



Tier 3 National Data Center of Bangladesh A Stepping Stone to Achieve Digital Bangladesh Dream

*“Taking on Country’s National Data Center project was a courageous task. Spectrum had done a great job for it. Thanks to them”
- name*

Bangladesh Computer Council (BCC) is a statutory autonomous government organization. It evolved as the ICT department of the government and is mainly responsible to help the government in policy formulation, developing and implementing action plans to increase the use of ICT within the government departments and also amongst the citizens.



“The National Data Center established in BCC is the only TIER 3 Certified Data Center in the country. It is certified as TIER 3 for Architectural, Mechanical, Telecommunications and Electrical facilities by EPI, UK” – BCC Website

Challenges that Spectrum addressed

Bangladesh Computer Council previously held some national IT applications for Bangladesh Government. It also integrates some other autonomous government organization IT operations and provides access to those applications from all over the Bangladesh.

For this project they planned to accommodate the growth of the national applications and their uses. Also there was a need to connect different government IT projects together to build a single platform

Spectrum had ensured that BCC gets the benefit of the Data Center project as following

All types of applications can be developed and can be accessed by outside users
Consolidated connectivity between different government organizations to access any application that developed in these facility
Integration among different government projects like CCA, BanglaGovNet, InfoSarkar and so on to provide access from anywhere
Accommodates continuous growth of application and user needs. For example previously it used to provide 20 applications

which can be accessible from anywhere in world. This scalable and gradually increased application architecture had to be a robust, secure, easily expandable infrastructure, which provides not only network services also satisfies some mandatory needs for IT operation like uninterrupted power, Cooling, Security, Physical connectivity and 24/7 monitoring facility.

with 15 physical servers and after the project was completed national data center is connecting more than 200 applications along with 180 different servers

“Currently the data center hosts nearly all important national databases, websites and applications for ensuring Government to Citizen, Government to Government services”

Solution for Data Center Physical Infrastructure

Tier-3 certified Data Center with N+1 redundancy facility

Easily manageable & expandable cabling system with both Copper & Fiber in entire Data Center

Automatic fire fighting with environment monitoring and alert system

Redundant UPS with N+1 generator backup system for power supply

Centralized grounding facility for avoiding power surge or spike

Thumb reader and IP surveillance system for avoiding unauthorized access or events

Solution for Network Services

Multiple security layer architecture

Redundancy achieved through physical devices

Perform eBGP for connecting multiple upstream and provide 99% uptime through multihoming with load sharing

HSRP performing gateway redundancy for end nodes

ASA physical firewall with IPS and Firewall blade inside Core switch provide multiple security zone for both internal and hosted servers

Load balancer module on Core switches provide application load sharing between multiple nodes

On top of gateway router bandwidth manager ensure proper bandwidth usage per applications



“Bangladesh Computer Council has happily awarded the Operations and Maintenance contract for 3+3 years to Spectrum as the best vendor for this project”

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