Using Primo Analytics

Note
If you are working with Primo VE and not Primo, see Primo VE Analytics.

This section describes the general activities that you can perform with Primo Analytics, such as the following:

- Navigating Primo Analytics
- Running out-of-the-box reports
- Creating reports
- Adding graphs to reports.

Navigating Primo Analytics

This section describes how to access the Primo Analytics and navigate among the various options.

Primo Analytics can be accessed by staff users with any institution-level Back Office role. All staff users can activate reports and also create new reports using data that belongs to their institution.

Note
If you have a “central institution” that is used to harvest only shared data sources, accessing Primo Analytics with a user that belongs to this institution will enable you to view only operations related reports regarding pipes and PNX records. If the “central institution” has a view that is in use, you will also be able to view usage-related reports.

To access Primo Analytics:

On the Monitor Primo Status page (Primo Home > Monitor Primo Status), click Primo Analytics to access the Primo Analytics interface.

You can use the Global Header (which displays at the top of each page) to navigate between components in the Primo Analytics interface.

Global Header

The global header includes the following components:
• **Search** – Enables you to search the Catalog, which includes all of the objects created in OBI (such as reports, dashboards, and more).

• **Advanced** – Displays the Catalog page in search mode where you can search for objects in the catalog. In search mode, the Search pane is displayed rather than the Folders pane within the page.

• **Help** – Provides different help options relevant for Oracle BI and not specifically for Primo Analytics. It includes the following options:
  ◦ `<page> Help` (where `<page>` is the name of the page, editor, or tab) – Dynamically changes to display the Help topic for the current page, editor, or tab.
  ◦ **Help Contents** – Displays a cascading menu that provides options that link to the tables of contents for Oracle BI EE
  ◦ **Documentation** – Displays the documentation library for Oracle BI EE
  ◦ **OTN** – Displays the Business Intelligence and Data Warehousing Technology Center page on the Oracle Technology Network (OTN)
  ◦ **About Oracle BI EE** – Displays a dialog identifying the Oracle BI EE version and copyright information

• **Sign Out** – Signs you out of Primo Analytics

• **Home** – Displays the Home page

• **Catalog** – The location where all reports are saved, including personal and shared reports. For more information, see [Catalog](#).

• **Dashboards** – A shortcut to all available dashboards that are saved in the dedicated dashboard subfolders.

• **New** – Displays a list of the OBI objects that can be created. This document describes the Analysis option (which creates new reports) and the Dashboard option (which creates dashboards). For more details on creating new reports, see [Creating New Reports](#).

• **Open** – Displays the following options:
  ◦ **Recent** – Displays a list of the objects that you have recently viewed, created, or updated.
  ◦ **Most Popular Objects** – Displays a list of the objects that are accessed the most often.

• **Signed In As username** – Displays the user name of the currently signed-in staff user.

• **My Account** – Displays the My Account page, which allows you to specify your preferences such as the timezone, delivery devices, and delivery profile.

The following figure shows some of the commonly used object icons in the Primo Analytics interface.
Catalog

The Catalog arranges reports and dashboards (grouping of reports) into folders. In addition to reports and dashboards, it is also possible to store report prompts as standalone objects.

The Primo Analytics Catalog has the following folders, which display in the folder’s pane:

![Catalog](image)

Types of Analytics Folders

- **My Folders** – Stores your personal reports and dashboard in subfolders. The content in this folder will not be shared with others in your institution or the Primo community.

- **Shared Folders** – Stores reports, prompts and dashboards that can be shared at various levels in subfolders. The Shared Folders folder has the following subfolders:
  - **Primo** – Contains the out-of-the-box reports and dashboards created by Ex Libris. These reports cannot be modified directly, but you can copy them to My Folder and change them. The Primo folder contains the following subfolders:
    - **Dashboards** – This subfolder contains the following dashboards:
      - Example Dashboard – This dashboard contains a tab for each Primo subject area.
      - Trends – This dashboard focuses on searches and usage.

    - **Operations**

    - **Usage**

    - **Primo Subfolders**

<table>
<thead>
<tr>
<th>Subfolder</th>
<th>Description</th>
</tr>
</thead>
</table>
| Dashboards | This subfolder contains the following dashboards:  
  • Example Dashboard – This dashboard contains a tab for each Primo subject area.  
  • Trends – This dashboard focuses on searches and usage. |
| Operations | This folder contains operation related reports, dashboards, and prompts for Pipes and PNX records. |
| Usage | This subfolder contains usage related reports, dashboards, and prompts. |

**Note**

These types of reports, dashboards, and prompts are not applicable to Primo VE.
Primo Community – This folder contains reports and dashboards that are created by the entire Primo community. Reports placed in this folder can be viewed and edited by all Primo customers who have access to the OBI. The reports are shared across all regions using a scheduled synchronization that runs every week on Friday. You can copy these reports to your folders to make local modifications.

