

Dundee University - connecting with the NHS.....

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About University of Dundee and NHS Tayside

Dundee University

- City Campus
- Ninewells Hospital Campus (shared site)
- Shared staff and many students

NHS Tayside

- Primary Hospital (Ninewells Hospital)
- Many secondary and tertiary sites





Objective

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“To achieve good inter-operability between NHS and Higher Education (HE) networks that enable secure anytime, anywhere access by medical, nursing and allied profession students, clinical teachers and researchers “

NHS-Higher Education Connectivity Project

What this means locally:

- Access to University systems and services at NHS sites
- Access to NHS systems and services at University sites



What has changed

- A recommendation from the 2011 McClelland report into public sector ICT in Scotland was increased use of shared services and better collaboration within the public sector.
- Technology is now intrinsically embedded on all aspects of University life.
- Expectations
- Cultural and organisational change
- Precedence set by other institutions
- Best Practice Working Group



Local Approach

- Local Bi-Directional Gateway
- Reciprocal Shared Wi-Fi Service
- University and NHS VDI
- Access directly from NHS PCs

Local Bi-Directional Gateway

- Local Gateway using 2 x Cisco ASA Firewalls
- Allows for bi-directional data flow.
- Firewalls managed separately by each organisation.
- Specific uses:
 - Transferring research data
 - Dual Authentication
 - Reciprocal Wi-Fi

Dual Authentication

- UNIFI – Medical School Curriculum Management System
- Medical School VLE
- High proportion of UG Medical Teaching undertaken by NHS Tayside employees
- University staff/students log on with University AD credentials
- NHS Tayside staff log on with NHS Tayside AD credentials

Sign in to Unifi (Live)

Sign in using your account on:

