

INCIDENT ROOT CAUSE ANALYSIS (RCA)

INCIDENT DATE 2024

TICKET NUMBER AND TITLE VARIOUS

IMPACT STATEMENT

End user service disruptions from slow performance to disconnects.

Root Cause Analysis (RCA)

A memory leak was discovered in the application service, resulting in degraded performance and system outages. The system failed to release allocated memory properly, leading to small memory footprints persisting. In some cases, this escalated to significant memory retention, further impacting performance.

Contributing Factors:

- **Gradual Onset:** The memory leak progressed slowly, becoming noticeable only after extended periods of operation or during heavy usage.
- **Customer-Specific Workflows:** Certain customer workflows contributed to the issue, complicating diagnosis.
- **Web Client Adoption:** The problem became more prevalent with the increased use of the web client. Unlike the desktop client, memory is not shared between the server and Windows client, resulting in different memory management behaviors.

Corrective Action

Interim Solution: To maintain stability Scheduled Weekly Restarts have been applied to customer hosted environments.

Resolution:

The memory leak issue has been addressed in versions 10.6 SP2 and 11.0 SP1. We recommend deploying these service packs to improve performance.

Additional Notes:

- Sites using isotopes may continue to encounter memory-related issues, which will be addressed as they are discovered.
- Sites running large reports or exports may still experience high memory usage. While the system will eventually recover, performance may be affected. It is recommended to limit result sets by refining the search criteria.

Next Steps:

A more proactive strategy is being developed to detect memory issues before they reach production. The team is also investigating new monitoring tools to enhance service oversight, with a focus on early detection and comprehensive end-to-end diagnostics for faster issue resolution.