CASE STUDY

Remote Database Administration
Backup & Recovery Contention Remediated

Monitoring Detects & Averts Serious Data Loss Scenario

The Client

The client is an independent company with global market leadership in B-to-B distribution of electrical products and related services.

The company is growing rapidly, enlarging its international footprint through targeted acquisitions around the world. With a 30+ database server environment, securely managed and backed up databases are critical.

A recent server virtualization effort unknowingly created a contention between server and database backup methodologies, and exposed a vulnerability that could lead to critical data loss if left undetected.

Executive Summary

Aspect Consulting, servings as the company's remote database administration team, had implemented it's centralized monitoring tool, Prodative WatchDog EMS, to perform daily monitoring and alerting.

After a server virtualization effort went live, Aspect's routine monitoring proactively detected a critical backup and recovery contention between server-side and SQL Server database backup methodologies, leaving gaps in backups, and preventing SQL Server database point in time recoverability.

Aspect alerted the client, informed stakeholders of the correct configurations, and coordinated with system administrators to reconfigure and remove the contention scenarios. As a result...

✓ **Data Loss was Proactively Averted** and remediated before any data loss situations occurred.

✓ **Dual Backup Methodologies were Configured to Work in Tandem** correctly, increasing data recoverability.

✓ **Backup Contention Monitoring was Extended Across Aspect's Client Base** and backup contention scenarios were detected and remediated within all client environments.

IS YOUR DATA FULLY RECOVERABLE?
Please read on for more detail about this client success.
CONTACT US FOR MORE INFORMATION ABOUT OUR REMOTE DATABASE ADMINISTRATION SERVICES

The Challenge
Multiple Backup Methodologies in Contention,
Preventing Point in Time Recoverability

A as large organization, the client's database environment was constantly growing, and server virtualization was occurring on a large scale. The client engaged Aspect as a Remote Database Administration team to serve as an extension of their in-house resources, providing daily monitoring and on-demand support.

With Aspect's help, the client's DBAs had established a best practice of configuring SQL Server Maintenance Plans as the backup method for the organizations databases.

As the organization's server environment became increasing virtualized, the client's VM administrators began to take advantage of VM software utilities as a backup method for the entire server.

During a database recoverability monitoring exercise, Aspect DBA's uncovered an unintended result-multiple backup methodologies had been implemented incorrectly, causing backup contention scenarios that would prevent the point in time recovery of data. Aspect was charged with leading the remediation effort.

The Solution
Configure Backup Methodologies to Work in Tandem Correctly

Both methodologies are valid and important for database and server recoverability, and can be implemented in tandem correctly, but in this case, options were set that unwittingly set up multiple recovery contention scenarios.

The issue occurred when the VM backup utility was configured with certain options (Application Aware Full Backups; Transaction log truncation) that introduce contention scenarios that broke the backup chain within each methodology, leaving data gaps in the backups, and preventing SQL Server database point in time recoverability.

To resolve the issues, Aspect Remote DBA team members took the following steps:

- **Assessed Impacts Across the Database Environment:** Captured environment wide recoverability impacts across the database environment in an assessment

- **Presented Recommendations:** Determined the correct configuration options and presented configuration remediation recommendations to prevent the contention scenarios.

- **Implemented Reconfiguration Recommendations:** Worked with in-house DBAs and system admin stakeholders to reconfigure VM Backups to implement Full Copy_Only backups instead of Full backups, and remove Transaction Log truncation to ensure point in time recoverability.

All configuration changes were accomplished within a rapid timeframe, before any data loss scenarios occurred.

"Our cross-environment backup and recovery strategy is now stronger and more failsafe as a result of Aspect's remote monitoring and rapid remediation.. "

- Client IT Director

The Benefits
Improved Backup & Recovery Strategy-Across Aspect's Entire Client-Base

- **Data Loss Averted**
Contention issues were detected proactively before data loss occurred.

- **Dual Backup Methodologies Configured to Work Correctly In Tandem.**
Aspect identified and worked with administrators to configure both methodologies to work correctly, for improved recoverability.

- **Backup Contention Monitoring Fine-Tuned and Extended to All Customers.**
Aspect extended monitoring across its client base, detecting and remediating backup contentions at each customer site BEFORE data loss occurred.