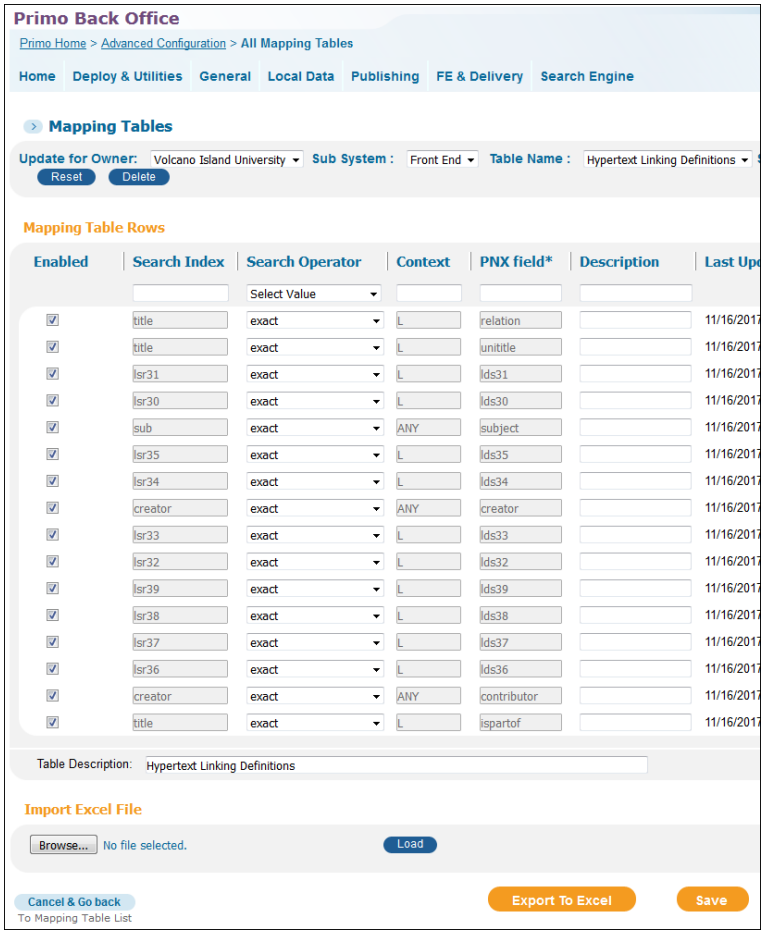
This section describes the configurations that support this functionality.

Defining a Field's Search Operator

The Hypertext Linking Definitions mapping table allows you define whether an **exact** or **contains** search is performed when users click the link provided for each type of display field. The Context field indicates whether the search is relevant to **ANY** (all scopes) or **L** (local scopes only) scopes.

Note

You may need to enable the rows that contain the following new hypertext linking fields: relation, unititle, and ispartof.



Hypertext Linking Definitions Mapping Table

Default Normalization Rules

The normalization rules listed in the table below are included in the following MARC templates: Generic, Voyager, Aleph, Alma, Unicorn, and SFX. You will need to apply them to your normalization rules and run an update pipe to enable the new functionality.

Note

- If the linking text (the portion of the display field that is prefixed with $$Q) is omitted, the system will use the entire display field for linking.
- If you are using lateral links (lds30 - lds39), you will need to add normalization rules that include the **$$Q** parameter. For more information, see Creating Lateral Links for Local Fields.

Source Tag	Displayed Subfields	$$Q (Subfields Searched)
Display/creator:		
100, 880-100	a, b, c, d, e, j, q, u	a, b, c, d, j
110, 880-110	a, b, c, d, e	a, b, c, d
Display/contributor:		

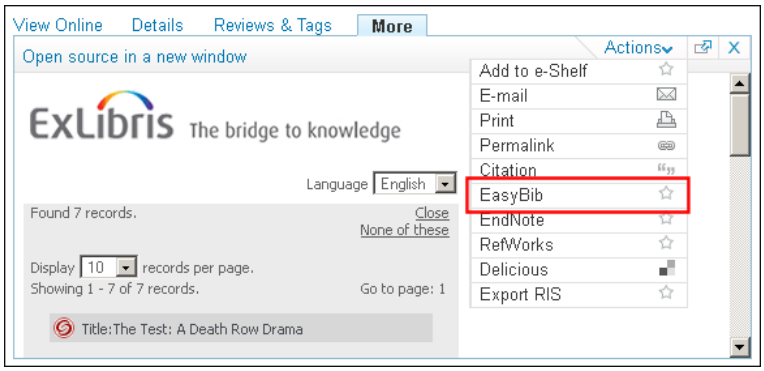
700, 773-880	a, b, c, d, e, j, q, u	a, b, c, d, j
710, 880-710	a, b, c, d, e	a, b, c, d
Display/ispartof:		
773, 700-880	all except for x, y, and z	t
Display/relation:		
400, 400-880	Exclude x	t
410, 410-880	Exclude x	t
411, 411-880	Exclude x	t
440, 440-880	Exclude x	a
490, 490-880	Exclude x	a
800, 800-880	Exclude x	t
810, 810-880	Exclude x	t
811, 811-880	Exclude x	t
830, 830-880	Exclude x	a
840, 840-880	Exclude x	a
780, 880-780	Exclude w, x, y, 6, 7	t
785, 880-785	w, x, y, 6, 7	t
240	a, d, m, n, p, r, s	a
130	a, d, m, n, p, r, s	a

Export to EasyBib

Return to menu

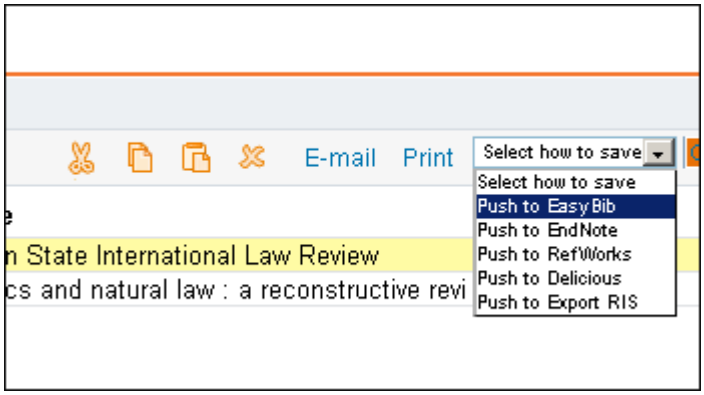
Primo allows users to export information from Primo results to the EasyBib application to create citations. The ability to export titles found in Primo to EasyBib has been added to the following places in the Front End:

- Full Display of a title – The **EasyBib** action has been added to the **Actions** drop-down list (which was previously named **Send to**). This action opens the EasyBib service and populates the fields necessary to create a citation for a title.



EasyBib Action in Actions Drop-Down List in Results

- e-Shelf – The **Push to EasyBib** save option has been added to the Actions menu in the user's e-Shelf. This action opens the EasyBib service and populates the fields necessary to create citations for the selected titles in the user's e-shelf.



Push to EasyBib Option from e-Shelf

Back Office Configuration

The following codes have been added to the Keeping this Item Tile code table to customize the labels associated with this enhancement:

Keeping this Item Tile Code Table

Code	Description
`default.fulldisplay.command.pushto.option.EasyBib`	Defines the label that appears in the Actions menu. The following value is defined out of the box: `EasyBib`.
`default.fulldisplay.command.pushto.option.eshelf.EasyBib`	Defines the label that appears in the Select how to save menu in the e-Shelf. The following value is defined out of the box: `EasyBib`.
`link.title.commands.tile.accessibility.pushto.EasyBib`	Defines the label that appears in the e-Shelf if JavaScript is disabled in the browser. The following value is defined out of the box: `Save record to EasyBib (opens in a new window)`

If you want to hide the new option in the Actions menu in the results, add **display: none** to the following line in your view's CSS file, as follows:

```
.EXLTabHeaderButtons ol.EXLTabHeaderButtonSendToList li.EXLButtonSendToEasyBib {display:
none;}}
```

Featured Results Bar

Return to menu

Primo allows you to include additional results from a different search scope that may or may not be defined in the same view or tab from which the user performed the search. This can be seen as a type of an advertisement to notify users that other types of material may be relevant to their searches. For example, a Featured Results bar can be configured to display the following:

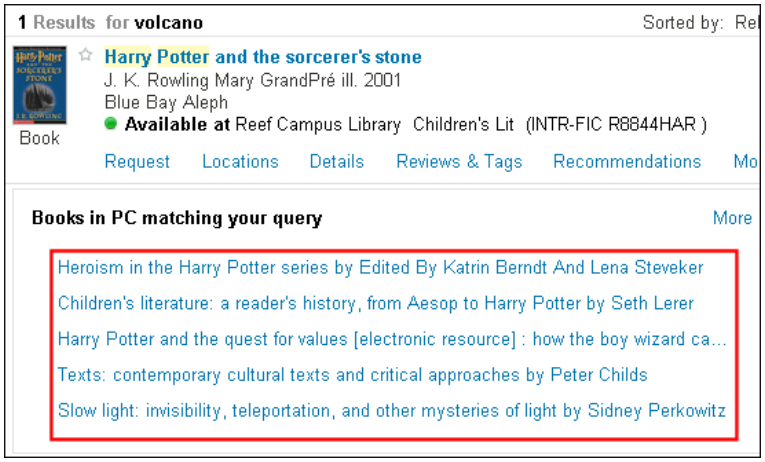
- Primo Central results in a tab that only returns local data
- Images to highlight images
- A special collection

When a Featured Result bar is defined for a tab, Primo will perform two queries when users perform searches:

- Original query – This query uses the search terms, scope, and material type (if this prefilter is selected) that the user enters to return the results set.
- Featured results query – This query uses the same search terms used in the original query, but the scope and material type are taken from the Featured Results mapping table (see The Featured Results Mapping Table). If this query returns enough results, Primo returns the additional results in one of the following formats in a dedicated bar that displays within the results of the original query:
    - **Thumbnails** (if at least four records are found in the featured results query)

Thumbnail Format

    - **List** (if at least two records are found in the featured results query)



List Format

The Featured Results bars appears after the fourth record in the results set. Within the bar, the most highly ranked results appear first.

Users can perform the following actions on the featured results:

- View the full display of the record by clicking the title.
- Display the complete results set for the featured results query by clicking the **More** link.

Note

- The Featured Results bar appears only for the initial query and on the first page. It will not display after selecting a facet or navigating to another page.
- If the original query does not return any results, Featured Results bar will not display.

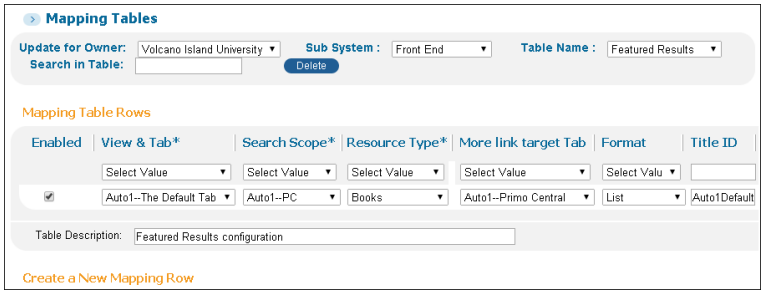
Back Office Configuration

The following tables are used to configure the Featured Results bar:

- Featured Results mapping table
- Featured Results Labels code table

The Featured Results Mapping Table

The Featured Results mapping table under the Front End subsystem allows you to configure the display of featured results per view and search scope at the institution level.



Featured Results Mapping Table

To create a Featured Results bar, specify the following fields:

- **View &Tab** – Specify the view and tab from which users will also receive featured results when performing a Primo search.

  Note

  There is a limit of one Featured Result bar per tab.

- **Search Scope** - Specify the search scope from which featured results are returned.

  Note

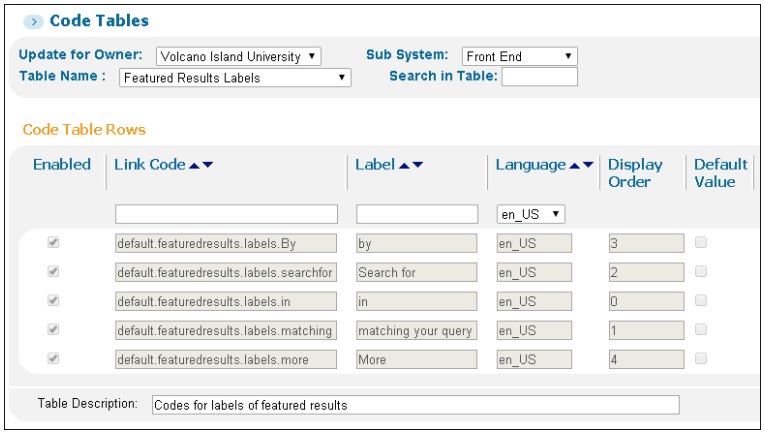
  Because of performance issues, you cannot include MetaLib quickSets in featured results.

- **Resource type** – If appropriate, specify the type of resource (which is defined in the Basic Media Type mapping table) to which to limit the featured results list. The system uses the Prefilter facet as the basis for the featured results list.
- **More Link Target Tab** – Specify the view and tab in which the additional search results will appear if the user clicks the More link.
- **Format** – Specify one of the following display formats for the featured results:
  - **Thumbnails** – Displays the results as thumbnails. This format is ideal for images or results that are likely to have cover page images. Up to 10 records can display in this format.
  - **List** – Displays the results as a list of titles. Up to 5 records can display in this format.
- **Title ID** – Specify an alphanumeric ID to identify this Featured Results bar in the Featured Results Labels code table, which allows you to override the title that displays for the bar in the Front End. For more information, see Featured Results Labels Code Table. A title ID is required even if you do not want a dedicated title for the Featured Results bar.

After making changes deploy from the mapping table page or specify the **All Code Tables and Mapping Tables (Front End labels and more)** option on the Deploy All page.

Featured Results Labels Code Table

The Featured Results Labels code table under the Front End subsystem allows you to configure the labels that display in each Featured Results bar.



Featured Results Labels Code Table

This table includes the following out-of-the-box codes:

Featured Results Labels Code Table Values

Code	Description
default.featuredresults.labels.By	Defines a component of the items presented in the List format, which appears in the following format: `<tile>by<author>`
default.featuredresults.labels.in	Defines a component of the default title, which appears in the following format: `<resource type> in <search scope>` matching your query
default.featuredresults.labels.matching	Defines a component of the default title, which appears in the following format: `<resource type> in <search scope>` matching your query
default.featuredresults.labels.more	Defines the label for the More link. The following value is provided out of the box: `More`

If you want to create a dedicated label for a Featured Results bar, add the following code to override the `default.featuredresults.labels.matching` and `default.featuredresults.labels.in` codes for the specified <title ID>:

```
<View ID>.featuredresults.<title ID>
```

or

```
default.featuredresults.<title ID>
```

For example:

```
Auto1.featuredresults.Auto1PC          Articles you may be interested in:
```

After making any changes to the table, deploy from the code table page or specify the **All Code Tables and Mapping Tables (Front End labels and more)** option on the Deploy All page.

If you do not define a specific label for the Featured Results bar, the system will default to the out-of-the-box title, which is created from the following elements:

`<Resource type from Basic Media type> in <Search Scope description> matching your query`

Find Databases

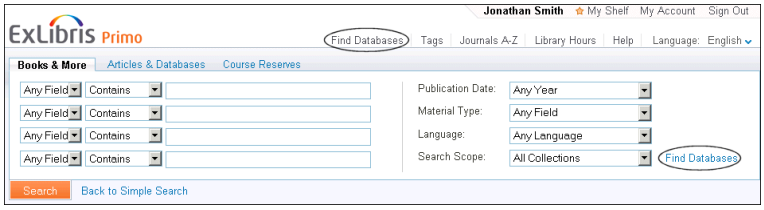
Return to menu

Primo's Find Databases page allows users to search for specific MetaLib databases (not just databases within MetaLib QuickSets) and include these databases in Primo searches. To create A-Z list for different languages, see Defining Find Databases A-Z List Per Language.

If a remote search scope has been defined for the active search tab, the **Find Databases** link displays in the following locations in the Front End user interface:

- In the menu at the top of each page (Advanced and Basic search pages)
- To the right of the Search Scope drop-down list on the Advanced Search page

  For example:

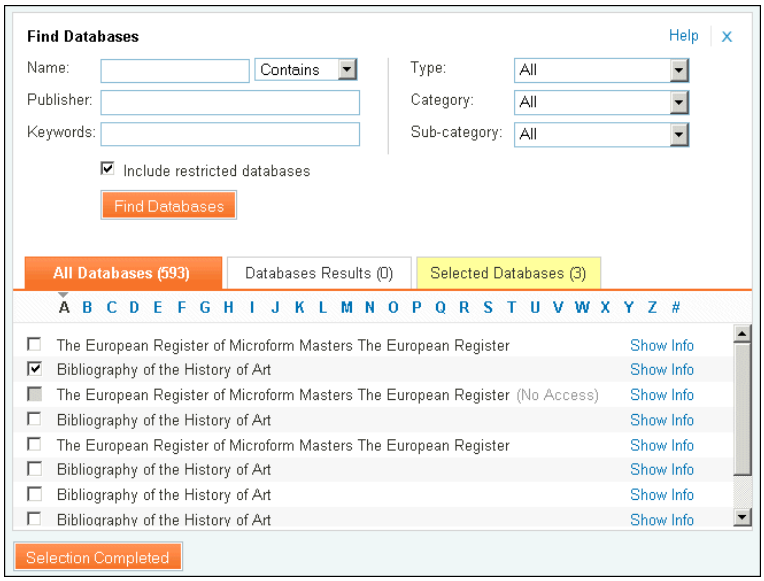


Find Databases Links on Advanced Search Page

Note

If a remote search scope is not defined for the active search tab, the links will not display.

This link allows users to display the Find Databases page, which opens inside a lightbox.



Find Database Page

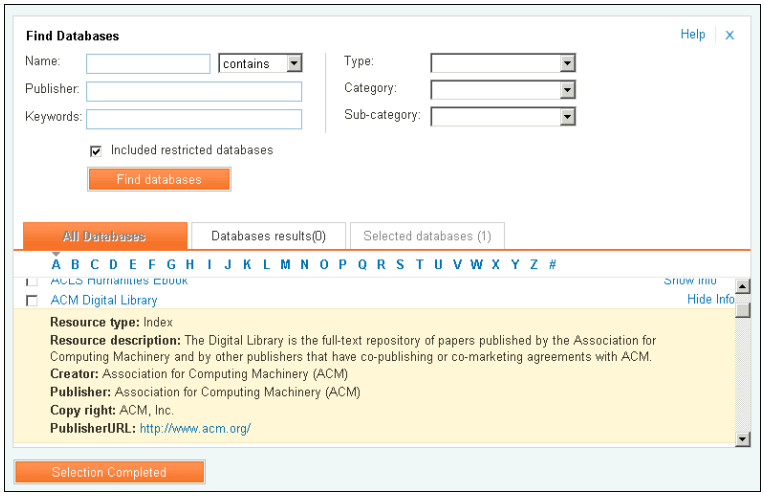
The top section of the page contain the fields that users enter to search for remote databases. After entering the search criteria, the user must click the **Find Databases** button to display the results.

The bottom portion of the page includes the following tabs:

- **All Databases**—displays all databases in the knowledgebase, which are grouped alphabetically by each letter A to Z. Users can view each alphabetic listing by clicking a letter in the A to Z tabs.
- **Databases Results**—displays the results of the last database search.
- **Selected Databases**—displays all of the databases that the user wants to include in Primo searches.

To include databases in Primo searches, users must select the check box next each database's entry in the list. The selected databases will appear in the Databases Results tab. If the user clicks **Selection Completed**, the system will add the selected databases to the active scope and display `Selected databases` in the Primo search box.

The Show Info link that displays next to each database on the All Databases, Databases Results, and Selected Databases tabs allows you to display information for the corresponding database (see Show Info Page).

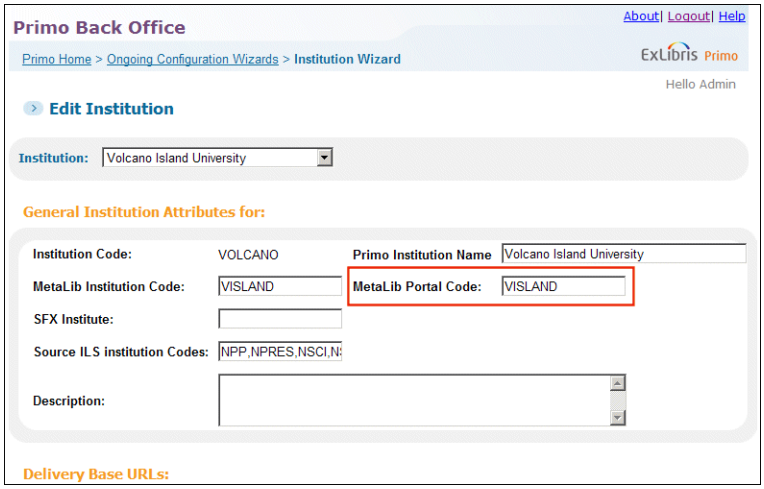


Show Info Page

The fields on the Show Info page and their order are configured with the Find Database Full Display mapping table. To hide the information for the database, click the **Hide Info** link.

Configuring the MetaLib Portal

Because MetaLib categories can be defined per portal in MetaLib, it may be necessary to define the **MetaLib Portal Code** field, which was added to the Edit Institution page (see Edit Institution Wizard). If this field is not specified, the system will use the **MetaLib Institution Code** field, which may be different from the portal in some cases.



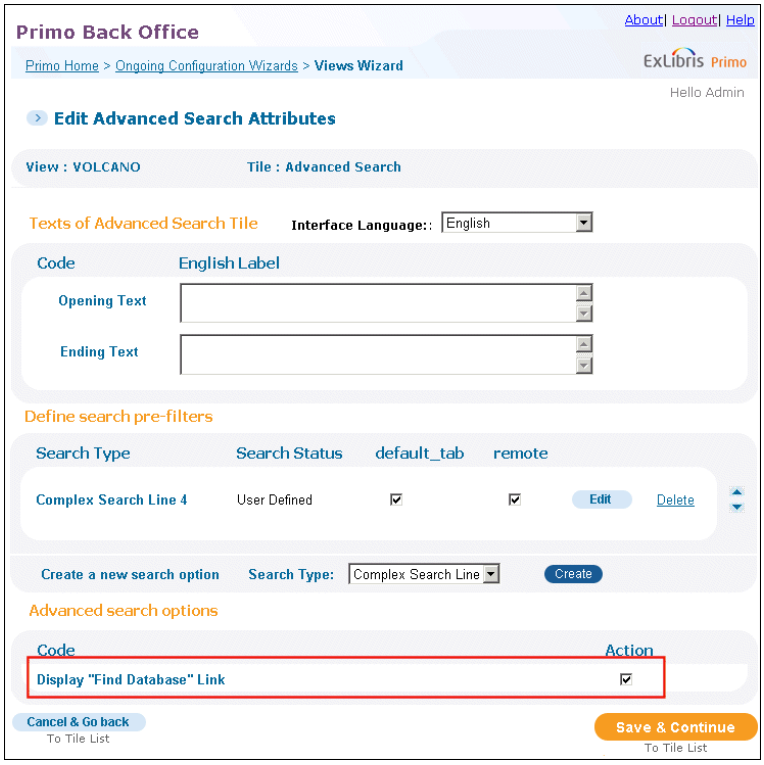
Edit Institution Wizard

Disabling the Find Databases Link

The Find Databases link appears in the menu on each page and in the Advanced Search box.

To disable this link in the advanced search box per view, open the Advanced Search tile in the Views wizard and clear the **Display "Find Database" Link** field.

To disable the link that displays in the menu, you will have to modify the CSS.



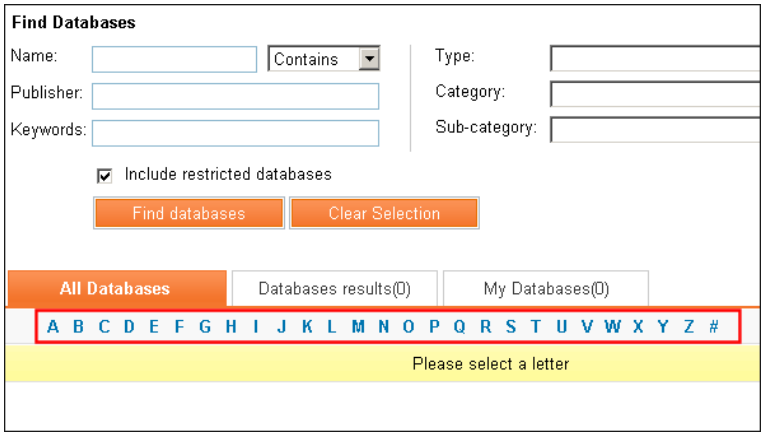
Configuring the Find Database Link

Note

The Find Databases link only displays if the scopes list contains at least one remote search scope.

Defining Find Databases A-Z List Per Language

Primo allows you to create different Find Databases A-Z lists for each language. Any character set that is supported by MetaLib is permitted. The default Find Databases A-Z list is defined with the `atoz.html` file, which appears as follows in the Front End:



Find Databases A-Z List

The default Find Databases A to Z list is stored under the following directory:

```
/exlibris/primo/pN_x/ng/primo/home/system/tomcat/search/webapps/primo_library#libweb/
static_htmls
```

Because the out-of-the-box static HTML files are overwritten during upgrades, it is not recommended to make changes to them.

To configure Find Databases A-Z Lists per language:

1. Create your language-specific versions of the `atoz.html` file. You must use the following naming convention for each file:

   `<default_filename>_<locale>.html`

   For example:

   `atoz_iw_IL.html`

2. Place your language-specific files in the same directory that contains your default `atoz.html` file.

   By default, the Primo Back Office is configured to use the default file stored on the Primo server. You can copy the default file to another directory or server and modify its contents as long as you specify its new name or path name in the Views Wizard.

3. Configure the name and location of your default Find Databases A to Z list file in the Back Office:

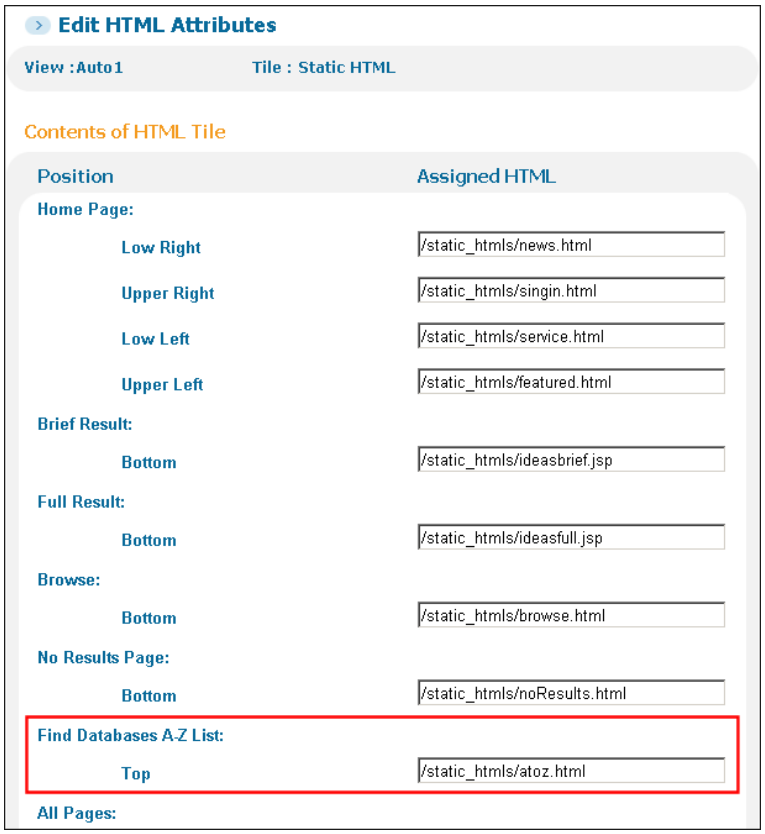
   1. On the **Primo Home > Ongoing Configuration Wizards > Views Wizard** page, click **Edit** next to the view you want to update.

      The Edit View Attributes page opens.

   2. Continue paging through the Wizard until you reach the Tiles Configuration page.

3. From the **Page** drop-down list, select **Home Page** and then click **Edit Tile** in the row containing the **Static HTML** tile.

   The Edit HTML Attributes page opens.



Find Databases A-Z List Section in Static HTML Tile

4. In the **Find Databases A-Z List** section, specify the location and name of the default A-Z file in the **Top** field.

5. Click **Save & Continue**.

6. Deploy your changes to the view.

Location Priority for Aleph and Voyager

Return to menu

This functionality allows Aleph and Voyager customers to prioritize the locations that display in the Locations tab of the Front End.

To use this functionality, the following ILS versions are required:

- For Aleph SP 22.0.2 and later, the priority is added per Aleph sublibrary and collection using Aleph's new `ava_location_priority` configuration table. For more details, refer to the *How to Configure Aleph-Primo Interoperability Guide*.
- For Voyager V9.0 and later, the priority is configured with Voyager's new `[LocationSortOrder]` stanza in the `PprimoExp-*.ini` file and in the `yyydb/tomcat/vxws/ini/PrimoExp-Rta.ini` file for real-time availability. For more details, refer to the *Voyager-Primo Integration Guide*.

Note

Location priority is handled differently in Alma. For more information, see Configuring Best Location.

Description

The normalization rules have been updated to copy the location's priority from AVA subfield p for Aleph and 949 subfield p for Voyager to the display/availlibrary $$P field in the PNX record. The order of the locations in the Locations tab is determined as follows:

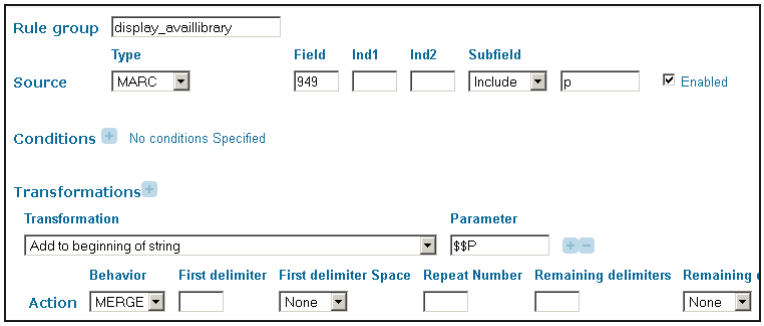
- For single institution environments, the highest priority is given to the first location that has the lowest value in the display/availibrary field. If any other locations have the same value, they are listed next alphabetically. Any locations that are not assigned a priority are placed at the end of the list in alphabetical order.
- For multiple institution environments using the **Sort locations by user institution** option (which is defined with the Locations tile in the Views Wizard), locations are sorted as follows:
  - Locations that match the user's location are listed first. Within the institution, the same priority is used as the single institution environment.
  - Locations from all other institutions are listed alphabetically under a separate heading.

Sort Locations by User Option is Configured

- For multiple institution environments using the **Include only locations belonging to the institution of the view** option (which is defined with the Locations tile in the Views Wizard), all locations that do not match the institution of the view are filtered out, and the remaining locations are sorted using the same priority used for single institution environments.
- For multiple institution environments that do not use either option above (that is locations from all institutions appear in a single list), the priority is ignored and all locations are sorted alphabetically.

Back Office Configuration

The out-of-the-box normalization rules templates map the priority from Aleph and Voyager to the display/availibrary $$P field in the PNX. The following rule is defined in the Voyager template:

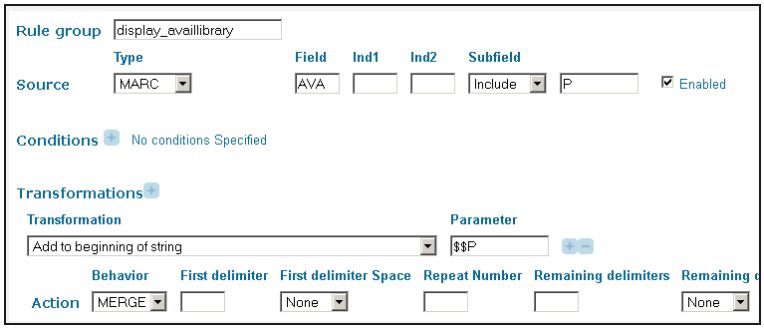


949 Rule in Voyager Template

Note

If Voyager sends locations with 949 subfield **p** set to 0 (which indicates no priority), the new normalization rule prevents the creation of $$P in the PNX record.

The following rule is defined in theAleph template:



AVA Rule Added to Aleph Template

Note

No additional configuration is necessary in Primo, and you do not need to re-normalize the data because priority is passed to Primo with RTA.

Managing Local Fields

Return to menu

You can define a maximum of 200 local fields in the Additional Data (lad), Display (lds), Enrichment (lrn), Facets (lfc), Links (lln), Search (lsr), and Sort (lso) sections of the PNX record.

To create customized local fields:

1. On the Back Office's home page, select **Advanced Configuration**.

   The Advanced Configuration page opens.

2. Select **All Code Tables**.

   The Code Tables page opens. For more information, see Code Tables.

3. To configure the local fields, click **Edit** next to the row that contains the Front End Display Fields table.

   The system opens the Front End Display Fields.

4. Select the **Enable** check box next to the row that contains the local field that you are customizing.

   This enables the field to appear in the Normalization Set Editor page.

   Note

   The local fields are located at the end of the list of fields, and always begin with the letter **l** and two characters from the PNX section. For example, use **lds01** for the first local field of the Display section.

5. In the field name, edit the name of the local field. This name opens next to the field on the Normalization Set Editor page.

   You have customized a local field in the Normalization Set Editor page.

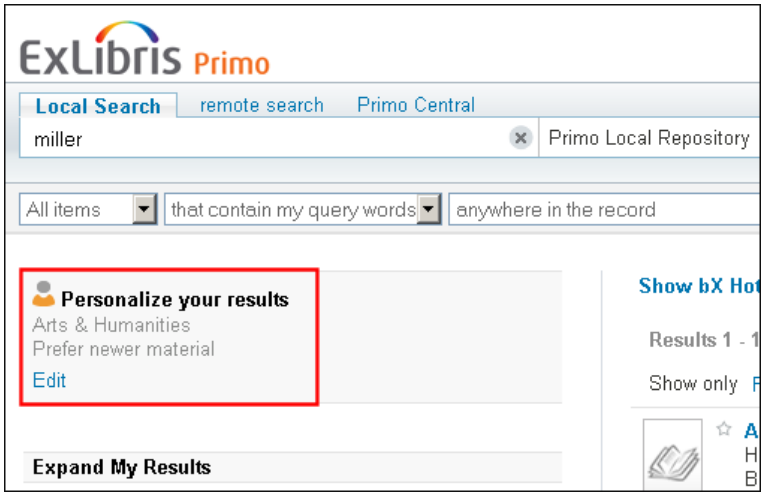
Personalized Ranking for Primo Central

Return to menu

Personalized ranking in Primo Central is particularly helpful for ambiguous searches, where search results come from a variety of disciplines or include a large set of articles. It does not replace topic facets or act as a filter. It simply adjusts the ranking algorithm to the general discipline of the user.

