



# z/OS Introduction and Workshop

## Commands

## Unit Objectives

After completing this unit, you should be able to:

- Describe MVS commands
- Locate MVS commands manual
- Get online assistance interpreting MVS command output
- Describe JES2 commands
- Locate JES2 commands manual
- Get online assistance interpreting JES2 command output
- List facilities available to enter MVS and JES2 commands

## MVS Commands - Summary

ACTIVATE	MODE	SET (T)	SLIP (SL)
CANCEL (C)	MODIFY (F)	SETAPPC	START (S)
CHNGDUMP (CD)	MONITOR (MN)	SETCEE	STOP (P)
CMDS	MOUNT (M)	SETCON	STOPMN (PM)
CONFIG (CF)	MSGRT (MR)	SETDMN	STOPTR
CONTROL (K)	PAGEADD (PA)	SETETR	SWAP (G)
DEVSERV (DS)	PAGEDEL (PD)	SETGRS	SWITCH (I)
DISPLAY (D)	QUIESCE	SETIOS	TRACE
DUMP	REPLY (R)	SETLOAD	TRACK
DUMPDS (DD)	RESET (E)	SETLOGR	UNLOAD (U)
FORCE	ROUTE (RO)	SETLOGRC	VARY (V)
HALT (Z)	SEND (SE)	SETOMVS	WRITELOG (W)
IOACTION (IO)		SETPROG	
LIBRARY (LI)		SETRRS CANCEL	
LOG (L)		SETSMF (SS)	
LOGOFF		SETSMS	
LOGON		SETSSI	
		SETUNI	
		SETXCF	

**red** – frequent  
**green** – less frequent  
**black** – least frequent

## MVS Commands – CANCEL

Use the CANCEL command to end an active job, started task, or time-sharing user immediately. The table that follows summarizes the tasks that the CANCEL command can perform. Following the table are usage notes, the complete command syntax, definition of parameters, and examples of use.

If the program that supports the job or started task was designed to recognize the STOP command, use the STOP command before using the CANCEL command. If the CANCEL command fails several times, consider using the FORCE command.

## MVS Commands - CANCEL

### CANCEL jobname

- a job in execution
- a started task

### CANCEL U=userid

- a time-sharing user

### CANCEL identifier

- a started task
- a MOUNT command
- an external writer allocation
- the output processing for a job
- a z/OS UNIX process

## MVS Commands - DISPLAY

Use the DISPLAY system command to display information about the operating system, the jobs and application programs that are running, the processor, devices that are online and offline, central storage, workload management service policy status, and the time of day.

The display command is has a large number of variations.  
We will cover only the most commonly used variations.

z/OS MVS System Commands  
SA38-0666-07  
Chapter 4

## MVS Commands - Display System Activity

D A,L	Display active tasks excluding BCP components
D A, <i>taskname</i>	Display detailed information about a specific active task
D A,ALL	Display all active tasks including BCP components
D J, <i>jobname</i>	Display detailed information about a specific batch job
D TS,L	Display TSO users
D TS, <i>username</i>	Display information about a specific TSO user
D TS,ALL	Display detailed information about all TSO users

## MVS Commands - Display System Library Information

D PARMLIB	Display system libraries searched for system parameters
D PROG,LNKLST	Display system libraries searched for executable programs
D PROG,APF	Display system libraries authorized for restricted program execution



## MVS Commands - Display system hardware configuration

D ASM	Display auxiliary storage – page data set information
D IPLINFO	Display system initial program load information
D IOS,CONFIG(ALL)	Display I/O Configuration information
D M	Display machine, memory, channel and device information
D M=CPU	Display machine type information
D M=STOR	Display memory storage information
D M=DEV(#)	Display detailed device information
D M=CHP(#)	Display detailed channel information

## MVS Commands - Display Unix System Service information

D OMVS,A=ALL	Display all Unix System Services Processes
D OMVS,O	Display Unix System Services Options/Parameter Settings
D OMVS,LIMITS	Display Unix System Services Thresholds
D OMVS,F	Display Unix System Services Mounted Filesystems

## MVS Commands - Display disk storage information

<code>DEVSERV QD,TYPE=ALL</code>	Display information about all DASD devices
<code>D U,,#,1</code>	Display detailed information about a specific DASD unit address
<code>D U,,ALLOC</code>	Display user allocations against DASD devices
<code>D U,VOL=<i>vol/ser</i></code>	Display DASD unit address of a specific volume serial label

## MVS Commands - Display Communications Server resources

```
D TCPIP,,NETSTAT,HOME  
D TCPIP,,NETSTAT,DEVICE  
D TCPIP,,NETSTAT,BYTE
```

```
D NET,APPLS  
D NET,MAJNODES  
D NET,TRL  
D NET,STATIONS  
D NET,PENDING
```

} VTAM (SNA)

## MVS Commands - Display miscellaneous

D R,L	Display outstanding system requests for operator responses
D T	Display system time
D C,K	Display useful operator console commands
D IKJTSO,ALL	Display TSO/E parameter settings
D OPDATA	Display subsystem command recognition characters
D SYMBOLS	Display system static symbolics
D SMF	Display system management facility information
D SSI	Display subsystem information
D WLM,APPLENV=*	Display workload manager application environment status

## MVS Commands - MODIFY (F)

Modify can be executed against many system environments:

- Jobnames & Started Tasks
- TSO
  - **F TCAS,USERMAX=#**
- Unix System Services
- Catalog Address Space (CAS)
  - **F CATALOG,OPEN**

## MVS Commands - VARY (V)

VARY can alter the status of specific resources owned by the operating system or optional system tasks.

