N3 JANET Gateway Phase II Project Update
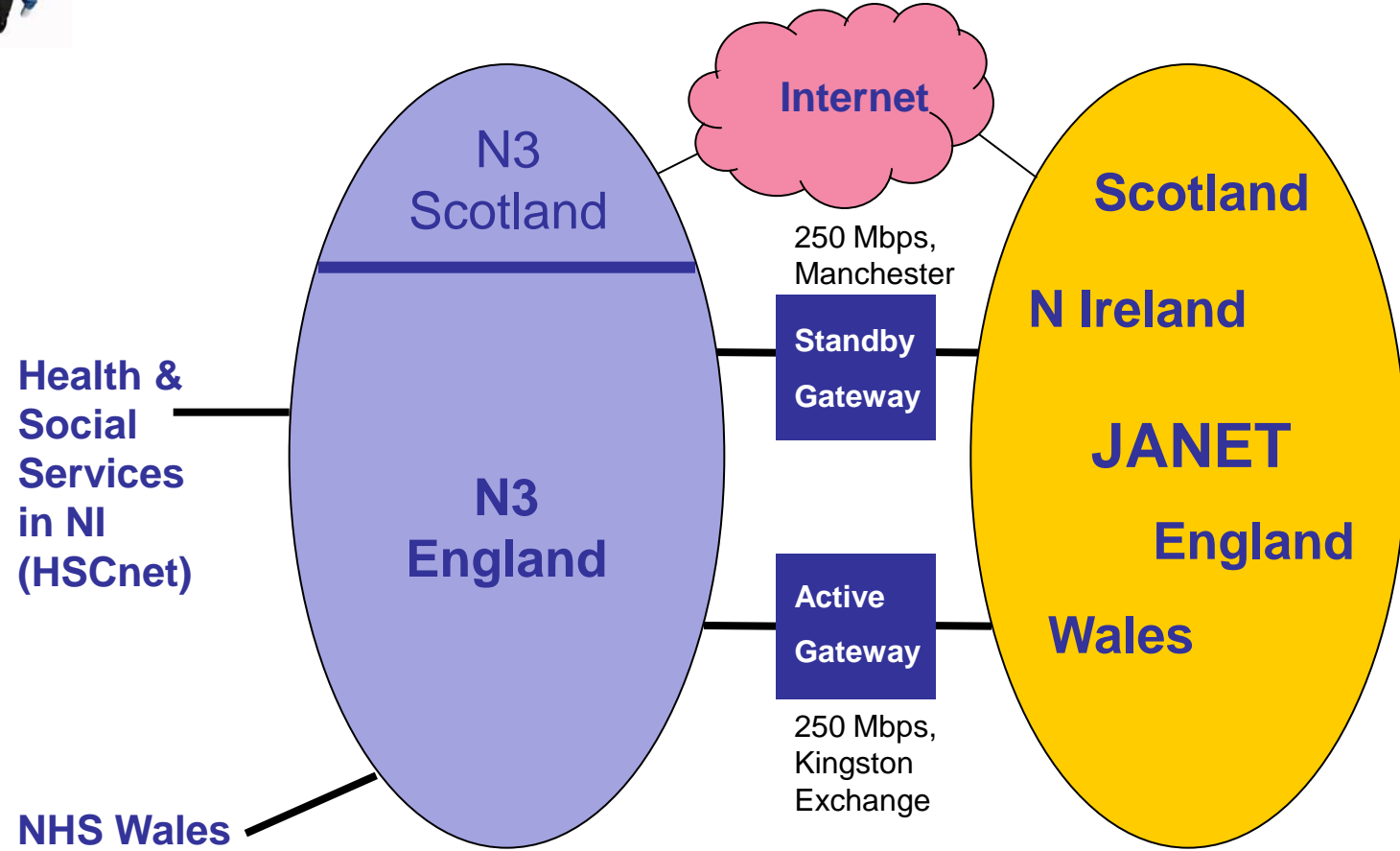
Scotland NHS-HE Forum

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N3 for NHS network in England and Scotland, JANET for Education & Research

Internet

N3
Scotland

250 Mbps,
Manchester

Standby

Gateway

**Health &
Social
Services
in NI
(HSCnet)**

**N3
England**

Active

Gateway

250 Mbps,
Kingston
Exchange

Scotland

N Ireland

JANET

England

Wales

NHS Wales

(PSBA)

Since 24th June 2010

The New N3 Gateway(s)

- The new N3 JANET Gateway Service:
    - Implemented on 24th June 2010
    - 2 Gateways at 250 Mbps active/standby
    - Joint funded with DH/Connecting for Health
    - All N3 JANET traffic (sessions initiated in N3, routed away from internet G/way)
    - Contract for 5 years
    - Full service management by N3

NHS-HE Connectivity Project

Are we there yet?......