UoD

Guest

NHS Tayside

Username

Password

Login



NHS LDAP username

Password

Login



Dual Authentication

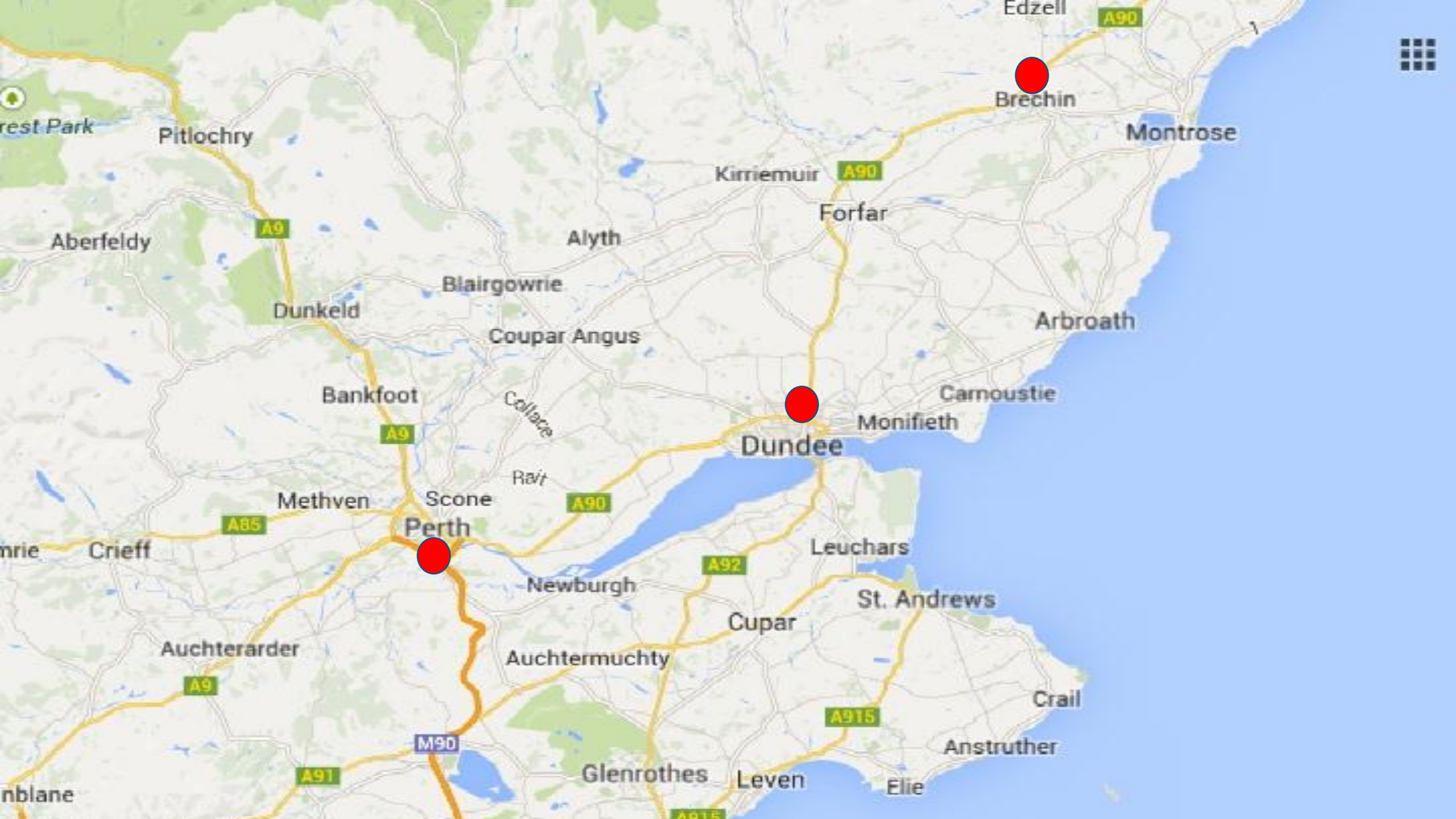
Benefits

- NHS staff are able to authenticate using their known credentials
- Reduced administrative effort in managing visitor accounts
- Greater efficiency for teaching staff

