



# tbXMS2.0: Network Monitoring System

## Introduction

TechBridge introduces tbXMS2.0, a unified FCAPS platform designed to fulfill all your requirements for establishing a robust and secure IT infrastructure, encompassing network management and monitoring, protocol management, data flow analysis, and integration with ITSM. Gain comprehensive insights into your infrastructure and processes, empowering you to enhance operational efficiency, streamline operations, foster innovation, elevate customer satisfaction, and mitigate risks effectively.

## Distinctive Features

- **Unified FCAPS Platform:** Centralizes Fault, Configuration, Accounting, Performance, and Security Management.
- **Proactive Service Assurance:** Identifies potential issues before they impact services, ensuring operational reliability.
- **Network Discovery and Topology Mapping:** Provides comprehensive network component identification and visualization.
- **Proactive Fault and Performance Management:** Actively monitors and resolves faults and performance issues in real-time.
- **Root Cause Analysis:** Capable of identifying the underlying causes of network issues for efficient resolution.
- **Error and Performance Management:** Offers functionalities for managing errors and optimizing performance.
- **Seamless Integrated Monitoring:** Monitors various aspects of the network with intuitive simplicity.
- **Real-time Monitoring:** Continuously monitors network performance and availability in real-time.
- **Event-Driven Operations:** Executes operations based on network events, with support for autocorrelation.

## Key Benefits

- Single Sign On (SSO)
- Access Management
- Biometric Authentication
- Security & Confidentiality
- Accounting Management
- MFA (Multi Factor Authentication)
- Personal Data Handling Compliances
- Seamless User Management Integration

## Highlights

- **API Based Monitoring**
- **SAP Hana Monitoring**
- **Application Monitoring**
- **SNMP Based Monitoring**
- **Drilldown view of Malfunctioning Systems**



- **Workflow Automation:** Streamlines workflows for enhanced operational efficiency.
- **Distributed Monitoring:** Capable of monitoring networks across distributed environments.
- **Role-Based Access Control:** Ensures file integrity with role-based access control mechanisms.
- **Secure Login with Captcha** for enhanced security.

## BENEFITS

- Automated service fulfillment enhancing service availability.
- Ensured service reliability for superior customer experience.
- Proactive issue resolution in real-time.
- Enhanced understanding of event interdependencies.
- Detailed insight into system failures through drill-down views.
- Holistic end-to-end network management.
- Visual representation of element relationships (Physical/Logical/Virtual) and Services.
- Compliance and IT security assurance.
- Scalable solutions adaptable to future needs.
- Streamlined operational processes from a centralized platform.
- Data-driven decision-making facilitated through trend analysis.
- Secure Login with Captcha for enhanced security.
- User-friendly interface with both light and dark mode options.
- Real-time and historical performance monitoring for comprehensive insights.
- Predictive performance monitoring using AI/ML for proactive network management.



### BIG SAVINGS

- **Reduced Downtime**
- **Improved Resource Utilization**
- **Enhanced Security**
- **Increased Efficiency**
- **Improved Planning and Budgeting**
- **Secure Interface**
- **New User-Friendly Design**



### SERVICE ASSURANCE

**Ensure uninterrupted service delivery, identify bottlenecks, and take proactive measures on the integrated FCAPS platform to uphold the expected service levels and manage faults and performance effectively.**

# Key Advantages:

## **Scalability:**

- Seamlessly adapts to networks of varying sizes, ensuring effectiveness as networks evolve.

## **Customization:**

- Tailor the platform to specific organizational requirements for enhanced efficiency.

## **Comprehensive Management**

- Covering fault detection, performance monitoring, configuration management, accounting, and security.

## **Holistic Monitoring:**

Offers a complete view of infrastructure elements for proactive issue resolution.

## **Reliability and Security:**

Emphasizes robust management and monitoring capabilities for enhanced protection.

## **Operational Efficiency:**

Streamlines processes, drives revenues, and enhances business performance.

## **Risk Mitigation:**

Provides real-time insights into network performance and security for proactive risk management.

## **User-Friendly Interface:**

Ensures efficient navigation and task execution for users.

## **AI/ML Integration:**

Harnesses the power of Artificial Intelligence and Machine Learning for advanced analytics and predictive capabilities.

## **Granular Reporting:**

Delivers detailed and customizable reports for in-depth analysis and decision-making.

## **Secure Login with Captcha:**

Enhances security with secure login mechanisms including Captcha verification.

## **Light Mode and Dark Mode:**

Offers both light and dark mode interfaces for user comfort and preference.

## **Threshold Configuration:**

Allows customizable threshold settings for performance metrics and alerts.

## **Performance Metrics Monitoring:**

Enables real-time monitoring of critical performance metrics.

## **Historical Data Analysis:**

Facilitates analysis of historical data for trend identification and decision-making.

