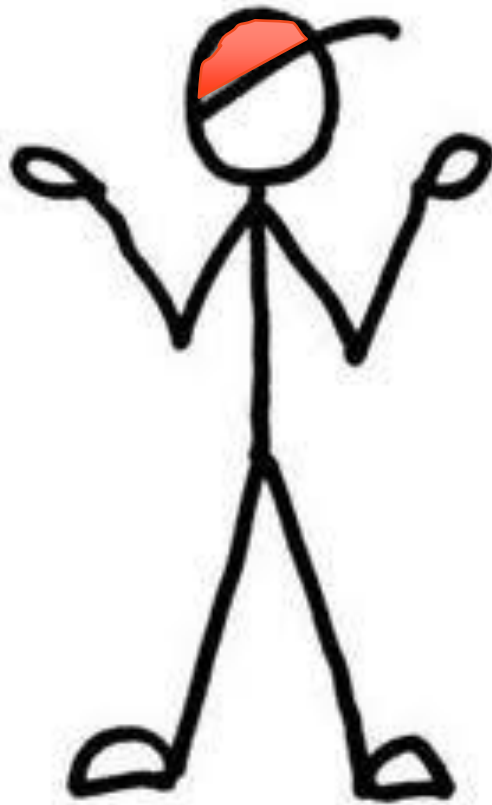


Watching the Federation



What is federated access management?



AAF Vision and Mission



- *To be increasingly valued as the provider of access management services for Australian Higher Education and Research.*
- *To support the collaboration and resource sharing objectives of its subscribers through provision of effective access management technologies and services.*

What components make up the AAF?



Core AAF services

- Discovery Services (WAYF) – 5 servers across Australia
- Federation Registry
- Metadata and Metadata distribution
- Virtual Home
- Web site

Plus 70 subscribers that bring Identity providers and Service providers to the federation...

- **100% Australian Universities**
- **Open Universities Australia**

9 Commercial Publishers

<i>Emerald Group</i>	<i>Cambridge Uni Press</i>
<i>HighWire Press</i>	<i>Ingram Library Services</i>
<i>RMIT Publishing</i>	<i>John Wiley and Sons</i>
<i>Karger Publishers</i>	<i>Emerald Publishing</i>
<i>Royal Society of Chemistry</i>	

6 Commercial Service Providers

<i>Trobexis</i>	<i>TALIS Education Ltd</i>
<i>Netspot</i>	<i>MyUNiDAYS Ltd</i>
<i>Lynda.com</i>	<i>UCROO Pty Ltd</i>

3 Non-commercial Service Providers

- **Masaryk University**
- **JISC Advance**
- **TERENA (Trans-European Research and Education Networking Association)**

12 Research Organisations

- **AARNet**
- **AIMS**
- **Australian Antarctic Division**
- **CAUDIT Inc**
- **CSIRO**
- **eResearch SA**
- **Intersect Australia Ltd**
- **NICTA**
- **QCIF**
- **QuestNet / QRNO**
- **TPAC**
- **VeRSI**

