

Project Scope of Work



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Project Details

Project name:	Campus Network Upgrade
Brief overview:	Design and implement enhancements to the Hutt Valley DHB campus network topology, including segmentation into a layered IP network. This work will be broken into two phases. The first includes urgent remediation and core network upgrades; the second part includes distribution and edge network upgrades, wireless replacement and security enhancements.
Start date:	7 th June 2010
Completion date:	TBD
Type of Engagement	Time and Materials
Contract Ref.:	NA

Project Objectives

No.	Business and Technical Objectives
1.	A robust LAN environment is available that provides significant scalability and redundancy to enable future technology enhancements.
2.	A detailed migration plan is available that will be effective and minimises the risk of deployment.
3.	A hierarchical IP integrated (Layer 3) network is available which will improve over-all network stability. This requires relinquishment of the existing flat Ethernet (Layer 2) based network.
4.	A centrally managed and secured wireless network is available.
5.	Enhancement of edge network security including Firewall High Availability and Remote Access Solution.
6.	Achieve a smooth migration with minimal impact to users.
7.	A simple logical LAN environment is available that is secure and easy to manage.

Key Project Roles and Contacts

Parties Involved	Scope:
Datacraft	Grant Pratt, Business Development Manager
Datacraft	Mikel Huth, Project Manager
Datacraft	Tim Lewis, Solutions Architect
Datacraft	Installation Engineers, Wellington – TBD
Hutt Valley DHB	Kevin Trew, IS Operations Manager

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Hutt Valley DHB	Diane Bull, Project Manager
Hutt Valley DHB	Kyle Donnison, Network Support

Datacraft Tasks and Deliverables

No.	Task	Estimated Effort
1.	Detailed requirements gathering and workshops to define functional requirements.	32 hours SA
2.	Cabling audit carried out to ensure integrity of circuits and placement for switch design.	16 hours SA
3.	Network Solution Design including: - Network detailed design and configuration assumptions - Planning placement of new access switches based on future NAC implementation requirements. - Configuration templates for Core, Distribution and Access layer switches - New IPv4 addressing schema to replace current IP addressing scheme.	72 hours SA
4.	Migration and Change control planning. Documented plan of cutover activity and timings.	16 hours SA
5.	Install and configure Core Switches in production environment.	8 hours SA
6.	Connect new Core Switch environment into existing production environment and test connectivity.	8 hours SA
7.	Install new Distribution Switches and connect to Core switches.	8 hours SA 12 hours IE
8.	Physically migrate existing access switches into new Distribution switches, as is. (HVDHB engineer involvement also required).	12 hours SA 24 hours IE
9.	Upgrade IOS and switch configurations to new access network standard (including provision for existing legacy connectivity in addition to new VLAN structure and implementation of Datacraft best practise access port security). From this stage, end devices are able to be logically rehomed to the new IP network. (HVDHB engineer involvement also required).	40 hours SA 32 hours IE
10.	Provide guidance to HVDHB IS operations staff and assist with network component of end station (PCs, Printers, etc) migration activity to new hierarchical IP network.	16 hours SA
11.	Design, configure, deploy and test Wireless LAN Controller and new Access Points.	40 hours SA 8 hours IE
12.	Design & implement guest Wireless Internet access.	20 hours SA
13.	Design & Implementation of new firewall infrastructure, including: - Install new firewalls - Migrate existing configuration from current Firewall and test basic functionality - Shutdown existing Firewall and cutover connectivity to new HA Firewalls.	32 hours SA 8 hours IE

	- Test Firewall Rules are being hit and test High Availability failover.	
14.	Configure any additional Firewall features as required (estimation provided for IPS implementation)	16 hours SA
15.	Design & implement remote access solution using SSL VPN.	32 hours SA
16.	Ensure Operational documentation and diagrams are complete and accurate.	12 hours SA
17.	Complete any remaining Operational handover/training tasks.	8 hours SA
18.	Project management	70 hours PM
19.	Project Close-Down and PIR.	5 hours PM 2 hours SA

Datacraft Roles and Responsibilities

Role	Detailed Responsibilities
Account Manager	Provide quotations for and source any required software and/or hardware.
Project Manager (PM)	Manage the Datacraft resources and communications with the Hutt Valley DHB Project Manager.
Solutions Architect (SA)	Lead the build, test, and installation of the required components.
Installation Engineers (IE)	Installation of all equipment and connectivity testing.

Assumed Hutt Valley DHB Activities

No.	Task
1.	Overall project management of all Hutt Valley District Health Board and HVDHB third party supplier resources.
2.	Primary interface to the Hutt Valley DHB business.
3.	Overall responsibility for the management of any project related issues and mitigation of project risks.
4.	Coordinate access for the required HVDHB locations required by this project.
5.	Completion and management of any change control activities required.
6.	Manage access, issues and testing during network and switch upgrades.
7.	Manage systems and user acceptance testing.
8.	Update DHCP & DNS servers and IP configuration of end-user devices as required
9.	Deploy additional campus fibre optic cabling as required by the solution, including fibre patch cables.

Out of Scope Activities

No.	Task
1.	Configuration of non-network infrastructure, including servers, workstations, PCs, printers and network attached medical equipment.
2.	802.1x Network Access Control design or implementation.
3.	Wireless site survey. APs will be deployed as replacements to the legacy wireless APs only at this stage, in the same locations. A site survey would be needed for a future project if a wide scale expansion of the wireless network footprint were

	required.
4.	Guest wireless integration with a paid/voucher service or system, third party or otherwise.
5.	Firewall redesign. Migration from the existing configuration is included in scope however.
6.	Centralised authentication.
7.	Corporate Novell eDirectory integration.
8.	All and any activity not defined as "In Scope".

Other Project Assumptions

No.	Description
1.	Hutt Valley DHB will provide overall leadership for the project and facilitate contributions to the engagement and schedule tasks in a reasonable and timely manner to allow Datacraft to meet its agreed delivery milestones.
2.	Datacraft will endeavour to action requests for changes promptly, however higher priority production operational issues may impact this at any time.
3.	That various migration activities will occur out of hours.

Risks

No.	Description
1.	Hardware delivery delays that impact Project timelines.
2.	Availability of Datacraft or Hutt Valley DHB resources that impact Project timelines.

Engagement Terms and Notes

No.	Description
1.	Any additional requirements not identified in this scope of work will be treated as a variation. Project scope variations will be submitted by Datacraft on a 'Project Scope Change Request' form to the Hutt Valley DHB Project Manager for approval. Agreement must be reached by Datacraft and Hutt Valley DHB prior to implementation.
2.	For 'Time and Materials engagements', Datacraft will invoice actual project hours utilised. The estimated value is shown in the 'Pricing' section below.
3.	Any disruption or delays during the project caused by a third party where Datacraft are on site and are required to "stand by" will be charged as a variation.
4.	Datacraft will keep Hutt Valley DHB regularly informed of task progress and hours used to date . This will include weekly progress reports on Fridays to the HVDHB Project Manager. If it is anticipated that additional hours are required, this will be identified during these sessions.
5.	Datacraft project pricing relating to this scope of work will be forwarded directly to Hutt Valley DHB and is not to be supplied to third parties by Datacraft or Hutt Valley DHB without prior agreement.
6.	Project Issues and Risks will be escalated to the Hutt Valley DHB Project Manager by the Datacraft Project Manager in the first instance for resolution.

