Requirements gathering briefing Q&A

Questions raised following our three webinars to brief members and users about our infrastructure plans.

Q. Our traffic on/off campus is increasing all the time. What access bandwidth is being proposed on the new infrastructure?
A. The long-term goal is for all sites to be served with dark fibre allowing bandwidth to be provided in accordance with the end sites requirements. Upgrades are then a question of changing the hardware (in some cases just a pluggable optic, in others a new CPE) when higher speeds are required.

Q. Who is the best person to talk to about the campus circuit presentation, we are going out to procurement for a replacement wired network and firewalls; therefore, want to ensure that we have the correct circuit presentation and bandwidth for the next circa five years?
A. Circuits will be presented as 1G, 10G, n*10G and 100G depending on the bandwidth requirements of the individual sites. Where services require n*10G these can be delivered as individual 10G for different uses or as a LAG.

Q. We currently have dark fibre provision between campus sites provided by Janet will this still be provided?
A. Yes, Jisc established a Dark Fibre Framework to provide this type of connection in the future. In addition, the design of the new access layer would allow virtual circuits to be provided between campus sites.

Q. Will all future layer 2 links be provided over dark fibre with this update? Currently we have some L2 tunnels.
A. This will depend on whether the L2 link is a Netpath Classic or a Netpath Plus. If dark fibre is provisioned to a site, then all the site's services will be provisioned across that dark fibre, and the intention is that there will be an NTE (Network Terminating Equipment – a small device) on the customer premises to act as a demarcation point.
Netpath Classics will, by default, still be provisioned as a VLAN on the same port that the IP access is delivered on. Netpath Plus may be provisioned as a separate port on the NTE if required.

Q. Are there plans to peer with/offer connectivity into HSCN?
A. Connectivity between Janet and the HSCN is via the public internet, the previous gateway between Janet and N3 (the predecessor to the HSCN) having been decommissioned at the end of January 2018. This approach is in line with UK Government policy which advocates the use of the public internet wherever possible in the delivery of public services (in this case NHS services).

The decommissioning of the gateway was undertaken after consultation with NHS Digital and with users of the gateway. Apart from a few transition problems which have been addressed, we are not aware of any present issues or foreseen problems with users on Janet accessing the HSCN via the public Internet, to which Janet is of course very well connected. However, we would be keen to hear of any if these do exist, so that we can help in resolving them.

Q. Will Jisc be a provider of HSCN as I cannot see you on the list at all currently?
A. There are no plans at present for Jisc to become a connectivity provider into the HSCN marketplace.

Q. Does this include access layer in relation to the shared data centre connectivity for sites?
A. Yes, the new access layer will provide access to the current (and any future) shared datacentres, and all other Jisc services.

Q. Will an HEI/Site be able to coordinate with Jisc resilience tests of the 'resilience' connections?
A. Yes, Jisc will be able to arrange resilience tests for individual sites that do not impact on other members.

Q. Are there any plans to change how peering with UK cloud provider data centres is done, such as Azure?
A. Jisc currently connects to Azure in a single location (but with different edge gateways), options for providing diverse access in a separate physical location are being investigated. The operational interconnection model will not change.

Federated Services

Q. What radius servers will be running the NRPS? Will it still be radiator?
A. We are currently undertaking a review of this as part of a consolidation and virtualisation of the NRPS function into our critical infrastructure hosting facilities. There are good arguments for staying with Radiator, but we want to look at the overall best solution for both govroam and eduroam, and
FreeRADIUS is another strong contender. There’s a view also that maintaining some diversity in the NRPS platform may give us greater resilience against zero-day exploits.

Q. **For those already providing eduroam, what is the shortest path to providing govroam?**
A. As an eduroam provider, you’d qualify as a govroam ‘visited site only’ provider. Technology-wise, govroam is a total copy of the proven eduroam model, so you could literally complete the boarding form obtained from govroam@jisc.ac.uk and duplicate your eduroam configuration, changing the name to govroam and substituting the new server addresses and shared secrets we’d provide. It should be a half-day job at most.

Q. **Will the eduroam app allow, in addition to ‘drop’ Pins, the ability to draw ‘areas’ off coverage (e.g. campuses)?**
A. The mobile app is purely a user-facing tool and doesn’t allow for data entry; the admins will soon have access to a map GUI web-based tool for data entry that this question is relevant to. What our web tool can do is determined by what the international database of eduroam data specified by the international eduroam team can capture. The eduroam 2.0 database format does include the capacity to capture areas, and we agree this is potentially very useful, but at present the 2.0 format hasn’t yet been formally adopted, and I believe that the precise way in which areas are captured hasn’t yet been settled (i.e. are they circles of a given radius around a single point, rectangles defined by two corner coordinates, or freeform shapes requiring the storage of multiple coordinates?). We are actively engaged with the international eduroam team around integrating our eduroam location entry tool into their international database, and I will raise the ‘area’ requirement with them; if we can agree something, we may be among the first to implement it on your behalf.

**eVA**

Q. **Who is responsible for issuing the eVA credentials? Is it the visited site?**
A. The site that is buying the eVA functionality (the visited site) generates new credentials for their temporary users through the eVA service portal. Jisc’s version of eVA in the UK is working towards these credentials being geofenced such that they will only provide connectivity when presented at the specific organisational instance of eduroam at the site that issued them.

Q. **If eVA requires client configuration as does general eduroam, even using CAT, then there will be a lack of enthusiasm from support desks. Support is challenging for one’s own users, let alone visitors who are onsite for perhaps limited time.**
A. eVA is predicated upon giving a loosely affiliated guest user a temporary eduroam experience. Implicit in this is both configuring the user’s device(s) and removing the eduroam profile(s) once that temporary account expires. The CAT can be of assistance with the first of those tasks, but as you say there will inevitably be some support overhead for users who cannot self-help from whatever instructions you supply. In our market testing and trials of the eVA concept a number of our members have been enthusiastic about eVA despite this issue, but we expect each of our members will evaluate the eVA product against their specific requirements.