



**DigiTool Version 3.2
(Service Pack 25) Release Notes
September 2009**

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1. Introduction

DigiTool service pack 24 is the third service pack of the revision (mini-release) 3.2. This service pack provides fixes and corrections to DTL and an upgrade to the Jpeg2000 third-party infrastructure.

1.1 Purpose and Scope

The purpose of this document is to describe the functional and technical changes related to fixed defects (SIs) and all new enhancements included in this mini-release version.

Wherever possible, implementation actions will be performed automatically by the SP mechanism – particularly for mandatory and recommended setup changes involving server-side setup and configuration implementation steps. You will receive an e-mail with the list of changes applied, as well as a “To Do” list of any remaining manual changes that may still be required, if any. This document will be attached to the e-mail described.

Whenever relevant, the additional manual steps that remain to be taken to activate any new functionality or change are described and organized by topic, level, and target audience. Generally, the non-automatic changes are non-mandatory, but there may be infrequent exceptions, which will be denoted accordingly.

Ideally, and in most cases, the SP can be installed and no further changes will be needed in order to continue working with the system.

Note: You must run `set_globals.sh` after installing and implementing any relevant manual changes related to this SP and before starting the application again with `dtl_startup_all`.

```
>>j_bin
>>./set_globals.sh

>>dtle
>>dtl_startup_all
```

Note: Always run Meditor’s version update after each SP installation to ensure that you have the most recent and working functionality of the Meditor PC client. To run the version update, select **DigiTool > Utilities > Version Check** using Meditor’s top toolbar.

1.2 Service Pack Information

1.2.1 DigiTool Revision, Service Pack Name and Number

DigiTool v 3.2 Service Pack 25 – September, 2009

1.2.2 Service Pack Highlights

The service pack items are categorized by the following:

- **Implementation actions** – Changes that involve some setup/configuration modification that must be activated. Two main classes of implementation actions exist:
 - Changes that involve modifications to configuration/setup in order to **allow** the use of the new change/function/feature. These changes are noted in the SP automated e-mail report and in the Changes with Implementation Actions table. These changes will usually be automated.
 - Changes that may also involve instructions on **how** to use the new change/function/feature. These changes are also included in the Changes with Implementation Actions table. They are usually optional and contain instructions on how to use a new function/feature. These changes may be entirely automatic (done by SP), partially automatic (may require additional steps to initiate), or manual (may require additional actions to activate).
 - Level
 - Mandatory – It is mandatory to activate this feature (auto or manual).
 - Recommended – It is not mandatory, but it is the recommendation of Ex Libris that the change be initiated.
 - Optional – It is possible to choose whether to activate the new feature.
 - Target Audience
 - ALL
 - Module/Orientation specific
- **No Implementation actions** – Changes that do not involve any setup/configuration change, and are generally code-based changes. These changes are always automatic. They can be viewed in the Code Changes (No Implementation Actions) table.

2. Service Pack Content Summary

Below is a list of corrections and enhancements included in this service pack. More detailed descriptions, when relevant, are provided in subsequent chapters.

The first table lists those changes that involve configuration changes that are either performed automatically or must be performed manually in order to be activated. The Auto-Enable column indicates whether the change was intended to be automatically performed by the SP. However, check the SP-generated e-mail after the SP is installed to see the status of any unperformed actions, whether intended to be automatic or manual.

The second table lists the defect fixes (code change only) that are automatically fixed by the SP mechanism.

Items that have additional information or implementation actions have links to such information in the Change ID # column.

