# **DSpace Release 6.0 Status**

## Version 6.0

Support for DSpace 6 will be ending on July 1, 2023. See Support for DSpace 5 and 6 is ending in 2023 DSpace 6.0 was officially released to the public on October 24, 2016.

DSpace 6.0 can be downloaded immediately from:

https://github.com/DSpace/DSpace/releases/tag/dspace-6.0

More information on the 6.0 release (and the 6.x platform in general) can be found in the 6.x Release Notes.

Upgrade instructions can be found at Upgrading DSpace Where are the Release Notes?

DSpace 6.x Release Notes have been incorporated into the DSpace 6.x documentation wiki. The content of that page, and this one, is similar, but it's not a perfect duplicate. This page is for coordinating and planning DSpace Release 6.0, and for communicating this status information to the community. This Release Status page is a historical document, with much of the same material.

#### **Table of Contents:**

#### Error rendering macro 'toc'

java.lang.RuntimeException: com.ctc.wstx.exc.WstxUnexpectedCharException: Unexpected character ';' (code 59) expected '=' at [row,col {unknown-source}]: [94,6835]

## New Features in DSpace 6.0

DSpace 6.0 ships with a number of new features. Certain features are automatically enabled by default while others require deliberate activation. The following non-exhaustive list contains the major new features in 6.0



Major Java API refactor, supporting UUIDs and Hibernate. The DSpace Java API has been refactored significantly to make it more modular, and make it easier to achieve future RoadMap modularity goals. For more detailed information, see DSpace Service based api or DS-2701. This feature was contributed by Kevin Van de Velde of @mire, with support/help from the DSpace Committers.

- Hibernate allows us more stability in our database layer (decreases the likelihood of database specific bugs), and potentially allows us to support additional database platforms in the future
- UUIDs provide all objects with stable, globally unique identifiers (instead of existing incremental, non-unique database identifiers). This simplifies the management of identifiers in our object model. See also DS-1782.
- The Java API itself is now split into three "layers" which are all now initialized via Spring
  - Service layer, which contains DSpace business logic
  - Database Access Object (DAO) layer, which contains specific Hibernate database queries to locate/find individual objects
  - Database Object layer, which provides access to specific database columns, object properties via Hibernate

Most sites will not notice this major API refactor, as the upgrade is seamless. However, if you've performed major (Java-level) customizations, you may need to refactor your own customizations to use this newly refactored API. Some examples are on the DSpace Service based api page.



Enhanced (Reloadable) Configuration System. See Configuration Reference, Enhanced Configuration Scheme and DS-2654. This feature was contributed by Tim Donohue of DuraSpace.

- Provides easier management of local configurations via a new local.cfg file. Any configurations
  (from \*.cfg files) can be overridden in DSpace by simply copying them into your local.cfg and
  changing the value. See Configuration Reference
- Many configurations now automatically reload as soon as you save your local.cfg file. This
  means you don't need to restart Tomcat every time you need to change a configuration.
  - Please note: Unfortunately, at this time, some configurations do still get cached in the XMLUI or JSPUI (or similar). So, while many will reload, not all of them yet support this feature.



Enhanced file (bitstream) storage plugins, including support for Amazon S3 file storage. This feature was contributed by Peter Dietz of Longsight.

 Configuring the Bitstream Store (also see https://github.com/DSpace/DSpace/pull/1159 and DS-1117)



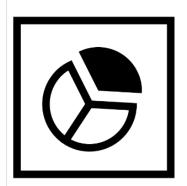
Configurable site healthcheck (i.e. repository status) reports via email. This feature was contributed by Jozef Misutka of Lindat.

• Healthcheck reports (also see DS-2659).



