



## **Middle East case study**

### **University of Sharjah UAE.**

#### ➤ **Glimpse about the university**

- University of Sharjah, a leading institution for higher learning and a vibrant center for study and advanced research. Located within the rich and diversified cultural environment of the Emirate of Sharjah.
- University of Sharjah is endowed with a beautiful architecturally impressive campus, 36 buildings.
- This is why the University of Sharjah is deservedly renowned as one of the finest academic institutions in the United Arab Emirates (UAE), as well as in the Middle East.

#### ➤ **Challenge**

How to connect the buildings?

The challenge was the absence of fire alarm network between the fire alarm Systems in 36 buildings.

#### ➤ **Solution**

The design issue in University of Sharjah Campus has been solved by extending an Ethernet network to work as an electronic infrastructure for their fire alarm network across the 36 buildings using open graphical navigation system.

- Connection could be through the Ethernet port available on all the Systems to BMS controller using the BACnet protocol or to fire alarm graphic software.
- All the boards have native BACnet Ethernet port; hence, no external gateway box is required to provide the BACnet points.



- All BMS system is smart system; however, it was not tested or designed for life and safety operation, plus all the cabling are normal non-fire rated cables.
- The Ethernet port was use to connect to the graphical software package offering three Dimensional view plus being listed as graphical software by UL.

Each of the 36 fire alarm system is located in different areas with different IP addresses while, the graphical software package is installed on one PC and the 65 adapters are installed on different PC`s but both PC`s are on the same layer and same IP range, while the other 65 Systems are on different layers.

