Release Notes

Upgrade from any past version of DSpace!

Installing DSpace provides an overview of the DSpace 7 installation process and all prerequisite software. You should review this before attempting an upgrade, in order to ensure you are running the required versions of Java, Node, etc.

Upgrading DSpace provides a guide for upgrading from *any old version* of DSpace to v7. As in the past, your data migrates automatically, no matter which older version you are running. *However, as the old XMLUI and JSPUI user interfaces are no longer supported, you must switch to using the new User Interface.*

7.6.1 Release Notes

DSpace 7.6.1 was released on November 15, 2023

To try out DSpace 7.6.1 immediately, see Try out DSpace 7.   This includes instructions for a quick-install via Docker, as well as information on our DSpace demo site.

To upgrade to DSpace 7.6.1 from 7.x *or any prior version*, see Upgrading DSpace

- To upgrade to 7.6.1, you MUST upgrade *both* the backend and frontend (user interface). Many bug fixes require updating *both*.

To install DSpace 7.6.1 for the first time, see Installing DSpace.

- Download DSpace 7.6.1 Backend: https://github.com/DSpace/DSpace/releases/tag/dspace-7.6.1
- Download DSpace 7.6.1 User Interface: https://github.com/DSpace/dspace-angular/releases/tag/dspace-7.6.1

DSpace 7.6.1 provides bug fixes & performance improvements to the 7.6.x platform. *No new features are provided.* As such this release should be an easier upgrade for sites already running 7.6.

Major bug fixes / improvements include:

- Performance improvements
    - User interface no longer repeatedly requests the "/api" endpoint of the backend. https://github.com/DSpace/dspace-angular/issues/2482 (*Donated by Atmire*)
    - "Edit Group" page performs much better for groups with a lot of members. https://github.com/DSpace/DSpace/issues/9052 and https://github.com/DSpace/dspace-angular/issues/2512
    - Workflow Tasks page loads more quickly for a logged-in EPerson who is a member of many groups. https://github.com/DSpace/DSpace/issues/9053 (*Donated by Atmire*)
    - OAI-PMH no longer has high memory usage during/after harvesting. https://github.com/DSpace/DSpace/issues/8846 (*Donated by Christian Bethge, ULB*)
    - Improved performance of "./dspace update-handle-prefix" script. https://github.com/DSpace/DSpace/issues/9066 (*Donated by 4Science*)
    - Improved performance of "./dspace checker" script. https://github.com/DSpace/DSpace/issues/9180 (*Donated by 4Science*)
    - Improved performance of "./dspace generate-sitemaps" script (and automatic sitemaps). https://github.com/DSpace/DSpace/issues/3182 (*Donated by 4Science*)
- General fixes

- - - Specific browser plugins no longer cause the User Interface to appear blank. https://github.com/DSpace/dspace-angular/issues/2450 *(Donated by floriangantner, U of Bamberg)*
    - Emails sent by DSpace no longer have blank "Subject" fields. https://github.com/DSpace/DSpace/issues/8921 *(Donated by Mark Wood, Indiana University)*
    - Navbar menu on mobile devices now works in Firefox/Safari. https://github.com/DSpace/dspace-angular/issues/2372 *(Donated by eScire)*
    - Git is no longer required as a build dependency. https://github.com/DSpace/DSpace/pull/9032 *(Donated by Cottage Labs)*
- Item view fixes
  - Handle redirects now work properly when "ui.nameSpace" config (on frontend) is customized. https://github.com/DSpace/dspace-angular/issues/2517 *(Donated by Atmire)*
  - Bitstream URLs now work properly if "ui.nameSpace" config (on frontend) is customized. https://github.com/DSpace/dspace-angular/issues/2446 *(Donated by Atmire)*
  - Thumbnails now work properly for Bitstreams having special characters. https://github.com/DSpace/DSpace/issues/9112 *(Donated by floriangantner, U of Bamberg)*
  - Fixed display issue of media viewer (controls hidden behind header). https://github.com/DSpace/dspace-angular/issues/2341 *(Donated by 4Science)*
  - MathJax code is no longer displayed twice. https://github.com/DSpace/dspace-angular/issues/2170 *(Donated by Atmire)*
  - Fixed issue where some "Edit Item" pages were visible (but not usable) to anonymous users. https://github.com/DSpace/dspace-angular/issues/2609 *(Donated by 4Science)*
- Browse/Search fixes
  - Hierarchical browse indexes for controlled vocabularies can now be disabled. https://github.com/DSpace/DSpace/issues/8947 *(Donated by Toni Prieto)*
  - Pagination is now reset when changing searches. https://github.com/DSpace/dspace-angular/issues/2159 *(Donated by eScire)*
  - Unicode characters now work properly in search filters. https://github.com/DSpace/DSpace/issues/8914 *(Donated by Toni Prieto)*
- Submission/Workflow form fixes
  - Submission form no longer hangs / enters infinite loop in specific scenarios. https://github.com/DSpace/dspace-angular/issues/1924 and https://github.com/DSpace/dspace-angular/issues/2577 *(Donated by 4Science)*
  - Freetext is now supported in controlled vocabulary fields where "closed=false". https://github.com/DSpace/dspace-angular/issues/2435 *(Donated by Atmire, with support from the International Livestock Research Institute)*
  - Date field can now be modified easier when editing an existing submission. https://github.com/DSpace/dspace-angular/issues/2588 *(Donated by 4Science)*
  - "metadata.hide" fields are no longer hidden from submitters/reviewers. https://github.com/DSpace/dspace-angular/issues/1997 *(Donated by Toni Prieto)*
  - "Type" dropdown no longer changes to first entry in list when pressing Enter. https://github.com/DSpace/dspace-angular/issues/2145 *(Donated by eScire)*
  - Workflow curation tasks can now be "queued" for later. https://github.com/DSpace/DSpace/issues/9070 *(Donated by Agustina Martinez, Cambridge University)*
  - Removed "Add More" button when additional sections not available. https://github.com/DSpace/dspace-angular/issues/2535 *(Donated by Atmire)*
  - Added submitter information in "dc.description.provenance" as in older versions. https://github.com/DSpace/DSpace/issues/8585 *(Donated by Arvo Consultores)*
- Authentication fixes
  - Entering an incorrect password no longer results in a blank login menu in Firefox. https://github.com/DSpace/dspace-angular/issues/2515 *(Donated by Atmire)*
  - LDAP is no longer broken if groupmaps were enabled. https://github.com/DSpace/DSpace/issues/8920 *(Donated by wwuck)*
  - Special groups are only added for the authentication system the user used to login. https://github.com/DSpace/DSpace/issues/9127 *(Donated by 4Science)*
  - Login popup now lists login methods in order of configuration. https://github.com/DSpace/dspace-angular/issues/2365 *(Donated by Atmire)*
- Admin tools fixes
  - A new Metadata Schema in registry no longer requires a page reload to appear. https://github.com/DSpace/dspace-angular/issues/1081 *(Donated by eScire)*
  - Moving items between collections now inherits policies correctly. https://github.com/DSpace/DSpace/issues/8987 *(Donated by Atmire)*
- Statistics fixes
  - Google Analytics bitstream statistics are now limited to the "ORIGINAL" bundle. https://github.com/DSpace/DSpace/issues/8938 *(Donated by Atmire)*
- Theming fixes
  - Configuring themes using "handle" now works properly. https://github.com/DSpace/dspace-angular/issues/2348 *(Donated by Atmire)*
  - Extending a theme no longer causes it to potentially render multiple times. https://github.com/DSpace/dspace-angular/issues/2346 *(Donated by Atmire)*
- Search Engine Optimization fixes
  - Access restricted and "Non-Discoverable" Items are no longer listed in Sitemaps. https://github.com/DSpace/DSpace/issues/5394 and https://github.com/DSpace/DSpace/issues/5343 *(Donated by 4Science)*
- Accessibility fixes
  - Fixes to accessibility of Community List (/community-list) page. https://github.com/DSpace/dspace-angular/issues/2251 *(Donated by Cottage Labs)*
  - Added an invisible "Skip to main content" button on all pages. https://github.com/DSpace/dspace-angular/issues/2523 *(Donated by Atmire)*
- Translation bug fixes
  - Translation files (i18n files) are now hashed, so they are no longer reloaded unless they change. https://github.com/DSpace/dspace-angular/issues/2461 *(Donated by Atmire)*
  - Localized "default_[language-code].license" files are supported again. https://github.com/DSpace/DSpace/issues/8882 *(Donated by PCG Academia)*
  - Translations are now working properly for item status badges in MyDSpace. https://github.com/DSpace/dspace-angular/issues/2387 *(Donated by Mirko Scherf)*
- Replication Task Suite version 7.6 has been released to add compatibility with all DSpace 7.6.x releases. This Maven plugin can be used to provide extra curation tasks for AIP Backup and Restore.
- *Many other bug fixes and dependency updates* as listed in Changes in 7.x.

Updated Language support:

- Finnish (Suomi) translation updates donated by Reeta Kuukoski (reetagithub)
- Italian (Italiano) language updates donated by 4Science
- Polish (Polski) translation updates donated by Micha Dykas (michdyk)
- Brazilian Portuguese (Português do Brasil) updates donated by Marco Aurelio Cardoso (marcoaureliocardoso)
- Portugese (Português) language updates donated by José Carvalho (j-n-c)
- (New) Serbian Cyrillic () language translations donated by Milos Ivanovic (imilos)
- (New) Serbian Latin (Srpski (lat)) language translations donated by Milos Ivanovic (imilos)
- Spanish (Español) translation updates donated by Arvo Consultores

7.6.1 Acknowledgments

The DSpace application would not exist without the hard work and support of its community. Thank you to the many developers who have worked very hard to deliver all the bug fixes and improvements. This release was *entirely volunteer driven!*

Development Acknowledgments

A total of 38 unique individuals contributed to 7.6.1.

Frontend / User Interface Acknowledgments

The following 29 individuals have contributed directly to the new DSpace (Angular) User Interface in this release (*ordered by number of GitHub commits*): A lexandre Vryghem (alexandrevryghem), Tim Donohue (tdonohue), Hugo Daniel Dominguez de la Cruz (hugo-escire), Davide Negretti (davide-negretti), Vla dzislav Novski (vNovski), Eike Löhden (Leano1998), Hrafn Malmquist (J4bbi), Paulo Graça (paulo-graca), Art Lowel (artlowel), Micha Dykas (michdyk), Ala n Orth (alanorth), Kristof De Langhe (Atmire-Kristof), Milos Ivanovic (imilos), Mirko Scherf (mirkoscherf), Sascha Szott (saschaszott), Mark Wood (mwoodiupui), William Welling (wwtamu), Lotte Hofstede (LotteHofstede), Flo (floriangantner), Hardy Pottinger (hardyoyo), Sergio Fernández Celorio (sergius02), Yury Bondarenko (ybnd), Agustina Martinez (amgciadev), Reeta Kuukoski (reetagithub), Nona Luypaert (nona-luypaert), Kim Shepherd (kshepherd), Yana De Pauw (YanaDePauw), Marie Verdonck (MarieVerdonck)

The above contributor lists were determined based on contributions to the "dspace-angular" project in GitHub between 7.6 (after June 23, 2023) and 7.6.1: https://github.com/DSpace/dspace-angular/graphs/contributors?from=2023-06-23&to=2023-11-15&type=c

Backend / REST API Acknowledgments

The following 20 individuals have contributed directly to the DSpace backend (REST API, Java API, OAI-PMH, etc.) in this release (*ordered by number of GitHub commits*): Tim Donohue (tdonohue), Agustina Martinez (amgciadev), Mark Wood (mwoodiupui), Paulo Graça (paulo-graca), Toni Prieto (toniprieto), Adán Román Ruiz (aroman-arvo), Christian Bethge (ChrisBethgster), Alan Orth (alanorth), Nicholas Woodward (nwoodward), Nona Luypaert (nona-luypaert), Alexandre Vryghem (alexandrevryghem), Hrafn Malmquist (J4bbi), Andrea Bollini (abollini), Luca Giamminonni (LucaGiamminonni), damian-joz, Michael Spalti (mspalti), Kim Shepherd (kshepherd), Martin Walk (MW3000)

The above contributor list was determined based on contributions to the "DSpace" project in GitHub between 7.6 (after June 23, 2023) and 7.6.1: https://git hub.com/DSpace/dspace/graphs/contributors?from=2023-06-23&to=2023-11-15&type=c

7.6 Release Notes

DSpace 7.6 was released on June 26, 2023

To try out DSpace 7.6 immediately, see Try out DSpace 7.   This includes instructions for a quick-install via Docker, as well as information on our sandbox /demo site for DSpace 7.

To upgrade to DSpace 7.6 from 7.x *or any prior version*, see Upgrading DSpace.

To install DSpace 7.6 for the first time, see Installing DSpace.

- Download DSpace 7.6 Backend: https://github.com/DSpace/DSpace/releases/tag/dspace-7.6
- Download DSpace 7.6 User Interface: https://github.com/DSpace/dspace-angular/releases/tag/dspace-7.6

DSpace 7.6 provides new features & bug fixes to the 7.x platform.

