System Integration Services for Intelligent Networks

IT Infrastructure Services

Traditional data networks offer limited support to businesses today, which operate in a fast-paced digital age that calls for high application performance and network agility. Amid rising cost pressures, companies are looking to minimize the resources involved in network management and the upkeep of data centers. Further, legacy network infrastructure often lacks the necessary security provisions to protect internal applications from sophisticated cyber attacks.

Tata Consultancy Services' (TCS') System Integration Services for Intelligent Networks help companies transform their existing data networks using technologies like software-defined network and WAN (SDN and SD-WAN), and network function virtualization (NFV). We enable faster deployment of network services and leverage cloud-managed network devices to centrally supervise network access. Additionally, TCS helps implement advanced threat protection systems including robust multi-context firewalls, remote access and single sign-on (SSN), and cloud proxy solutions.

Overview

Organizations face multiple challenges in delivering high quality services to their customers if the performance of their applications and data networks is not up to the mark. Aging network infrastructure is usually unable to support the ongoing development and deployment of modern applications, which are necessary for delivering superior customer experiences. Provisioning network services is often complex, time consuming, and highly dependent on IT departments, which affects release cycles and reduces organizational productivity. Moreover, in the absence of effective security tools, sophisticated malware, frequent zero-day attacks, and other emerging cyber threats can expose a company to high information and financial risk.

TCS' System Integration Services for Intelligent Networks promote the upgrade and virtualization of legacy data networks to enable faster network provisioning and network mobility (NEMO), with programmatic management using SDN. We integrate your existing network landscape with next-generation platforms using cloud, high speed wireless based on IEEE 802.11ac, and virtual networks, while ensuring minimum system downtime. TCS' enterprise security experts can accelerate the deployment of security enhancement features like intrusion prevention systems (IPS), URL filtering, application visibility and control (AVC), and advanced malware protection (AMP) across technology platforms including Cisco, Juniper, and Checkpoint.

Our Solution

TCS provides expert recommendations for end-to-end network transformation, by conducting thorough due diligence and identifying high-potential areas for modernization. Our approach focuses on:

- **Technology implementation:** Integrating with and migrating to an optimized target network with maximum virtualization, enhanced security, and agility.

- **Cost optimization:** Virtualizing network components, and establishing unified security protection using advanced firewalls across technology platforms like Cisco, Juniper, Palo Alto, and Checkpoint. Using cost-effective technologies that do not require high capital expenditure at the outset.

- **Industry best practices:** Implementing productivity standards through process simplification, better workforce management, efficient monitoring and reporting, and effective customer segmentation and enterprise treatment strategies, while committing to continuous improvement.

- **Resource utilization:** Maximizing span of control across L1, L2, and L3 service tiers, and enabling resource pooling and cross-skill training programs.

Benefits

With TCS' System Integration Services for Intelligent Networks, you can reap the following benefits:

Increase customer satisfaction: Offer a wide range of front-end applications and services to your customers by leveraging an agile, next-generation network controlled by application owners. Enhance application availability and reliability for an exceptional customer experience.

Optimize network costs: Reduce capital expenditure by installing pay-as-you-grow technology platforms that eliminate the need for acquiring purpose-built, application specific networking hardware. Minimize manual effort through central management and programmatic provisioning, reducing IT personnel cost. Decrease maintenance expenses by reducing the number of physical switches, routers, and servers, with network virtualization.

Enhance network security: Strengthen security capabilities with IPS, IDS, URL Filtering, AMP, and AVC features.

Ensure superior business continuity: Enable smooth migration to target network without disrupting ongoing business operations.

The TCS Advantage

By partnering with TCS, you can leverage the following differentiators:

- **Technical expertise:** Our subject matter experts, trained and certified in various technologies including Cisco, Juniper, F5, and Citrix, will help you maximize the return on your technology investments. We have a robust data network framework for designing high-performance network architecture and rapidly deploying core technologies. TCS has a vast experience in integrating disparate network components such as load balancers, firewalls, IPS, routers, switches, and cloud to ensure system effectiveness.

- **Proven delivery capabilities:** We have established a well-structured communication and issue escalation process for all our engagements to enable better coordination and effective incident management. Our global delivery model – spanning centers in India, China, Europe, North America, and Latin America – helps in providing consistent, high quality services to our clients the world over. Our pre-sales and solution design teams have strong language capabilities, technical skills, and local business knowledge to help you find the most appropriate operating model, tailored to your specific business requirements.

- **Strategic partnership:** We have a robust, collaborative working relationship with industry-leading data network product vendors including Cisco, Juniper, VMWare, F5, Citrix, and Checkpoint.

TATA CONSULTANCY SERVICES

Experience certainty.

Awards & Recognition

| Brand Finance #1 Most Powerful IT Services Brand 2016 | Forbes 2015 THE WORLD'S MOST INNOVATIVE COMPANIES | JK Superbrands 2016 | top EMPLOYER GLOBAL 2016 CERTIFIED EXCELLENCE IN EMPLOYEE CONDITIONS |

To know more
Visit the **Technology Operations** page on **www.tcs.com**
Email: **techops.marketing@tcs.com**

About Tata Consultancy Services Ltd (TCS)

Tata Consultancy Services is an IT services, consulting and business solutions organization that delivers real results to global business, ensuring a level of certainty no other firm can match. TCS offers a consulting-led, integrated portfolio of IT and IT-enabled infrastructure, engineering and assurance services. This is delivered through its unique Global Network Delivery Model™, recognized as the benchmark of excellence in software development. A part of the Tata Group, India's largest industrial conglomerate, TCS has a global footprint and is listed on the National Stock Exchange and Bombay Stock Exchange in India.

For more information, visit us at **www.tcs.com**

IT Services
Business Solutions
Consulting