Reciprocal Shared Wi-Fi Service

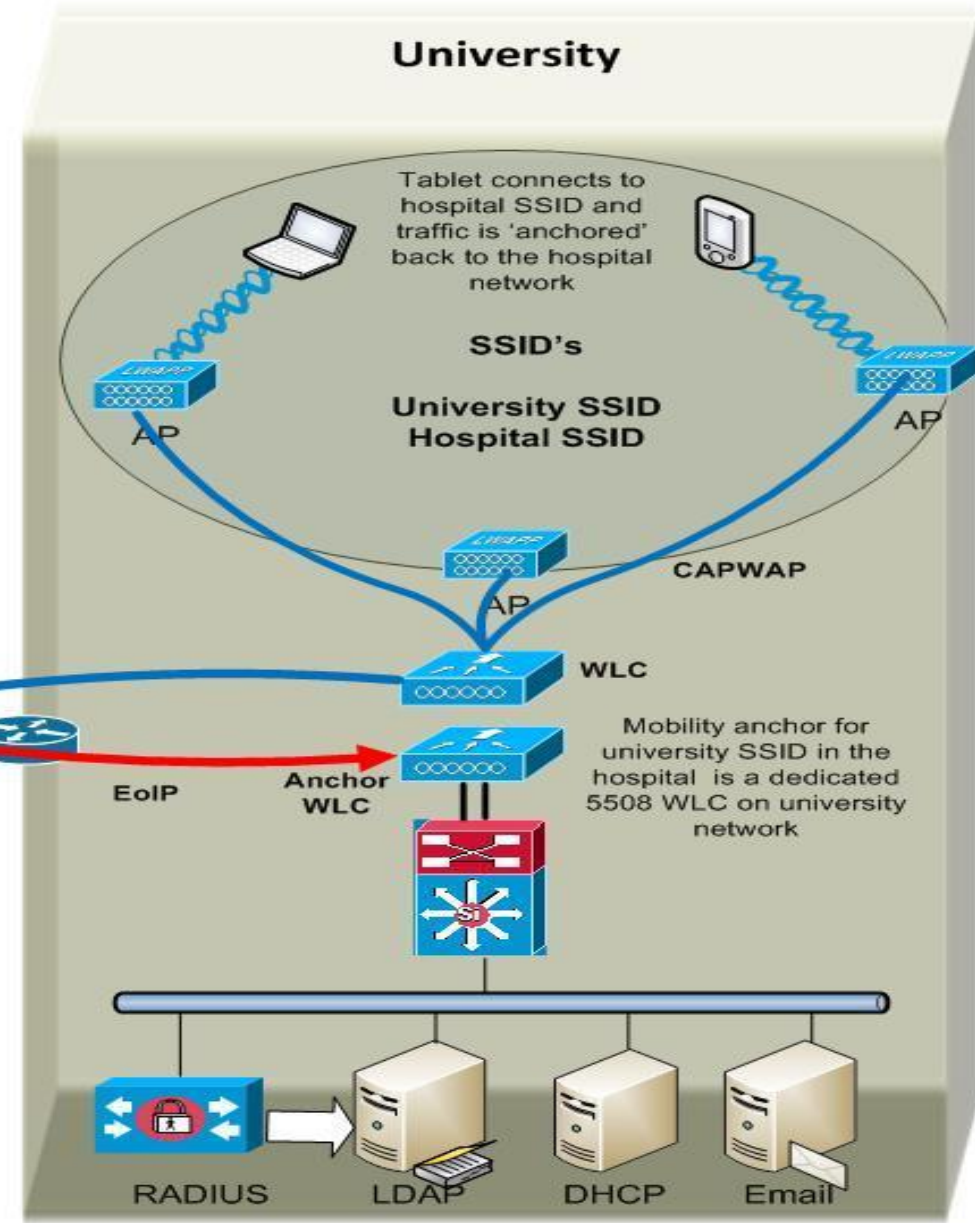
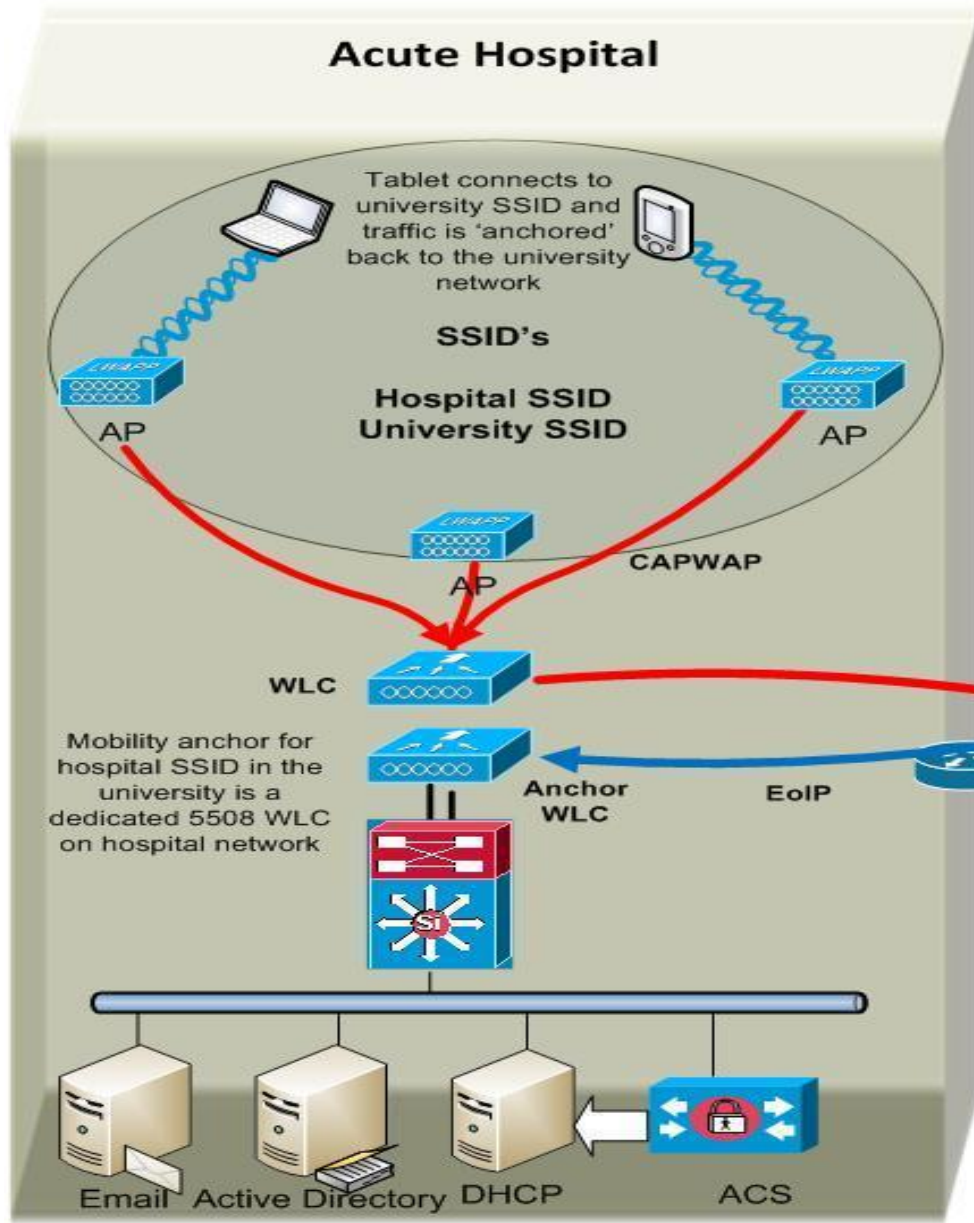
- Students attend many NHS sites as part of their learning (Clinical placements)
- Staff are based at NHS sites (Research, Teaching, Admin)
- Many spaces are shared between both organisations

