



The Samvera Community: An Overview

Jon Dunn and Richard Green

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Samvera is a grass-roots, open source community creating best in class digital asset management solutions for Libraries, Archives, Museums and others.

Samvera is based on the premise that no single system can provide the full range of repository-based solutions for a given institution's needs and that no single institution can resource the development of a full range of solutions on its own. Working together, the Samvera Community creates sustainable solutions using a common infrastructure within which there is the flexibility to tailor solutions to local demands and workflows.

Samvera software is free and open source, available under an Apache 2 license, and is based around four major components:

- the Fedora repository software providing a robust, durable repository layer for persisting and managing digital objects.
- Solr indexes, providing fast access to information about an institution's repository content.
- Blacklight, a Ruby on Rails plugin that sits above Solr and provides faceted searching, browsing and tailored views on objects.
- Samvera gems: Ruby on Rails components that integrate the building blocks to form a complete, flexible and extensible digital repository solution.

These components may be used by institutions to develop their own completely customized local solutions but are also used in three major community-supported applications, or "solution bundles":

- Avalon – a time-based media solution
- Hyrax – a Ruby gem that includes much of Samvera's functionality. It is the basis on which users can build their own, customized version of Samvera.
- Hyku – a feature-rich, robust, flexible, multi-tenant digital repository that is easy to install, configure, and maintain. Hyku can be installed locally or run in the cloud and is based on Hyrax. A number of service providers are – or will soon be – offering cloud-based, hosted versions.

A short history

Samvera began in 2008 as the *Hydra Project*, emerging out of discussions between the University of Virginia, University of Hull (UK), Stanford University, and Fedora Commons (later absorbed into Duraspace) regarding how they might jointly produce modular, open source software catering to a number of repository needs but using a single Fedora store. This idea of 'one body' (Fedora) with 'many heads' gave rise to the project name 'Hydra'.

It was decided very early in the planning process that the Project should utilize existing, 'best of breed' open-source software alongside its own work. Accordingly, Blacklight and Solr were adopted alongside Fedora.

The group identified a core of common needs and set themselves the target of producing within three years 'a reusable framework for multipurpose, multi-function, multi-institutional repository-powered solutions'. Hull was the first of the universities to go live with a Hydra repository in fall 2012.

There was an early recognition that any output from the Project would only work sustainably if it could be built on and further developed by others as well. From the beginning a key aim was thus to enable others to join the open source Hydra Project as and when they wished, and to establish a framework for sustaining the community as much as any technical outputs that may emerge. A formal governance structure was adopted by the initial partners in 2012 and as of August 2019, Samvera has 36 Partners in the USA and Europe (See Appendix).

By 2015 the Partners in the Hydra Project decided that it was established enough that the Hydra name and logo should be trademarked. It transpired that 'Hydra' could not be used and so the Community renamed itself 'Samvera' (an Icelandic term meaning 'togetherness'). Rather than seeing the rebranding work as a setback, the Community treated it as an opportunity to re-evaluate its aims and its working practises; part of this analysis resulted in the formation of a Governance Working Group to make recommendations for the future. These were accepted and underpin today's Community structure.

Samvera Community structure

At the heart of the modern Samvera Community are its Partners, currently comprising institutions, companies, and other groups that have formally committed to contributing to the Samvera Community. The community is defined by a Memorandum of Understanding, which all Partners agree to, and its legal and financial affairs are handled through a fiscal sponsor, DuraSpace - now part of LYRASIS.

Samvera Partners participate in groups that coordinate effort across multiple institutions and development efforts. These include the Steering Group, the Roadmap Council and the Core Components Maintenance Group, as well as project-specific teams that focus on particular efforts such as the Avalon Media System, Hyrax, and Hyku solution bundles. Partners have the opportunity to meet in person twice each year to discuss progress and plans. Much of Samvera's development is then underpinned by the work of a number of Working Groups and Interest Groups. Other adopters of Samvera's software can (and do) contribute to the membership of these groups; the exception is the Steering Group whose elected members come solely from Partner institutions.

All the various groups outlined above hold regular meetings on-line and notes of these calls are made available to all. In addition to these business meetings, the Community holds a number of more general on-line and face-to-face meetings each year, including an annual conference (Samvera Connect), which brings together 150-200 attendees for a variety of collaborative and community-building activities.

Samvera code development

Samvera's code development is overseen and coordinated by a number of the groups mentioned above.

The Community puts considerable effort into ensuring that its code is robust, reliable and sustainable. Samvera's developers use continuous integration tools to ensure that new code does not 'break' anything else in the system. No code is accepted into the Samvera core that does not have adequate, in-built testing. All Samvera code is distributed under an open source license (Apache 2.0) and, to ensure the legality of that, Contributor License Agreements (CLA's) based on the Apache Foundation

CLA's, are required from contributors, individual and institutional, before their code can be added to the Community's code base.

Many of Samvera's adopters adapt the core code to address local use cases and needs. Institutions that do this are encouraged to contribute the code back if it has more general applicability.

