

eduroam Pilot Service
at
North Somerset Academy (Weston General hospital)

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1. Introduction

This paper presents the eduroam pilot service, initially 12 months, at Weston General hospital that went live on the 24th April 2013.

Medical students from the University of Bristol's (UoB) MB ChB programme (years 3 – 5) spend blocks of 8 weeks based at the North Somerset Clinical Academy for their clinical and academic teaching and experience. With the growing development of smartphones and tablet computers in medical education plus the need for the students and staff to regularly access their University emails, e-portfolios, Blackboard OLE and electronic learning resources, wireless connectivity is becoming a necessity rather than a 'nice to have'.

eduroam is a hugely popular worldwide network access service which is implemented on a federated basis. Essentially, eduroam provides the user with authenticated network logon and access to the Internet through a single Wi-Fi profile and set of credentials, wherever the service has been made available by participating organisations. Connection can be seamless and automatic. By eduroam-enabling the network, organisations can provide guest network access services to visitors without the need for guest account management, saving time and cost for both the organisation and the visitor. For further information on eduroam, see <https://www.ja.net/products-services/janet-connect/eduroam>

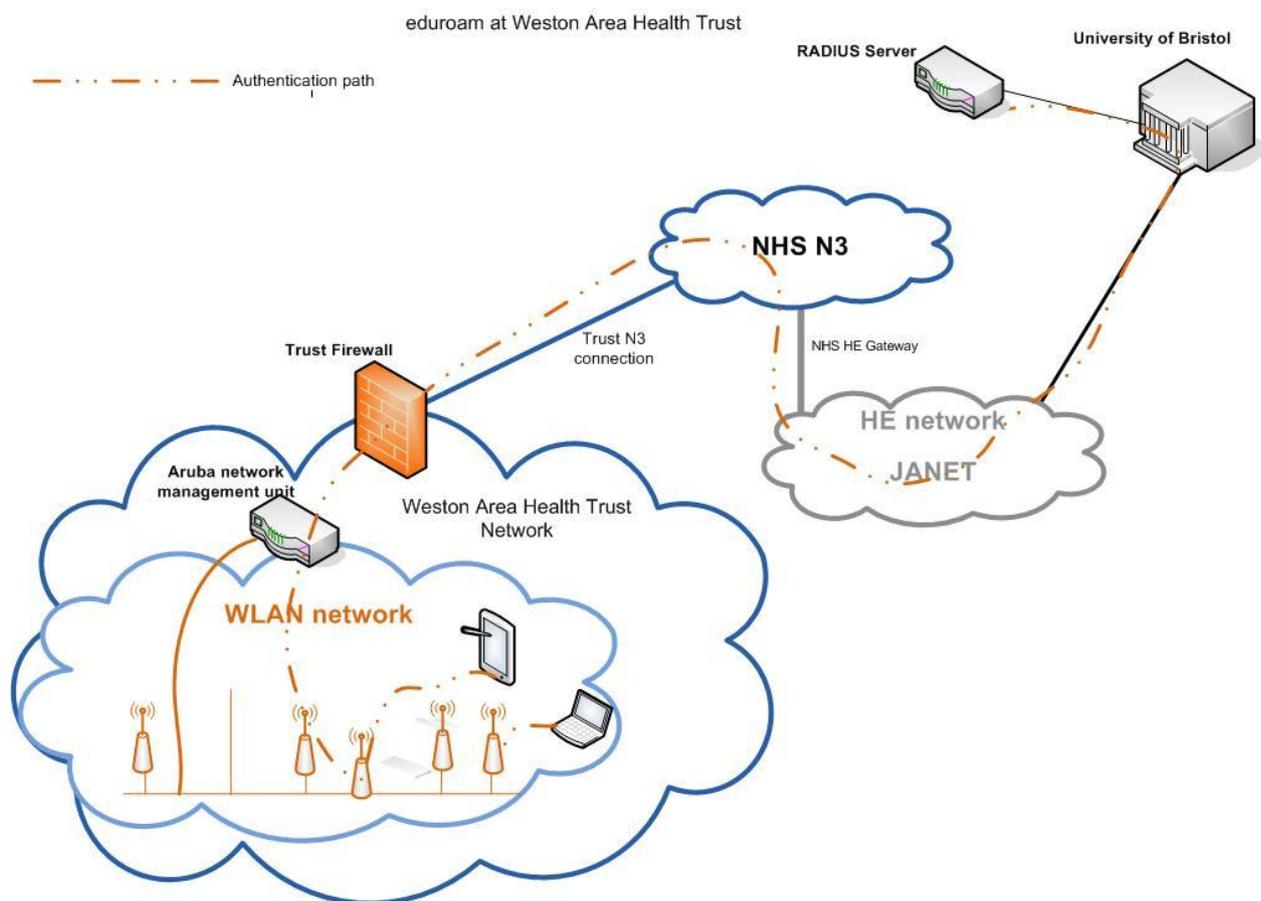
The University Hospitals Bristol Foundation Trust (UHBT) together with the University have already enabled eduroam in the Bristol Royal Infirmary, Dental and South Bristol community hospitals where it has been gratefully received by staff and students. Manchester medical school, as part of their roll out of iPads to their medical undergraduates, have already enabled wireless access for their staff and students in the 20 NHS sites that they use.