2.1 Changes with Implementation Actions

Change ID #	Target Audience	Brief Description	Level	Type	Module/ Topic	RPC #	Auto Enable
1	Sites using Jpeg2000	Jpeg2000 viewer improvements	Mandatory	Enhancement	Delivery	1383	Y
2	Sites using RD	Resource Discovery - The mouseover tooltip text for thumbnail display is now configurable.	Mandatory	Defect fix	Resource Discovery	1405	Y
3	Sites using Mod-JK JP2 setup	Mod-JK setup with Tomcat had a mismatched port in the default DTL configuration.	Recommended	Defect fix	Delivery/ Mod-JK	1411	N
4	Sites using RD	Improvement to q2 harvest query speed	Recommended	Enhancement	Harvesting	1412	N
5	ALL	The number of results per page in the repository search is now configurable. The default remains 10.	Optional	Enhancement	Repository Search	1386	Y*

Change ID #	Target Audience	Brief Description	Level	Type	Module/ Topic	RPC #	Auto Enable
6	Sites using Repository Replication	Repository replication - Support for Is Null/Is Not Null in the set definition has been added.	Optional	Enhancement	Repository Replication	1390	N
7	ALL	Repository Search - Handling of “reserved words” by Oracle :	Optional	Enhancement	Repository Search	1388	N

2.2 Code Changes (No Implementation Actions)

Change ID #	Target Audience	Description	Type	Module/ Topic	RPC #
1	Sites cataloging CJK character sets	<p>Meditor CJK handling.</p> <ul style="list-style-type: none"> Certain Korean characters were not displayed correctly when editing and cataloging Dublin Core metadata. This has been corrected. The problem with the position of the Korean IME window has been fixed. 	Defect fix	Meditor	1377
2	OAI providers	OAI provider - XML format error for ListRecords and GetRecord OAI provider responses dealing with large XML records. Fixed.	Defect fix	OAI	1378
3	Sites cataloging non-Roman character sets	Meditor - editor_conf*.xml is derived from rep_editor_conf*.xml, which is stored in UTF-8. However, the characters in the editor_conf*.xml file were converted to UTF-8 again. This unnecessary conversion has been removed. All editor_conf*.xml updates are now done in UTF-8 encoding.	Defect fix	Meditor	1379

Change ID #	Target Audience	Description	Type	Module/ Topic	RPC #
4	OAI providers	<p>OAI server performance.</p> <p>The number of records per set was changed from a default of 30 to a default of 1000 in a previous Service Pack. This was appropriate for standard DC OAI providing, but large records containing full text (for example, Primo) would take a long time to send.</p> <p>The default value has now been changed to 100 records.</p> <p>However, the value may be changed as needed using the maxRecordsNumber parameter in \$dtl_tab/oai/oaipubconf.xml.</p> <p>Each resumption Token is now limited to 2 MB as per the OAI best practice - regardless of the maxRecordsNumber setting to avoid unnecessarily large sets.</p>	Defect fix	OAI	1380
5	Sites using Resource Discovery	Resource Discovery e-shelf publishing a folder containing a large amount of COMPLEX objects would lead to a time-out. Fixed.	Defect fix	RD	1381
6	Sites using CSV loading	Ingest of multiple complex objects simultaneously via CSV was not indexed correctly for purposes of viewer's search. Fixed.	Defect fix	Ingest	1382
7	Sites using Jpeg2000	Jpeg2000 - New version of JPEG200 aware-imageserver.jar	Enhancement	Delivery	1383
8	ALL	Repository indexing - missing indexes. The indexing mechanism will now be paused while the "Add Metadata" job is running in order to prevent missing indexes. A daemon will run to ensure that no indexes are missing.	Defect fix	Management Jobs	1384
9	ALL	<p>DC field management</p> <ul style="list-style-type: none"> Updating out-of-the-box DC fields would overwrite their DC Terms equivalent fields with the same prefix in tab12. Fixed. The "Add to Silo" check box did not work correctly. Fixed. Updating an existing DC field indexed by extended WRD in tab11_word would remove the other Word index codes. Fixed. Updating out-of-the-box DC Terms fields that have attributes would add incorrect harvesting_schema.xml silo code. Fixed. 	Defect fix	DC field management	1385

