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 Tasks for 7.x
  - Tier 2: Medium-High Priority
  - Tier 3: Medium Priority
  - Tier 4: Medium-Low Priority
  - Tier 5: Low Priority
- Suggesting new / missing features for our Tier list
- Try out DSpace 7
- Where is this work happening? How can I track it?
- When will 8.0 planning begin? Is there a Roadmap for 8.0?
- Presentations / Workshops

DSpace 7.6 is available now!

DSpace 7.6 was released on June 26, 2023.

DSpace 7.5 was released on February 20, 2023.

DSpace 7.4 was released on October 10, 2022.

DSpace 7.3 was released on June 27, 2022.

DSpace 7.2 was released on Feb 7, 2022.

DSpace 7.1 was released on Nov 1, 2021.

DSpace 7.0 was released on Aug 2, 2021. The press release for 7.0 was translated into a number of languages: English, Deutsch, Español, Français, Italiano, Português.

Ready to get started? Download DSpace 7 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 (2016-2023) has already begun work on version 7.6, 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 (2016-2023) 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>
<tr>
<td>Year</td>
<td>Description</td>
</tr>
<tr>
<td>------</td>
<td>-------------</td>
</tr>
<tr>
<td>(2017)</td>
<td>Adoption of a standards based REST API to maximize exposure of all DSpace features for integration purposes: A completely redesigned REST API that is self-documenting and human browsable.</td>
</tr>
<tr>
<td>(2017-19)</td>
<td>Redesigned submissions and workflows featuring a one page submission process with a drag-and-drop interface &amp; a searchable MyDSpace.</td>
</tr>
<tr>
<td>(2017-19)</td>
<td>Configurable entities, an optional new item type inspired by the DSpace-CRIS project that allows for complex linked relationships between items. For example, Items can now represent a Person (Entity) to provide a way to support &quot;researcher profiles&quot;, and link that person to the works they authored.</td>
</tr>
<tr>
<td>(May 2019)</td>
<td>Preview release, including Entity demonstrator and associated data set</td>
</tr>
<tr>
<td>(2019-20)</td>
<td>Docker installation and deployment procedures</td>
</tr>
<tr>
<td>(Jan 2020)</td>
<td>Established a new Staged Beta Release Process for 7.0, spacing out major features over a series of smaller Beta releases &amp; delaying some low priority features for later 7.x releases. Paid/funded development began.</td>
</tr>
<tr>
<td>(March 2020)</td>
<td>Beta 1 released</td>
</tr>
<tr>
<td>(April 2020)</td>
<td>Beta 2 released</td>
</tr>
<tr>
<td>(July 2020)</td>
<td>Beta 3 released</td>
</tr>
<tr>
<td>(Oct 2020)</td>
<td>Beta 4 released</td>
</tr>
<tr>
<td>(April 2021)</td>
<td>Beta 5 released</td>
</tr>
<tr>
<td></td>
<td>Testathon April 19 - May 7, 2021</td>
</tr>
<tr>
<td></td>
<td>OR2021 Talks / Workshop June 7-10, 2021</td>
</tr>
<tr>
<td></td>
<td>Final bug &amp; accessibility fixes prior to 7.0 release See 7.0 work board</td>
</tr>
<tr>
<td></td>
<td>(Nov 1, 2021) 7.1 release Release Notes</td>
</tr>
<tr>
<td></td>
<td>(Feb 7, 2022) 7.2 release Release Notes</td>
</tr>
<tr>
<td></td>
<td>(June 27, 2022) 7.3 release Release Notes</td>
</tr>
<tr>
<td></td>
<td>(October 10, 2022) 7.4 release Release Notes</td>
</tr>
<tr>
<td></td>
<td>(February 20, 2023) 7.5 Release Release Notes</td>
</tr>
<tr>
<td></td>
<td>(June 26, 2023) 7.6 Release Release Notes</td>
</tr>
</tbody>
</table>

7.6.x Ongoing Maintenance: With the release of DSpace 7.6 in June 2023, the 7.x platform has moved into maintenance mode. This means that all future 7.x releases will only include bug or security fixes and will adopt a "7.6.x" numbering scheme.

