

Case Study 2

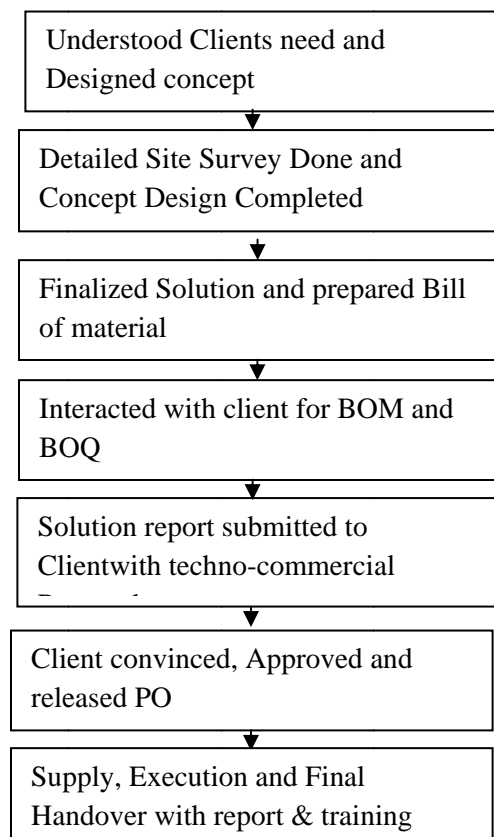
Client: One of India's Leading Shipping Maritime Academy, Maharashtra

Project Brief: Requirement of implementing E learning with Audio/Video streaming complete with Networking & Security solution to be used by their students and management.

Challenges and Client Need:

1. Client had connectivity issues & challenges in integrating 11 Hostel Buildings to their training institute within the campus.
2. Their main purpose was to provide their students with an online alternative when they are unable to attend classes due to health reasons or any other challenges.
3. On the technical side they needed Data/Voice/Video to be on a single cable with capacity to handle bandwidth for live streaming.
4. Due to infrastructure challenges they needed a combination of wired as well as wireless backbone with safeguards for power fluctuation and ability to provide uninterrupted power from mains.
5. They also needed a security solution to monitor the campus, which was vulnerable due to a missing perimeter wall that could not be constructed because of compliance issues. They envisioned this solution to be a deterrent and a monitoring tool in even of unexpected cases like student suicide attempts.
6. Apart from above requirements they also faced constant equipment failure and malfunction due to moisture issues caused by heavy rainfall and environmental humidity faced by the location 6 months in a year.

Process & Survey:



Solution Details:

- Single Fiber Backbone Connectivity for Entire Campus for Data/Voice/Video
- Copper Connectivity for DATA & Voice
- WI-FI Solution
- CCTV Surveillance
- Uninterruptible Power Supply.

Our action for successful project completion:

- We have installed entire fiber backbone network for Data, Voice & Video with parallel redundancy.
- The cores of OFC have been terminated/spliced on LIU being installed and from there it has been connected to the network switch through Fiber Patch cord.
- There are 11 different buildings in the campus within which we have used Cat6 cable for establishing Data and Voice connectivity for connecting Desktops, Laptops and Network printers for users.
- We have installed CCTV Surveillance for Total Campus, Students & Asset security system which includes 18 nos. IR Dome Cameras, 26 nos. IR Box Cameras, 4 nos. PTZ Cameras and 10 no Digital Video Recorder. With different range of Dome Cameras capable of covering 20 mtrs distance and IR box camera capable of covering 50 mtrs/100 mtrs. Distance in order to solve security issue within stipulated location covered whole discussed area (Indoor & Outdoor).
- We have given Data, Voice, Video, on Single Fiber s backbone & with front end of CAT6 with throughput of 300 Mbps which is enough capable for live streaming. Hence it was really convenient for students to attend lecture from hostel in condition when they are unable to attend lecture physically due to any medical or genuine challenges.
- To overcome geographic conditions we installed products that are IP55/IP65 & IP66 capable.