DSpace Release 7.0 Status

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DSpace 7.0 is under active development (see milestones below). If you or your institution would like to contribute to and accelerate this release process, we welcome contributors to the DSpace 7 Working Group. Get in touch with Tim Donohue if you’d like to contribute!

What to see what it looks like so far? Visit Try out DSpace 7 for details.

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>
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<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>
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<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>
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<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>
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<tr>
<td>(2017) 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>
<td>&quot;On the Road to DSpace 7 : Angular UI + REST&quot; at OR2017 DSpace 7 UI Project Plain Language Summary</td>
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<td>(2017-19) Redesigned submissions and workflows featuring a one page submission process with a drag-and-drop interface &amp; a searchable MyDSpace.</td>
<td>Configuration changes in the submission process</td>
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<td>(2017-19) 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>
<td>Initial Investigation WG: DSpace Entities Working Group Implementation WG: DSpace 7 Entities Working Group</td>
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<td>(May 2019) Preview release, including Entity demonstrator and associated data set</td>
<td>DSpace 7 Preview Release</td>
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<td>(2019-20) Docker installation and deployment procedures</td>
<td>Try out DSpace 7 (&quot;Install via Docker&quot; section)</td>
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<tr>
<td>(Jan 2020) 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 7.1 or 7.2. Paid/funded development began.</td>
<td>DSpace 7 Release Goals</td>
</tr>
<tr>
<td>(March 2020) Beta 1 released</td>
<td>Beta 1 Release Notes</td>
</tr>
</tbody>
</table>
(April 2020) Beta 2 released
Beta 2 Release Notes

(July 2020) Beta 3 released
Beta 3 Release Notes

(Oct 2020) Beta 4 released
Beta 4 Release Notes

Beta 5 is under development. It will be the final Beta before Testathon
Estimated for late April 2021. See DSpace 7 Release Goals

Testathon (3 weeks)
TBA (late April / early May 2021)

7.0 release (see "What will be included in DSpace 7.0?" below)
TBA (After Testathon)

7.1 release (see "What will be included in DSpace 7.1?" below)
TBA (After 7.0 release)

7.2 release (see "What will be included in DSpace 7.2?" below)
TBA (After 7.1 release)

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

DSpace 7 admin menu

DSpace 7 search results display

What will be 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 (for each Beta).
   c. NOTE: Some, lower-priority, minor DSpace 6 XMLUI or JSPUI features have been delayed for either 7.1 or 7.2 release (see sections 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. 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/1wEmHiFzrY3qG1FrR2YBQwGOvH1nu1TVGmxD4dnqWxM/edit

For more information on the history behind these decisions, see DSpace 7 UI Project Plain Language Summary

What will be included in DSpace 7.1?

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 either 7.1 or 7.2. See DSpace 7 Release Goals for more information.

Below is the list of features currently scheduled for 7.1 (not exhaustive & may change):

- General features
  - Feedback form
  - Contextual help (e.g. hover-overs which provide hints/tips on using the user interface)
  - View your groups (on user profile page)
  - Request a Copy
  - 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.

- Submission related features
  - 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 ones during submission.
  - Embargo entire Item (including metadata). In 7.0, only a Bitstream/File can be embargoed
  - Make an Item private during submission. In 7.0, it's only possible to make an item private after it is submitted.
  - 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.
  - 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.

- SHERPA/RoMEO Integration

- Workflow related features
  - Full support for custom configurable workflow steps. In 7.0, some workflow step names are hardcoded, so custom named steps may not be recognized automatically.
  - Ability to batch claim workflow tasks. In 7.0, you can only claim one task at a time.
  - Preview an item during workflow approval (via a button), to allow for easier accepting/rejecting.

- Administrative features
  - Export an Item, a Collection or a Community to Zip file. In 7.0, it is still possible to batch export from command line, but not possible from the Admin UI.
  - Batch Import from a Zip file. In 7.0, it is still possible to batch import from command line, but not possible from the Admin UI.
  - Ability to export metadata (to CSV) from search results.
  - Ability to preview Batch Metadata changes during import of CSV. In 7.0, it is possible to import a CSV but you are not shown a preview of pending changes.
  - Create a new Item Version (as an administrator or a submitter). In 7.0, viewing Item Versions is supported, but new versions cannot be created.
  - Embargo an archived Item - applying an embargo after the fact to an Item that is already available.
  - Bulk access control management (previously called "Advanced Policy Manager") - The ability to modify policies on several items at once.
  - OAI-PMH harvesting (from an external OAI-PMH endpoint) into a DSpace Collection
  - Edit Homepage News from Admin UI

- Statistics features
  - Workflow reports - statistics on items currently in workflow approval.
  - Administrative (potentially log-based) statistical reports (still under discussion on inclusion or exclusion)

For an up-to-date list of all 7.1 tickets/features, see the 7.1 Project Board

What will be included in DSpace 7.2?

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 either 7.1 or 7.2. See DSpace 7 Release Goals for more information.

Below is the list of features currently scheduled for 7.2 (not exhaustive & may change):

- General features
  - RSS / ATOM feeds for Site, Community or Collection
  - Ability to subscribe to email updates for a Collection (Manage Subscriptions)
  - Tag Cloud visualization (like in JSPUI)
  - Export all personal data (for your user account)

- Submission related features
  - Support for hierarchical controlled vocabularies
  - Support for type-based submission forms (<type-bind> configuration)

- Workflow related features
  - Migrate additional workflow steps for DSpace 6: “Select Single Reviewer Workflow”, “Score Review Workflow”, etc.

- Administrative features
• Edit Item via Submission Form (easier to use Edit Item form)
• Administrative Control Panel (similar to XMLUI)
• Supervision Orders (similar to JSPUI)
• Edit default deposit license from Admin UI (similar to JSPUI)

• Statistics features
  • Search reports - statistics on searches performed in DSpace.

• Integrations
  • OpenURL support
  • OpenSearch API support
  • ResourceSync support, aligning with recommendations from the COAR Next Generation Repositories Report
  • Signposting support, aligning with recommendations from the COAR Next Generation Repositories Report
  • SWORDv1 Client (under discussion)

• Configurable Entities features
  • AIP Backup and Restore should support export/import of Entities & their relationships
  • SAF Import should support Entity/relationship creation
  • SWORD should support Entity/relationship creation

For an up-to-date list of all 7.2 tickets/features, see the 7.2 Project Board

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: dspace7demo+admin@gmail.com, Password: dspace)
- DSpace 7 REST API Demo: https://api7.dspace.org/server/ (Login: dspace7demo+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

Introducing DSpace 7
DSpace 7 REST API (OR2019)

DSpace 7 Open for Integration

DSpace 7: Configurable Entities (OR2019)

The Angular UI from a user perspective (OR2019)

Enhanced Submission & Workflow

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