The Primo Community folder has the following out-of-the-box subfolders: Dashboard, Prompts, and Reports.

- Primo Community Subfolders

The Reports subfolder has a separate subfolder for each subject area, which are described in separate sections below. When adding reports to the Primo Community folder, make sure that you add reports to the appropriate folder and prefix the name of the reports with your institution name and a dash so that each report is identifiable by the contributing institution. For example:

- U. Minn - Search Related Actions
- U. Sienna - Sessions and Sign-in

Reports that are contributed by Ex Libris are prefixed with Ex Libris —.

Each institution can browse the folders for reports pertaining to a specific area or perform a search for reports from a specific institution.

Libraries are encouraged to add information in the properties of the reports so that other libraries are able to identify the functionality of the report easily. For example:

- Primo Institution – Every Primo institution has its own folder. Out of the box, subfolders are provided for dashboards, prompts, and reports. Objects placed in this folder are only viewable to users who belong to the institution.

Home

Click the Home link to display the Primo Analytics home page:
The Home page is a task-oriented, centralized workspace that is combined with a global header that provides access to Primo Analytics objects, their respective editors, help documentation, and other features.

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**Running the Out-Of-The-Box Reports**

You can run reports whose criteria have been created by Ex Libris.

**To run an out-of-the-box report:**

1. Click **Catalog** and then select the **Primo** folder under **Shared Folders**.

2. Click the expand buttons next to **Shared folders > Primo > Usage > Reports** — for example, the out-of-the-box reports that are related to Usage display:
3. Click **Open** for the report that you want to run.

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**Displaying Dashboards**

Dashboards provide an at-a-glance view of one or more reports. These dashboards may be provided by Ex Libris, the community, or yourself. You can display these dashboards from either the Catalog or the Dashboard drop-down list in the Global Header.

**To display an out-of-the-box dashboard from the Catalog:**

1. Click **Catalog** and then select the **Primo** folder under the **Shared Folders**.
2. Click the expand buttons next to **Shared folders > Primo > Dashboards**
3. Click **Open** for the dashboard you want to display.

**To display a dashboard from the Community:**

1. Click **Catalog** and then select the **Primo Community** folder under the **Shared Folders**.
2. Click the expand buttons next to **Shared folders > Primo Community > Dashboards**
3. Click **Open** for the dashboard you want to display.

**To display your personal dashboard:**
Click Catalog > My Dashboard.

To display a dashboard from the Global Header:

1. Click Dashboards in the Global Header:

   ![Dashboard Interface]

   - Most Recent (Example Dashboard - PNX Records)
   - My Dashboard
   - Primo
     - Example Dashboard
     - Trends
   - Primo Community
     - Example Dashboard
     - Tani’s dashboard
     - Trends

2. Select the dashboard that you want to view under Primo or Primo Community. If you want to see your personal dashboard, click My Dashboard.

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**Copying Reports**

The copy function allows you to customize a report to create another report. This is useful if the original report includes similar information.

To copy a report:

1. Open the catalog and locate the report that you want to copy.

2. Select More > Copy.
Creating New Reports

You can create new reports to provide you with information on library activities. The simplest way to create a report is based on one subject area. There are cases in which you need to combine data from more than two subject areas. (For more information on creating a report from two subject areas, see Creating Advanced Reports).

Note

Analytic reports can have a maximum of one million cells and up to 65,000 lines.

Reports in Primo Analytics can be based on data that is organized by subject areas that include two broad categories:

- **Usage** – Subject areas that are related to usage of the Primo Front End:
  - Primo Action – Provides information on end-user use of the various Primo functionality.
Primo Facets – Provides information on facet usage.

Primo Popular Searches – Lists the details for the most popular searches.

Primo Sessions – Provides information on Primo sessions.

Primo Zero Result Searches – Lists the details for searches that found no results.

**Operations** – These types of reports are not applicable to Primo VE. Subject areas that are related to Primo Back Office processes and Primo’s database:

- Primo Pipes – Provides details on Primo pipes processing.
- Primo PNX Records – Provides information on PNX records.

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Creating Basic Reports

The following procedure is a basic example of how to create a report:

**To create a report:**

1. Select **New > Analysis**. The Select Subject Area menu opens.

![Select Subject Area Descriptions Menu](image)

2. From the Select Subject Area menu, select **Primo Action Usage** — for example, to open the Analysis Editor.
The Analysis Editor contains the following components:

- The left pane displays the elements of the Primo Actions Usage subject area:

Primo Action Usage Area

- The Analysis Editor contains the following tabs and their use are described later sections:
  - Criteria – Used to create the report columns and filters.
  - Results – Used to display the report with data relevant to your institution.
  - Prompts – Used to add report prompts.
  - Advanced – This tab is not described in this document and requires expert knowledge of OBI.

