

QUT Network

Presented by:

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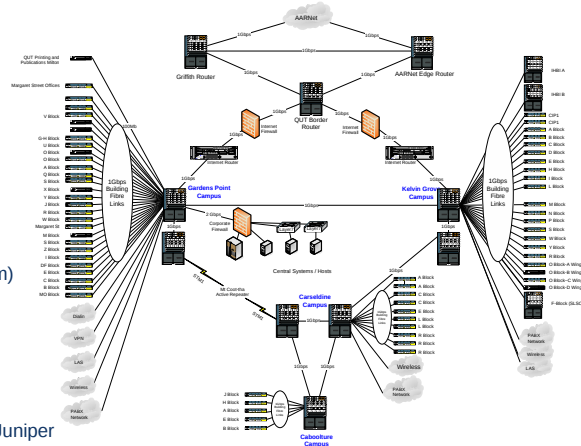


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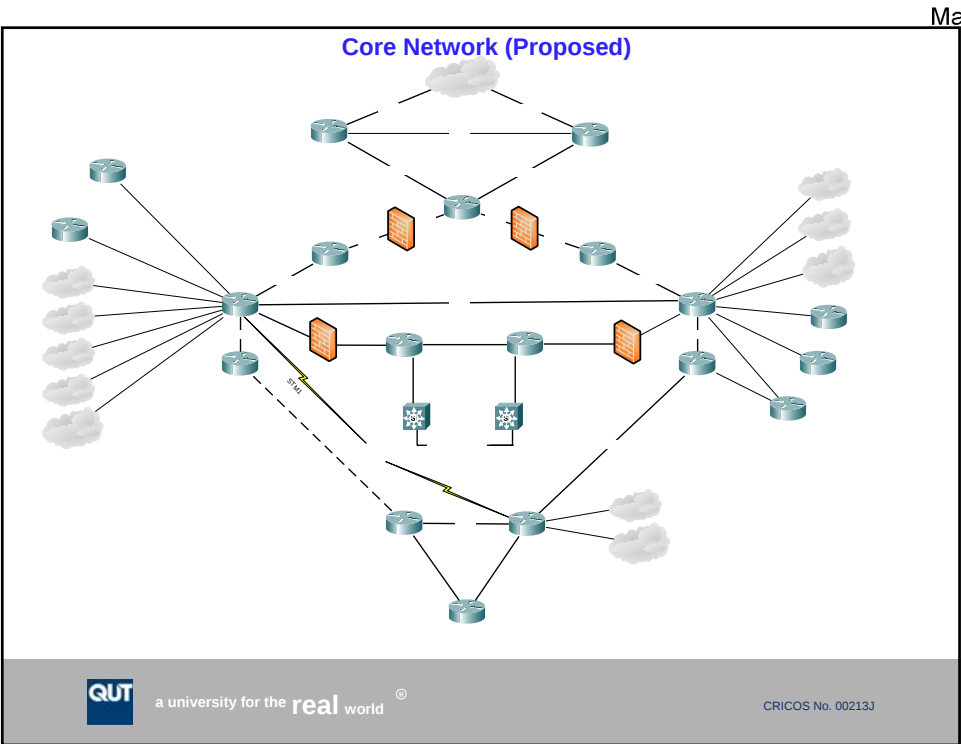
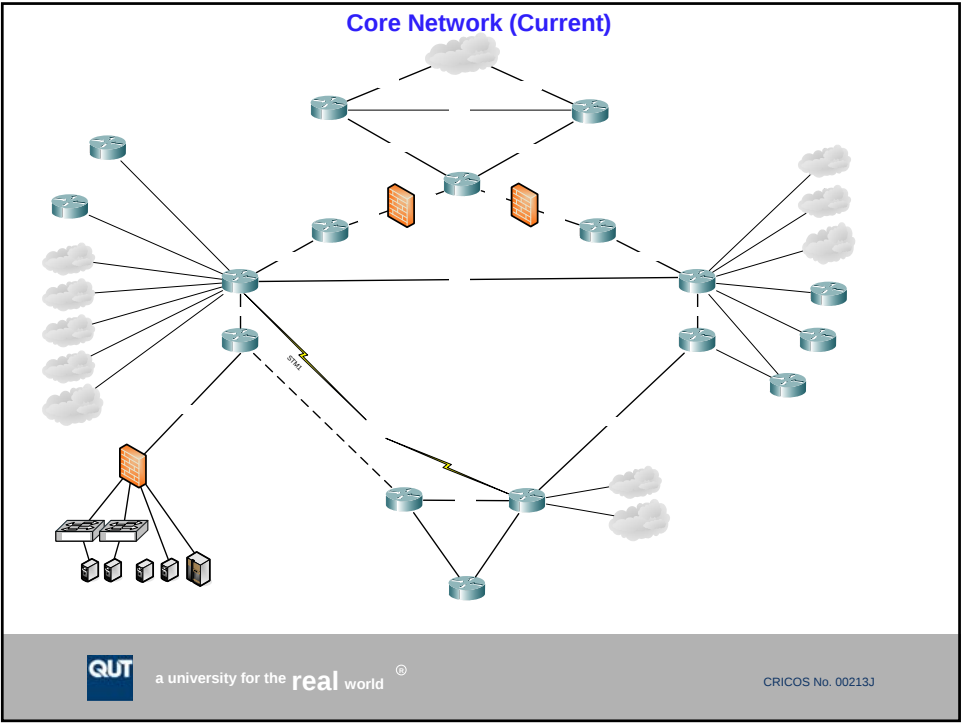
Data Network