## **Predictive Performance Monitoring:**

Uses AI/ML to predict performance issues and optimize network operations proactively.

# Fault Management with tbXMS2.0: Ensuring Network Reliability

In today's complex network environments, swift detection and resolution of faults are paramount to maintaining operational efficiency and ensuring maximum uptime. tbXMS2.0 offers a comprehensive Fault Management feature, empowering organizations to detect, capture, and resolve faults across diverse network elements and topologies seamlessly.

## Key Highlights of Fault Management:

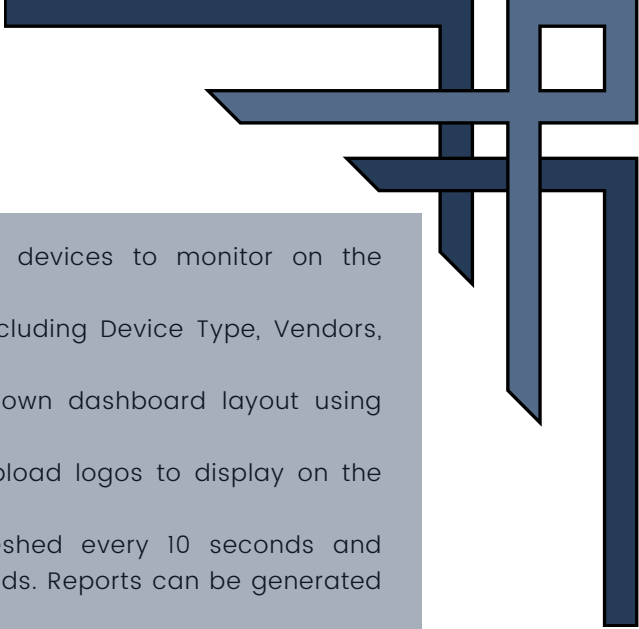
- 1.High Scalability:** With tbXMS2.0, organizations can rapidly identify faults even in expansive networks. Its high scalability ensures efficient fault detection regardless of network size or complexity.
- 2.Error Identification:** The platform excels in identifying errors related to logical service flows, enabling organizations to address issues promptly and effectively.
- 3.Compact Hardware Footprint:** tbXMS2.0 maintains a compact hardware footprint, ensuring cost-effectiveness without compromising on performance. This feature makes it an ideal solution for organizations with budget constraints.
- 4.Seamless Integration:** tbXMS2.0 seamlessly integrates with tbITSM or third-party ticket management systems, streamlining fault management workflows and enhancing collaboration across IT teams.

# Performance Management with tbXMS2.0: Ensuring Optimal Network Health

Efficiently managing, monitoring, and controlling network-wide health and availability is crucial for organizations to meet service level agreements and deliver optimal performance to users. tbXMS2.0 offers a robust Performance Management feature, empowering organizations to collect and analyze network information comprehensively, encompassing parameters such as packet loss, throughput, response time, and utilization.

## Key Highlights of Performance Management:

- 1.Capacity Planning:** tbXMS2.0 facilitates capacity planning through proactive monitoring, allowing organizations to anticipate and address potential capacity issues before they impact network performance.
- 2.Comprehensive Visibility:** Organizations gain comprehensive visibility into network performance, enabling them to preempt congestion and optimize resource utilization effectively.
- 3.Timely Issue Resolution:** tbXMS2.0 ensures timely detection, analysis, and resolution of network issues through proactive alerts and remediation actions, minimizing downtime and ensuring uninterrupted service delivery.
- 4.Global/Integrated Reports:** The platform provides global and integrated network-wide performance reports and dashboards, offering insights into overall network health and performance trends.
- 5.Real-time Monitoring:** With tbXMS2.0, organizations can monitor crucial metrics such as error rates, packet loss, and discard in real-time, enabling prompt action to maintain optimal network performance.
- 6.Seamless Integration:** tbXMS2.0 seamlessly integrates with multiple providers, reducing network complexity and enhancing interoperability across diverse network environments.
- 7.Scalability:** The platform's scalability is enhanced with multiple remote bollards, allowing organizations to expand their monitoring capabilities as their network grows.
- 8.Adaptive Thresholds:** The platform employs adaptive and intelligent thresholds for real-time monitoring and notification of key performance indicators, ensuring proactive management of network performance

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9. **Business Criticality:** Users can choose a maximum of 3 devices to monitor on the dashboard home page and define parameters for monitoring.
  10. **Master Data:** Allows users to add different device types, including Device Type, Vendors, and Vendor Model for monitoring through tbXMS.
  11. **Custom Dashboard Layout:** Enables users to design their own dashboard layout using provided widgets, saving unique layouts for individual users.
  12. **Customer Logo:** After deployment, users can select and upload logos to display on the dashboard and reports.
  13. **Performance Dashboard:** Includes live data display refreshed every 10 seconds and historical data presented as a Line Graph for user-defined periods. Reports can be generated from this section.
  14. **Performance Metrics Monitoring:** Enables real-time tracking of critical performance metrics to ensure optimal network health.
  15. **Historical Data Analysis:** Facilitates the analysis of historical performance data for trend identification and forecasting.
  16. **Predictive Performance Monitoring:** Uses AI/ML algorithms to predict potential performance issues and optimize network operations proactively.