Primo Central's ranking accepts user information (such as the user's disciplines of interest and newer material preference) in order to help rank the results for queries from your local Primo server. If this functionality is enabled in your local Primo Back Office, users can apply these preferences to searches that include Primo Central.

The **Personalize your results** area displays on the Brief Results page when the user's search contains at least one result. It allows users to see a brief list of the preferences that will be applied to each search. For information on setting preferences, see Setting Personalized Ranking Preferences.

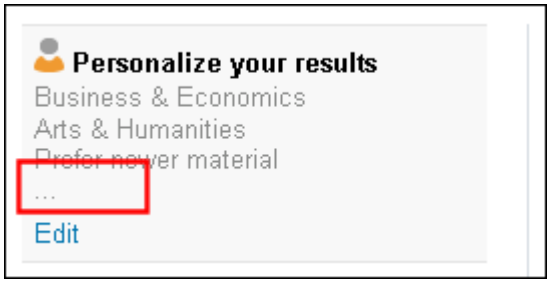


Personalize Your Results Area in Results

Note

Guests and users who have not signed in must set their preferences each session.

An ellipsis below the list of preferences indicates that the user has selected more preferences than are visible:

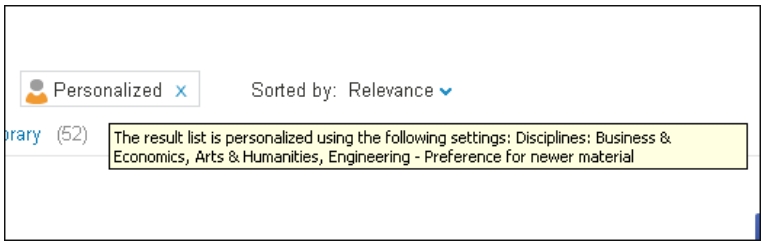


Additional Personalization Preferences

When searches are performed with any personalize ranking preference selected, the Personalized button will appear above the search results. You can click this button to remove the personalized ranking for individual searches:

Personalized Ranking Button

Users can see which options have been selected by hovering the cursor over the button:



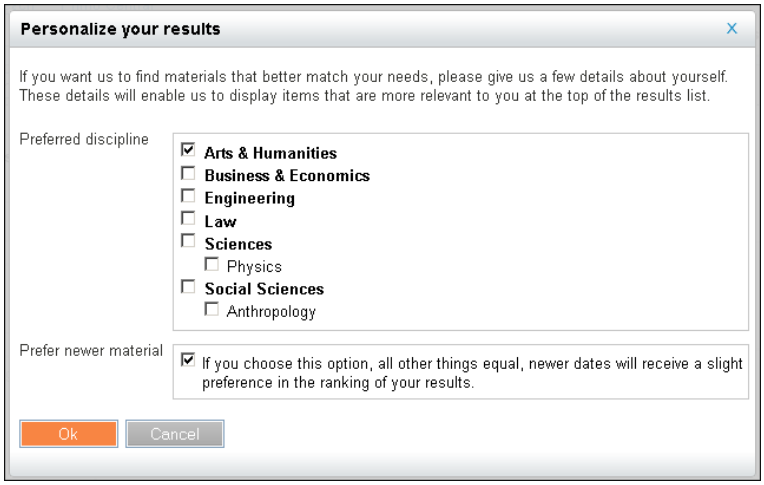
Viewing Selected Personalized Ranking Options

Note

Although the user will see the Personalized filter for all searches when any personalized ranking options are selected, it applies only to Primo Central results and will not affect results found in Primo local, remote searches (MetaLib), EBSCO, and WorldCat.

Setting Personalized Ranking Preferences

The Personalize Your Results dialog box allows users to set their preferences, which are retained between sessions for signed-in users.



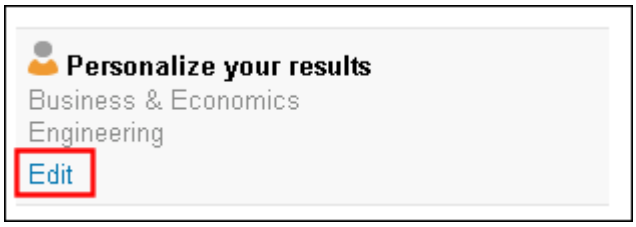
Personalize Your Results Dialog Box

Note

The list of disciplines are defined by Primo Central, but they can be translated locally using a code table in the Back Office. For more information, see Configuring Personalized Ranking in the Back Office.

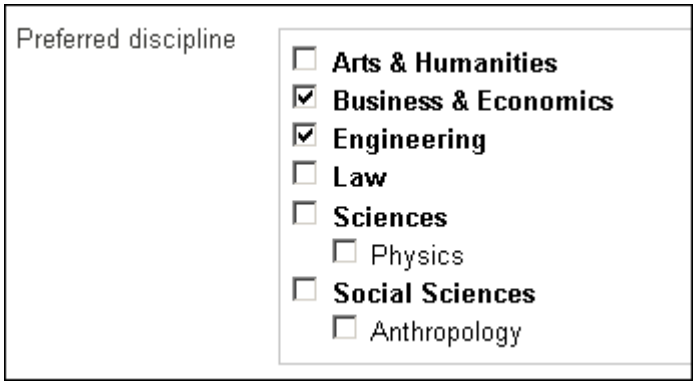
To configure personalized settings in the Front End:

1. Click **Edit** in the Personalize your results area to open the Personalize your results dialog box.



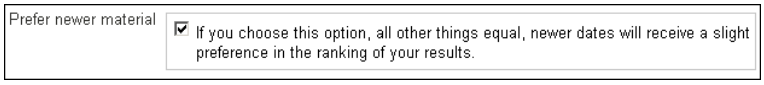
Personalize Your Results Dialog Box

2. In the Personalize your results dialog, select up to five disciplines in the **Preferred discipline** field.



Selecting Disciplines

3. Select the **Prefer new material** option if you want to rank newer material higher in your results.



Newer Material Option

4. Click **OK**.

Note

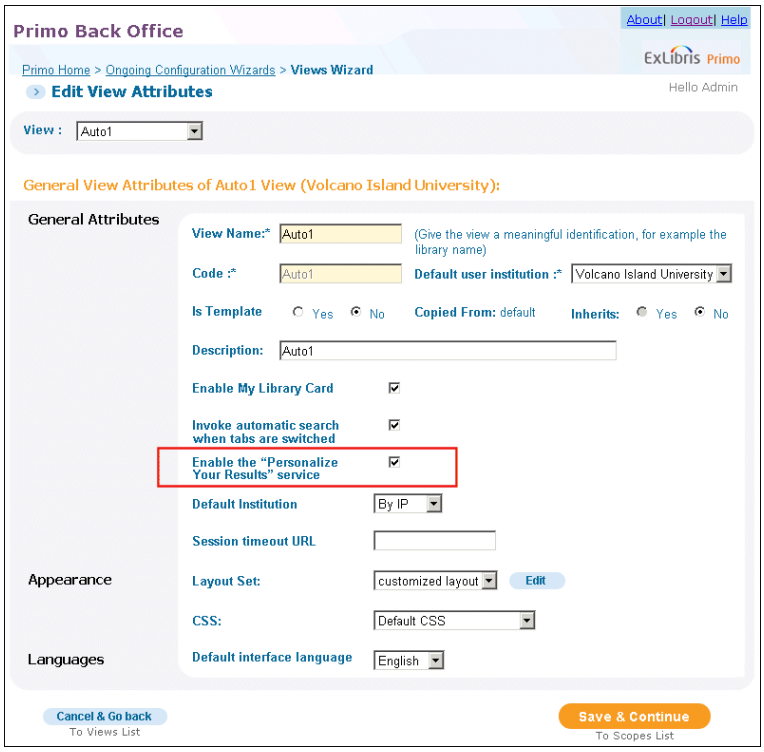
For guests and unsigned users, these settings are retained for the session only.

Configuring Personalized Ranking in the Back Office

This section describes the Back Office configurations used to display personalized ranking results in the Front End.

Enabling Personalized Ranking

The **Enable the "Personalize Your Results" service** field on the General Attributes page in the Views wizard (see Views Wizard - General Attributes Page) allows you to display the Personalize Your Results area on the Brief Results page in the Front End.



Views Wizard - General Attributes Page

Customizing the Display of Personalized Ranking

The following tables allow you to configure how personalized ranking displays in the Front End:

- **Personalize Your Results Disciplines code table** – This table allows you to translate the disciplines and modify display names and categories.
- **Personalize Your Results Labels code table** – Contains all labels used by the Personalize Your Results area on the Brief Results page and the Personalize Your Results dialog box.
- **Personalize Your Results Disciplines Fields mapping table** – Contains the list of valid disciplines per view, which are defined by Primo Central. If you do not want to display specific disciplines in the Personalize your results dialog box, you are permitted to delete those rows from the table.
- **Error messages code table** – The following code displays a message when the maximum number of disciplines has been selected:

```
validation.pyr.maxDisciplines - You have reached the maximum number of disciplines.
Please select up to five.
```

Primo Analytics

The following actions are available in the Actions Subject Area to support personalized results profiles in Primo Analytics.

- **Update Personalized Results Profile** – End users who update their personalized results profile.
- **Remove Personalized Results Profile** – End users who have removed their personalized results profile.

Note

The above reports begin tracking after the update to the Primo July 2015 release.

Using Personalized Results in Primo APIs

It is possible to include the degree and disciplines in search requests in order to activate personalized ranking in Primo API searches:

- **Web Services** – The disciplines can be added to `searchRequest` as follows:

```
<requestparams>

<requestparam key="pyrCategories"> medicine;business </requestparam>
```

- **X-Services** – The disciplines can be added to `Brief Search` with the following parameters: **pyrCategories**.

  For example:

```
http://<host>:<port>/PrimoWebServices/xservice/search/brief?institu-
tion=PYRTEST_INST1&onCampus=false&query=any,contains,war&indx=1&bulkSize=10&dym=true&highlig
```

  The valid disciplines are defined in the Personalize Your Result Disciplines code tables under the Front End subsystem.

Primo to Primo Deep Searches

Return to menu

The PrimoThirdNode plugin allows you to create a deep search to another Primo's search index. This may be used between institutions in a consortium, of if you have loaded a local database separately from your institution.

To configure a deep search plugin to another Primo's search index or a local database:

1. On the All Mapping Tables page (**Primo Home > Advanced Configuration > All Mapping Tables**), edit the **Deep-Search Plugins** mapping table.
2. In the **Create a New Mapping Row** section, specify the following fields and then click **Create** to define a new deep search index:
   - Enabled – Select this check box to enable the new deep search index.
   - Plugin ID – **Specify a unique name for the new deep search index.**
   - Plugin Class – Select **PrimoThirdNode** from the drop-down list.
   - Plugin Display Name – Specify the name that will display in the Views Wizard.
3. Click **Save**.
4. On the All Mapping Tables page (**Primo Home > Advanced Configuration > All Mapping Tables**), edit the **Deep Search Plugin Parameters** mapping table.
5. Use the **Create a New Mapping Row** section to create a new mapping row for each parameter that is listed in the following table. In the **Plugin** field, you must specify the plugin ID that you defined in the Deep-Search Plugins mapping table.

Primo to Primo Deep Search Parameters

Param Name	Param Value
host	Specify the target FE's host name or IP.
port	Specify the target FE's host port.
cache/ enable	Indicates whether results should be cached. The valid values are **true** or **false**. When set to **false**, every full display initiates a new search.
primo_ services/ primo_rank	The valid values are **true** or **false**. If set to **true**, the ranking is created by Primo instead of the plugin. If set to **false**, the ranking is taken from the plugin's results. Be aware that if set to true, the ranking is is based only on the subset of results returned to Primo. For example, if the plugin returns 20 records, the ranking is based only on those 20 records. It is recommended to set this value to **false** in order to return the ranking from the original engine.
warmup/ enable	The valid values are **true** or **false**. If set to **true**, Primo sends a certain amount of queries to your plugin before adding it to Primo's search. This is in order to warm up your plugin. For example, you might be using some kind of a data type, that needs to get filled up.

Param Name	Param Value
primo_ services/ primo facets	The valid values are **true** or **false**. If set to **true**, the facets are built by Primo. If set to **false**, it is assumed that the results set includes a facets section. If set to **true**, it assumed that each returned PNX record includes a facet section, and the facets section returned in the results set is based on the facets section of the PNX.
cache/ batchsize	Indicates the number of results to store in the cache. Do not configure a large number. 10 to 20 results is sufficient.
primo_ services/ primo_ highlighting	The valid values are **true** and **false**. If set to **true**, highlighting is performed on the results sets.

6. Click **Save**.
7. On the Deploy All page (**Primo Home > Deploy All**), select the **Deep Search Configuration** option and then click **Deploy**.
8. On the View List page of the Views Wizard (**Primo Home > Ongoing Configuration Wizards > Views Wizard**), edit your view.
9. Click **Save & Continue**.

   The Search Scope List page opens.
10. In the **Add Search Scope** section, specify a name for the new deep search index's scope and then click **Add**.

    The Edit Search Scope page opens.
11. In the **General Attributes for Search Scope** section, specify the display text, which will display to users in the Front End.
12. In the **Deep Search Plugins** section, select the new deep search plugin.
13. Click **Save & Continue**.

    The Tabs Configuration page opens.
14. Edit the tab to which you want to add the search scope for the new search scope.

    The Edit View Attributes page opens.
15. In the **Add a New Scope** section, select the new search scope and then click **Add**.
16. Click **Save & Continue**.
17. Continue to end of the Views Wizard and click **Deploy Now**.

Restricting Access to Deep Search Plugins

Return to menu

This functionality enables customers to prevent users that belong to specific user groups from searching restricted Primo Central collections, EBSCO, or any other restricted deep search plug-ins if defined. This may be necessary if a user group (for example, alumni who have user accounts and sign-in off campus) is not permitted access, but the institution as a whole is permitted access.

Note

This functionality requires customers to pass the user group from the PDS.

Description

If a signed-in user is not on campus, Primo will check to see if the user belongs to one of the restricted user groups defined in the **User Groups with restricted access to PC/DS** mapping table before sending a request to the deep search plug-in (such as Primo Central and EBSCO). If the user belongs to a restricted group, the user will not have access to restricted collections provided by the specified adaptor (PC, EBSCO, or any other defined deep search plug-in) unless the user is on campus.

Note

For customer-defined deep search plug-ins, additional configuration is required to use this functionality. For more information, see the Deep Search section on the Ex Libris Developer Network.

Back Office Configuration

The **User Groups with restricted access to PC/DS** mapping table defines the restricted user groups. In addition, the following codes in the Error Messages code table define the error messages that are displayed for searches in restricted collections:

- `default.search.tnsearch.error.authorization` – displays the following error message when the user is off campus and not signed in:

  `You must be signed-in or on campus to search in this resource. Sign in`

- `default.search.tnsearch.error.restricted` – displays the following error message when the user is signed and belongs to a restricted user group:

  `You must be on campus to search in this resource.`

To restrict a user group:

1. Configure the PDS so that it returns the restricted user groups in the `bor_info` response. For more information, see the *Patron Directory Services Guide*.

2. Define the user group in the User Group code table, making sure that the code matches the user group returned by the PDS.
3. Add the restricted user group to the new **User Groups with restricted access to PC/DS** mapping table under the Front End subsystem. This table contains the following columns and is defined at the institution level only:
    - **Third Node Adaptor** – Select the deep search plug-in that requires user group restrictions (such as PC, or EBSCO).
    - **User group** – Select the restricted user group (which is defined in the User Groups code table).

    You can create multiple rows per deep search plug-in.
4. Deploy the **All Code Tables and Mapping Tables (Front End labels and more)** option on the Deploy All page.

Tags and Reviews

Return to menu

In the Tags and Reviews tab in the Primo Front End, end users can create reviews for records and create tags to categorize search records. The Tags and Reviews Configuration wizard allows you to view end users' tags and reviews and delete the unwanted ones.

Note

Only customers in multi-tenant environments are permitted to manage tags at the institution level. Local and dedicated-direct customers can manage tags only at the installation level.

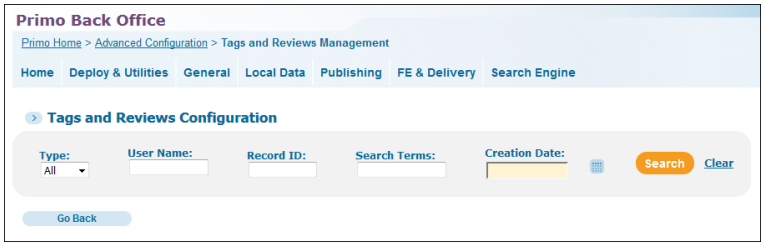
To manage the Tags and Reviews settings:

1. On the Back Office's home page, click **Advanced Configuration**.

   The Advanced Configuration page opens (see Advanced Configuration Page).

2. Click **Tags and Reviews Management**.

   The Tags and Reviews Configuration page opens.

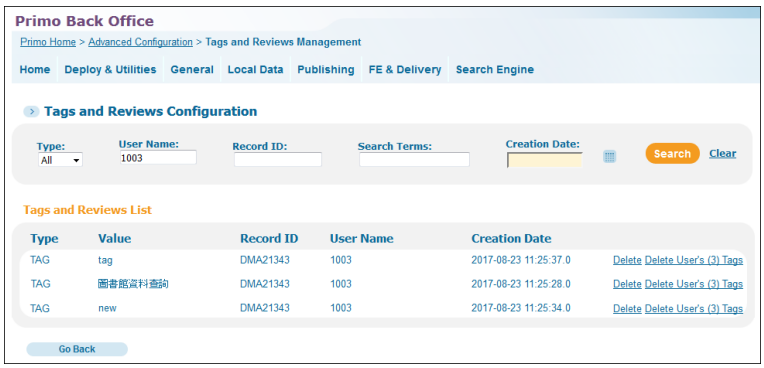


Tags and Reviews Configuration Page

3. Select one of the following types from the **Type** drop-down list: **Tag**, **Review**, or **All**.

4. Specify the following fields as needed to narrow your results: **Record ID**, **Search Terms**, and **Creation Date**.

5. Click **Search** to display the tags and reviews.



Search for Tags and Reviews

From this page, you can perform the following actions:

- Click the **Delete** link next to the tag or review that you want to remove.
- Click **Delete User's Tags link next to a tag to remove all of a user's links.**

Refreshing Tags for Remote Searches

In order for end users to display the results for tags that have remote search records, the indexes must be refreshed periodically.

Note

- To enable tag searching in the Front End, select the **Enabled** check box next to the TAG Extension Name row in the PNX_EXTENSIONS_MAPPINGS mapping table.
- Because remote search records are given a new record ID each time a search is performed, previously created tags will not display in the Tags and Review tabs for these records.

To refresh tags for remote searches:

1. From Primo's home page, click **Monitor Primo Status** to open the Monitor Primo Status page.
2. Click **Process Monitoring** to open the Process List page.
3. Click **Execute** next to the row that contains the Indexing_and_Hotswapping process.
4. To check the status of the process, click Refresh to update the screen.

UI Notification for Expanded Search Results

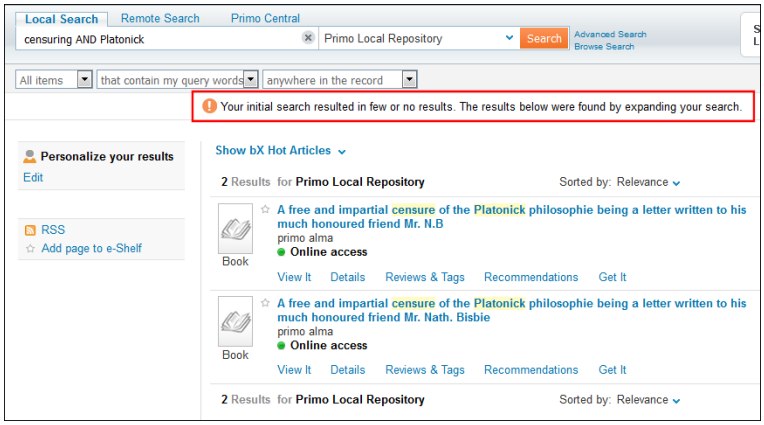
Return to menu

When an initial search yields zero or very few results from your local Primo catalog, the system alters the query in order to return relevant records. Because this could cause confusion to users for specific queries, a notification now appears at the top of the results page to indicate that the system had altered the query using the following methods:

- Stemming – the process of reducing inflected (or sometimes derived) words to their word stem, base, or root form.
- OR query (some of the search words are dropped according to a predefined algorithm)

Note

The Did you mean functionality overrides this notification.



Expansion Notification in Local Search

Back Office Configuration

No configuration is necessary to display the notification. You may hide the notification or update the text that displays for the notification. The following table describes the configuration associated with this capability:

Keeping this Item Tile Code Table

Configuration	Description
Error messages code table in the Front End subsystem	The following code allows you to localize and modify the expansion notification that displays in the Front End: **default.results.note.expanded_search** – `Your initial search resulted in few or no results. The results below were found by expanding your search.`
`CSS`	If you want to hide the notification, add **display: none** to the following line in your view's CSS file, as follows:

Configuration	Description
	`.EXLSystemFeedbackExpanstionMessage{display:none;}`

Using Links Within Remote Search Records for Availability and Delivery

Return to menu

In previous releases, the availability status and the delivery of remote search records depended on SFX. If full text was available via SFX, the status was **Full text** available. Otherwise, the status was **No full text**. Delivery was also based on an OpenURL to SFX only. Links to fulltext that may exist in the record itself were ignored and displayed only in the full record. This was very problematic for resources that are partially available via SFX or not available at all.

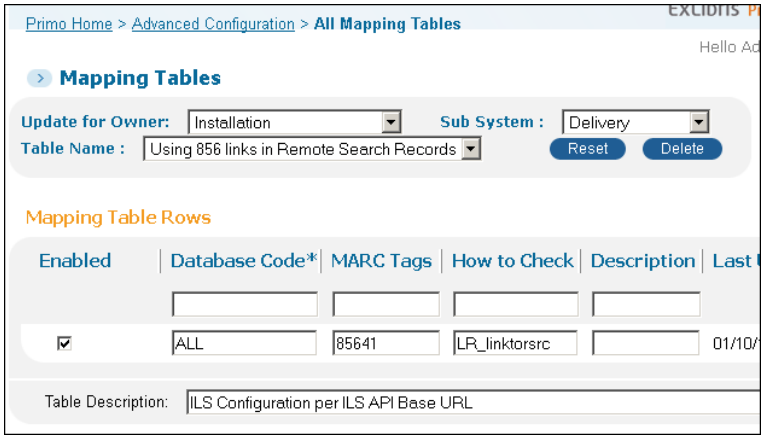
It is now possible to combine the use of SFX and links to full text that are in the record itself (which are sent by MetaLib as MARC 856 fields) in order to determine the availability status of remote search records and to provide access to full text.

To configure this feature for all or specific databases, use the following mapping tables on the Primo Home > Advanced Configuration > All Mapping Tables page:

- **Using Links in Remote Search Records** – For each database, enter the following fields:

Using Links in Remote Search Records

Field	Description
Database Code	The database code that MetaLib sends in the SID field subfield b, and then Primo adds it to the PNX control/sourceid field. It is the MetaLib Z58 code. Enter ALL to indicate all databases that are not explicitly listed.
MARC Tags	Indicates which MARC tags to use in order to create PNX links/linktorsrc type links. You can enter a tag with specific indicators or leave the indicator blank to use all value. For example, 856 includes 8564, 85641, and 85642. The system will always take subfield u as the URL.
How to Check	This field contains the following options: ◦ **linktorsrc_only** – This option indicates to the system to check only the linktorsrc fields in the PNX for the specified data source. ◦ **LR_linktorsrc** – This option indicates to the system to check for full text in SFX first and then check for 856 links if SFX does not return full text. ◦ **linktorsrc_LR** – This option indicates to the system to check for 856 links and then check for full text in SFX if no 856 links are found. ◦ **LR_only** – This option indicates to the system to check only for full text in SFX. This option provides backward compatibility with previous releases of Primo.

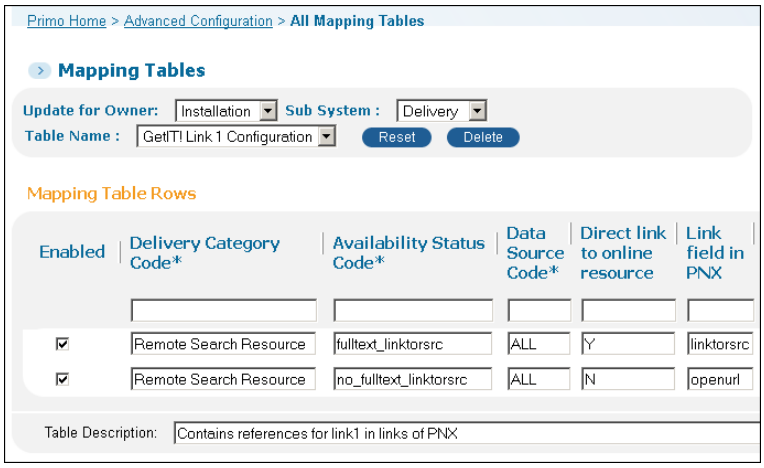


Using Links in Remote Search Records

- **GetIT! Link 1 Configuration** – The following availability statuses are defined for this mapping table:

GetIT! Link 1 Configuration

Field	Description
fulltext_linktorsrc	This option indicates that the record has full text based on the information in the record.
no_fulltext_linktorsrc	This option indicates that the record does not have full text based on the information in the record.



GetIT! Link 1 Configuration

If the remote search record is a deduped record that comes from multiple data sources with conflicting definitions in the Using Links in Remote Search Records mapping table, the system gives the following priority:

1. LR_linktorsrc
2. linktorsrc_LR
3. LR_only
4. linktorsrc_only

Primo Reports

Primo uses BIRT (which is an open source platform to create data visualizations and reports) to define and display user- and system-defined reports that include various information saved by Primo in Oracle tables. This information is divided into the following types of reports in Primo:

- **List** – These reports display information about the settings and fields created for your Primo system.
- **Statistical** – These reports display statistical information about processes within the system.

Note

Institution-level staff users can only run reports for their institution.

This section includes:

- Report Parameters
- List Reports
- Statistical Reports
- Using the BIRT Report Viewer

For more information regarding user-defined reports, refer to the Primo Reporting Schema and User-Defined Reports section.

Report Parameters

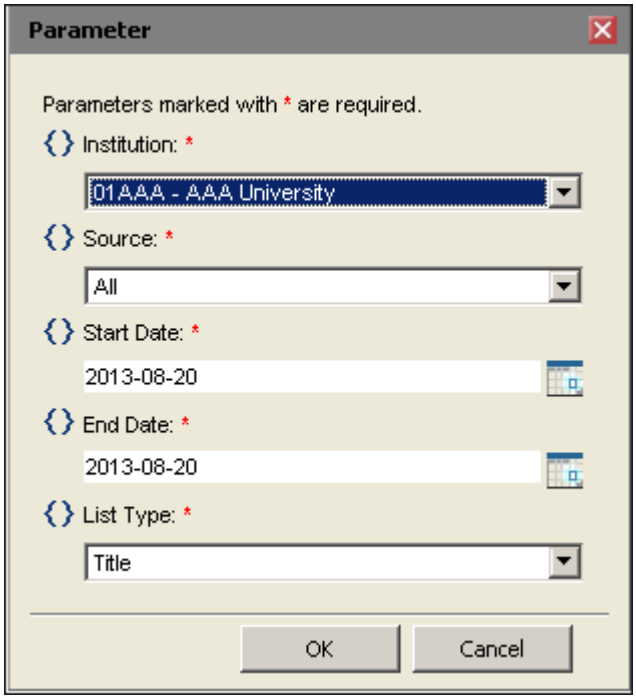
Return to menu

Depending on the type of report and the staff user's access level (installation or institution level), the system may prompt you to enter various parameters to define the scope of the report you are requesting:

- **Institution** – If you are an installation-level staff user, select a specific institution or **All Institutions** from the drop-down list. For institution-level staff users, your institution will already be selected.
- **Group** – Select **All Groups** or a specific user group from the drop-down list. The user group is based on information returned from the PDS server. Non-signed-in users are part of the group **GUEST**, and an empty user groups are left blank.
- **Source** – Select **All** or a specific source from the drop-down list. The source indicates the source of the action being counted (such as Primo Front End, Web Service, X-service, Deep Link, or Services Page).
- **List Type** – Select the type of Browse from the drop-down list. The valid values are Title, Subject, Author, and Call number (Generic, Library of Congress, Dewey, SUDOC, or NLM).
- **View** – Select a specific view.
- **Event Type** – Select a type of event (such as add tags, add a review, and so forth).
- Various date parameters:
  - **Start Date** – Specify the start date of the statistics to include in the report.
  - **End Date** – Specify the end date of the statistics to include in the report.
  - **Choose Date** – Enter a date or click the Date wizard

    
    to select a date.
  - **Last date of the week to include in report** – Specify the date of the last week to include in the report.
  - **Date of the day to include in report** – Specify the date that you want to monitor from the drop-down list.
  - **Date** – Enter a date or click the Date wizard

    
    to select a date.



Parameter Dialog Box

List Reports

Return to menu

List reports display on the left side of the Primo Reports page (see Primo Reports Page). These reports display information about your Primo configuration. These reports are generated from Oracle tables (such as `RT_PIPE_CONFIGURATION`, `C_N_MAPPING_SET`, `C_I_INTITUTIONS`, and so forth).

Primo Reports Page

The information that appears in the BIRT Report Viewer is updated when you change the configuration settings via the Back Office configuration wizards. The following table describes the List reports:

Primo Reports

Report Name	Description
Code Table Reports	Lists all code tables per sub system.
Data Sources Report	Lists the sources of data in the system.
General Parameters Report	Lists the system parameters.
IPs Report	Lists the IP addresses and names of the machines in the system.

Report Name	Description
Institutions Report	Lists the system institutions.
Mapping Tables Report	Lists the mapping tables by sub system. Includes information on the level of the table and whether or not it is enabled.
Normalization Sets Report	Lists the Normalization sets used by the system.
Pipes Report	Lists the pipes used to publish system data. Includes the harvesting and normalized types and when the pipe was last run.
Processes Report	Lists the processes and when they were last run.
Restrictions Report	Lists the search restrictions. Includes the user group, and if the restrictions apply to users that are on or off campus.
Scopes Report	Lists the search scopes including search and delivery restrictions.
Staff Users Report	Lists the registered system users, their roles, and contact information.
Top Searches Based on Processing Time Report	Lists the search string, number of searches, average number of results, and average response time of the top searches based on processing time.
Top Searches with No Results Report	Lists the search string, number of searches, and average response time of the top searches with no results.
Views Report	Lists the pre-configured system screen views and whether they are currently deployed.

Code Table Reports

This report lists all of the code tables per subsystem and displays information on the level of the table and whether it is enabled or disabled.

To view the Code Tables report:

1. On the Back Office's home page, click **Primo Reports**.

   The Primo Reports page opens.

2. Click **Code Tables** to display the Code Table report.

BIRT Report Viewer

Showing page 1 of 2 Go to page:

Primo Code Tables

Table Name	Level	Enabled	Description
Sub System: BO			
Base URLs	ALL	Yes	IBase URLS for accessing systems
Restriction Campus	ALL	Yes	Used to define the institution's user groups
Uniqueness strategy	ALL	Yes	Drop down list for mapping tables
User Group	ALL	Yes	Used to define the institution's user groups
WS and XS Error Messages	I	Yes	WS and XS Error Messages
Number of tables: 5			
Sub System: COMMON			
Configuration Parameters SubSystem	ALL	Yes	IBase URLS for accessing systems
Roles	ALL	Yes	Contains codes of Roles and thier description in order to display in the application
Sub Systems	I	Yes	sub System List
Number of tables: 3			
Sub System: DELIVERY			
Calculated Availability Text	ALL	Yes	Contains code tables of Calculated Availability Text
Data Sources	ALL	Yes	Contains codes for data source name (updated from the Publishing wizard - data sources).
GetIT! Tab1	ALL	Yes	Contains code tables of GetIT! Tab1
GetIT! Tab2	ALL	Yes	Contains code tables of GetIT! Tab2
GetIT! Text	ALL	Yes	Contains code tables of GetIT! Text
Library Names	ALL	Yes	Contains codes of Libraries and thier description in order to display in the application
Number of tables: 6			
Sub System: DEPRECATED			
Process Stage	ALL	Yes	Process Stages
Number of tables: 1			

BIRT Code Tables Page

3. Select a code table link in the report to display information for a specific code table.

   For example, click Data Sources under the Delivery subsystem to display the Data Sources code table.

BIRT Report Viewer

Showing page 1 of 1 Go to page:

Primo Code Table Values

Sub System	Table Name	Level	Enabled	Description
DELIVERY	Data Sources	ALL	Yes	Contains codes for data source name (updated from the Publishing wizard - data sources).

Code	Display Order	Language	Enabled	Description	Last Updated
Sort by ABC					
default.fulldisplay.datasource.Blue_Bay_Aleph	0	en_US	Yes	Blue Bay Aleph	May 18, 2009
default.fulldisplay.datasource.White_Shore_Voyager	0	en_US	Yes	White Shore Voyager	May 18, 2009
default.fulldisplay.datasource.Blue_Bay_Digitool	0	en_US	Yes	Blue Bay Digitool	May 18, 2009

Data Sources Code Table

Note

By default, this page sorts the table by display order. To sort the list alphabetically, click the Sort by ABC link.

Data Sources Report

This report lists all of the sources of data defined in the system. For more information on configuring data sources, see Configuring Data Sources.

To view the Data Sources report:

1. On the Back Office's home page, click **Primo Reports**.

The Primo Reports page opens.

2. Click **Data Sources**.

   The Parameter dialog box opens.

3. Select a specific institution or **All Institutions** from the drop-down list and then click **OK**. For institution-level staff users, your institution will be selected for you.

   The Data Sources report opens.

