DSpace Release 7.0 Status

Table of Contents:

- Milestones
- Major benefits of DSpace 7
- What is included in DSpace 7.0?
- What features are coming in a later 7.x release?
  - Tier 1: Highest Priority after 7.0
  - Tier 2: Medium-High Priority
  - Tier 3: Medium Priority
  - Tier 4: Medium-Low Priority
  - Tier 5: Low Priority
- Try out DSpace 7
- Where is this work happening? How can I track it?
- Presentations / Workshops

DSpace 7.0 is available now!

Click to view the DSpace 7.0 Press Release announcement provided in the following languages. Help us spread the word that the latest release is now available.

- English
- Deutsch
- Español
- Français
- Italiano
- Português

Ready to get started? Download DSpace 7.0 or Try out DSpace 7 (via our sandbox site or Docker quick install). See the Release Notes for more information.

Additional 7.x Releases will be coming soon!

The DSpace 7 Working Group has already begun work on version 7.1, which will feature the highest priority features listed in the “What features are coming in a later 7.x release?” list below. If you’d like to join the effort, or take the lead on a feature that is not in the highest priority listing, please contact Tim Donohue and/or join a DSpace 7 Working Group meeting.

DSpace v7 versus DSpace-CRIS v7

DSpace v7 and DSpace-CRIS v7 are separate open source products with separate roadmaps and separate governance models. As you may know, DSpace is a community-maintained, open-source platform, including community-elected governance. DSpace-CRIS is an open-source product built/maintained/governed by 4Science, which extends that DSpace platform for research data & information management use cases. DSpace Governance has been in discussions with 4Science regarding convergence of the two products, but the products will continue to be separate in v7.x.

Milestones

DSpace 7.0 will be the largest release in the history of DSpace. It is the culmination of strategic planning by DSpace Governance in response to community feedback, use cases and needs (for additional details see Strategic Planning)

<table>
<thead>
<tr>
<th>Achievement</th>
<th>More details</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2014-15) Governance creates a Strategic Plan for modernizing &amp; refreshing DSpace for the future. A key goal of this plan is a &quot;single, out of the box user interface&quot; to replace the aging XMLUI and JSPUI.</td>
<td>DSpace 2015-18 Strategic Plan</td>
</tr>
<tr>
<td>(2015-16) Community competition for different UI prototypes. Nine were reviewed / analyzed for inclusion as the single, future DSpace UI.</td>
<td>DSpace UI Prototype Challenge</td>
</tr>
<tr>
<td>(2016) Formal selection of Angular as new UI framework, replacing both the XMLUI and JSPUI. New Angular UI that is modern, responsive, and built using a Bootstrap theme for easy customization.</td>
<td>&quot;Introducing the new DSpace User Interface&quot; talk at OR2016 DSpace 7 UI Project Plain Language Summary</td>
</tr>
</tbody>
</table>
Major benefits of DSpace 7

This release finally brings together two user interfaces and their communities, who had previously been working in parallel. The ambition is to bring together the best of both JSPUI and XMLUI worlds, meaning that all features you love and use are re-imagined, and re-implemented on a single new user interface technology, Angular. This new UI is backed by a brand new REST API, which opens all data & features to the web, allowing DSpace to integrate or interact with external systems/services like never before.

The switch to Angular also allows for more rapid innovation. Angular has the potential to attract developers with prior expertise, given the popularity and global traction of Angular across industries.

Want to see what it looks like? Visit Try out DSpace 7
What is included in DSpace 7.0?

