Shibboleth Consortium Update and Development Roadmap

IAM Online
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Kevin Morooney, Internet2
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Shibboleth Consortium

Justin Knight, Jisc
Consortium Manager
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
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)

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<th>Category</th>
<th>Small</th>
<th>Medium</th>
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<td>NREN/Federation Member</td>
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<td></td>
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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](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