BIRT Report Viewer

Showing page 1 of 1 Go to page:

Data Sources

Code	Name	Description	Source System	Version	Last Updated
Primo Institution					
marc_exchange	MARC_EXCHANGE	Reference data	Other		Jun 10, 2009
primo_sfx	PRIMO-SFX	Reference data	SFX		Jun 10, 2009
primo_other	PRIMO-OTHER	Reference data	Other		Jun 10, 2009
primo_dublincore	PRIMO-DUBLINCORE	Reference data			Jun 10, 2009
primo_metalib	PRIMO-METALIB	Reference data	MetaLib		Jun 10, 2009
primo_digitool	PRIMO-DIGITOOL	Reference data	Digitool		Jun 10, 2009
primo_aleph	PRIMO-ALEPH	Reference data	Aleph		Jun 10, 2009
Volcano Island University					
Blue_Bay_Digitool	Blue Bay Digitool	The Digitool used for the Consortium	Digitool		Jun 10, 2009
Blue_Bay_Aleph	Blue Bay Aleph	The Aleph used for the Consortium	Aleph		Jun 10, 2009
White Shore University					
White_Shore_Voyager	White Shore Voyager	The Voyager used by White Shore University	Voyager		Jun 10, 2009

BIRT Data Sources Page

4. Select a data source in the report to display more information (such as pipe details) for the data source. For example, click **Blue_Bay_Digitool** under the Volcano Island University institution to display the Data Sources Details page.

BIRT Report Viewer

Showing page 1 of 1 Go to page:

Data Source Details

Code	Name	Description	Institution	Last Updated
Blue_Bay_Digitool	Blue Bay Digitool	The Digitool used for the Consortium	Volcano Island University	Jun 10, 2009

Source System	Digitool
Version	not specified
Source Format	Digital Entity

Pipes

Pipe	Description	Harvesting Type	START_DATE Last Run
Blue_Bay_Digitool	Data for Volcano Island and Reef Universities	FTP	May 18, 2009

Data Source Details Page

5. To display more information on a data source's pipes, click a link under the Pipe column of the report.

General Parameters Report

This report lists all of the system parameters defined in the system.

To view the General Parameters report:

1. On the Back Office's home page, click **Primo Reports**.

   The Primo Reports page opens.

2. Click **General Parameters** to display the General Parameters page.

BIRT Report Viewer

Showing page 1 of 2 Go to page:

Primo General Parameters

ID	Name	Value	Last Updated	Last Updated By
Sub System: Alerts (4)				Ungroup
52	E-Mailing Frequency (in days)	7		Primo
2000001	SMTP-AUTH	true	May 18, 2009	Primo
51	Schedule Days	SUN,MON,TUE,WED,THU,FRI,SAT		Primo
50	Schedule Hour	0		Primo
Number of Parameters		4		
Sub System: Delivery (2)				Ungroup
91	INSTITUTION_AVAILABLITY	Y	May 18, 2009	Primo
90	LIBRARY_AVAILABLITY	Y	May 18, 2009	Primo
Number of Parameters		2		
Sub System: Deskbar (5)				Ungroup
83	Base Ini File	searchBox/primoDeskbar.ini		Primo
84	Deskbar Exe File	searchBox/deskbar.exe	Jul 8, 2008	Admin
81	Deskbar URL	http://<hostname>:<port>/primo_library/libweb/action		Primo
80	Deskbar View	VISLAND		Primo
82	Primo Exe File	searchBox/primoDeskbar.exe		Primo
Number of Parameters		5		
Sub System: E-mail and SMS Configuration (9)				Ungroup
66	Contact Person E-Mail	qauser@exlibris.co.il	May 18, 2009	Admin
75	Country Code for SMS	+972	May 18, 2009	Admin
5173076	E-Mail Sender	Primo@exlibris.co.il	May 20, 2009	Primo
76	Exlibris Support E-Mail	exlibrissupport@primo.com		Primo
73	Maximum SMS per message	2	May 18, 2009	Admin
92	SMS Default Institution	PRIMO	May 18, 2009	Admin
55	SMTP_HOST	10.1.235.29	May 18, 2009	Admin
57	SMTP_PASSWORD	qauser113	May 18, 2009	Admin
56	SMTP_USERNAME	exlcorp\qauser	May 18, 2009	Admin
Number of Parameters		9		

BIRT General Parameters Page

Note

By default, the parameters are grouped by subsystem. To list the parameters alphabetically, click an **ungroup** link, which appears next to each subsystem.

IPs Report

This report lists the IP addresses and names of the machines in the system.

To view the IPs report:

1. On the Back Office's home page, click **Primo Reports**.

   The Primo Reports page opens.

2. Click **IPs**.

   The Parameter dialog box opens.

3. Select a specific institution or **All Institutions** from the drop-down list and then click **OK**. For institution-level staff users, your institution will be selected for you.

   The IPs report opens.

BIRT Report Viewer

Showing page 1 of 1 Go to page:

IPs

Start IP	End IP	Institution Name Group By Institution	User Group	Last Updated
10.100.2.100	10.100.2.110	Primo Institution	guest	Jun 19, 2009

BIRT IPs Page

Note

By default, the IP ranges are listed by ascending IP range. To group the IP ranges by institution, click the **Group by Institution** link.

Institutions Report

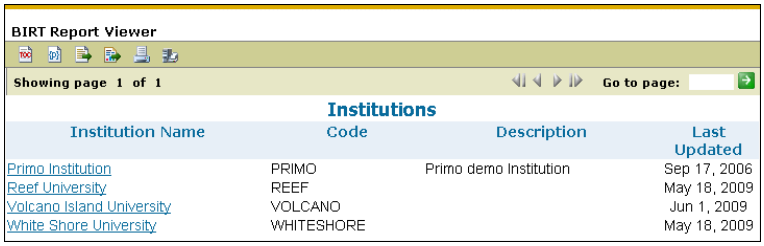
This report lists all of the institutions defined in the system.

To view the Institutions report:

1. On the Back Office's home page, click **Primo Reports**.

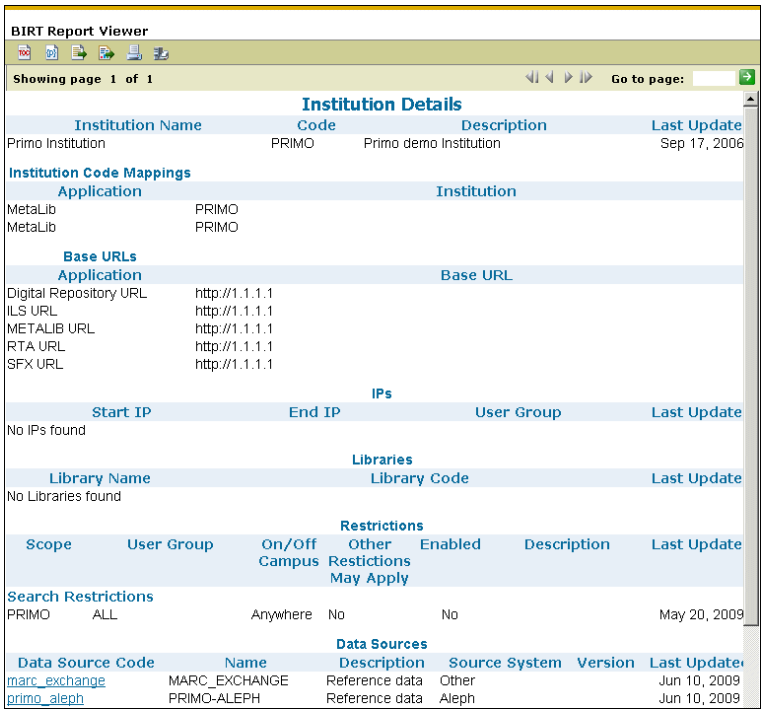
   The Primo Reports page opens.

2. Click **Institutions** to display the Institutions report.



BIRT Institutions Page

3. Click an institution link in the report to display information for a specific institution. For example, click Primo Institution to display the Institution Details page.



Institution Details Page

Mapping Tables Report

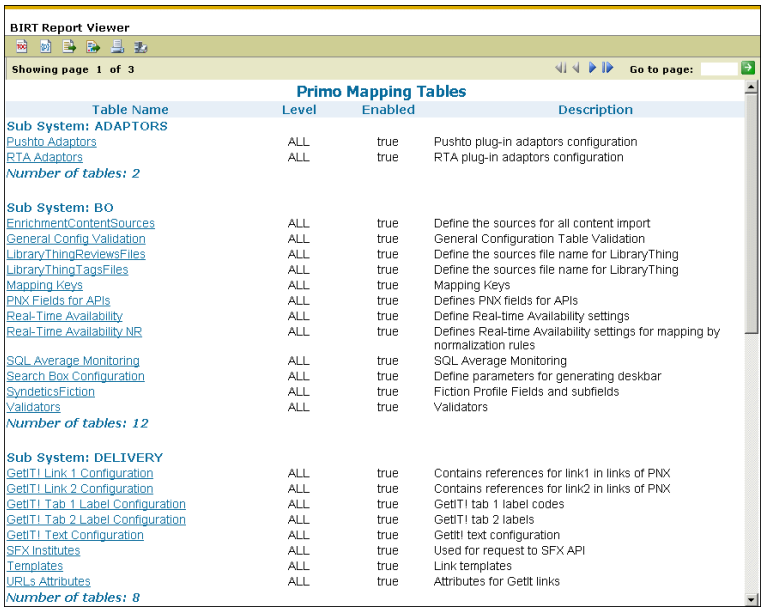
This report lists all of the mapping tables defined in the system.

To view the Mapping Tables report:

1. On the Back Office's home page, click **Primo Reports**.

   The Primo Reports page opens.

2. Click **Mapping Tables** to display the Mapping Tables report.



BIRT Report Viewer

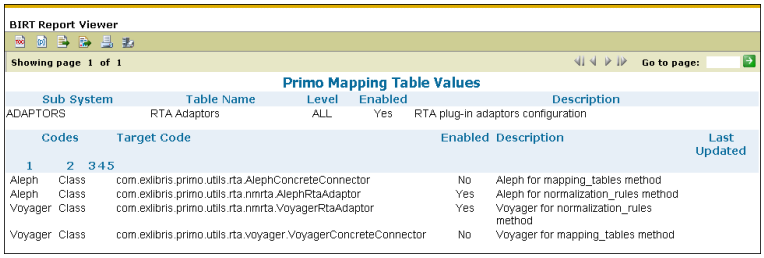
Showing page 1 of 3 Go to page:

Primo Mapping Tables

Table Name	Level	Enabled	Description
Sub System: ADAPTORS			
Pushto Adaptors	ALL	true	Pushto plug-in adaptors configuration
RTA Adaptors	ALL	true	RTA plug-in adaptors configuration
Number of tables: 2			
Sub System: BO			
EnrichmentContentSources	ALL	true	Define the sources for all content import
General Config Validation	ALL	true	General Configuration Table Validation
LibraryThingReviewsFiles	ALL	true	Define the sources file name for LibraryThing
LibraryThingTagsFiles	ALL	true	Define the sources file name for LibraryThing
Mapping Keys	ALL	true	Mapping Keys
PNX Fields for APIs	ALL	true	Defines PNX fields for APIs
Real-Time Availability	ALL	true	Define Real-time Availability settings
Real-Time Availability NR	ALL	true	Defines Real-time Availability settings for mapping by normalization rules
SQL Average Monitoring	ALL	true	SQL Average Monitoring
Search Box Configuration	ALL	true	Define parameters for generating deskbar
SyndeticsFiction	ALL	true	Fiction Profile Fields and subfields
Validators	ALL	true	Validators
Number of tables: 12			
Sub System: DELIVERY			
GetIT! Link 1 Configuration	ALL	true	Contains references for link1 in links of PNX
GetIT! Link 2 Configuration	ALL	true	Contains references for link2 in links of PNX
GetIT! Tab 1 Label Configuration	ALL	true	GetIT! tab 1 label codes
GetIT! Tab 2 Label Configuration	ALL	true	GetIT! tab 2 labels
GetIT! Text Configuration	ALL	true	GetIt! text configuration
SFX Institutes	ALL	true	Used for request to SFX API
Templates	ALL	true	Link templates
URLs Attributes	ALL	true	Attributes for GetIt links
Number of tables: 8			

BIRT Mapping Tables Page

3. Select a mapping table link in the report to display information for a specific mapping table. For example, click **RTA Adaptors** under the Adaptors subsystem to display the Mapping Table Values page.



BIRT Report Viewer

Showing page 1 of 1 Go to page:

Primo Mapping Table Values

Sub System	Table Name	Level	Enabled	Description
ADAPTORS	RTA Adaptors	ALL	Yes	RTA plug-in adaptors configuration

Codes 1	Codes 2 345	Target Code	Enabled	Description	Last Updated
Aleph	Class	com.exlibris.primo.utils.rta.AlephConcreteConnector	No	Aleph for mapping_tables method	
Aleph	Class	com.exlibris.primo.utils.rta.nrmrta.AlephRtaAdaptor	Yes	Aleph for normalization_rules method	
Voyager	Class	com.exlibris.primo.utils.rta.nrmrta.VoyagerRtaAdaptor	Yes	Voyager for normalization_rules method	
Voyager	Class	com.exlibris.primo.utils.rta.voyager.VoyagerConcreteConnector	No	Voyager for mapping_tables method	

Mapping Table Values Page

Normalization Sets Report

This report lists all of the normalization sets used in the system.

To view the Normalization Sets report:

1. On the Back Office's home page, click **Primo Reports**.

The Primo Reports page opens.

2. Click **Normalization Sets**.

   The Parameter dialog box opens.

3. Select a specific institution or **All Institutions** from the drop-down list and then click **OK**. For institution-level staff users, your institution will be selected for you.

   The Normalization Sets report opens.

BIRT Report Viewer

Showing page 1 of 1 Go to page:

Normalization Sets

Name	Description	Base Format	Institution	Enabled	Is Deployed	Last Updated
ALEPH KORMARC - Template		marc		Yes	Yes	Jun 10, 2009
ALEPH MAB - Template		mab		Yes	Yes	Jun 10, 2009
ALEPH MARC - Template		marc		Yes	Yes	Jun 10, 2009
ALEPH UNIMARC - Template		marc		Yes	Yes	Jun 10, 2009
ALEPH danMARC2 - Template		marc		Yes	Yes	Jun 10, 2009
Aleph_nr		marc		No	Yes	Jun 10, 2009
DTV - Template		dublin_core		Yes	Yes	Jun 10, 2009
DigiTool DC - Template		digital_entity		Yes	Yes	Jun 10, 2009
DigiTool MARC - Template		digital_entity		Yes	Yes	Jun 10, 2009
DigiTool_DC_nr		digital_entity		No	Yes	Jun 10, 2009
Digitool - Template		digital_entity		Yes	Yes	Jun 10, 2009
Generic Dublin Core - Template		dublin_core		Yes	Yes	Jun 10, 2009
Generic MARC - Template		marc		Yes	Yes	Jun 10, 2009
Generic UNIMARC - Template		marc		Yes	Yes	Jun 10, 2009
Generic danMARC2 - Template		marc		Yes	Yes	Jun 10, 2009
MAB (HBZ) - Template		mab		Yes	Yes	Jun 10, 2009
MetaLib KB - Template		metalib		Yes	Yes	Jun 10, 2009
SFX - Template		marc		Yes	Yes	Jun 10, 2009
Unicorn - Template		marc		Yes	Yes	Jun 10, 2009
Voyager - Template		marc		Yes	Yes	Jun 10, 2009
Voyager_nr		marc		No	Yes	Jun 10, 2009
Xml - Template		xml		Yes	Yes	Jun 10, 2009

BIRT Normalization Sets Page

4. Click a normalization set link in the report to display detailed information for a normalization set. For example, click **ALEPH MARC - Template** to display the Normalization Set Details page.

BIRT Report Viewer

Showing page 1 of 1 Go to page:

Normalization Set

Name	Description	Base Format	Institution	Enabled	Is Deployed	Last Updated
ALEPH MARC - Template		marc		Yes	Yes	Jun 10, 2009

Rule Statistics

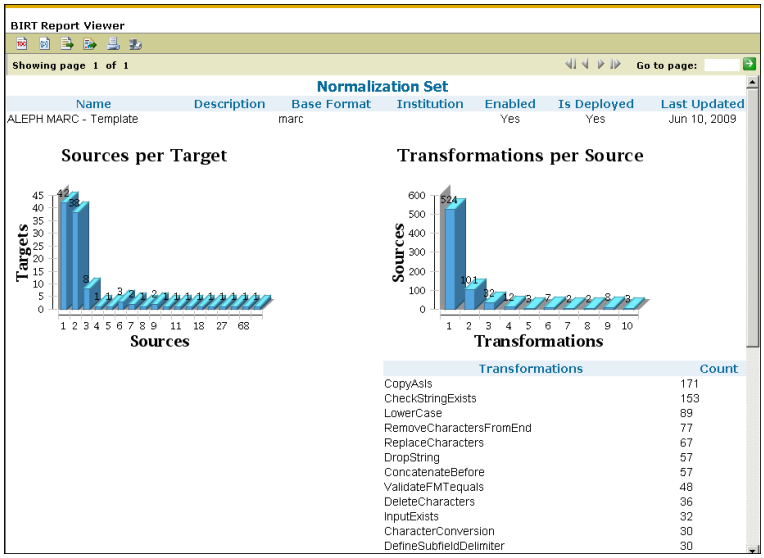
Targets	107	Changed	0	Disabled	0	View More Statistics

Disabled Rules

Target Section	Field	Creation Date	Last Updated	Last Updated By
links	linktotoc	Jun 10, 2009	Jun 10, 2009	primo
facets	collection	Jun 10, 2009	Jun 10, 2009	primo
delivery	institution	Jun 10, 2009	Jun 10, 2009	primo
search	general	Jun 10, 2009	Jun 10, 2009	primo
display	availlibrary	Jun 10, 2009	Jun 10, 2009	primo
facets	genre	Jun 10, 2009	Jun 10, 2009	primo
display	contributor	Jun 10, 2009	Jun 10, 2009	primo
display	creator	Jun 10, 2009	Jun 10, 2009	primo
addata	objectid	Jun 10, 2009	Jun 10, 2009	primo
facets	library	Jun 10, 2009	Jun 10, 2009	primo
search	creatorcontrib	Jun 10, 2009	Jun 10, 2009	primo

Normalization Set Details Page

5. Click the **View More Statistics** link in the report to display graphical statistics for the normalization set.



Normalization Set Statistics

Pipes Report

This report lists the pipes that are used to publish system data, including the harvesting and normalized types and the date of the pipe's last run.

To view the Pipes report:

1. On the Back Office's home page, click **Primo Reports**.

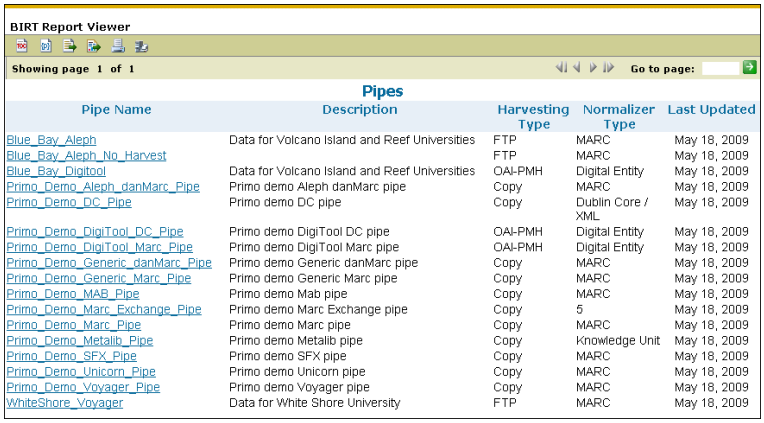
   The Primo Reports page opens.

2. Click **Pipes**.

   The Parameter dialog box opens.

3. Select a specific institution or **All Institutions** from the drop-down list and then click **OK**. For institution-level staff users, your institution will be selected for you.

   The Pipes report opens.



BIRT Pipes Page

4. Click a pipe link in the report to display information for a specific pipe. For example, click **Blue_Bay_Aleph** to display the Pipes Details page.

BIRT Report Viewer

Showing page 1 of 1 Go to page:

Pipes

Pipe Name	Description		Last Updated
Blue_Bay_Aleph	Data for Volcano Island and Reef Universities	View Pipe Processes	May 18, 2009

General details	
Bulk Size	1000
Failed Record Threshold	0
Harvesting Details	
Harvesting Type	FTP
Delete Files	No
Normalization Details	
Normalizer Type	MARC
Normalization Set	Aleph_nr
Enrichment Set	Aleph Marc
Scheduling Details	
Schedule Enabled	No

Pipes Details Page

5. Click the **View Pipe Processes** link to display information on the pipe's processes.

Processes Report

This report lists the processes and the last time they were run.

To view the Processes report:

1. On the Back Office's home page, click **Primo Reports**.

   The Primo Reports page opens.

2. Click **Processes** to display the Processes report.

BIRT Report Viewer

Showing page 1 of 1 Go to page:

Processes

Process Name	Description	Last Run	Status	Last Updated
Didumean		Jun 30, 2008	Completed	Feb 22, 2008 5:09 AM
Hotswapping		Mar 3, 2009	Completed	Feb 22, 2008 5:09 AM
Indexing		Dec 31, 2008	Completed	Feb 22, 2008 5:09 AM
Indexing_and_Didumean_and_Hotswapping		Oct 3, 2008	Completed	Feb 22, 2008 5:09 AM
Indexing_and_Hotswapping		Mar 18, 2009	Completed	Feb 22, 2008 5:09 AM

BIRT Processes Page

3. Click a date link in the Last Run column to display information for a specific process.

   For example, click **Indexing_and_Didumean_and_Hotswapping** to display the Process Runs page.

BIRT Report Viewer

Showing page 1 of 1 Go to page:

Process Runs

Process Name	Description	Last Updated
Indexing_and_Didumean_and_Hotswapping		Feb 22, 2008 5:09 AM

Process ID	State	Total Records	Failed Records	Total Bulks Processed	Start Date	Last Updated
2006612	Completed	10095	0	0	Oct 03, 2008 15:35	Oct 03, 2008 15:41
2006612	Completed	3	0	0	Jul 15, 2008 20:55	Jul 15, 2008 20:57
2006612	Completed	4027	0	0	Feb 22, 2008 08:25	Feb 22, 2008 08:28

Process Runs Page

Restrictions Report

This report lists the search restrictions, which includes the user group, and whether restrictions apply to users that are on or off campus.

To view the Restrictions report:

1. On the Back Office's home page, click **Primo Reports**.

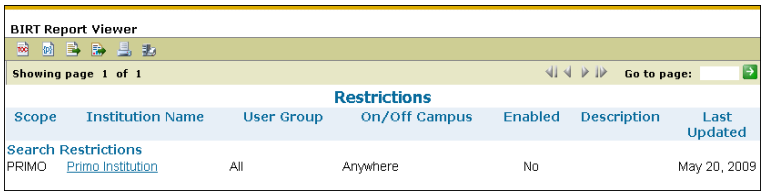
   The Primo Reports page opens.

2. Click **Restrictions**.

   The Parameter dialog box opens.

3. Select a specific institution or **All Institutions** from the drop-down list and then click **OK**. For institution-level staff users, your institution will be selected for you.

   The Restrictions report opens.



BIRT Restrictions Page

Note

If you want to display more details on the institution, click an institution link in the Institution Name column.

Scopes Report

This report lists the search scopes and displays the search and delivery restrictions.

To view the Scopes report:

1. On the Back Office's home page, click **Primo Reports**.

   The Primo Reports page opens.

2. Click **Scopes**.

   The Parameter dialog box opens.

3. Select a specific institution or **All Institutions** from the drop-down list and then click **OK**. For institution-level staff users, your institution will be selected for you.

   The Scopes report opens.

BIRT Report Viewer

Showing page 1 of 1 Go to page:

Scopes

Scope Code	Name	Type	Description	Search Scope	Search Restriction	Delivery Restriction	Last Updated
VOLCANO	Volcano Island University Scope	institution	Volcano Island University Scope description.	Yes	No	No	May 18, 2009
WHITESHORE	White Shore University Scope	institution	White Shore University Scope description.	Yes	No	No	May 18, 2009
REEF	Reef University Scope	institution	Reef University Scope description.	Yes	No	No	May 18, 2009
PRIMO	Primo Institution Scope	Institution	Primo Institution Scope description	Yes	Yes	No	Sep 17, 2006

BIRT Scopes Page

Staff Users Report

This report lists all of the registered staff users and displays their roles and contact information.

To view the Staff Users report:

1. On the Back Office's home page, click **Primo Reports**.

   The Primo Reports page opens.

2. Click **Staff Users**.

   The Parameter dialog box opens.

3. Select a specific institution or **All Institutions** from the drop-down list and then click **OK**. For institution-level staff users, your institution will be selected for you.

   The Staff Users report opens.

BIRT Report Viewer

Showing page 1 of 1 Go to page:

Staff Users

User Name	Role	Work Phone	Mobile Phone	Last Updated
Admin	ROLE_ADMINISTRATION			
Oprt	ROLE_OPERATIONAL			

BIRT Staff Users Page

Top Searches Based on Processing Time Report

This report lists the search string, the number of searches, the average number of results, and the average response time of the top searches, based on processing time.

To view the Top Searches Based on Processing Time report:

1. On the Back Office's home page, click **Primo Reports**.

   The Primo Reports page opens.

2. Click **Top Searches Based on Processing Time**.

   The Parameter dialog box opens.

3. Select a specific institution or **All Institutions** from the drop-down list and then click **OK**. For institution-level staff users, your institution will be selected for you.

The Top Primo Searches report opens.

BIRT Report Viewer

Showing page 1 of 5 Go to page:

Top Primo Searches

Sort by Response Time

Search String	Number of Searches (Sort by Count)	Average Number of Results (Sort by Number of Results)	Average Respons Time (Seconds)
local			
June 11, 2009			
harry potter	2	20	0.13
Date Summary	2	20	0.13
June 10, 2009			
harry potter	1	37	5.05
theme	1	377	3.12
thems	1	0	0.29
america	1	13,716	0.00
Date Summary	4	3,532	2.11

BIRT Top Searches Based on Processing Time Page

By default, the report is sorted by the average response time. To change the order in which the search strings are sorted, you can click the following links:

- Sort by Count – sorts the search strings by the number of times the search string was used in a query.
- Sort by Number of Results – sorts the search strings by the average number of results that were returned from a query.
- Sort by Response Time – sorts the search strings by the average response time in seconds per query.

Top Searches with No Results Report

This report lists the search string, the number of searches, and the average response time of the top searches that did not return results.

To view the Top Searches with No Results report:

1. On the Back Office's home page, click **Primo Reports**.

   The Primo Reports page opens.

2. Click **Top Searches with No Results**.

   The Parameter dialog box opens.

3. Select a specific institution or **All Institutions** from the drop-down list and then click **OK**. For institution-level staff users, your institution will be selected for you.

   The Top Primo Searches with No Results report opens.

BIRT Report Viewer

Showing page 1 of 2 Go to page:

Top Primo Searches with No Results
Sorted by ABC
All Institutions

Search String	Number of Searches (Sort by Count)	Average Response Time (Seconds) (Sort by Response Time)
local		
June 10, 2009		
thems	1	0.29
Date Summary	**1**	**0.29**
June 8, 2009		
A review of the native North America bees of the genus Chalicodoma (Hymenopetra:Megachilidea)	1	1.10
Brodsky, Jenny	2	0.18
Calleros-Alarcn□, Juan Carlos.	3	0.17
Hirschfeld, Miriam JudithWHO Collaborating Centre for Research on Health of the Elderly.	2	0.31
Lippman, Stanley B. 1950-	1	0.44
maath	1	0.10
Date Summary	**10**	**0.32**

BIRT Top Searches with No Results Page

By default, the report is sorted alphabetically by the search string. To change the order in which the search strings are sorted, you can click the following links:

- **Sort by Count** – Sorts the search strings by the number of times the search string was used in a query.
- **Sort by ABC** – Sorts the search strings alphabetically by the search strings that are used in queries.
- **Sort by Response Time** – Sorts the search strings by the average response time in seconds per query.

Views Report

This report lists the pre-configured system screen views and whether they are currently deployed.

To view the Views report:

1. On the Back Office's home page, click **Primo Reports**.

   The Primo Reports page opens.

2. Click **Views**.

   The Parameter dialog box opens.

3. Select a specific institution or **All Institutions** from the drop-down list and then click **OK**. For institution-level staff users, your institution will be selected for you.

   The Views report opens.

BIRT Report Viewer

Showing page 1 of 1 Go to page:

Views

View Code	Name	Description	Institution	Is Deployed	Last Updated
default	default	DESC default	Primo Institution		
DMA	DMA	Dallas Museum of Art	Dallas Museum of Art		Jun 1, 2009
GWCC	GWCC	George Wallace Community College	George Wallace Community College		Apr 3, 2009
RSCC	RSCC	Rancho Santiago Community College	Rancho Santiago Community College		Apr 3, 2009

BIRT Views Page

4. Click a view link in the View column to display information for a specific view. For example, click **DMA** to open the View Details page.

BIRT Report Viewer

Showing page 1 of 1 Go to page:

View Details

View Code	Name	Description	Institution	Is Deployed	Last Updated
DMA	DMA	Dallas Museum of Art	Dallas Museum of Art		Jun 1, 2009
	Parent View	DMA			
	Layout Set	Standard			

Tabs

Position	Tab Name	Description	Last Updated
1	default_tab	The Default Tab in The System	Apr 3, 2009
1	default_scope		Dec 19, 2008
2	DMA		Dec 19, 2008

Tiles

Tile	Type	Status	Last Updated
DESC OF BASIC SEARCH - Configured By Client	SearchTileInterface-Simple	Configured By Client	Dec 16, 2008
DESC OF ADVANCED SEARCH	SearchTileInterface-Advanced	Primo Default	Dec 16, 2008
DESC OF MAIN MENU	MainMenuTileInterface	Primo Default	Dec 16, 2008
DESC OF FULL RESULT - Configured By Client	ResultFullTileInterface	Configured By Client	Dec 19, 2008
DESC OF KEEPING THIS ITEM	KeepingItemTileInterface	Primo Default	Dec 16, 2008
DESC OF STATIC HTML	StaticHTMLTileInterface	Primo Default	Dec 16, 2008
DESC OF BRIEF RESULT	ResultTileInterface	Primo Default	Dec 16, 2008
DESC OF Refine My Results (Facets) - Configured By Client	FacetTileInterface	Configured By Client	Dec 16, 2008

View Details Page

Statistical Reports

Return to menu

Statistical reports appear on the right side of the Primo Reports page and display statistical information from your servers, such as click actions on your FEs and searches. The source of each action may be from the Primo FE, Web services, X-Services, deep links, or the Services Page.

Primo Reports Page

The statistical reports described in Statistical Reports are created from the following Oracle tables, which are updated every 1000 actions or every half hour.

- `S_CLICK_SUMMARIES` – Provides the data used for the click action reports (such as Facet Clicks and Click Events).
- `S_SEARCH_SUMMARIES` – Provides the data used for the search reports (such as Search Statistics and Top Search Terms). The following categories are used in the search statistic reports:
  - **local** – Includes searches performed in your local Primo index. Prior to the April 2015 release, this category also included blended searches with any other target except for MetaLib.
  - **deep_search** – Includes searches performed in Primo Central, EBSCO, WorldCat, and so forth. In addition, it includes blended deep searches (such as Primo Central and EBSCO).
  - **remote** – Includes any search with MetaLib, including MetaLib with another search engine (such as your local Primo index, Primo Central, or a deep search adaptor).
  - **blended** – Includes searches performed in your local Primo index and a deep search adaptor (which includes Primo Central and excludes MetaLib). Any blended search performed with MetaLib is considered remote.

Statistical Reports

Report Name	Description
Browse String Statistics	Statistics concerning the search strings used for Browse searches performed in the system.
Click Through Statistics	Lists statistics concerning the number of clicks registered for different records in the system.
Hourly Remote Statistics	Lists the remote search statistics, broken down by the hour and length of the search in seconds.
Hourly Search Statistics	Lists the local search statistics, broken down by the hour and length of the search in seconds.
PNX Click Statistics	Graphs the local and remote search statistics, which includes the total searches, number of results, and response time.
PNX Statistics	Lists PNX statistics.
Search Statistics	Statistics concerning the searches performed in the system.
Search Strings Statistics	Statistics concerning the search strings used for searches performed in the system.
System Monitoring	The I/O, memory, and CPU usage by time.
Users Personal Sets Report	Statistics concerning personal sets created with the Find Database function (MetaLib).
Annual Event Statistics (new)	Displays annual statistics for a selected institution, view, and event.
Annual Search Statistics (new)	Displays annual search statistics for a selected institution and view.
Click Events Statistics (new)	Displays click event statistics for a selected institution, view, and period of time.
Daily Search Statistics (new)	Displays hourly statistics for a selected institution, view, and day.
Facet Clicks Statistics (new)	Displays facet click statistics for a selected institution, view, and period of time.
Search Statistics (new)	Displays search statistics for a selected institution, view, and period of time.

Report Name	Description
Search Terms by Letter Statistics (new)	Displays the top search terms by letter for a selected institution, view, and period of time.
Top Search Terms Statistics (new)	Displays the top search terms for a selected institution, view, and period of time.

Browse String Statistics

This report allows you to display the search strings and the number of times each string was entered over a specified number of days. Intially, the results are grouped by the first character of the search string. You can drill down further by clicking the character link in the **Searches Starting With** columm.

To view the Browse String Statistics report:

1. On the Back Office's home page, select **Primo Reports**.

   The Primo Reports page opens.

2. Click **Browse String Statistics**.

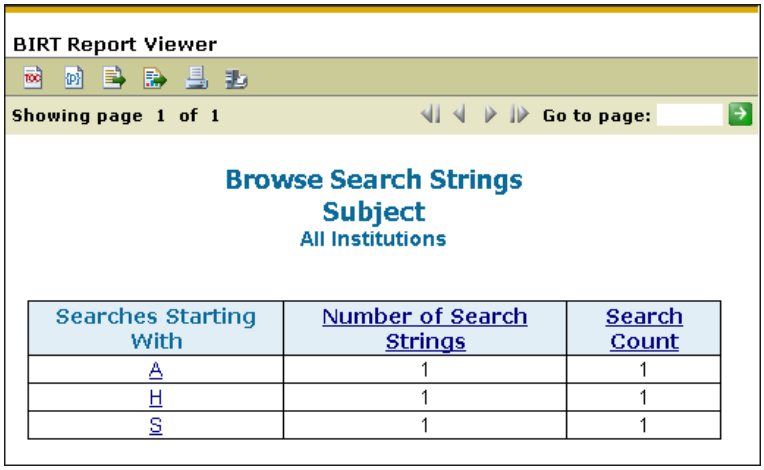
   The Parameter dialog box opens.