Objective:

"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"

To move away from 2 PC syndrome

Gateway Phase II Project

- NHS working with JANET(UK)
- Project was given joint agreement to proceed in February 2011.
- **To implement "sessions initiated in JANET" or "bidirectional working" if a suitable technical and information governance model can be found.**
- Four potential services to investigate to proof of concept and to develop proposals.

Initial workshops held April-June 2011

Sessions initiated in JANET

i.e. To implement a solution for JANET users (or machine to machine) from JANET to N3

- ✓ Rapid Risk Assessment conducted and final report concluded that there are no evidenced risks which cannot be appropriately managed
- ✓ Matrix of potential use cases
- ✓ SSL VPN/https technical proposal for specific agreed tunneling from specific JANET IP address range to specific NHS IP address range
- ❖ Information governance statement of compliance/Information Governance Toolkit or equivalent for subset of JANET connected organisation involved?

  Not a "given" that the Information Governance can be resolved

i.e. Current concept:

N3 JANET Bi-Directional Working Concept
Academic Institution to NHS Organisation
0509711 DHID VDNS v0.1
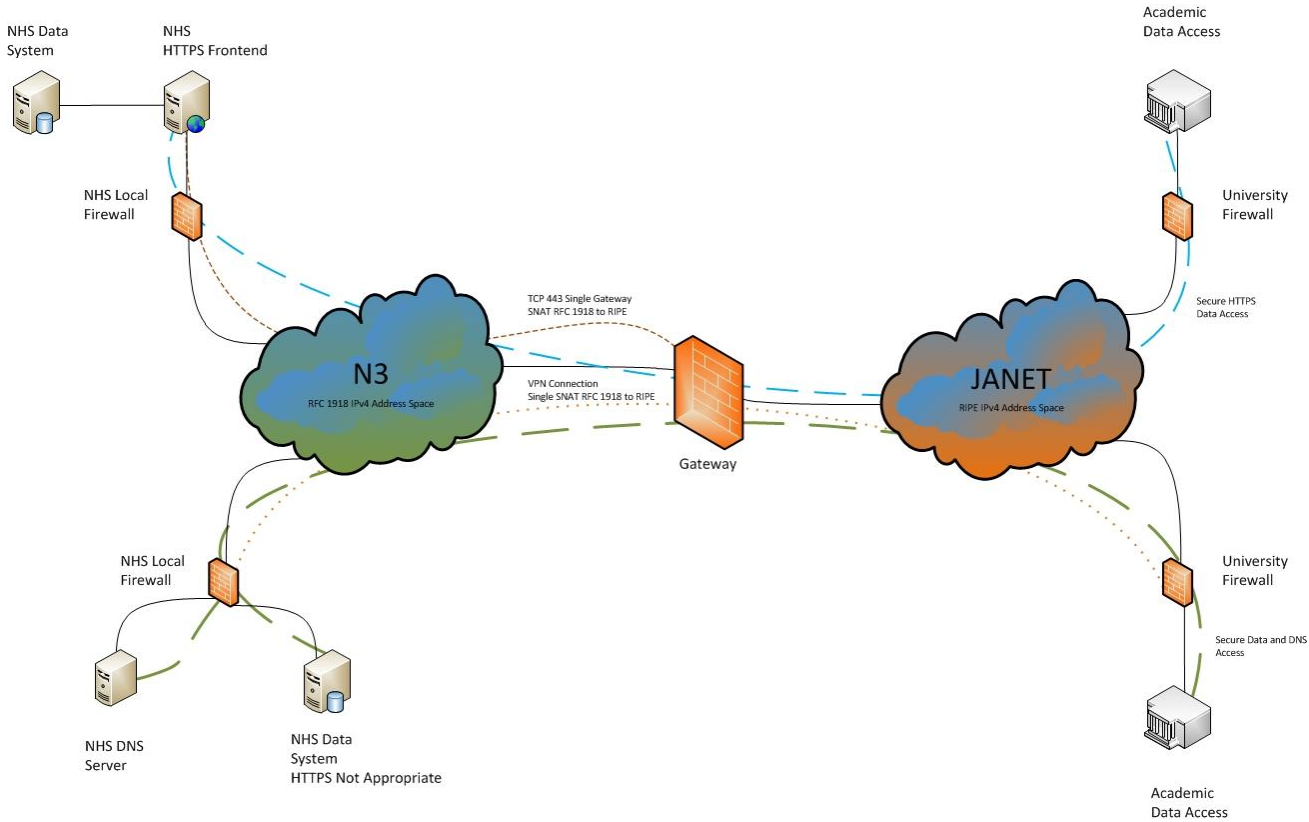
Draft: from DH technical proposal

