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## HIGHER COLLEGES OF TECHNOLOGY

# CASE STUDY

## COMPUTER & POWER TECHNOLOGY

### SUMMARY & CHALLENGE:

HCT in Education Sector requires a high-performance network design to improve collaboration among labs, faculty, staff, and students, and to support the deployment of new applications, and high-performance networks to support their use of the leading-edge technologies that contribute to scientific and educational advancements

With the new Educational methodologies where students learn in a technologically sophisticated, e-learning environment that encourages development of independent and life-long learning skills; HCT requires a high-performance network design to improve collaboration among labs, faculty, staff, and students, and to support the deployment of new applications, and high-performance networks to support their use of the leading-edge technologies that contribute to scientific and educational advancements.

### IMPLEMENTATION:

MDS has built a Network, Wireless and Security Solutions for HCT for more than 7 campuses (including Fujairah) including Juniper Network (LAN, WAN), Aruba Wireless, PaloAlto Perimeter Firewalls, F5 Load Balancers..., for an average of 500-2500 students each campus (different number of students per college).

The Higher Colleges of Technology is the largest higher educational institution in the United Arab Emirates with the current enrolment exceeding 18,000 students, all UAE nationals.



### IMPLEMENTATION DETAILS:

Juniper Networks' campus area network helps colleges and universities collaborate in research, protect their research and student data, and provide students with more courses, class resources, and other communication and administrative services.

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We used Juniper EX Switches and utilized "Support of multiple routing domains and protocol instances on a single router using Virtual Routers and/or VRF", and we used Collapsed aggregation layer into the core layer avoiding the aggregation layer as the EX8200 Series Core Switches are more than capable to handle high throughput traffic, and supports high density of ports (1g, 10G).

With Juniper EX Switches and Firewalls using the same software "JUNOS", we've built a Secure and Scalable/Dynamic network, and Cloud-Ready Data Center for HCT.

**7 CAMPUSES**

**500-2,500 STUDENTS  
PER CAMPUS**

**CLOUD-READY DATA  
CENTER FOR HCT**