3. Enter the following parameters:

   - **Institution** – select **All Institutions** or a specific institution from the drop-down list.
   - **Source** – select **All** or a specific source from the drop-down list.
   - **Start Date** – specify the start date of the statistics to include in the report.
   - **End Date** – specify the end date of the statistics to include in the report.
   - **List Type** – select the type of Browse from the drop-down list.

4. Click **OK**.

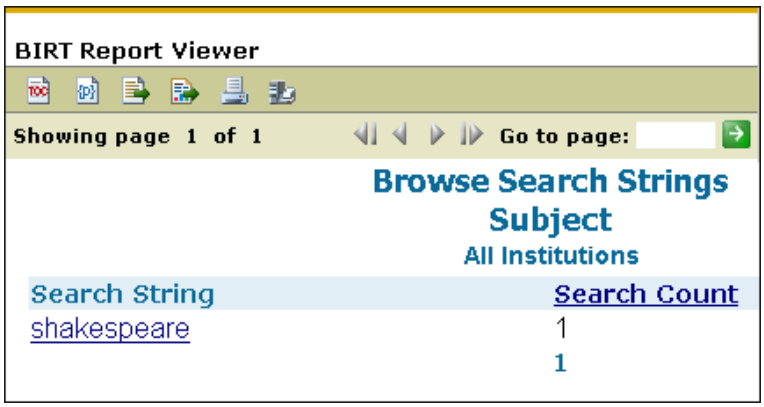
   The report displays the Browse string statistics.



Searches Starting With	Number of Search Strings	Search Count
A	1	1
H	1	1
S	1	1

Example Subject Browse String Statistics Report

From this page, you can view the following variations of the report by clicking the following links:



Example Subject Browse Drill-Down Report

- Sort the information by column by clicking the column heading.
- Click a character link to display all of the search strings that started with that character.

Click Through Statistics

This report displays statistical information that relates to end-user activity on the Front End (FE) interface. The report displays the number of times a function or page on the FE interface (such as basic and advanced search) is accessed or used.

Note

Searches performed in the Primo Central scope are reported under the DS category.

To view the Primo Click Through Statistics report:

1. On the Back Office's home page, click **Primo Reports**.

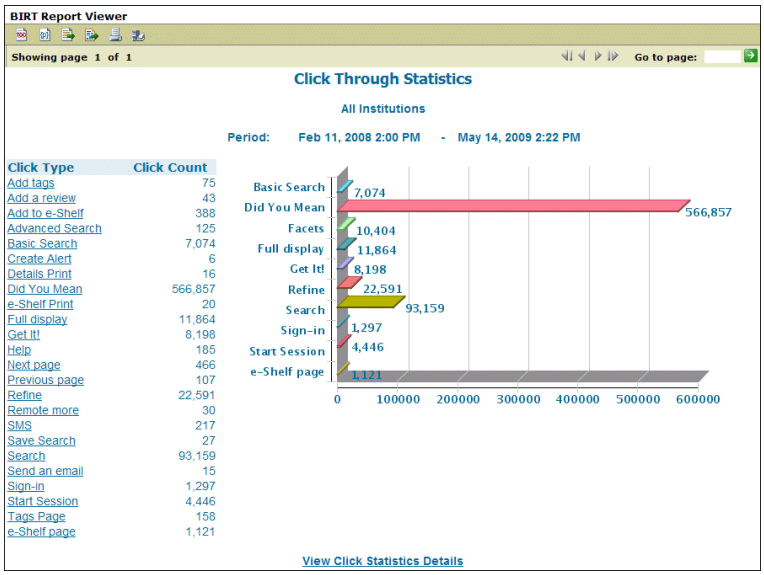
   The Primo Reports page opens.

2. Select **Click Through Statistics** to view the system's click-through statistics.

The Parameter dialog box opens.

3. Enter the following parameters and then click **OK**:
   - **Institution** – select **All Institutions** or a specific institution from the drop-down list.
   - **Group** – select **All Groups** or a specific group from the drop-down list.
   - **Source** – select **All** or a specific source from the drop-down list.
   - **Start Date** – specify the start date of the statistics to include in the report.
   - **End Date** – specify the end date of the statistics to include in the report.

   The Click Through Statistics page opens.

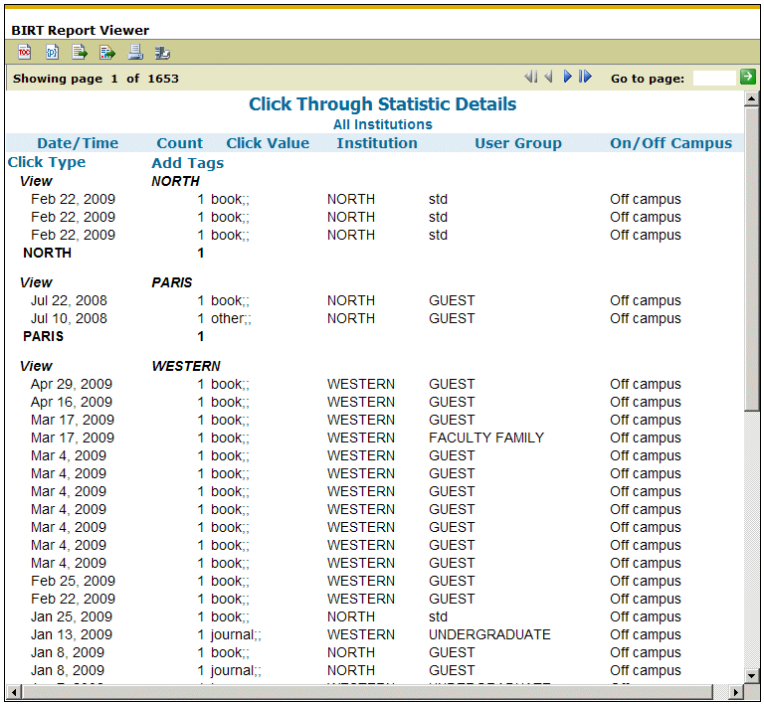


Click Through Statistics Page

4. On the Click Through Statistics page, you can display more detailed information by clicking the following links:
   - **View Click Statistics Details** (bottom of page) – For more information, see Click Through Statistics Details Report.
   - **Advanced Search** and **Basic Search** – For more information, see Search Statistics Report.
   - **Did You Mean** – For more information, see Did You Mean Statistics Report.
   - **Refine** – For more information, see Refine (Facet) Statistics Report.
   - all other links (such as **add tags**) – displays the details for the selected statistic. For more information, see Click Through Statistics Details Report.

Click Through Statistics Details Report

This report contains detailed information per institution.



BIRT Report Viewer

Showing page 1 of 1653 Go to page:

Click Through Statistic Details

All Institutions

Date/Time	Count	Click Value	Institution	User Group	On/Off Campus
Click Type	**Add Tags**				
View	*NORTH*				
Feb 22, 2009	1	book;;	NORTH	std	Off campus
Feb 22, 2009	1	book;;	NORTH	std	Off campus
Feb 22, 2009	1	book;;	NORTH	std	Off campus
NORTH	**1**				
View	*PARIS*				
Jul 22, 2008	1	book;;	NORTH	GUEST	Off campus
Jul 10, 2008	1	other;;	NORTH	GUEST	Off campus
PARIS	**1**				
View	*WESTERN*				
Apr 29, 2009	1	book;;	WESTERN	GUEST	Off campus
Apr 16, 2009	1	book;;	WESTERN	GUEST	Off campus
Mar 17, 2009	1	book;;	WESTERN	GUEST	Off campus
Mar 17, 2009	1	book;;	WESTERN	FACULTY FAMILY	Off campus
Mar 4, 2009	1	book;;	WESTERN	GUEST	Off campus
Mar 4, 2009	1	book;;	WESTERN	GUEST	Off campus
Mar 4, 2009	1	book;;	WESTERN	GUEST	Off campus
Mar 4, 2009	1	book;;	WESTERN	GUEST	Off campus
Mar 4, 2009	1	book;;	WESTERN	GUEST	Off campus
Mar 4, 2009	1	book;;	WESTERN	GUEST	Off campus
Mar 4, 2009	1	book;;	WESTERN	GUEST	Off campus
Feb 25, 2009	1	book;;	WESTERN	GUEST	Off campus
Feb 22, 2009	1	book;;	WESTERN	GUEST	Off campus
Jan 25, 2009	1	book;;	NORTH	std	Off campus
Jan 13, 2009	1	journal;;	WESTERN	UNDERGRADUATE	Off campus
Jan 8, 2009	1	book;;	NORTH	GUEST	Off campus
Jan 8, 2009	1	journal;;	NORTH	GUEST	Off campus

Click Through Statistics Details Page

The following table describes the fields in the Click Statistics Details page.

Click Through Statistics Details

Column Name	Description
Date/ Time	The date on which a click was recorded in the system. This column is divided according to the clicks in the Basic Search, Full Display, and GetIt! sections of the Front End.
Count	This number indicates the number of clicks recorded on this date. This column is divided according to the clicks performed in the Basic Search, Full Display, and GetIt! sections of the Front End.
Click Value	The type of resource that was clicked.
Institution	The institution from which the click was performed.
User Group	The user group of the user that performed the click.
On/Off Campus	Indicates whether the User was on or off campus while performing the click.

Column Name	Description
Click Type	Indicates the type of click (for example, **add to eShelf**, **eShelf page**, and **help**) that was performed. For more information, see Click Type Details.

The following table describes the types of clicks that are reported on the Click Statistics Details page.

Click Type Details

Click Type	Description
Add a review	Number of times users added a review to a record.
Add page to e-shelf	Number of times users clicked the **Add page to e-Shelf** option. **Note** Every record added is counted as a Add to e-Shelf type of click.
Add Tags	Number of times users added a tag to a record. **Note** Editing an existing tag is not counted as a statistic.
Add to eShelf	Number of times users added records to their e-Shelves.
Advanced Search	Number of times users searched from the Advanced search box.
Alma A-Z	Number of times users accessed the A-Z page. **Note** This is only relevant to customers with Alma.
Basic Search	Number of times users searched from the Basic Search box.
Browse Page	Number of times users clicked the **Browse** option.
Browse Related	Number of times users clicked an entry to display records linked to a browse list entry, and the number of times they clicked the title of a record linked to an entry.

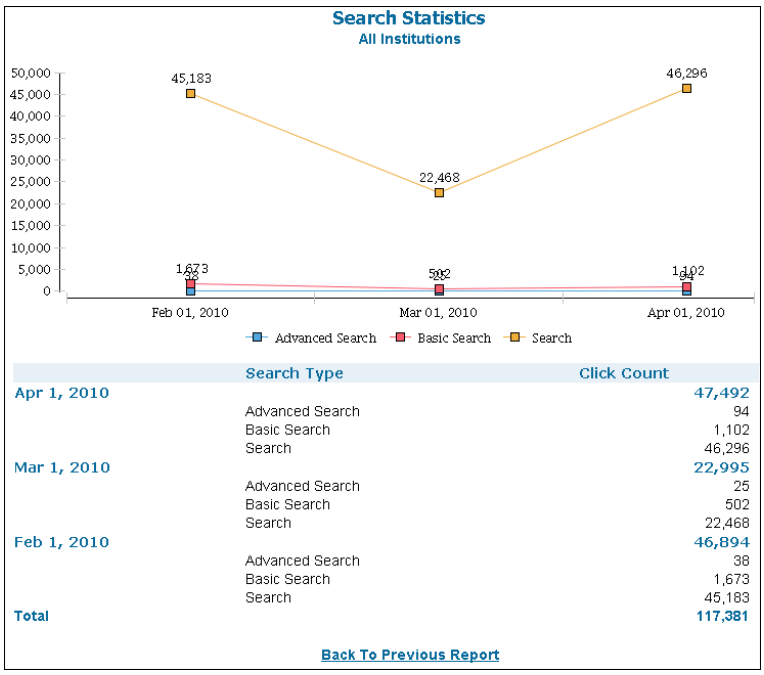
Click Type	Description
Browse Search - Author, Title, Subject, or Call number	Number of times users browsed a specific browse list. **Note** Clicking the Prev/Next on the browse result page is counted as a Browse Search of the same type as the original query.
bX Hot Articles	Number of times users clicked **Show/Hide bX articles**.
Create Alert	Number of times users created an alert after saving a query.
Details Print	Number of times users printed a record from the Actions menu on the Details tab.
Did You Mean	Number of times users clicked **Did You Mean**.
Display Details Tab	Number of times users display the Details tab.
Display institution from Get It tab	Number of times users selected another institution from the Institutions lightbox. **Note** This is only relevant to customers with Alma.
Display Tags and Reviews	Number of times users displayed the Tags and Reviews tab.
DS	Number of times a Deep Search adaptor was searched from the FE, Web services, and X-Services.
eShelf Page	Number of entries and actions by users on the e-Shelf page.
Eshelf Print	Number of times users sent an item to Print from the eShelf.
Full Display	Number of times the Full record Display service was requested with Web services, X-services, or Permalinks.
Get it	Number of times the 'GetIt' service (request for delivery options) is sent from a Web Service or an X-Service request.

Click Type	Description
GetIt!Link1	Number of times users displayed the Get It1 tab.
GetIt!Link2	Number of times users displayed the Get It2 tab.
Locations	Number of times users displayed the Locations tab.
Next Page	Number of times users clicked **Next Page**.
Permalink	Number of times users invoked the **Permalink** option from the Actions menu.
Personal Data	Number of changes made by users on the Personal Settings page.
Previous Page	Number of times users clicked the Previous page option.
Refine	Number of times users selected or removed a facet.
Remote More	Number of times users clicked the **Display more results?** link to display additional results from a MetaLib search.
Request for services	Number of times Primo displays the Alma Services Page. **Note** This is only relevant to customers with Alma.
Save Search	Number of times users save a query, which includes both options: **save search only** and **save search and create alert**.
Send an email	Number of times an email is sent from the FE.
Sign-in	Number of successful sign-ins.
SMS	Number of SMS messages sent from Primo.

Click Type	Description
Start Session	Number of new sessions. **Note** A new session is started by opening the FE the first time in a browser, changing the view, or re-accessing the FE after the session has ended.
Subscribe RSS	Number of times users subscribed to RSS from the Saved Queries page.
Tags Page	Number of times the Tags page was accessed from the main menu.
View institutions in Get It tab	Number of times the **More** option was invoked to display the Institutions lightbox. **Note** This is only relevant to customers with Alma.

Search Statistics Report

This report graphically displays the details for basic and advanced search statistics per institution.



Search Statistics Page

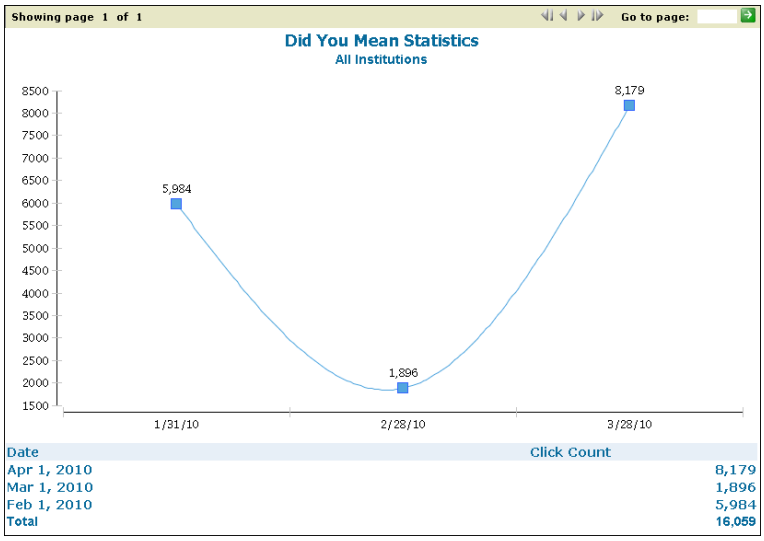
The following table describes the fields on the Search Statistics page.

Search Statistics Details

Column Name	Description
Date	The month in which the system tallied the statistics.
Search Type	The type of search on which the statistic is based.
Click Count	The number of clicks recorded in the specific Search Type.

Did You Mean Statistics Report

This report graphically displays the details for Did You Mean statistics per institution.



Did You Mean Statistics Page

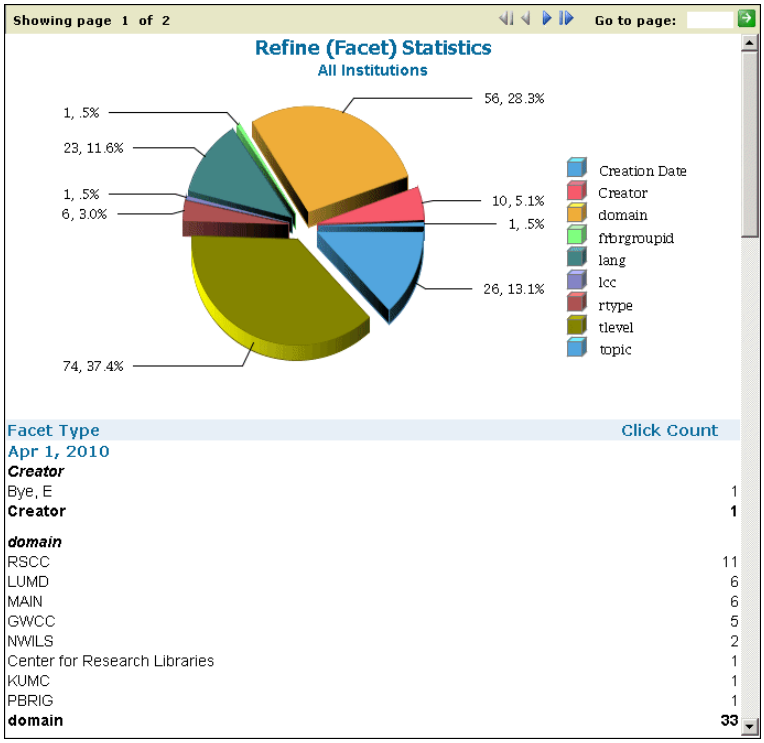
The following table describes the fields on the Search Statistics page.

Search Statistics Details

Column Name	Description
Date	The month in which the system tallied the statistics.
Click Count	The number of clicks recorded for Did You Mean.

Refine (Facet) Statistics Report

This report graphically displays the details for facet statistics per institution.



Refine (Facets) Statistics Page

The following table describes the fields on the Search Statistics page.

Search Statistics Details

Column Name	Description
Facet Type	The type of facet on which the statistic is based.
Click Count	The number of clicks recorded in the specific Search Type.

Hourly Remote Statistics

This report displays an hourly report of remote search counts per day, and includes the total number of searches and the total number of searches by response time.

To view the Hourly Remote Statistics report:

1. On the Back Office's home page, select **Primo Reports**.

   The Primo Reports page opens.

2. Click **Hourly Remote Statistics**.

   The Parameter dialog box opens.

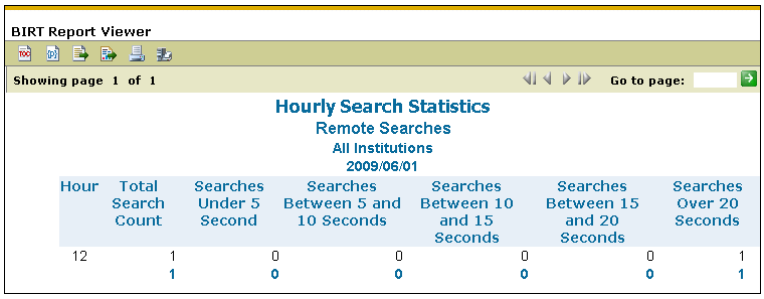
3. Enter the following parameters and then click **OK**:

   - **Choose Date** – Enter a date or click the Date wizard


to select a date.

- **Institution** – Select **All Institutions** or a specific institution from the drop-down list.
- **Group** – Select **All Groups** or a specific group from the drop-down list.
- **Source** – Select **All** or a specific source from the drop-down list.

The Hourly Search Statistics report opens.



Hourly Remote Statistics

The following table describes the fields on the Hourly Remote Statistics page.

Hourly Remote Statistics Description

Field	Description
Hour	The hour of the day (00 - 24).
Total Search Count	Total number of remote searches.
Searches Under 5 Seconds	Total number of remote searches less than five seconds.
Searches Between 5 and 10 Seconds	Total number of remote searches between five and ten seconds.
Searches Between 10 and 15 Seconds	Total number of remote searches between 10 and 15 seconds.
Searches Between 15 and 20 Seconds	Total number of remote searches between 15 and 20 seconds.
Searches Over 20 Seconds	Total number of remote searches over 20 seconds.

Hourly Search Statistics

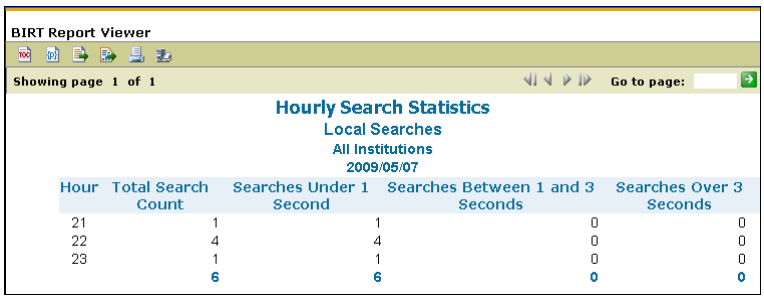
This report displays an hourly report of local search counts, broken down by the length of the search in seconds.

To view the Hourly Search Statistics report:

The Primo Reports page opens.
The Parameter dialog box opens.

1. On the Back Office's home page, select **Primo Reports**.
2. Click **Hourly Search Statistics**.
3. Enter the following parameters and then click **OK**:
   - **Choose Date** – Enter a date or click the Date wizard  to select a date.
   - **Institution** – Select **All Institutions** or a specific institution from the drop-down list.
   - **Group** – Select **All Groups** or a specific group from the drop-down list.
   - **Source** – Select **All** or a specific source from the drop-down list.

The Hourly Search Statistics report opens.



Hour	Total Search Count	Searches Under 1 Second	Searches Between 1 and 3 Seconds	Searches Over 3 Seconds
21	1	1	0	0
22	4	4	0	0
23	1	1	0	0
	6	6	0	0

Hourly Search Statistics

Hourly Search Statistics Description describes the parameters on the Hourly Search Statistics page.

Hourly Search Statistics Description

Field	Description
Hour	The hour of the day (00 - 24).
Total Search Count	Total number of local searches.
Searches Under 1 Second	Total number of local searches less than one second.
Searches Between 1 and 3 Seconds	Total number of local searches between one and three seconds.
Searches Over 3 Seconds	Total number of local searches over three seconds.

PNX Click Statistics

This report graphs the local and remote search statistics, broken down by the total searches, number of results, and response time.

To view the PNX Click Statistics report:

1. On the Back Office's home page, select **Primo Reports**.

   The Primo Reports page opens.

2. Click **PNX Click Statistics**.

   The Parameter dialog box opens.

3. Enter the following parameters and then click **OK**:

   - **Institution** – Select **All Institutions** or a specific institution from the drop-down list.
   - **Start Date** – Enter a start date or click the Date wizard

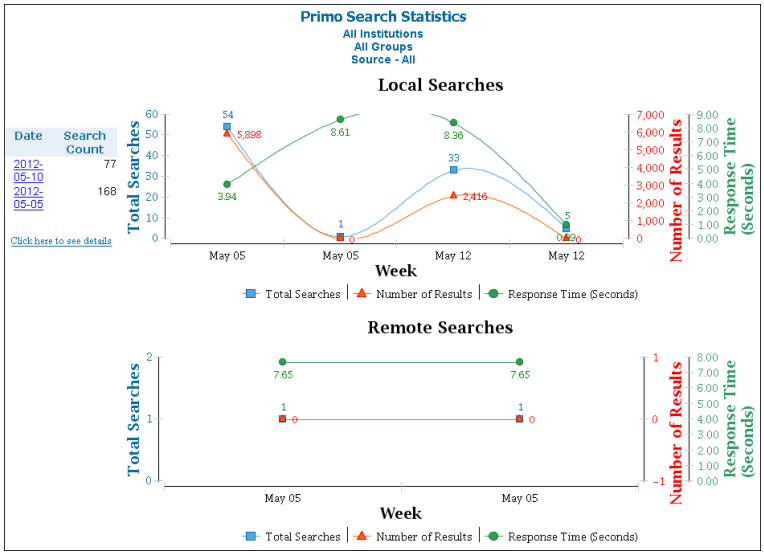
     

     to select a start date.
   - **End Date** – Enter an end date or click the Date wizard

     to select an end date.

   The PNX Clicks Statistics report opens.



PNX Click Statistics

To display the details per week, click the **Click here to see details** link.

Primo Search Statistics

All Institutions
All Groups
Source - All
Click Here To See Graph

Week	Number of Searches	Average Number of Results	Average Response Time (Seconds)	Average Full Time (Seconds)
N/A				
2012/05/10	4	0	0.00	0.00
	4	0	0.00	0.00
ds				
2012/05/10	35	400,602	3.70	4.02
2012/05/05	111	1,002,636	1.75	1.94
	146	858,313	2.21	2.44
local				
2012/05/10	38	2,099	7.39	7.75
2012/05/05	55	5,791	4.02	4.43
	93	4,282	5.40	5.79
remote				
2012/05/05	2	0	7.65	7.67
	2	0	7.65	7.67
Total	245			

PNX Clicks Weekly Details

Hourly Search Statistics Description describes the parameters on the PNX Clicks Search Statistics page.

PNX Clicks Search Statistics Description

Field	Description
Week	The week of the report per type of search.
Number of Searches	Total number of searches per type of search.
Average Number of Results	The average number of results per type of search.
Average Response Time	The average response time per type of search.
Average Full Time	The average time to return the results per type of search.

PNX Statistics

This report provides an overview of all PNX records in the system and includes the type of PNX records, the state of the PNX records in the database and in the index, and the dedup and FRBR statistics.

To view the Primo PNX Statistics report:

1. From Primo's home page, select **Primo Reports**.

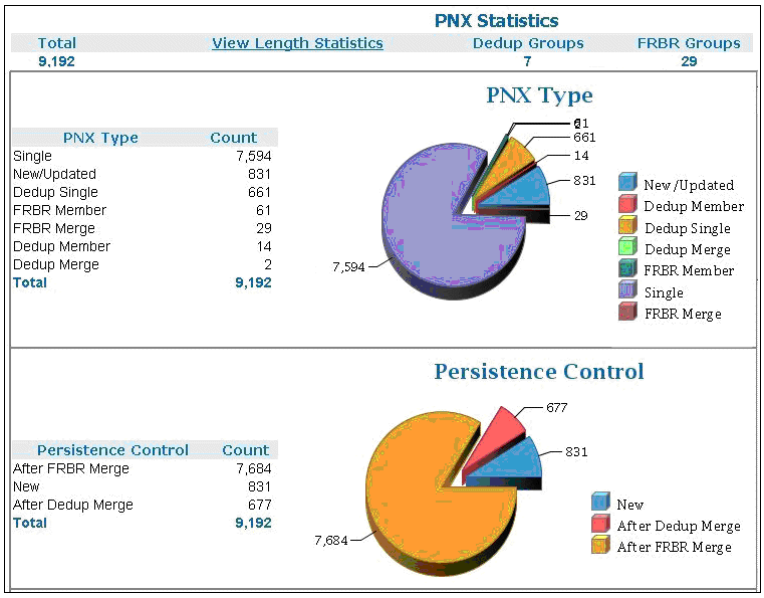
   The Primo Reports page opens.

2. Click **PNX Statistics** to view the system's PNX statistics.

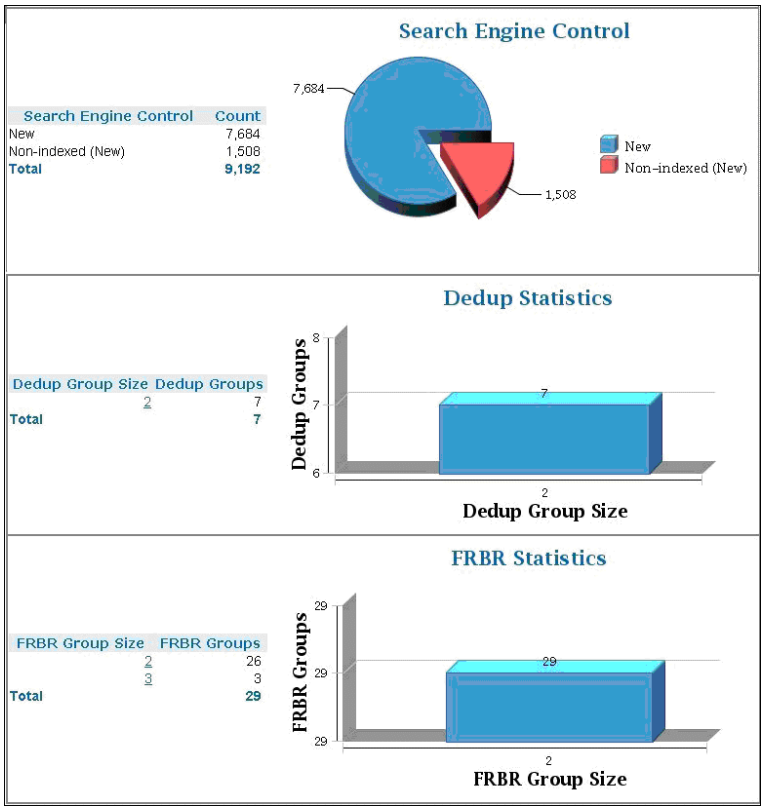
   The PNX Statistics page opens.

Note

Depending on the amount of information in your system, it may take a couple of moments for the PNX statistics page to display.



PNX Statistics Page (Part 1 of 2)



PNX Statistics Page (Part 2 of 2)

The following table describes the fields in the PNX Statistics page.

PNX Statistics Details

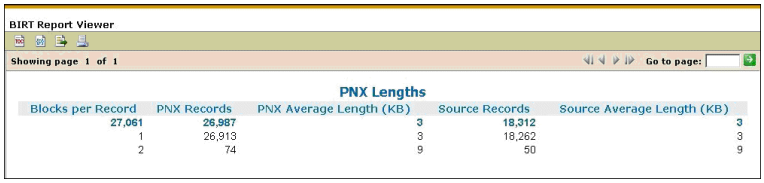
Report Name	Description
PNX Statistics:	
Total	The total number of records in the system.
Dedup Groups	The total number of Dedup groups in the system.
FRBR Groups	The total number of FRBR groups in the system.
PNX Type:	
Single	The number of records that have been indexed.
New/ Updated	The number of records that need to be updated.
Dedup Single	The number of records that have been through the Dedup process and are waiting for indexing.
FRBR Member	The total number of records that belong to a FRBR group.
FRBR Merge	The number of FRBR records that represent a FRBR group. This should be the same as the number of FRBR groups.
Dedup Member	The total number of records that belong to a Dedup group.
Dedup Merge	The number of FRBR records that represent a Dedup group. This should be the same as the number of Dedup groups.
Persistence Control:	

Report Name	Description
After FRBR Merge	The number of records that have been merged into a FRBR group.
New	The number of records waiting to be merged.
After Dedup Merge	The number of records that have been merged into a Dedup group.
Search Engine Control:	
New	The number of records in the search engine.
Non-indexed (New)	The number of non-indexed records.
Dedup Statistics:	
Dedup Group Size	The number of records in a group of Dedup merged records. **Note** You can click on the group size number to display the list of the Dedup groups that are of that size. You can then click on a specific group to display the merged records contained in the group.
Dedup Groups	The number of groups containing the amount of records specified in the Dedup Group Size field.
FRBR Statistics:	
FRBR Group Size	The number of records in a group of FRBR merged records. **Note** You can click on the group size number to display the list of the FRBR groups that are of that size. You can then click on a specific group to display the merged records contained in the group.

Report Name	Description
FRBR Groups	The number of groups containing the amount of records specified in the FRBR Group Size field.

3. Click **View Length Statistics** to view the system's length statistics.

   The PNX Lengths page opens.



PNX Lengths Page

The following table describes the PNX Lengths page.

PNX Lengths Description

Field	Description
Blocks per Record	The number of blocks used for the systems records. Each physical block contains up to 8 Kb of records.
PNX records	Lists groups of the system's PNX records.
PNX Average Length (KB)	Lists the average PNX record size for each group, in kilobytes.
Source Records	Lists groups of the system's Source Records.
Source Average Length (KB)	Lists the average Source record size for each group, in kilobytes.

Search Statistics

This report displays the total searches, number of results, and response time for the following types of searches:

- Local searches are searches that are performed within local scopes such as libraries and digital entities.
- Remote searches are searches that are performed remotely via MetaLib. Note that these statistics can also be viewed via MetaLib statistics.

Note

Because SFX click are performed outside of Primo, these statistics can be viewed only via SFX reports.

To view the Primo Search Statistic report:

1. On the Back Office's home page, select Primo Reports.

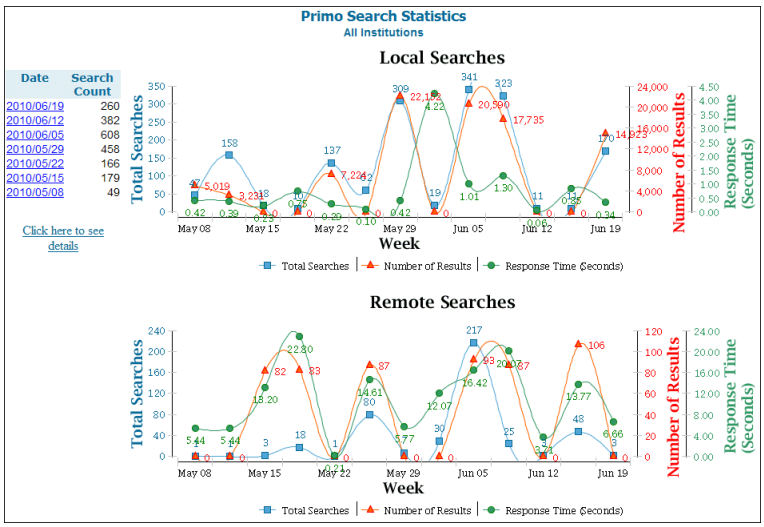
   The Primo Reports page opens.

2. Click **Search Statistics** to view the system's Search statistics.

   The Parameter dialog box opens.

3. Specify the institution and the date of the week in the respective drop-down lists.

   The Search Statistics page opens.



Search Statistics Page

From this page, you can get more details by clicking the following links:

- *Month link* – displays the graphs for the specified month.
- **Click here to see details** – displays the details for the current page.

4. Use the instructions in Search Engine Monitoring to manage the search statistics.

Search Strings Statistics

This report displays the number of times a search string has been used. For each search term, the report includes the scope type (local, remote, or DS), search count, and search response time.