- **Star Topology**
- **Core Layer**
 - Layer3 using RIPv2
 - Cisco 6500
- **Distribution Layer**
 - Layer2 using 802.1q
 - Cisco 6500,3750
- **Access Layer**
 - 82% Cisco 2950,2960,3750
 - 18% Nortel switches / hubs
- **Wireless**
 - Entirely Cisco LWAPP (Wism)
 - 1131,1231 & 1242 AP's
- **Firewalls**
 - FW5M
 - Netscreen
- **Border**
 - BGP to AARNet
 - IAS internet charging using Juniper ERX



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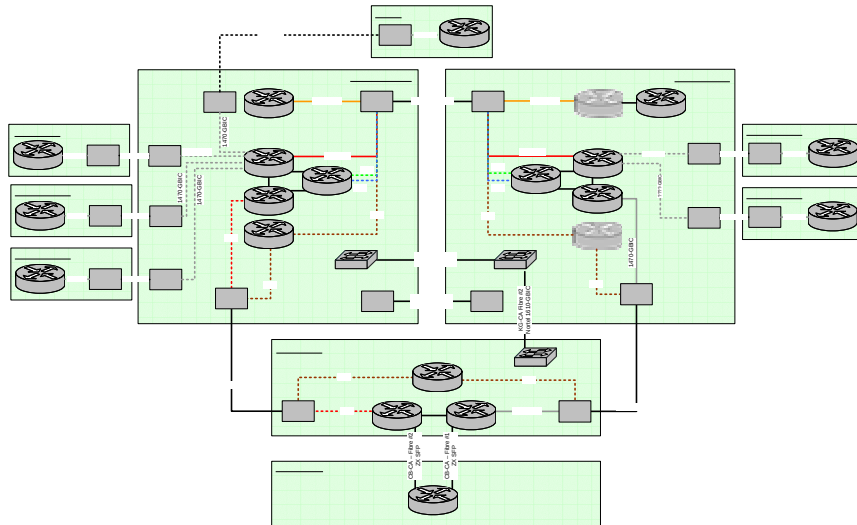
Margaret St
Offices

