INT NETLINK's Past Projects

Data Center for a Banking Organization

Afghanistan

REFERENCE FOR THE FOLLOWING PROJECT CAN BE OBTAINED ON SPECIAL REQUEST

We had completed a Data Centre project in Kabul for a new banking organization that will play a lead role in developing and modernizing the retail banking market in Afghanistan by providing innovative electronic and mobile payment services that enhance the retail banking offering in the country.

Organization was planning to equip itself with technology so as to eradicate the requirement for Afghanistan banks and non-bank payment partners to undertake heavy investment in building, operating, maintaining and future-proofing their own payment switches and processing infrastructure. By developing a common processing platform and shared ATM and merchant acquiring networks, considerable economies of scale will result, as well as all the other benefits associated with nationwide payments interoperability and common national payment standards and operating procedures.

To provide data centers Efficiency Without Compromise by providing a path to optimize data center infrastructure around design, operating and management efficiencies through the utilization of cooling, power and monitoring technologies, supported by Int Netlink Technologies.

With this Data Center project the following setup was developed:

- Establishment of power room to distribute conditional power supply in Data Center.
- Establishment of Switch room for outdoor connectivity and indoor connectivity through fibre cable & Cat6 via standard Ducting rule.
- Establishment of Raise Floor & False Ceiling for Data Center.
- Establishment of Data Center as per Standard Requirement.

There were Passive and Active components involved in this project.

The infrastructure requirement can be divided into the following sub items. Under this session we will try to detail the solution approach Netlink will be taking to achieve what had been envisioned by APS and its technical team.

1. UPS _Emerson make ;

    a. Redundant power link from two 60 KVA UPS to the Server Room and Switch Room with having a rich battery back up for the case of city power blackout.
    b. To improve operations and to achieving superior running cost savings.
    c. To protects and optimizes critical infrastructure in data centers from Transient Surges/Inrush current/High Voltage and Low Voltage protections for Data centre critical equipments.
    d. To provide complete protection in term of Voltage, Current, Frequency.
    e. To provide voltage stability to critical load in case of static and dynamic loading in Data Center.

f. To give an alert/Alarm (Audible & Visible) from any nuisance occurrence due to environmental condition.

2. AC _HVAC- Stulz make ;
   a. Energy-efficient hybrid technology of Precision air-conditioning to maintain the ideal room temperature and humidity conditions for the sensitive IT equipments.
   b. To supply cold air supply via raised floor upto IT equipments and to cut the data center electricity consumption by up to 40 %.
   c. To keep the IT available at all times.

3. Raised Floor- Mero ;

   To creates a space under the equipment to contain the multitude of cables (power and data) required to feed servers and other IT equipment; we installed
   Standard fire proof Raised Flooring and ceiling (with the standard Datacenter lighting and emergency lights) in Server Room (Data Center), Switch Room.

4. Bullet Proof Mirroring & PVC Door/Window;
   a. PVC Windows with Bullet Proof Mirror in the Data Center.
   b. PVC Window with double sided mirror in Network Operation Center (NOC) Room.
   c. PVC Door for Network Operation Room (NOC).

5. Servo Stablizer -Megisan make ;
   a. To Transform the infinite Raw Electrical Power into Finite protected Power.
   b. To effectively control the voltage variation and fluctuations to prevent the damages of high tech instruments
   c. For excellent energy saving of Data Centre electrical running cost per month.
   d. To effectively control the Transient Surges/Inrush current/High Voltage and Low Voltage protections for Data center non critical equipment's.

6. Fire Detection & Suppression- Shield make ;
   a. To prevent from physical effects of fire.
   b. To breakup up the fire at molecules level with the help of HFC227ea filled Gas cylinder in data center, Switch and power room.
   c. The versatile and reliable photoelectric smoke sensor with cross zoning feature to sense smoke and to enable the protection gas.
7. Distribution Panel –
   - To distribute Raw power for non critical load in Data Centre like Air conditioning, Lighting.
   - To distribute Regulated power supply from UPS to Data Centre Racks, Lighting and other critical equipment's.
   - To provide safety to equipment from over current/over loading.

8. Diesel Generator – Fg Wilson make
    - Supply and commissioning of New Dg.

9. Automatic Transfer Switch – Fg Wilson make
    - Fully automatic mains failure sensing and generator set start signal.
    - Digitally control panel to control the running of multiple Dg.
    - To synchronize the 2 Dg (Newly installed Dg with existing capacity) in such a way so that in case of failure of any one Dg another Dg will take place without any manual operation.
10. Passive Items

    a. Patch Panels and Cable Managers
    b. Cat 6 Keystones
    c. Cat6 Cable rolls
    d. Indoor Fibers
    e. Faceplates with dual RJ45 connectors in Data Centre Switch room and NOC room

11. Network Operating Centre
    a. Environment monitoring- AKCess Pro make;

        - To provide the backbone component for monitoring and controlling the data center environment.
        - To Monitor temperature, humidity, water leaks.
        - Monitoring and alerts on all activities.
        - Access Control integration with AKCess Pro Server Application
        - All devices link seamlessly to all manner of control devices
        - Access to Server room; Biometric Lock systems with five Multi Reader (Face, Finger, Card and PIN).

12. Civil Work
    a. Laying of underground Pipes for Power cabling.
    b. Making of Earth Pit as per Standard.