**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/DSpace
   a. Additionally, a new REST Contract (describing all API interactions) is being written at https://github.com/DSpace/RestContract

3. 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 (2018-19).
   a. Early technical documentation is available at https://docs.google.com/document/d/1wEmHirFzrY3ygGlJr2YBQqWOvH1uTVGmxDldqWxM/edit

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.

No more features will be added to 7.x. All outstanding features move to 8.0

With the release of DSpace 7.6 in June 2023, the 7.x platform has moved into maintenance mode. No additional features in these tier lists will be added to 7.x.

Any outstanding/incomplete features in the below tier lists will be moved to 8.0 (at the earliest). See our RoadMap 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).
Ability to
List of Recently Added Items (REST ticket/PR #2129)
REST ticket #2840
#2847
COAR Next Generation Repositories Report
REST ticket #2878
UI ticket (
REST ticket #2877
#780
REST ticket #2834)

Support "Browse By" configurations for custom browse options. In 7.0-7.1, "Browse By" options shown in the UI
generated from an OAI-PMH endpoint (like in 6.x XMLUI), and kick of a new harvest from the UI. (UI ticket #761)

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 #776 and #780, REST tickets #2844 and #2847)

Tier 1: Highest Priority Tasks for 7.x

Note: While these are the features that will be tackled first (via funded development), they are not guaranteed for a specific release of 7.x. For example, they may be added over several releases (a few in 7.1, a few in 7.2, etc.) The number added per release depends heavily on available development
resources. If you want to chip in to help things go more quickly, please get in touch with Tim Donohue

See tasks on our Tier 1 Board

1. ✅ (Available in 7.3) (Admin) Ability to preview Batch Metadata changes during import of CSV, similar to 6.x. In 7.x, it is possible to import a CSV from the Admin Tool bar, but you are not shown a preview of pending changes. ([UI ticket #782, REST ticket #2849])
2. ✅ (Available in 7.1) (General) Request a Copy, similar to how it worked in 6.x ([UI ticket #779, REST ticket/PR #2129])
3. (Delayed, as this feature is highly complex & may require significant effort or external funding.) (NEW) External lookup of metadata using a search or identifier (e.g. DOI) to enrich an in-progress submission. In 7.x, external searches/lookups can only be done from the MyDSpace page to start a new submission. ([REST ticket #2834])
4. ✅ (Available in 7.2) (Submission) Embargo entire item (including metadata) via an "Access" section, similar to 6.x. In 7.0-7.1, only individual Bitstreams/Files can be embargoed during a submission. ([UI ticket #767, REST ticket #2839])
5. ✅ (Available in 7.1) (Admin) Collection harvested from an OAI-PMH endpoint (like in 6.x XMLUI), and kick off a new harvest from the UI. ([UI ticket #761])
6. ✅ (Available in 7.1) (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 #776 and #780, REST tickets #2844 and #2847)
7. ✅ (Available in 7.3) (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. (Available in 7.2) (General) Feedback form, similar to 6.x ([UI ticket #763, REST ticket #2836])
9. ✅ (Available in 7.3) (Admin) Ability to export metadata (to CSV) from search results, similar to 6.x. In 7.x, 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

