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SYSB-II CASE STUDY

State Government Keeps Citizen Services Online While Running Daytime Batch

State Government

Overview

A large U.S. state government operates a centralized IT organization that supports multiple agencies, including social services and finance. These agencies rely on VSAM-backed CICS applications to deliver citizen benefits, process financial transactions, and support public-facing services that must remain available beyond traditional business hours.

The applications supported by this environment serve millions of citizens and consume the majority of available LPAR capacity, making outages highly visible and operationally disruptive.

Business need

Two agencies presented conflicting operational demands. The social services agency required 24×7 availability for citizen-facing benefits programs, including eligibility and payment processing. The finance agency needed to run high-volume batch processing during the day, including print runs and invoicing workloads.

Historically, running batch required closing VSAM files, which caused downtime and scheduling pressure. The resulting outages affected citizen access to benefits, delayed financial processing, and required extensive manual coordination.

Key challenges included:

- Citizen-facing benefit systems requiring 24×7 availability
- High-volume daytime batch processing for print and financial workloads
- Manual file open and close procedures creating operational risk
- Highly visible outages due to applications consuming most of the LPAR capacity
- No viable path to rewriting or modernizing existing applications

The state needed a way to satisfy both agencies' requirements simultaneously, continuous online access and flexible batch processing, without forcing a risky modernization effort.

Solution

The state implemented SYSB-II to allow batch and CICS to concurrently update the same VSAM files. Batch I/O was routed through the owning CICS region so updates executed under standard CICS locking, journaling, and recovery controls.

This approach enabled both agencies to operate on their own schedules without conflicting with each other. The solution provided:

- Concurrent batch and online access to shared VSAM files
- Batch processing during business hours without disrupting citizen services
- Elimination of manual file open and close procedures
- Integrated journaling and backward recovery protections
- Implementation without application code modifications

SYSB-II was deployed incrementally, allowing the state to prioritize its most critical workloads first while minimizing risk.

Benefits

- **Continuous citizen services —** Citizen-facing systems remained available during batch processing, ensuring uninterrupted access to benefits and public services.
- **Flexible daytime batch —** Daytime and evening batch workloads ran without disrupting online access, giving both agencies the scheduling flexibility they needed.
- **Eliminated manual procedures —** Manual file open and close procedures were removed, reducing operational complexity and the risk of human error.
- **Reduced operational risk** — Operational risk was significantly reduced without modifying application code, preserving the stability of proven systems.
- **Automated recovery** — Built-in journaling and backward recovery provided confidence that batch failures could be resolved without impacting online transactions.

Protecting citizen-facing service availability

The social services agency's benefit programs serve millions of citizens who depend on timely access to eligibility determinations, payment status, and case information. Any downtime in these systems is immediately visible and generates significant public impact.

With SYSB-II in place, the agency's high-volume batch workloads including print runs and financial transactions now execute concurrently with the social services agency's online systems. Citizens experience no interruption, and the finance agency meets its processing deadlines without waiting for off-hours batch windows.

Simplifying operations without code changes

Before SYSB-II, operations teams managed a complex choreography of file closures, batch scheduling, and reopening procedures. This required tight coordination across agencies and introduced risk at every step; a missed file closure or premature reopen could compromise data integrity.

SYSB-II eliminated this entire class of operational work. Batch jobs now access VSAM files through CICS controls, removing the need for manual file management. The state achieved this transformation without modifying a single application program, avoiding the risk and cost of a modernization project that would have taken years to complete.

Conclusion

By implementing SYSB-II, this state government enabled continuous service delivery for citizen-facing programs while giving its finance agency the flexibility to run high-volume batch processing during the day.

SYSB-II resolved a longstanding conflict between availability and batch processing requirements without forcing risky modernization projects or application rewrites. The solution now operates as a foundational component of the state's IT infrastructure, supporting reliable, uninterrupted service delivery across multiple agencies.

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