DSpace Release 9.0 Status

Version 9.0

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Under Discussion for 9.0

The following is a (incomplete) list of features / priorities that are currently under discussion for the 9.0 release. Features/ideas listed on this list are NOT guaranteed for 9.0 until approved/prioritized by the DSpace Steering Group.

- Improving performance / scalability in general
  - High CPU usage for server-side rendering, [https://github.com/DSpace/dspace-angular/issues/3110](https://github.com/DSpace/dspace-angular/issues/3110)
  - Unable to route network requests to different REST URL during server-side rendering (public vs private REST requests): [https://github.com/DSpace/dspace-angular/issues/1485](https://github.com/DSpace/dspace-angular/issues/1485)
  - Serve REST configuration more efficiently: [https://github.com/DSpace/dspace-angular/issues/9056](https://github.com/DSpace/dspace-angular/issues/9056)
  - User permissions should be obtained in fewer REST requests: [https://github.com/DSpace/dspace-angular/issues/3161](https://github.com/DSpace/dspace-angular/issues/3161)
  - Submission Form should be loaded using fewer REST requests: [https://github.com/DSpace/dspace-angular/issues/3162](https://github.com/DSpace/dspace-angular/issues/3162)
  - Search Results should be loaded using fewer REST requests: [https://github.com/DSpace/dspace-angular/issues/3163](https://github.com/DSpace/dspace-angular/issues/3163)

- Easier Installation and Upgrades
  - Discussions around simplifying installation process: [https://github.com/DSpace/dspace-angular/issues/3184](https://github.com/DSpace/dspace-angular/issues/3184)
  - Use "npm" instead of "yarn" for frontend installation: [https://github.com/DSpace/dspace-angular/pull/3173](https://github.com/DSpace/dspace-angular/pull/3173)

- Code Cleanup / Maintenance
  - Dependency upgrades: Upgrade to Angular 18 & Spring Boot 3.3
  - Replace Submission Form library (as the one we use is unmaintained): [https://github.com/DSpace/dspace-angular/issues/2216](https://github.com/DSpace/dspace-angular/issues/2216)
  - All collections should have a workflow – a default noninteractive workflow would facilitate applying curation tasks (such as virus scanning) to all submissions: [https://github.com/DSpace/DSpace/issues/8820](https://github.com/DSpace/DSpace/issues/8820)
  - Shall we automatically change metadata in flyway migrations?
    - DOIs
      - Changing the field a DOI is using (dc.identifier.uri vs. dc.identifier.doi)
      - Changing the resolver ([https://doi.org](https://doi.org) vs. [http://dx.doi.org](http://dx.doi.org))
  - What do we need to achieve to enable Entities by default?
  - How can entities be made more usable?
  - Improving scalability/performance/functionality of Relationships
  - Basic Nested/hierarchical metadata (e.g. dates on a Person's affiliation with an OrgUnit). Related also to [https://github.com/DSpace/DSpace/issues/9736](https://github.com/DSpace/DSpace/issues/9736)
    - If entities are enabled by default how could a migration look like? Shall we offer a script to add a field dspace.entity.type="Publication" to all items without an entity type?
    - Convert a Relationship to a DSpaceObject - it will benefit of all the DSpaceObject has to offer, like: metadata, resource policies

- Enabling Configurable Entities by default (Potential alignment with DSpace-CRIS?)
  - What do we need to achieve to enable Entities by default?
  - How can entities be made more usable?
  - Improving scalability/performance/functionality of Relationships
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- Modularization
  - Angular : library-based architecture proposal - As of 8.0, we’ve already migrated to “standalone components”. We can now consider whether to potentially migrate to using Nx.
  - Do we need a UI/UX guide to enable module developer to achieve a common "DSpace" look and feel? [https://github.com/DSpace/dspace-angular/issues/3211](https://github.com/DSpace/dspace-angular/issues/3211)

- Enhanced Statistics for DSpace (volunteer: Paulo Graça)
  - Paulo volunteered to perhaps start an interest group / working group around Statistics enhancements as his organization is interested in enhancing this for DSpace.

- Features which existed in DSpace 6 (and earlier)
  - Bitstream persistence URLs - As of DSpace 7, there are no persistent URLs for bitstreams. The URL is based on UUID, and if you replace or version a bitstream the URL will change: [https://github.com/DSpace/DSpace/issues/9083](https://github.com/DSpace/DSpace/issues/9083)
  - CMS - bringing back old features to new the DSpace version like the ability to the admin user to change content like: news, default license,.... [https://github.com/DSpace/dspace-angular/issues/3200](https://github.com/DSpace/dspace-angular/issues/3200)

- Administrative User Interface enhancements/improvements
  - The bitstream permissions flow is confusing, we should improve the usability - [https://github.com/DSpace/dspace-angular/issues/3203](https://github.com/DSpace/dspace-angular/issues/3203)
  - Any DSpaceObject, like a Bitstream can have custom fields. After creation, there should be a place in the UI to view and edit them
  - Communities/Collections: there should be a way in the UI to move sub-communities to a different place: [https://github.com/DSpace/dspace-angular/issues/3196](https://github.com/DSpace/dspace-angular/issues/3196)
  - Permissions: Possibility of granting granular permission to individuals and groups to edit / see only some metadata

Results of DCAT UX Project Team Testing

Priorities for 9.0

To be decided. 9.0 is still in very early planning phase. Priorities have not yet been established.
Tickets & Pull Requests to review for possible inclusion

All potential tickets & pull requests may be found on our 9.0 Project Board.

- 9.0 Project Board: https://github.com/orgs/DSpace/projects/31

If there is a feature you wish to work on which is not on that 9.0 Project Board, please create a GitHub issue ticket to describe it (or find one if it exists) and contact Tim Donohue (via email or Slack) about possible inclusion in 9.0.

Keep in mind, even if a ticket/PR exists on the 9.0 Project Board, that does not guarantee it will be completed in time for 9.0. All development & testing /reviewing is volunteer based. You can help ensure a PR’s inclusion by volunteering to help test or review the code! Any work that cannot be achieved in time for 9.0 will be rescheduled for a future release.

Organizational Details

Release Coordination

The 9.0 Release will be coordinated by Tim Donohue and the DSpace Committers.

Updates and discussions will take place in weekly Developer Meetings.

Release Timeline

Please note that the dates below are estimates of when particular activities may occur. As there are many factors involved in a major release, these are subject to change.

<table>
<thead>
<tr>
<th>Date</th>
<th>Milestone</th>
<th>What it means</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 2025 (tentative)</td>
<td>DSpace 9.0 is publicly released</td>
<td>DSpace 9.0 is released for download and general use.</td>
</tr>
</tbody>
</table>

Release Process needs to proceed according to the following Maven release process: Release Procedure