

Choice Case Study

Datacenter Build Out for Accenture

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Project Background & Challenge

Accenture was planning to build a datacenter for their global exchange and CIO project. After careful consideration and planning they had zeroed in on the Bang 6 facility at Bangalore as the site.

The key requirements included uninterrupted power design and solution following uptime standards, to meet the existing criteria and also to plug in more components in future. Requirements also included space optimization for the DC layout.

The numbers of racks proposed were more than 50 including the server and network racks. These racks were meant to keep Dell 2950 servers and some high end Cisco switches. The cable vendor was AMP by Tyco. The amount of cabling required was humongous due to their special application and the density of server clusters being planned to deploy. Also Accenture intended that they would remotely monitor the servers including remote shutdown/reboot of the servers.

All the above requirements posed, a big challenge for Accenture on areas such as:

- Right design
- Precise rack layout
- Selecting racks designed to meet the load density
- Manageable power distribution

Choice Role and Solution

Choice Solutions Ltd. deployed their consultant on-site to study the above requirements and proposed a 2 N solution for the DC room. It was with independent power paths and appropriate number of ATS switches for the single power chord equipment.

The layout was designed in such a way that it not only accommodates the required racks but also created more space for future deployment.

The issue of rack design was aptly met for by introducing COOL DATA racks; a brand which owned by CSL. The cabling challenges were met by understanding the nature of cabling and promptly redesigning our rack to make the best cable routing. This included supplying some innovatively designed cable managers and cable baskets.

The remote management of servers was best addressed by APC switched rack PDUs. These PDUs not only met their high dense power requirements per rack (32 A each PDU), but also provided solution for managing the servers over the network. These PDUs can be configured remotely to shutdown the individual power socket (i.e. shutting down the power to the server there by server shutdown) and also power on the same way.

To make it easy, the system administration community had proposed; unique hardware and software based monitoring solution that will seamlessly integrate all the power components, without any additional cabling. It will also acts as a single point of control for monitoring.

Further more, Accenture wanted to improvise the power design of CSL by demanding extremely complex engineering solution by making it a highly available solution, which the CSL team made it look simpler. CSL also designed more innovative ways of powering the DC. This solution was highly appreciated and accepted. These advancements are currently waiting for budget approvals.

Key Solution Components

- i. **Power Solution:** APC MGE UPS systems (2 no.) with a design that can accommodate 2 more numbers in future. Hence power up-gradation on the fly without shutdown is easy and also saves the cost of downtime
- ii. **Rack Layout:** The best optimized DC layout with maximum rack space being utilized, with COOL DATA racks.
- iii. **APC Switch:** PDU's for rack distribution and remote monitoring
- iv. **APC ATS:** Single corded equipment for redundancy
- v. **APC ISX Manager:** To monitor all the PDU's from a single console

A layout was designed that not only accommodates the required racks but also created more space for future deployment.

The best optimized DC layout with maximum rack space was utilized.

Client Benefit

Today Accenture has thickly populated DC with

- More space availability
- The best cabling routing without any major re-engineering
- The highest available power solution design
- Most comprehensive remote management solution

*The best cabling routing
without any major re-
engineering*

About Choice Solutions

Established in 1991 Choice Solutions Ltd. is a leading IT and Facilities solutions provider. Choice Solutions Ltd. business comprises of Six different practices, namely

IMS

- Desktop, Server, Network, Storage, Support, OS, Assets, Apps, Non IT
- Hardware - A-Add, M-Modify, I-Install, C-Change, R-Repair
- Assets, Security, Software Distribution, Upgrades

Networking

- Packaged Services Monitoring & Management
- Products, Security, Design, Deploy, Maintain
- Auditing & Compliance, SOC

Datacenter

- DC Audit, Monitor & Manage, Training
- Assess, Design, Built, Deploy, Disaster Recovery

Consulting

- Business Consulting, CIO & Technology Services, Physical Security, Power Devices, IT Consulting
- DC Consulting, ERP, CRM & Custom Apps

Cloud Computing

- Cold Site – Backup, Disaster Recovery
- Hot Site – HaaS, Software, Manage
- Public Cloud, Private Cloud, Hybrid Cloud
- CaaS, License Software, IaaS
- Disaster Recovery

Power

- Power Audit, Equipment Management
- Physical Security, Power Devices
- Power Saving Devices
- Design & Audit
- Renewable Energy Products