New features include:

- **Bulk Access Management** allows someone with administrative privileges (site wide or over a single object) to perform bulk modifications to the permissions of objects they administer. This allows for the ability to add/remove embargoes or other access restrictions to many objects at once. (*Developed and co-funded by 4Science with the Support of University of Cambridge*)
- **Support for selecting Primary Bitstream for archived Items**, similar to version 6.x. The existing "primary bitstream" selector now functions properly when editing a Bitstream.
- **Item counts can now be displayed** for all Communities/Collections *similar to version 6.x. (Donated by PCG Academia)*
- **Browse Hierarchical Controlled Vocabularies** This new feature allows users to browse/search for items quickly using the same controlled vocabulary configured in your submission forms. *(Donated by Atmire)*
- **Signposting support for items and bitstreams.** This new feature embeds signposting links/metadata into pages and responses, to better support FAIR guiding principles. (*Developed and donated by 4Science*)
- **Import Simple Archive Format Zip files from a remote URL.** This feature enhances the existing batch import feature to allow you to specify the URL of the ZIP file to import, instead of using the drag & drop upload. *(Developed and donated by 4Science)*
- **ImageMagick Thumbnails for Video files** (MP4). A new "ImageMagick Video Thumbnail" plugin can be used to generate thumbnails from Video files using FFmpeg. *(Donated by Abel Gómez)*

- **Ability to map Item submission forms via Entity Type** to easily configure a submission form for all Collections accepting the same Entity Type. See the Configurable Entities documentation. *(Donated by Paulo Graça)*
- **New default Privacy Statement and End User Agreement** . The new default text of these policies can be found by visiting the links in the footer of our demo site. *(Donated by DSpaceDirect)*
- **Oracle support has been removed** as was previously announced in March 2022 on our mailing lists.

Major bug fixes / improvements include:

- User interface upgraded to Angular 15
- Performance improvements for Items with many bitstreams *(Donated by Michael Spalti)*
- Browse by fixes
  - Allow browse by to properly filter for numerical values. *(Donated by eScire)*
  - Added upper limit for year in Browse by Date *(Donated by Michael Spalti)*
  - Fixed issue with clicking on items when filtering by year in Browse by Date *(Donated by Michael Spalti)*
  - Fixed issue where non-existent browse could cause page loading issues *(Donated by Atmire)*
  - Fixed issue where special characters in UUID could cause page loading issues *(Donated by Atmire)*
- Search fixes
  - Fixed issue with scope-based searching in Discovery/Solr *(Donated by Atmire)*
  - Fixed issue where deselecting a filter could return an invalid query. *(Donated by eScire)*
  - Ensured Collections/Communities are now listed alphabetically in all search/selection popups (and sort order is configurable in config. yml) *(Donated by Arvo Consultores)*
  - Fixed issues with "-i" and "-r" params to index-discovery script *(Donated by Agustina Martinez)*
- Submission form fixes
  - Fixed issue where "list" input type would not work properly when set to required
  - Adding/removing new relationships (between Entities) would sometimes not update on the form *(Donated by Atmire)*
  - Date picker was not always respecting start/end dates for access options *(Donated by Mark Wood)*
  - Hint was missing from subject keywords field, and "list" and "tag" input types *(Donated by Atmire)*
  - Fixed several issues with imports from external sources to avoid cached errors and double submissions *(Donated by Atmire and 4Science and Alan Orth and others)*
  - Fixed issues where a required, hidden field could make it impossible to complete submission *(Donated by 4Science)*
  - Disabled collection box once submission is in workflow state. Collection cannot be changed during workflow. *(Donated by eScire)*
  - Fixed visibility of read-only fields and sections *(Donated by 4Science)*
  - Fixed issue where CC0 was displayed twice in Creative Commons section *(Donated by Atmire)*
- Statistics fixes
  - Fixed issue where Solr statistics were not loading after sharding *(Donated by Nicholas Woodward)*
  - Fixed issue where restricted objects appeared in Solr statistics with an empty name
  - Fixed issue where the referrer for a "view" event was almost always incorrect *(Donated by Atmire)*
  - Fixed issue where "search_result" events were not being captured in statistics. *(Donated by Atmire)*
- Permission inheritance fixes
  - When moving an Item to a new Collection *(Donated by Agustina Martinez)*
  - Where Bundles were accidentally inheriting access permissions for Bitstreams *(Donated by Kim Shepherd)*
- Administrative fixes
  - Enhanced functionality for deleting multiple bitstreams (of the same Item) at once. Fixed issue where sometimes only the first bitstream would be deleted. *(Donated by Atmire)*
  - Fixed issue where only one thumbnail was deleted when running media-filter in force mode. (*Developed and donated by 4Science*)
  - Fixed issue where an Admin couldn't reset another user's password if Captcha was enabled. *(Donated by @Ma-Tador)*
  - Fixed issues with checksum reporter/checker no longer working properly. (*Developed and donated by 4Science*)
  - Fixed issue where Collection Admin could not edit an Item Template *(Donated by D&L)*
  - Fixed issue where EPerson deletion could result in page loading issues (*Developed and donated by 4Science*)
  - Fixed bug where edit form for a Commuity/Collection/Item would not always update if you selected a different object immediately (*Developed and donated by 4Science*)
  - Improved validation of input fields when creating new Metadata schema or fields. *(Donated by Atmire)*
  - Fixed issue where workflow actions (from "Administer workflow" page) were not working. (*Developed and donated by 4Science*)
  - Fixed issue where curation tasks could not be performed by Community or Collection Admins. (*Developed and donated by 4Science*)
- Request a Copy fixes
  - Fixed issue with response page not loading
  - Fixed issue where "helpdesk" strategy required authentication in order to respond. *(Donated by Arvo Consultores)*
  - Moved text of approval/rejection emails to backend along with other email templates *(Donated by Mark Wood)*
- Added Multipart upload support to Amazon S3 Bitstore plugin (allows for larger uploads). (*Developed and donated by 4Science*)
- Added "webui.content_disposition_format" configuration to support always downloading (as an attachment) specific file formats. *(Donated by Atmire)*
- Fixed issue where page could fail to load if browse cookie language code was invalid *(Donated by Atmire)*
- Fixed issue where Shibboleth authentication would not reload the current page after authentication *(Donated by Michael Spalti)*
- Fixed several bugs with the ORCID Authority Control plugin and added more detailed documentation on enabling it. *(Donated by uofmsean with support from others)*
- Fixed issue where RSS feed was wrongly sorting alphabetically. Corrected to sort by date (like recent submissions). *(Donated by Nicholas Woodward)*
- Fixed issue where you could not enable the video viewer without also enabling the image viewer. *(Donated by Atmire)*
- Fixed issue where Batch import (Zip) would throw a confusing error if the file size was too large *(Donated by Nicholas Woodward)*
- Fixed issue where Batch import (Zip) was not cleaning up temporary files after an error occurred *(Donated by Nicholas Woodward)*
- GDPR compliance fix. An unnecessary external font was being loaded into the UI. *(Donated by Nicholas Woodward)*
- Minor updates/fixes to IIIF support *(Donated by Michael Spalti)*
- Made many more user interface components themeable
- Numerous user interface accessibility and usability enhancements *(Donated by Adam Doan and eScire and Atmire)*
- Docker script build enhancements *(Donated by DSpaceDirect)*
- Numerous other small bug fixes and dependency updates to frontend and backend.

New/Updated Language support:

- French (Français) language updates donated by Pierre Lasou (pilasou)

- German (Deutsch) language updates donated by fapsi and Sascha Szott (saschaszott)
- Hungarian (Magyar) language updates donated by Nagy Akos (akoscomp)
- Italian (Italiano) language added & donated by 4Science
- Portegese (Português) language updates donated by Ricardo Saraiva (rsaraivac)
- Spanish (Español) language updates donated by vlguerrero
- Vietnamese (Ting Vit) language added & donated by D&L (VuNguyen - Zerosoul1990)

7.6 Acknowledgments

The DSpace application would not exist without the hard work and support of its community. Thank you to the many developers who have worked very hard to deliver all the new features and improvements. We deeply appreciate the financial contributions by those institutions that have contributed to the DSpace Development Fund. Also, thanks to the users who provided input and feedback on the development, those who contributed documentation as well those who participated in the testathons.

Development Acknowledgments

A total of 45 unique individuals contributed to 7.6, with major institutional contributions coming from 4Science and Atmire.

Frontend / User Interface Acknowledgments

The following 33 individuals have contributed directly to the new DSpace (Angular) User Interface in this release (*ordered by number of GitHub commits*): Alexandre Vryghem (alexandrevryghem), enea4science, Kristof De Langhe (Atmire-Kristof), Nona Luypaert (nona-luypaert), Tim Donohue (tdonohue), Lotte Hofstede (LotteHofstede), Cristian Emanuelle Guzmán Suárez (CrisGuzmanS), Mark Wood (mwoodiupui), Art Lowel (artlowel), Michael Spalti (mspalti), Ricardo Saraiva (rsaraivac), Paulo Graça (paulo-graca), Aman Budgujar (amanbudgujar), Alan Orth (alanorth), Adam Doan (doana), VuNguyen (Zerosoul1990), Davide Negretti (davide-negretti), damian-joz, Yana De Pauw (YanaDePauw), Yury Bondarenko (ybnd), Nicholas Woodward (nwoodward), Pierre Lasou (pilasou), fapsi, Flo (floriangantner), Mattia Vianelli (Sondissimo), Reeta Kuuskoski (reetagithub), Agustina Martinez (amgciadev), Nagy Akos (akoscomp), Mark Cooper (mark-cooper), vlguerrero, Adán Román Ruiz (aroman-arvo), Sascha Szott (saschaszott), Kim Shepherd (kshepherd)

The above contributor lists were determined based on contributions to the "dspace-angular" project in GitHub between 7.5 (after February 17, 2023) and 7.6: https://github.com/DSpace/dspace-angular/graphs/contributors?from=2023-02-17&to=2023-06-23&type=c

Backend / REST API Acknowledgments

The following 27 individuals have contributed directly to the DSpace backend (REST API, Java API, OAI-PMH, etc.) in this release (*ordered by number of GitHub commits*): Tim Donohue (tdonohue), Nona Luypaert (nona-luypaert), Mark Wood (mwoodiupui), Alan Orth (alanorth), NikitaKr1vonosov, Paulo Graça (paulo-graca), Alexandre Vryghem (alexandrevryghem), Adán Román Ruiz (aroman-arvo), Andrea Bollini (abollini), Yana De Pauw (YanaDePauw), Francesco Pio Scognamiglio (francescopioscognamiglio), Agustina Martinez (amgciadev), Kim Shepherd (kshepherd), Michael Spalti (mspalti), Nicholas Woodward (nwoodward), Abel Gómez (abelgomez), Kristof De Langhe (Atmire-Kristof), damian-joz, buithaihai, Chandaluri Vamsi Krishna (CVamsi27), eskander17, Vincenzo Mecca (vins01-4science), Kevin Van de Velde (KevinVdV), Luca Giamminonni (LucaGiamminonni), Hardy Pottinger (hardyoyo), Marie Verdonck (MarieVerdonck), Yury Bondarenko (ybnd)

The above contributor list was determined based on contributions to the "DSpace" project in GitHub between 7.5 (after February 17, 2023) and 7.6: https://github.com/DSpace/dspace/graphs/contributors?from=2023-02-17&to=2023-06-23&type=c

Financial Acknowledgments

We gratefully recognize those institutions who have generously pledged to financially support one or more 7.x releases via the DSpace Development Fund. A list of those funders can be found on the DSpace Development Fund page.

7.5 Release Notes

DSpace 7.5 was released on February 20, 2023

To try out DSpace 7.5 immediately, see Try out DSpace 7. This includes instructions for a quick-install via Docker, as well as information on our sandbox /demo site for DSpace 7.

To upgrade to DSpace 7.5 from 7.x *or any prior version*, see Upgrading DSpace.

To install DSpace 7.5 for the first time, see Installing DSpace.

- Download DSpace 7.5 Backend: https://github.com/DSpace/DSpace/releases/tag/dspace-7.5
- Download DSpace 7.5 User Interface: https://github.com/DSpace/dspace-angular/releases/tag/dspace-7.5

DSpace 7.5 provides new features & bug fixes to the 7.x platform.

New features include:

- **Subscribe to email updates** from a **Community or Collection** *(ported from the DSpace-CRIS project, partially donated and developed by 4Science)*
    - *NOTE: This feature requires new scheduled cron settings* to enable sending of emails. See Scheduled Tasks via Cron
- **Supervision orders** allow Administrators to assign Group(s) to supervise other user's (in-progress) submissions
- **System wide alerts** which allow you to display a site-wide banner to announce scheduled downtime or maintenance (Login as an Admin and visit the "System-wide Alert" menu option)
- **Ability to disable self-registration or restrict to specific email domains**. See Authentication by Password documentation for more details.
- **Search interface supports filtering by controlled vocabularies** See the new "vocabularies" option in config.*.yml. By default, only the SRSC vocabulary is available in DSpace, but additional ones may be added as described in Authority Control of Metadata Values

- **Support for custom Configurable Workflow steps, including "Select Single Reviewer Workflow" and "Score Review Workflow"** (which were in v6.x). See Additional workflow steps documentation for more details.
- **Ability to add Contextual Help Tooltips on any page.** Currently, only a basic example is provided, with more likely to be added in future DSpace releases. In the meantime, additional tooltips may be added manually on a page-by-page basis. See Contextual Help Tooltips for more details.
- **Basic MediaViewer now supports captioning for audio/video files.** *(Donated by yingjin)* The caption file must be provided alongside the video /audio file. See documentation at Media Viewer Settings
- **On Item pages, the "Edit Item > Metadata" tab has been redesigned** to allow for easier reordering of metadata values, etc.
- **On Item pages, metadata values can automatically link to "Browse By" results for that value.** *(Donated by The Library Code with the Support of German Institute for Urban Affairs)* The existing "webui.browse.links.<n>" settings in dspace.cfg are now supported in version 7.x. See Links to Other Browse Contexts section of the Configuration documentation.
- **"Show identifiers" submission allows you to optionally pre-register Handles or DOIs for all new submissions.** *(Donated by The Library Code with support of Technische Universität Hamburg and Technische Informationsbibliothek)* See Configuring the Identifiers step and Configuring pre-registration of Identifiers
- **New DataCite plugin for importing metadata from DataCite when starting a new submission.** *(Donated by @johannastaudinger, @florianga ntner and @philipprumpf)*
- **New "dspace database skip" command** can be used to skip problematic database migrations during upgrade to 7.x. See this common migration error that has impacted some older DSpace sites during their upgrade to 7.x.

