DSpace’s rich 19-year history as an open source repository is paired with a strong membership, governance and active participation from a wide variety of stakeholder organizations located all over the world. Despite COVID-19, a global pandemic with lockdowns across the globe, the DSpace community amped up its work and made vigorous progress in developing and deployment of DSpace 7.

In the last 12 months, the community released 3 Beta releases of DSpace 7. Following DSpace 7 Beta 5, the community embarked on a two week testathon which led to the final and now official stable release of DSpace 7.0. This latest stable version was released on July 29, 2021.

This annual report will focus on the fiscal calendar year beginning July 1, 2020 - June 30, 2021 and the community achievements leading up to the release.

The DSpace Program is fostered by its global community. Representatives from member organizations plan, implement, develop, and sustain DSpace with input from community groups including DSpace Steering Group, DSpace Leadership Group, DSpace Committers, DSpace Community Advisory Team (DCAT), DSpace Marketing Interest Group, and DSpace Ambassador Program.

<table>
<thead>
<tr>
<th>Total Known Installations</th>
<th>Countries with Active Sites</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>3,051</strong></td>
<td><strong>133</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>New Members</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>04</strong></td>
</tr>
<tr>
<td>(as of July 2021)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Members</th>
<th>DSpace 7 Beta Releases</th>
<th>DSpace YouTube Video Views</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>93</strong></td>
<td><strong>03</strong></td>
<td><strong>200+</strong></td>
</tr>
<tr>
<td>representing 23 different countries</td>
<td>DSpace 7 Beta 3, Beta 4 and Beta 5</td>
<td>representing 23 different countries</td>
</tr>
</tbody>
</table>

1,026,797 lines of code changed/modified in DSpace 7 (as of July 2021)
DSpace Around the World Global Installations

The DSpace Community is the broadest open source repository community globally. In the DSpace User Registry there are 3051 registered instances of DSpace. This is a 4% increase from last fiscal year. There may be many more DSpace instances running that have not registered.

The registry is located online at registry.duraspace.org/registry/dspace.
About DSpace Members

DSpace members are leaders from university, research, library organizations, and others, who have made a financial commitment to our open source programs. DSpace members are partners in governance, active within the community to provide leadership, development, documentation, contributions, and investments ensuring the sustainability and ongoing advancement of the DSpace program.

Between 2020 – June 30, 2021, DSpace gained 4 members:

• Consorci de Serveis Universitaris de Catalunya (CSUC)
• York University
• University of Arizona
• Universität des Saarlandes

Bringing the total number of DSpace members to 93.

For a full list of members supporting DSpace: https://duraspace.org/membership/duraspace-members/

DSpace Service Providers

Along with DSpace members, DSpace Service Providers make an investment in our open technologies and a commitment to work cooperatively to best serve the community of users. As of this Annual Report, there are 3 Certified DSpace Partners, 10 Certified DSpace Contributors and 5 Listed Service Providers.

The DSpace Service Providers are crucial to the success of the global DSpace Community. They support users and members across the globe, they help institutions with training, customizations and development. In some regions, they also coordinate DSpace national user Groups, running online and in person events. Among all the Service Providers, we’d like to especially thank our Certified DSpace Partners: 4Science, ATMIRE, and The Library Code. Our Certified Partners are members of the DSpace Leadership Group and together with institutions from 100 countries and LYRASIS, they are involved in defining priorities and the strategic direction of DSpace.
DSpace User Group Meetings

During 2020-2021, Mexico, Brazil, Chile and Germany’s National User Groups provided 10 webinars in 3 different languages.