To view the Primo Search Strings Statistics report:

1. On the Back Office's home page, select **Primo Reports**.

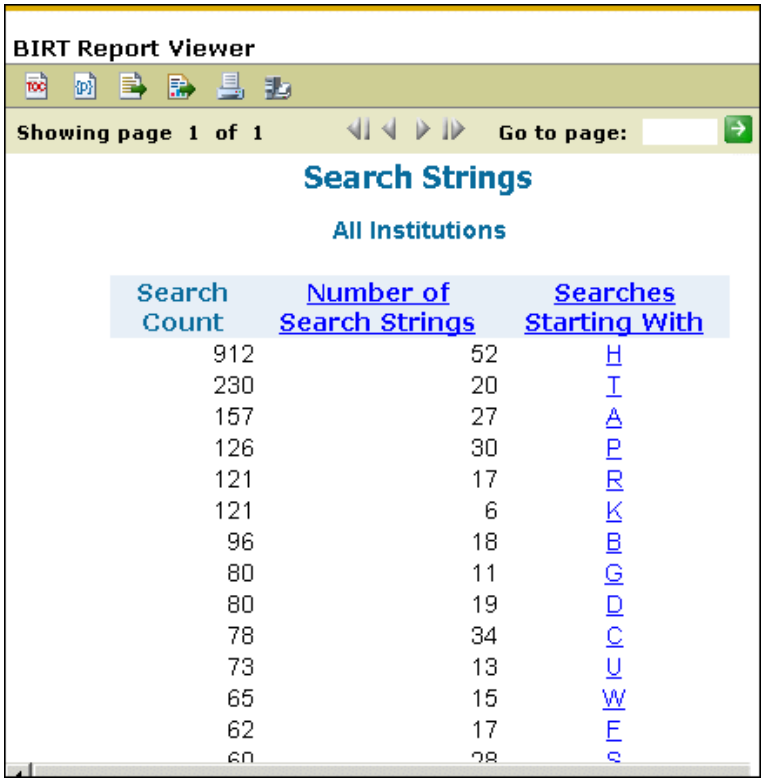
   The Primo Reports page opens.

2. Click **Search Strings Statistics**.

   The Parameter dialog box opens.

3. Specify **All Institutions** or a specific institution from the drop-down list.

   The report displays the search string statistics.



Search Count	Number of Search Strings	Searches Starting With
912	52	H
230	20	T
157	27	A
126	30	P
121	17	R
121	6	K
96	18	B
80	11	G
80	19	D
78	34	C
73	13	U
65	15	W
62	17	E
60	28	S

Search Strings Statistics Report

   From this page, you can view the following variations of the report by clicking the following links:

   - Click the **Number of Search Strings** link to display the report sorted by the number of search strings.
   - Click the **Searches Starting With** link to display the report sorted by the first character of the search string.
   - Click a character link to display all of the search strings that start with that character.

System Monitoring

This report displays information regarding the system on a specified day (such as memory usage, high I/O rates, and CPU incidents).

To view the Primo System Monitoring report:

1. On the Back Office's home page, select **Primo Reports**.

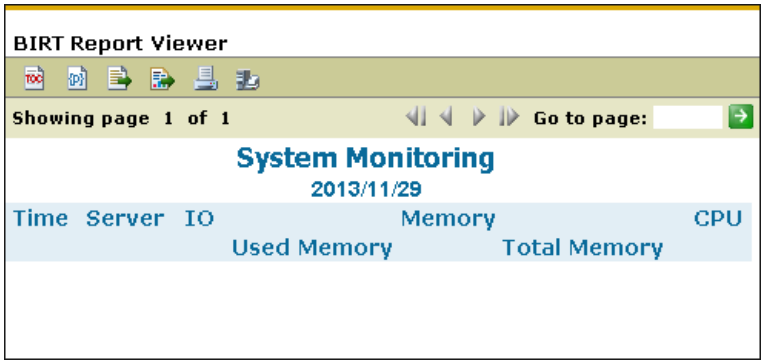
   The Primo Reports page opens.

2. Click **System Monitoring**.

   The Parameter dialog box opens.

3. Specify the date that you want to monitor from the drop-down list.

   The report displays the system monitoring statistics for the specified date.



System Monitoring Report

From this page, you can view the following variations of the report by clicking the following links:

- Click the **Number of Search Strings** link to display the report sorted by the number of search strings.
- Click the **Searches Starting With** link to display the report sorted by the first character of the search string.
- Click a character link to display all of the search strings that start with that character.

Users Personal Sets Report

This report displays the following statistics about user personal database sets created with the Find Database function (for MetaLib):

- **Number of sets created** – Displays the total number of sets that were created by users.
- **Number of users that created sets** – Displays the total number of users that have created sets.
- **Number of sets per user** – Displays the total number of sets created per user. The information is grouped by number of sets: 1, 2, 3, 5 - 10, and above 10 sets.

To view the Primo Users Personal Sets report:

1. On the Back Office's home page, select **Primo Reports**.

   The Primo Reports page opens.

2. Click **Users Personal Sets Report**.

   The Parameter dialog box opens.

3. Enter the following parameters:

   - **Institution** – Select **All Institutions** or a specific institution from the drop-down list.
   - **Start Date** – Enter a start date or click the Date wizard

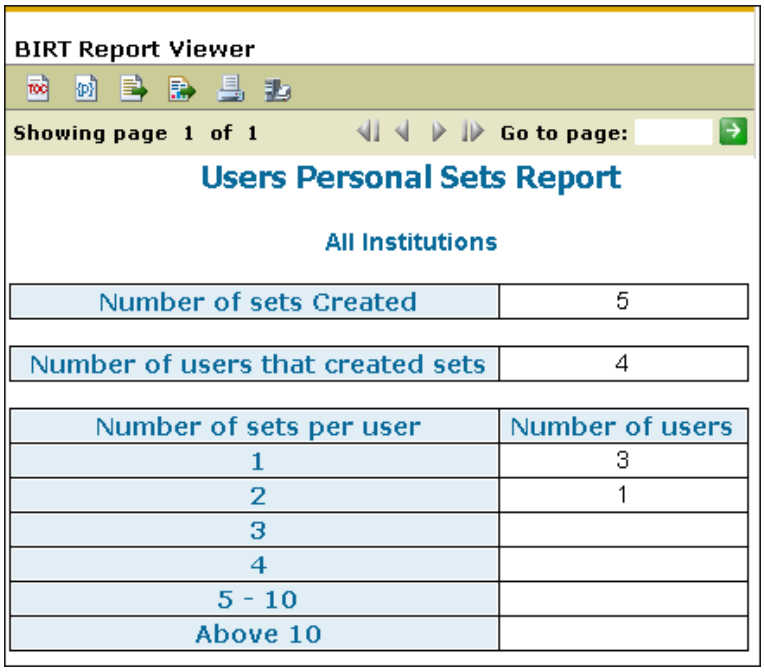
     
     to select a start date.

- **End Date** – Enter an end date or click the Date wizard

  
  to select an end date.

4. Click **OK**:

   The report displays the user personal sets statistics.



Users Personal Sets Report

Annual Event Statistics

This report displays the number of times functions were invoked in the past year for a selected institution, view, and event. For more information on the types of events that are tracked, see Click Type Details.

To view the annual event statistics:

1. On the Back Office's home page, select **Primo Reports**.

   The Primo Reports page opens.

2. Click **Annual Event Statistics**.

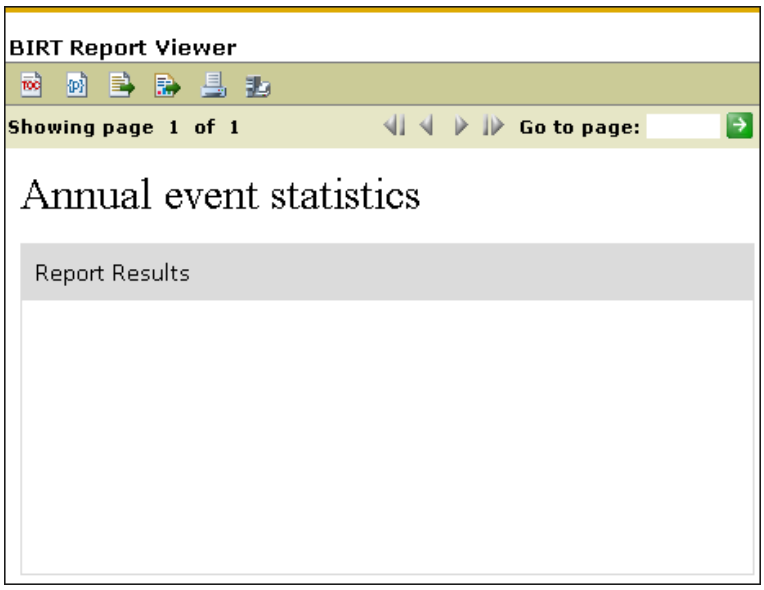
   The Parameter dialog box opens.

3. Enter the following parameters in the dialog box:

   - **Institution** – Select **All Institutions** or a specific institution from the drop-down list.
   - **View** – Select a view.
   - **Event Type** – Select a type of event (such as add tags, add a review, and so forth).

4. Click **OK**:

The report displays the annual event statistics.



Annual Event Statistics

Annual Search Statistics

This report displays the search statistics per year and month for a selected institution and view.

To view the annual search statistics:

1. On the Back Office's home page, select **Primo Reports**.

   The Primo Reports page opens.

2. Click **Annual Search Statistics**.

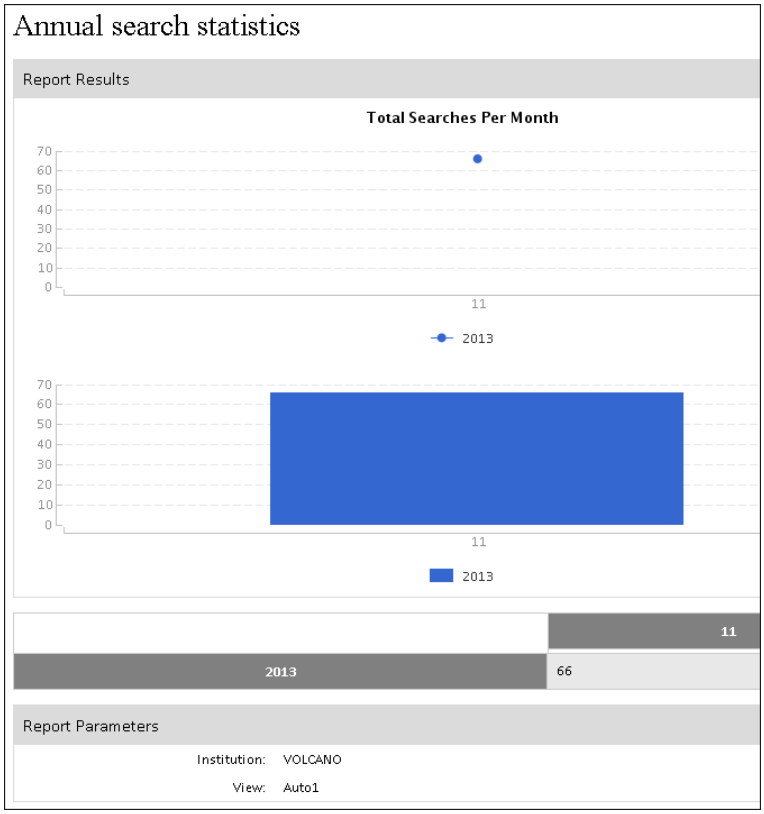
   The Parameter dialog box opens.

3. Enter the following parameters:

   - **Institution** – Select **All Institutions** or a specific institution from the drop-down list.
   - **View** – Select a view.

4. Click **OK**:

   The report displays the annual search statistics.



Annual Search Statistics

Click Events Statistics

This report displays the event statistics for all functions (such as **add to eShelf**, **eShelf page**, and **help**) for a selected institution, view, and period of time. For information on the type of clicks this report tracks, see Click Type Details.

Note

The chart is limited to the top 10 most clicked functions.

To view the click events statistics:

1. On the Back Office's home page, select **Primo Reports**.

   The Primo Reports page opens.

2. Click **Click Events**.

   The Parameter dialog box opens.

3. Enter the following parameters:

   - **Institution** – Select **All Institutions** or a specific institution from the drop-down list.
   - **View** – Select a view.
   - **Start Date** – Enter a start date or click the Date wizard

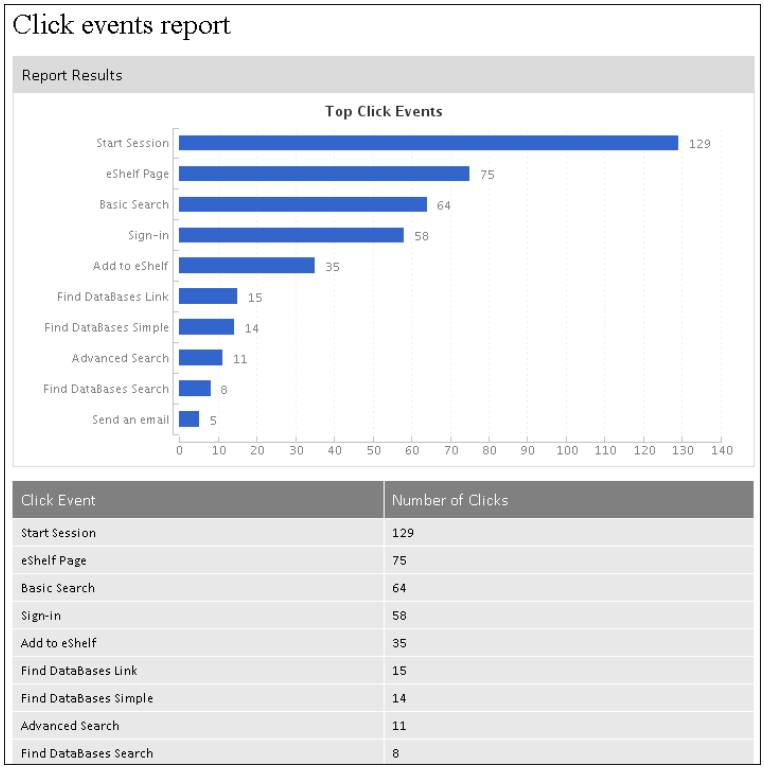
to select a start date.

- **End Date** – Enter an end date or click the Date wizard

to select an end date.

4. Click **OK**:

   The report displays the click events statistics.



Click Event	Number of Clicks
Start Session	129
eShelf Page	75
Basic Search	64
Sign-in	58
Add to eShelf	35
Find DataBases Link	15
Find DataBases Simple	14
Advanced Search	11
Find DataBases Search	8

Click Events Statistics

Daily Search Statistics

This report displays the average search response times per hour for a selected institution, view, and day.

To view the daily search statistics:

1. On the Back Office's home page, select **Primo Reports**.

   The Primo Reports page opens.

2. Click **Daily Search Statistics**.

   The Parameter dialog box opens.

3. Enter the following parameters in the dialog box:

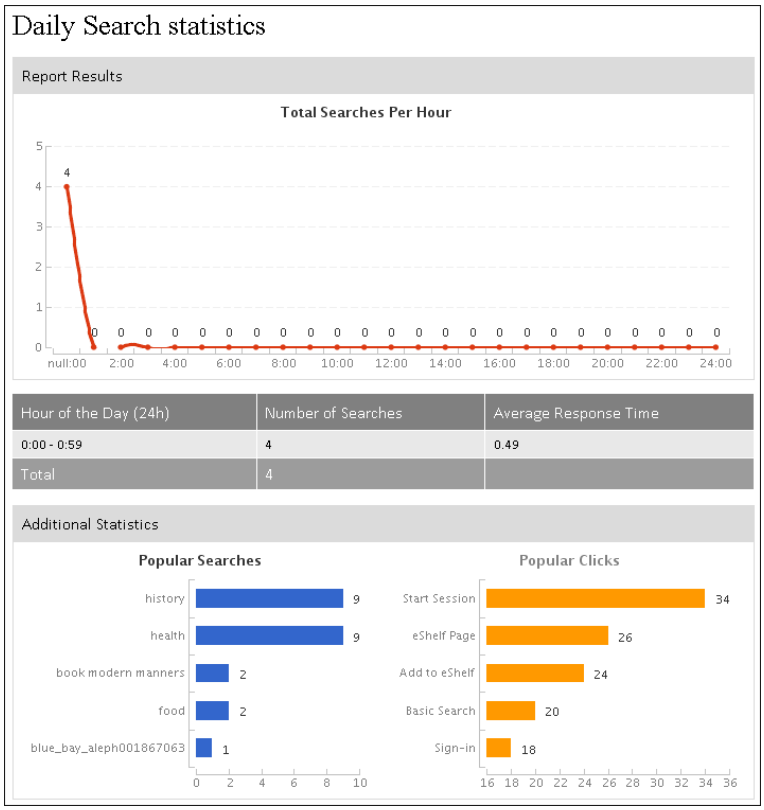
   - **Institution** – Select **All Institutions** or a specific institution from the drop-down list.
   - **View** – Select a view.

- **Date** – Enter a date or click the Date wizard

  
  to select a date.

4. Click **OK**:

   The report displays the daily search statistics.



Daily Search Statistics

Facet Clicks Statistics

This report displays the number of times a facet type was clicked for a selected institution, view, and period of time.

To view the facet click statistics:

1. On the Back Office's home page, select **Primo Reports**.

   The Primo Reports page opens.

2. Click **Facet Clicks**.

   The Parameter dialog box opens.

3. Enter the following parameters:

   - **Institution** – Select **All Institutions** or a specific institution from the drop-down list.
   - **View** – Select a view.

- **Start Date** – Enter a start date or click the Date wizard

  to select a start date.

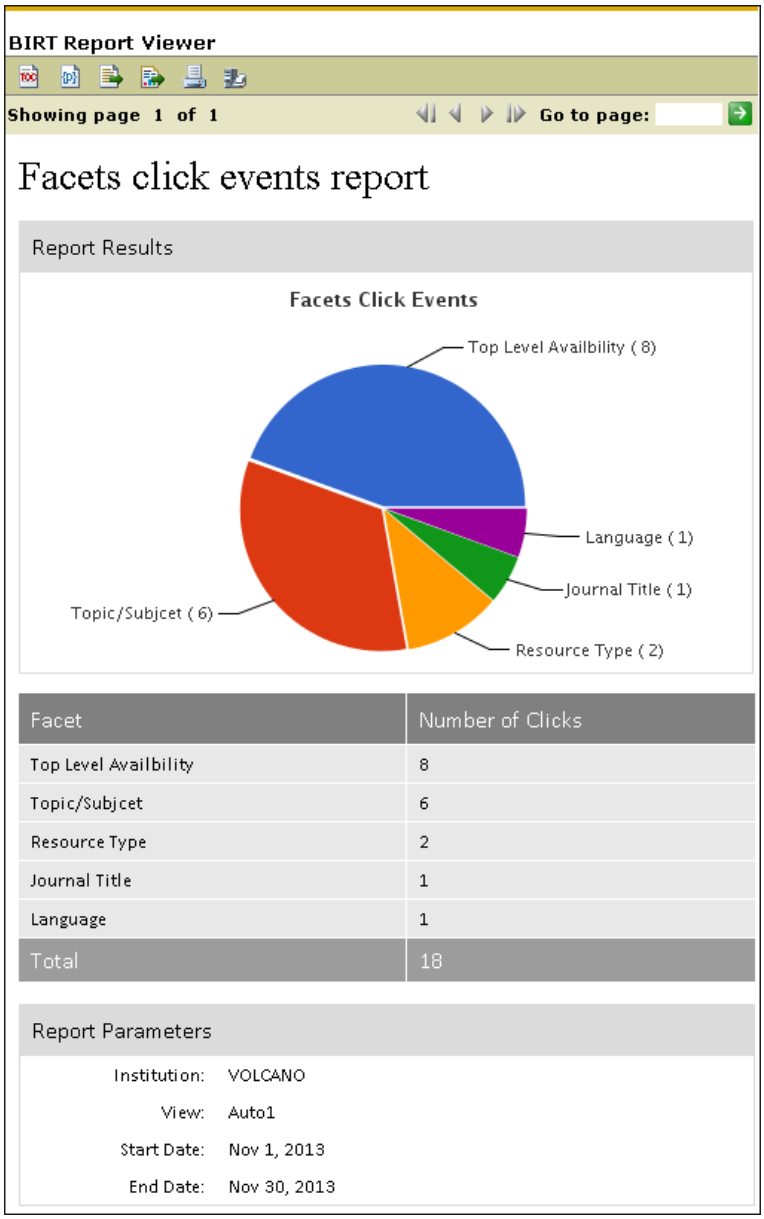
- **End Date** – Enter an end date or click the Date wizard

  to select an end date.

4. Click **OK**:

   The report displays the facet clicks statistics.



Facet Clicks Statistics

Search Statistics

This report displays the following search statistics for a selected institution, view, and period of time:

- Number of searches
- Drill-down to daily report – number of searches per hour
    - Average response time

To view the search statistics:

1. On the Back Office's home page, select **Primo Reports**.

   The Primo Reports page opens.

2. Click **Search Statistics**.

   The Parameter dialog box opens.

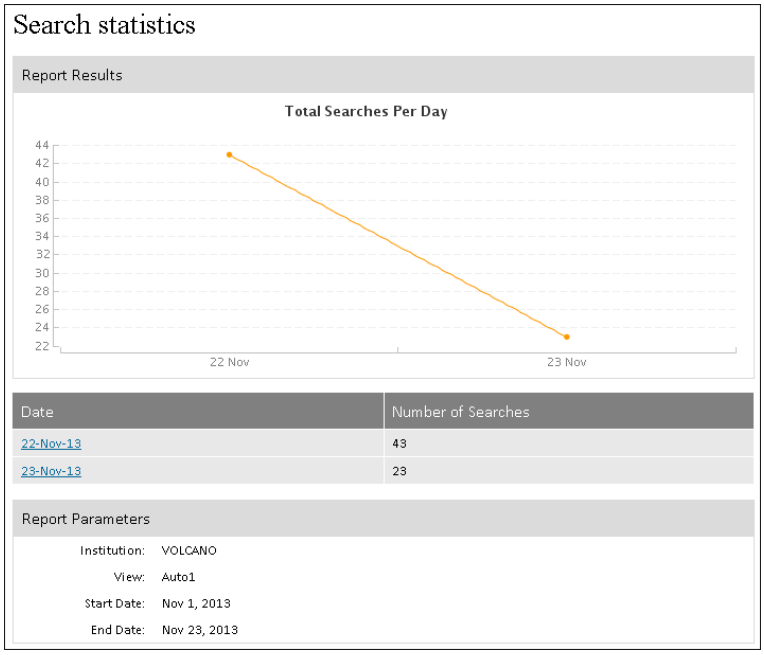
3. Enter the following parameters:
    - **Institution** – Select **All Institutions** or a specific institution from the drop-down list.
    - **View** – Select a view.
    - **Start Date** – Enter a start date or click the Date wizard

      
      to select a start date.
    - **End Date** – Enter an end date or click the Date wizard

      
      to select an end date.

4. Click **OK**:

   The report displays the search statistics.



Search Statistics

Search Terms by Letter Statistics

This report displays the following statistics for a selected institution, view, and period of time:

- Number of searches by letter
- Drill-down to search terms and number of searches

To view the search terms by letter statistics:

1. On the Back Office's home page, select **Primo Reports**.

   The Primo Reports page opens.

2. Click **Search Terms by Letter**.

   The Parameter dialog box opens.

3. Enter the following parameters:

   - **Start Date** – Enter a start date or click the Date wizard

     
     to select a start date.

   - **End Date** – Enter an end date or click the Date wizard

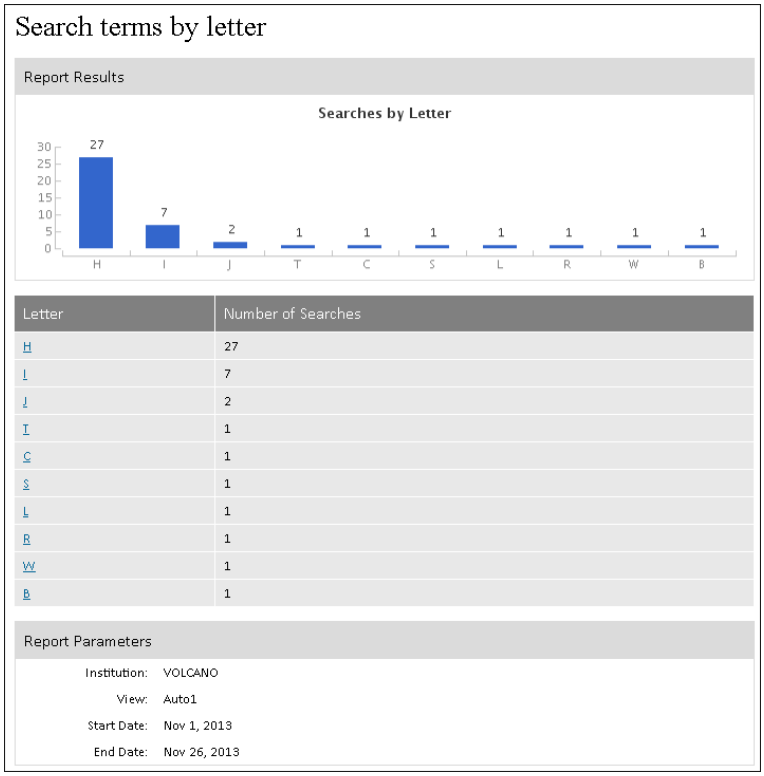
     
     to select an end date.

   - **Institution** – Select **All Institutions** or a specific institution from the drop-down list.

   - **View** – Select a view.

4. Click **OK**:

   The report displays the search terms statistics by letter.



Search Terms by Letter Statistics

Top Search Terms Statistics

This report displays the top 25 search terms for a selected institution, view, and period of time.

To view the top search terms statistics:

1. On the Back Office's home page, select **Primo Reports**.

   The Primo Reports page opens.

2. Click **Top Search Terms**.

   The Parameter dialog box opens.

3. Enter the following parameters:

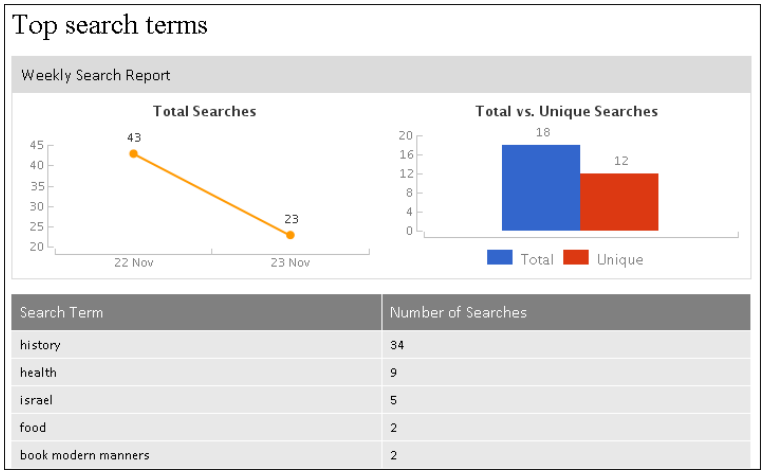
   - **Institution** – Select **All Institutions** or a specific institution from the drop-down list.
   - **View** – Select a view.
   - **Start Date** – Enter a start date or click the Date wizard

     
     to select a start date.
   - **End Date** – Enter an end date or click the Date wizard

     
     to select an end date.

4. Click **OK**:

The report displays the top search terms statistics.



Top Search Terms Statistics

Using the BIRT Report Viewer

Return to menu

The BIRT Report Viewer allows you to view BIRT reports and perform the following operations for each report selected on the Primo Reports page:

BIRT Report Viewer Operations

Button	Operation
	Toggles the display of the report's Table of Contents.
	Re-runs the report using the same or different criteria.
	Exports the specified data from the report and stores the data in a CSV file.
	Exports the report to any of the following output formats: • Excel • PDF • PostScript • Word • XML • PowerPoint
	Prints the report using any of the following formats: • HTML • PDF
	Prints the report to the specified printer on the server.

Mapping Tables

This section includes:

All Mapping Tables Page

Return to menu

Mapping tables are used to configure various aspects of the system. Although many of the mapping tables that are used in the system can be managed by using a specific wizard, here you can manage all of the system's mapping tables from one place. For a full list of the system's mapping tables, refer to Mapping Table Reference.

You can load normalization mapping tables from a tab delimited file. For more information, see Importing Mapping Tables from an Excel File.

Note

Changes to the tables in the Normalization, Front End, and Delivery subsystems must be deployed before changes appear in the Front End. To deploy these types of tables, select the associated subsystem in the Mapping Tables page and click **Deploy**.

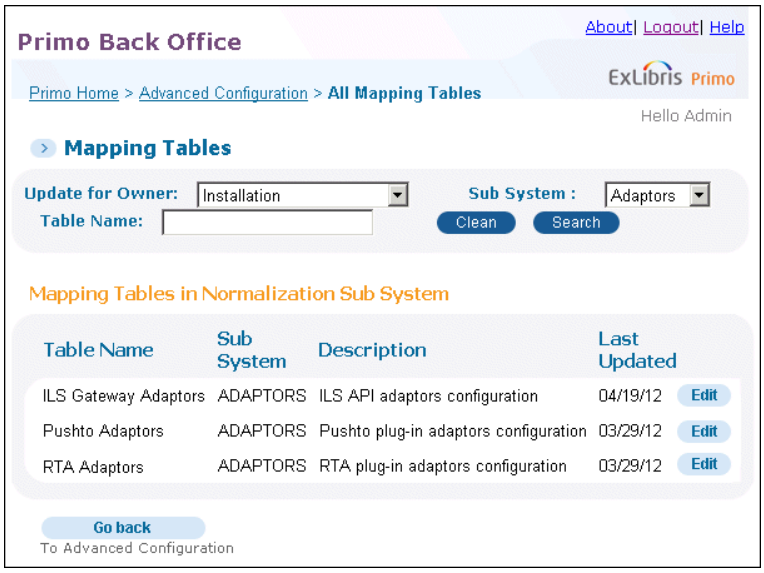
To access the Mapping Tables:

1. On the Back Office's home page, click **Advanced Configuration**.

   The Advanced Configuration page opens.

2. Click **All Mapping Tables**.

   The Mapping Tables page opens.



Mapping Tables Page

From this page, you can perform the following operations on your system's mapping tables:

- Creating Normalization Mapping Tables
- Editing Mapping Tables

- Deleting Mapping Tables

Note

If you do not have permissions to an update a table, the system will replace the **Edit** button withe **View** button.

Mapping Table Configuration Restrictions

Return to menu

Most mapping tables can be configured at the institution level. In some cases, it is necessary to configure mapping tables at specific levels. As a rule, if the mapping table is used for an entity that belongs to a specific institution (such as an institution, a data source, or a view), it should be configured at the institution level. For more information on configuration levels, see Primo Configuration Levels.

Note

Tables that cannot be modified at a specific configuration level are view only until you select the correct configuration level in the **Update for Owner** drop-down list. Customers who do not have installation-level permissions may not have access to some tables.

Installation-Level Only Tables

The following table lists which mapping tables must be configured at the installation level and cannot be configured per institution. Customers who do have installation-level permissions will not have access to these tables.

Installation-Level Mapping Tables

Subsystem	Mapping Table
Adaptors	ILS Gateway Adaptors, Pushto Adaptors, and RTA Adaptors
Back Office	Fiction Profile Fields and Subfields, Library Thing Review Files, Library Thing Tag Files, Mapping Keys, PNX Extension Sources, and Real-Time Availability
Front End	PNX_EXTENSIONS_MAPPINGS, SE 221 Char conversion, SE Char conversion, Snippets Extensions Mapper, and WS and XS IP
ILS Gateway	All mapping tables
Plugins	Plugins
Publishing	Dedup Keys, Popularity Sort Boosts

Institution-Level Only Tables

The following table lists which mapping tables must be configured at the institution level and cannot be configured at the installation level:

Institution-Level Mapping Tables

Subsystem	Mapping Table
Publishing	Datasource Index Extensions
Normalization	Alma Institution Codes, ILS Institution Codes, ILS Library Codes, ILS Library Codes2, MetaLib Institution Codes
Front End	bX Token, Featured Results, Hot Articles Token, Institution Base URLs, Metalib Institution Configuration, PC Customers Ids, Recommendation Systems, SMS Provider Configuration, User groups with restricted access to PC/DS
OPAC via Primo	OvP Functionality

Mapping Table Inheritance Levels

Return to menu

As mentioned previously, you can configure many of the mapping tables for a specific institution. However, it is possible to share mapping information from the installation level via inheritance. This means that if an institution does not configure specific mapping information, the system will use the configuration information stored at the next higher level (such as the installation or OTB level).

For mapping tables, inheritance is provided at the table level, which indicates that the entire table (when configured at the institution level) applies to the specific institution, and no rows are inherited from a higher level.

Exporting Mapping Tables to an Excel File

Return to menu

Each mapping table page allows users to export mapping tables to an Excel file.

To export mapping tables:

1. On the Back Office's home page, click **Advanced Configuration**.

   The Advanced Configuration page opens.

2. Click **All Mapping Tables** to open the Mapping Tables page.

3. Click **Edit** next to the mapping table row that you want to copy.

   The requested table opens.

4. Click **Export to Excel**.

5. Specify a file name and click **Save** in the Save As dialog box.

Importing Mapping Tables from an Excel File

Return to menu

Primo allows you to import mapping tables from an Excel file.

During the load process, the system validates the file before loading the mapping table into the database. If an error occurs, the file is not loaded.

If validation is successful, Primo replaces the entire mapping table in the database with the values in the file.

Because the load process replaces the entire mapping table, you must include all values of the mapping table.

A results log displays a list of error messages or a confirmation message for a successful load.

To import a mapping table:

1. On the Back Office's home page, click **Advanced Configuration**.

   The Advanced Configuration page opens.

2. Click **All Mapping Tables** to display the Mapping Tables page.

3. Click **Edit** next to the mapping table row that you want to copy.

   The requested table appears.

4. In the **Import Excel File** field, enter the full path name of the import file or click **Browse** to search for the import file.

   Note that the import file must include a header row such as shown in the following import file.

	A	B	C	D	E	F
1	**Enabled**	**Source Code**	**Target Code**	**Description**	**InstallationCode**	**InstitutionCode**
2	true	legal_document	legal_documents		CUSTOMER	
3	true	video	media		CUSTOMER	
4	true	technical_report	technical_reports		CUSTOMER	
5	true	map	maps		CUSTOMER	
6	true	database	databases		CUSTOMER	

Sample Import File with Header

5. Click **Load**.

Creating Normalization Mapping Tables

Return to menu

For the Normalization subsystem only, you can create additional mapping tables.

To create a new mapping table for the Normalization subsystem:

1. On the Mapping Tables page, select **Normalization** in the Sub System drop-down list.

   The Create a New Code Table section displays at the bottom of the page.