Major bug fixes / improvements include:

- Performance improvements to User Interface
  - Optional page caching (of server-side rendered pages) for bots and/or anonymous users. Page caching for bots is enabled by default, while page caching for anonymous users is disabled. Enabling page caching for anonymous users can drastically speed up your site, but anonymous users may see slightly outdated content. See Cache Settings - Server Side Rendering(SSR) for details.
  - Decreased the initial download size of the UI application. *Between 7.4 and 7.5, we've decreased the initial download from 877KB to ~600KB* (gzipped sizes), even while adding new features.
- Performance improvements for the "metadata-import" and "cleanup" command-line scripts. *(Fixes to "cleanup" donated by Agustina Martinez)*
- Logging of slow SOLR queries is now enabled by default to simplify performance issues analysis (*Donated by 4Science*)
- Fixed issues with the "Request a Copy" helpdesk strategy, where all requests go to the Helpdesk email to respond. *(Donated by Mark Wood, IUPUI)*
- Number of bitstreams displayed on the Item page is now configurable (see "item > bitstream > pageSize" configuration). *(Donated by Arvo Consultores y Tecnología. S.L)*
- Updated Submission forms "<regex>" tag to use a common extended regular expression format.
- "Back to Results" button appears on Item pages when browsing/searching and clicking on an Item. This allows you to easily return to your prior browse/search. *(Donated by Michael Spalti)*
- Fixed breadcrumbs to display full object names on hover over *(Donated by eScire)*
- Facet search box on the main search interface can now search all words in a phrase facet value (previously it only searched the first word)
- Fixed issue where homepage hits could trigger 2 views in Google Analytics
- Fixed issues with Syndication Feed buttons on Community/Collection pages *(Donated by Nicholas Woodward)*
- Fixed issue where "Browse By Title" didn't allow you to filter results by multiple words *(Donated by Toni Prieto)*
- Fixed issue where opening a restricted bitstream in a different window or tab did not work properly.
- Fixed issue where items with thousands of bitstreams caused the Item page to load extremely slowly or crash entirely.
- Fixed robots.txt to include fully qualified URLs in Sitemap (necessary for search engine optimization)
- Fixed issue where "Browse By" menus were not working properly for Community/Collection Admins.
- Fixed issue where Collection Admins could not version Items.
- Fixed issue where Group descriptions could not be edited from the Admin UI.
- Fixed issue where sidebar options were displayed for authenticated users with read-only access. Sidebar has been enhanced to check user permissions more carefully.
- Fixed issue where thumbnails were sometimes generated with no permissions, making them not able to be displayed in the UI.
- Fixed issue where submission forms listed Collections in the Collection dropdown in a random order. They are now ordered by Title *(Donated by Arvo Consultores y Tecnología. S.L)*
- Fixed issue where scripts are listed in the start new process dropdown in a random order. They are now order alphabetically *(Donated by 4Science)*
- Fixed issues where configured Creative Commons jurisdiction was being ignored & locale wasn't returning translated questions *(Donated by Toni Prieto)*
- Fixed issues where OAI Harvesting "last harvested" date wasn't being updated or reported properly. *(Donated by Nicholas Woodword)*
- Fixed issue where title highlighting was not working in search results.
- Fixed issue where an Item could not be deleted if it had a "Request for Copy".
- Allow users to enhance ImageMagick generated PDF thumbnails via a new "density" setting & fixed layout issues with some PDF thumbnails. *(Donated by Alan Orth)*
- CSS variables can now be used in all HTML templates. See https://github.com/DSpace/dspace-angular/pull/1853
- Accessibility bug fixes for several pages *(Donated by eScire)*
- Support for Node v18 in the User Interface
- Numerous other small bug fixes and dependency updates

New/Updated Language support:

- Brazilian Portugese (Português do Brasil) language updates donated by Lucas Zinato Carraro (lucaszc)
- Catalan (Català) language added & donated by Toni Prieto
- French (Français) language updates donated by Pierre Lasou (pilasou)
- German (Deutsch) language updates donated by Sascha Szott (saschaszott)
- Greek () language updates donated by LisAtUP
- Kazakh () language updates donated by myrza1
- Polish (Polski) language added & donated by PCG Academia & Micha Dykas (michdyk)
- Spanish (Español) language updates donated by Toni Prieto & Cristian Emanuelle Guzmán Suárez (CrisGuzmanS)
- Ukrainian (Y) language added & donated by AndrukhivAndriy

7.5 Acknowledgments

The DSpace application would not exist without the hard work and support of its community. Thank you to the many developers who have worked very hard to deliver all the new features and improvements. We deeply appreciate the financial contributions by those institutions that have contributed to the DSpace Development Fund. Also, thanks to the users who provided input and feedback on the development, those who contributed documentation as well those who participated in the testathons.

Development Acknowledgments

A total of 44 unique individuals contributed to 7.5, with major institutional contributions coming from 4Science and Atmire.

Frontend / User Interface Acknowledgments

The following 30 individuals have contributed directly to the new DSpace (Angular) User Interface in this release (*ordered by number of GitHub commits*): Alexandre Vryghem (alexandrevryghem), Tim Donohue (tdonohue), Kim Shepherd (kshepherd), Kristof De Langhe (Atmire-Kristof), Michael Spalti (mspalti), Yana De Pauw (YanaDePauw), Yury Bondarenko (ybnd), Giuseppe Digilio (atarix83), Joost Fock (joost-atmire), Cristian Emanuelle Guzmán Suárez (CrisGuzmanS), nikunj59, yingjin, Marie Verdonck (MarieVerdonck), Toni Prieto (toniprieto), Mark Wood (mwoodiupui), Art Lowel (artlowel), Nicholas Woodward (nwoodward), Sergio Fernández Celorio (sergius02), Lucas Zinato Carraro (lucaszc), Sascha Szott (saschaszott), Micha Dykas (michdyk), Vincenzo Mecca (vins01-4science), Pierre Lasou (pilasou), Max Nuding (hutattedonmyarm), dsteelma-umd, Mykhaylo Boychuk (Micheleboychuk), myrza1, AndrukhivAndriy, LisAtUP, tony

The above contributor lists were determined based on contributions to the "dspace-angular" project in GitHub between 7.4 (after October 6, 2022) and 7.5: https://github.com/DSpace/dspace-angular/graphs/contributors?from=2022-10-06&to=2023-02-16&type=c

Backend / REST API Acknowledgments

The following 26 individuals have contributed directly to the DSpace backend (REST API, Java API, OAI-PMH, etc.) in this release (*ordered by number of GitHub commits*): Mykhaylo Boychuk (Micheleboychuk), Kim Shepherd (kshepherd), Tim Donohue (tdonohue), Marie Verdonck (MarieVerdonck), JensRoets-Atmire, Yana De Pauw (YanaDePauw), Vincenzo Mecca (vins01-4science), Nicholas Woodward (nwoodward), Kevin Van de Velde (KevinVdV), Toni Prieto (toniprieto), Adán Román Ruiz (aroman-arvo), Alex (sashashura), Philipp Rumpf (philipprumpf), Mark Wood (mwoodiupui), Alan Orth (alanorth), Giuseppe Digilio (atarix83), Joost Fock (joost-atmire), Pascal-Nicolas Becker (pnbecker), Johanna (johannastaudinger), Hrafn Malmquist (J4bbi), Raf Ponsaerts (Raf-atmire), Andrea Bollini (abollini), Francesco Pio Scognamiglio (francescopioscognamiglio), Christian Scheible (christian-scheible), Kristof De Langhe (Atmire-Kristof), Flo (floriangantner)

The above contributor list was determined based on contributions to the "DSpace" project in GitHub between 7.4 (after October 6, 2022) and 7.5: https://github.com/DSpace/DSpace/graphs/contributors?from=2022-10-06&to=2023-02-16&type=c

Financial Acknowledgments

We gratefully recognize those institutions who have generously pledged to financially support one or more 7.x releases via the DSpace Development Fund. A list of those funders can be found on the DSpace Development Fund page.

7.4 Release Notes

DSpace 7.4 was released on October 10, 2022

To upgrade to DSpace 7.4 from 7.x *or any prior version*, see Upgrading DSpace.

To install DSpace 7.4 for the first time, see Installing DSpace.

- Download DSpace 7.4 Backend: https://github.com/DSpace/DSpace/releases/tag/dspace-7.4
- Download DSpace 7.4 User Interface: https://github.com/DSpace/dspace-angular/releases/tag/dspace-7.4

DSpace 7.4 provides new features & bug fixes to the 7.x platform.

New and improved features include:

- **Recent Submissions are now listed on the homepage**. (See "recentSubmissions" options) *(donated by DSpaceDirect, developed by DSquare Technologies)*
- **Batch export (to Zip)** of **Collections or Items** available in the Admin UI
- **Batch import (from Zip)** available in the Admin UI.
- **Thumbnails are now displayed** in all search/browse screens. (See "showThumbnails" option) *(donated by Michael Spalti, Willamette University)*
- **Support for Google Captcha** on "New user registration" form. (See "registration.verification.enabled" in dspace.cfg) *(donated by 4Science)*
- **Support for Google Analytics 4** ("Universal Analytics" is still also supported)
- **Support for Markdown, HTML and MathJax** in Item abstracts. Support for line breaks in all metadata fields.
- **Support for Remote Handle Resolver** now included, allowing for Handle Server to be run remotely.
- **Enhanced support for Amazon S3 as a storage location**, including support for IAM Roles.
- **Allow for deletion of old Processes** from the Admin UI. Bulk deletion script (process-cleaner) also available.
- **Request a Copy can now be sent to multiple recipients** at once *(donated by Mark Wood, IUPUI)*
- Privacy statement and end user agreement can now be disabled. (See "info" options)
- Add configurations for page sizes to many browse/search pages. (See various "pageSize" options in User Interface Configuration) *(donated by Mark Wood, IUPUI, and Mark Cooper, LYRASIS)*

Major bug fixes / improvements include:

- Fixed issue where "start-handle-server" command line tool wasn't working properly *(donated by Jean-François Morin, Université Laval and Mark Wood, IUPUI)*
- MyDSpace: Entities are now displayed properly, workflow tasks now refresh after state change
- Submission: After drag & drop of a file, the user goes directly to the submission form. *(donated by Nicolas Boulay, Université Laval)*

- Statistics: fixed issue where file names were sometimes missing or replaced by UUID.
- Thumbnails: restricted thumbnails are now supported and are displayed if you have access.
- Search: admins were seeing private/withdrawn items in normal searches. Those now are only visible in the "Admin Search" page.
- Browse by pages: fixed issue where pagination was not working properly on all browse by pages and diacritics were not working properly in filter boxes
- Curation tasks: the output of the task is now visible from the Admin UI.
- Password authentication security enhancements: user must provide current password when changing their password. Password minimum requirements are now configurable, allowing for you to require users to create more secure passwords (See "authentication-password.regex-validation.pattern" in dspace.cfg)
- Shibboleth authentication: Admin menu now reloads automatically after login
- Numerous caching & performance fixes to ensure various pages will now automatically refresh whenever underlying objects change.
- See the 7.4 milestone for frontend and backend for a list of *all changes applied in 7.4.*

New/Updated Language support:

- Finnish (Suomi) language updates donated by Reeta Kuuskoski (reetagithub)
- French (Français) language updates donated by Pierre Lasou (pilasou)
- German (Deutsch) language updates donated by Sascha Szott (saschaszott)
- Greek () language added & donated by Kostis Alexandris (kostisalex)
- Hindi () language added & donated by DSquare Technologies
- Kazakh () language added & donated by myrza1
- Brazilian Portuguese (Português do Brasil) updates donated by João Fernandes (joao-uefrom), Lucas Zinato Carraro (lucaszc) and Danilo Felicio Jr (danilofjr)
- Spanish (Español) language updates donated by Arvo Consultores y Tecnología. S.L
- Swedish (Svenska) language added & donated by Urban Andersson (jokermanse). Additional updates donated by Reeta Kuuskoski (reetagithub)

7.4 Acknowledgments

The DSpace application would not exist without the hard work and support of its community. Thank you to the many developers who have worked very hard to deliver all the new features and improvements. We deeply appreciate the financial contributions by those institutions that have contributed to the DSpace Development Fund. Also, thanks to the users who provided input and feedback on the development, those who contributed documentation as well those who participated in the testathons.

Development Acknowledgments

A total of 49 unique individuals contributed to 7.4, with major institutional contributions coming from 4Science and Atmire.