Wireless

PABX
Network

1Gbps

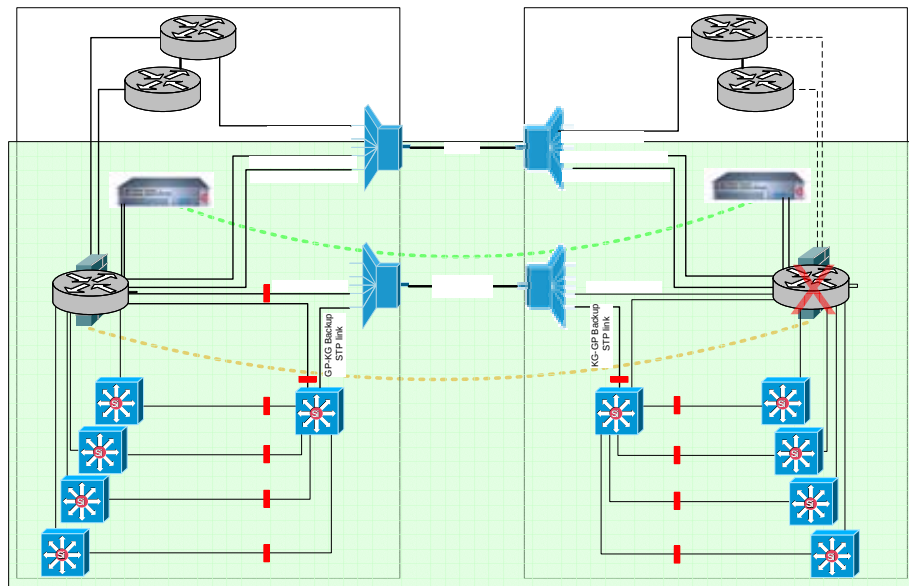
CWDM Fibre Network (Current & Proposed)



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QUT Proposed Virtual Data Centre



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CH

1470-GBIC 8-Way MUX GP-PCH Fibre 8-Way MUX

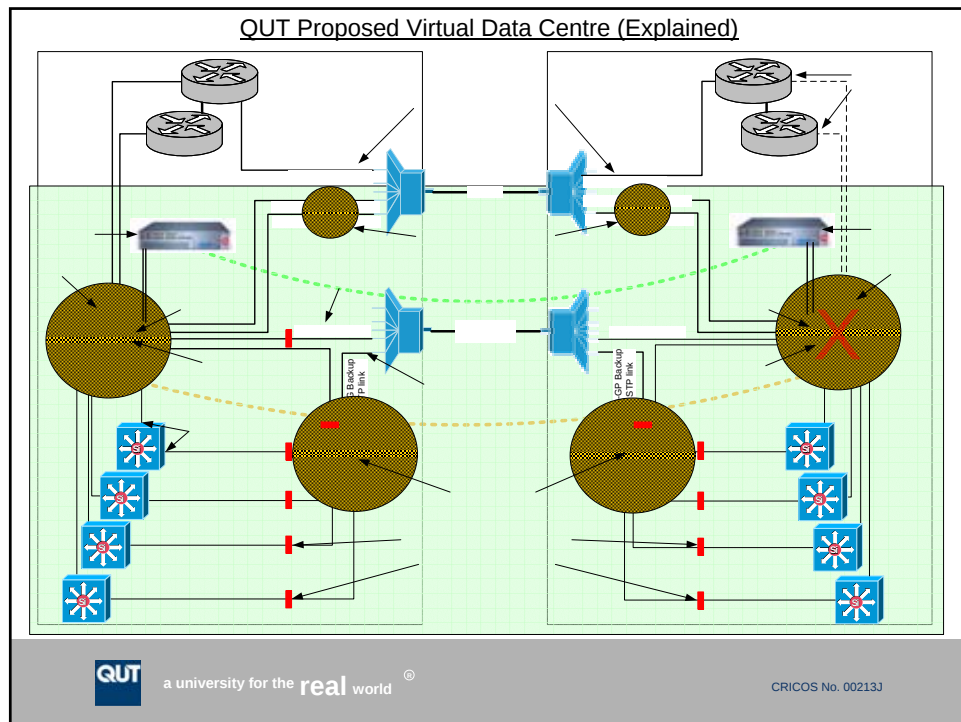
Site''

