SPECIFICATION

Minimum Specification for Replacement of Core and Edge Network Switches

PURPOSE
Replacement of core and edge network switches. The proposed solution should also support integration with an enterprise grade wireless system which will be added in future.

CURRENT ENVIRONMENT
The current environment consists of Extreme Networks switches in the following configuration:

- x450a 24 port gigabit SFP core switch x 1 (Server Room)
- x430 48 port gigabit ethernet switches with SFP uplink x 4 (Server Room)
- x150 48 port ether switches with SFP uplink x 9 (Edge)

SPECIFICATION
Minimum Specification for Purchase of ICT Equipment

24 Port 1/2 U Core Managed Network Switch

- The switch should have minimum 24 x 1 Gb Ethernet SFP ports with 18 transceivers.

48 Port 1/2U Layer 2 Managed Network Switches

- The switch should have minimum 48 x 10/100/1000 Ports, auto negotiating, and 4x 1 Gb Ethernet SFP and optional two 10Gb Ethernet SFP uplink network modules with two transceivers per switch.

Common Specifications

- Centralized Cloud Management for all switches and possible future wireless network. Please specify if a compatible wireless solution is available and include web links.
- Switch should be rack mountable and include side rails and/or other installation parts required for this.
- The Switch should be Stackable and should be able to stack at least 4 in a single stack.
- The stacking ports should be separate from the normal uplink ports.
- Switch should have adequate power supply for the complete system usage with all slots populated and used and provide N+1 redundancy.
- Switch should support VLAN tagging (IEEE 802.1q).
- Switch should support IEEE Link Aggregation and Ethernet Bonding functionality to group multiple ports for redundancy.
- Switch ports should support auto MDI and MDI-X and Auto /Manual Speed Negotiation
- Spanning tree PortFast and PortFast guard for fast convergence or its equivalent.
- Spanning-Tree Root Guard (STRG) to prevent other edge switches becoming the root bridge
- IGMP snooping v1, v2 and v3.
IEEE 802.1x to allow dynamic, port-based security, providing user authentication.
802.1d, 802.1s, 802.1w, 802.3ad.
VLAN ACLs (VACLs) on all VLANs.
DHCP snooping.
BPDU Guard.

Describe

- Proposed hardware and software roadmaps, End-of-sale, End-of-Life, and end-of-support timeline or probable dates.
- Licensing information including up front and recurring license types.