

A photograph of two IT professionals, a woman and a man, standing in a server room. The woman is on the left, wearing a white blouse and dark trousers, pointing at a laptop held by the man. The man is on the right, wearing a grey sweater and dark trousers, looking at the laptop. They are standing in front of a row of server racks. The room is dimly lit with blue ambient lighting.

Building a next-generation **Data Center Network for Kakinada Smart City**

Kakinada, Andhra Pradesh

Project Background

STL has designed and deployed a truly smart city having IoT-driven civic infrastructure. All these applications run on a robust 120 Km Optical Fibre backbone and an MPLS network with an advanced CCC comprising a highly sophisticated data center network. With years of experience in data center design & implementation, we have delivered best-in-class network uptime and availability, and near-zero latency.

Challenges Faced and Mitigated

- Designing network infrastructure from scratch
- Building high-speed broadband infrastructure for IoT applications and devices
- Maintaining SLAs of Network availability and Uptime
- Building multi-layer security preventing cyberattacks

STL Solution

With STL's capabilities to build end-to-end smart city infrastructure, we have developed one of the most advanced command and communication centers. It has improved disaster management and emergency response system integrated into a sophisticated data center network. Our advanced security elements, such as firewalls, IDPS, GSLB, and SLB, ensure safe synchronization between the data center and disaster recovery and protection against cyberattacks. With state-of-the-art in designing and building capabilities of the data center, we have built a data center architecture that comprises two core switches for performing the task of main data processing element between the field components, servers and storage, operator consoles, and traffic from the Internet. This traffic from the internet is forwarded to the core switches using Fibre Optics.

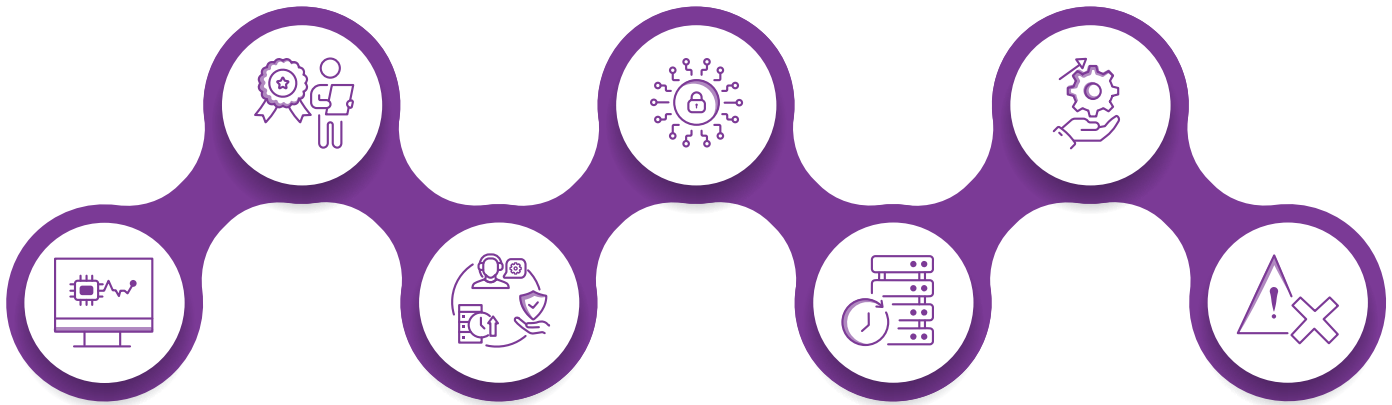


Impact Created

Certified & audited security by CERT-IN approved

Latest Firewalls & IDPS for **Cyber Threat Protection**

High availability configuration for all critical modules



24x7 NOC for Monitoring

SLA Network availability & Uptime of 99.99%

Real-Time Monitoring and **MTTR of ~4 Hours** in case of Hardware faults and **~2 Hours for Network link restoration**

No single point of failure