Frontend / User Interface Acknowledgments

The following 39 individuals have contributed directly to the new DSpace (Angular) User Interface in this release (*ordered by number of GitHub commits*): Yury Bondarenko (ybnd), Michael Spalti (mspalti), Giuseppe Digilio (atarix83), Davide Negretti (davidenegretti-4science), Lotte Hofstede (LotteHofstede), nikunj59, Peter Wolfersberger (hpwBLN), Tim Donohue (tdonohue), Samuel Cambien (samuelcambien), Art Lowel (artlowel), Mark Wood (mwoodiupui), Alexandre Vryghem (alexandrevryghem), Pierre Lasou (pilasou), Vincenzo Mecca (vins01-4science), myrza1, Yana De Pauw (YanaDePauw), Lucas Zinato Carraro (lucaszc), Abhishek Raval (abhishekd2t), GauravD2t, Danilo Felicio Jr (danilofjr), Kostis Alexandris (kostisalex), Kristof De Langhe (Atmire-Kristof), Mark Cooper (mark-cooper), Toni Prieto (toniprieto), FelixNicol, João Fernandes (joao-uefrom), dsteelma-umd, Kostas Stamatis (kstamatis), Corrado Lombardi (corrad82-4s), Sergio Fernández Celorio (sergius02), Urban Andersson (jokermanse), yingjin, Ian van der Linde (Ianvdl), Andrea Bollini (abollini), Hardy Pottinger (hardyoyo), Reeta Kuuskoski (reetagithub), Sascha Szott (saschaszott), Kim Shepherd (kshepherd), Nicolas Boulay (nibou230)

The above contributor lists were determined based on contributions to the "dspace-angular" project in GitHub between 7.3 (after June 24, 2022) and 7.4: https://github.com/DSpace/dspace-angular/graphs/contributors?from=2022-06-24&to=2022-10-06&type=c

Backend / REST API Acknowledgments

The following 20 individuals have contributed directly to the DSpace backend (REST API, Java API, OAI-PMH, etc.) in this release (*ordered by number of GitHub commits*): Michele Boychuk (Micheleboychuk), Luca Giamminonni (LucaGiamminonni), Vincenzo Mecca (vins01-4science), Michael Spalti (mspalti), Tim Donohue (tdonohue), Francesco Pio Scognamiglio (francescopioscognamiglio), Mark Wood (mwoodiupui), Philipp Rumpf (philipprumpf), ammanabrolua, Andrea Bollini (abollini), Yury Bondarenko (ybnd), eskander17, Kim Shepherd (kshepherd), ballarinie, Davide Negretti (davidenegretti-4science), Toni Prieto (toniprieto), Ben Bosman (benbosman), Samuel Cambien (samuelcambien), Marie Verdonck (MarieVerdonck), Jean-François Morin (jeffmorin)

The above contributor list was determined based on contributions to the "DSpace" project in GitHub between 7.3 (after June 24, 2022) and 7.4: https://github.com/DSpace/DSpace/graphs/contributors?from=2022-06-24&to=2022-10-06&type=c

Financial Acknowledgments

We gratefully recognize those institutions who have generously pledged to financially support one or more 7.x releases via the DSpace Development Fund. A list of those funders can be found on the DSpace Development Fund page.

7.3 Release Notes

DSpace 7.3 was released on June 27, 2022

(i) To upgrade to DSpace 7.3 from 7.x *or any prior version*, see Upgrading DSpace.

To install DSpace 7.3 for the first time, see Installing DSpace.

- Download DSpace 7.3 Backend: https://github.com/DSpace/DSpace/releases/tag/dspace-7.3
- Download DSpace 7.3 User Interface: https://github.com/DSpace/dspace-angular/releases/tag/dspace-7.3

DSpace 7.3 provides new features & bug fixes to the 7.x platform.

New and improved features include:

- **ORCID Authentication and synchronization to a DSpace Researcher Profile** *(ported from the DSpace-CRIS project, partially donated and developed by 4Science)*. See ORCID Integration and Researcher Profiles
- **Import content directly from 9 new external services** including CrossRef, Scopus, Web of Science, PubMed Europe, CiNii, NASA Astrophysics Data System (ADS), VuFind.org, SciELO.org, and the European Patent Office (EPO) (*ported from the DSpace-CRIS project, partially donated and developed by 4Science). See Importing Items via basic bibliographic formats (Endnote, BibTex, RIS, CSV, etc) and online services (arXiv, PubMed, CrossRef, CiNii, etc)*
- **Configurable Entities now support Item Versioning.** It is now possible to create versions of Entities which automatically retain all relationships. Examples of how versioning works can be found in "Versioning Support" section of "Configurable Entities". Also refer to Item Level Versioning documentation for a general overview of how versioning works in DSpace.
- **Admin "Health" menu provides basic control panel functionality** *(based on 6.x Control Panel).* When logged in as an Administrator, select "Health" from the side menu. You'll see a "Status" tab which provides useful information about the status of the DSpace backend, and an "Info" tab which provides an overview of backend configurations and Java information.
- **Validate a Batch Metadata CSV before applying changes** *(similar to 6.x).* When uploading a CSV for batch updates (using "Import" menu), a new "Validate Only" option is selected by default. When selected, the uploaded CSV will only be validated & you'll receive a report of the detected changes in the CSV. This allows you to verify the changes are correct before applying them. (NOTE: applying the changes requires re-submitting the CSV with the "Validate Only" option deselected)
- **Export search results to a CSV** *(similar to 6.x).* When logged in as an Administrator, after performing a search a new "Export search results as CSV" button appears. Clicking it will export the metadata of all items in your search results to a CSV. This CSV can then be used to perform batch metadata updates (based on the items in your search results).
- **Submission forms support display of SHERPA/RoMEO publisher policies when an ISSN is entered** *(similar to 6.x).* A new "sherpaPolicies" optional submission step exists. When enabled, a new "Sherpa policies" section appears in the form. If a submitter enters an ISSN, then that form section will display publisher policies based on that ISSN. See "Configuring the Sherpa Romeo step" in the "Submission User Interface"
- **Submission forms support type-based fields** (*ported from the DSpace-CRIS project by Kim Shepherd of The Library Code, with support from Technische Universität Berlin) (similar to 6.x):* Based on the selected Type (dc.type), the form may dynamically add/change metadata fields available. See "Item Type Based Metadata Collection" in Submission User Interface
- **Preview items during workflow approval** *(similar to 6.x).* When viewing the list of all items under workflow (in "My DSpace" "Show: Workflow Tasks"), it's now possible to preview each item (before claiming or reviewing) by clicking the View button.
- **Withdrawn items now show a tombstone page** *(similar to 6.x).* When an item is withdrawn, accessing it's homepage as a non-Administrator now brings you to a "tombstone" page which notes that the Item was withdrawn. (Administrative users can see see the entire item when they are logged in)
- **RSS/Atom feeds for Site, Community & Collection pages** *(Donated by Atmire) (similar to 6.x).* On the homepage, and on every Community or Collection page, a Syndication Feed icon now appears. Clicking it brings you to an Atom feed of the most recent submissions (either sitewide, or specific to that Community/Collection).
- Optionally, **Item "access status" badges (e.g. "open access", "restricted", "metadata only", "embargoed") can be displayed in all Item lists.** *(Donated by Université Laval)* This feature can be enabled via the new "showAccessStatuses" setting in config.*.yml. See User Interface Configuration and https://github.com/DSpace/dspace-angular/issues/1566
- Optionally, **a welcome email can be sent to all newly registered users** *(Donated by Mark H. Wood of IUPUI).* This can be enabled using the new "mail.welcome.enabled" backend configuration in your local.cfg.
- **Oracle Database support has been deprecated.** It will be removed in mid-2023. All sites should plan a migration to PostgreSQL. See https://github.com/DSpace/DSpace/issues/8214
- Migrated text extraction to use Apache Tika. There is now a single "Text Extractor" media filter plugin. See Mediafilters for Transforming DSpace Content for more details.

Major bug fixes / improvements include:

- Major frontend performance improvements: initial page load is much quicker. All assets are now zipped/minified. Caching improvements.
- Frontend can be easily run from a subpath (e.g. https://my.university.edu/dspace) *(Donated by Harvard University, developed by William Welling)*
- "custom" theme was throwing TypeErrors in 7.2. That has been fixed.
- Renamed "private/public" status to be "non-discoverable/discoverable", which is more accurate. This item status just meant the item was not findable/discoverable through DSpace search/browse. It has nothing to do with whether the item is accessible or not accessible anonymously.
- Added "Now Showing..." informational counts to all Browse By pages (similar to in 6.x)
- Changed Browse "jump to" boxes to act as a filter, rather than jumping to a specific page. Updated display to make this clearer.
- Fixed several bugs related to resource policies
  - Couldn't set an end date on a resource policy in some situations
  - Couldn't edit an existing resource policy (previously you had to delete & recreate the policy)
- Fixed bug where resubmitting an Item move could result in Item deletion.
- Fixed several bugs in submission form, including
  - Improved form validation and error display
  - Occasionally, null metadata values were being saved
  - In some scenarios, submissions could be completed without agreeing to license.
  - Fixed bug where Creative Commons step wasn't loading properly when configured
  - Fixed bug where radio buttons were not working properly when submission field was set as a "list" that was not repeatable.
  - Fixed several bugs in bitstream editing form
- Fixed bug with browse by issue date wouldn't work if it encountered an invalid date in the first item. *(Donated by 4Science)*
- Fixed bug where bitstream edit page wouldn't load if a bitstream's access policies were all deleted.

- Fixed bug where restricted bitstream downloads were not checking a user's "special groups" which may provide them permissions. *(Donated by 4 Science)*
- Frontend has been upgraded to Angular 13.
- Backend has been updated to Spring Boot 2.6
- Numerous other dependency updates
- See the 7.3 milestone for frontend and backend for a list of *all changes applied in 7.3.*

New/Updated Language support:

- Bengali () language added & donated by Md. Topu Raihan (raihantopu)
- Finnish (Suomi) language updates donated by Reeta Kuuskoski (reetagithub)
- French (Français) language updates donated by Marie-Hélène Vézina (mhvenzina)
- German (Deutsch) language updates donated by Sascha Szott (saschaszott) and louiserumpf and Yannick Paulsen (YPaulsen-TLC) and WolfgangT71
- Turkish (Türkçe) language added & donated by stanbul Technical University IT Office

7.3 Acknowledgments

The DSpace application would not exist without the hard work and support of its community. Thank you to the many developers who have worked very hard to deliver all the new features and improvements. We deeply appreciate the financial contributions by those institutions that have contributed to the DSpace Development Fund. Also, thanks to the users who provided input and feedback on the development, those who contributed documentation as well those who participated in the testathons.

Development Acknowledgments

A total of 37 unique individuals contributed to 7.3, with major institutional contributions coming from 4Science and Atmire.

Frontend / User Interface Acknowledgments

The following 28 individuals have contributed directly to the new DSpace (Angular) User Interface in this release (*ordered by number of GitHub commits*): Giuseppe Digilio (atarix83), Yury Bondarenko (ybnd), Davide Negretti (davidenegretti-4science), Kim Shepherd (kshepherd), Tim Donohue (tdonohue), Sascha Szott (saschaszott), Luca Giamminonni (LucaGiamminonni), Alexandre Vryghem (alexandrevryghem), Art Lowel (artlowel), Yana De Pauw (YanaDePauw), Lotte Hofstede (LotteHofstede), Marie Verdonck (MarieVerdonck), Bruno Roemers (bruno-atmire), Michael Spalti (mspalti), stanbul Technical University IT Office (itudevops), Sufiyan Shaikh (SufiyanShaikhPeerbits), William Welling (wwelling), Michele Boychuk (Micheleboychuk), nikunj59, Kristof De Langhe (Atmire-Kristof), louiserumpf, Pierre Lasou (pilasou), Marie-Hélène Vézina (mhvenzina), Reeta Kuuskoski (reetagithub), pratik-peerbits, Md. Topu Raihan (raihantopu), Pascal-Nicolas Becker (pnbecker), Rezart Vata (rezartatis)

The above contributor lists were determined based on contributions to the "dspace-angular" project in GitHub between 7.2 (after Feb 3, 2022) and 7.3: https://github.com/DSpace/dspace-angular/graphs/contributors?from=2022-02-03&to=2022-06-24&type=c

Backend / REST API Acknowledgments

The following 20 individuals have contributed directly to the DSpace backend (REST API, Java API, OAI-PMH, etc.) in this release (*ordered by number of GitHub commits*): Luca Giamminonni (LucaGiamminonni), Bruno Roemers (bruno-atmire), Michele Boychuk (Micheleboychuk), Tim Donohue (tdonohue), ballarinie, Andrea Bollini (abollini), Mark Wood (mwoodiupui), Kristof De Langhe (Atmire-Kristof), Kim Shepherd (kshepherd), Antoine Snyers (antoine-atmire), Ben Bosman (benbosman), Marie Verdonck (MarieVerdonck), Corrado Lombardi (corrad82-4s), Yana De Pauw (YanaDePauw), eskander17, Michael Spalti (mspalti), Toni Prieto (toniprieto), Giuseppe Digilio (atarix83), Pascal-Nicolas Becker (pnbecker), Samuel Cambien (samuelcambien)

The above contributor list was determined based on contributions to the "DSpace" project in GitHub between 7.2 (after Feb 3, 2022) and 7.3: https://github.com/DSpace/DSpace/graphs/contributors?from=2022-02-03&to=2022-06-24&type=c

Financial Acknowledgments

We gratefully recognize the following institutions who have generously pledged financially to support the 7.3 release via the DSpace Development Fund.

- Charité - Universitätsmedizin Berlin - Medical Library
- Freie Universität Berlin, Universitätsbibliothek
- Georgia Tech Library
- Humboldt Universität zu Berlin
- Indiana University, Purdue University, Indianapolis (IUPUI)
- Technische Universität Berlin
- Universitäts- und Landesbibliothek Darmstadt
- Universitätsbibliothek Kassel
- Universität Konstanz
- University of Arizona Libraries
- University of Edinburgh
- University of Kansas
- Virginia Tech University Libraries

7.2.1 Release Notes (Backend Only)

All DSpace 7.0, 7.1 or 7.2 sites should ensure the backend is upgraded to 7.2.1 (or later) or manually patched

DSpace 7.0, 7.1 and 7.2 all used a bundled version of the Apache Spring Libraries which are vulnerable to RCE (remote command execution). The CVE-2022-22965 vulnerability is described in more detail at https://spring.io/blog/2022/03/31/spring-framework-rce-early-announcement

If you cannot upgrade immediately, other workarounds / alternative fixes are documented in the patch PR at https://github.com/DSpace/DSpace/pull/8231

DSpace 7.2.1 only contains an update to the Apache Spring Libraries to ensure DSpace is not vulnerable to CVE-2022-22965. As such, it was only a Backend / REST API release. The DSpace 7.2 Frontend (UI) can be used with the DSpace 7.2.1 Backend.