70 Subscribers

Our Problem

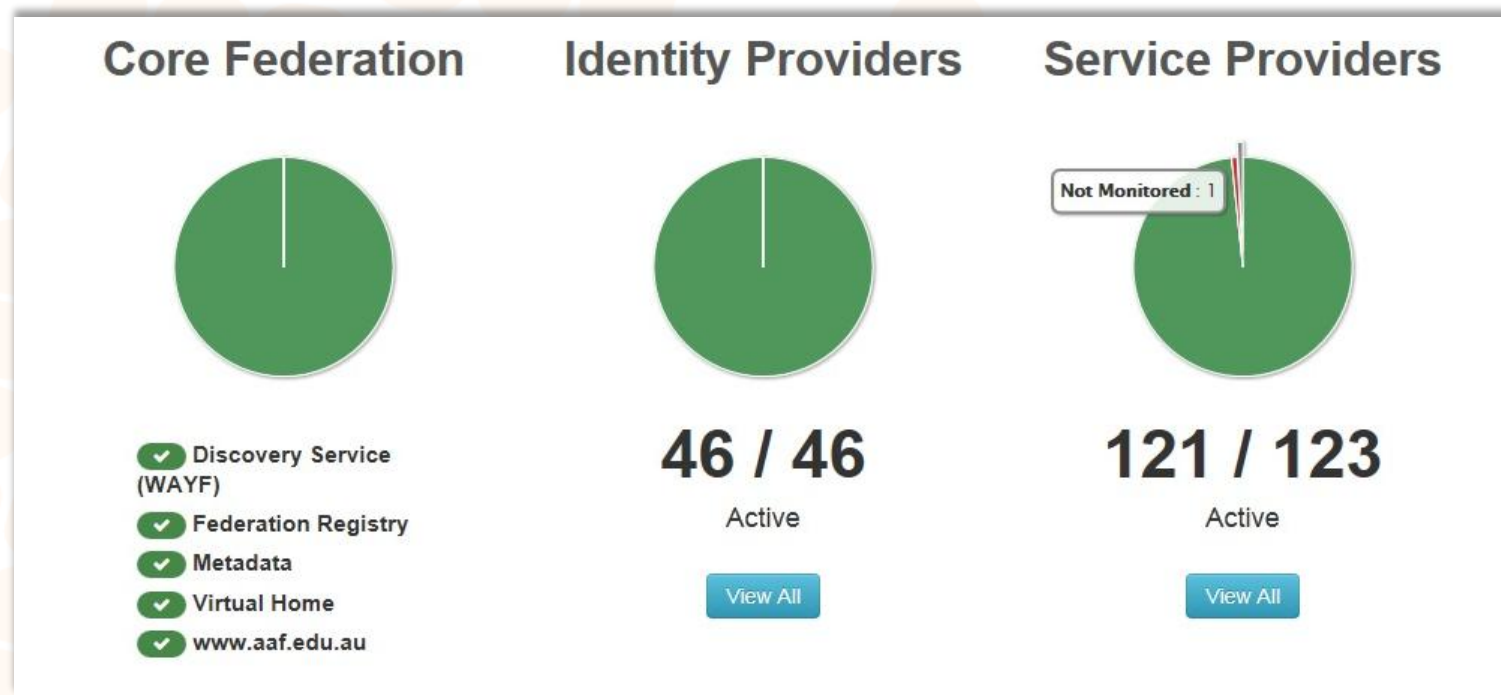


- How do we ensure it's all working and available for a user base of a million+?
- When something does break, how do we quickly identify the issue and notify the right people to get it fixed?
- How can we minimise the operational and support workload of the small and dedicated AAF support team?