The efforts contributed to DSpace 7 are the largest endeavour ever undertaken by the DSpace community. The DSpace 7.0 release will concentrate on the following major features:

1. A new User Interface based on Angular (to replace XMLUI and JSPUI). This work is going on in the "main" branch of https://github.com/DSpace/dspace-angular.
   a. The goal of the new UI is to implement all major features of both XMLUI and JSPUI in a single, modern UI.
   b. An exhaustive list of all major features already in 7.0 can be found in the 7.0 Release Notes.
   c. NOTE: Some, lower-priority, minor DSpace 6 XMLUI or JSPUI features have been delayed for a later 7.x release (see below). This decision was made to make 7.0 available as soon as possible.
2. A refactored/enhanced REST API (using modern REST best practices). This work is going on in the "main" branch of https://github.com/DSpace
   a. Additionally, a new REST Contract (describing all API interactions) is being written at https://github.com/DSpace/RestContract
3. Redesigned submissions and workflows featuring a one page submission process with a drag-and-drop interface and newly redesigned MyDSpace.
4. A new Configurable Entities object model, which allows for the creation of new "typed" Items, and storing relationships between Items. This feature will allow for tighter integration with external identifier systems (e.g. ORCID), current research information systems (CRIS), journal publishing systems, etc. This work was completed by the DSpace 7 Entities Working Group.
   a. Early technical documentation is available at https://docs.google.com/document/d/1wEmHirFrzY3ggOfRr2YBQwGOvH1luTVGmxDldqwxM/edit

For much more information see the Release Notes

What features are coming in a later 7.x release?

Because of the complexity of merging features of two UIs (XMLUI and JSPUI) into one, and the desire to make 7.0 available as soon as possible, we have chosen to release 7.0 as soon as the highest priority features (those deemed most widely used) are completed. Therefore, some features have been delayed for a later 7.x release. See DSpace 7 Release Goals for more information.

Ranking of outstanding features into "Tiers"

In April-May 2021, all DSpace Steering & Leadership members were surveyed on the features not yet implemented in 7.0. They were asked to rank those features on behalf of their institution(s) they represent. In June 2021, a subset of those members compiled the results into 5 "tiers", based on the results of that survey. These "tiers" provide the priority of every outstanding feature, and map to a rough plan for at least five 7.x releases. Features are also ranked within a "tier" based on their number (with #1 being the highest priority within that tier).

RoadMap for 7.1 (due Nov 1, 2021)

The 7.1 release will concentrate on features listed below in "Tier 1: Highest Priority". As many Tier 1 features will be released in 7.1 as possible given the public release date of November 1, 2021. The latest status of each feature may be found by clicking on its ticket, or browsing our 7.1 Development Board.

Volunteer development may impact the order in which features are completed. To encourage volunteers to contribute code to DSpace 7.1, volunteer developers are welcome to contribute any feature (listed in any tier below or prior approved) to the 7.1 release. These volunteer-contributed features will be included in the 7.1 release, provided they are contributed before the 7.1 Pull Request deadline (tentatively Sept 23) and pass code reviews. Please get in touch with Tim Donohue or add a comment to an existing issue ticket if you wish to volunteer to implement one of the features listed below.
Tier 1: Highest Priority after 7.0

1. (Admin) Ability to preview Batch Metadata changes during import of CSV, similar to 6.x. In 7.0, it is possible to import a CSV from the Admin Toolbar, but you are not shown a preview of pending changes. (UI ticket #782, REST ticket #2849)
2. (General) Request a Copy, similar to how it worked in 6.x (UI ticket #779, REST ticket/PR #2129)
3. (NEW) External lookup of metadata using a search or identifier (e.g. DOI) to enrich an in-progress submission. In 7.0, external searches/lookups can only be done from the MyDSpace page to start a new submission. (REST ticket #2824)
4. (Submission) Embargo entire Item (including metadata) via an “Access” section, similar to 6.x. In 7.0, only individual Bitstreams/Files can be embargoed during a submission. (UI ticket #767, REST ticket #2839)
5. (Admin) Collection harvested from an OAI-PMH endpoint (like in 6.x XMLEUI), and kick off a new harvest from the UI. (UI ticket #761)
6. (Submission) Create a new item version, similar to 6.x (as either an administrator or a submitter). In 7.0, viewing Item Versions is supported, but new versions cannot be created. (UI tickets #770 and #780, REST tickets #2844 and #2847)
7. (Workflow) Preview an item during workflow approval (via a button/popup), to allow for easier accepting/rejecting, similar to 6.x (UI ticket #772)
8. (General) Feedback form, similar to 6.x (UI ticket #763, REST ticket #2836)
9. (Admin) Ability to export metadata (to CSV) from search results, similar to 6.x. In 7.0, it’s possible to export metadata to CSV from a Community /Collection/Item, but not from a set of search results. (REST Ticket #3129)