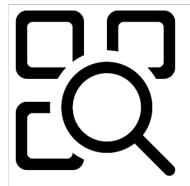
#### XMLUI new features

- New framework for metadata import from external sources (including an out-of-the-box plugin supporting PubMed, and hopefully more coming soon). This concept was previously only supported in JSPUI. Screencast example: http://screencast.com/t/QBImSGbAUZ. These features were contributed by @mire. The PubMed metadata import plugin was also contributed by the Netherlands Cancer Institute.
  - Framework to support metadata import from external sources: DS-2876
  - PubMed metadata import plugin: DS-2880
- Extensible administrative control panel, allowing institutions to override or customize the tabs in the XMLUI administrative "control panel" (see also DS-2625). This feature was contributed by Jozef Mis utka of Lindat.
- · Export of XMLUI search results to CSV for batch metadata editing. This feature was previously only supported in JSPUI. See also DS-1262. This feature was contributed by William Welling of Texas



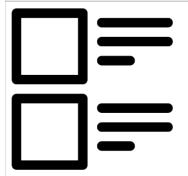
#### **REST API new features**

- REST Based Quality Control Reports for collection manager. See also DS-2583. This feature was contributed by Terry Brady of Georgetown University
  - See Metadata Query Report on demo.dspace.org
     See Collection Filter Report on demo.dspace.org
- Support for all authentication methods via REST (e.g. Shibboleth, LDAP, etc). See also DS-2898.
- New /registries endpoint which provides access to the metadata registries via REST. See also DS-2539. This feature was contributed by Terry Brady of Georgetown University.
- REST API now provides a version via /status endpoint (inherits the version of DSpace API). See DS-2619. This feature was contributed by Ivan Masár.



#### Search/Discovery enhancements

- All searches now default to boolean AND. See DS-2809. This enhancement was contributed by Andrea Schweer.
- New "Has File" facet, which allows you to easily filter by items that have one or more files. See DS-2648. This enhancement was contributed by Christian Scheible.
- Full text indexing of Excel spreadsheets, so that they are now searchable. See DS-2629. This
  enhancement was contributed by Ed Goulet.
- Right-to-left text in PDFs is now indexed for searching. See DS-1187. This enhancement was contributed by Saiful Amin



#### Other enhancements:

- PDFBox was upgraded to version 2.0 (DS-3035). A new PDFBox Thumbnail generator was also added and enabled by default (DS-3052). These features were contributed by Ivan Masár.
- OAI-PMH was upgraded for compliance with the OpenAIRE 3.0 guidelines for literature repositories. This enhancement was contributed by Pedro Príncipe.



#### Features Removed or Replaced in 6.0

- The build.properties configuration file has been replaced by an enhanced local.cfg configuration file. The new local.cfg allows you to easily override any configuration (from dspace.cfg or modules/\*.cfg files) by simply copying it into your local.cfg and specifying a new value. It also provides enhanced configuration options as detailed in the Configuration Reference documentation. The old build.properties file is no longer used nor supported.
  - WARNING: As part of adding this new configuration scheme, many of the configuration settings in DSpace (primarily those in modules/\*.cfg files) had to be renamed or prepended with the name of the module. This means that 5.x (or below) configurations are no longer guaranteed to be compatible with 6.x. If possible, we recommend starting with fresh configs (see below), and moving all your locally customized settings into the new local.cfg file.
- The PDF Citation Cover Page configuration file has been renamed (from disseminatecitation.cfg to citation-page.cfg). See this feature's documentation for more details.
- The legacy search engine (based on Apache Lucene) and legacy Browse system (based on database tables) have been removed from DSpace 6.0 or above. Instead, DSpace now only uses Discovery (based on Apache Solr) for all Search/Browse capabilities. See DS-2160. The legacy browse system was removed by Kevin Van de Velde. The legacy search system was removed by Tim Dopohue
- The DSpace Lightweight Networking Interface (LNI), supporting WebDAV / SOAP / RPC API, has been removed from DSpace 6.0 or above. We recommend using REST or SWORD (v1 or v2) as a replacement. However, if you still require it, the old (unmaintained) LNI codebase is still available at https://github.com/DSpace/dspace-Ini. This change was contributed by Robin Taylor of University of Edinburgh.
- Support for SRB (Storage Resource Broker) file storage has been removed from DSpace 6.0 or above. As it was unmaintained (and seemingly unused) for many years, this feature was removed along with its configurations. As a replacement, a new file storage plugin system was added, featuring a traditional local file storage option (default) and an Amazon S3 file storage option (see Storage Layer documentation, especially Configuring the Bitstream Store). For more information on the removal of SRB support, also see DS-3055. This change was contributed by Peter Dietz of Longsight.
- The user groups Administrator and Anonymous cannot be renamed or deleted. If you had
  renamed them, they will be renamed back to the stock names during the upgrade. DSpace is now
  dependent on these specific names due to internal changes. This change was contributed by Mark
  Wood of IUPUI.
- XPDF PDF Thumbnail generation has been removed. Please use the ImageMagick or PDFBox thumbnail generators instead. See DS-2159. This change was contributed by Mark Wood of IUPUI.
- The default strategy to create new handles for versioned Items has changed. If you have Item
  Level Versioning enabled and you have versioned Items in your DSpace installation, you may want
  to change the configuration to continue using the mechanism to create handles as it was in DSpace
  4 and 5. You can find more informations here: Item Level Versioning#IdentifierServiceOverride.
- Elasticsearch Usage Statistics feature is deprecated in the 6.0 release. While they still
  function, and you can continue to use them, in a future DSpace release they will be removed. If you
  are looking for a usage statistics option, we recommend instead using the default SOLR Statistics
  engine and/or DSpace's integration with Google Analytics. See DS-2897 for more information.