Our Solution

Federation Status

...keeping an eye on the health of the Federation

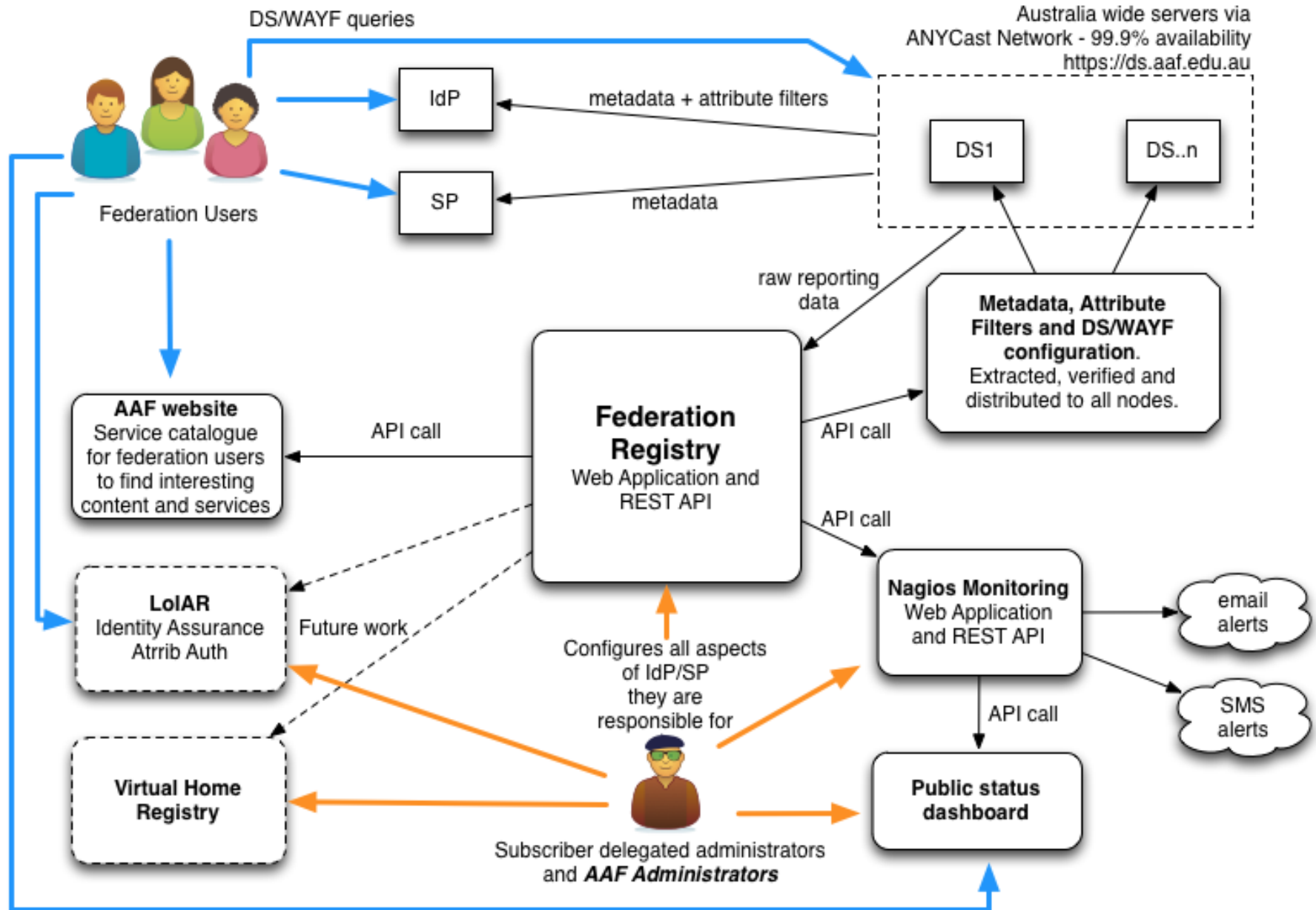


What is Federation Status



- **Open Source components**
 - Icinga monitoring (Nagios variant)
 - Nagios Business Process monitoring plugin
- **Integration sources of data via defined APIs**
 - Federation Registry
 - Puppet dashboard
- **Dashboard**
 - Simple publically accessible view
 - Publish scheduled and unscheduled outage notifications

Where monitoring fits within the AAF



What is monitored

- Core
 - CPU
 - Memory
 - Disk
 - Processes
 - MySQL
 - others as required
- IdPs and SPs
 - Time Sync
 - HTTPS
 - Shibboleth basic / advanced
 - Certificate expiry
 - Ping
 - More to come