Analysis Editor Tabs

3. To create a report of the number of times a certain action was invoked, perform the following steps:

   1. Click the arrow next to the Actions Type to expand the Actions Type dimension folder. Double-click the Action Group, Action Sub Group and Action fields (or drag and drop them into the Selected Columns pane).

   2. Click the arrow next to the Action Usage folder and then double-click the Actions measure. The selected columns should look similar to the following example.
3. Click the Results tab to see the report’s results.

Creating Advanced Reports

You may want to include information in a report from two subject areas. In order to be able to create reports from two subject areas, the following conditions must be met:

- There must be at least one common dimension between the two subject areas.
- Descriptive fields must come from the common dimensions.

**Note**

Measurement fields can come from the facts, although they are not common dimensions.
If you attempt to create a report from two descriptive fields that are not in common between the two subject areas, an error message will display.

In this example, we create a report from the Actions Usage and Sessions to create a report that on the average number of actions per session.

To create a report from two subject areas:

1. Select New > Analysis. The Select Subject Area menu opens.

2. In the Select Subject Area menu, select Primo Action Usage — for example, to open the Analysis Editor.

3. In the left pane, click the Add/Remove Subject Areas icon

and select Sessions. Both the Action Usage and Sessions subject areas appear:
4. The Action Usage and Sessions subject areas have the Dates dimension in common. Add any date to the report as well as any measurement dimensions. For example, select Sessions from the Sessions column and Actions from the Action Usage column.

5. Add a column that calculates the average number of actions per session:

   1. Click the Criteria tab and add a new column of any kind — for example, Signed-In.
   2. Click the More Options icon of the new column and select Edit Formula. The Edit Column Formula dialog box opens:

   - Highlight and replace the existing formula with the following formula, and then click OK:
     
     \[1.0 * "\text{Action Usage}." \text{Actions} / "\text{Primo Sessions}." \text{Sessions} . \text{Sessions}\]
   
   7. Click the More Options icon
of the new column and select **Column Properties > Column Format**.

8. Select the **Custom Headings** check box.

9. Enter a new name for the column in the **Column Heading** field.

10. Click **OK**.

11. Click the More Options icon

12. Select the **Override Default Data Format** check box.

13. Select 2 from the **Decimal Places** drop-down list.

14. Click the Results tab to display the report.

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**Analytics Report**

<table>
<thead>
<tr>
<th>Month (date)</th>
<th>Sessions</th>
<th>Actions</th>
<th>Actions per Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mar 2014</td>
<td>823</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apr 2014</td>
<td>1,757</td>
<td></td>
<td></td>
</tr>
<tr>
<td>May 2014</td>
<td>15,325</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jun 2014</td>
<td>17,285</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jul 2014</td>
<td>4,583</td>
<td>6,619</td>
<td>1.44</td>
</tr>
<tr>
<td>Aug 2014</td>
<td>3,836</td>
<td>12,977</td>
<td>3.38</td>
</tr>
<tr>
<td>Sep 2014</td>
<td>4,879</td>
<td>22,838</td>
<td>4.68</td>
</tr>
<tr>
<td>Oct 2014</td>
<td>5,324</td>
<td>24,474</td>
<td>4.60</td>
</tr>
<tr>
<td>Nov 2014</td>
<td>4,376</td>
<td>16,402</td>
<td>3.75</td>
</tr>
<tr>
<td>Dec 2014</td>
<td>3,334</td>
<td>16,020</td>
<td>4.81</td>
</tr>
<tr>
<td>Jan 2015</td>
<td>4,682</td>
<td>23,923</td>
<td>5.11</td>
</tr>
<tr>
<td>Feb 2015</td>
<td>3,486</td>
<td>14,829</td>
<td>4.25</td>
</tr>
<tr>
<td>Mar 2015</td>
<td>3,866</td>
<td>10,668</td>
<td>2.76</td>
</tr>
<tr>
<td>Apr 2015</td>
<td>3,824</td>
<td>11,521</td>
<td>3.01</td>
</tr>
<tr>
<td>May 2015</td>
<td>2,766</td>
<td>7,837</td>
<td>2.83</td>
</tr>
</tbody>
</table>
Filtering a Report

Filters allow you to limit the amount of data displayed in the report and are applied before the report is aggregated. Filters affect the report and, thus, the resulting values for measures. Filters can be applied directly to attribute columns and measure columns.

To filter a report:

1. Click the More Options icon next to the column whose data you want to filter and select Filter. Alternatively, click the Filter icon and select the appropriate column from the drop-down list.