To ensure your 7.x site is completely secure, perform the following:

1. Upgrade your DSpace backend (REST API) to version 7.2.1 immediately. This backend is compatible with the DSpace Frontend version 7.2 (only)
   a. If you are unable to perform this upgrade, you may patch your 7.0 or 7.1 site by applying the changes in PR #8231. Instructions can be found in that PR.
2. Optionally, upgrade your Apache Tomcat to version 9.0.62 (which also has extra guards against this vulnerability).
3. Make sure to restart Tomcat after updates have been applied.

At this time, DSpace 6.x and below appear unaffected by CVE-2022-22965, as they all used Java/JDK 8 (or below) which is documented as not impacted. The vulnerability is only possible when using Java/JDK 9 or above.

7.2 Release Notes

DSpace 7.2 was released on February 7, 2022

To try out DSpace 7.2 immediately, see Try out DSpace 7.   This includes instructions for a quick-install via Docker, as well as information on our sandbox /demo site for DSpace 7.

To upgrade to DSpace 7.2 from 7.x *or any prior version*, see Upgrading DSpace.

To install DSpace 7.2 for the first time, see Installing DSpace.

- Download DSpace 7.2 Backend: https://github.com/DSpace/DSpace/releases/tag/dspace-7.2
- Download DSpace 7.2 User Interface: https://github.com/DSpace/dspace-angular/releases/tag/dspace-7.2

DSpace 7.2 provides new features & bug fixes to the 7.x platform.

New and improved features include:

- **Runtime Configuration for the User Interface** *(Donated by Harvard University, developed by William Welling)*: In DSpace 7.0 and 7.1, changes to your User Interface Configuration required rebuilding the entire UI (which could take 10+ minutes). As of 7.2, *all User Interface configurations are loaded at runtime*. So, to change configurations just requires a quick restart of the User Interface (which usually takes only a few seconds). The configuration format also changed from Typescript to YAML to support this feature. A "yarn env:yaml" migration script is provided to migrate the old format to the new one. See User Interface Configuration for more details.
- **Add Item Embargoes / Restrictions in the Submission User Interface:** A new, optional "itemAccessConditions" step exists in the Submission configuration. Enabling it adds a section which allows you to select access restrictions, embargoes or leases. It also allows you to select whether the Item is discoverable via search/browse. See Submission User Interface and Embargo documentation for details.
- **Feedback Form:** A feedback form is now linked in the footer of every page, as long as a "feedback.recipient" is specified in your local.cfg. This feature allow users to contact the configured "feedback.recipient" from any page in the site.
- **OpenID Connect (OIDC) Authentication Plugin** *(Ported from the DSpace-CRIS project by Hardy Pottinger of California Digital Library, with support from 4Science)*: DSpace now supports single sign on using OpenID Connect (OIDC), which allows it to support authentication through providers such as Google, Microsoft, Amazon, etc. For more information on setting this up, see the Authentication Plugins page.
- **IIIF Enhancements** *(Donated by Michael Spalti of Willamette University)***:** Includes support for adding IIIF metadata using Importing and Exporting Items via Simple Archive Format (SAF), editing IIIF bitstream metadata from the User Interface (when editing an existing Bitstream), and a new "./dspace iiif-canvas-dimensions" CLI tool for auto-populating IIIF canvas dimensions in bulk.
- **Running "filter-media" (Mediafilters) from Processes User Interface.** Administrators can now run the "filter-media" script from the Admin UI ("Processes" menu), in order to immediately update thumbnails, full text indexing, etc. See Mediafilters for Transforming DSpace Content for more details about this script.
- **Improved support for custom "Browse By" configurations.** User Interface "Browse by" options are now retrieved dynamically from the REST API, based on the backend's configured browse by indexes (see "webui.browse.index.*" options documented in the Configuration Reference)
- **Backend has added support for JDK 17.** The DSpace backend now supports either JDK 11 or JDK 17.
- **Frontend has been upgraded to Angular 11.**
- **Solr now uses a connection pool by default** *(Donated by Mark H. Wood of IUPUI)*. See Configuration Reference for details of new "solr.client.*" configs in dspace.cfg.

Major bug fixes include:

- User interface would load indefinitely if the REST API was unavailable. Now, an error page is displayed to let you know the REST API is unresponsive.
- User Interface deployment required the "node_modules" folder to exist, making it more difficult to containerize (e.g. Docker). Now, the UI can be deployed via only the "dist" folder. See https://github.com/DSpace/dspace-angular/issues/1410 *(Donated by Harvard University, developed by William Welling)*
- Searches with invalid syntax or special characters would load indefinitely. Now an error is displayed if the syntax is invalid in some way.
- On Item page, very long metadata fields or file names would break the page layout
- When an Item had an invalid or empty "dspace.entity.type" metadata field, it was unable to be deleted.
- On Submission page, if you drag & drop a file to start a submission, the Collection selection window sometimes did not load properly.
- On Submission page, sometimes the "Deposit" button would not enable even when all required fields are filled out. "Deposit" button is now always enabled, but it will block submission if required fields are missing.
- On Submission page, fixed several bugs with editing / setting embargoes or access restrictions on uploaded files.
- Statistics were always accessible publicly, even if restricted to Administrators. Statistics now are only accessible to Admins when `usage-statistics.authorization.admin.usage` is set to true in local.cfg
- Administrators were not able to reset passwords of other users.
- On Processes page, scripts could not be run without parameters. Additionally, fixed display of dates so they always appear as UTC time
- When both Shibboleth and DSpace password authentication were enabled, users were able to change their password in DSpace in order to bypass Shibboleth.

- On backend, improved indexing performance. *(Donated by 4Science)*
- On backend, improved file download performance to avoid connection leaks when S3 is used as backend storage.
- Numerous other minor bug fixes or accessibility improvements. See the 7.2 milestone for frontend and backend for a list of *all changes applied in 7.2.*

New/Updated Language support:

- Scottish Gaelic (Gàidhlig) user interface support added *(Donated by Donald I Macdonald and Stòrlann Nàiseanta na Gàidhlig)*
- German (Deutsch) user interface support had a syntax error which caused it not to work properly

7.2 Acknowledgments

A total of 28 unique individuals contributed to 7.2, with major institutional contributions coming from 4Science and Atmire.

Frontend / User Interface Acknowledgments

The following 15 individuals have contributed directly to the new DSpace (Angular) User Interface in this release (*ordered by number of GitHub commits*): Giuseppe Digilio (atarix83), William Welling (wwelling), Tim Donohue (tdonohue), Davide Negretti (davidenegretti-4science), Michael Spalti (mspalti), Rezart Vata (rezartatis), Bruno Roemers (bruno-atmire), Lotte Hofstede (LotteHofstede), Art Lowel (artlowel), Yury Bondarenko (ybnd), Corrado Lombardi (corrad82-4s), Kristof De Langhe (Atmire-Kristof), Hardy Pottinger (hardyoyo), Donald I Macdonald (donaldi), Santiago Tettamanti (santit96)

The above contributor lists were determined based on contributions to the "dspace-angular" project in GitHub between 7.1 (after Oct 28, 2021) and 7.2: https://github.com/DSpace/dspace-angular/graphs/contributors?from=2021-10-28&to=2022-02-03&type=c

Backend / REST API Acknowledgments

The following 23 individuals have contributed directly to the DSpace backend (REST API, Java API, OAI-PMH, etc) in this release (*ordered by number of GitHub commits*): Tim Donohue (tdonohue), Michele Boychuk (Micheleboychuk), Michael Spalti (mspalti), Hardy Pottinger (hardyoyo), Yana De Pauw (YanaDePauw), Joost Fock (joost-atmire), Kevin Van de Velde (KevinVdV), Corrado Lombardi (corrad82-4s), Jose Vicente Ribelles Aguilar (jvribell), Davide Negretti (davidenegretti-4science), Luca Giamminonni (LucaGiamminonni), Yury Bondarenko (ybnd), Ben Bosman (benbosman), Marie Verdonck (MarieVerdonck), Bruno Roemers (bruno-atmire), Mark Wood (mwoodiupui), Hrafn Malmquist (J4bbi), Paulo Graça (paulo-graca), Andrea Bollini (abollini), Giuseppe Digilio (atarix83), William Welling (wwelling), Kristof De Langhe (Atmire-Kristof), Samuel Cambien (samuelcambien)

The above contributor list was determined based on contributions to the "DSpace" project in GitHub between 7.1 (after Oct 28, 2021) and 7.2: https://github.com/DSpace/DSpace/graphs/contributors?from=2021-10-28&to=2022-02-03&type=c

7.1.1 Release Notes (Backend Only)

All DSpace 7.0 or 7.1 sites should ensure the backend is upgraded to 7.1.1 (or above) or manually patched

DSpace 7.0 and 7.1 both used a bundled version of the Apache Log4j Library vulnerable to RCE (remote command execution). The CVE-2021-44228 vulnerability is described in more detail at https://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2021-44228 and https://logging.apache.org/log4j/2.x/security.html#Fixed_in_Log4j_2.15.0

DSpace 7.1.1 only contains an update to the Apache Log4j Library to ensure DSpace is not vulnerable to CVE-2021-44228. As such, it was only a Backend / REST API release. The DSpace 7.1 Frontend (UI) can be used with the DSpace 7.1.1 Backend.

To ensure your 7.x site is completely secure, perform ALL the following:

1. Upgrade your DSpace backend (REST API) to version 7.1.1 immediately. This backend is compatible with the DSpace Frontend version 7.1
   a. If you are unable to perform this upgrade, you may patch your 7.0 or 7.1 site by applying the changes in PR #8065. Specifically, update your ./pom.xml to have <log4j.version>2.15.0</log4j.version>. Then rebuild & redeploy your backend. Make sure to restart Tomcat.
2. Upgrade to Apache Solr v8.11.1 (or above), to ensure your Solr is patched for CVE-2021-44228
   a. If you are unable to perform this upgrade, you may patch your current Solr by ensuring that `-Dlog4j2.formatMsgNoLookups=true` is specified in your `SOLR_OPTS` environment variable. For more information, see https://solr.apache.org/security.html#apache-solr-affected-by-apache-log4j-cve-2021-44228
3. If you use the Handle.Net Registry Support in DSpace 7.x, make sure to restart your Handle Server. This will ensure it is using the new version of log4j as well.

At this time, DSpace 6.x and below appear unaffected by CVE-2021-44228, as they all used log4j v1 exclusively with a default configuration that is not impacted.

Additional log4j patch available for 7.x

Immediately after version 7.1.1 was released, the log4j community announced a secondary, less severe vulnerability (CVE-2021-45046) which was patched in a log4j v 2.16.0 release.

This fix is NOT included in 7.1.1. But, you can immediately apply this secondary patch by applying the changes in https://github.com/DSpace/DSpace/pull/8070. This is again a one line change. Simply update your ./pom.xml to have <log4j.version>2.16.0</log4j.version>. Then rebuild & redeploy your backend.

7.1 Release Notes

We highly recommend ALL DSpace 7.0 users upgrade to 7.1

DSpace 7.1 contains a security fix to the backend (REST API) for all sites running 7.0. See CVE-2021-41189 for details.
DSpace 7.1 was released on November 1, 2021

To try out DSpace 7.1 immediately, see Try out DSpace 7.   This includes instructions for a quick-install via Docker, as well as information on our sandbox /demo site for DSpace 7.

To upgrade to DSpace 7.1 from 7.0 *or any prior version*, see Upgrading DSpace.

To install DSpace 7.0 for the first time, see Installing DSpace.

- Download DSpace 7.1 Backend: https://github.com/DSpace/DSpace/releases/tag/dspace-7.1
- Download DSpace 7.1 User Interface: https://github.com/DSpace/dspace-angular/releases/tag/dspace-7.1

DSpace 7.1 provides new features, security & bug fixes to the 7.x platform.

New and improved features include:

- **Request a Copy** *(Backend donated by Mark H. Wood of IUPUI)*: Similar to v6.x, users can now ask the original author or submitter (or a help desk email) for an emailed copy of access restricted files. This provides users with a way to privately get copies of restricted files, should the request be approved. A request can be submitted by simply clicking on an access restricted bitstream in the UI. Approval or rejection of the request occurs by clicking the link sent in the request email.
- **Item Versioning:** Similar to v6.x, administrators or submitters can now create new versions of Items. A new Item version can be created by logging in & clicking the "Create new version" button (next to the "Edit this item" button) on an Item's page. The new version is then created via the normal Item submission form (prepopulated with all existing information). Once created, all versions of an Item are visible on the Item page in the "Version History" section.
  - *Item Versioning is enabled by default, but can be disabled via configuration.*
  - *Entities are not yet supported for Versioning.*
- **Configure Collections to harvest content via OAI-PMH (OAI Harvesting):** Similar to 6.x (XMLUI), on the "Edit Collection" page's "Content Source" tab, there's an option to specify "This collection harvests its content from an external source". When enabled for a Collection, you can configure an external OAI-PMH instance (including another DSpace site) to harvest from. Once configured in the UI, harvesting is completed based on the configured schedule in your backend's local.cfg or oai.cfg.
- **IIIF Support** *(Donated by Michael Spalti of Willamette University, with support & enhancements donated by 4Science)*: DSpace now supports the International Image Interoperability Framework (IIIF.io), including an embedded IIIF viewer (Mirador) in the UI. IIIF support is disabled by default, but can be easily enabled via configuration. Enabling IIIF also requires installing a IIIF image server (e.g. Cantaloupe). For more details, please see the linked documentation.
- **Ability to "extend" other User Interface themes:** In your environment.prod.ts, you can now specify that one theme "extends" another. This allows you to inherit all settings from the extended them by default. See the "Entending other Themes" section of the User Interface Customization documentation.
- **Configure one Entity Type per Collection** *(Ported by 4Science from their DSpace-CRIS project)*: When Configurable Entities are enabled, in the "Edit Collection" page you can select an Entity Type (e.g. Person, Project, Journal, etc) that Collection will accept. Once configured, this Collection will only accept new Submissions of that Entity Type, and will be one of the *recommended Collections* to Submitters whenever they start a new Submission of that Entity Type. See "Configure Collections for each Entity type" section of the Configurable Entities documentation.
- **Support for importing Entities & Relationships via the Simple Archive Format** *(Donated by tysonlt)***:** This is achieved via a new, optional "relationships" file in the Simple Archive Format directory. See the documentation for more details.
- **Support for importing Project Entities with funding information via the OpenAIRE API** *(Donated by Paulo Graça)*: When importing a new "Research Project" Entity, a new "Funding OpenAIRE API" option is available, allowing you to import a Project from the OpenAIRE API complete with all it's funding information (Funder, Funder Identifier, Funding Stream and Funding ID). This is implemented via a new external source via Live Import from external sources.
- **Command-line script to help test the connection between your UI and your REST API.** Several people who installed 7.0 early ran into issues configuring the UI and REST API properly. A new "yarn config:check:rest" script has been added to the frontend codebase to help validate the connection with your REST API. It should also provide more descriptive errors (should they occur) which will help us to debug future issues others may encounter. See the "Frontend Installation" instructions (step 4) in Installing DSpace for more details.