This pilot is a joint project between the University of Bristol and the Weston Area Health Trust to establish an eduroam Wi-Fi service at the Weston General hospital to cover the Academy buildings and in the main hospital buildings. This new service will enable UoB students and staff to be authenticated via eduroam and gain internet access from within the Trust. It is important to note that this service is securely segmented from the main Trust network and that no access will be available to hospital systems or data.

2. eduroam set up at Weston General hospital

The existing Wireless LAN (WLAN) infrastructure at the Trust will be used to broadcast the additional eduroam Service Set Identifier (SSID). The Trust's Aruba wireless network controller will receive the user's authentication request (user's home institution login) and pass it on to the RADIUS service at UoB. Once the authentication has been successfully confirmed by the University, the Trust's Aruba network controller will complete the user's wireless connection and give them access to the WLAN and the internet services. All authentication requests and Internet Protocol (IP) allocations are logged and recorded for auditing purposes.

Users from other HE institutions can also connect via eduroam. When their authentication request is received by the UoB RADIUS server, it is forwarded to the home institution where the request is validated and then passed back down the chain to the Trust's Aruba network controller.



3. Pilot service

This service is different from the existing eduroam service at UHBT as there is no direct connection between the two organisations. This in itself presents challenges as neither organisation has complete control and visibility of the service. It is very much a shared enterprise where there needs to be a good working relationship, both in the initial setup phase and the on-going support and maintenance.

The pilot service will initially run for 12 months to assess the effectiveness and reliability of the service. The service will be reviewed at 3, 6 and 12 month milestones to assess the performance, user experience and support required, taking the opportunity to make changes as and when required.

Both NHS and HE organisations are under pressure to reduce costs and it is important that this pilot service should not place a significant burden on either organisation. In order to mitigate the risk of this becoming an unsustainable service, it is essential that good communication between all interested parties is maintained and issues are raised at the earliest opportunity rather than waiting for a review milestone.

4. Service management

In order for the pilot to be successful it is important that all parties communicate well and respond in a timely manner to service affecting issues.

If a user (medical student or member of staff) or group of users are experiencing difficulties in using the service, or if a member of the IT team becomes aware of a service issue, it is important that the faulting procedure is followed. Simply reporting an issue to the Trust IT helpdesk or the UoB service desk without closely following the faulting procedure will lead to a protracted resolution and wasting valuable time of both IT support organisations.

Part of the difficulty with providing and maintain such a service is that neither organisation has a complete overview of the service. For example, the UoB network team can only see if authentication requests are being received by the University's RADIUS server. If the authentication request is not received, they cannot resolve the issue. Clearly, if there is an uncertainty where the fault lies between the hospital site and the University, the IT support teams will need to work together to resolve the issue.

5. Conclusion

The use of eduroam at the Weston Area Health Trust is an exciting development that will enable both University staff and students to use laptops and mobile devices to be connected throughout the Academy and hospital buildings. This new wireless connectivity will facilitate greater engagement with mobile elearning, where students can readily access their online ePortfolio, and electronic resources e.g. eBNF and the increasing use of social media and other mobile learning practices.

The success of the pilot will depend on the working partnership and good communication between the Academy, NHS Trust and University. The benefits to the Trust and the University are that it will provide an efficient and cost effective solution in providing a guest network without the overhead of account management. The benefits to all of the users, as described above, are clear and will be warmly welcomed by both the staff and students.