- Physical University network connectivity at Ninewells Hospital
- No physical University network connectivity at other NHS Tayside sites
- Physical University network connectivity at all sites is not financially sustainable



Reciprocal Shared Wi-Fi Service

- Cisco white paper on a Cisco Reciprocal Wi-Fi solution
- Mobility Anchoring – specify a controller as the anchor point for clients
- Connect client to University SSID broadcast on NHS Access Point, traffic on this WLAN is tunnelled via Ether over IP (EoIP) back to the University anchor controller then switched onto the University LAN.
- Path isolation ensures that security and Quality of Service (QoS) policies can be separate and can differentiate internal and visitor traffic.

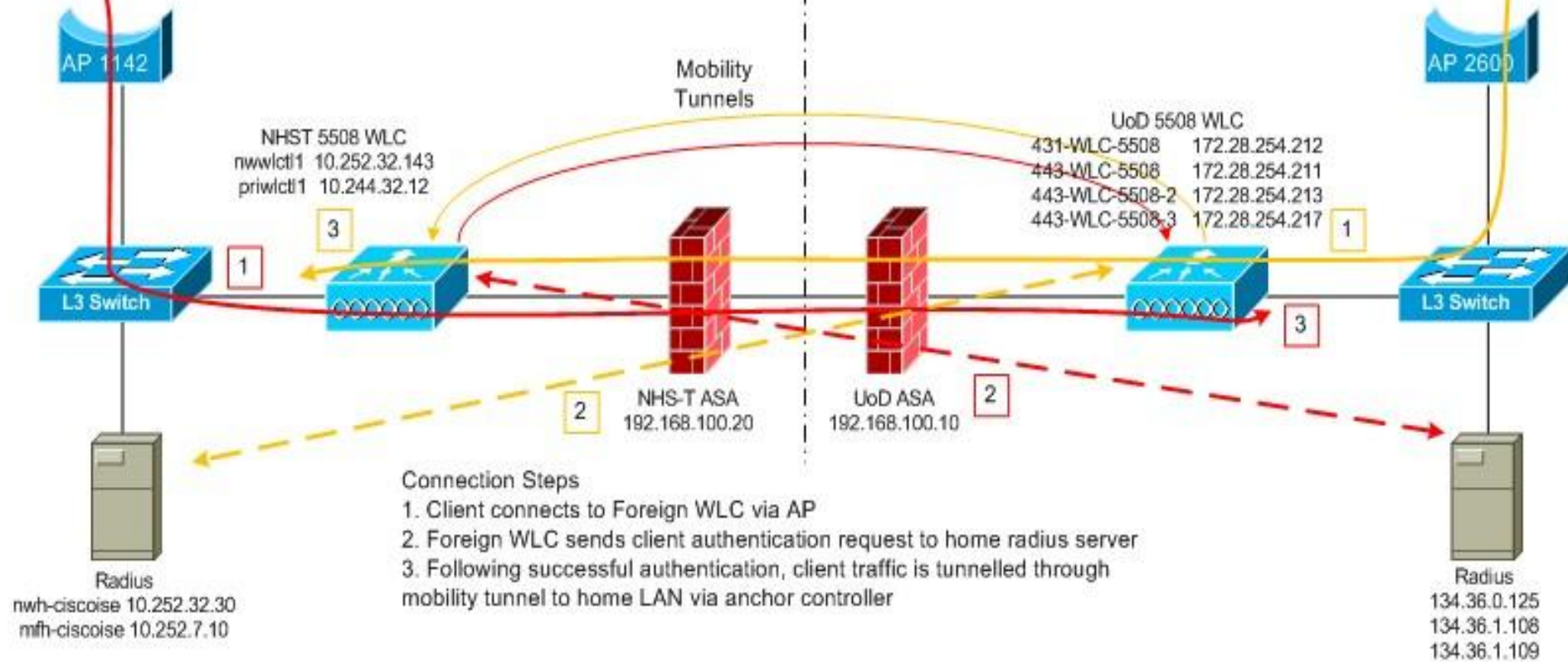


UoD Corporate Wireless
SSID Eduroam or UoD_WiFi

NHS T Corporate Wireless
SSID mobiletynet

NHS Tayside
(PRI)