See tasks on our Tier 2 Board

1. (Available in 7.3) (NEW) Advanced ORCID integration port from DSpace-CRIS to DSpace ([Ticket #9157])
2. (Available in 7.3) (NEW) Migrate additional "Live-Import" external metadata sources from DSpace-CRIS to DSpace; ([Ticket #3359])
3. (Available in 7.5) (General) Support for hierarchical controlled vocabularies in Search interfaces, similar to 6.x. In 7.x, hierarchical controlled vocabularies are supported in the Submission form but not in Search. ([UI ticket #915, REST ticket #2870])
4. (Available in 7.4) (General) List of Recently Added Items (Recent Submissions) on homepage, similar to 6.x. In 7.x, this is only available on Collection homepages. ([UI ticket #667])
5. (Available in 7.3) (Submission) SHERPA/RoMEO integration, similar to 6.x ([UI ticket #769, REST ticket #2840])
6. (Delayed, requires further analysis / discussion) (NEW) Export all personal data for your user account (compliance for privacy) ([UI ticket #814, REST ticket #2888])
7. (Delayed, as this feature is highly complex & may require significant effort or external funding.) (NEW) Extracting metadata from a bibliographic file (e.g. BibTex, PDF) to enrich an in-progress submission. In 7.x, metadata extraction only will occur when uploading a file from the MyDSpace page to start a new submission. ([REST ticket #2833])
8. (Available in 7.5) (Submission) Supervision Orders (similar to 6.x JSPUI) ([UI ticket #808, REST ticket #2978])
9. (Available in 7.2) (General) Support "Browse By" configurations for custom browse options. In 7.0-7.1, "Browse By" options shown in the UI are hardcoded when they should be read from configuration. ([UI ticket #852])
10. (Available in 7.3) (Admin) Administrative Control Panel (similar to 6.x XMLUI) ([UI ticket #801, REST ticket #2877])
11. (Available in 7.3 - donated by The Library Code) (Submission) Support for type-based submission forms (<type-bind> configuration), similar to 6.x. ([UI ticket #806, REST ticket #2873])
12. (Available in 7.2) (Submission) Make an item "private" during submission, similar to 6.x ([UI ticket #768])
13. (Available in 7.2) (NEW) Signposting support, aligning with recommendations from the COAR Next Generation Repositories Report ([UI ticket #811, REST ticket #2881])
14. (Available in 7.4) (Integrations) OpenSearch API support, similar to 6.x ([UI Ticket #791, REST ticket #2869])
15. (Available in 7.3) (NEW) Versioning support for Configurable Entities ([UI ticket #1312, REST ticket #7937])
16. (Available in 7.5) (Authentication) Ability to disable self-registration, similar to 6.x ([REST ticket #3272])

Tier 3: Medium Priority

See tasks on our Tier 3 Board

1. (Available in 7.4) (Admin) Batch Import from a Zip file in Admin UI, similar to 6.x. In 7.x, 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. (Available in 7.4) (Admin) Batch Export an Item or a Collection to Zip file in Admin UI, similar to 6.x. In 7.x, it is still possible to batch export from command line, but not possible from the Admin UI. (UI tickets #775 and #777, REST tickets #2843 and #2845)
   a. NOTE: Community export is not yet possible in 7.4 (see UI Ticket #774, REST ticket #2842), because a correspond import process has never existed in DSpace.
3. (Available in 7.5) (Workflow) Full support for custom configurable workflow steps, similar to 6.x. In 7.x, some workflow step names are hardcoded, so custom named steps may not be recognized automatically. (UI ticket #770, REST ticket #2941)
4. (In early development. Likely in 8.0) (NEW) AIP Backup and Restore should support export/import of Entities & their relationships (REST ticket #2882)
5. (Available in 7.3) (General) RSS / ATOM feeds for Site, Community or Collection, similar to 6.x (UI ticket #788, REST ticket #2864)
6. (Available in 7.5) (General) Ability to subscribe to email updates for a Collection (Manage Subscriptions), similar to 6.x (UI ticket #803, REST ticket #2871). In 7.x, existing email subscriptions will still work, but they cannot be managed or added from the UI.
7. (Delayed, as this feature is highly complex & may require significant effort or external funding.) (NEW) Ability to edit an Archived Item via a submission-like form (i.e. easier to use Edit Item form) (UI ticket #807, REST ticket #2876)
8. (In early development. Likely in 8.0 or later) (To be donated) (NEW) COAR Notify Support (Linked Data Notifications / LDN), aligning with recommendations from the COAR Next Generation Repositories Report (REST ticket #8120)

Tier 4: Medium-Low Priority

See tasks on our Tier 4 Board

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. See tasks on our Tier 5 Board

Tier 4: Medium-Low Priority

1. (Available in 7.1) (NEW) Simple Archive Format (SAF) Import should support Entity/relationship creation (REST ticket #2883)
2. (Available in 7.6) (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 #2849)
3. (Available in 7.5) (General) Additional contextual help (e.g. hover-overs which provide hints/tips on using the user interface), similar to 6.x JSPUI (UI ticket #782). As of 7.5, the framework exists to allow for these contextual help "hints". However, most pages do not yet have hints added.
4. (Needs discussion / feedback. Unclear prioritization) (Workflow) Ability to batch claim workflow tasks. In 7.0, you can only claim one task at a time. (UI ticket #777)
5. (Delayed until 8.0 at the earliest) (Submission) Support for kicking off a Curation Task during Submission process, similar to 6.x (REST ticket #2863)
6. (Available in 7.5) (Workflow) Migrate additional configurable workflow steps from 6.x, specifically "Select Single Reviewer Workflow", "Score Review Workflow", etc. (REST tickets #2874, #2875)
7. (Delayed until 8.0. Prioritized for that release in our RoadMap - to be donated) (NEW) OpenAIRE integration with the notification broker and the claim service (UI PR #1562, REST PR #1814)
8. (NEW) SWORD should support Entity/relationship creation (REST ticket #2884)
9. (Available in 7.6) (General) Item counts for Communities/Collections (Ticket #1787)