DSpace is now in a strategic partnership with COAR. COAR is a membership organization with over 150 members and partners from 50 countries on all 5 continents. COAR’s vision is a global knowledge commons based on the distributed repository network on which value added services can be built. COAR and DSpace believe in a strong role for innovative open technologies to promote long lasting and open access to digital data. We are committed to supporting the development of repository platforms that are interoperable and compliant with international standards and protocols, and next generation repository recommendations.
Technical Overview

DSpace 7.0 is the largest release in the history of DSpace software. While retaining the “out-of-the-box” aspects DSpace is known for, it represents a major evolution of the platform including:

- A completely new Javascript-based User Interface, built on Angular.io (with support for SEO provided by Angular Universal). This new interface is customizable via HTML and CSS (Sass) and Bootstrap.
- A completely new, fully featured REST API, 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.
- A newly designed search box / experience, available throughout the site.
- A new MyDSpace area to manage your submissions & reviews, MyDSpace includes a new drag & drop area to start a new submission, and easily search your workflow tasks or in progress submissions to find what you were working on.
- A new configurable submission user interface, featuring a one-page, drag & drop submission form.
- Optional, new Configurable Entities feature. DSpace now supports “entities”, which are DSpace Items of a specific ‘type’ which may have relationships to other entities.
- Dynamic user interface translations
- A new Administrative sidebar for common admin tools/tasks.
- Improved GDPR alignment
  - User Agreement required for all authenticated users to read and agree to.
  - Cookie Preferences are now available for all users
  - User Accounts management.
- Support for OpenAIREv4 Guidelines for Literature Repositories in OAI-PMH
- Search Engine Optimization: Tested and approved by the Google Scholar team
- Video/Image Content Streaming
- Basic Usage Statistics
- More information on these features, including demo sites and videos can be found in the 7.0 Release Notes, https://wiki.lyrasis.org/display/DSDOC7x/Release+Notes.
Major Contributing Institutions

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

• Atmire
• 4Science
• FCT / RCAAP

Financial Contributors

We gratefully recognize the following institutions who together have generously contributed financially to support the DSpace 7 staged release program (see DSpace 7 Release Goals), and individuals who devoted time to fundraising:

• Auburn University
• Cornell University
• Pascal Becker
• Dalhousie University
• Duke University
• ETH Zurich, ETH Library
• Fraunhofer Gesellschaft
• Imperial College London
• Indiana University–Purdue University, Indianapolis
• LYRASIS
• National Library of Finland
• Beate Rajski
• Staats- und Universitätsbibliothek Hamburg – Carl von Ossietzky
• Technische Universität Berlin
• Technische Universität Hamburg (TUHH)
• The DSpace-Konsortium Deutschland
• The Helmut-Schmidt-Universität/
  Universität der Bundeswehr Hamburg
• The Library Code GmbH
• The Ohio State University
• Texas Digital Library
• University of Arizona
• University of Edinburgh
• University of Kansas
• University of Minnesota
• University of Missouri
• University of Toronto
• World Bank
• ZHAW

For a full list of all contributors to DSpace 7, please see the Release Notes: https://wiki.lyrasis.org/display/DSDOC7x/Release+Notes
Financials

In 2020, DSpace shifted to a paid development model for 7.0. This was designed to accelerate the innovative release which is critical to improving the platform and the long term sustainability. The program initiated a fundraising campaign that raised over $160,000 to support the development work thanks to generous contributions from members. This year we were able to cover additional costs through other cost savings and net assets. In the coming year, the governance will continue to find ways to diversify revenue and fundraising efforts to continue to support this work.

<table>
<thead>
<tr>
<th></th>
<th>2020-2021</th>
<th>2019-2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues</td>
<td>$411,159</td>
<td>$488,583</td>
</tr>
<tr>
<td>Expenses</td>
<td>$419,414</td>
<td>$461,356</td>
</tr>
<tr>
<td>Net Assets</td>
<td>$16,396</td>
<td>$24,651</td>
</tr>
<tr>
<td>Total income</td>
<td>$-8,255</td>
<td>$27,228</td>
</tr>
</tbody>
</table>
Despite a global pandemic, the DSpace community made significant software developments, contributing over a million lines of code, countless hours of dedicated work towards the success of launching the DSpace 7.0 release. We appreciate the contributions of the entire community as we work together in support of this essential component of the international open repository ecosystem.

Kristi Park, DSpace Leadership Chair, Executive Director, Texas Digital Library