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SYSB-II CASE STUDY

Higher Education Finance Authority Eliminates Batch Windows Without Adding Staff

Higher Education

Overview

A statewide higher education finance authority supports financial aid processing for colleges, universities, and students across the state. Its core operations run on IBM z/OS using CICS and VSAM, handling loan origination, disbursement tracking, and institutional reporting.

These VSAM-based CICS systems must remain accessible throughout the day to serve institutions, students, and internal staff who depend on timely access to financial data.

Business need

The authority operated multiple shifts of operations staff to manage batch processing and the file open and close cycles that batch windows required. As processing volumes grew, the organization faced pressure to add additional staffing to keep up.

Batch jobs supporting financial aid disbursements, account reconciliation, and institutional reporting required VSAM files to be closed, taking CICS systems offline. This created scheduling constraints and forced operations teams into tightly managed, multi-shift coordination.

When batch jobs failed, recovery relied on manual file restores—a slow, error-prone process. Some jobs ran against non-recoverable files, further complicating the recovery picture and increasing the risk of data loss.

Key challenges included:

- Multiple operations shifts required to manage batch processing cycles
- Growing transaction volumes threatening to exceed staffing capacity
- CICS applications unavailable to institutions and staff during batch windows
- Manual file restores as the only recovery mechanism for abended batch jobs
- Some workloads running against non-recoverable files

The authority needed a solution that would reduce operational overhead, improve recovery capabilities, and position the organization to move toward 24×7 availability without sacrificing data integrity.

Solution

The authority adopted SYSB-II to allow batch updates to run through CICS rather than against it. By routing batch I/O through the owning CICS region, SYSB-II is designed to eliminate the need to close VSAM files for batch processing.

The solution provides:

- Batch and CICS concurrent access to shared VSAM files
- Elimination of batch windows for targeted workloads
- Integrated journaling and automated backward recovery which replaces manual file restores
- Deployment without modifications to application code

SYSB-II is being introduced using a JCL-based model, allowing the authority to adopt it incrementally for its highest-priority workloads first.

Benefits

- **Batch without file closures** — Batch jobs can run without closing VSAM files, eliminating the need for disruptive file open and close cycles.
- **Continuous CICS availability** — CICS systems can remain available to institutions and staff throughout batch processing, improving service reliability.
- **Staffing pressure avoided** — The need to add additional operations shifts is expected to be eliminated, delivering meaningful cost savings.
- **Faster, predictable recovery** — Automated backward recovery replaces manual file restores, reducing the complexity and duration of recovery from batch failures.
- **Simplified operations** — Removing manual file management procedures reduces operational complexity and the potential for human error.

Eliminating batch windows for critical workloads

Financial aid processing is one of the authority's most time-sensitive workloads. Disbursement deadlines, institutional reporting cycles, and student account updates all require timely batch execution, but they also require CICS to remain available so institutions can continue submitting and reviewing data.

With SYSB-II, batch jobs that previously required dedicated processing windows can run concurrently with online transactions. This is positioned to remove one of the most significant scheduling constraints in the environment. The authority can process work based on business priority rather than system limitations, moving the organization closer to its goal of 24×7 availability.

Avoiding additional operations staffing

Before SYSB-II, managing batch processing required coordinating multiple operations shifts to handle file closures, job scheduling, and recovery procedures. When batch jobs failed, the only recourse was manual file restores—a slow process that added further pressure to already-stretched operations teams. As volumes grew, the authority faced the prospect of adding staff to maintain the same level of service.

By eliminating batch windows and replacing manual recovery with automated backward recovery, SYSB-II is positioned to allow the existing operations team to handle increased volumes without additional headcount. The result is meaningful cost savings alongside improved availability and reliability.

Conclusion

By adopting SYSB-II, this higher education authority is positioned to eliminate batch processing windows, avoid additional staffing costs, and improve availability for the institutions and students it serves.

SYSB-II is designed to deliver operational savings while strengthening the reliability of mission-critical financial aid systems. It replaces manual recovery with automated protections and moves the organization toward its goal of continuous availability.

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