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. See tasks on our Tier 5 Board

1. (Needs discussion / feedback. Unclear prioritization) (Admin) Edit homepage news from Admin UI, similar to 6.x JSPUI. (UI ticket #784, REST Contract Ticket #45)
2. (Available in 7.6 via the Bulk Access Control Management tool) (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 #778, REST ticket #2846)
3. (Needs discussion / feedback) (Search) Advanced Search page, similar to 6.x XMIUI. In 7.x, Advanced Search options already exist and are documented at https://wiki.lyrasis.org/display/DSDOC7x/Search, but a separate Advanced Search page doesn't yet exist. (Ticket #8431)
4. (Needs discussion / feedback) (General) Display "More like this" (similar items) on an Item page, similar to 6.x XMIUI. (UI ticket #1288)
5. (Available in 7.0) (General) View your groups in your user profile page.
6. (Needs discussion / feedback) (Integrations) Migrate SWORDv1 client (ability to send content from DSpace to an external SWORDv1 server) from 6.x (REST ticket #3127)
7. (Needs discussion / feedback) (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)
8. (Admin) Edit default deposit license from Admin UI, similar to 6.x JSPUI. (UI ticket #809, REST ticket #2879)
9. (Needs discussion / feedback) (Integrations) OpenURL Support (UI ticket #789, REST ticket #2865)
10. (Needs discussion / feedback) (Statistics) Search reports, similar to 6.x. Statistics on searches performed in DSpace. (UI ticket #810, REST ticket #2880)
11. (Needs discussion / feedback) (General) Tag cloud visualization, similar to 6.x JSPUI. (UI ticket #790, REST ticket #2866)
12. (Needs discussion / feedback) (Statistics) Workflow reports, similar to 6.x. Statistics on items currently in workflow approval in DSpace. (UI ticket #785, REST ticket #2851)
13. (Needs discussion / feedback) (NEW) ResourceSync support, aligning with recommendations from the COAR Next Generation Repositories Report (REST ticket #8139)

Suggesting new / missing features for our Tier list

If you discover a 6.x feature we overlooked in our Tier listing above, or if you wish to suggest an improvement to an existing feature, we recommend following this process:

- First, check to see if your suggestion already exists in a ticket. Search our frontend tickets and our backend tickets for anything similar.
- If you find a ticket matching your suggestion, add a comment to it, letting us know why this feature is of interest to you / your institution. The more comments a ticket receives, the higher priority it will get.
• If there is not matching ticket, create one! If you aren't sure if the ticket should be a frontend or backend ticket, just create it as a frontend ticket (we can always move it later if we feel we need to)
  ◦ Create frontend tickets at https://github.com/DSpace/dspace-angular/issues
  ◦ Create backend tickets at https://github.com/DSpace/dspace/issues
• Once your ticket is created, we'll analyze it, label it & prioritize it. Keep in mind, tickets may not be prioritized immediately, or may start out as a lower priority (but if others add comments to it, that usually results in us bumping up the priority).

Try out DSpace 7

Try out DSpace 7 has instructions for installing DSpace 7 locally, or via Docker.

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://demo.dspace.org/ (Login: dspacev2+admin@gmail.com, Password: dspace)
  • DSpace 7 REST API Demo: https://demo.dspace.org/server/ (Login: dspacev2+admin@gmail.com, Password: dspace)
  ◦ REST Contract / Documentation is available at: https://github.com/DSpace/RestContract/#readme

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 takes place in Developer Meetings.

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.

When will 8.0 planning begin? Is there a Roadmap for 8.0?

See RoadMap, which has been updated in August 2023 with these details.

Presentations / Workshops

Here are the latest DSpace 7 presentations: Videos and Webinars

Additional presentations/workshops may be found at:

  • Older presentations can be found on DSpace 7 Media and Presentations