## Changes

### New Features in 6.0

key summary type created updated due assignee reporter priority status resolution

Unable to locate Jira server for this macro. It may be due to Application Link configuration.

## **General Improvements in 6.0**

key summary type created updated due assignee reporter priority status resolution

Unable to locate Jira server for this macro. It may be due to Application Link configuration.

## Bug Fixes in 6.0

key summary type created updated due assignee reporter priority status resolution

Unable to locate Jira server for this macro. It may be due to Application Link configuration.

## Organizational Details

#### **Release Coordination**

Instead of a single "Release Coordinator", the DSpace 6.0 release will be managed by a "Release Team".

#### **Release Team Members**

- Kevin Van de Velde (Atmire)
- Tim Donohue
- Pascal-Nicolas Becker

### **Timeline and Processing**

Your contributions are welcome now! Code and documentation need not be finished, so long as it is working and we can all see what it is for. Time is set aside for fixing, polishing, and integration. We have some general Code Contribution Guidelines available, but you are also welcome to ask questions on the dspace-devel mailing list.

## **Release Timeline**

Please note that the dates below are estimates of when particular activities may occur. As there are many factors involved in a major release, these are subject to change.

Date	Milestone	What it means
November 12	Deadline for feature pull requests	If you wish to contribute features to DSpace 6.0, you must submit a pull request by this date.
November - January	Review, merger and conflict resolution between pull requests	The entire hour's meeting will be used to discuss proposed features submitted by the deadline.

March, 2016	Feature freeze	DSpace 6.0 is considered feature-complete on this date. Only bugfixes will be pulled between this date and final release.
April 22	Release Candidate 1 tagged	A DSpace 6.0 Release Candidate will be available for wider testing.
April 25 through May 6	Testathon	Intensive public testing of the 6.0 Release Candidate is invited. The Release Team will focus on getting problems resolved.
June 10	Release Candidate 2 tagged	An updated DSpace 6.0 Release Candidate will be available for wider testing.
June - July 2016	Ongoing bug fixes / stability testing	Ongoing bug fixes / stability testing
Sept 6	Release Candidate 3 tagged	An updated DSpace 6.0 Release Candidate will be available for wider testing.
Sept 30	Release Candidate 4	An updated DSpace 6.0 Release Candidate will be available for wider testing.
Oct 24	DSpace 6.0 is publicly released	DSpace 6.0 is released for download and general use.

Release Process needs to proceed according to the following Maven release process: Release Procedure

## **Image Credits**

Refactor by Arthur Shlain, The Noun Project

Configure by Gonzalo Bravo, The Noun Project

Cloud by Icon 54, The Noun Project

System Status by Rabee Balakrishnan, The Noun Project

Imperial Trellis by Wes Breazall, The Noun Project

Control Panel by Gregor rešnar, The Noun Project

Export Data by Creative Stall, The Noun Project

Pie Graph by Emily van den Heever, The Noun Project

Shears by Anton Gajdosik, The Noun Project

Tiles by Arthur Shlain, The Noun Project

Search Applications by Rolith M. S., The Noun Project

# **Príncipe**