Tier 2: Medium-High Priority

1. (General) Support for hierarchical controlled vocabularies in Search interfaces, similar to 6.x. In 7.0, hierarchical controlled vocabularies are supported in the Submission form but not in Search. (UI ticket #815, REST ticket #2870)
2. (General) List of Recently Added Items (Recent Submissions) on homepage, similar to 6.x. In 7.0, this is only available on Collection homepages. (UI ticket #667)
3. (Submission) SHERPA/RoMEO integration, similar to 6.x (UI ticket #769, REST ticket #2840)
4. (NEW) Export all personal data for your user account (compliance for privacy) (UI ticket #814, REST ticket #2898)
5. (NEW) Extracting metadata from a bibliographic file (e.g. BibTex, PDF) to enrich an in-progress submission. In 7.0, metadata extraction only will occur when uploading a file from the MyDSpace page to start a new submission. (REST ticket #2833)
6. (Submission) Supervision Orders (similar to 6.x JSPUI) (UI ticket #808, REST ticket #2878)
7. (General) Support “Browse By” configurations for custom browse options. In 7.0, “Browse By” options shown in the UI are hardcoded when they should be read from configuration. (UI ticket #852) (May move to “Tier 3”)
8. (Admin) Administrative Control Panel (similar to 6.x XMLEUI) (UI ticket #801, REST ticket #2877) (May move to “Tier 3”)
9. (Submission) Support for type-based submission forms (e.g-type-bind configuration), similar to 6.x. (UI ticket #806, REST ticket #2873) (May move to “Tier 3”)
10. (Submission) Make an item “private” during submission, similar to 6.x (UI ticket #768)
11. (NEW) Signposting support, aligning with recommendations from the COAR Next Generation Repositories Report (UI ticket #811, REST ticket #2871) (May move to “Tier 3”)
12. (Integrations) OpenSearch API support, similar to 6.x (UI ticket #791, REST ticket #2869) (May move to “Tier 3”)
13. (Authentication) Ability to disable self-registration, similar to 6.x (REST Ticket #3272)

Tier 3: Medium Priority

1. (Admin) Batch Import from a Zip file in Admin UI, similar to 6.x. In 7.0, it is still possible to batch import from command line, but not yet possible from the Admin UI. (UI ticket #783, REST ticket #2850)
2. (Admin) Batch Export an Item, a Collection or a Community to Zip file in Admin UI, similar to 6.x. In 7.0, it is still possible to batch export from command line, but not possible from the Admin UI. (UI tickets #774 and #775 and #777, REST tickets #2842 and #2843 and #2845)
3. (Workflow) Full support for custom configurable workflow steps, similar to 6.x. In 7.0, some workflow step names are hardcoded, so custom named steps may not be recognized automatically. (UI ticket #770, REST ticket #2841)
4. (NEW) AIP Backup and Restore should support export/import of Entities & their relationships (REST ticket #2882)
5. (General) RSS / ATOM feeds for Site, Community or Collection, similar to 6.x (UI ticket #778, REST ticket #2864)
6. (General) Abilty to subscribe to email updates for a Collection (Manage Subscriptions), similar to 6.x (UI ticket #803, REST ticket #2871)
7. (NEW) Ability to edit an Archived Item using a submission-like form (i.e. easier to use Edit Item form to edit an Archived item) (UI ticket #807, REST ticket #2876)
8. (NEW) ResourceSync support, aligning with recommendations from the COAR Next Generation Repositories Report (REST ticket #2318)
9. (Statistics) Administrative (potentially log-based) statistical reports, similar to 6.x (UI ticket #786, REST ticket #2852)