- Disk storage devices can be varied online/offline
- System Consoles can be varied online/offline
- System Manage Storage (SMS) resources
- Communication Server (TCPIP & VTAM) resources
- Any channel path or device in I/O configuration can be altered
- Workload Manager (WLM) resources
- Parallel Sysplex defined resources

## MVS Commands - REPLY

You can use the REPLY command to respond to system requests. To review outstanding requests before replying, issue DISPLAY R.

R id,text

- where id is the message id number and text is an operator choice of valid responses to the outstanding request.
- look up message issuing the request for reply in LookAt when uncertain about response text syntax and consequences.

```
SDSF SYSLOG 4346.102 S0W1 S0W1 04/27/2007 0W 1965 COLUMNS 51 130
COMMAND INPUT ==> SCROLL ==> CSR
)090 *06 IEA793A NO DUMP DATA SETS AVAILABLE FOR DUMPID=001 BY JOB (*MASTER*).
      ↓ USE THE DUMPDS COMMAND OR REPLY D TO DELETE THE DUMP
)290 R 6,D
)090 IEE600I REPLY TO 06 IS;D
```



## MVS Commands - START (S) and STOP (P)

Use the START (S) command to start started tasks, which support system functions such as IMS, CICS, and RACF. Started tasks are defined in cataloged procedures (residing in procedure libraries or through jobs residing in a partitioned data set defined in master JCL.

Use the STOP (P) command to stop system functions and jobs in execution.

## JES2 Job Entry Subsystem

The most critical z/OS subsystem.

Highly customizable environment with extensive parameter options.

JES is required to start VTAM, TCPIP, TSO, Batch Jobs, all other major subsystems (DB2, CICS, etc.)

z/OS JES2 Commands SA32-0990-02

## JES2 Commands – Summary...page 1 of 4

\$A	Release held jobs
\$ADD	dynamically add JES resources
\$B	Backup device output
\$C	Cancel job and other JES resources
\$D	Display JES resources
\$DEL	dynamically delete JES resources
\$E	Reset/Restart JES resources
\$F	Forward device output
\$G	Modify resource in remote JES environment
\$H	Hold JES jobs
\$I	Interrupt a JES controlled resource

## JES2 Commands – Summary...page 2 of 4

\$JDDetails	Display details summary of jobs
\$JDHistory	Display history of JES2 resource usage
\$JDMonitor	Display current status of JES2 monitor subtasks
\$JDStatus	Display current status
\$JStop	Terminate monitor address space

## JES2 Commands – Summary...page 3 of 4

- \$L List job output information
- \$M Send command to other tight coupled JES systems
- \$N Send commands through network to remotely connected JES
- \$O Release or cancel held output groups
- \$P Stop or Purge any further processing of JES2 controlled resource
- \$R Route JES job output

## JES2 Commands – Summary...page 4 of 4

\$T	Alter JES2 controlled parameters, rules and resources
\$VS	Enter MVS system commands through JES2
\$Z	Halt JES2 resource activity
\$ZAPJOB	Remove job structure from job queue

```
$VS,'S BACKUP'
```

```
$ T A0001,I=43200,'$VS,"S BACKUP"'
```

```
$ T A0002,I=43200,'$POJOBQ,ALL,PROTECTED,DAYS>1'
```

## JES2 Commands – Common Commands

\$D SPL	Display JES2 spool information
\$D A	Display JES2 active jobs
\$D I	Display JES2 job initiator information
\$T A,ALL	Display information about all active JES2 automatic commands

## JES2 Commands – Managing the JES Spool

\$D SPL	Display JES2 spool information
\$JDDETAILS	Display JES2 limit details
\$P S1-9999,PROTECTED	Purge all Started Task output
\$P T1-9999	Purge all TSO output
\$D JOBQ,SPL=(PERCENT>5)	Display job output using more than 5%
\$D JQ,DAYS>5	Display jobs in the spool longer than 5 days
\$P OJOBQ,ALL,PROTECTED,DAYS>5	Purge all job output older than 5 days
\$T A,ALL	Display all automated JES commands
\$D ESTLNCT	Display estimated line count
\$T ESTLNCT,OPT=1	Modify estimated line count to enforce line limit

### Note:

Inability to read or write to JES spool will result in everything waiting  
When a JES2 limit is exhausted, everything will wait



## MVS & JES2 Command Input Sources

- 1) System Console Facility  
HMC or Support Element
- 2) SDSF Console Facility – using / prefix
- 3) TSO Console Facility – oper command
- 4) JCL command statement  
*// COMMAND 'mvs\_command'*
- 5) JCL JES command statement  
*/\*\$jes2\_command*  
*/\*\$VS,'mvs\_command'*
- 6) FTP  
quote site filetype=jes  
put 'a file containing /\*\$ or /\*\$VS command syntax'

## Subsystem Command Recognition Characters

Subsystems such as JES, RACF, DB2, WebSphere MQSeries have system programmer assigned command recognition characters used to prefix subsystem commands. This assigned prefix instructs z/OS which subsystem is to be passed the command.

Several methods for determining assigned subsystem command prefix

D OPDATA (will provide DB2, JES2 and WebSphere MQSeries info)

Search for all occurrences of IEE252I in SYSLOG

'MEMBER **IEFSSN##** FOUND IN 'system parameter library name'

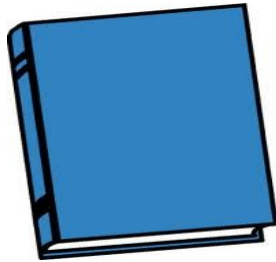
Inspect each **IEFSSN##** entry for subsystem command recognition prefix

# z/OS and JES2 Command Manuals

z/OS MVS Commands



JES2 Commands



hyperlinks

## Unit Summary

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