User types?

employed as	function	credentials	Patient Identifiable Data (PID) possible?	MoSCoW	VPN required?	risk
NHS staff (permanent)	Clinical	NHS Smart Card	yes	MUST have	WOULD like	medium
NHS staff (permanent)	Clinical	NHS Local	yes	MUST have	WOULD like	medium
NHS staff (contract)	Clinical	NHS Smart Card	yes	MUST have	WOULD like	medium
NHS staff (contract)	Clinical	NHS Local	yes	MUST have	WOULD like	medium
Academic (medical)	Clinical	NHS Smart Card	yes	MUST have	WOULD like	medium+
Academic (medical)	Clinical	NHS Local	yes	MUST have	WOULD like	medium+
Student (medical)	Clinical	NHS Smart Card	yes	MUST have	WOULD like	medium
Student (medical)	Clinical	NHS Local	yes	MUST have	WOULD like	medium
machine (heart beat)	Eduroam	configured end point	no	MUST have	COULD have	low
machine (autonomous)	VC call	?	yes	MUST have	SHOULD have	medium
machine (autonomous)	VC set up	register user	no	MUST have	COULD have	low
Academic ICT support	IT support	?	yes	SHOULD have	MUST have	low
Academic ICT support	IT support	?	no	SHOULD have	MUST have	low
NHS staff (permanent)	non-clinical	NHS Local	no	SHOULD have	WOULD like	low
NHS staff (contract)	non-clinical	NHS Local	no	SHOULD have	WOULD like	low
Academic (medical)	non-clinical	NHS Local	no	SHOULD have	WOULD like	low
Student (medical)	non-clinical	NHS Local	no	SHOULD have	WOULD like	low

Issues to be resolved include:

- No solution yet drafted for access to national solutions

- NHS uses private IP addresses, JANET uses public (RIPE) ones

  - Network address translation (NAT) involved
  - RIPE addresses limited and running out

- NHS Information governance by organisation and devices on a subnet – culturally different to academia where it is user-centric

Integration of video services

"Business case" and proof of concept for:

Integration of the NHS (N3) and Academic (JANET) Video services

- Looking particularly at the new N3 vc service in England
- (different proposal in Scotland – RM speaking later)
- Want to be able to book and run videoconferences across the two booking systems
- Both have guest site facilities for IP and ISDN, the N3 vc service is about to allow guest IP access from the internet

Scope agreed: proof of concept testing next

Secure Data Transfer

- Solution required to enable staff operating in either JANET or NHS to securely exchange sensitive data or large datasets
  - ✓ Initial scoping workshop held in May 2011
  - ✓ Use cases identified from requests for help
  - ✓ DH has Secure File Transfer System on N3 but may not work for JANET community.
  - ✓ NHSmail not thought to be the way forward because need capacity for the NHS
  - ❖ Requirements being summarised in order to evaluate other options identified e.g. filesender

Again to get to "business case" and proof of concept

Widening eduroam Support

Business case and proof of concept for:

Support for eduroam (JANET Roaming Service) in NHS networks

- Enables visitor network access to basic services when at other sites.

- International facility well used in education & research

- Good reports where tried e.g. In Oxfordshire and Truro areas (on back of partner University eduroam)

Working hypothesis

- On an NHS visited site supporting eduroam, the NHS site might provide 4 levels of access:

1. To their own NHS users
2. To visiting NHS users who then might be allowed access within N3
3. To visiting Local Authority users, GCSX access possibly
4. To visiting education & research or "unbadged" users, internet access similar to existing eduroam

Issues to be resolved on eduroam include:

- Allowable under eduroam branding
- Radius hierarchy would be needed on N3
- How to kick-start

Proof of concept testing "lab to lab" about to start

Outcome to be built in to proposal for deployment – limit of current plan.

Federated Access

- Solution required to create a federated identity framework between JANET and NHS (N3) to allow Service Providers in either domain to trust identities

  ✓ Initial scoping workshop held in May 2011

- Proof of Concept testing proposal under development.

- Particularly focus: use of NHS smartcard credentials to provide identity management for web resources available through the UK access management federation

Questions & Comments please

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Thank you.