Welcome to Release 7.0, the next major release of the DSpace platform. Any previous version of DSpace may be upgraded to DSpace 7 directly. For more information, please see Upgrading DSpace.

7.0 Beta 2 Release Notes

Do not install a Beta release in Production!
DSpace 7 is still under active development. As a Beta release, we do not recommend installing this in production. Rather, we ask that you consider installing it in a test environment, try it out, and report back any issues or bugs you notice to our JIRA issue tracker.

Get Started / Try it out!
To try out DSpace 7.0 Beta 2 immediately, see Try out DSpace 7
Full installation instructions are also available at Installing DSpace.
For more information on the upcoming Beta and Final release schedule see DSpace 7 Release Goals.

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- Administrative Search (video) combines retrieval of withdrawn items and private items, together with a series of quick action buttons.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

Coming Soon

- For the upcoming Beta release schedule see DSpace 7 Release Goals

Additional Resources

At this time, the DSpace 7 documentation is still in progress, but has begun at https://wiki.lyrasis.org/display/DSDOC7x/

That said, we have a number of recorded presentations and workshops available which provide an overview of all the new 7.0 features.

- Presentations / Workshops from OR2019 (June 2019). Some video recordings exist https://wiki.lyrasis.org/display/DSPACE/DSpace+7+at+OR2019
- Additional DSpace 7 presentations/workshops/webinars are planned for 2020 as we get closer to the 7.0 final release.
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

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 (i18n).
- 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 (FULL DOCUMENTATION COMING SOON).
- 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 (FULL DOCUMENTATION COMING SOON).
- 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 config documentation for more reference for more details.
- 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)

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- Presentations / Workshops from OR2019 (June 2019). Some video recordings exist https://wiki.lyrasis.org/display/DSPACE/DSpace+7+at+OR2019
- Additional DSpace 7 presentations/workshops/webinars are planned for 2020, including at the OR2020 conference

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

**Major Contributing Institutions**

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

- Atmire
- 4Science
- FCT / RCAAP

**Frontend / New 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):

- Lotte Hofstede (LotteHofstede), Giuseppe Digilio (atarix83), Kristof De Langhe (Atmire-Kristof), Art Lowel (artlowel), William Welling (wwelling and wellingWilliam), Michael Spalti (mspalti), Laura Henze (lhenze), Jonas Van Goolen (jonas-atmire), Marie Verdonck (MarieVerdonck), Terry Brady (terrywbrady), Andrea Chiapparelli (andreachiapparelli), Ben Bosman (benbosman), Antoine Snayers (antoine-atmire), Matteo Perelli (sourcecode), Bram Luyten (bram-atmire), Courtney Pattison (courtneypattison), Álex Magaz Graça (rivaldi8), Tim Donohue (tdonohue), Chris Wilper (cwilper), Christian Snelbe (christian-snelbe), Alexander Sulfrini ( AlexandreS), Paulo Graça (paulo-graca), Mohamed Mohideen Abdul Rasheed (mohideen), Philip Vissenaekens (PhilipVis), Pascal-Nicolas Becker (pnbecker), Hardy Pottinger (hardyoyo), Mateus Mercer (MatMercer), Martin Walk (MW3000), Julius Gruber (Flusspferd123)

The following 5 individuals have contributed a translation of the new interface: Marina Muilwijk (Dutch), Claudia Jürgen ( German), Maria Fernanda Ruiz (Spanish), Vitor Silva Rodrigues (Brazilian Portuguese), Ivan Masar (Czech)

The above contributor lists were determined based on historical contributions to the "dspace-angular" project in GitHub: [https://github.com/DSpace/dspace-angular/graphs/contributors](https://github.com/DSpace/dspace-angular/graphs/contributors)

**Backend / REST API Acknowledgments**

The following 45 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), Andrea Bollini (abollini), Mark Wood (mwoodupui), Luigi Andrea Pascarelli (lap82), Terry Brady (terrywbrady), Tom Desair (tomdesair), Ben Bosman (benbosman), Tim Donohue (tdonohue), Marie Verdonck (MarieVerdonck), Chris Wilper (cwilper), Michele Boychuk (Micheleboychuk), Jelle Pelgrims (jpelgrims-atmire), Kevin Van de Velde (KevinVdV), Andrew Wood (AndrewZWood), Peter Nijs (peter-atmire), Michael Spalti (mspalti), Patrick Trotter (PTrotter), Pablo Prieto (ppmodo), Alexander Sulfrini ( AlexanderS), Hardy Pottinger (hardyoyo), Kim Shepherd (k shepherd), William Tantzen (tantzt001), Jonas Van Goolen (jonas-atmire), Pascal-Nicolas Becker (pnbecker), Ivan Masar (helix84), Kristof De Langhe (Atmire-Kristof), Paulo Graça ( paulo-graca), James Creel (j creel), Ian Little ( li ttle-cmr), Alan Orth ( alanorth), Claudia Jürgen (cjürgen), Mikia Nurmim (minurmin), Colin Delacroix (cdelacroix), Giuseppe Digilio (atarix83), Hrafn Malmquist (j4bbi), Bram Luyten (bram-atmire), Christian Snelbe (christian-snelbe), Sven Soliman (s soli m), Santiago Tettamanti (santit96), Julius Gruber (Flusspferd123), Saiful Amin (saiful-semantic), Mohamed Mohideen Abdul Rasheed (mohideen), József Marton (marton), Marsa Haoua (marsaoua), Alex Magaz Graça (rivaldi8)

The above contributor list was determined based on contributions to the "DSpace" project in GitHub since 6.0 (after Oct 24, 2016): [https://github.com/DSpace/DSpace/graphs/contributors?from=2016-10-24&to=2020-03-03&type=commit](https://github.com/DSpace/DSpace/graphs/contributors?from=2016-10-24&to=2020-03-03&type=commit) 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
- DSpace 7 Entities Working Group
- DSpace 7 Marketing Working Group
- DSpace Community Advisory Team (DCAT)

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. Our ongoing list of all known people/institutions that have contributed to DSpace software can be found on our DSpace Contributors page. Acknowledgments to those left off will be made in future releases.