



# IBM Operating System Environment Manager for z/OS

## Highlights

- Facilitates System Management**
  - Simplifies standards enforcement
  - Simplifies software upgrades
  - Simplifies system and data center consolidation
  - Allows dynamic updating
  - Enhances storage management
  - Facilitates accounting and charge-back processes
  - Facilitates security and integrity processes
- Facilitates Achievement of System Throughput and Service Level Targets**
  - Facilitates resource control
  - Handles resource overruns automatically
  - Facilitates direction of mission-critical resources
  - Increases system availability with reduction of need to run an IPL (Initial Program Load)
  - Improves responsiveness to user requirements
- Optimizes Usage of Existing Software**
  - Allows software licenses to be restricted to specific processors
  - Facilitates JES3 (Job Entry Subsystem 3) to JES2 migrations
- Facilitates Redirection of Scarce Technical Resources to Strategic Tasks**
  - Reduces the effort required for software upgrades
  - Reduces the effort required for exit development and maintenance

IBM Operating System Environment Manager (OSEM) for z/OS® offers a methodology and ISPF (interactive structured programming facility) interface to provide today’s data center a proactive solution to the challenges of fewer systems programmers. It also offers an opportunity to make the task of managing system environments an administrative one rather than a technical programming issue. The IBM Operating System Environment Manager for z/OS makes it much easier for installations to manage system resources and to control how they are used.

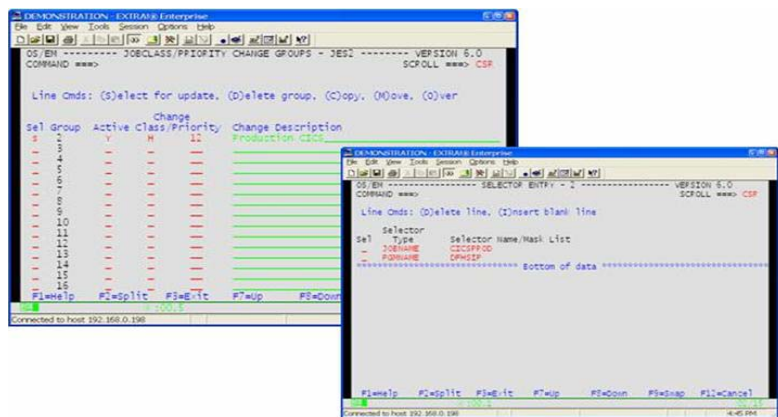
Driven by an easy-to-use ISPF interface, IBM OSEM for z/OS, with more than 200 robust features, provides dynamic controls in the areas of:

- Maximizing systems performance
- Increasing batch resource routing controls
- Eliminating assembler exits

IBM OSEM for z/OS follows a “functionality without maintenance” methodology. The elements of this methodology are described in the following column and pages.

## Facilitates System Management

- Simplifies standards enforcement:** Easily define, modify, and enforce installation standards and operating rules without any programming effort simply by setting parameters via a user-friendly online interface. Changes can be applied dynamically or deferred until the next appropriate change window.
- Simplifies software upgrades:** The dynamic updating feature reduces the need to:
  - Rework and retest installation exits
  - Make manual JCL (Job Control Language) changes
  - IPL systems when implementing new versions of program products
- Simplifies system and data center consolidation:** Reduces the need to retain in-house installation exists thereby allowing users to position systems prior to integrating their workloads. The task of workload integration is hence made much easier as are the processes of system build and rollout.
- Allows Dynamic Updating:** Dynamically change an operational environment to suit specific workload profiles such as sets of standards and rules for daytime online processing and overnight batch periods.



Example 1: Set Job Priority with Operating System Environment Manager for z/OS



- **Enhances Storage Management:** Extensive DFSMSShsm™ reporting and optimization tools can help administrators to significantly improve storage management operations.

- **Facilitates accounting and charge back processes:** Job accounting information can be stored in the catalog for DFSMS-managed datasets to facilitate more accurate accounting of storage usage.

- **Facilitates Security and Integrity Processes:** Helps ensure that only authorized users are able to access resources specified in job JCL parameters by providing RACF (Resource Access Control Facility) protection for resources such as job class and JCL parameters.

**Facilitates Achievement of System Throughput and Service Level Targets**

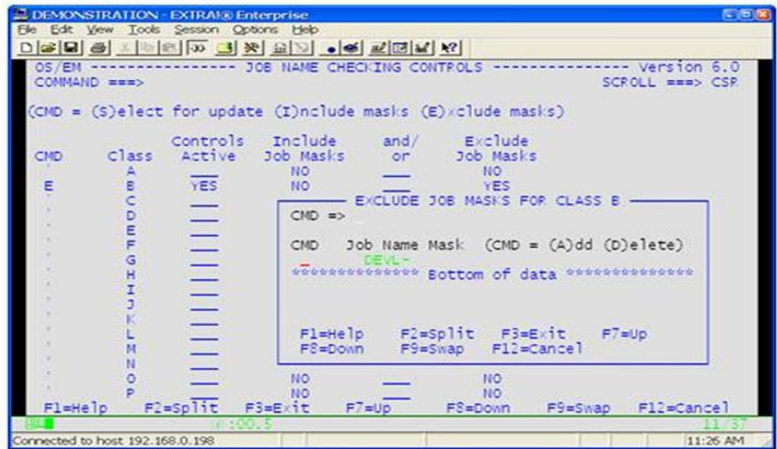
- **Facilitates Resource Control:** Optimize utilization of system resources with facilities to improve control over: job and SYSOUT classes, virtual storage, dataspace, etc. Dynamic job routing can also contribute improving system throughput by ensuring that jobs are executed on the most appropriate system.

