MiCORE SOLUTIONS™

CASE STUDY

MANUFACTURING

OVERCOMING PERFORMANCE AND HIGH AVAILABILITY CHALLENGES

Background

A prominent player in the manufacturing industry specializing in the production of industrial machinery and equipment has a diverse portfolio of products and global operations. They rely heavily on their data infrastructure to support production planning, quality control, supply chain management, and customer engagement. However, they were faced with persistent challenges related to database performance and high availability. Frequent performance bottlenecks and downtime were negatively impacting production efficiency, leading them to seek a solution to address these issues.

Challenges

Performance Bottlenecks:

The company's database systems- which included a mix of on-premise and cloud-based databases- experienced frequent performance bottlenecks that resulted in slower production processes and increased response times for critical applications.

High Downtime:

Planned and unplanned downtime was causing significant disruptions to manufacturing operations. Even brief interruptions led to loss of productivity and potential production delays that directly impacted topline revenue.

Resource Scalability:

Existing database infrastructure was not flexible enough to accommodate fluctuations in demand. This led to underutilized resources during periods of low demand and resource constraints during peak production times.

Solution

Comprehensive Assessment:

Conducted a thorough assessment of their database environment to identify performance bottlenecks, scalability issues, and areas of improvement.

Proactive Performance Monitoring:

Continuous monitoring of database performance with real-time alerts and proactive measures to address issues before they impacted operations.

Performance Tuning:

MiCORE Solutions' database experts performed fine-tuning of configurations, optimized queries, and adjusted indexes to enhance overall performance.

High Availability Solutions:

Implemented high availability and disaster recovery solutions to minimize downtime and ensure continuous operation including failover strategies and automated backups.

Resource Scaling:

Efficiently managed resource allocation- scaling up or down as required to accommodate fluctuations in demand during peak and off-peak periods.

24/7 Support:

Provided 24/7 support to address any database-related issues promptly, reducing the impact of potential disruptions.

Results

- **Improved Performance:** The proactive monitoring and performance tuning efforts led to a significant improvement in database performance. Critical applications and processes ran faster, resulting in increased production efficiency.

- **High Availability:** Implementation of high availability solutions minimized unplanned downtime, ensuring manufacturing operations could continue uninterrupted even during system failures.

- **Resource Scalability:** The company's database resources were optimized for peak demand, reducing unnecessary costs during slower periods while ensuring adequate resources during production peaks.

- **Reduced Disruptions:** The 24/7 support and proactive monitoring reduced the frequency and duration of disruptions, increasing overall operational stability..

- **Enhanced Productivity:** With improved database performance and high availability, the company could meet production targets more consistently, enhancing productivity and customer satisfaction.

Conclusion

By leveraging MiCORE Solutions, this prominent Manufacturing Corporation successfully overcame performance and high availability challenges that were impacting their operations. This partnership allowed them to streamline operations, reduce disruptions, optimize resource utilization, and enhance overall productivity. The company continued to thrive in the competitive manufacturing industry while maintaining the performance and availability of their critical data infrastructure.

About MiCORE

For over 15 years, MiCORE Solutions has provided specialized database and cloud infrastructure managed support services for Oracle, Microsoft SQL Server, major open-source databases (MySQL, PostgresSQL, MariaDB), and AWS databases. MiCORE provides database cloud architecture, migration, and management across AWS, Azure, and Oracle Cloud. At MiCORE Solutions, we leverage our deep expertise and best practices, along with the latest cloud and database management technologies to help our clients transform, modernize, and maintain their critical data. We are committed to supporting our clients' requirements by delivering cost-effective, high-quality, and reliable solutions that help drive innovation and maximize return on IT investments.