Tier 4: Medium-Low Priority

1. (NEW) Simple Archive Format (SAF) Import should support Entity/relationship creation (REST ticket #2883)
2. (Admin) Bulk access control management (previously called “Advanced Policy Manager”) in 6.x - The ability to modify policies on several items at once. (UI ticket #781, REST ticket #2848)
3. (General) Additional contextual help (e.g. hover-overs which provide hints/tips on using the user interface), similar to 6.x JSPUI (UI ticket #762)
4. (Workflow) Ability to batch claim workflow tasks. In 7.0, you can only claim one task at a time. (UI ticket #771)
5. (Submission) Support for kicking off a Curation Task during Submission process, similar to 6.x (REST ticket #2868)
6. (Workflow) Migrate additional configurable workflow steps from 6.x, specifically “Select Single Reviewer Workflow”, “Score Review Workflow”, etc. (REST tickets #2874, #2875)
7. (NEW) OpenAIRE integration with the notification broker and the claim service (UI PR #1007, REST PR #3143)
8. (NEW) SWORD should support Entity/relationship creation (REST ticket #2884)

Tier 5: Low Priority

These features were deemed lowest priority of all on our list. While most will still be implemented in 7.x, some may also be reviewed for possible removal (or replacement) if the feature is no longer useful.

1. (Admin) Edit homepage news from Admin UI, similar to 6.x JSPUI. (UI ticket #784, REST Contract Ticket #45)
2. (NEW) Easily embargo an Archived Item using a date-picker or form. In 7.0, you can embargo an Item by modifying its Policies/Permissions directly (e.g. creating an Anonymous policy that starts on a future date will embargo that item until that date). (UI ticket #787, REST ticket #2846)
3. (General) Display "More like this" (similar items) on an item page, similar to 6.x XMLUI. (UI ticket #1288)
4. (General) View your groups in your user profile page. (Removed, as this ended up being included in 7.0)
5. (Integrations) Migrate SWORDv1 client (ability to send content from DSpace to an external SWORDv1 server) from 6.x (REST ticket #3127)
6. (NEW) Support drag & drop of multiple files at once from MyDSpace page. In 7.0, only one file can be drag & dropped at a time from MyDSpace. However, you can drag & drop additional files during submission. (UI ticket #820)
7. (Admin) Edit default deposit license from Admin UI, similar to 6.x JSPUI. (UI ticket #809, REST ticket #2879)
8. (Integrations) OpenURL Support (UI ticket #789, REST ticket #2865)
9. (Statistics) Search reports, similar to 6.x. Statistics on searches performed in DSpace. (UI ticket #810, REST ticket #2880)
10. (General) Tag cloud visualization, similar to 6.x JSPUI. (UI ticket #790, REST ticket #2866)
11. (Statistics) Workflow reports, similar to 6.x. Statistics on items currently in workflow approval in DSpace. (UI ticket #785, REST ticket #2851)

Try out DSpace 7

Try out DSpace 7 has instructions for installing DSpace 7 locally, or via Docker. Keep in mind, DSpace 7 is not yet "production ready" until 7.0 is released.

If you want to quickly test out the latest DSpace 7 code, you may do so using our demo site.

- DSpace 7 User Interface Demo: https://demo7.dspace.org/ (Login: dspacedemo+admin@gmail.com, Password: dspace)
- DSpace 7 REST API Demo: https://api7.dspace.org/server/ (Login: dspacedemo+admin@gmail.com, Password: dspace)
  - REST Contract / Documentation is available at: https://github.com/DSpace/RestContract/blob/master/README.md

Keep in mind, our User Interface Demo uses the REST API Demo as the backend. So, any content created (by anyone) will immediately appear in both locations.

Where is this work happening? How can I track it?

Active development work takes part in the DSpace 7 Working Group. This development team meets on a weekly basis (every Thursday). All meetings are open (anyone can attend) and meeting notes are publicly available off the group's wiki page.

We also use Slack to communicate between meetings. Anyone can request a Slack invite (see link) to listen in or join discussions.

We are tracking the current status of all active DSpace 7 development in our DSpace 7 Project Boards.

Presentations / Workshops

Here are the latest DSpace 7 presentations: DSpace 7 at OR2021

Additional presentations/workshops may be found at:

- September 2019 - DSpace North American User Group Meeting
- June 2019 - Open Repositories 2019 Hamburg
- Older presentations can be found on DSpace 7 Media and Presentations