

UAEU Infrastructure upgrade – Phase 3

Salman Sadiq

UAEU upgraded its data center in the Crescent building in the first two phases of infrastructure upgrade, continuing UAE University's promise to deliver ubiquitous, high bandwidth connectivity throughout the campus. In phase 3 two more buildings C-series and F-series were upgraded to keep up-to-date with the advancement in networking technology and the introduction of features such as internet of things (IoT), 4th generation access protocols, cloud applications as well as bandwidth hungry gaming application such as Poke'Mon. This upgrade enables the infrastructure to meet the exorbitant bandwidth demands and to satisfy the requirement for ever-present internet connectivity providing a switching backhaul of 40 Gbps, highly resilient, non-blocking state-of-the-art infrastructure. The upshot of this change would be a higher bandwidth for the end user by reducing the bandwidth contention ratio and oversubscription on the uplink.



Figure 1: Cisco Nexus 7702 series

For the campus, Nexus-7702 40 Gbps switch form the distribution layer while the Multi-gigabit Catalyst-3850 constitutes the access layer. The Cisco Nexus 7702 switch is designed to extend the feature richness of the Nexus 7700 family to small and medium-sized deployments. The comprehensive DCI feature set includes Cisco Overlay Transport Virtualization (OTV), Cisco Locator/ID Separation Protocol (LISP), Cisco IOS Multiprotocol Label Switching (MPLS), and Virtual Private LAN Service (VPLS). The switch is hardware ready for Virtual Extensible LAN (VXLAN) and Ethernet VPN (EVPN) technologies.