Security fixes include:

- **[HIGH] CVE-2021-41189**: In 7.0, a Community or Collection Admin could escalate their permissions to become a full Administrator. A quick fix is a lso provided for sites running 7.0. *(Reported by Andrea Bollini of 4Science)*

Major bug fixes include:

- Major performance improvements to UI and REST API
  - In 7.0, several UI pages (Homepage, MyDSpace, Search, etc) would respond slowly if a large number of Communities & Collections existed in the system. Performance has been drastically improved in 7.1.
- In Submission form, the "administrator" Bitstream access condition was fixed. Previously, depending on Collection's "DEFAULT_READ" settings, the "administrator" permission limitation may not have worked properly. See https://github.com/DSpace/DSpace/pull/8013
- In Login form, some special characters in passwords were not accepted. This was the result of an encoding error which is now fixed. See https://github.com/DSpace/dspace-angular/issues/1367
- In "Edit Item" on "Bitstreams" tab, the upload button was not working properly. This has been fixed. See https://github.com/DSpace/dspace-angular/issues/1286
- In "Edit Item" on "Relationships" tab, it was difficult to manage Entities with many relationships. This has been improved. See https://github.com/DSpace/dspace-angular/issues/1148
- Google Analytics reporting has been moved to an asynchronous/batch script to improve performance. See https://github.com/DSpace/DSpace/pull/2248
- Numerous other minor bug fixes or accessibility improvements. See the 7.1 milestone for frontend and backend for a list of *all changes applied in 7.1.*

New/Updated Language support:

- German (Deutsch) user interface support was updated *(Donated by The Library Code)*
- Spanish (Español) user interface support added *(Donated by Gustavo S. Ferreyro)*

7.1 Acknowledgments

A total of 27 unique individuals contributed to 7.1, with major institutional contributions coming from 4Science and Atmire.

Frontend / User Interface Acknowledgments

The following 18 individuals have contributed directly to the new DSpace (Angular) User Interface in this release (*ordered by number of GitHub commits*): Davide Negretti (davidenegretti-4science), Giuseppe Digilio (atarix83), Yury Bondarenko (ybnd), Tim Donohue (tdonohue), Michael Spalti (mspalti), Rezart Vata (rezartatis), Kristof De Langhe (Atmire-Kristof), Yana De Pauw (YanaDePauw), Lotte Hofstede (LotteHofstede), Alessandro Martelli (alemarte), Bill Branan (bbranan), Art Lowel (artlowel), Corrado Lombardi (corrad82-4s), Marie Verdonck (MarieVerdonck), Bruno Roemers (bruno-atmire), Yannick Paulsen (YPaulsen-TLC), Pascal-Nicolas Becker (pnbecker), Gustavo S Ferreyro (gsferreyro)

The above contributor lists were determined based on contributions to the "dspace-angular" project in GitHub between 7.0 (after July 29, 2021) and 7.1: https://github.com/DSpace/dspace-angular/graphs/contributors?from=2021-07-29&to=2021-10-27&type=c

Backend / REST API Acknowledgments

The following 16 individuals have contributed directly to the DSpace backend (REST API, Java API, OAI-PMH, etc) in this release (*ordered by number of GitHub commits*): Michele Boychuk (Micheleboychuk), Michael Spalti (mspalti), Mark Wood (mwoodiupui), Paulo Graça (paulo-graca), Tim Donohue (tdonohue), Andrea Bollini (abollini), tysonlt, Yury Bondarenko (ybnd), Corrado Lombardi (corrad82-4s), Yana De Pauw (YanaDePauw), Nicholas Woodward (nwoodward), Alan Orth (alanorth), Davide Negretti (davidenegretti-4science), Marie Verdonck (MarieVerdonck), Andrew Wood (AndrewZWood), Ben Bosman (benbosman).

The above contributor list was determined based on contributions to the "DSpace" project in GitHub between 7.0 (after July 29, 2021) and 7.1: https://github.com/DSpace/DSpace/graphs/contributors?from=2021-07-29&to=2021-10-27&type=c

7.0 Release Notes

DSpace 7.0 was released on July 29, 2021

Brief videos of some DSpace 7 features are available at https://duraspace.org/dspace/dspace-7/

DSpace 7.0 is the largest release in the history of DSpace software. While retaining the "out-of-the-box" aspects DSpace is known for, it represents a major evolution of the platform including:

- **A completely new User Interface (demo site).** This is the new Javascript-based frontend, built on Angular.io (with support for SEO provided by Angular Universal). This new interface is also customizable via HTML and CSS (Sass) and Bootstrap. For early theme building tips see User Interface Customization
- **A completely new, fully featured REST API (demo site)**, provided via a single "server" webapp backend. This new backend is not only a REST API, but also still supports OAI-PMH, SWORD (v1 or v2) and RDF. Anything you can do from the User Interface is now also possible in our REST API. See REST API documentation for more details.
- **A newly designed search box.** Search from the header of any page (click the magnifying glass). The search results page now features automatic search highlight, expandable & searchable filters, and optional thumbnail-based results (click on the "grid" view).
- **A new MyDSpace area to manage your submissions & reviews**, MyDSpace includes a new drag & drop area to start a new submission, and easily search your workflow tasks or in progress submissions to find what you were working on. (Login, click on your user profile icon, click "MyDSpace"). Find workflow tasks to claim by selecting "All tasks" in the "Show" dropdown.
- **A new configurable submission user interface,** featuring a one-page, drag & drop submission form. This form is completely configurable and can be prepopulated by dragging & dropping a metadata file (e.g. ArXiv, CSV/TSV, Endnote, PubMed, or RIS. etc) or by importing via external APIs (e.g ORCID, PubMed, Sherpa Journals or Sherpa Publishers, etc) (video). Local controlled vocabularies are also still supported (video). See Submission User Interface for more details.
- **Optional, new Configurable Entities feature**. DSpace now supports "entities", which are DSpace Items of a specific 'type' which may have relationships to other entities. These entity types and relationships are configurable, with two examples coming out-of-the-box: a set of Journal hierarchy entities (Journal, Volume, Issue, Publication) and a set of Research entities (Publication, Project, Person, OrgUnit). For more information see Configurable Entities.
- **Dynamic user interface translations** (Click the globe, and select a language). Interested in adding more translations? See DSpace 7 Translation - Internationalization (i18n) - Localization (l10n).
- **A new Admin sidebar.** Login as an Administrator, and an administrative sidebar appears. Features available include:
  - Quickly create or edit objects from anywhere in the system. Either browse to the object first, or search for it using the Admin sidebar.
  - Processes UI (video) allows Administrators to run backend scripts/processes while monitoring their progress & completion. (Login as an Admin, select "Processes" in sidebar)
  - Administrative Search (video) combines retrieval of withdrawn items and private items, together with a series of quick action buttons.
  - Administer Active Workflows (video) allows Administrators to see every submission that is currently in the workflow approval process.
  - Bitstream Editing (video) has a drag-and-drop interface for re-ordering bitstreams and makes adding and editing bitstreams more intuitive.
  - Metadata Editing (video) introduces suggest-as-you-type for field name selection of new metadata.
  - Login As (Impersonate) another account allows Administrators to debug issues that a specific user is seeing, or do some work on behalf of that user. (Login as an Admin, Click "Access Control" in sidebar, Click "People". Search for the user account & edit it. Click the "Impersonate EPerson" button. You will be authenticated as that user until you click "Stop Impersonating EPerson" in the upper right.)
- **Improved GDPR alignment** (video)
  - User Agreement required for all authenticated users to read and agree to. (Login for first time, and sample user agreement will display. After agreeing to it, it will not appear again.)
  - Cookie Preferences are now available for all users (anonymous or authenticated). A cookie preference popup appears when first accessing the site. Users are given information on what cookies added by DSpace, including a Privacy Statement which can be used to describe how their data is used.
  - User Accounts can be deleted *even if they've submitted content* in the past.
- **Support for OpenAIREv4** Guidelines for Literature Repositories in OAI-PMH (See the new "openaire4" context in OAI-PMH).
- **Search Engine Optimization**: Tested and approved by the Google Scholar team, DSpace still includes all the SEO features you require: a robots.txt, Sitemaps and Google Scholar "citation" tags.
- **Video/Image Content Streaming** *(Kindly donated by Zoltán Kanász-Nagy and Dániel Péter Sipos of Qulto):* When enabled, DSpace can now stream videos & view images full screen, using an embedded viewer. (See the "mediaViewer" settings in the environment.common.ts to enable.)

- **Basic Usage Statistics** (video) are available for the entire site (See "Statistics" menu at top of homepage), or specific Communities, Collections or Items (Click on that same "Statistics" menu after browsing to a specific object
- Additional features are listed in the Beta release notes below. Also, give it a try on our demo site & see what you discover!

DSpace 7 does not yet include all the features of DSpace 6.x

DSpace 7.0 represents a major evolution of the platform into a new, modern web architecture. This means there are tons of new and redesigned features in 7.0. However, in order to get this release in your hands sooner, DSpace Steering decided to delay some 6.x features for later 7.x releases. So, if you don't see a 6.x feature yet in 7.0, it'll likely be coming soon in a later 7.x release. For a prioritized list of upcoming features see "What features are coming in a later 7.x release?" on our DSpace Release 7.0 Status page.

Additional major changes to be aware of in the 7.x platform (not an exhaustive list):

- **XMLUI and JSPUI are no longer supported or distributed with DSpace.** All users should immediately migrate to and utilize the new Angular User Interface. There is no migration path from either the XMLUI or JSPUI to the new User interface. However, the new user interface can be themed via HTML and CSS (SCSS).
- **The old REST API ("rest" webapp from DSpace v4.x-6.x) is deprecated and will be removed in v8.x.** The new REST API (provided in the "server" webapp) replaces all functionality available in the older REST API. If you have tools that rely on the old REST API, you can still (optionally) build & deploy it alongside the "server" webapp via the "-Pdspace-rest" Maven flag. See REST API v6 (deprecated)
- **The Submission Form configuration has changed.** The "item-submission.xml" file has changed its structure, and the "input-forms.xml" has been replaced by a "submission-forms.xml". See Submission User Interface
- **ElasticSearch Usage Statistics have been removed.** Please use SOLR Statistics or DSpace Google Analytics Statistics.
- **The traditional, 3-step Workflow system has been removed in favor of the Configurable Workflow System.** For most users, you should see no effect or difference. The default setup for this Configurable Workflow System is identical to the traditional, 3-step workflow ("Approve/Reject", "Approve/Reject/Edit Metadata", "Edit Metadata")
- **The old BTE import framework in favor of Live Import Framework** (features of BTE have been ported to Live Import)
- **Apache Solr is no longer embedded within the DSpace installer.** Solr now MUST be installed as a separate dependency alongside the DSpace backend. See Installing DSpace.
- **A large number of old/obsolete configurations were removed.** "7.0 Configurations Removed" section below.
- See Upgrading DSpace for more hints on the upgrade from any old version of DSpace to 7.x

Additional Resources

- Video presentations / Workshops from OR2021 (June 2021) showing off many of the new features & configurations of DSpace 7: DSpace 7 at OR2021

7.0 Configurations Removed

With the removal of the JSPUI and XMLUI, a large number of server-side (backend) configurations were made obsolete and were therefore removed between the 6.x and 7.0 release. Those Configurations removed included:

- Within the `[dspace]/config/` directory, these are the **configuration files which were deleted:**
    - `dc2mods.cfg`
    - `input-forms.xml / dtd` (*REPLACED BY submission-forms.xml, see Submission User Interface*)
    - `log4j.properties` (REPLACED BY `log4j2.xml`)
    - `log4j-console.properties` (REPLACED BY `log4j-console.xml`)
    - `log4j-solr.properties` (no replacement as Solr now must be installed separately)
    - `news-side.html`
    - `news-top.html`
    - `news-xmlui.xml`
    - `workflow.xml` (REPLACED BY `./spring/api/workflow.xml`)
    - `xmlui.xconf / dtd`
    - `emails/bte_*` (BTE import framework was removed in favor of Live Import from external sources)
    - `modules/controlpanel.cfg`
    - `modules/elastic-search-statistics.cfg` (Elastic Search support was removed in favor of Solr)
    - `modules/fetchccdata.cfg`
    - `modules/publication-lookup.cfg`
    - `spring/api/bte.xml` (BTE import framework was removed in favor of Live Import from external sources)
    - `spring/oai/*` (OAI is now part of the backend "server webapp" and needs no separate configurations)
    - `spring/xmlui/*`
- Within the `dspace.cfg` main configuration file, the following **settings were removed:**
    - `log.init.config` (replaced by `log4j2.xml`)
    - `webui.submit.blocktheses`
    - `webui.submit.upload.html5`
    - `webui.submission.restrictstep.enableAdvancedForm`
    - `webui.submission.restrictstep.groups`
    - `webui.submit.enable-cc`
    - `webui.browse.thumbnail.*`
    - `webui.item.thumbnail.*`
    - `webui.preview.enabled`
    - `webui.strengths.show`
    - `webui.browse.author-field`
    - `webui.browse.author-limit`
    - `webui.browse.render-scientific-formulas`
    - `recent.submissions.*`
    - `webui.collectionhome.*`
    - `plugin.sequence.org.dspace.plugin.SiteHomeProcessor`
    - `plugin.sequence.org.dspace.plugin.CommunityHomeProcessor`

- plugin.sequence.org.dspace.plugin.CollectionHomeProcessor
- plugin.sequence.org.dspace.plugin.ItemHomeProcessor
- plugin.single.org.dspace.app.webui.search.SearchRequestProcessor
- plugin.single.org.dspace.app.xmlui.aspect.administrative.mapper.SearchRequestProcessor
- plugin.named.org.dspace.app.webui.json.JSONRequest
- plugin.single.org.dspace.app.webui.util.StyleSelection
- webui.bitstream.order.*
- webui.itemdisplay.*
- webui.resolver.*
- webui.preferred.identifier
- webui.identifier.*
- webui.mydspace.*
- webui.suggest.*
- webui.controlledvocabulary.enable
- webui.session.invalidate
- itemmap.*
- jspui.*
- xmlui.*
- mirage2.*

A full list of all changes / bug fixes in 7.x is available in the Changes in 7.x section.

