

INTRODUCTION

EPFO, a vital social security organization in India, recognized the necessity for advanced network management solutions to ensure the efficiency and reliability of their regional communications networks.

PROBLEM STATEMENT

EPFO encountered challenges such as the absence of centralized monitoring, managing a sophisticated IP/MPLS Network Infrastructure and lack of awareness regarding the status of their nodes. They are also not able to do live monitoring of the websites status whether they are up or down. They relied on manual reporting for availability and SLA monitoring, without the aid of centralized dashboards, helpdesk portals, or remote configuration managers. To address these issues, they require a comprehensive solution that resolves these monitoring and reporting gaps efficiently.

SOLUTION TO THE PROBLEM

TechBridge's solution encompasses the deployment of critical components:

Network Management System (tbXMS):

- Monitors the network infrastructure.
- Conducts fault and performance management for IP/SNMP-enabled devices.
- Supports various protocols, including SNMP and ICMP.
- Parameters monitored include CPU, memory, link status, bandwidth, errors, losses, and traffic behavior.
- Services provided: Network monitoring, device detection, performance analysis, device management, and fault management.

tbConfigManager:

• Automated configuration deployment and centralized configuration management capabilities.

URL Monitoring:

 Monitor their websites being up or down and response time.

Industry

• Financial Service

The Company

The Employees' Provident Fund Organisation (EPFO) is one of the two main social security organization under the Government of India's Ministry of Labour and Employment and is responsible for regulation and management of provident funds in India, the other being Employees' State Insurance. Its establishment dates back to 1951 through the enactment of the Employees' Provident Fund and Miscellaneous Provisions (EPF&MP)





Server Performance Monitoring (tbXMS):

- Monitors server resources for optimal performance.
- Tracks CPU utilization, disk utilization, CPU load, memory utilization, and operating system parameters.
- Applications Manager provides real-time monitoring for metrics such as memory utilization, disk I/O, network interface, hardware health, and more.

Helpdesk System (tbITSM):

- Provides incident management, problem management, and change management.
- Implements SLA tracking for incident resolution time.
- Manages ticketing and automatically creates tickets for NMS-detected issues.
- Manages assets and hardware inventory.

Unified Dashboard (tbDashboard):

- Presents a centralized view of critical metrics and data.
- Custom reports for insightful data presentation.
- User-specific dashboards tailored to individual needs.

The proposed solution ensures end-to-end configuration, integration, and testing to meet specific organizational requirements. It addresses challenges related to high availability, node provisioning, monitoring protocols, fault and performance management, incident resolution, problem identification, change control, and long-term support. TechBridge aims to establish a resilient and efficient IT infrastructure aligned with organizational goals.

BENEFITS TO THE CUSTOMERS

- Enhanced Network Reliability: Continuous monitoring and fault management ensure reduced downtimes, improving network availability.
- Monitoring Server Performance: Proactive tracking and monitoring of server metrics maintain a smooth end-user experience.
- Efficient IT Support: Streamlined incident and problem management, along with SLA tracking, enhance the efficiency of IT support processes.
- Centralized Monitoring and Reporting: The Unified Dashboard provides a centralized view and custom reports, aiding informed decision–making.
- User-Specific Dashboards: Tailored dashboards for individual users enhance the user experience, providing relevant insights based on specific roles.

Dashboard