Change ID #	Target Audience	Description	Type	Module/ Topic	RPC #
10	Sites using LDAP and access rights	Access rights checker did not work properly with the PDS attributes course_enrollment_m and bor_group_m. Fixed.	Defect fix	Access rights	1387
11	Sites using deposit	Deposit/Approver - Previewing deposited files in deposit/approver would open the same file for different deposit activities when opened in the same browser window. Fixed.	Defect fix	Deposit/ Approver	1391
12	Sites using repository replication	Delivery rules ignored the user_mode attribute. Fixed.	Defect fix	Delivery	1392
13	Sites using Marc metadata	Marc XML handling in Meditor: Handling of control field whitespaces has been fixed.	Defect fix	Meditor	1394
14	Sites using external PDS and access rights	Meditor - Delivery of access right-restricted objects. When running PDS on an SSL port or an external PDS server, the delivery from the Meditor failed to pass the pds_handle in the staff driven URL and access-restricted objects were restricted even when they should have been allowed. Fixed.	Defect fix	Meditor	1395
15	Sites using Resource Discovery	The "brief" and "table view" parameter "maxlen" did not work. Fixed.	Defect fix	Resource Discovery	1396
16	Sites using CSV loading	Webingest - Corrupted CSV with non-closed quotes caused the ingest activity to get stuck in running status. Fixed - now it will be sent to Failed.	Defect fix	Ingest	1397
17	Sites using RD snippets	Resource Discovery with Snippets functionality - Filtering of dates together with search inside DIV did not work properly. Fixed.	Defect fix	Resource Discovery	1398
18	Sites using Marc metadata	Meditor - The number of subfields allowed per a Marc field has been increased to 99.	Defect fix	Meditor	1399
19	ALL	TECHNICAL - Problem with restarting JBOSS in certain cases when running the server log file cleanup via util x 12. Fixed.	Defect fix	General	1400
20	Sites using repository replication	Replications with multi-thread processing sometimes skipped records. Fixed.	Defect fix	Repository Replication	1401

Change ID #	Target Audience	Description	Type	Module/ Topic	RPC #
21	ALL	Management jobs - Performing a search that returns no results in order to build a set population on which to run a job would default to ALL digital entities being used as a set population instead of NONE. This has been fixed. Note: When no search is performed, the default will still run on ALL digital entities with the usual pop-up warning.	Defect fix	Management Jobs	1402
22	Sites using MODS	MODS handling - The standard x-path will now support harvesting and indexing of mods extensions with any namespace.	Defect fix	MODS	1403
23	Sites using COMPLEX/ METS	A new index for the HMETSINDEX table, due to a performance issue	Defect fix	Delivery	1404
24	Sites using PDS in Primo	PDS did not work correctly with Primo and DigiTool when PDS was on the Primo side. This has been fixed.	Defect fix	PDS	1406
25	ALL	Meditor - An attempt to edit a metadata record with a field that contained a large amount of data would cause Meditor to exit unexpectedly. Fixed.	Defect fix	Meditor	1407
26	Sites using Xepicur	Xepicur replication that uses the OAI DB replicator, would in certain cases skip records.	Defect fix	Repository Replication	1408
27	Sites using e-Shelf	When e-Shelf was used to view published folders in the METS/COMPLEX viewer, the table of contents label listed was the PID instead of the object name. Fixed.	Defect fix	Resource Discovery	1409
28	ALL	In certain circumstances of multiple and simultaneously running single and multi-threaded Create Persistent Identifier jobs, the system would generate duplicate handle identifiers. Fixed.	Defect fix	Management Jobs	1410