???-GBIC 8-Way MUX GP-??? Fibre 8-Way MUX

Site''

??-???-rtr

???-GBIC 8-Way MUX GP-??? Fibre 8-Way MUX



gp-co

IPv6

- Not implemented yet
- Nothing stopping a limited deployment
- Hurdles
 - Juniper accounting solution
 - 3 x Cisco Chassis with Sup22 need to have updated supervisors to support IPv6 hardware switching.
 - DNS/DHCP

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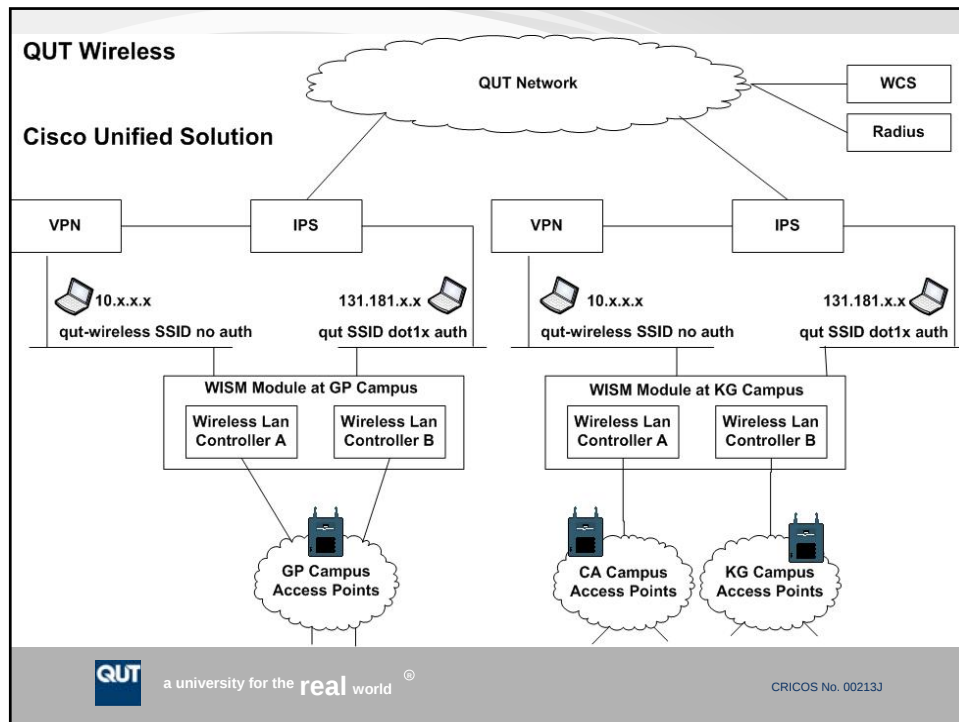
gp-core2-rtr

6500 distr
router (s
FWS

dist-rtr

VRP
gatewa
(Act

All ed
dual h
distrib
3750



Dot1X and NAC

- Hurdles
 - OOB management for switches.
- Next Step
 - Continue moving switches to new in-band network
 - Move from Cisco ACS to involve production radius servers
 - Guest vlan design
 - Testing different OS's and login/management issues
 - Test with trunking and IP phones
- NAC
 - We will work together with the Faculty of IT (FIT) later in the year in investigation of the Cisco NAC appliance/framework.

IPTel

- Progress
 - Extensive IPTEL trials with the Faculty of IT involving Cisco and Alcatel.
 - More trials with the different vendor collaboration offerings, such as Cisco Meetingplace and Alcatel MyTeamwork.
 - The MERF building at Prince Charles Hospital will be our first building with production IPTEL.
 - Trialling Asterisk (Trixbox) as a possible free on-campus SIP solution for students.
 - Alcatel SIP (20 licences) under trial with selected staff
 - Using the Nokia E-Series to connect with SIP via wireless.
 - Implementation of SIP not as standard as one would like between vendors.
- Future
 - SIP to SIP with other Universities
 - SIP trunk between Alcatel and Asterisk
 - QoS on the network



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The End



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