A quick demo



Federation Registry

Registry what to monitor

Monitoring

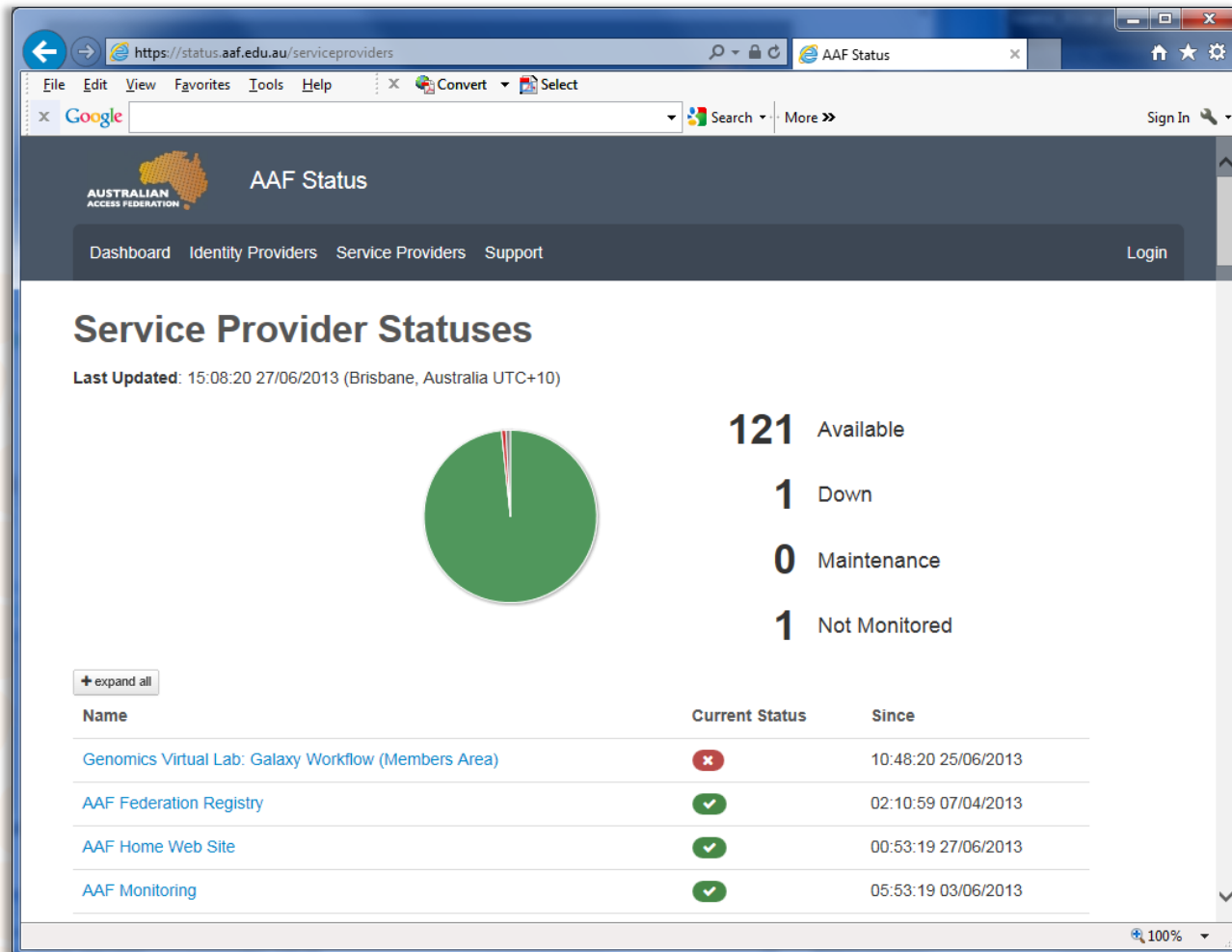
Perform the monitoring

Send notifications

Federation Status

View the results

When a Service is down



Status Notifications

An important message from the Australian Access Federation monitoring system, Federation Status..

Do you need help with the Federation?
[Access the AAF Support service.](#)



Monitoring Notification

www.telescope-net.com

Notification Type:

AAF Monitoring service time sync monitor was unable to connect to server...

Server:

www.telescope-net.com

Supports the following SPs:

telescope-net portal

Action:

No connection to host...

[Follow on Twitter](#) | [Friend on Facebook](#) | [Get AAF Support](#)

The Benefits

- Zero touch monitoring – automation
- Proactive notifications to the right technical people
- Public view → reduces support calls
- Helps identify the actual cause of authentication problems
 - SPs were generally blamed when users could not login
- Tools for support desks

Improved support



Institutional Service Desk Engagement Framework

is a joint initiative by CAUDIT and the AAF (funded by the Department of Innovation) to improve end-user support for federated services within the Higher Education and Research Sector. The primary objective is to better equip Service Desks with support material to improve coordination of incidents across different organisations and tiers.

- The AAF Status page has been provided to support this initiative
- Allows the AAF and subscribers to post notifications of coming maintenance events and service disruptions / resolutions

For more details: <https://www.aaf.edu.au/supporting-researchers/institutional-service-desk-engagement-framework/>

Next steps

Identity Provider (IdP) Improvement Program

- Ensure all IdPs are aware of the Status tool
- Define additional monitors for IdPs
 - Ensure metadata and attribute filters are refreshed regularly
 - Host monitoring (CPU, Memory, Disk, etc)
- Begins next week
 - IdP admins to expect a short survey in early August



Virtual Home



AAF Virtual Home

- New user interface
- IdP for the homeless
- Level 1 and 2 access assurance (strong password + rules)
- Password management – mobile device involved
- Every subscriber can add users



Coming Q3 2013

LoIAR



AAF Level of Identity Assurance Registry (LoIAR)

The AAF is investigating requirements for higher levels of identity assurance to allow Service Providers to define trust levels they require, independently of the different IdP implementation states of AAF's subscribers.

- Web UI that will allow researchers to request a higher level of identity assurance
- allow the Registration Authority (RA) to approve such requests.
- A tool for RA's to record users who have been assured with a higher level of identity assurance (level 2)

Groups

Group management tool

- AAF Groups allows association experts to centrally manage group membership to provide access to resources across multiple services
- **Alpha** version available for public comment and feedback
- Membership details can be accessed by applications using...
 - Attribute Authority (SAML)
 - Restful API

<https://groups.aaf.edu.au/>

The AAF Dashboard



Bringing it all together, the AAF dashboard provides a launch pad for all the tools and services provided by the AAF. A convenient one stop shop.

More than just monitoring



Summary

The Federation Status site is a core component of services provided by the AAF. Delivering more than just monitoring...

It is a tool for everyone that continually watches every component of the federation with minimal manual intervention that has resulted in reduced support calls.

Questions / Comments



Questions or comments ?

To keep up to date with what's happening in the AAF go to:

<http://www.aaf.edu.au/about/news-events/>



*“We see the AAF as an enabler
for sharing all manner of fragile,
dangerous, rare and
geographically remote equipment
between research organisations.”*

**Michel De La Villefromoy - Manager,
University of Technology, Sydney**

