TRANSFORMING REMOTE DESKTOP AND PATCH MANAGEMENT IN CRIS (PMS) PROJECT-<u>CASE STUDY</u>

INTRODUCTION

TechBridge, a leading OEM specializing in EMS, CyberSecurity, and Productivity solutions, partnered with the Centre for Railway Information Systems (CRIS) to revolutionize its Parcel Management System (PMS). The CRIS PMS plays a pivotal role in managing parcel logistics and operations across the railway network, necessitating robust IT infrastructure and Remote Desktop Access streamlined for efficiency, augmented with AI and automation, for seamless Patch Management.

PROBLEM STATEMENT

The CRIS Parcel Management System (PMS) project encountered several challenges related to remote desktop access and patch management, including:

Limited Remote Access:

Inadequate remote desktop access tools hampered railway personnel's ability to access critical systems and data from remote locations, impacting parcel logistics and operational efficiency.

Security Vulnerabilities:

Outdated software and unpatched systems posed security risks, leaving the railway network vulnerable to cyber threats and potential disruptions to parcel services.

Patch Management Complexity:

Manual patch management processes were time-consuming and error-prone, making it difficult to ensure timely deployment of security patches and updates across the railway IT infrastructure.

SOLUTION TO THE PROBLEM

TechBridge addressed these challenges by deploying tbRMS, its integrated remote desktop and patch management tool, tailored to meet the specific needs of the CRIS Parcel Management System (PMS) project:

Integrated Remote Desktop Access:

tbRMS provided secure and seamless remote desktop access to railway personnel, enabling them to access critical systems and data from any location with internet connectivity, improving parcel logistics and operational efficiency.

Industry

• Transportation Industry

The Company

 CRIS (Centre for Railway Information Systems) is an organization under Ministry of Railways. CRIS is a unique combination of competent IT professionals and experienced Railway personnel enabling it to successfully deliver complex Railway IT systems in core areas. Since its inception, CRIS is developing/maintaining softwares for the following key functional areas of the Indian Railways.



Automated Patch Management:

tbRMS automated the patch management process, facilitating the timely deployment of security patches and updates across the railway IT infrastructure to mitigate security risks and ensure system reliability.

Centralized Management Console:

A centralized management console provided administrators with real-time visibility into the patch status of all devices, enabling proactive monitoring and management of patch deployments.

Policy-Based Patching:

Customizable policies were implemented to prioritize and schedule patch deployments based on the criticality and severity of vulnerabilities, ensuring efficient use of resources and reducing the risk of exploitation.

Reporting and Analytics:

Comprehensive reporting and analytics functionalities provided insights into patch compliance, vulnerability status, and patch deployment effectiveness, enabling informed decision-making and continuous improvement of patch management processes.

OUTCOMES ACHIEVED:

Improved Remote Access:

tbRMS, bolstered by advanced AI and automation, provided railway personnel with secure and reliable remote desktop access. This augmentation enhanced parcel logistics and operational efficiency by enabling seamless access to critical systems and data from remote locations.

Enhanced Security:

Leveraging advanced AI and automation, tbRMS automated patch management, ensuring the railway IT infrastructure remained secure and protected against cyber threats. This approach minimized the risk of disruptions to parcel services, thereby enhancing customer satisfaction.

Streamlined Patch Management:

With advanced AI and automation, tbRMS streamlined patch management processes through automation and centralized management capabilities. This optimization reduced manual effort, minimized the risk of errors, and led to improved system reliability and performance.

Compliance Assurance:

Real-time visibility and reporting capabilities, enhanced by AI and automation, facilitated compliance with regulatory requirements and industry standards. This ensured a secure and resilient railway IT environment, maintaining the integrity of parcel operations.

Cost Savings:

Integration of advanced AI and automation resulted in efficient patch management and reduced downtime, contributing to cost savings for the CRIS Parcel Management System (PMS) project. This optimization optimized resource utilization and improved operational efficiency.





