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Case Study

Pipeline Logistics Information Portal Provider
Looks to AWS for Performance Improvements & Cost Reductions

This case study explores how Datavail helped a pipeline logistics information portal provider develop a budget for addressing SQL Server performance, cost, upgrades and deployment.

The Challenge

The pipeline logistics information portal provider gives its clients a comprehensive view of their shipment pipeline. They depended on it for a vital part of their operations, as performance issues and other problems damage the user experience. Deadlocks and timeouts occurred frequently. The customer requested a server assessment and tuning statement of work to establish a budget for making improvements to their infrastructure.

The Solution

The customer had several goals in mind with this project. They wanted to address the performance issues, look for ways to reduce costs, upgrade SQL Server, and then deploy the solution. We started with a preliminary budget number for the upgrade project, which we refined following the assessment.

Our priority was to resolve the deadlocks and timeouts that made it difficult to use the system. By fixing this issue, the software users would not run into frustration with trying to check on shipments and other relevant information.

Optimizing AWS input/output operations per second was essential for reducing costs for the customer. This would also provide performance benefits. We recommended needed maintenance plans to keep the system operating correctly and to address potential issues proactively. We eliminated having to flush the Procedure Cache daily. Finally, we recommended pessimistic versus optimistic locking. This change worked well for meeting the customer's needs in this use case.

The design and implementation plan for a new upgraded SQL Server 2017 environment focused on adding disaster recovery with an RPO of one hour and an RTO of less than 24 hours. A fast recovery from downtime stops users from losing access to critical logistics data. This plan also offered more performance improvements.

The Results

The customer was delighted with the cost reduction and the SQL Server upgrade. The system's performance dramatically improved. The Windows Rapid Migration Program offered a streamlined and painless process for making these changes.