Samvera as an organization

Samvera is a widely distributed, international organization. As such, there needs to be a level of stewardship and administration; this, then, is essentially the role of the Steering Group. The Group consists of nine members, elected from and by the Samvera Partners.

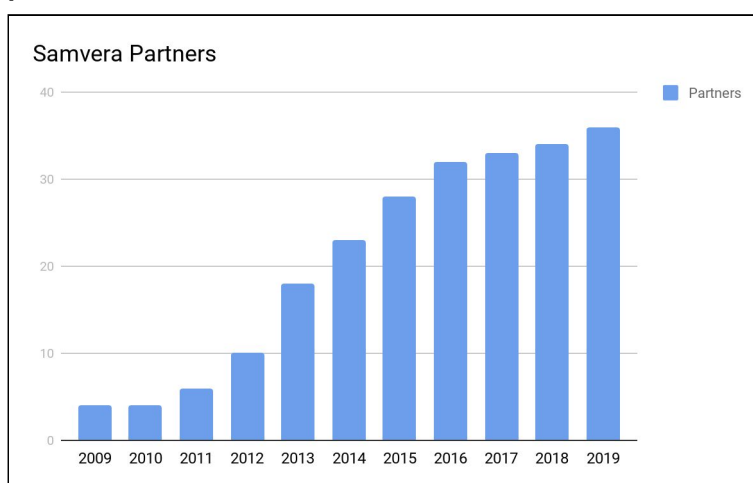
The organization maintains a website at <https://samvera.org> and a wiki at <https://samvera.org/wiki>. In addition there are a number of mailing lists, each serving a specific focus within the Community, and a widely used Slack Channel.

Samvera strives to project a professional image and is mindful of its responsibilities to Community members as well as to its adopters and potential adopters. The Community operates a publicly posted Code of Conduct and an Anti-harassment Policy.

Moving forward

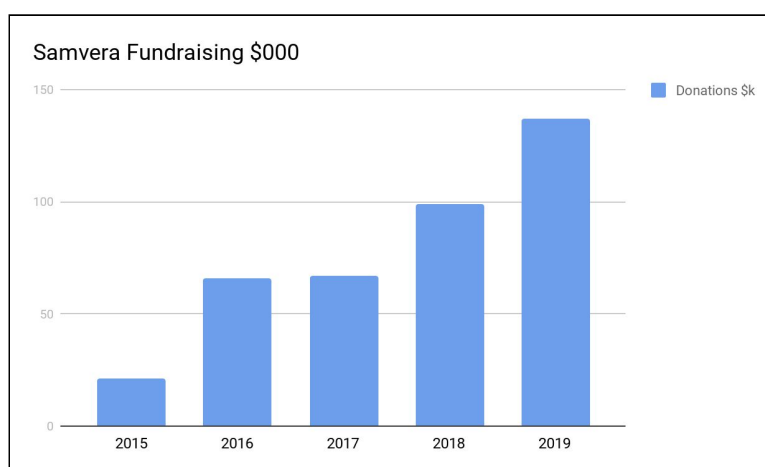
To date, nearly all effort to design, build, and maintain Samvera's software and to manage and coordinate the Samvera Partners and broader community has come from individual and institutional volunteers. As the size of the community and number of Partners have grown, and as the software has matured and evolved, the work needed to support and coordinate the technology stack and the community has increased. To help address this need, Samvera Steering began a relatively low-key, voluntary annual fundraising campaign in 2015, which has grown from \$22,000 to \$130,000 annually, primarily from Partners (see Appendix). The 2017 governance review recommended that the community work toward hiring two full-time roles: a community lead and a technical lead, a structure not dissimilar to other open source and open standards communities within the academic library space such as Fedora Repository or the International Image Interoperability Framework (IIIF). In 2019, a group was charged to develop a contribution model for Samvera, including setting expectations or requirements for financial contributions from Partners in order to achieve these hiring goals.

Appendix: Samvera Partners and Fundraising



Note: Samvera lost three Partners in 2018 and one in 2019 mainly as institutions took alternative software directions.

Boston Public Library	Indiana University	The Digital Repository of Ireland, Ireland	University of Notre Dame
Columbia University	Lafayette College	Tufts University	University of Oregon
Cornell University	London School of Economics and Political Science, UK	Ubiquity Press	University of Utah
CoSector, University of London, UK	Northwestern University	University of California, San Diego	University of Virginia
Data Curation Experts	Notch8	University of California, Santa Barbara	University of York, UK
Digital Public Library of America (DPLA)	Oregon State University	University of Cincinnati	Virginia Tech
Duke University	Penn State University	University of Houston Libraries	Washington University in St. Louis (WUSTL)
DuraSpace	Princeton University Library	University of Hull, UK	WGBH Boston
Emory University	Stanford University	University of Michigan	Yale University



Note: These figures exclude donations that were not part of Samvera's fundraising drive.