

Case Study

Bajaj Capital
IT Infrastructure

Targus Tackling Unmanaged Switches, Unstructured Cabling, and Security Challenges

Targus Technologies revamped Bajaj Capital's LAN and security by configuring high-availability Juniper firewalls, core switches, VLANs, and wireless solutions, ensuring redundancy and secure, efficient network performance.

About Bajaj Capital

Bajaj Capital Ltd is one of India's leading Investment Advisory and Financial Planning firms, also recognized as a SEBI-approved Category I Merchant Banker. The company provides tailored investment advice and financial planning services to individual investors, corporate entities, institutional investors, Non-Resident Indians (NRIs), and High Net-Worth Individuals (HNIs). As a prominent player in India's investment services sector, Bajaj Capital is involved in the distribution of mutual funds, insurance, fixed deposits, bonds, loans, and more. With a workforce of over 3,500 employees, the company has a strong pan-India presence across more than 60 locations.

Bajaj Capital Network Overhaul

Previously, Bajaj Capital's network relied on unmanaged switches and unstructured cabling. They operated on a flat network with the same IP schema used across all departments, including servers. The network was powered by a mix of switching products from Linksys and D-Link, and there were no security gateway devices at the perimeter level. As a result, there were no restrictions on inbound or outbound traffic, and public IPs were used on the servers to provide remote access for users and clients.

The entire network ran on unstructured Ethernet cabling, leaving no alternative solutions in case of connectivity issues, such as connecting to network resources like printers and servers. Additionally, Bajaj Capital hosted several business-critical servers, including web servers, mail servers, ERP servers, and database servers, all running essential applications. The IT team faced significant challenges maintaining the network, with frequent issues causing considerable strain on resources.

Targus Technologies implemented perimeter security, core switching redundancy, comprehensive documentation, efficient troubleshooting, and scalable network changes, ensuring high availability, easy maintenance, and flexibility to meet evolving business needs.

Key Challenges

After a discovery call, Targus Technologies identified the following challenges in their IT infra:

- Unmanaged, unstructured, and undocumented cabling
- Mixed cables (Cat 3, 5, and 6) used
- Lack of network connectivity diagram, leading to longer turnaround times
- LAN security vulnerabilities
- No wireless connectivity for redundant network access
- Virus infections on servers and end-user systems due to absence of security/UTM devices
- Internet bandwidth choking, preventing LAN/WAN users from accessing the internet
- No network segmentation (VLANs) implemented

Transformation of LAN & Security Infrastructure

Targus Technologies overhauled Bajaj Capital's LAN and security infrastructure to enhance performance and reliability:

- Redesigned cabling and configured Juniper firewalls and core switches in a high-availability architecture to ensure redundancy in case of hardware failure.
- Deployed Juniper EX4200 at the core layer and EX2200 at the edge layer for optimal network performance.
- Configured VLANs, Inter-VLAN routing, Link Aggregation Control Protocol (LACP), and Spanning Tree Protocol (STP) to reduce network congestion and eliminate broadcast loops.
- Installed Juniper SRX240 Firewall at the network perimeter, implementing Layer 4 security and access control lists to regulate authorized access and prevent internet bandwidth choking.
- Set up a wireless solution using Juniper equipment to provide redundant connectivity in case of Ethernet failure, along with a wireless controller and 8 access points.
- Integrated Juniper Network and Security Management System for centralized monitoring of events, alerts, logs, and reports across all Juniper devices.

Achievements

- **Enhanced Network Availability:** Perimeter security and core switching with redundancy ensure high availability, minimizing downtime and maintaining uninterrupted network performance.
- **Comprehensive Documentation:** Clear and detailed network documentation enables efficient management, easy reference, and streamlined maintenance.
- **Efficient Troubleshooting:** Simplified troubleshooting for both active and passive network components, reducing response time and improving system reliability.
- **Scalable Network Changes:** Seamless network scalability with easy move, add, and change capabilities, ensuring flexibility as business needs evolve.