2. Select the configuration level of the mapping table in the **Update for Owner** drop-down list. If the information you are mapping pertains to a specific institution, select that institution.

   For institution-level staff users, the system will select your institution automatically.

3. In the Create a New Code Table section, enter the following fields:

   - **Table Name** – Type the name of the new code table.

     Note

     The table names must be unique for all mapping and code tables.

   - **Description** – Type a description for the new code table.

4. Click **Create** to create the new table.

   The new mapping table appears in the list.

5. Click **Edit** next to the new mapping table in the list to add mapping rows.

   The Mapping Tables page opens for the new mapping table.

6. In the Create a New Mapping Row section, enter the fields described in the following table:

   Normalization Code Table Row Details

Field name	Description
sourceCode1	The code being mapped.
targetCode	The target code of the mapping.
Description	A text description of the new table.

7. Click **Create** to add the new mapping table row.

8. Repeat Steps 7 and 8 to add additional mapping table rows.

Note

If you are using this mapping table for normalization rule transformations, you cannot define more than one mapping row. If you define two or more rows, the system returns unexpected results.

9. Click **Save** to save your changes and return to the Mapping Tables page.

Editing Mapping Tables

Return to menu

Primo maintains an out-of-the-box version of most mapping tables, which cannot be edited by customers. If needed, you can customize a version of them for your institution. Primo will use the lowest configured mapping tables that are available to an institution.

For on-premises installations, a copy of the tables can be customized at the installation level, and many of those tables can also be customized at the institution level. Although, if they are customized at the institution level, they cannot be shared with other institutions in your installation. For more information, see Mapping Table Configuration Restrictions.

If you attempt to edit a table that has not been configured at the institution level or a specified higher level, the system will display the mapping rows inherited from the next higher configuration level. In order to edit a table at a lower configuration level, you will need to click the **Customize** button that displays next to the **Owner** field. After clicking the button, the system will replace it with following buttons:

- **Reset** – Resets all mapping rows to the values provided in the next higher version of the table.
- **Delete** – Resets all mapping rows to the values provided in the next higher version of the table and removes the version of the table at the current configuration level. Note that the **Customize** button will return.

Note

If a table cannot be edited at a configuration level, all of the mapping rows will be disabled and none of the above buttons will display on the page. In addition, the system will display the **View** button instead of the **Edit** button next to the mapping table in the list on the All Mapping Tables page.

To edit a mapping table:

1. On the All Mapping Tables page, click **Edit** next to the mapping table that you want to update.

   The requested mapping table opens.

2. For installation-level staff users, select the installation name or a specific institution from the **Update for Owner** drop-down list. The valid values are **Installation** (if using the default name) or a specific institution.

   Note

   For institution-level staff users, this field is set to your institution.

   ---

3. If the table has not been customized previously, click **Customize** to allow the table to be modified.
4. In the Mapping Table Rows section, update the values in each row as needed.

   You can also perform any of the following actions on the mapping table:

   - Adding Mapping Table Rows
   - Deleting Mapping Table Rows

5. Click **Save** to return to the list of mapping tables on the All Mapping Tables page.

Adding Mapping Table Rows

Note

If you have already customized a mapping table for your institution, mapping rows that are added to the installation copy are not automatically applied to the institution copy.

To add mapping rows:

1. If the table has not been customized previously, click **Customize** to allow the table to be modified.
2. In the Create a New Mapping Row section, enter the required fields and any optional fields that you need.

   Note

   Make sure that you have selected the correct configuration level in the **Update for Owner** drop-down list.

3. Click **Create**.

   The new mapping row is added to the list of mapping rows in Mapping Table Rows section.

4. Repeat steps 1 and 2 for each additional row.
5. Click **Save** to return to the list of mapping tables on the All Mapping Tables page.

Deleting Mapping Table Rows

To delete a row:

1. If the table has not been customized previously, click **Customize** to allow the table to be modified.
2. In the Mapping Table Rows section, click **Delete** next to the mapping row that you no longer need at this configuration level.

   Note

   Make sure that you have selected the correct configuration level in the **Update for Owner** drop-down list.

   The mapping row is removed from the list of mapping rows in Mapping Table Rows section.

3. Repeat step 1 for each additional row.
4. Click **Save** to return to the list of mapping tables on the All Mapping Tables page.

Deleting Mapping Tables

Return to menu

In general, you cannot delete a mapping table unless it is a mapping table (such as user-defined normalization table) that you have defined yourself. For more information on creating mapping tables, see Creating Normalization Mapping Tables.

To delete a mapping table:

1. On the All Mapping Tables page, select **Normalization** in the **Sub System** drop-down list.

   Note

   Make sure that you have selected the correct configuration level in the **Update for Owner** drop-down list.

2. Click **Delete** next to the mapping table that you want to delete.

   A confirmation box appears.

3. Click **OK**.

   The mapping table is removed from the list of mapping tables on the All Mapping Tables page.

Searching for Mapping Tables

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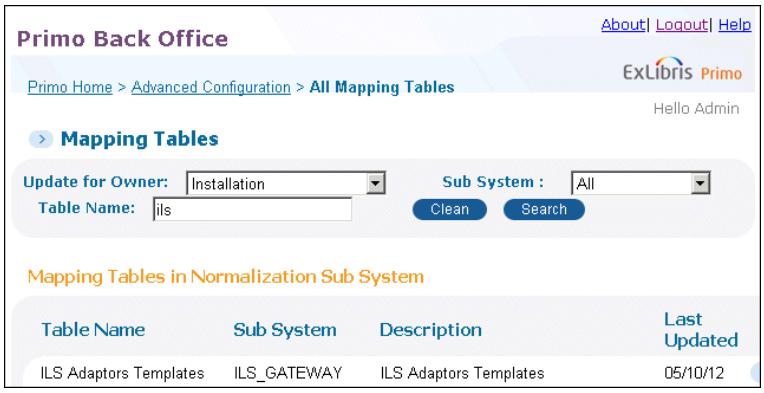
Searching allows users to reduce the number of mapping tables that are displayed in the list. To search the mapping tables, specify a value in one or more of the following columns and then click **Search** (see Searching Mapping Tables):

- **Update for Owner** – Select the entire installation or a specific institution from the drop-down list. For institution-level staff users, your institution will be pre-selected.
- **Sub System** – Select a subsystem from the drop-down list.
- **Table Name** – Type a search string.



Searching Mapping Tables

To start a new search, click **Clean**.

Filtering Mapping Table Rows

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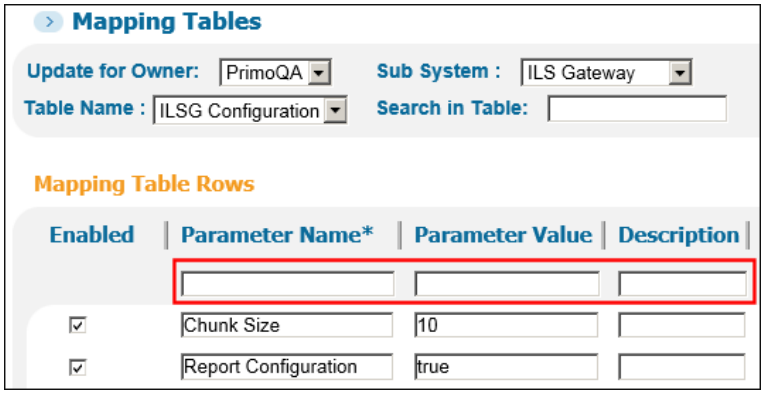
Filtering allows users to narrow the number of mapping table rows to view. You can use the following methods to narrow your search:

- Column-Specific Filtering
- Search in Table Filtering

Column-Specific Filtering

To filter a mapping table, type a search string in one or more of the column headings and then press enter (see Column-Specific Filtering). This method executes a search and displays the resulting mapping rows.



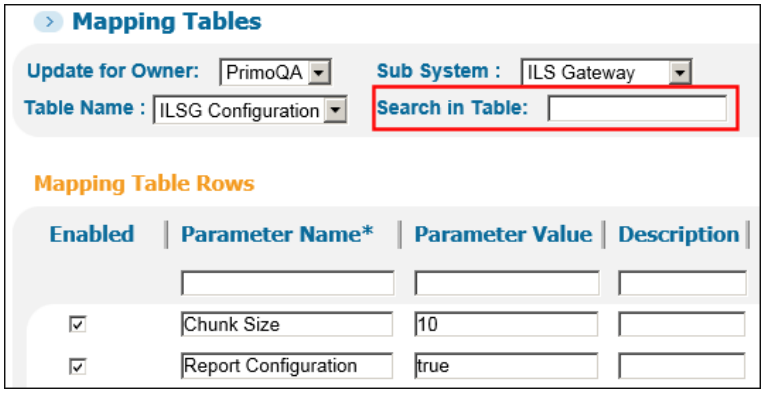
Column-Specific Filtering

Search in Table Filtering

This filter is applied across all columns in the table as you type characters in the **Search in Table** field. Unlike the column-specific filter, no actual query is executed. The filter simply hides the rows that were not filtered by any column-specific searches.

Note

- While using the this type of filtering, you will be blocked from performing any further column-specific searches until you clear the **Search in Table** field.
- This filtering does not include the Language column or any columns that do not allow column-specific filtering.



Search in Table Filtering

Using Special Characters

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Because some special characters may cause parsing errors, Ex Libris recommends the use of XML-based entities in mapping tables. For example, instead of using the special characters (such as an apostrophe shown in the following line):

```
Source Code - Gruen'sche Bibliothek
```

Use the following entities as shown in bold:

```
Source Code - Gruen'sche Bibliothek
```

The following table lists the recommended XML-based entities:

Using Special Characters

Special Character	Unicode Value	XML-Based Entity
" (double quote)	(U+0022)	"
& (ampersand)	(U+0026)	&
' (single quote)	(U+0027)	'
< (less than sign)	(U+003C)	<
> (greater than sign)	(U+003E)	>

Mapping Table Reference

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This section lists the Primo mapping tables, which are grouped by the following subsystems:

Back Office Subsystem

Back Office Subsystem

Table Name	Description
Back Office Subsystem	
E-mail Addresses	At both the installation and institution levels, this table allows you to configure who receives the following: • Email notifications for pipe processes • Email inquiries from end users if a Front End failure occurs You can configure a list of email addresses per notification type (Pipe or Front End process) by separating addresses with a semicolon. For example: `Ryan_Hardy@myinst_1.edu;Joe_Carroll@myinst_2.edu` **Note** When defined, these email addresses override the email address defined in the Contact Personal E-Mail parameter (**Primo Home > Advanced Configuration > General Configuration Wizard > E-Mail and SMS Configuration**).

Table Name	Description
Fiction Profile Fields and Subfields[1]	Fiction Profile fields and subfields.
III Millennium RTA Locations	Maps the III Millennium locations to the Primo institution, library, and sub-location. For for more information, see the *Primo Interoperability Guide*.
III Millennium RTA Statuses	Maps the III Millennium statuses to the statuses used in Primo. For for more information, see the *Primo Interoperability Guide*.
LibraryThing Review Files[1]	Defines the review content for LibraryThing. This table contains the following fields: • **Enabled** – select this field to enable the review content. • **FileType** – enter the type of file. The following types of files are supported for review content: ◦ **works_to_isbns** – maps work IDs to ISBNs. ◦ **work_to_reviews** – maps work IDs to reviews. • **FileNamesFormat** – enter the format of the file name to convert. • **Description** – enter a description for the type of content.
LibraryThing Tag Files[1]	Defines the tag content for LibraryThing. This table contains the following fields: • **Enabled** – select this field to enable the tag content. • **FileType** – enter the type of file. The following types of files are supported for tag content: ◦ **works_to_isbns** – maps work IDs to ISBNs. ◦ **work_to_tags** – maps work IDs to tags. ◦ **taginfo** – tags dictionary. • **FileNamesFormat** – enter the format of the file name to convert. • **Description** – enter a description for the type of content.
Mapping Keys[1]	Mapping keys. For every key, the following columns should be defined: • **Mapping key** – the code of the key, such as ISBN. • **Description** – the code of the PNX field, such as addata/isbn.
PNX Extension Sources[1]	Configures the enrichment content sources for all content import. To configure a source or add content, enter the following fields: • **Enabled** – select this field to enable the source content.

Table Name	Description
	• **Source System** – enter the source system, such as Syndetics or LibraryThing. • **Type** – enter the type of content. • **FileNamesFormat** – enter the format of the file name to import. • **Uniqueness Strategy** – enter the update mode. The following values are valid: ◦ **new** – this mode indicates that the import file contains only new records, and that the records will be added to the ENRICHMENT and P_PNX_EXTENSION tables. This mode should be used if a single identifier (such as ISBN) or the PNX may have multiple occurrence of a type of record (such as multiple tags or reviews for the same record). ◦ **update** – this mode indicates that the import file contains new and updated records, and that updated records will be overridden in the ENRICHMENT and P_PNX_EXTENSION tables. This mode can be used only if there is a single type of record per source (for example, there is only one Table of Contents per ISBN from Syndetics). **Note** The system assumes that there is only one record per source, per key type-value, or per PNX. • **Conversion Class** – enter the class name and path of the import program. • **Description** – enter a description for the type of content.
Real-Time Availability[1]	This table defines the configuration information for real-time availability (RTA). This table is used with the mapping_tables mapping method.
Real-Time Availability (using normalization rules)	This table defines the configuration information for real-time availability (RTA). This table is used with the normalization_rules mapping method.
User Groups for Primo Analytics	This table defines the user groups that display in Primo Analytics reports. You can define up to eight user groups. To create a user group for display in Primo Analytics, specify the following fields for each mapping row: • **Enabled** – Indicates whether the row is active. • **User Group Values** – Specify the user group values returned by your authentication system. If you have less than nine user group values to report, you can create a separate mapping row for each user group value. Otherwise, you may need to group some of the values by separating them with a comma. For example: `staff,admin`. • **User Group Name** – The user group name that displays in Primo Analytics reports. If you are mapping a single user group value, you can specify the user group value. Otherwise, you may want to specify a name that identifies the user group values that you are grouping together. • **USER_GROUP** – A name that is used internally to uniquely identify each of the eight groups. Each mapping row must use a different value: **USER_GROUP1** through **USER_GROUP8**. • **Description** – An optional description for the group of user group values.

Table Name	Description
	Note • You must define at least one mapping row to send this data to Primo Analytics for reporting. • A user group value should not be defined in more than one mapping row to prevent mapping issues. The user group value that is sent to Primo Analytics is determined as follows: • If a user has signed in and belongs to a user group, the system will try to map the user's group to a user group defined in the **User Group Values** field. If a match is found, the user group specified in the **User Group Name** field is used. If no match is found, the system-defined **Not Guest** user group is used. • If a user has signed in and does not belong to a user group, the system-defined **Not Guest** user group is used. • If the user has not signed in, the system-defined **Guest** user group is used.

Common Tables Subsystem

Back Office Subsystem

Table Name	Description
General Configuration	This table defines the following general configuration parameters at the installation and institution levels: • **Short Date Format** – Defines the format of short dates when they appear in the Primo Front End And Back Office. The out-of-the-box format is `MM/dd/yy`. These types of dates appear on various pages and may indicate when something was last updated by a user. • **Long Date Format** – Defines the format of long dates when they appear in the Primo Front End And Back Office. The out-of-the-box format is `MM/dd/yy HH:mm:ss`. These types of dates appear mainly in the Back Office and are generally related to information that has been added to a log file by the system.

Delivery Subsystem

For more information on delivery, see *Delivery Functionality and Configuration*.

Delivery Subsystem

Table Name	Description
GetIt! Link 1 Configuration	This table configures the GetIt! 1 links, based on the calculated availability status, delivery category, and data source. For more information, see GetIt! Links.
GetIt! Link 2 Configuration	Configuration of the GetIt! 2 link, based on the calculated availability status, delivery category, and data source.

Table Name	Description
GetIt! Tab 1 Text Configuration	Configuration of the GetIt! Tab1 Label, based on the calculated availability status, delivery category, and data source.
GetIt! Tab 2 Text Configuration	Configuration of the GetIt! Tab2 Label, based on the calculated availability status, delivery category, and data source.
Get It! Text Configuration	Configuration of the GetIt! Text, based on the calculated availability status, delivery category, and data source.

Templates	This table defines the link templates.
	Note
	Because Primo encodes the values for placeholders in the templates that include ampersands, placeholders for templates should be added only to the links fields and the addata/url field in the PNX.
	When defining a template, the following parameters may be used:
	• **userID** – allows you to include the user ID in the template URLs. For example, if you want to include the user ID in the my_library_card code and you are using the following link-to syntax:
	`http://<server_url>?func=user-info&user=<user id>`
	you can use the following template code:
	`{{ils_base}}?func=user-info&user={{userID}}`
	• **language** – allows you to include the language code for the active interface and translate it into a three-letter ISO 639-2/T terminological code, which is derived from the native name for the language. For example, the three-letter code for French is fra, which is based on the native name Francais. For example, if you want to include the ISO 639-2/T language code with the SFX A to Z list, you can use the following template code:
	`{{sfx_base}}/az/?lang={{language}}`
	Note
	You must first implement the SFX 3.0 A to Z List.
	• **language_bibliographic** – allows you to include the language code for the active interface and translate it into a three-letter ISO 639-2/B bibliographic code, which is derived from the English name for the language. For example, the three-letter code for French is fre, which is based on the English name French. For example, if you want to include the ISO 639-2/B language code with the SFX A to Z list, you can use the following template code:
	`{{sfx_base}}/az/?lang={{language_bibliographic}}`
	Note
	You must first implement the SFX 3.0 A to Z List.
	Primo provides the following templates for links to Aleph and Voyager library cards:

Table Name	Description
	• `my_library_card_aleph` • `my_library_card_voyager` If each institution uses a different ILS system, Primo allows you to add templates for each institution, using the following formats: ◦ `my_library_card_`*<institution>* ◦ `my_library_card_`*<ils>*`_`*<institution>* **Note** If Primo does not find a template that has an institution suffix that matches the user's institution, it will use the first enabled `my_library_card` template. When the `svc.fulltext=yes` parameter is added to the following codes, the system forces the SFX menu to display only full-text targets and suppress all other targets: • `openurlfulltext` • `openurlfull_journal` • `openurlfull_article` This allows you to focus specifically on the full-text target links and hide other options, such as ILL requests. **Note** Because bX is not a full-text target, bX recommendations are also suppressed when the `svc.fulltext=yes` parameter is used.
URLs Attributes	This table defines special functions for specific URLs. This table is checked when the GetIt! links are created. To configure a special function, enter the following fields: • **Enabled** – select this field to enable the special function. • **URL prefix** – enter the value of the URL. • **Attribute Name** – enter the name of the attribute (for example, OpenInNewWindow). • **Attribute Value** – enter the value of the attribute. • **Description** – enter a description for the mapping row. For example, if you want to display the holdings information in a new window when the user clicks the Request tab, create the following mapping row: • **Enabled** – select this field. • **URL prefix** – enter your site's URL. • **Attribute Name** – enter **OpenInNewWindow**. • **Attribute Value** – enter **Y**.

Table Name	Description

Using 856 links in Remote Search Records	This feature allows Primo to combine the use of the Alma and SFX link resolvers and 856 links to deliver full text. It can be configured for all or specific databases. Out-of-the-box, availability is first determined by the link resolver (Alma/SFX). If the link resolver returns no full-text, the system checks to see if there is a link in the record itself.
	
	To configure each database, enter the following fields:
	
	• **Database Code** – The database code that MetaLib sends in the SID field subfield b and Primo then adds to the PNX control/sourceid field. It is the MetaLib Z58 code. Enter **ALL** to indicate all databases that are not explicitly listed.
	
	• **MARC Tags** – Indicates which MARC tags to use in order to create PNX links/linktorsrc type links. You can enter a tag with specific indicators or leave the indicator blank to use all value. For example, 856 includes 8564, 85641, and 85642. The system will always take subfield u as the URL.
	
	• **How to Check** – This field contains the following options:
	  ◦ **linktorsrc_only** – This option indicates to the system to check only the linktorsrc fields in the PNX for the specified data source.
	  ◦ **LR_linktorsrc** – This option indicates to the system to check for full text in SFX first and then check for 856 links if SFX does not return full text.
	  ◦ **linktorsrc_LR** – This option indicates to the system to check for 856 links and then check for full text in SFX if no 856 links are found.
	  ◦ **LR_only** – This option indicates to the system to check only for full text in SFX. This option provides backward compatibility with previous releases of Primo.
	
	Note
	Availability for EBSCO records returned from the EBSCO API is also based on this table. For more information, see Configuring EBSCO Availability and Delivery.

Front End Subsystem

Front End Subsystem

Table Name	Description
Actions List	This table allows you to control the order in which actions appear in the Actions drop-down lists in the Front End. This table contains the following fields: • **Enabled** – Indicates whether the action is enabled in the Front End. • **Action name** – The action name. For Send To actions (such as RefWorks), the action name must match an adaptor identifier in the Pushto Adaptors mapping table. • **Order** – Enter a number for each action indicating its position in the Actions drop-down list. The actions are listed in ascending order in the Front End. • **View** – Select a specific view name or default if you want the setting to apply as the default setting for all views. • **Description** – An optional description for the mapping row. **Note** In the e-Shelf only the push-to options enabled in the PushTo Adaptors mapping table appear in the Actions list.

Table Name	Description
bX Token	This table maps the bX authentication token to an institution. For information on bX, refer to the *Primo Interoperability Guide*. **Note** This table is automatically populated after a bX token is assigned to an institution in the Institutions wizard.
Browse Lists	This table configures the following aspects of Browse: • Activate/deactivate browse lists. If one or more browse lists is enabled, the Browse option displays in the Front End. You can define browse lists per institution and view.‘ • Define the default sort used for list of PNX records that are linked to a heading • Define which procedure to use to normalize the call numbers for a browse list. • Define the order of lists that display in the Browse drop-down list in the Front End UI. For more information on this table, refer to the *Primo Technical Guide*.
Bulk Definition	This table configures the parameters that are associated with bulk processing in the Front End. The following parameters are supported: • **Reviews** – Indicates the number of reviews per bulk to display in the Reviews & Tags tab on the full record display. The default value is 10 reviews. The Reviews & Tags tab in the Brief results displays only the two most recent reviews. If there are more than two reviews, the tab displays a **See all** *<number/>* **reviews** link. When the link is invoked, the system displays the full record with up to as many reviews as defined for a bulk. If there are more records than can fit in a single bulk, the page displays a **View more reviews** link, allowing users to view the records in the next bulk. The following codes in the Review Tile code table in the Front End subsystem define how the links display in the Front End: ◦ `default.reviews.seeAllReviews` ◦ `default.reviews.viewMoreReviews` • **OvP - Loans Paging** – Indicates the number of loans per bulk to fetch in My Account. If the ILS’s API supports the paging of loans, Primo will fetch loans in bulks. If the user has more loans than the configured bulk size, Primo will display the **Show More Loans** link at the bottom of the page, which allows the user to fetch an additional bulk. If the user invokes the **Renew** or **Renew All** option before all loans have been fetched from the ILS, Primo will replace the **Show More Loans** link with the **Refresh List** link, which allows the user to display the updated loans list from the ILS. • **OvP - Items Paging** – Indicates the number of items per bulk to fetch for the Brief Results.
Citation Linker Definitions	This table defines which OpenURL fields can be entered per citation type.You may remove fields or change the order of fields. In addition, you can can add fields and tabs using the following format with openURL fields: `rft.<mapping table field>=<value>`

Table Name	Description
Citation Source Types	This table maps Primo resource types to EasyBib source types. If you have created additional resource types in Primo, you can map each of them to an EasyBib source type. The following source types are supported: book, chapter, newspaper, journal, and website. If no mapping is defined, the EasyBib source type defaults to **book**.
CSS	The list of CSS files that are supported by the application.
Export RIS encodings	This table defines the character sets supported by the Export to RIS option. Out of the box, the following character sets are defined and enabled: • UTF-8 (default) • ISO-8859-1 • windows-1251 Additional character sets can also be defined.
Featured Results	This table allows you to configure the display of Featured Results bars in the Front End at the institution level only. For more information, see Featured Results Bar. To change the display labels for Featured Results bars, use the Featured Results Labels code table.
Find Database Full Display	This table configures the fields that display when users click the Show Info link in the Find Databases' tabs (such as the All Databases tab). To configure the fields, enter the following fields: • **Enabled** – select this field to enable the element. • **Element name** – enter the name of the element. • **Enable/display** – enter **Y** to display this element. • **view** – enter a view name or enter **default** to apply this element to all views. • **Description** – enter a description for the element.

Front End Redirect Definitions	This table allows you to define Front End redirection URLs per DNS. The assumption is that multi-institution environments have a different DNS per institution.
	This table contains the following required fields:
	• **DNS** – Specify the DNS. For example:
	`il-primo17.myhost.com`
	• **Redirect URL** – Specify the redirection URL for the DNS. For example:
	`/primo_library/libweb/action/search.do?vid=Auto1`

Table Name	Description
	Note Alternatively, the redirections can be configured in the `re-direct.jsp` file, but the definitions will be overwritten during the installation of service packs.
Hot Articles Token	This table contains the bX Hot Articles tokens that have been assigned to an institution. When an institution is added, the system automatically creates a generic Primo token that is called **primo-generic**. For more information on bX Hot Articles, see bX Hot Articles.
Institution Base URLs	Institutions Base URLs.
Languages	This table defines the language drop-down lists in the Institution and Views wizards and the view in the FE. To modify the label of the language, refer to the Interface Language code table.
MetaLib Institution Configuration	This table allows you to indicate whether MetaLib is sending compressed data in responses to Primo. To indicate to Primo that MetaLib is sending compressed data for an institution, create a mapping row for each Primo institution code and set the **Data is Compressed** field to **Yes**. In order to use this feature, MetaLib must be configured to send compressed data. For more information, see the *MetaLib System Configuration and Administration Guide*.
My Account Links	This table allows you to define up to three links per My Account section. This table can be defined at the installation or institution level. For example, if you want to add a link to My Accounts > Personal Settings, create a new mapping row using the following fields: • **View ID** – Select the view. • **Link Code** – Select one of the following values for personal settings: **personalsettings.link1**, **personalsettings.link2**, or **personalsettings.link3**. • **Order** – Specify the position (**1**, **2**, or **3**) of the link in the title. • **Link URL** – Specify the URL of the page that you want this link to open. To modify the associated labels, see the My Account Links Labels code table in Code Table Reference.
Personalize Your Results Degrees Fields	Manages the Personalize Your Results drop-down field for degrees. For on-premises installations you can define this table at the installation and institution levels. At the institution level, you can define the Degrees drop-down field per view. Once the view has one or more rows, the Front End uses only the rows that are defined for the view. This allows you to remove values from the list more easily, and it also prevents duplicate views if the the lower level inherits a row from a higher level in the code tables.

Table Name	Description
	If you disabled rows via the Personalize Your Results Degrees code table, you will also need to disable them in the mapping table. Otherwise, the code of the degree displays in the Front End.
Personalize Your Results Disciplines Fields	Manages the Personalize Your Results drop-down field for disciplines. For on-premises installations you can define this table at the installation and institution levels. At the institution level, you can define the Disciplines drop-down field per view. Once the view has one or more rows, the Front End uses only the rows that are defined for the view. This allows you to remove values from the list more easily, and it also prevents duplicate views if the the lower level inherits a row from a higher level in the code tables. If you disabled rows via the Personalize Your Results Disciplines code table, you will also need to disable them in the mapping table. Otherwise, the code of the discipline displays in the Front End.
PNX_ EXTENSIONS_ MAPPINGS[1]	Defines the PNX Extensions to PNX tags mapping. To enable tagging in the Front End, enable the row that contains the TAG extension name.
Recommendation Systems	This table configures and enables the recommendation systems per institution. To configure a recommendation system, enter the following fields: • **Enabled** – select this field to enable the recommendation system. • **Recommendation System ID** – enter the name of the recommendation system, such as **bX** or **BIBTIP**. • **Javascript File Name** – enter the URL of the Javascript program that is providing recommendations for BibTip only. • **Description** – enter a description for the recommendation system.

Refworks Fields	Allows you to create RIS fields for PushTo RefWorks. You can map multiple PNX fields to a single RIS format field by separating the entries in the PNX field with a semicolon. The system will attempt to use the first defined field if it exists. If it does not exist in the active record, the system will try the second field, and so forth.
	
	To add a RIS field for PushTo Refworks, populate the following fields:
	
	• **Enabled** – select this field to enable the RIS field.
	• **RIS field** – enter the name of the RIS field.
	• **PNX field** – enter the name of the PNX field to use. The following values are valid:
	  ◦ Display section:
	  type, title, unititle, subject, source, rights, relation, publisher, lds10, lds09, lds08, lds07, lds06, lds05, lds04, lds03, lds02, lds01, language, ispartof, identifier, format, edition, description, creator, coverage, creationdate, contributor, version, availpnx, availlibrary, vertitle
	  ◦ Addata section:
	  author (au), primareytitle (btitle), seconderytitle (addtitle), titleseires (seriestitle), seconderyauthor (addau), primerydate (risdate), notes, abstract, periodicalfull (jtitle), periodicalabbrev (stitle), volume, issue, startpage (spage), otherpages (epage), cop, issn, isbn, oclcid, lccn, eissn, ristype

Table Name	Description
	You can map a RIS format to multiple PNX fields by separating entries with a semicolon. For example: **date; creationdate**. The system will attempt to use the first defined field. If the field exists, it will be used. Otherwise, the system will try the next field in the list, and so forth. • **Description** – enter a description for the RIS field. **Note** The corresponding PNX fields are shown in parentheses if they are different from the input values. For more information on PNX fields, see the *Primo Technical Guide*.
SE 221 Char Conversion[1]	This table allows you to define how decomposed Unicode characters are normalized for indexing and searching. To configure normalization for a set of decomposed characters, populate the following fields: • **Enabled** – select this field to enable the normalization of the decomposed characters. • **From** – List the Unicode values of the decomposed characters separated by a hypen. • **To** – Enter the precomposed Unicode value of the characters entered in the **From** parameter. • **Description** – enter a description for this mapping row. For example, if you want normalize the decomposed Unicode characters A and a diaeresis (¨) to a single character Ä, define a mapping row containing the following entries: • **From**: 0041-0308 • **To**: 00C4 **Note** Changes to this table require you to deploy the Search Engine configuration, clear the search indexes, and then re-index.
SE Char Conversion[1]	This table is used to convert a range of Unicode characters to another character during indexing. For more information about using the SE Char Conversion mapping table, see the *Primo Technical Guide*.
SMS Provider Configuration	SMS Provider Configuration. Add institutions to the `SmsProxyConfig.xml` file, which is located in the following directory: `/exlibris/primo/p<r>_<x>/ng/primo/home/system/search/conf` When this table is deployed, the definitions in the `SmsProxyConf.xml` file located on the server are updated. For more information about configuring the SMS provider, see the Configuring the SMS Proxy section in the *Primo Technical Guide*.
Snippet Display Preferences	Defines the settings for snippets if the **Show snippet if query terms are not found in fields** parameter is selected in the Brief Results tile in the Views wizard. For more information, see Snippet Display Options. If this option is enabled and the search term is not found in the abstract, toc, or fulltext fields, the system displays the first 160 characters of the highest priority field, as defined by this table.

Table Name	Description
	To configure snippets per view and type, specify the following fields: • **Enabled** – select this field to enable the configuration. • **View** – select the name of the view. If you select **default**, the settings apply to all views. • **Type** – select the type of resource for which to display snippets. • **Priority** – select the priority given to a field. The valid values are **1** through **3**. Note that you cannot assign the same priority to the same type and view. If the field is not available or does not contain 145 to 160 characters, priority is given to the field with the next highest priority. • **PNX field** – select the field from which to display the snippet. The valid values are **abstract**, **fulltext**, and **toc**. Note that you can assign a field only once per view and type. • **Description** – enter a description for the snippet configuration. **Note** In order to display snippets in the results, PNX records that have snippets must contain the search/rsrctype field, which is populated by the out-of-the-box templates.
Snippets Extensions Mapper[1]	Defines the fields for which you can display snippets. Currently, only the TOC, Abstract, and FULLTEXT fields can be defined. For more information on snippets, see Snippet Display Preferences.
Sort Fields Config[1]	This table configures the fields that can appear in Sorted By drop-down list on the Brief Results page. To configure a sort field, update the following fields: • **Enabled** – select this field to enable this sort field in the Back Office user interface. • **direction** – enter the direction of the sort. The valid values are **ASC** (ascending) and **DESC** (descending). • **code** – this is a view-only field that defines the code for the sort field. • **Index Field** – this is a view-only field, which is used for indexing. • **Description** – enter a description for the sort field. **After you have configured the sort field:** 1. Modify the display value for the sort field in the Sort Values code table. For example, if you added **lso01**, update the Description field for the following code: `default.results.sortby.option.lso01` 2. Deploy the mapping and code tables. 3. Add the sort field to Brief Results tile in the Views wizard. 4. Deploy the view. Out of the box, the following sort configurations are defined: • **popularity** - a descending order sort based on popularity. • **title** - an ascending sort based on the title.

Table Name	Description
	• **date** - a descending sort based on the date. • **date2** - a virtual field that sorts by date in ascending order. • **author** - an ascending sort based on the author.
User Login Links	For the new UI, this table allows you to define up to four links that display on the Primo Sign-In page. If only a single link is defined, the link will appear without clicking **Need help** on the Primo Sign-In page.
WS and XS IP[1]	IP restriction for Web Services and X-Services. Primo's Web services and X-Services are IP authenticated. Only requests coming from IPs listed in the WS and XS IP mapping table are processed. Previously, every request performed a query against the WS and XS IP mapping table. In order to improve performance, the IP list is loaded into memory and no query is done in real time. Because of this, any change to the WS and XS IP mapping table requires the table to be deployed. Note that you can also use the **All Client IP Ranges (WS and XS IP mapping table)** option on the Deploy All page. For more information, see Deploy All Configuration Settings.

Normalization Subsystem

Normalization Subsystem

Table Name	Description
Alma Institution Codes[1]	Maps the Alma institution codes to their associated Primo institution codes. This is a read-only table.
FMT	Used to map MARC21 leader positions 6 and 7 to the format.
Format_mean	Used to define the resource type filter in the Facets section.
Genre	Used to define the Genre in the Additional data section.
ILS Institution Codes[1]	Used by the Normalization process to map the institution codes from the ILS to the codes used in Primo. This is a read-only table.
ILS Library Codes[1]	Used by the Normalization process to map the library codes from the ILS to the codes used in Primo. This is a read-only table.