- **Handles Resource Overruns Automatically:** Resource overruns can be handled without operator intervention thereby helping to ensure that critical processing continues while simultaneously allowing the redirection of human resources to more crucial tasks.

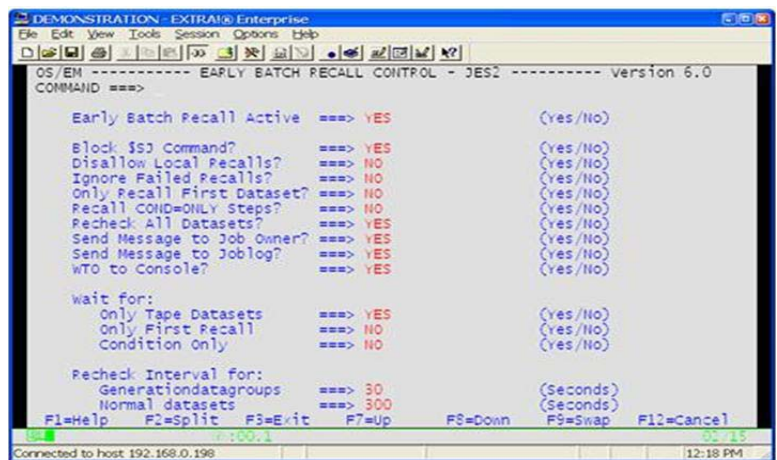
- **Facilitates Direction of Mission-Critical Resources:** Scarce hardware can be reserved for specific jobs or a range of jobs thereby helping to ensure that mission-critical work has access to required resources.

- **Increases System Availability with Reduction of Need to IPL:** Installation standards and rule definitions, as well as updates to supervisor call (SVC) modules and RACF® control tables can be made dynamically, without an IPL, thereby increasing system availability.

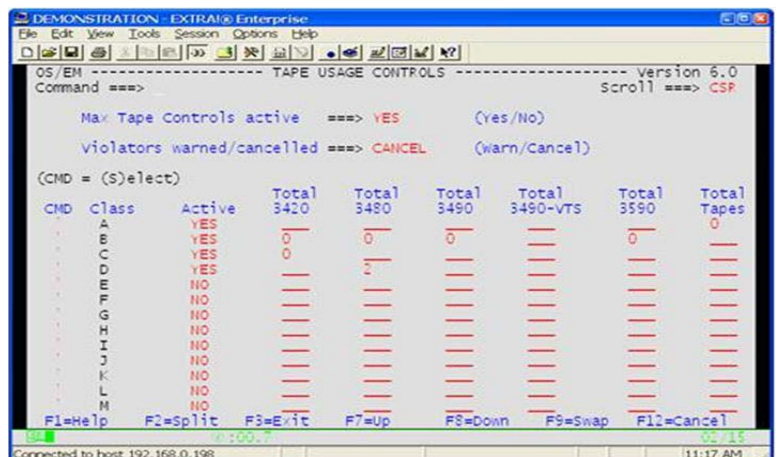
- **Improve Responsiveness to User Requirements:** Dynamic update capability for rules, standards, SVCs, and control tables help administrators respond to user requirements in a more timely manner.



Example 2: Restrict jobs from running in a certain class



Example 3: Ensure that jobs do not start until all migrated data sets have been recalled.



Example 4: Limit tape usage by class



### Optimizes Usage of Existing Software

• **Allows Software Licenses to be Restricted to Specific Processors:** Dynamic routing using granular routing criteria makes it easier to restrict the licensing of software to specific processors.

• **Facilitates JES3 to JES2 migration:** A migration path from JES3 to JES2 is provided by including most of the workload routing functionality of JES3.

### Facilitates Redirection of Scarce Technical Resources to Strategic Tasks

• **Reduces the Effort Required for Software Upgrades:** Software upgrades can be tested and rolled out in a controlled manner with the dynamic insertion of STEPLIB statements.

• **Reduces the Effort Required for Exit Development and Maintenance:** The need for development and maintenance of in-house system code and exits is reduced. This may help to significantly reduce the time and effort involved in upgrading z/OS and related system hardware.

## Hardware Requirements

- An IBM eServer zSeries® machine mainframe system

## Software Requirements

- z/OS V1R4 or higher

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