7.0 Acknowledgments

DSpace 7.0 was the largest release in the history of DSpace, with 1,026,797 lines of code changed and 79 unique individuals contributing to either the frontend or backend.

Major Contributing Institutions

The following institutions have been major code contributors to the DSpace 7 release (in general)

- Atmire - also hosted/maintained DSpace 7 UI demo site from 2018-2023
- 4Science - also hosted/maintained DSpace 7 REST demo site from 2018-2023
- FCT / RCAAP

Financial Contributors

We gratefully recognize the following institutions who together have generously contributed financially to support the DSpace 7 staged release program (see DSpace 7 Release Goals), and individuals who devoted time to fundraising:

- Auburn University
- Cornell University
- Pascal Becker
- Dalhousie University
- Duke University
- ETH Zurich, ETH Library
- Fraunhofer Gesellschaft
- Imperial College London
- Indiana University–Purdue University, Indianapolis
- LYRASIS
- National Library of Finland
- Beate Rajski
- Staats- und Universitätsbibliothek Hamburg – Carl von Ossietzky
- Technische Universität Berlin
- Technische Universität Hamburg (TUHH)
- The DSpace-Konsortium Deutschland
- The Helmut-Schmidt-Universität/Universität der Bundeswehr Hamburg
- The Library Code GmbH
- The Ohio State University
- Texas Digital Library
- University of Arizona
- University of Edinburgh
- University of Kansas
- University of Minnesota
- University of Missouri
- University of Toronto
- World Bank
- ZHAW

Frontend / User Interface Acknowledgments

The following 55 individuals have contributed directly to the new DSpace (Angular) User Interface in this release (*ordered by number of GitHub commits*): Giuseppe Digilio (atarix83), Kristof De Langhe (Atmire-Kristof), Lotte Hofstede (LotteHofstede), Art Lowel (artlowel), Marie Verdonck (MarieVerdonck), Julius Gruber (Flusspferd123), Yury Bondarenko (ybnd), William Welling (wwelling and wellingWilliam), Yana De Pauw (YanaDePauw), Tim Donohue (tdonohue), Alessandro Martelli (alemarte), Michael Spalti (mspalti), Jonas Van Goolen (jonas-atmire), Laura Henze (lhenze), Dániel Péter Sipos (dsipos-

dev), Samuel Cambien (samuelcambien), Bruno Roemers (bruno-atmire), Matteo Perelli (sourcedump), Bram Luyten (bram-atmire), Ben Bosman (benbosman), Terry Brady (terrywbrady), Raf Ponsaerts (Raf-atmire), Danilo Di Nuzzo (ddinuzzo), Andrea Chiapparelli (andreachiapparelli), Antoine Snyers (antoine-atmire), Corrado Lombardi (corrad82-4s), Courtney Pattison (courtneypattison), Àlex Magaz Graça (rivaldi8), Chris Wilper (cwilper), Christian Scheible (christian-scheible), Andrew Wood (AndrewZWood), Reeta Kuuskoski (reetagithub), Vítor Silvério Rodrigues (vitorsilverio), Alexander Sulfrian (AlexanderS), muiltje, José Carvalho (josekarvalho), Claudia Jürgen (cjuergen), fernandaruizm, Ivan Masar (helix84), Paulo Graça (paulo-graca), Philip Vissenaekens (PhilipVis), Nagy Akos (akoscomp), Kevin Van de Velde (KevinVdV), Sascha Szott (saschaszott), Mohamed Mohideen Abdul Rasheed (mohideen), David Cavrenne (davidatmire), Hardy Pottinger (hardyoyo), Luca Giamminonni (LucaGiamminonni), Mateus Mercer (MatMercer), Denijs Balodis (Denijsb), Pascal-Nicolas Becker (pnbecker), Mikus Zarins (MixonZ), marciofoz, Andrea Bollini (abollini), Martin Walk (MW3000).

Out of the above list, the following individuals contributed a translation of the new interface (ordered alphabetically by language): Ivan Masar (Czech), Marina Muilwijk (Dutch), Reeta Kuuskoski (Finnish), David Cavrenne (French), Claudia Jürgen and Sasha Szott (German), Nagy Akos and Transylvanian Museum Society (Hungarian), Mikus Zarins (Latvian), Vítor Silvério Rodrigues and marciofoz (Brazilian Portuguese), José Carvalho (Portuguese) and Maria Fernanda Ruiz (Spanish).

The above contributor lists were determined based on historical contributions to the "dspace-angular" project in GitHub until 7.0: https://github.com/DSpace /dspace-angular/graphs/contributors?from=2016-11-27&to=2021-07-29&type=c

Backend / REST API Acknowledgments

The following 55 individuals have contributed directly to the DSpace backend (REST API, Java API, OAI-PMH, etc) in this release (*ordered by number of GitHub commits*): Raf Ponsaerts (Raf-atmire), Tim Donohue (tdonohue), Andrea Bollini (abollini), Michele Boychuk (Micheleboychuk), Mark Wood (mwoodiupui), Marie Verdonck (MarieVerdonck), Ben Bosman (benbosman), Luigi Andrea Pascarelli (lap82), Terry Brady (terrywbrady), Tom Desair (tomdesair), Yana De Pauw (YanaDePauw), Chris Wilper (cwilper), Peter Nijs (peter-atmire), Kevin Van de Velde (KevinVdV), Bruno Roemers (bruno-atmire), Giuseppe Digilio (atarix83), Pasquale Cavallo (pasqualecvl), Jelle Pelgrims (jpelgrims-atmire), Andrew Wood (AndrewZWood), Samuel Cambien (samuelcambien), Antoine Snyers (antoine-atmire), Kim Shepherd (kshepherd), Yury Bondarenko (ybnd), Michael Spalti (mspalti), Alessandro Martelli (alemarte), Oliver Goldschmidt (olli-gold), Jonas Van Goolen (jonas-atmire), Kristof De Langhe (Atmire-Kristof), Alexander Sulfrian (AlexanderS), Patrick Trottier (PTrottier), Pablo Prieto (ppmdo), Hardy Pottinger (hardyoyo), Pascal-Nicolas Becker (pnbecker), William Tantzen (tantz001), Paulo Graça (paulo-graca), Luca Giamminonni (LucaGiamminonni), Ivan Masar (helix84), Hrafn Malmquist (J4bbi), Ian Little (ilittle-cnri), Anis Moubarik (anis-moubarik), Claudia Jürgen (cjuergen), Alan Orth (alanorth), xuejiangtao, Danilo Di Nuzzo (ddinuzzo), James Creel (jcreel), Marsa Haoua (marsaoua), Philip Vissenaekens (PhilipVis), Miika Nurminen (minurmin), Bram Luyten (bram-atmire), Christian Scheible (christian-scheible), Nicholas Woodward (nwoodward), József Marton (jmarton), Mohamed Mohideen Abdul Rasheed (mohideen), Saiful Amin (saiful-semantic), Àlex Magaz Graça (rivaldi8)

The above contributor list was determined based on contributions to the "DSpace" project in GitHub between 6.0 (after Oct 24, 2016) and 7.0: https://github .com/DSpace/DSpace/graphs/contributors?from=2016-10-24&to=2021-07-29&type=c Therefore this list may include individuals who contributed to later 6. x releases, but *only if their bug fix was also applied to 7.0.*

Additional Thanks

Additional thanks to our DSpace Leadership Group and DSpace Steering Group for their ongoing DSpace support and advice. Thanks also to LYRASIS for your leadership, collaboration & support in helping to speed up the development process of DSpace 7.

Thanks also to the various developer & community Working Groups who have worked diligently to help make DSpace 7 a reality. These include:

- DSpace 7 Working Group (2016-2023) - This is the team behind the code
- DSpace 7 Entities Working Group (2018-19) - This team designed & implemented Configurable Entities
- DSpace 7 Marketing Working Group (2016-2020) - This team did all our DSpace 7marketing, press releases & announcements.
- DSpace Community Advisory Team (DCAT) - This team helped organize/lead the DSpace 7.0 Testathon (to bang on the system to find any last bugs), and they also provided us with advice on features, etc.

We apologize to any contributor accidentally left off this list. DSpace has such a large, active development community that we sometimes lose track of all our contributors. Acknowledgments to those left off will be made in future releases.

7.0 Beta 1-5 Release Notes

DSpace 7.0 was developed via a series of Beta releases from 2020-21. The release notes for each Beta are retained here for reference.

7.0 Beta 5 Release Notes

Released April 2021

Included in Beta 5

- **Support for custom theme(s) in UI & accessibility cleanup of base theme**. See early information at DSpace UI Design principles and guidelines and the "themes" section of the environment.common.ts
    - Updated the "base" theme (default Bootstrap look & feel) for consistency and better accessibility. (Additional accessibility analysis will be performed during Testathon)
    - Added a simple "dspace" theme (this is the new default theme, and primarily shows an example of customizing color scheme & homepage)
    - Added a "custom" theme folder with all necessary files. These files can be directly modified to create a completely custom theme.
- **Major performance improvements to UI** by making better use of caching & smart reloading
- **Video/Image Content Streaming** *(Kindly donated by Zoltán Kanász-Nagy and Dániel Péter Sipos of Qulto):* When enabled, DSpace can now stream videos & view images full screen, using an embedded viewer.
    - See the new "mediaViewer" settings in the environment.common.ts to enable. Sample screenshots of the feature can also be found at https://github.com/DSpace/dspace-angular/issues/885
- New Administrative Features

- Add ability to modify Community/Collection resource policies (i.e. permissions). Edit a Community or Collection and look at the "Authorizations" tab.
- Add ability to edit/delete user Groups.
- Add private/withdrawn item badges for Administrators to quickly see which Items are private or withdrawn. These are viewable throughout the browse/search when logged in as an Administrative user.
- Configurable Entities Improvements
  - Entities now report their Entity type in the URL path (e.g. Person entities use URL path /entities/person/[uuid] and Publication entities use the URL path /entities/publication/[uuid])
  - Each Entity type now has a custom Submission form.
    - These can be most easily seen in the Demo site. Submitting to the "People" collection uses the "Person" Entity Form. Submitting to the "Articles" collection uses the "Publication" Entity Form. The full list of Entity-specific Collection submission mappings can be found in the example in item-submission.xml (this example is enabled on our Demo Site)
  - General performance improvements for Entities. Introduction of "tilted" relationships for Configurable Entities that may have hundreds or thousands of relationships.
- Improvements to Upgrade process
  - Added a new Submission form migration script to help DSpace 5/6 institutions migrate their old Submission configuration files to the new /updated format for v7.
- Security fixes
  - Added CSRF (Cross-Site Request Forgery) protection to REST API. UI (and any other clients) now must be *trusted* to login to the REST API.
  - Improved permissions checks/validation in UI for Administrator, Community/Collection Administrator and Submitter roles.
  - Fixed several other security issues auto-reported by LGTM
- Many bug fixes
  - Fixed issue where mapped items were not appearing
  - Fixed issue where Handles were not redirecting
  - Fixed issues with Sherpa and ORCID integrations
  - Fixed several small issues with OpenAIRE v4 support in OAI-PMH
  - Fixed many bugs in MyDSpace and Submission UI
  - Fixed several bugs in CSV import/export process.
  - Fixes to search/browse pagination & breadcrumb trail
  - Improved performance of Browse by Community/Collection hierarchy
  - LDAP Authentication support is working again
- Many dependency upgrades
  - Upgrade UI to Angular v10
  - Upgrade UI to Node v12 or v14 support
  - Upgrade Backend to Solr v8 support
  - Upgrade to ORCID v3 support
  - Upgrade to SHERPA v2 support
- Removal of obsolete features
  - Removal of the old BTE framework in favor of Live Import Framework (features of BTE have been ported to Live Import)
  - Removal of Traditional/Basic workflow in favor of Configurable Workflow (default workflow is still the same as in DSpace 6)

Changelog

- All User Interface changes: https://github.com/DSpace/dspace-angular/issues?q=is%3Aclosed+milestone%3A7.0beta5
- All Backend changes: https://github.com/DSpace/DSpace/issues?q=is%3Aclosed+milestone%3A7.0beta5