Change ID #	Target Audience	Description	Type	Module/ Topic	RPC #
29	Sites using image collections	<p>Delivery of images via the JPEG viewer pre-processor - improvements have been made to the cache logic:</p> <ul style="list-style-type: none"> • When converting TIFF to JPG on the fly for delivery, the Tiff is only copied/converted to JPG if a cached version of the JPG does not exist yet. • When rotating images, a copy of each rotated version of the image is kept in the cache directory to avoid simultaneous access overriding the cached image. • A delivery rule prefix has been added to cached image filename to ensure that the correct cached version is delivered (for example, when one delivery rule for images uses watermarking and another delivery rule does not). 	Defect fix	Delivery	1414
30	Sites using collections	Resource Discovery - Collections – A search within a collection that returned zero results would return the user into the search base GEN01. This is now fixed, and the base will correctly direct the user to the search-base destination.	Defect fix	Collections/ RD	1415
31	Sites using Resource Discovery	<p>Browser navigation in Resource Discovery search results:</p> <p>Using the browser Back button between different searches caused inconsistency in the results counts and lists. Fixed.</p>	Defect fix	Resource Discovery	1417
32	ALL	Derivative Jobs/Tasks – Derivative objects created by TN/JP2/general manifestation tasks/jobs inherited the Creation/Modification dates of the source objects instead of being given new dates. Fixed.	Defect fix	Management Jobs	1418
33	ALL	Webingest - When COMPLEX objects that had manifestations were ingested, sometimes (depending on the OS) a manifestation would be ingested before its COMPLEX object and would not be related to the COMPLEX object. Fixed.	Defect fix	Ingest	1419

3. Changes with Implementation Actions (Detailed)

3.1 Change 1 – Jpeg2000 Infrastructure Improved

Level – **Mandatory**

Target Audience – **Sites using Jpeg2000**

Type - **Enhancement**

Module – **Delivery**

Automatically enabled – **Y**

Description: Jpeg2000 viewer improvements:

- The image navigation page has been updated.
- When using deeplink, the XY coordinates are pointing to the center of the viewing frame.
- The Channel 4 color has been improved.

Automatic steps performed by the SP – for reference:

1. Delete the aware-imageserver-core-3.1.4.jar file from
\${user_dev}/dtle/tomcat/webapps/ImageServer/WEB-INF/lib/
and
\${user_dev}/dtle/tomcat/webapps/ImageServer/lib/
2. Copy the aware-imageserver-core-3.1.5.jar file from
\${dtl_dev}/dtle/tomcat/webapps/ImageServer/WEB-INF/lib/
to
\${user_dev}/dtle/tomcat/webapps/ImageServer/WEB-INF/lib/
and
\${user_dev}/dtle/tomcat/webapps/ImageServer/lib/
3. Copy the following files to \${user_dev}/dtle/tomcat/webapps/ImageServer/:
\${dtl_dev}/dtle/tomcat/webapps/ImageServer/dtlimagenav.jsp
\${dtl_dev}/dtle/tomcat/webapps/ImageServer/dtlimagenav.js

Click [here](#) to return to the Changes with Implementation Actions table.

3.2 Change 2 – Configurable Thumbnail Mouseover Text in RD

Level – **Mandatory**
Target Audience – Sites using RD
Type – **Defect**
Module – **RD**
Automatically enabled – **Y**

Description: Resource Discovery - The mouseover tooltip text for thumbnail display is now configurable via the `www_r_heading` file in the relevant language (`$dtle/error_lng/www_r_heading`):

5101 L Image Thumbnail

Automatic steps performed by the SP – for reference:

In `$dtle_root/error_*/www_r_heading`, the following lines are added:

```
!www_r_util_get_thumbnail  
5101 L Image Thumbnail
```

Click [here](#) to return to the Changes with Implementation Actions table.

3.3 Change 3 – Mod-JK for Jpeg2000 Tomcat

Level – **Recommended**
Target Audience – **Sites that need Mod-JK access to Jpeg2000 Tomcat**
Type - **Defect**
Module – **Delivery/Mod-JK**
Automatically enabled – **N**

Description: The Mod-JK setup with Tomcat had a mismatched port in the default DTL configuration. The port defined for node2 in `$dtle_root/apache/conf/mod-jk-workers.properties` and the one defined in `$dtle_root/tomcat/conf/server.xml` for port Coyote/JK2 AJP 1.3 Connector port must be the same.

Make sure that the `localnode2` port and the tomcat ajp connector port are the same.

