

Shibboleth Consortium Update and Development Roadmap

IAM Online

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Shibboleth Consortium

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Challenges

Keeping Shibboleth Open Source and free for anyone to use, whilst meeting the costs associated with maintaining it

- Wide-scale adoption also means wide-scale reliance - this has grown over time
- Considerable time and effort is needed to maintain the product - which has a cost associated
- Expertise in Shibboleth remains a niche area - and commands a high value



The Consortium

- Comprised of a Board, Members, Developers and a Manager
- The body which handles financial and contractual management
- Provides strategic direction to the Shibboleth Project
- Not a legal entity in itself
- Requires an Operator (Jisc) and has a Manager (Justin)



Financial Comparison of 2018 and 2019

2018	
Income	
NREN/Federation Members:	£398,794
Academic/Non-Profit Members:	£172,482
Commercial Members:	£17,690
Donations:	£880
Balance from 2017 carried forward:	£305,184
Total:	£895,030
Expenditure	
Consortium Operations:	£37,680
Development Costs:	£352,162
Infrastructure:	£2,121
Travel and expenses:	£738
Total expenditure:	£392,701
Total balance at year end:	£502,329

2019 forecast	
Income	
NREN/Federation Members:	£416,109
Academic/Non-Profit Members:	£187,131
Commercial Members:	£17,600
Balance from 2018 carried forward:	£502,329
Total:	£1,123,169
Expenditure	
Consortium Operations:	£37,680
Development Costs:	£498,226
Infrastructure:	£3,000
Travel and expenses:	£3,000
Total expenditure:	£541,906
Total forecast balance at year end:	£581,263



Financials (cont)

2018 was a good year, in thanks largely to the membership growth from US institutions.

Our intentions were to use the stronger financial footing to:

- Increase development effort (*2 new developers brought in*)
- Be able to respond to community requests more (*e.g. OIDC extension*)
- Enhance the product and ship quality releases in good timescales (*IdP v4 is on the way, more from Scott on the roadmap*)



Consortium Membership

Has grown significantly over the last couple of years

- End 2016: 20
- End 2017: 42
- End 2018: 52

Membership now stands at 56, comprised of

- 3 Principal Members
- 15 national identity Federation Members
- 34 Academic / Non-Profit Members
- 4 Commercial Members



Membership Benefits

- **Help keep the software maintained**

Membership contributions go directly to funding the ongoing maintenance, support and development of the software

- **Access expert support**

Members benefit from direct support from the core development team

- **Contribute to the strategic direction of the product**

Especially Principal members, who sit on the Board

All members have a voice



Membership Fees (annual)

Category	Small	Medium	Large
NREN/Federation Member	\$14,800 (€ 12,500)	\$29,600 € 25,000	\$59,200 € 50,000
Academic/Non-Profit Member	\$2,960 € 2,500	\$5,920 € 5,000	\$8,880 € 7,500
Commercial Member	\$5,920 € 5,000	\$11,840 € 10,000	\$23,680 € 20,000

To become a Principal Member and get a seat on the Board, an additional \$22,600 (€20,000) will qualify any level.

Academic organisations with multiple campuses that share the same Shibboleth system may join at the multi-site level. The fee for this level is \$29,600 (€25,000) and all campuses within the organisation will be represented under a single membership.



How to join?

- Contact Justin Knight at justin.knight@jisc.ac.uk or contact@shibboleth.net
- The appropriate tier will be established
- Sign the Membership agreement
- Jisc, as Consortium Operator, raise an invoice
- We get you set up with access to the support channels and relevant mailing lists



Shibboleth Roadmap

Scott Cantor, The Ohio State University
Lead Developer



2018 Highlights

- IdP 3.4
 - Final release in V3 line
 - Warnings added for features scheduled for removal
 - Metadata-driven configuration features supporting ongoing GUI development by Internet2
 - Extensive improvements in dynamic metadata support in response to InCommon WG feedback

2018 Highlights cont.

- SP 3.0
 - First major upgrade in many years
 - OpenSSL 1.1 compatibility for newer OS versions
 - Modernized, more secure IIS support
 - Streamlined configuration for virtual hosting
 - Extensive improvements in dynamic metadata support in response to InCommon WG feedback

Planning Parameters

- Financial stability
- Additional developers for increased parallelism
- Success/adoption of V3, “soundness” of design
- Technical debt (V3 based on Java 7, Spring 4)
- Desire for increased release frequency provided adoption curve remains tractable

Product Roadmap - SP

- Mature product with coverage of the “viable” web server platforms
- Maintenance / library compatibility
- Packaging
 - Fostering more relationships with volunteers
 - Clearer message to members that we’ll support them on platforms with a good packaging story

Product Roadmap - IdP

- Planning two “smaller” major releases with roughly 12 month development schedules
- V4 will remove V2 legacy features, “mostly” compatible
- V5 will allow for API changes needed to finalize some newer features

Product Roadmap – Java Strategy

- We are an enterprise product, not an “agile” one
- CI coverage of LTS (11) and latest Java releases using “officially supported” Java builds
 - This would be clearer if we knew what “officially supported” meant yet
 - Probably *not* Oracle “commercial” Java

Product Roadmap – IdP V4 - Overview

- <https://wiki.shibboleth.net/confluence/x/eYDNAQ> (rough “rolling” planning/notes document)
- Java 11, Spring 5, (Jetty 9.4)
- Most significant removals:
 - V2 RelyingParty syntax
 - Legacy resolver/filter XML namespaces
 - <Dependency> element replaced in V3.4
 - NameID encoding via resolver (probably)

Product Roadmap – IdP V4 – New Work

- Starting work on inbound proxying (i.e. SSO login flows)
 - OIDC for sure
 - SAML “maybe”, something short of a full-featured SP
- Redesign of attribute encoding/decoding features to streamline the processing and mapping of data between protocols

Product Roadmap – IdP V4 – New Work

- Small logout enhancements
 - SOAP support
 - UI enhancements with more user control for some deployers
- Possible future replacement of Velocity in Spring views, e.g. FreeMarker
- Lots of misc stuff, -> Jira

Product Roadmap – OIDC

- 1.0 release of extension for IdP V3.4 from GEANT team available, certification testing shortly
- Extension will be adopted into IdP in a future release
 - V4 or V5 depending on tester feedback and scheduling/workload of the principals
 - Some configuration changes of course likely

Product Roadmap – OAuth

- Additional profiles likely in the medium term (e.g. AppAuth) provided there's significant interoperability
- Generalized support will depend on feedback from OIDC testers and more experience with what's needed/useful

Questions?



Upcoming Events

InCommon Shibboleth Installation Workshop

UMBC, Baltimore, Maryland

April 30-May 1, 2019

www.incommon.org/shibtraining

BaseCAMP: Hands-on with Federation and the InCommon Trusted Access Platform

August 13-15, 2019

Hyatt Regency, Milwaukee, Wisconsin

<https://meetings.internet2.edu/basecamp-2019>

Please evaluate today's session

<https://www.surveymonkey.com/r/IAMOnline-Apr2019>