

OS/EM at Comerica Bank

Comerica is one of the 20 largest banking companies in the United States, with over \$50 billion in total assets. Headquartered in Detroit, it has banking subsidiaries in Michigan, California and Texas, and businesses in several other states.

Installation EXIT management

Comerica's IT operations rely heavily on its IBM mainframe systems, which currently total 894 MIPS. "Back in the early 1990s," recalls senior systems specialist Carl Jiovani, "we were faced with the task of maintaining large numbers of SMF, JES2 and TSO EXITS – many of which had been written in-house. These EXITS had to be re-examined (and often re-written) every time we upgraded the MVS operating system or applied maintenance – and we were upgrading every year! Every EXIT change needed an IPL, and that had a real impact on availability. It also took us at least 160 man-hours to do those re-writes."

As a solution to this problem, Comerica installed OS/EM, and has remained a loyal user ever since, applying new features and controls as they were introduced. The company is now on version 5.6, and is running OS/EM on 6 LPARs across test and production Parallel Sysplexes.

With OS/EM, Comerica was able to pare down the number of JES2 EXITS it used from 25 to 3, and to eliminate a large number of SMF and TSO EXITS. OS/EM also allowed Comerica, in the event of EXIT failure, to fall back to a previous version of an EXIT, which proved invaluable during upgrades.

Bottom-line benefits: Substantial improvements to system availability, valuable manpower savings, and significant reduction in risk.

Controlling jobs

Once Comerica had OS/EM in place, the company was able to use a number of controls for managing jobs.

"Programmers were submitting up to 20 test jobs at a time," explains Jiovani. "which was seriously affecting performance. With OS/EM, for the first time we were able to limit users to having 3 jobs each running at a time, which relieved the strain on our initiators and saved hundreds of IPLs."

Another problem that Comerica faced was that users did not adhere to job class and naming standards for assigned job classes, or used classes with inappropriate levels of priority and system resource allocation. This caused extensive

performance problems. OS/EM job class and naming controls were employed to check jobs at submission, making sure that appropriate job classes and names were used. Similarly, the company exploited OS/EM's Time controls to ensure that job submissions followed the CPU allocation specified within JES2 for their particular class, and had not been assigned unlimited CPU time!

Bottom-line benefits: CPU savings, significant improvements to system availability and throughput, automatic enforcement of installation standards

Avoiding unnecessary ABENDS

Time controls also provided Comerica with the powerful capability to dynamically grant wait time extensions, so that critical work could complete without being abnormally terminated (thus avoiding unnecessary job re-runs); and so that critical TSO users (such as systems administrators) could work unimpeded by normal time limits.

Bottom-line benefits: Improved service levels, considerable CPU savings through elimination of numerous re-runs.

Virtual storage management

Comerica is a big CICS user, and it had been experiencing rapidly expanding CICS regions, which were becoming difficult to manage. OS/EM allowed the company to centralise and automate virtual storage allocation for the first time. This improved the performance of its business-critical CICS applications and removed the need to make laborious manual JCL changes.

Bottom-line benefits: CICS transaction throughput improvements, manpower savings.

Why OS/EM

Summing up, Carl Jiovani said, "The real benefits of OS/EM are its ease of use and the power of its controls. Frankly I couldn't imagine running an MVS environment without it now."