1. Add the following to `$dtle_root/apache/conf/mod-jk-workers.properties`:

```
# Define Node2  
worker.localnode2.port=587@_AL_COPY  
worker.localnode2.host=localhost  
worker.localnode2.type=ajp13  
worker.localnode2.lbfactor=1  
worker.localnode2.local_worker=2
```

```
worker.localnode2.cachesize=10
worker.list=localnode2
```

If you are setting up Mod-JK and have Jpeg2000 Tomcat port that listens to Apache's port, make sure that the non-tml file \$dtl_root/apache/conf/mod-jk-workers.properties has the following section defined:

```
# Define Node2
worker.localnode2.port=5871
worker.localnode2.host=localhost
worker.localnode2.type=ajp13
worker.localnode2.lbfactor=1
worker.localnode2.local_worker=2
worker.localnode2.cachesize=10
worker.list=localnode2
```

2. Add the following to \$dtl_root/apache/conf/mod-jk.conf (and the .tml file):

After the line JkMount /oai* localnode add the following line:

```
JkMount /ImageServer* localnode2
```

3. If you are setting up Mod-and have Jpeg2000 Tomcat that listens to Apache's port, restart Apache and Tomcat.

Click [here](#) to return to the Changes with Implementation Actions table.

3.4 Change 4 – Improvement to Harvest q2 Query Speed

<p><u>Level</u> – Recommended <u>Target Audience</u> – Sites using RD <u>Type</u> - Enhancement <u>Module</u> – Harvesting <u>Automatically enabled</u> – N</p>
--

Description: Improvement to q2 Harvest query speed

Recommended for larger sites (100K + records)

Copy q2.v2.template.xml \$dtl_dev/gen01/tab/ to \$user_dev/gen01/tab/ by typing:

```
cp ${dtl_dev}/gen01/tab/q2.v2.template.xml ${user_dev}/gen01/tab/
```

Click [here](#) to return to the Changes with Implementation Actions table.

3.5 Change 5 – Results per Page in Repository Search

Level – **Optional**
Target Audience – **ALL**
Type - **Enhancement**
Module – **Management search**
Automatically enabled – **Y**

Description: The number of results per page in the repository search has been made configurable. The default remains 10.

Automatic steps performed by the SP – for reference:

Within \$jdtlh/profile/overwrites/conf/repository_configuration.xml.tmpl, add the following parameter in the repository module:

//modules/module[@name="repository"]/parameters

```
<parameter>
    <p_key>answer_per_page</p_key>
    <p_val>10</p_val>
</parameter>
```

Click [here](#) to return to the Changes with Implementation Actions table.

3.6 Change 6 – Allowing Null Value control_field Searches to Be Conducted via Repository Replication

Level – **Optional**
Target Audience – **Sites using repository replication**
Type - **Enhancement**
Module – **Repository Replication**
Automatically enabled – **N**

Description: Repository replication - Support for Is Null/Is Not Null has been added in the set definition for control_fields.

The following options are now supported when creating a set based on control fields:

- <field key="owner" op="exact">null</field> = all digital entries where owner is null
- <field key="owner" op="exact"></field> = all digital entries where owner is null
- <field key="owner" op="not">null</field> = all digital entities where owner is not null
- <field key="owner" op="not"></field> =all digital entries where owner is not null

- <field key="owner" op="exact">"null"</field> = all digital entries where owner is "null" (the search string is literally "null")

This is useful when a user is building sets based on control fields that store null values by default - for example, status or partition values. If the user, for instance, wants to create a set with statuses that are not SUPPRESSED, the repository replication will now return PIDs with null value statuses as well as those with an actual value other than SUPPRESSED.

Click [here](#) to return to the Changes with Implementation Actions table.

3.7 Change 7 – Handling of Reserved Word by Oracle in Repository Search

Level – **Optional**

Target Audience – **ALL**

Type - **Enhancement**

Module – **Repository Search**

Automatically enabled – **N**

Description: Repository Search - Handling of reserved words by Oracle:

When reserved words, such as NEAR or FUZZY, are sent to Oracle without brackets, they are treated as reserved words. When such words are in curly brackets, the search term will be treated literally.

Example:

"A near B" means "Use the Oracle NEAR function".

"A {near} B" means "Search the string as is".

Click [here](#) to return to the Changes with Implementation Actions table.