

A close-up photograph of a person wearing an orange hard hat and clear safety glasses. They are looking down, focused on a task. They are wearing a dark blue work shirt. The background is blurred.

ASSET MANAGEMENT SYSTEM MODERNIZATION FOR A CONSTRUCTION MATERIAL MANUFACTURER BASED IN AUSTRALIA

Case Study.

ABOUT THE CUSTOMER

Boral limited is headquartered in Sydney, with 16,000 employees working across 700 operational sites. They primarily deal with building products and construction materials.

BUSINESS SCENARIO

Boral needed to transform their asset management solution to address:

- The asset management solution was deployed in multiple sites and with each site working in silos and causing a lack of visibility into asset usage.
- Older version of asset management product running in End of Life (EOL) stage.
- On-premise solution did not allow standardization of maintenance practices, effective utilization of resources across locations, and did not allow for digitization or technical growth.
- Poor visibility into asset health metrics
- Increased total cost of ownership (TCO) towards maintenance and operations
- Poor end user experience
- Lack of scheduled maintenance cycles causing higher downtime
- Higher mean time to repair (MTTR)

OUR SOLUTION

Tech Mahindra has followed their cloud migration framework (MAC Tool Kit) to migrate Boral's asset management solution and also re-platform the database (DB) from Oracle to DB2.

- 01 This migration was executed with an exhaustive approach that included identifying the necessary data from the existing system, extracting data, cleansing it, and transforming the data through Maximo Integration Framework (MIF).
- 02 HA (High Availability) as well as improved network latency performance using Amazon Route53, Amazon ELB and Amazon CloudFront (CDN) was implemented
- 03 IBM DB2 database was deployed on Amazon EC2. Database replication was enabled between AZ's and supported the app in active/passive methodology.
- 04 Mulesoft middleware is used as an enabler for data communication between Maximo and Oracle financial application hosted in customer's datacenter.
- 05 AWS EC2 systems manager was used to patch the operating system (OS) periodically. Tech Mahindra also created the patch baselines and maintenance windows as per the standards set forth for patching on-going basis.
- 06 Patches were scheduled to update the non-production servers initially, followed by deployment to production servers per TechM mCOPS Tech Mahindra's managed Cloud OperationS (mCOPS) standard operating procedures.

AWS SERVICES CONSUMED

- Amazon EC2
- Amazon EBS
- Amazon ELB
- Amazon CloudWatch
- AWS Cloud Trail
- AWS Config
- AWS Trusted Advisor
- AWS Lambda
- AWS SNS

- AWS VPC
- AWS CloudFront
- AWS SES
- AWS WAF
- Amazon S3
- AWS SSM
- AWS VPN
- AWS S3 Glacier
- AWS CloudFormation

THIRD PARTY SOLUTION

- IBM Database Conversion Workbench (DCW)
- Maximo Integration Framework (MIF)

VALUE DELIVERED

- Migrated entire asset management system to AWS.
- Latest version of Maximo (7.6.0.8) has been implemented on AWS .
- Migrated 20+ years of multi-site data into a single data lake-style repository.
- Improved the mean-time to repair as well as reduced the long maintenance cycle as the customer is now able to provision and replace servers quickly.
- Significantly improved the availability and reliability of the application using AWS native services such as ELB and caching technologies for content delivery.
- Due to the services and features provided by AWS, Tech Mahindra could provide application availability at 99.95% to the customer at the lowest cost.
- Improved user experience with Amazon CloudFront using edge locations, and the ability to lock down the coverage area using geo restriction features.
- Environments were secured using AWS best practices and recommendations incorporated with AWS WAF Dynamic rules were updated using AWS Lambda along with IAM, AWS Config and AWS CloudTrail
- Tech Mahindra was able to overall TCO, enhanced the security posture, improved the overall response time,
- enhanced security, reduced RPO/RTO, and
- improved availability.

REDUCED TCO

- Provided enhanced security
- Reduced RTO & RPO
- Highly available (HA) and cost-effective solution
- Faster response time



About Tech Mahindra

Tech Mahindra offers innovative and customer-centric digital experiences, enabling enterprises, associates and the society to Rise. We are a USD 5.1 billion organization with 141,100+ professionals across 90 countries helping 1123 global customers, including Fortune 500 companies. We are focused on leveraging next-generation technologies including 5G, Blockchain, Cybersecurity, Artificial Intelligence, and more, to enable end-to-end digital transformation for global customers. Tech Mahindra is one of the fastest growing brands and amongst the top 15 IT service providers globally. Tech Mahindra has consistently emerged as a leader in sustainability and is recognized amongst the '2021 Global 100 Most sustainable corporations in the World' by Corporate Knights. With the NXT.NOW™ framework, Tech Mahindra aims to enhance 'Human Centric Experience' for our ecosystem and drive collaborative disruption with synergies arising from a robust portfolio of companies. Tech Mahindra aims at delivering tomorrow's experiences today, and believes that the 'Future is Now'.

We are part of the Mahindra Group, founded in 1945, one of the largest and most admired multinational federation of companies with 260,000 employees in over 100 countries. It enjoys a leadership position in farm equipment, utility vehicles, information technology and financial services in India and is the world's largest tractor company by volume. It has a strong presence in renewable energy, agriculture, logistics, hospitality and real estate. The Mahindra Group has a clear focus on leading ESG globally, enabling rural prosperity and enhancing urban living, with a goal to drive positive change in the lives of communities and stakeholders to enable them to Rise.

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