Table Name	Description
MetaLib Institution Codes[1]	Used by the Normalization process to map the institution codes from MetaLib to the codes used in Primo. This is a read-only table.
pre_filter	Used to define the prefilter facet in the Facets section.
RIStype	Used to define the RIStype in the Additional data section.

Plugins Subsystem

Plugins Subsystem

Table Name	Description
Deep-Search Plugins	Registers each deep search plugin with the system. To register a plugin, enter the following fields: • **Enabled** – select this field to enable this plugin. • **Plugin ID** – enter the name of the plugin to which to assign parameters using the Plugins Parameters mapping table. • **Plugin Class** – enter the full class name of the plugin. • **Plugin Display Name** – specify the name that displays in the Views Wizard. • **Description** – enter a description for the plugin. To use an RTA plugin, you must configure the base URL of the RTA system on the Institutions page. For more information, see the following page in the Ex Libris Developer Network: https://developers.exlibrisgroup.com/primo/integrations/search/deepsearch For additional information on EBSCO adaptors, see Configuring the EBSCO Plug-In.
Deep Search Plugin Parameters	Defines the parameters used by the deep search plugins. For more information, see the following page in the Ex Libris Developer Network: https://developers.exlibrisgroup.com/primo/integrations/search/deepsearch • **Param Name** – enter the name of the parameter to be passed to the plugin. For PrimoThirdNode plugins, you must specify the **host** and **port** of the Primo Front End server. • **Param Value** – enter the value of the parameter if encryption is not needed. • **Param Value - Encrypted** – enter the value of the parameter if encryption is needed. Use this field to encrypt sensitive information (such as keys and passwords). • **Plugin** – enter the name of the plugin (defined with the Deep-Search Plugins mapping table) to be passed this parameter. • **Description** – enter a description for the parameter.

Table Name	Description
Plugins[1]	Registers each plugin with the system. To register a plugin, enter the following fields: • **Enabled** – select this field to enable this plugin. • **Name** – enter the name of the plugin to which to assign parameters using the Plugins Parameters mapping table. • **Class** – enter the full class name of the plugin. • **Type** – select the type of plugin to register. The valid values are **Enrichment** and **RTA**. • **Description** – enter a description for the plugin. To use an RTA plugin, you must configure the base URL of the RTA system on the Institutions page.
Plugins Parameters	Defines the parameters used by the plugins. • **Param Name** – enter the name of the parameter to be passed to the plugin. • **Param Value** – enter the value of the parameter. • **Plugin** – enter the name of the plugin (defined with the Plugins mapping table) to be passed this parameter. • **Description** – enter a description for the parameter. With the exception of customer-defined plugins and the PicaRTAPlugin and RTAPluginSymphony plugins, the parameters should not be modified. For more information on the new RTA plugin mechanism, refer to the following page on EL Commons: https://developers.exlibrisgroup.com...s/frontend/rta

Publishing Subsystem

Publishing Subsystem

Table Name	Description
Datasource Index Extensions	This table notifies the system which data source extensions require indexing. This table contains the following fields: • **Data Source Name** – Select the data source that is using the file splitter that adds the extensions. • **Type** – The following values are valid: • **Index All** – Use this option if all records parsed by this file splitter will be added with the extensions. • **Index If Exists** – Use this option if only a partial set of the parsed records will be added with the extensions. **Note** If you do not configure the data source in this mapping table, the system will load the extensions into the database, but it will not index them, making them unsearchable.
File Splitters	This mapping table defines the file splitter plug-ins that are supported and enabled in Primo. This mapping table contains the following fields:

Table Name	Description
	• **Name** – Defines the name of the file splitter that opens the in the File Splitter drop-down list on the Data Sources page on the Back Office user interface. • **Splitter class** – This field specifies the fully-qualified name of the class that implements the file splitter plug-in. If you want to create your own XML or HTML file splitter, use the following classes, respectively: ◦ `com.exlibris.primo.publish.platform.harvest.splitters.generic.DomXmlSplitter` ◦ `com.exlibris.primo.publish.platform.harvest.splitters.html.HTMLFileSplitter` For more information on using generic file splitters, refer to the following page in the Developers Network: https://developers.exlibrisgroup.com...o/filesplitter • **Description** – This field contains the description for the plug-in. • **Enabled** – If selected, this field enables the file splitter in the File Splitter drop-down list on the Data Sources page in the Back Office.
File Splitters Params	This mapping table defines the parameters that are passed to each file splitter plug-in. It allows you to create generic file splitters that support different structures. This mapping table contains the following fields: • **Param Name/ParamValue** – Contains a key/value that is passed to the file splitter, where the key is used to retrieve the value. • **File Splitter Name** – Select the file splitter to which to pass the parameters. • **Enabled** – If selected, this field enables the file splitter parameter to be passed to the plug-in. By default, the OAI file splitter parses the record ID defined in the **IdentifierXpath** parameter and uses only the characters after the colon. For example, if the **IdentifierXpath** parameter contains **oai:digi-tool.com:233566**, the splitter uses **233566** only. If you want to prevent this split, add the **SplitRecordId** parameter to this mapping table and set its value to **false**.
	For MARC Exchange data sources, you can define which MARC tag to use as the source for the original record ID. This is necessary when the original record ID is not stored in 001, which is the default. The MARC Exchange file splitter, which is a program Primo uses to split MARC Exchange source files for normalization, checks the MarcExchangeIdField parameter to determine which tag to use. For more information on file splitters, refer to the Primo Version 3.0 Highlights document. To specify a different source for the original record ID: 1. Edit the File Splitters Params mapping table on the Advanced Configuration > All Mapping Tables > Publishing subsystem page. 2. In the Create a New Mapping Row section, enter the following fields: ◦ **Param Name** – Enter **MarcExchangeIdField**. ◦ **Param Value** – Enter the tag to use. You can use either a control field or a data field. For data fields, specify the indicators (or use a hash sign to indicate any indicator) and the subfield. Here are some examples: ▪ **002** (uses tag 002) ▪ **907 ## a** (uses tag 907, any indicators, and subfield a) ▪ **907 10 a** (uses tag 907, indicators 10, and subfield a) ◦ **File Splitter name** – Select **MARC Exchange splitter** from the drop-down list.

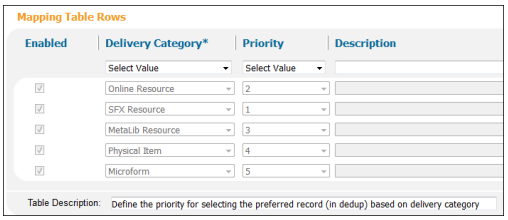
Table Name	Description
	◦ **Description** – Enter a free text description. 3. Click **Create** to add the new mapping row to the table.
Popularity Sort Boosts[1]	Used to define the multiplier for the popularity rank of the following clicks in the Front End: • **e-Shelf** – default is 15. • **Full display** – default is 5. • **GetIt!** – default is 10. **Note** The number of clicks is counted across all scopes and applies to local records only. The count is stored in P_PNX_EXTENSIONS and indexed so that the SE can sort by the information.
Preferred Record-Delivery Category Priority	This table allows you to set the priority for each type of delivery category to determine the preferred record in a Dedup group.  **Note** Any changes to this table require you to run an update pipe (no harvesting) using the Force DEDUP option.
Source Format	The source format not only contains information about the format, but it also defines the physical format of the harvested records, which the publishing platform uses to process records differently. Currently, there are five possible physical formats that are identified by numeric codes. Four of these formats are XML, which differ to a certain extent. If you add a new source format, it is important to define the correct physical format. Note that physical formats cannot be added. The following physical formats are valid: • **Digital Entity** – this format is intended for the record format exported by DigiTool. In the existing list, the source format digital entity uses this format. The code for this format is 1. The digital entity is a separate format because DigiTool sends the metadata in a CDATA field. This data is parsed by the pipe. • **MARC XML** – this format is intended for the MARC XML format (http://www.loc.gov/standards/marcxml/). In the existing list, the source formats MARC21, MAB, DANMARC2 and UNIMARC use this format. The code for this format is 0. MARC XML has been defined as a separate format because the tags and subfields are attributes, which Primo parses differently in preparation for the normalization rules.

Table Name	Description
	• **XML** – this format is intended for standard XML. In the existing list, the source formats DC (Dublin Core) and XML (intended for any XML format) use this format. The code for this format is 2. • **MetaLib** – this format is intended for the record format exported by MetaLib (the IRD). In the existing list, the MetaLib source format uses this format. The code for this format is 3. MetaLib requires a separate format because most of the records are MARC XML, but there are also some non-MARC XML fields. • **MARC exchange** – this physical format is for records in MARC Exchange (ISO 2709). In the existing list the source format Marc exchange is defined to use this format. The code for this format is 5. For every source format, the following fields should be defined: • **Code** – this is the code of the source format. • **Description** – this is the physical format as described above. The valid values are 0, 1, 2, 3, and 5. • **Description 2** – this is a free text description of the format for informational purposes.

Static Facets Subsystem

Static Facets Subsystem

Table Name	Description
Static Facets[1]	Defines the static facets.
facet_fsize_values[1]	Defines the facet file size values.
facet_lang_values[1]	Defines the facet language values.
facet_pfilter_values[1]	Defines the facet pre-filter values. Populates the Basic Media Type code table and the media types on the Basic Search tile in the Views wizard.
facet_tlevel_values[1]	Defines the top-level facet values. By default, the **Available** and **Online Resources** top-level facets have been defined as static facets to ensure that they display when they are not in the top hits.
facet_rtype_values[1]	Defines the facet resource type values.

Adaptors Subsystem

Adaptors Subsystem

Table Name	Description
ILS Gateway Adaptors[1]	This mapping table configures the OPAC via Primo adaptors that are used for each type of ILS gateway. For more information, see the *Primo Interoperability Guide*.

PushTo Adaptors[1]	Allows hosted and local Primo customers to configure PushTo plug-in adaptors at the installation level.
	
	To configure an adaptor, populate the following fields:
	
	• **Enabled** – Indicates whether the adaptor name should display in the **Actions** drop-down list in the Front End results and e-Shelf.
	• **Adaptor Identifier** – Enter the name of the adaptor <*x*>, which serves as the link to the code defined in the Keeping this item code table:
	  ◦ `default.fulldisplay.command.pushto.option.eshelf.`<*x*>
	  ◦ `default.fulldisplay.command.pushto.option.`<*x*>
	• **Key** – For each adaptor, enter the following keys as needed:
	  ◦ **Class** – Enter the name of the plug-in, including the package.
	  ◦ **URL** – Enter the link.
	  ◦ **Value** – For each key, enter its value.
	
	Note
	Currently, new PushTo adaptors can be added to the classic UI only.

PushTo Adaptors Configuration	This table allows you to override the default URL used for RefWorks. To use a different URL for RefWorks, update the following fields: • **Adaptor Identifier** – Enter the Adaptor Identifier defined for RefWorks in the Pushto Adaptors mapping table. • **Key** – Enter **base url**. • **Value** – Enter the URL used for RefWorks in your region. The default is `http://www.refworks.com`. **Note** • This mapping table can be defined at the installation and institution levels. • Changes to this table require you to deploy the changes either from the Pushto Adaptors Configuration mapping table or from the Deploy All page using the **Adaptors Mapping Tables** option.
RTA Adaptors[1]	Configures RTA plug-in adaptors.

ILS Gateway Subsystem

ILS Gateway Subsystem: (For more information, see the *Primo Interoperability Guide*.)

ILS Gateway Subsystem

Table Name	Description
ILS Adaptors Templates[1]	This mapping table configures the templates that are used in ILS requests and responses for OPAC via Primo. To ensure that Voyager sends all items for each location, you must disable ID **73001, enable IDs 73001a and 73001b,** and then deploy this mapping table. This allows Primo to send separate requests for holdings and items to Voyager.
ILS Templates Parameters[1]	This mapping table configures the parameters that are used in ILS requests and responses for OPAC via Primo.
ILSG Configuration[1]	This mapping table defines the general configuration settings for the ILS gateway:

OPAC Via Primo Subsystem

OPAC Via Primo Subsystem: (For more information, see the *Primo Interoperability Guide*.)

OPAC Via Primo Subsystem

Table Name	Description
Acquisition Request Detailed Display	This table configures the display mappings for acquisition requests. **Note** To prevent duplication of information in the new UI, do not include fields that already display in the brief display of the item.
Call Slip Request Detailed Display	This table configures the display mappings for call slip requests. **Note** To prevent duplication of information in the new UI, do not include fields that already display in the brief display of the item.
CallSlip Optional Request Parameters	This table configures the display settings for optional call slip request parameters.

Table Name	Description
Fines Brief Display	(New UI only) This table defines which fields display in the brief display of an item in the My Library Card > Fines tab. The first row of the brief display contains the most important information and is not configurable. The second row, which is configurable, al per field and the delimiter that separates them. The Library card Labels code table defines the labels for the brief display. Out of the box, only the fields that require text have been define
Fines Detailed Display	This table configures the display mappings for the fines and fees list. **Note** To prevent duplication of information in the new UI, do not include fields that already display in the brief display of the item.
Hold Optional Request Parameters	This table configures the display settings for optional hold request parameters.
Holdings Record Configuration	This table configures the display mappings for holding records.
Hold/Recall Request Detailed Display	This table configures the display mappings for hold and recall requests. **Note** To prevent duplication of information in the new UI, do not include fields that already display in the brief display of the item.
ILL Request Detailed Display	This table configures the display mappings for ILL requests. **Note** To prevent duplication of information in the new UI, do not include fields that already display in the brief display of the item.
ILL Optional Request Parameters	This table configures the display settings for optional ILL request parameters.

Table Name	Description
ILS API Configuration	This table maps the ILS gateway adaptor to base URLs. For more information, see the *Primo Interoperability Guide*. For OPAC via Primo customers, the **Match for holdings filter** column defines which subfields from the Library Availability field in the PNX holdings and items sent by the ILS. The following options are available: • **MainLocation** – Used for Aleph to match on the owning library and location. • **MainLocation,SecondaryLocation** – Used for Aleph V.20 (SP4) and later releases to match on the owning library, location, and coll • **MainLocation,CallNumber** – Used for Voyager to match on the owning library, location, and call number.
Items Brief Display	(New UI only) This table defines which fields appear in the brief display of an item on the Full Display page. You can define up to three pa displays between them.
Library card alerts	(New UI only) This table allows you to configure the alerts next to the various tabs (such as Loans) in My Library Card. For loans, you can loan is due to display the alert. This alert indicates that a loan is due soon or is overdue. **Note** If you want display the loans with the alert at the top of the list, you will need to configure the ILS to retrieve the list by due-date
Loans Brief Display	(New UI only) This table defines which fields display in the brief display of an item in the My Library Card > Loans tab. The first row of the brief display contains the most important information and is not configurable. The second row, which is configurable, a per field and the delimiter that separates them. The Library card Labels code table defines the labels for the brief display. Out of the box, only the fields that require text have been define
Loans Detailed Display	This table configures the display mappings for the loans list. **Note** To prevent duplication of information in the new UI, do not include fields that already display in the brief display of the item.
Loans List Configuration	This table defines which fields display in the My Account > Loans tab. For the active list, use the `loans.brief.active.column2` throu values in the **Column** column to configure the order of the fields. For the historical list, use the `loans.brief.history.column2` throu values in the **Column** column to configure the order of the fields.
Location Item content	This table configures the columns that display in the list of items on the Locations tab. Column names that cannot be found will be ignored
My Account Menu	For the classic UI, this table defines which tabs appear in My Account and the order in which they appear. The order of the tabs is determi **myaccount5** (bottom) values in the **My Account function** column.

Table Name	Description
Configuration - OvP	For the new UI, this table configures only the existence of the tabs in My Library Card and does not configure the order of the tabs. You m Overview tab always appears and cannot be hidden.
OvP Funtionality	Enables miscellaneous functionality for OvP configurations. For more information, refer to the *Primo Interoperability Guide*.
Personal Setting Fields	This table configures the display mappings for personal settings.
Photocopy Optional Request Parameters	This table defines the optional mapping fields for photocopy requests.
Photocopy Request Detailed Display	This table configures the display mappings for photocopy requests. **Note** To prevent duplication of information in the new UI, do not include fields that already display in the brief display of the item.
Recall Optional Request Parameters	This table configures the display settings for optional recall request parameters.
Requests Brief Display	(New UI only) This table defines which fields display in the brief display of an item in the My Library Card > Requests tab. The first row of the brief display contains the most important information and is not configurable. The second row, which is configurable, a per field and the delimiter that separates them. The Library card Labels code table defines the labels for the brief display. Out of the box, only the fields that require text have been define
Requests List Configuration	This table defines which fields display in the My Account > Requests tab. The order of the fields is determined by the `request.brief.c` `request.brief.column7` (last) values in the **Column** column.
Short Loan Display	This table configures the display mappings for short loan requests.

Table Name	Description
Short Loan and Booking Request Detailed Display	This table configures the display mappings for the short loan and booking requests. **Note** To prevent duplication of information in the new UI, do not include fields that already display in the brief display of the item.
Templates for Link to ILS Requests	Defines the link templates for Aleph requests.
UB Request Optional Request Parameters	This table configures the display settings for optional UB request parameters.

[1]Read only for cloud installations.

Code Tables

This section includes:

All Code Tables Page

Return to menu

Code tables are used to generate multilingual display texts instead of codes. Although many of the code tables that are used in the system can be managed by using a specific wizard, you can manage all of the code tables with the All Code Tables page.

For a full list of the system's code tables, refer to Code Tables.

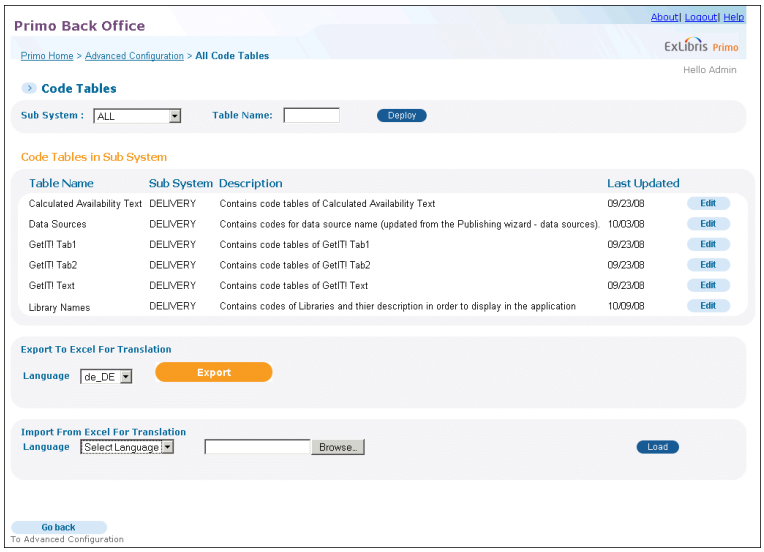
To access the All Code Tables page:

1. On the Back Office's home page, click **Advanced Configuration**.

   The Advanced Configuration page opens.

2. Click **All Code Tables**.

   The All Code Tables page opens.



Code Tables Page

Code Table Configuration Restrictions

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Most code tables can be configured at the institution level. In some cases, it is necessary to configure code tables or rows at specific levels. If you want to create separate definitions per view, it is recommended that you create them only for the institution to which the view belongs. For more information on configuration levels, see Primo Configuration Levels.

Note

The Character set code table in the Publishing subsystem must be configured at the installation level and cannot be configured per institution.

Code Table Inheritance Levels

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As mentioned previously, you can configure many of the code tables for a specific institution. However, it is possible to share codes from the installation level via inheritance. This means that if an institution has not configured specific codes, the system will use the codes defined at the installation level or OTB level.

Depending on the code table, inheritance is provided at the following levels:

- **Row** – Indicates that only rows added or modified by the institution are specific to that institution, and all other rows are inherited from a higher level (such as the installation or OTB levels). All code tables in the Front End, Delivery, and OPAC via Primo subsystems are of this type.
- **Table** – Indicates that the entire table (when configured at the institution level) applies to the specific institution, and no rows are inherited from a higher level. All code tables that are not in the Front End, Delivery, and OPAC via Primo subsystems are of this type.

Searching Code Tables

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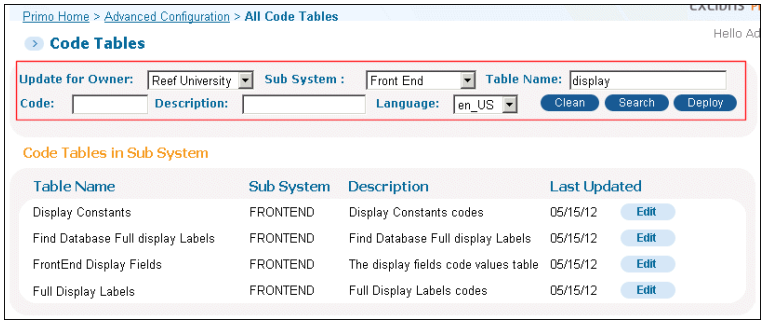
Searching allows users to reduce the number of code tables/rows to display or to find a specific code. To search the code tables, specify a value in one or more of the following columns and then click **Search**:

- **Update for Owner** – For installation-level staff users, select the installation name or a specific institution from the drop-down list. The valid values are **Installation** (if using the default name) or a specific institution.

  For institution-level staff users, this field is set to your institution.

- **Sub System** – select a subsystem from the drop-down list.
- **Table Name** – type a search string.
- **Code** – type a search string.
- **Description** – type a search string.
- **Language** – select a language from the drop-down list.



Searching Code Tables

To start a new search, click **Clean**. For more information on finding and changing labels in the Front End, see Updating Display Labels.

Filtering Code Tables

Return to menu

Filtering allows you to narrow the number of code table rows to view. You can use the following methods to narrow your search:

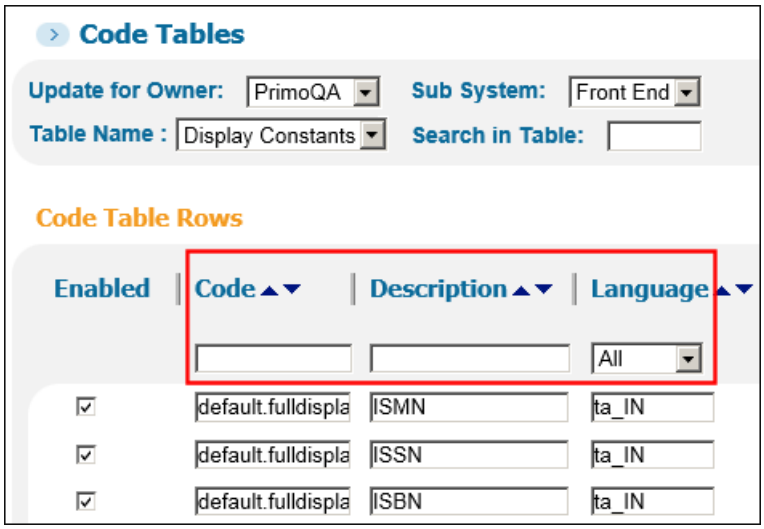
- Column-Specific Filtering
- Search in Table Filtering

Column-Specific Filtering

To filter a code table, type a search term in one or more of the following columns and then type enter to execute the search (see the following figure):

- **Code** – type a search string.
- **Description** – type a search string.
- **Language** – select a language from the drop-down list.

This method executes a search and displays the resulting table rows.



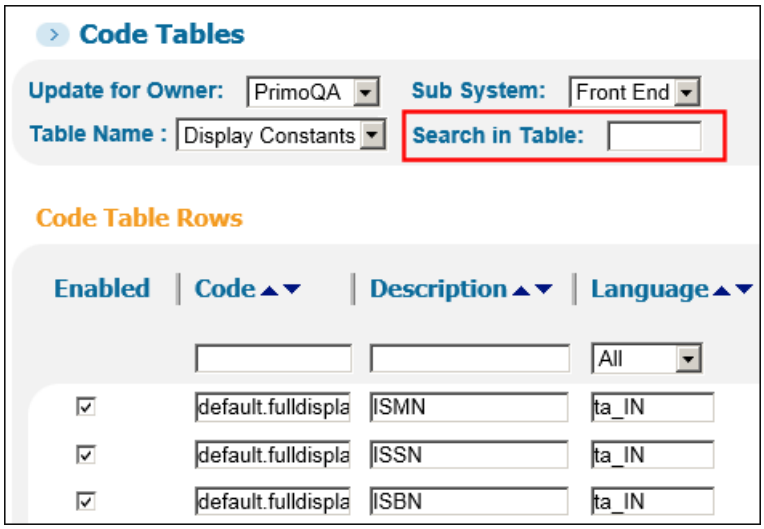
Column-Specific Filtering

Search in Table Filtering

This filter is applied across all columns in the table as you type characters in the **Search in Table** field. Unlike the column-specific filter, no actual query is executed. The filter simply hides the rows that were not filtered by any column-specific searches.

Note

While using the this type of filtering, you will be blocked from performing any further column-specific searches until you clear the Search in Table field.

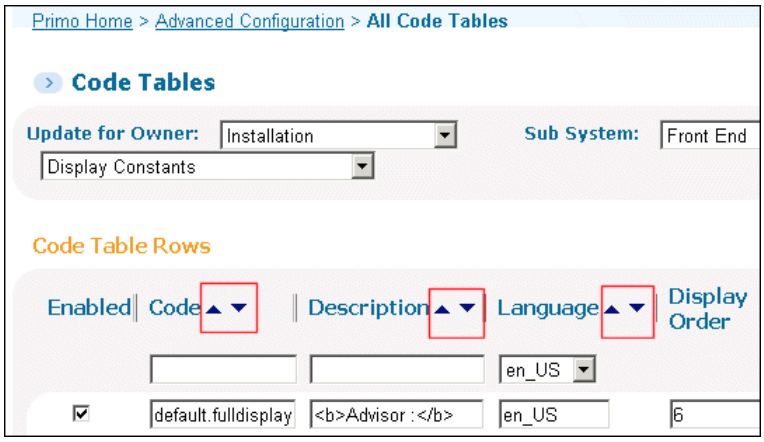


Search in Table Filtering

Sorting Code Tables

Return to menu

Sorting allows users to alphabetically sort code table rows in ascending or descending order (see the following figure). Users can sort code tables using the following columns: **Code**, **Description**, and **Language**.



Sorting Code Tables

To sort a code table, click the up arrow

for ascending sorts and the down arrow

for descending sorts.

Importing Code Tables for Translation

Return to menu

Primo allows users to use an Excel file to import language-specific information from a code table.

To import code tables for translation:

1. On the Back Office's home page, click **Advanced Configuration**.

   The Advanced Configuration page opens.

2. Click **All Code Tables** to display the Code Tables page.

3. In the Import from Excel for Translation section, select a language and locale to import in the **Language** drop-down list.

4. Click **Browse** to locate the Excel file to import.

5. Click **Load** to import the code tables.

Exporting Code Tables for Translation

Return to menu

Primo allows users to export language-specific information from a code table to an Excel file.

To export code tables for translation:

1. On the Back Office's home page, click **Advanced Configuration**.

   The Advanced Configuration page opens.

2. Click **All Code Tables** to display the Code Tables page.
3. In the Export to Excel for Translation section, select a language and locale to export in the **Language** drop-down list.
4. Click **Export** to export the code tables to an Excel file.
5. Save the Excel file.

Editing Code Tables

Return to menu

Ex Libris maintains an out-of-the-box version of most code tables, which cannot be edited by customers. Depending on the code table, you can customize it at either the table or row level for your institution. Primo will use the lowest configured codes that are available to an institution. For more information, see Code Table Inheritance Levels.

For on-premises installations, a copy of the tables can be customized at the installation level, and many of those tables can also be customized at the institution level. Although, if they are customized at the institution level, they cannot be shared with other institutions in your installation.

If you attempt to edit a table or row that has not been configured at the institution level or a specified higher level, the system will display the code table rows from the next higher configuration level. In order to edit a table at a lower configuration level, you will need to click the **Customize** button that displays either above the code table rows (table inheritance) or in the code table row (row inheritance). After clicking the button, the system will replace it with following buttons:

- **Reset** –
  - For code tables that use table inheritance, this button resets all code table rows to the values provided in the next higher version of the table.
  - For code tables that use row inheritance, this button resets the code table row to the value provided in the next higher version of the row.
- **Delete** –
  - For code tables that use table inheritance, this button resets all code table rows to the values provided in the next higher version of the table and removes the version of the table at the current configuration level.
  - For code tables that use row inheritance, this button resets the code table row to the value provided in the next higher version of the row and then removes the version of the row at the current configuration level.
  - For both inheritance levels, the **Customize** button will return.

Note

If a table cannot be edited at a configuration level, all of the code table rows will be disabled and none of the above buttons will display on the page. In addition, the system will display the **View** button instead of the **Edit** button next to the code table in the list on the All Code Tables page.

To edit a code table:

1. On the All Code Tables page, click **Edit** next to the code table that you want to update.

   The requested code table opens.

2. For installation-level staff users, select the installation name or a specific institution from the Update for Owner drop-down list. The valid values are Installation (if using the default name) or a specific institution.

Note

For institution-level staff users, this field is set to your institution.

3. For code tables that use table inheritance, you will need to click **Customize**, to allow the table to be modified.
4. In the Code Table Rows section, you can edit each of the code table rows according to the following table:

Edit Code Table Row Details

Field name	Description
Code	The code being translated.
Description	The translation of the code.
Language	The interface language for the code table row.
Display Order	The order in which the value (Description) displays in Back Office drop-down lists. If rows are assigned the same value, the items will appear as they are listed in the table.
Default Value	Whether this is the default value among the code table rows.

Note

For tables that use row inheritance, you will need to click **Customize** to allow the row to be modified.

In addition, you can also perform any of the following actions on code table rows:

- Adding Code Table Rows
- Duplicating Code Table Rows
- Deleting Code Table Rows

5. Click **Save & Continue** to return to the list of code tables on the All Code Tables page.

Adding Code Table Rows

To create a new Code table row:

1. In the Create a New Code Table Row section, enter the fields that are described in Edit Code Table Row Details as needed.

Note

Make sure that you have selected the correct configuration level in the **Update for Owner** drop-down list.

2. Click **Create**.

   The new code table row is added to the list of code table rows in Code Table Rows section.

3. Repeat steps 1 and 2 for each additional row.

4. Click **Save & Continue** to return to the list of code tables on the All Code Tables page.

Duplicating Code Table Rows

For code tables that provide row inheritance, you can quickly copy existing rows in your code table.

To duplicate a code table row:

1. In the Code Table Rows section, click **Duplicate** next to the row that you want to copy.

   Note

   Make sure that you have selected the correct configuration level in the **Update for Owner** drop-down list.

   The information for this row opens in the Create a New Code Table Row section.

2. In the Create a New Code Table Row section, enter the fields that are described in Edit Code Table Row Details as needed.

3. Click **Create** to add the new row.

4. Repeat steps 1 through 3 for each duplicated row.

5. Click **Save & Continue** to return to the list of code tables on the All Code Tables page.

Deleting Code Table Rows

To delete a row:

1. In the Code Table Rows section, click **Delete** next to the code table row that you no longer need at this configuration level.

   Note

   Make sure that you have selected the correct configuration level in the **Update for Owner** drop-down list.

   For table inheritance, the code table row is removed from the list of code table rows in Code Table Rows section. For row inheritance, the system will use the code table row configured at the next higher configuration level.

2. Repeat step 1 for each additional row.

3. Click **Save & Continue** to return to the list of code tables on the All Code Tables page.

Code Table Reference

Return to menu

This section lists the code tables provided with Primo. For more information on finding and changing labels in the Front End, see Editing Code Tables and Updating Display Labels. The entries in the table below are grouped by the following subsystems:

- Back Office Subsystem
- Delivery Subsystem
- Front End Subsystem
- OPAC Via Primo Subsystem
- Publishing Subsystem

Back Office Subsystem

Back Office Subsystem

Table Name	Description
User Group	Defines the institution's user groups. Multiple translations can be separated by a comma.

Delivery Subsystem

For more information on delivery, see Delivery Functionality and Configuration.

Delivery Subsystem

Table Name	Description
Calculated Availability Text	Text of the Calculated Availability statuses Text. The following placeholders can be added to the Calculated Availability statuses text. Both are intended for physical items (Physical Items and Microforms): • **{0}** – display the name of the user's institution. This can be used in the following status: `default.delivery.code.available_in_my_institution` • **{1}** – display a location (the most relevant one per the calculated availability status. This can be used in all statuses for physical items. This placeholder is added by default, but it can be removed.
Collection Names	Defines translations for collection names that display in various sections of the Front End (such as the availability line in the brief results section, Locations tab, and so forth). Collection codes are assumed to be unique within an institution To make use of the translations defind in this table, you must include the $$1 code in the display/availibrary PNX field.

Table Name	Description
Data Sources	Contains the codes for the data source names (updated in the Publishing wizard - data sources).
GetIt! Sign-in Text	Defines the text used for GetIt! sign in.
Get It! Tab1	Text of the Get It! Tab1.
Get It! Tab2	Text of the Get It! Tab2.
Get It! Text	Text of the Get It! link.
Institution Light box labels code table	Defines the display labels used in the Institution lightbox for Alma consortia. • **Available** – default.institutions.lighbox.available • **Checked out** – default.institutions.lighbox.unavailable • **Check library holdings** – default.institutions.lighbox.checkholdings • **Institutions** – default.institutions.lighbox.header • **My Institution** – default.institutions.lighbox.myinstitution • **Other Institutions** – default.institutions.lighbox.otherinsituttion
Institution Names	Defines the codes of the institutions and their labels in order to display in the Front End for Alma consortia. This table is created and updated automatically by the Institution Wizard and includes the institution code and name for the en_US interface language. If necessary, names can be added manually for other interface languages via this code table.
Library Names	Contains codes of the libraries and their description in order to display in the application.

Front End Subsystem

Front End Subsystem

Table Name	Description	
A to Z list	Defines labels used for the A to Z List.	
Advanced Index Fields	The search field's advanced code values table.	

Table Name	Description	
Advanced Media Type	Advanced search media types.	
Advanced Precision Operator	Defines the labels used for the operators on the Advanced Search page. The following codes define the labels for the boolean operator drop-down lists that combine search terms to filter results: • `default.search-advanced.boolOperator.option.AND`: AND • `default.search-advanced.boolOperator.option.OR:` OR • `default.search-advanced.boolOperator.option.NOT`: NOT **Note** Advanced searches using the NOT and OR operators are not supported in remote searches (MetaLib). For information on how to hide the boolean operator drop-down lists, see the *Primo Technical Guide*.	
Basic Index Fields	The search field's simple code values table.	
Basic Media Type	Simple search media types.	
Basic Precision Operator	Simple search precision operator.	
Blocks and Messages List Labels	This table defines the labels for patron blocks and messages (Aleph only).	
Boolean Operators	This table defines the translations for the Boolean search operators (**AND**, **OR**, and **NOT**) per language.	
Browse Lists Labels	This table defines the labels (such as **By Subject** and **By title**) that display in the browse lists drop-down list on the Browse Search page in the Front End UI. **Note** These labels only display if the associated browse list is enabled in the Browse Lists mapping table.	

