

Title:

Managed Services – doing more for our communities

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Abstract

Over the past year or so, Jisc has had a strategic change of direction with regards our trust and identity services (the UK federation, eduroam, Assent). Traditionally, Jisc has run the national services and let our members deal with connecting to those services either in-house, or by contracting with a third party commercial provider to do it for them. However, it is becoming increasingly apparent that there is a gradual shift in desire within our membership to outsource wherever possible, and that the existing range of options in the T&I space currently isn't good enough – existing providers are either too expensive, not flexible enough, or only offer services for a subset of our services. So, we decided to build our own managed T&I services platform for all of our services – and it's called Liberate. It launched in October 2017 in the UK, however, the plan is not just to restrict it to Jisc's membership in the UK, but to offer it as a service worldwide via any partners/resellers whose membership/customer base has a need for such services.

Liberate is a custom cloud orchestration platform that we've purpose built. It presents a simple web interface for an organisation to use that is a single point of management for one or more of the services it supports - a cloud-based SAML IdP (Shibboleth), an eduroam IdP & RP (FreeRADIUS), an Assent (i.e. Moonshot) IdP & RP (FreeRADIUS & Trust Router), and also an authenticated url-rewriting web proxy. We're also adding a govroam IdP & RP into the mix in 2018. The cloud VM(s) can dial back into the organisations network via secure VPN to gain access to the organisation's directory. There is a fairly comprehensive roadmap for 2018 to increase the features offered.

Alongside this new development, the backend for the UK federation was moved in the summer of 2016 from 10 year old Solaris machines and manual smartcard signing to a new cloud-based platform and secure HSM signing. However, when this was built it was manually set up and is manually managed. But this is not the way we do things in 2018...

So, Jisc is about to re-engineer the backend again – keeping the same toolsets and configuration, but rebuilding it in a much more containerised, automated, manageable, and deployable manner. This work was initially planned entirely for our own benefit – it'll save us time and effort in management. However, when we have that platform, we've decided to also offer it as a low cost managed federation service (a.k.a. federation-as-a-

service) platform towards the end of 2018 for other federations who want to retain autonomy in running their federation but effectively outsource running and management of the tooling. We'll be offering it as a low cost solution as we're not looking to make lots of money, rather, to us it is of strategic importance to help other federations who are currently operating without the time, money, and/or expertise to run backend tooling as comprehensive as that used by the UK federation.

So, in this talk, we will of course give a brief technical overview of our Liberate service and new Managed Federation Service for those interested in the technical aspects of how we're addressing the requirements of our members, and what the upcoming roadmap looks like – but this is not a sales pitch.

Instead, we'll mostly be concentrating on looking at the common themes of these two services – cloud orchestration and managed services in the trust and identity space – and using those as a basis for concentrating on what we consider the interesting aspect of all of this – namely, opening up a discussion in the community about the move within all of our membership towards wanting us, as NRENs and federation operators, to do more for them by relieving them of the burden of running systems that requires specialist skills and knowledge that is hard to come by. The lack of these skills within our member organisations is harming the quality of federations as a whole, and our taking over of these aspects for them will hopefully increase this quality and thus the effectiveness of federation as a whole. Interestingly, when you move up the stack, exactly the same issues are present for those running federations...

Ultimately, we would like to prompt a debate about how we should all be responding to these requirements from our respective communities, and around what areas we can all collaborate in when doing so.

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References

N/A

Author Biographies

Dr Rhys Smith – Chief technical architect: trust & identity at Jisc – has a background in computer security and over a decade of experience of Identity Management and Federated Access. Within Jisc, Rhys is a member of the Enterprise group and is responsible for the overall architecture for Jisc's Trust & Identity services, which includes the UK federation, eduroam, Jisc Assent, the Certificate Service, and Liberate. Rhys has a PhD in the privacy aspects of e-Commerce.

Mr Joe Steele - Managed Services Operations Manager: Trust & Identity at Jisc - has a background in service delivery management. Joe has progressed from working on an IT service desk to Managing the IT service delivery of one of Europe's largest veterinary groups. At Jisc Joe is responsible for the day to day running and development of the Liberate service.