7.0 Beta 4 Release Notes

Released October 2020

Included in Beta 4

- **Live Import framework** (video) support has been added to the Submission Form (and REST API `/api/integration/externalsources` endpoint)
  - Search an external site for works to import (From your MyDSpace page, click the "Import metadata from external source" button in upper right). Currently supports Library of Congress Names, ORCID, PubMed, Sherpa Journals or Sherpa Publishers.
  - Drag and drop a bibliographic file into Submission form or MyDSpace page to prepopulate metadata. Supported formats include ArXiv, CSV (or TSV), Endnote, PubMed, or RIS.
- **Controlled Vocabulary support** (video) in Submission Form. Depending on the field configuration, this can include autocomplete of known terms (see default "Subject Keywords" field), dropdown support (see default "Type" field) and hierarchical tree views
  - Includes support for Controlled Vocabs, Authority Control and "Value-Pairs" (from submission configs)
- **Curation Tasks** are now supported via the Admin UI and the Processes UI. (Login as an Admin, select "Curation Tasks")
- **Import / Export metadata from/to CSV** (i.e. Batch Metadata Editing) is now available from the Admin UI. (Login as an Admin, select "Export" > "Metadata", select "Import" > "Metadata")
- **Basic Usage Statistics** (video) are available for the entire site (See "Statistics" menu at top of homepage), or specific Communities, Collections or Items (Click on that same "Statistics" menu after browsing to a specific object).
  - Support for exchanging usage data to IRUS was added. See new "irus-statistics.cfg" and DS-626
- Improved GDPR Alignment (video)
  - **User Agreement** required for all authenticated users to read and agree to. (Login for first time, and sample user agreement will display. After agreeing to it, it will not appear again.)
  - **Cookie Preferences** are now available for all users (anonymous or authenticated). A cookie preference popup appears when first accessing the site. Users are given information on what cookies added by DSpace, including a **Privacy Statement** which can be used to describe how their data is used.
  - User Accounts can be deleted *even if they've submitted content* in the past.
    - When a user is deleted, their past submissions are kept but the submitter field is set to empty (null).
    - Users cannot be deleted if they are the only member of a workflow approval group. Admins must either delete that group first, or assign another member to the group. This ensures Workflows are kept even if a user account needs to be deleted.

- **Language preferences** are now kept for all users (anonymous or logged in). By default, DSpace will try to use your browser's preferred language (if found in Accept-Language header and a translation in that language exists). Users can override it by either saving a preferred language in their user profile, or by manually selecting a different language from the globe icon (upper right).
- **IP-based authorization** lets you restrict (or provide access to) objects based on the user's IP address. This uses the same "authentication-ip.cfg" configuration as DSpace 6, allowing you to map IP ranges to specific DSpace Groups. Users within that IP range are added to the mapped DSpace Group for the remainder of their session.
- **Search Engine Optimization**: Addition of robots.txt, Sitemaps and Google Scholar "citation" tags. These optimizations are being tested by the Google Scholar team and may be improved further in the upcoming beta 5 release.
  - For improved SEO, Sitemaps are now enabled by default and automatically update once per day.
- Security Fixes and Dependency upgrades
  - Enhancements to new `/api/authz/features` endpoint in REST API to provide additional feature-specific permission checks
  - Flyway database engine was upgraded to version 6.5.5
  - Indexing enhancements (some objects were being indexed twice, see PR#2960)
  - Fixes to Shibboleth login
  - Additional bug fixes to both UI and REST API

Changelog

- All User Interface changes: https://github.com/DSpace/dspace-angular/issues?q=is%3Aclosed+milestone%3A7.0beta4
- All Backend changes: https://github.com/DSpace/DSpace/issues?q=is%3Aclosed+milestone%3A7.0beta4

7.0 Beta 3 Release Notes

Released July 2020

Included in Beta 3

- **Processes Admin UI** (video) allows Administrators to run backend scripts/processes while monitoring their progress & completion. (Login as an Admin, select "Processes" in sidebar)
  - Currently supported processes include "index-discovery" (reindex site), "metadata-export" (batch metadata editing CSV export), and "metadata-import" (batch metadata editing CSV import).
- **Manage Account Profile** allows logged in users to update their name, language or password. (Login, click on the account icon, and select "Profile")
- **New User Registration** (video) and password reset on the Login Screen
- **Login As (Impersonate)** another account allows Administrators to debug issues that a specific user is seeing, or do some work on behalf of that user. (Login as an Admin, Click "Access Control" in sidebar, Click "People". Search for the user account & edit it. Click the "Impersonate EPerson" button. You will be authenticated as that user until you click "Stop Impersonating EPerson" in the upper right.)
  - Requires "webui.user.assumelogin=true" to be set in your local.cfg on backend. Also be aware that you can only "impersonate" a user who is *not* a member of the Administrator group.
- **Manage Authorization Policies** of an Item allows Administrators to directly change/update the access policies of an Item, its Bundles or Bitstreams. (Login as an Admin, Click "Edit" "Item" in sidebar, and search for the Item. Click the "Authorization.." button on its "Status" tab.
- **Manage Item Templates** of a Collection allows Administrators to create/manage template metadata that all new Items will start with when submitted to that Collection. (Login as an Admin, Click "Edit" "Collection" in sidebar and search for the Collection. Click the "Add" button under "Template Item" to get started.)
  - NOTE: unfortunately there's a known bug that while you can create these templates, the submission process is not yet using them. See https://github.com/DSpace/dspace-angular/issues/748
- **Administer Active Workflows** (video) allows Administrators to see every submission that is currently in the workflow approval process. From there, they have the option to delete Items (if they are no longer needed), or send them back to the workflow pool (to allow another user to review them). (Login as an Admin, Click "Administer Workflow" in sidebar)
- **CC License** step allows your users to select a Creative Commons License as part of their submission. Once enabled in the "item-submission.xml" (on the backend) it appears as part of the submission form.
- **Angular CLI** compatibility was added to the User Interface. This allows developers to easily update the User Interface using standard Angular commandline tools. More information (including tutorials) is available at https://cli.angular.io/
- English, Latvian, Dutch, German, French, Portuguese, Spanish and Finnish language catalogs
- Numerous bugs were fixed based on early user testing. (*Thanks to all who've tested Beta 1 or Beta 2 and reported your feedback!*) Some bugs fixed include:
  - Login/Logout session fixes (including compatibility with Firefox and Safari browsers)
  - Improved Community/Collection tree browsing performance
  - Fixes to editing Communities, Collections and Items. This includes improved drag & drop reordering of bitstreams in an Item.
  - Improved performance of Collection dropdown in submission
  - Ability to download restricted bitstreams (previously these would error out)
  - Authorization & security improvements in both REST API and UI
- Upgraded all REST API dependencies (Spring, Spring Boot, HAL Browser) and enhanced our automated testing via additional Integration Tests.
- *All features previous mentioned in 7.0 Beta 2 Release Notes and 7.0 Beta 1 Release Notes below*

Learn More: New videos are available highlighting features of the MyDSpace area:

- Manage Submissions in MyDSpace (video)
- Manage Tasks in MyDSpace (video)

Changelog

- All User Interface changes: https://github.com/DSpace/dspace-angular/issues?q=is%3Aclosed+milestone%3A7.0beta3
- All Backend changes: https://github.com/DSpace/DSpace/issues?q=is%3Aclosed+milestone%3A7.0beta3

7.0 Beta 2 Release Notes

Released April 2020

Included in Beta 2

- **Administrative Search** (video) combines retrieval of withdrawn items and private items, together with a series of quick action buttons.
- **EPeople, Groups and Roles** can now be viewed, created and updated.
  - Manage Groups (Login as an Admin Access Control Groups)
  - Manage EPeople (Login as an Admin Access Control EPeople)
  - Manage Community/Collection Roles (Login as an Admin Edit Community/Collection Assign Roles). Note: this feature is Admin-only in beta 2, but will be extended to Community/Collection Admins in beta 3.
- **Bitstream Editing** (video) has a drag-and-drop interface for re-ordering bitstreams and makes adding and editing bitstreams more intuitive.
- **Metadata Editing** (video) introduces suggest-as-you-type for field name selection of new metadata.
- **Update Profile / Change Password** (Login Select user menu in upper right Profile)
- **Shibboleth Authentication**
- **Viewing Item Version History** (requires upgrading from a 6.x site that includes Item Versioning)
- Collection and Community (video) creation and edit pages.
- English, Latvian, Dutch, German, French, Portuguese and Spanish language catalogs
- Security and authorization improvements, including REST API support hiding specific metadata fields (metadata.hide property) and upgrades of different software packages on which DSpace 7 depends.
- *All features previous mentioned in 7.0 Beta 1 Release Notes below*

A full list of all changes / bug fixes in 7.x is available in the Changes in 7.x section.

7.0 Beta 1 Release Notes

Released March 2020

New features to look for

- **A completely new User Interface (demo site).** This is the new Javascript-based frontend, built on Angular.io (with support for SEO provided by Angular Universal). This new interface is also via HTML and CSS (SCSS). For early theme building training, see the "Getting Started with DSpace 7 Workshop" from the North American User Group meeting: slides or video recording.
- **A completely new, fully featured REST API (demo site)**, provided via a single "server" webapp backend. This new backend is not only a REST API, but also still supports OAI-PMH, SWORD (v1 or v2) and RDF. See the REST API's documentation / contract at https://github.com/DSpace /Rest7Contract/blob/master/README.md
- **A newly designed search box.** Search from the header of any page (click the magnifying glass). The search results page now features automatic search highlight, expandable & searchable filters, and optional thumbnail-based results (click on the "grid" view).
- **A new MyDSpace area**, including a new, one-page, drag & drop submission form, a new workflow approval process, and searchable past submissions. (Login, click on your user profile icon, click "MyDSpace"). Find workflow tasks to claim by selecting "All tasks" in the "Show" dropdown.
- **Dynamic user interface translations** (Click the globe, and select a language). Anyone interested in adding more translations? See DSpace 7 Translation - Internationalization (i18n) - Localization (l10n).
- **A new Admin sidebar.** Login as an Administrator, and an administrative sidebar appears. Use this to create a new Community/Collection/Item, edit existing ones, and manage registries. (*NOTE: A number of Administrative tools are still missing or greyed out. They will be coming in future Beta releases.*)
- Optional, new **Configurable Entities** feature. DSpace now supports "entities", which are DSpace Items of a specific 'type' which may have relationships to other entities. These entity types and relationships are configurable, with two examples coming out-of-the-box: a set of Journal hierarchy entities (Journal, Volume, Issue, Publication) and a set of Research entities (Publication, Project, Person, OrgUnit). For more information see "The Power of Configurable Entities" from OR2019: slides or video recording. Additionally, a test data set featuring both out-of-the-box examples can be used when trying out DSpace 7 via Docker. Early documentation is available at Configurable Entities.
- **Support for OpenAIREv4** Guidelines for Literature Repositories in OAI-PMH (See the new "openaire4" context in OAI-PMH).

Additional major changes to be aware of in the 7.x platform (not an exhaustive list):

- **XMLUI and JSPUI are no longer supported or distributed with DSpace.** All users should immediately migrate to and utilize the new Angular User Interface. There is no migration path from either the XMLUI or JSPUI to the new User interface. However, the new user interface can be themed via HTML and CSS (SCSS).
- **The old REST API ("rest" webapp from DSpace v4.x-6.x) is deprecated and will be removed in v8.x.** The new REST API (provided in the "server" webapp) replaces all functionality available in the older REST API. If you have tools that rely on the old REST API, you can still (optionally) build & deploy it alongside the "server" webapp via the "-Pdspace-rest" Maven flag.
- **The Submission Form configuration has changed.** The "item-submission.xml" file has changed its structure, and the "input-forms.xml" has been replaced by a "submission-forms.xml". For early documentation see Configuration changes in the submission process
- **ElasticSearch Usage Statistics have been removed.** Please use SOLR Statistics or DSpace Google Analytics Statistics.
- **The traditional, 3-step Workflow system has been removed in favor of the Configurable Workflow System.** For most users, you should see no effect or difference. The default setup for this Configurable Workflow System is identical to the traditional, 3-step workflow ("Approve/Reject", "Approve/Reject/Edit Metadata", "Edit Metadata")
- **Apache Solr is no longer embedded within the DSpace installer (and has been upgraded to Solr v7).** Solr now MUST be installed as a separate dependency alongside the DSpace backend. See Installing DSpace.
- **Some command-line tools/scripts are enabled in the new REST API** (e.g. index-discovery): See new Scripts endpoint: https://github.com /DSpace/Rest7Contract/blob/master/scripts-endpoint.md
- **DSpace now has a single, backend "server" webapp to deploy in Tomcat (or similar).** In DSpace 6.x and below, different machine interfaces (OAI-PMH, SWORD v1 or v2, RDF, REST API) were provided via separate deployable webapps. Now, all those interfaces along with the new REST API are in a single, "server" webapp built on Spring Boot. You can now control which interfaces are enabled, and what path they appear on via configuration (e.g. "oai.enabled=true" and "oai.path=oai"). See https://jira.lyrasis.org/browse/DS-4257
- **Configuration has been upgraded to Apache Commons Configuration version 2.** For most users, you should see no effect or difference. *No DSpace configuration files were modified during this upgrade and no configurations or settings were renamed or changed.* However, if you locally modified or customized the [dspace]/config/config-definition.xml (DSpace's Apache Commons Configuration settings), you will need to ensure those modifications are compatible with Apache Commons Configuration version 2. See the Apache Commons Configuration's configur ation definition file reference for more details.
- **Handle Server has been upgraded to version 9.x :** https://jira.lyrasis.org/browse/DS-4205

- **DSpace now has sample Docker images (configurations)** which can be used to try out DSpace quickly. See Try out DSpace 7 ("Install via Docker" section).