Table Name	Description	
Browse Labels	This table defines all other labels used for Browse functionality. For more information about this table, refer to the *Primo Technical Guide*.	
Citation Linker Labels	Defines the labels that display in the Citation Linker lightbox.	

Citation Tab Labels	This table defines the labels used for each publisher's links (WoS and Scopus) in the Times Cited tab in the Front End:
	• `default.citationsTab.pc_citation_wos_label`:
	`WEB OF SCIENCE`
	• `default.citationsTab.pc_citation_scopus_label`:
	`SciVerse Scopus`
	• `default.citationsTab.viewthisRecord`:
	`View this record in -`
	• `default.citationsTab.viewCitations`:
	`View Citation ({0}})`	

Collection Discovery	Defines the labels that display on the Collection Discovery page. • `The first node in the collection path and in the full display of an item:` default.colldiscovery.collpath.topnode > Collections • `The View Collection link on top-level collection page of the Collections Lobby:` default.colldiscovery.viewcoll.toplevel > View collection • `The View Collection link on a subcollection page of the Collections Lobby:` default.colldiscovery.viewcoll.sub > View collection • `The View Items link in the Collections Lobby:` default.colldiscovery.viewitems > View items	
Details tab	Defines labels in Details tab.	
Display Constants	This table defines the display constants. For multi-institutional sites, the following display constants are used with Library facets: • **default.facets.facet.availability.locations.facet_library_myinstitution** – the default label is `Availability and locations in {0}`, where `{0}` is replaced by the institution name. • **default.facets.facet.availability.locations.facet_library_otherinstitution** – the default label is `Availability and locations in other institutions.`	

Table Name	Description	
Error messages	Error messages.	
e-Shelf Tile	Add To Eshelf codes.	
Facet Collections	Facet Collections codes. For more information, see Configuring Collection Names.	
Facet Labels	Facet Labels Codes. For more information, see Facets.	
Facet Resource Type	Facet Resource codes. For more information, see Facets.	
facet_fsize_ values_codes	Facet Resource codes. For more information, see Facets.	
facet_lang_ values_codes	Facet Resource codes. For more information, see Facets.	
facet_pfilter_ values_codes	Facet Resource codes. For more information, see Facets.	
Facets Code Fields	The facets fields code values table. For more information, see Facets.	
Favorites Labels (new UI only)	Defines the labels used on the My Favorites page.	
Featured Results Labels	This table defines the labels associated with Featured Results bars. For more information, see Featured Results Bar.	
Find Database Full display Labels	This table defines the labels used for Find Databases on the Full Display page.	
Find Databases	This table defines the labels for the Find Databases light box.	

Table Name	Description	
FrontEnd Display Fields	This table defines the labels that display in various places in the Front End, and it also defines which values appear in the drop-down lists in the Views Wizard. For information on displaying local fields in the Full and Brief Displays, see Displaying Local Display Fields. For addition information on using code prefixes, see Full Display Labels.	
Full Display Labels	Defines the labels that typically appear in the Brief and Full Displays. Many of these labels appear in the Details tab. You can modify the labels according to language and view. Codes that begin with the prefix **default** display the default value for all of the institution's views. If you would want to display a different value in a view, create a new mapping row that starts with a view ID prefix. For example: REEF.fulldisplay.creationdate | Date | en_US default.fulldisplay.creationdate | Creation Date | en_US For more information on displaying these labels in the Front End, see the following pages in the Primo Back Office: • Edit Brief Display Tile • Edit Full Display Tile To use a code from this table in the PNX, you must prefix it with `$$E`. For example, if the PNX contains the following text, the link in the Front End will display `This item in WorldCat®`: `<linktouc>$$Tworldcat_isbn$$Eworldcat</linktouc>`	
Getit Tile	Codes for Getit and availability.	
Header/Footer Tiles	Codes for Header and Footer.	
Icon codes	Brief display eShelf Icon names codes, Full display type value.	
Interface Language	This table defines the labels for the languages that are supported by Primo.	
Keeping this item Tile	Defines the codes associated with the Keeping this item tile. To modify labels for PushTo items, configure the following codes (where <x> is the social bookmark name (such as RefWorks, Delicious, Connotea, EasyBib, and so forth): • **default.fulldisplay.command.pushto.option.eshelf.<x>** – the drop-down in the basket page. • **default.fulldisplay.command.pushto.option.<x>** – the drop-down list in the Full Details page. • **basket.noscript.link.save.<x>** – used for accessibility when scripting is blocked.	
Language codes	This table defines the 3-character language codes, which comply with ISO 639.2.	

Table Name	Description	
Locale CSS Map	This table allows you to specify a default CSS file for each locale. Additional CSS files can be listed by separating them with a semicolon. The CSS files will be loaded in the order that they are listed. For more information, see the *Primo Technical Guide*.	
My Account Links Labels	This table defines the name of the link that displays in My Account. Update the Label field for the link code you defined in the My Account Links mapping table. The label's code is the same as the Link Code defined in the My Account Links mapping table. For more information, see Adding Links to My Account.	
My preferences Tile	Codes for preferences page.	
New Records Type	Defines the labels used for the New Records facet values.	
Page Titles	Codes for page titles.	
Personalize Your Results Degrees	Contains the lists of degrees, which are defined by Primo Central. This table allows you to translate the labels and set the display order of the degrees in the Degree drop-down list in the Personalized Ranking lightbox.	
Personalize Your Results Disciplines	Contains the list of valid disciplines, which are defined by Primo Central. This table allows you to translate the labels. Note that the disciplines are displayed in alphabetical order in the Personalized Ranking lightbox.	
Personalize Your Results Labels	Contains all labels used by the Personalized Ranking tile in My Account and the Personalized Ranking lightbox.	
Recommendation tab messages	This table defines the messages for the Recommendation tab.	
Results Tile	Codes for Brief results, Full results and the facet tile. To change the Expand My Results label in the Front End, update the following code: **default.expand.options**	
Reviews Tile	Reviews Tile.	
RSS Page	Defines the labels used on the RSS page.	

Table Name	Description	
Search Box Labels	Defines the labels used for the Primo Search Box.	
Search Languages	Language codes.	
Search Publication Dates	Search Publication Dates for advanced search.	
Search Tile	This table defines the text that appears before the search options (such as resource type, index, and scopes) per language. The following codes allow you to define the text for the fields in the Search box: • **default.search-simple.lookForText** – defines the text for the resource type drop-down list. The default is **Look for my query:**. • **default.search-simple.operatorText** – defines the text for the search operator drop-down list (such as “that contain my query words”/”with my exact phrase”). The default is blank ( ). • **default.search-simple.lookInText** – defines the text for the search index field (such as anywhere in the record, in the title, in user tag...). The default is blank ( ). • **default.search-simple.inScopeText** – defines the text for the which scope to look in field. The default is **In**. • **default.search-simple.inScopeTextEnding** – defines the ending text for the query field. The default is blank ( ). The following codes allow you to define the text for the prefilter check boxes in the Advanced Search box: • **default.search-advanced.prefilter.peer_review** – defines the text for the Peer-reviewed articles only check box. • **default.search-advanced.prefilter.full_text_online** – defines the text for the Full-text articles only check box. The following coded defines the label used for the Clear button in the Advanced Search box: • **default.link.title.search.clear** – **Clear**.	
Send Email and Sms	Email and SMS pop-up and content texts. This table defines the following default e-mail option: • **default.email.form** – defines the value of the From field in the e-mail header. The following error messages allow you to provide different error messages for alerts: • **default.alert.heading** – Translates the error message when new records are found. • **default.alert.headingNoResults** – Translates the error message when no records are found.	
Sort Values	Configures the display values for the sort fields in the Front End.	

Table Name	Description	
Suggested New Searches Tile	Suggested New Searches codes.	
Suggestions Labels (new UI only)	Defines the labels associated with the Suggestions area of the Full Display page.	
Tags Tile	Tags Tile and List codes.	
Third Node Adaptors	Defines the labels used for Third Node adaptors in the Back Office.	
Top Level Facet	Top Level Facet Codes.	
User Interface Images	This table defines images used in the user interface.	
User Login	This table defines the labels associated with the user authentication login pages. For more information, see Login Pages for User Authentication.	
User Space Menu	This table defines labels for the user space menus, such as My Shelf and My Account.	
User Tile	Defines the codes for the user area.	
View Labels	Labels of the View configuration.	
Virtual browse tab	Defines the labels (such as for the Previous and Next buttons) in the Virtual Browse tab.	

OPAC Via Primo Subsystem

For more information, see *Configuring OPAC Via Primo*.

Table Name	Description
Call Slip Request	This table defines the labels for the Call Slip Request tab.
Fines List Labels	This table defines the labels used in the fines and fees list in My Account.
Get it service labels (new UI only)	This table defines labels for various subsections, messages, and back links in the Get It section on the Full Display page in the new UI. Each of the new codes are prefixed with `default.nui`. For example, the following code displays the **Locations** header: `default.nui.locations.header`
Hold Request	This table defines the labels used for all hold requests.
ILL Request	This table defines the labels used for all ILL requests.
Library Card Labels (new UI only)	This table defines the labels used in My Library Card (see My Library Card).
Loans List Labels	This table defines the labels used in the loans list in My Account.
Location Tab	This table defines the labels for the Locations tab.
Opac via Links messages	This table defines the labels used for OPAC via Link messages.
Personal Settings Labels	This table defines the labels used in the personal settings list in My Account.
Photocopy Request	This table defines the labels used for all photocopy requests.
Recall Request	This table defines the labels used for all recall requests.

Table Name	Description
Request Tab	This table defines the labels for the Request tab.
Request tab messages	This table defines the labels for the messages used on the Request tab.
Request Tips	This table defines the labels for tips used on the Request tab.
Requests List Labels	This table defines the labels used in the requests list in My Account.
Short Loan Request	This table defines the labels used for all short loan requests.
UB Request	This table defines the labels used for all UB requests.

Publishing Subsystem

Publishing Subsystem

Table Name	Description
Character Set	This table defines the character sets supported by Primo. By default, pipes can convert the source to **UTF-8** or **MARC-8**. If you would like to support additional character sets, select the **Enable** check box for each additional character set. **Note** The enabled character sets display in the Character Set drop-down list on the Data Sources page.
Export RIS encodings	Defines the encodings associated with the export of the RIS file format.
Source System	Source systems.

Staff User Role Privileges

This section lists the staff user privileges per role. For information on assigning roles to staff users, see Creating Staff Users.

In the tables below, each role is given a code:

- **SA** – Superadmin (on-premises installations only)
- **ADC** – Admin (installation level for on-premises installations only)
- **ADI** – Admin (institution level)
- **DA** – Data Administrator
- **PO** – Pipe Operator
- **NE** – Normalization Rules Editor
- **SU** – Staff User
- **VM** – View Manager
- **OL** – Operational
- **RG** – Reporting
- **TC** – Total Care
- **UU** – Utility

Staff Privileges Sorted by Menu

The following table sorts the privileges by menu:

Staff Privileges Sorted by Menu

Privilege	SA	ADC	ADI	DA	PO	NE	SU	VM	OL	RG	TC	UU
Monitoring and Maintenance:												
Monitor Primo Status	X	X	X	X	X	X	X	X	X			
PNX Viewer	X	X	X	X	X	X	X	X	X			
Primo Reports[1]	X	X	X	X	X	X	X	X	X	X	X	

Privilege	SA	ADC	ADI	DA	PO	NE	SU	VM	OL	RG	TC	UU
Primo Utilities	X	X	X								X	X
Schedule Tasks	X	X	X	X					X			
Deploy All	X	X	X									
Configuration & Management Wizards:												
Advanced Configuration	X	X	X	X	X	X	X	X				
Initial Configuration wizards	X											
Ongoing Configuration Wizards	X	X	X	X	X	X	X	X				
Monitor Primo Status:												
CONFIGURE_PIPES[1]	X	X	X	X								
Deploy Monitoring	X	X	X	X	X	X	X	X	X			
EXECUTE_PIPES[1]	X	X	X	X	X				X			
EXECUTE_PROCESSES[2]	X	X		X	X				X			
Job Monitoring	X	X	X	X	X	X	X		X			
MONITOR_SEARCH_ENGINE[2]	X	X	X									
Pipe Monitoring	X	X	X	X	X	X	X		X			
Process Monitoring	X	X	X	X	X	X	X		X			

Privilege	SA	ADC	ADI	DA	PO	NE	SU	VM	OL	RG	TC	UU
Search Engine Monitoring	X	X	X	X	X	X	X		X			
Tools Monitoring	X	X	X[3]	X[4]								
Watchdog	X								X[2]			
Primo Utilities:												
Cleanup Procedures[2]	X	X										
System Tests & monitor	X	X	X									
Primo Utilities > Cleanup Procedures:												
Cleanup Logs and more[2]	X	X										
Primo Utilities > System Tests & Monitor:												
DEDUP test	X	X	X									
FRBR test	X	X	X									
Test File Splitters	X	X										
Test RTA Plugin	X											
Ongoing Configuration Wizards:												
Configure User Groups[1]	X	X	X									
CONFIGURE_INSTITUTIONS[1]	X	X	X									

Privilege	SA	ADC	ADI	DA	PO	NE	SU	VM	OL	RG	TC	UU
Institution Wizard[1]	X	X	X									
LOAD_LIBRARIES_IPS[1]	X	X	X									
PDS Configuration Wizard	X											
Pipe Configuration Wizards[1]	X	X	X	X	X	X	X					
Restrictions and Delivery Configuration Wizard[1]	X	X	X									
Staff Configuration Wizard[1]	X	X	X									
Views Wizard[1]	X	X	X					X				
Advanced Configuration:												
All Code Tables[1]	X	X	X	X	X	X		X				
All Mapping Tables[1]	X	X	X	X	X	X		X				
CONFIGURE_NORMALIZATION_RULES	X	X	X									
Full Normalization Rule Configuration	X	X	X	X	X	X	X					
General Configuration Wizard	X	X										
Search Engine Configurations	X	X										
Tags and Reviews Management[2]	X	X		X	X	X	X		X			

Privilege	SA	ADC	ADI	DA	PO	NE	SU	VM	OL	RG	TC	UU
Ongoing Configuration > Pipe Configuration Wizards:												
CONFIGURE_DATASOURCES[1]	X	X	X	X								
CONFIGURE_ENRICHMENT_SETS[1]	X	X	X	X	X	X						
Data Sources Configuration[1]	X	X	X	X	X	X	X					
Enrichment Sets Configuration[1]	X	X	X	X	X	X	X					
Normalization Mapping Tables[1]	X	X	X	X	X	X						
Normalization Rules configuration[1]	X	X	X	X	X	X	X					
Pipes Configuration[1]	X	X	X	X								
Scope Values Configuration[1]	X	X	X	X								

[1]Institution-level staff users are limited to their own institutions.

[2]Only installation-level staff users are permitted to execute task.

[3]Institution-level staff users are limited to the following tools: Generate/Delete Sitemap and Export/Import Primo Configuration.

[4]Institution-level staff users are limited to the following tools: Generate and Delete Sitemap.

Staff Privileges Sorted by Privilege

The following table sorts the staff privileges by privilege:

Staff Privileges Sorted by Privilege

Privilege	SA	ADC	ADI	DA	PO	NE	SU	VM	OL	RG	TC	UU
Advanced Configuration	X	X	X	X	X	X	X	X				
All Code Tables[2]	X	X	X	X	X	X		X				
All Mapping Tables[2]	X	X	X	X	X	X		X				
Cleanup Logs and more[1]	X	X										
Cleanup Procedures[1]	X	X										
Configure User Groups[2]	X	X	X									
CONFIGURE_DATASOURCES[2]	X	X	X	X								
CONFIGURE_ENRICHMENT_SETS[2]	X	X	X	X	X	X						
CONFIGURE_INSTITUTIONS[2]	X	X	X									
CONFIGURE_NORMALIZATION_RULES	X	X	X									
CONFIGURE_PIPES[2]	X	X	X	X								
Data Sources Configuration[2]	X	X	X	X	X	X	X					
DEDUP test	X	X	X									
Deploy All	X	X	X									
Deploy Monitoring	X	X	X	X	X	X	X	X	X			

Privilege	SA	ADC	ADI	DA	PO	NE	SU	VM	OL	RG	TC	UU
Enrichment Sets Configuration[2]	X	X	X	X	X	X	X					
EXECUTE_PIPES[2]	X	X	X	X	X				X			
EXECUTE_PROCESSES[1]	X	X		X	X				X			
FRBR test	X	X	X									
Full Normalization Rule Configuration	X	X	X	X	X	X	X					
General Configuration Wizard	X	X										
Initial Configuration wizards	X											
Institution Wizard[2]	X	X	X									
Job Monitoring	X	X	X	X	X	X	X		X			
LOAD_LIBRARIES_IPS[2]	X	X	X									
Monitor Primo Status	X	X	X	X	X	X	X	X	X			
MONITOR_SEARCH_ENGINE[1]	X	X	X									
Normalization Mapping Tables[2]	X	X	X	X	X	X						
Normalization Rules configuration[2]	X	X	X	X	X	X	X					
Ongoing Configuration Wizards	X	X	X	X	X	X	X	X				

Privilege	SA	ADC	ADI	DA	PO	NE	SU	VM	OL	RG	TC	UU
PDS Configuration Wizard	X											
Pipe Configuration Wizards[2] [1]	X	X	X	X	X	X	X					
Pipe Monitoring	X	X	X	X	X	X	X		X			
Pipes Configuration[2]	X	X	X	X								
PNX Viewer	X	X	X	X	X	X	X	X	X			
Primo Reports[2]	X	X	X	X	X	X	X	X	X	X	X	
Primo Utilities	X	X	X								X	X
Process Monitoring	X	X	X	X	X	X	X		X			
Restrictions and Delivery Configuration Wizard[2]	X	X	X									
Schedule Tasks	X	X	X	X					X			
Scope Values Configuration[2]	X	X	X	X								
Search Engine Configurations	X	X										
Search Engine Monitoring	X	X	X	X	X	X	X		X			
Staff Configuration Wizard[2]	X	X	X									
System Tests & monitor	X	X	X									
Tags and Reviews Management[1]	X	X		X	X	X	X		X			

Privilege	SA	ADC	ADI	DA	PO	NE	SU	VM	OL	RG	TC	UU
Test File Splitters	X	X										
Test RTA Plugin	X											
Tools Monitoring	X	X	X[3]	X[4]								
Views Wizard[2]	X	X	X					X				
Watchdog	X								X[1]			

[1]Only installation-level staff users are permitted to execute task.

[2]Institution-level staff users are limited to their own institutions.

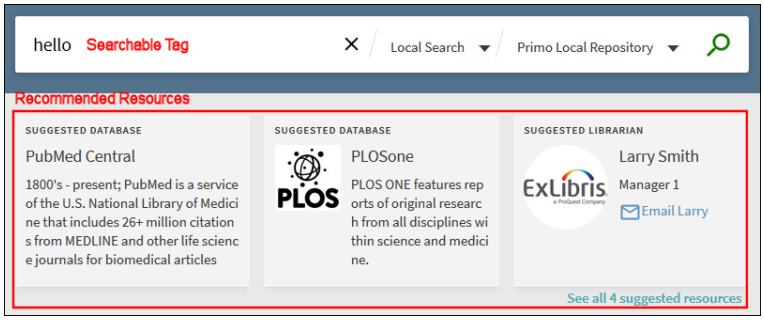
[3]Institution-level staff users are limited to the following tools: Generate/Delete Sitemap and Export/Import Primo Configuration.

[4]Institution-level staff users are limited to the following tools: Generate and Delete Sitemap.

Resource Recommender

The Resource Recommender service allows you to recommend the following resources based on searchable tags that you configure in the Primo Back Office: database, website, person, library information, library guide.

When a user performs a search in which the query exactly matches the searchable tag (which may be a word or phrase), the new Primo UI displays up to three associated recommendations at the top of the brief results. User's can see all of the recommendations by clicking the **See all suggested resources** link.



Resource Recommender Service on the Brief Results Page

Note

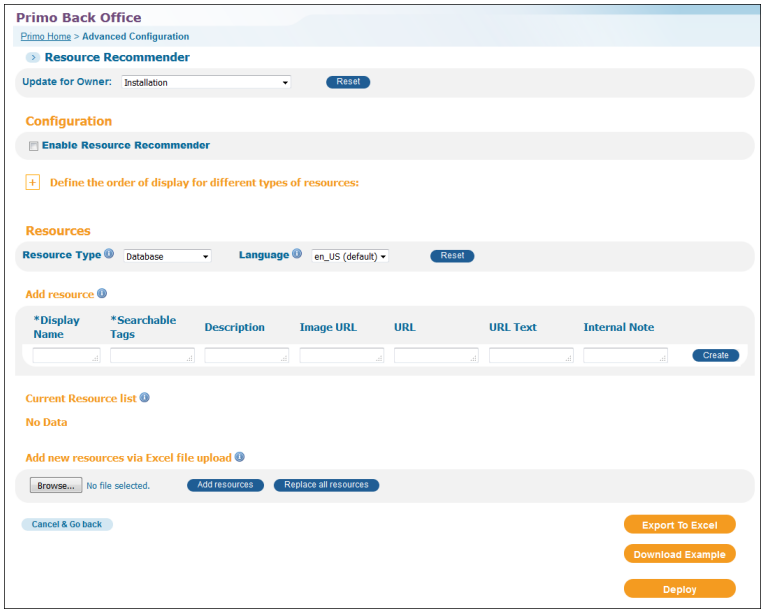
Currently, partial searches are not supported by the Resource Recommender.

Configuring the Resource Recommender Service

The Resource Recommender page under the Advanced Configuration menu allows you to define resource recommendations (such as a librarian or a Website) that are based on searchable tags. The searchable tags are defined per resource type and recommendation.

To configure the Resource Recommender service:

1. Open the Resource Recommender page (**Primo Home > Advanced Configuration > Resource Recommender**).
2. Click **Customize** if the service has not already been customized. The **Delete** option returns the configuration to the installation level, which may not have a default configuration. The **Reset** option clears all configurations.



Customization Mode for Resource Recommender

3. From the Resource Type drop-down list, select one of the following resources:
   - **Database** - Displays the database recommendations on the left side of the All Suggested Resources page.
   - **Person** - Displays the contact recommendations on the right side of the All Suggested Resources page.
   - **Website** - Displays the Website recommendations on the left side of the All Suggested Resources page.
   - **Library Information** - Displays the library information on the right side of the All Suggested Resources page.
   - **Library Guide** - Displays the library guide recommendations on the right side of the All Suggested Resources page.
   - **Custom 1**, **2**, and **3** - Displays the custom recommendations on the left side of the All Suggested Resources page.
   - **All (only display)** - This option displays the full list of configured resources in read-only mode on this page.
4. From the **Language** drop-down list, select the display language of the recommendation.

Note

Before you can create a translation for a language other than **en_US**, you must first create the base recommendation (which includes searchable tags for all languages) using the default language **en_US**.

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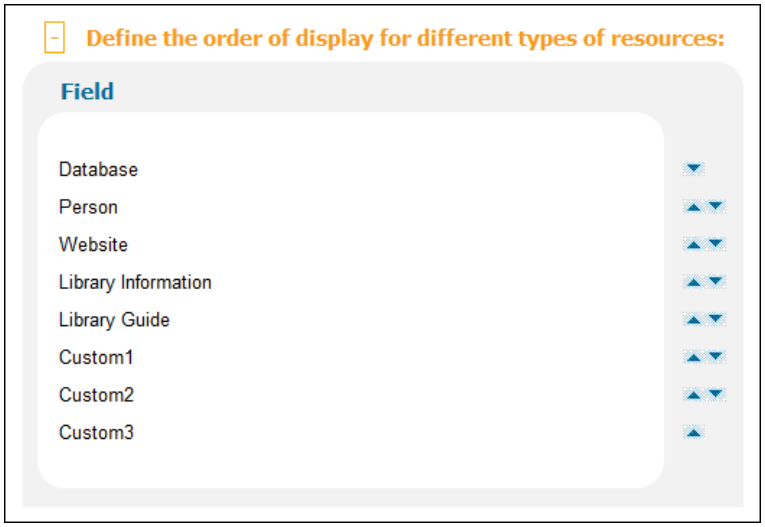
5. For each type of resource, you can configure the following fields:

Resource Recommender Fields

Field	Description
Display Name (required)	The name that displays for the resource in the new UI.

Field	Description
Searchable Tags (required)	The search tags that trigger this resource recommendation. If you want to specify multiple tags for a recommendation, separate them with a semicolon. You must set the Language to en_US even when adding tags for languages other than en_US.
Description	The resource's description, which appears for the recommendation in the new UI.
Image URL	The URL used to display an image for the recommendation in the new UI.
URL	The URL that is used to redirect users after they click the display name in the recommendation. Not applicable to Person resource types.
URL Text	If the URL field is specified, the system displays this text in the new UI and redirects users to the specified URL when clicked. Not applicable to Person resource types.
Email	This field displays only for Person resource types. It provides the email address of the contact person. If no email text is provided, the system will display the email address in the new UI.
Email Text	This field displays only for Person resource types. If specified, this text displays instead of the user's email address. If left empty, the Email address of the person will be displayed.
Internal Note	Optional descriptive text to explain the use of this resource to staff members who may be configuring recommendations.

6. Click **Create** to add a new recommendation for the specified resource type.
7. Repeat steps 4 and 5 to add another recommendation for the specified resource type.
8. Repeat steps 3 through 6 to define recommendations for other resource types.
9. Define the order in which the resources will appear in the new UI:
    1. Click the **Define the order of display for different types of resources** field to display the list of resource types and their order. The highest ranked resources appear at the top of the list.



Define the Highest Ranked Resource Types

Note

Per resource, the system lists the recommendations alphabetically by display name on the Brief Results and Recommended Resources pages.

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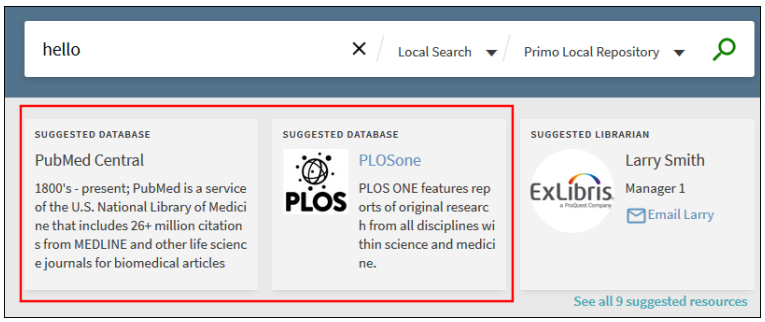
2. Use the up/down arrows to specify the order of the the recommendations per resource type. For the highest ranked resource type, the system reserves the first two recommendation slots on the Brief Results page.

   For example, if the Database resource type has the highest ranking and has two matching recommendations, both of its recommendations will display in the first two slots. The third and last slot will be filled by the first matching recommendation from the next highest ranked resource.



Highest Ranked Resource Type Displays Two Recommendations

10. Select the **Enable Resource Recommender** check box to enable the service in the new UI.

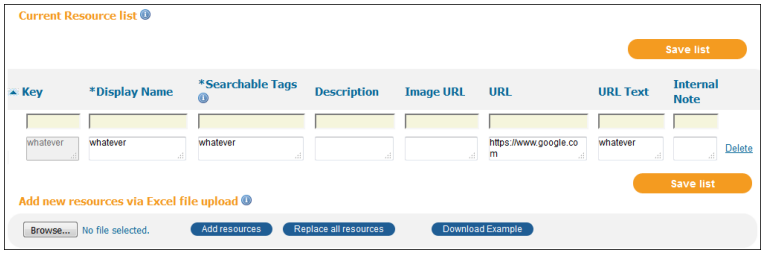
11. Click **Deploy**.

Modifying a Recommendation

After creating a recommendation, you can modify various fields as needed. For information on how to create a new recommendation, see Configuring the Resource Recommender Service.

To modify a recommendation:

1. Open the Resource Recommender page (**Primo Home > Advanced Configuration > Resource Recommender**).
2. In the Current Resource List section, edit any of the enabled fields (such as Display Name) for each recommendation.



Current Resource List Section on Resource Recommender Page

3. Click **Save list**.

Importing Recommendations

The Resource Recommender page allows you to import recommendations per resource and language using an Excel file. All recommendations must be first created in the default display language en_US and then translated for each language in subsequent imports.

Depending on the resource type, some of the following columns must be included in the Excel file even if you do not plan on entering values:

Resource Recommender Fields

Field	Description
key	The internal key, which is used to track the recommendations. This field is required for all resource types, but you can leave it blank when adding or replacing recommendations. **Note** When creating translations for languages other than the default **en_US**, you must specify an existing key, which must be created first using the default language **en_US**.
name	The name that displays for the resource in the new UI. You must specify a display name for all recommendations and resource types. This field is translatable.
tags	The search tags that trigger this resource recommendation. You must specify at least one tag per recommendation. If you want to specify multiple tags for a recommendation, separate them with a semicolon.
description	The resource's description, which appears for the recommendation in the new UI. This field is required for all resource types, but you can leave it blank. This field is translatable.
image_url	The URL used to display an image for the recommendation in the new UI. This field is required for all resource types, but you can leave it blank.

Field	Description
url	The URL that is used to redirect users after they click the display name in the recommendation. This field must be included for all resource types (except for Person), but you can leave it blank.
url_text	If the url field is specified, the system displays this text in the new UI and redirects users to the specified URL when clicked. This field must be included for all resource types (except for Person), but you can leave it blank.
email	This field is required only for Person resource types. It provides the email address of the contact person. If no email text is provided, the system will display the email address in the new UI.
email_text	This field is required only for Person resource types. If specified, this text displays instead of the user's email address. If left empty, the Email address of the person will be displayed.
internal_ note	Descriptive text to explain the use of this resource to staff members who may be configuring recommendations. This field is required for all resource types, but it can be left blank.

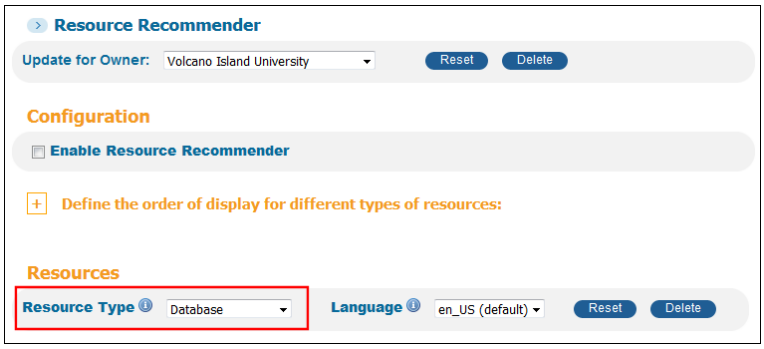
The following figure shows an example of an Excel file for a Database resource type:

	A	B	C	D	E	F	G	H
1	key	name	tags	description	image_url	url	url_text	internal_note
2	biography_in_context	Biography In Context	actors;african americans;athletes;authors;autobiographies;autobiography;biographical;biographies;biographies in context;biography;biography database;biography in context;biography resource;biography resource center;celebrities;composers;criminals;directors;explorers;famous people;first ladies;history;inventors;journalists;military figures;musicians;native americans;news;nobel peace prize winners;novelists;olympians;people;people in the news;philosophers;poets;politicians;popular culture;presidents;religious leaders;scientists;singers;social reformers;sports figures;supreme court justices;world leaders;writers	Full-text biographical information on more than 185,000 people throughout history				
3	academic_search_elite	Academic Search Elite	academic search elite;arts & literature;ase;chemistry;ciência da computação;ciências sociais;computer sciences;ebsco;ebsco academic;ebsco ase;ebscohost academic;engenharia;engineering;ethnic studies;física;language and linguistics;medical sciences;medicina;physics;social science	Academic Search Elite, an EBSCO database, is a general academic index that indexes almost 3,000 magazines and journals from every academic discipline and provides the full-text of more than 1,200				

Database Resource Recommendation

To import recommendations:

1. Open the Resource Recommender page (**Primo Home > Advanced Configuration > Resource Recommender**).
2. Click **Customize** if the service has not already been customized. The **Delete** option returns the configuration to the installation level, which may not have a default configuration. The **Reset** option clears all configurations.
3. In the **Resources** section, select the **Resource Type** and **Language** for which you want to import recommendations.

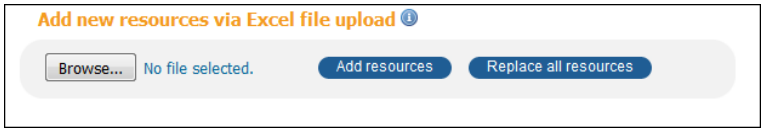


Select Resource Type

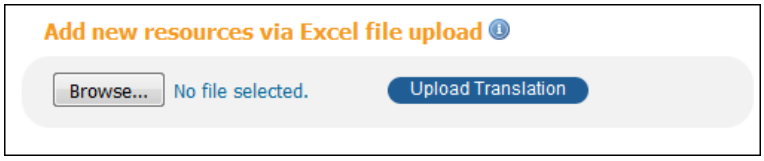
Note

Before you can create a translation for a language other than **en_US**, you must first create the base recommendation (which includes searchable tags for all languages) using the default language **en_US**.

4. In the **Add new resources via Excel file upload** section, click **Browse** and select the Excel file that you created for this type of resource.



en_US - Import New Recommendations or Replace All Recommendations



Not en_US - Translate Recommendation's Only

5. Choose one of the following options:
   - **add Resources** – (**en_US**) Click this button if you want to add recommendations to the existing list of recommendations for this resource type.
   - **Replace all resources** – (**en_US**) Click this button if you want to replace all recommendations for this resource type.
   - **Upload Translation** – (not **en_US**) Click this button if you want to translate display information, URLs, and email information for use with another language. It may help to export the existing settings for a language, modify the Excel file, and then import updated file.
6. Click **Deploy** to update the new Primo UI.

Exporting Recommendations

The Resource Recommender page allows you to export recommendations per resource and language to an Excel file. This allows you to modify many recommendations at once, create translations, and import the updated Excel file into the Resource Recommender page (see Importing Recommendations).

To export recommendations:

1. Open the Resource Recommender page (**Primo Home > Advanced Configuration > Resource Recommender**).
2. Click **Customize** if the service has not already been customized. The **Delete** option returns the configuration to the installation level, which may not have a default configuration. The **Reset** option clears all configurations.
3. In the **Resources** section, select the **Resource Type** and **Language** for which you want to export recommendations.
4. Click **Export to Excel**.