HOW CONTROL-M CAN HELP YOU MINIMIZE SAP® BUSINESS WAREHOUSE LOG MONITORING ISSUES



SAP® Business Warehouse (BW) is a complex enterprise data warehouse (EDW) system connected and providing data to multiple upstream and downstream systems. Job scheduling within an EDW is a continuous process and monitoring these jobs presents its own unique set of challenges.

One of the mechanisms for measuring job success and failure is to use SAP workload background processes to monitor and analyze logs for root cause analysis when failures occur and processes slow, providing that data to the network operations center (NOC) operator or other process administrator for follow up. Issues arise when there are too many logs to analyze, and they are not in the same place. Examples of types of logs in SAP BW include SM21 system logs, SLG2 application logs, and ST22 short dumps.

Log monitoring tools help the IT operations (ITOps) department review jobs and processes experiencing longer than normal run times due to external or internal dependencies such as

excessive heap memory utilization, excessive use of CPU, bad code, ABAP® dumps, or configuration errors. Longer running background processes are an indicator that either data is bad, the configuration is corrupted, there are potential system hardware (CPU/memory) issues, or there is simply an error in ABAP code that is causing the short dumps.

This reduces the performance because batch dialog processes are consumed and the system has exhausted the resources required for any available backend process to run new jobs, which can

crash the system and forces ITOps or the process administrator into the uncomfortable position of having to explain why the system was unavailable. Monitoring logs within the system helps reduce the frequency of this happening in your organization.

Your organization's reputation depends on its ability to deliver accurate results every time and in real time without any downtime or errors. Log monitoring is very important to finding any bottlenecks in the system and making sure your SAP enterprise resource planning (ERP) systems are up and running and that the jobs and processes are running on time, all the time.

Log monitoring challenges

Common challenges in log monitoring within SAP BW systems include:

- SAP system-specific
    - If multiple systems are connected to the SAP BW system, then each source system needs to be selected and logs can be visualized for that source system and the process administrator must toggle back and forth between source systems, which can impact enterprise visibility.
- Transaction code (T-code)
    - There are multiple T-codes to see and visualize the logs, like SM21 for system logs, SLG1 for application logs, ST22 for code-related error logs, and SM37 for job logs. This process is time-consuming and requires extra skills to become proficient.
- Multiple steps involved to see and monitor jobs.
- Individual clients and logins required for multiple systems and to view all job logs.
- SAP coding knowledge required.
    - Hiring and training of the skilled resources required to monitor and analyze job logs can be costly for companies.
- No complete visibility into dependencies.
- SAP logs from previous years are archived and unavailable for viewing.

Control-M benefits for SAP BW log monitoring

Control-M Saas and the self-hosted version of Control-M simplify application and data workflow orchestration as a service or on-premises. As a part of your SAP BW toolset, Control-M makes it easy to build, define, schedule, manage, and monitor all of your production workflows, ensuring visibility and reliability and improving service level agreements (SLAs). With Control-M, you can review job logs, job dependencies, and historical job executions to determine why a particular job failed or experienced issues.

Control-M log monitoring aids in identifying long-running processes, not only in jobs that have failed, but also those jobs that are in a yellow hanging state due to other factors. With this proactive approach to log monitoring, Control-M can help you avoid unnecessary system downtime and maintain trust and reliability in the system.

All log monitoring can be streamlined and automated with Control-M, saving time and money for the companies when those critical jobs fail. Control-M can also manage transformation logic and derivation rules jobs. Error handling and message logging capabilities are implemented in the extract, transform, load (ETL) process and controlled by Control-M. Finally, failed processes can be restarted with Control-M after correcting the data at the source.

With Control-M's robust log monitoring capabilities, companies can avoid unnecessary system and process disruptions, while also improving the performance of the system by eliminating unwanted bad elements with proper root cause analysis.

Other key functional benefits of using Control-M in conjunction with your SAP BW tools include:

- Full statistics on job average run times
- Easy interface to monitor all system logs
- User-friendly, easily navigable graphical user interface (GUI)
- Provides enterprise visibility and a single dashboard for monitoring, analyzing, and managing multiple jobs logs from multiple systems

Conclusion

The reliability of your system is important because it ensures that your users trust and have confidence in the system you are maintaining. Your organization's reputation depends on its ability to deliver accurate results every time without any downtime or errors. Control-M empowers companies to process and analyze logs in real time to quickly identify and address issues as they occur. Reliable alerting mechanisms promptly notify relevant parties when critical events or errors are detected in the logs. Control-M's intuitive user interface makes it easy for operators and administrators to interact with the log monitoring features, set up alerts, and analyze log data, reducing the need for specialized resources and training. Finally, Control-M provides full statistics on job run times so companies can continue to find and correct inefficiencies in their key jobs and processes across hybrid and multi-cloud environments.

By leveraging Control-M's SAP integration and job types, companies can enhance the reliability of their log monitoring system, leading to improved system stability, quicker issue resolution, and better overall operational performance.

Visit our website to learn more about how Control-M for SAP can help you with all your SAP needs.

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