University of Dundee



Reciprocal Shared Wi-Fi Service

Benefits:

- University/Eduroam Wi-Fi at all NHS Tayside sites – enhancing the student experience
- NHS Tayside Wi-Fi at University sites
- Cost savings at shared sites



Feedback

“This new Wi-Fi is excellent. I am able to operate and email at the same time!”

“Thank you for installing Wi-Fi at PRI, this is the single biggest development since arriving at Medical School ”

Other Solutions

- University VDI
- NHS Tayside VDI
- Better access directly from NHS PCs
 - Modern versions of software
 - Streaming media now accessible.

Future Developments

- Active Directory Domain Trust
 - Use NHS credentials to authenticate on University PCs
- Single PC???
- Eduroam with SWAN???



NHS-HE Connectivity Best Practice Working Group



NHS-HE Connectivity Best Practice Working Group

- Group created at the request of the NHS-HE Forum
- The objective of the group is to identify and share best practice in NHS-HE connectivity and to assist in its promulgation
- Team of individuals coming together to achieve a joint task



NHS-HE Connectivity Best Practice Working Group

The Task:

- To improve connectivity, between Universities and the NHS to support;
 - Access to NHS systems from University networks
 - Access to University systems from the NHS
 - Access to internet based systems and web sites from within the NHS, when these would otherwise be blocked.
 - To leverage the bandwidth available to the University for students when they are on NHS sites.
- To put in place policies and procedures to support connectivity, whilst not increasing the risks of data security to either party.
- To give organisations confidence that they can move forward with knowledge that they are implementing best / common practice.

NHS-HE Connectivity Best Practice Working Group

Themes:

- Access Directly from NHS Desktops
- How the NHS and HE can network securely
- Use of Terminal Services
- ~~Information Governance and Data Sharing~~
- Procedures and Policies

- Influencing national policy where it impacts significantly on NHS-HE connectivity
- Understanding NHS-HE connectivity in the wider community

NHS-HE Connectivity Best Practice Working Group

Access Directly from NHS Desktops:

- Minimum Desktop Specification
- University email access
- Internet content filtering
- Streaming media
- Students obtaining NHS accounts
- Web 2.0 and Social Media



NHS-HE Connectivity Best Practice Working Group

How the NHS and HE can network securely:

- N3 JANET Gateway
- Direct network connections
- Shared Wi-Fi services



NHS-HE Connectivity Best Practice Working Group

Use of Terminal Services:

- University VDI
- NHS VDI
- Case Studies from various Universities
- Terminal Services/Citrix



NHS-HE Connectivity Best Practice Working Group

What has been achieved:

- Originally a “task and finish” group aiming to finish work by end of 2013
- Many case studies showcasing good or best practice e.g. Shared Wi-Fi & VDI
- Sample processes e.g. obtaining NHS LDAP accounts
- Online resources - <https://community.ja.net/groups/nhs-he-forum-connectivity-project/article/nhs-he-connectivity-best-practice-working-group>
- Setting precedence allowing organisations to proceed with confidence
- Member’s Institutions have seen demonstrable connectivity improvements
- Other organisations have implemented best practice highlighted by the group (word of mouth)
- Better local connectivity for many universities and partner NHS Trusts/Boards

NHS-HE Connectivity Best Practice Working Group

Next Steps:

- Group will continue due to the tangible benefits in improving NHS-HE connectivity
- National approach particular with regard to Eduroam
- Influence national policy where it impacts significantly on NHS-HE connectivity
- Proactive gathering of information of NHS-HE connectivity in wider community
- Raise awareness of the work of the group particularly within the NHS
- Increase core membership, particularly from NHS organisations
- Be seen as the “Go To” resource for NHS-HE connectivity



Contact

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