   The New filter dialog Box opens — for example, for the Action Group:

   ![New Filter - Action Group]

2. Select an option from the Operator drop-down list.

3. Enter a value in the Value field.

   The filter appears at the bottom of the Filter pane.

4. Click the Results tab to display the results filtered according to the criteria you set.

Sorting a Report

You can sort the data in a column — for example, to be ascending or descending.

To sort a column:

1. Click the More Options icon next to the column whose data you want to sort and then select Sort.

2. Select a sort option to sort the column.
Saving a Report

After you create a report, you can save a private or public version by placing it under the appropriate area:

- My Folders – Area reserved for private reports.
- Shared Folders – Area reserved for shared reports. Place all shared reports in the appropriate folder under Primo Community. Do not forget to prefix the report with your institution name and to include a description of the report.

To save a report:

1. Click the Save icon

   ![Save icon]

   to open the Save As dialog box.

   ![Save As Dialog Box]

2. Select a folder under either the My Folders area (for private usage) or the Shared Folders are (for shared usage).

3. Specify a name and a description for the new report in the corresponding fields.

4. Click OK.

   The title appears at the top of the report. To change the title:

   1. Click the Results tab.

   2. Click the Edit icon

       ![Edit icon]

       in the Views pane.

   3. Enter a new title in the Title field.

Adding Totals to a Report

You can display the total of a column of a report.

To display a column’s total:
1. Click the Edit icon of the report in the Results Tab. The Table Editor opens:

![Table Editor](image)

2. Click the Totals icon in the Columns and Measures section and then select **After**. The green check mark indicates that a grand total has been added to the analysis.

3. Click **Done** to display a grand total.

![Table with Grand Total](image)
Formatting a Report

You can format a report.

To format a report:

1. On the Results tab of a report, click the edit icon.

   For example, the following page opens:

   ![Example Results for a Report](image)

2. On the top of the toolbar, click the Table View Properties icon.

   The table properties dialog box opens:
3. On the Style tab, select **Enable alternate row styling**.

4. Select **Repeat cell values** to display each full row in the table in a separate color.

5. Click **Set alternate format**. The following is displayed:

6. Select the formatting options you want — for example, from the **Background Color** drop-down list, select yellow for the background color.

7. Click **OK**.

The table is now formatted with alternating yellow rows:
Adding a Graph to a Report

You can add a graph, such as a pie chart, to the report.

To add a graph to a report:

1. On the Results tab, click the New View icon

   ![New View Icon]

   and select **Graph > Pie**.
2. If you want only the pie chart, click the Remove View from Compound Layout icon for both Title and Table views. Both views are removed to display the graph only.

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**Note**

The Title and Table views are still available for use from the Views pane.

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**Formatting a Graph**

You can format a graph. The formatting options available are different depending on the type of graph you are formatting. In this example, we format a pie graph.

**To format a graph:**

1. On the Results tab, click the Edit View icon to open the Graph Editor.
2. Click the Edit Graph Properties icon on the top toolbar to open the Graph Properties dialog box.

3. You can change various graph properties from the General, Style, and Titles and Labels tabs. For example, perform the following steps:

   1. On the General tab, select **Left** from the Legend Location drop-down list.

   2. On the Style tab, make the following changes:

      - In the Legend section, select gray as the background color and blue as the border color.
In the Canvas Colors and Borders section, select turquoise for the background color and blue for the background color.

- Clear the Gradient check box.

3. On the Titles and Labels tab, make the following changes:

- Clear the Use measure name as graph title check box and enter a title (such as **Primo Actions Drop-Down Chart**).

- In the Labels section, click the Format Title icon

  next to legend, select **Arial** from the **Family** drop-down list, enter 10 in the **Size** field, and select the color.

4. Click **OK** to open the modified graph.

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**Creating a Dashboard**

This section describes how to create a new dashboard.

**To create a new dashboard:**

1. Click **New > Dashboard** to open the New Dashboard dialog box:
2. Enter the following information:
   - **Name** – Enter a name for the dashboard.
   - **Description** – Enter a description for the dashboard.
   - **Location** – Enter the location where you want the dashboard to be saved.
   - **Content** – If you want to add content now, select *Add content now*, which is the default option. If you want to add content later and create an empty dashboard, select *Add content later (Create empty dashboard)*.

3. Click **OK**.

4. If you want to create a dashboard with reports from your local institution folder, drag and drop reports from your institution’s folder in the Catalog pane to the drag-and-drop area in the right pane.

5. If you want to use an out-of-the-box report in a dashboard, you must first copy it to your local institution:
   1. Click **Catalog** to open the list of folders:
2. Select **More > Copy** for the report that you want to copy to your local institution folder.

3. Navigate to your local institution folder and select **More > Paste** to paste the out-of-the-box report to your local folder.

   You can now configure the dashboard to be displayed.