## Key Monitored Performance Statistics:

- CPU Utilization
- Disk Utilization
- Network Utilization
- Memory Utilization
- Network Availability
- Resource Availability
- Database Availability
- Application Availability
- Port Availability

## Security Management

Control access to network resources, authenticate users, and safeguard network information against unauthorized access and security threats.

### Key Highlights:

- Role-based access control ensuring restricted access to network resources.
- Protection against virus attacks and unauthorized access.
- Granular control over user access to network assets.
- Proactive alerts for security breaches and unauthorized access attempts.
- Log management facilitating compliance and IT security audits.
- Monitoring of firewall rule changes to maintain security integrity.
- Secure Login with Captcha: Enhances security with Captcha verification during login.
- User-Friendly Interface: Includes both light mode and dark mode options for user preference.

## Master Data:

Users can leverage tbXMS2.0 to manage comprehensive master data related to network devices. This feature allows users to add different device types such as Device Type, Vendors, and Vendor Models for monitoring purposes. By defining these parameters within tbXMS2.0, organizations can maintain accurate and detailed information about their network infrastructure, facilitating efficient management and monitoring.

## Performance Dashboard:

tbXMS2.0 enhances performance monitoring capabilities with its advanced Performance Dashboard. The dashboard includes two main sections:

- 1.Live Data Monitoring:** Provides real-time data of selected devices refreshed every 10 seconds, offering immediate insights into current network performance.
- 2.Historical Data Analysis:** Displays historical performance data as a Line Graph over user-defined time periods. This section enables organizations to analyze performance trends and patterns, supporting informed decision-making and proactive management strategies.

## Integration with ITSM Tools: Seamlessly Aligning Network Management with IT Service Management

tbXMS2.0 offers seamless integration with IT Service Management (ITSM) tools, bridging the gap between network management and IT service delivery processes. This integration empowers organizations to streamline workflows, enhance collaboration between IT teams, and improve overall operational efficiency.

## Network Discovery

Automatically detect network devices across physical, virtual, and cloud environments, facilitating proactive monitoring and providing complete visibility and control over your IT infrastructure.

## Network Inventory

tbXMS2.0 empowers organizations to efficiently monitor and manage Network Inventory such as servers, operating systems, VMware, and more, ensuring better control over the IT infrastructure and minimizing downtime.

## Network Topology

tbXMS2.0 empowers users to design and manage network layouts manually, enabling them to achieve organizational network goals with precision and efficiency. Key features include:

- **Manual Topology Mapping:** Users can manually create and customize topology maps of network nodes, allowing for tailored visualization and management of network architecture.
- **Custom Layouts:** Users have the flexibility to create and save customized layout configurations as defaults, ensuring consistent and personalized network monitoring experiences.

## Key Highlights:

- Comprehensive Network Inventory Tracking: Seamlessly monitor Network Inventory resources including servers, operating systems, VMware, and other critical Network Modules within your network infrastructure.
- Automatic Software Asset Detection: tbXMS2.0 automatically detects software assets, facilitating accurate tracking and management of software installations across the network.
- Software Usage Monitoring: Ensure compliance with software licensing agreements by monitoring software usage and ensuring proper license allocation across the organization.
- Integrated Browser Remote Desktop: Access integrated browser remote desktop functionality for efficient monitoring and diagnostics of network assets, enhancing troubleshooting capabilities and minimizing downtime.

## Conclusion

TechBridge's tbXMS2.0 solution provides a comprehensive suite of tools and functionalities to address the diverse needs of modern IT infrastructures. With its unified FCAPS platform, organizations can enhance operational efficiency, ensure network reliability and security, and deliver superior customer experiences. Experience streamlined network management and monitoring with tbXMS2.0 for a competitive edge in today's dynamic business landscape.

# Dashboard



# ABOUT TECHBRIDGE

TechBridge is the World's leading Product & Solutions Company. Data Center Applications, Collaboration and Real Time Communication. DC Management and Monitoring, Disaster Management, Security, Collaboration and Cloud. Its market-leading Network Modernization, Unified Communications, Mobility and Embedded Communications solutions enable customers to quickly capitalize on growing market segments and introduce differentiating products, applications and services. We are an expert and leader in Government Solutions, Smart City Solutions, Data Centers and Large Enterprises. We do custom applications also, as per the customer requirements.

## CERTIFICATES:-

