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 <u>display information</u> about the <u>operating system</u>, the <u>jobs</u> and <u>application programs</u> that are running, the <u>processor</u>, <u>devices</u> that are online and offline, <u>central storage</u>, <u>workload management</u> service policy status, and the <u>time</u> 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
SA22-7627-13
Chapter 4 - Section 4.10

MVS Commands
Display System Activity

D A,L   (List active tasks excluding BCP components)

D A,taskname (List detailed information about a specific active task)

D A,ALL (List all active tasks including BCP components)

D J,jobname (List detailed information about a specific batch job)

D TS,L (List TSO users)

D TS,username (List information about a specific TSO user)

D TS,ALL (List detailed information about all TSO users)

MVS Commands
Display System Library Information

D PARMLIB   (List system libraries searched for system parameters)

D PROG,LNKLST (List system libraries searched for executable programs)

D PROG,APF (List system libraries authorized for restricted program execution)

MVS Commands
Display system hardware configuration

D ASM   (List auxiliary storage – page data set information)

D IPLINFO (List system initial program load information)

D IOS,CONFIG(ALL)   (List I/O Configuration information)

D M   (List machine, memory, channel and device information)

D M=CPU (List machine type information)

D M=STOR (List memory storage information)

D M=DEV(#) (List detailed device information)

D M=CHP(#) (List detailed channel information)

MVS Commands
Display unix system service information

D OMVS,A=ALL (List all Unix System Services Processes)

D OMVS,O (List Unix System Services Options/Parameter Settings)

D OMVS,LIMITS (List Unix System Services Thresholds)

D OMVS,F (List Unix System Services Mounted Filesystems)

MVS Commands
Display disk storage information

DEVSERV QD,TYPE=ALL (List information about all DASD devices)

D U,,,#,1 (List detailed information about a specific DASD unit address)

D U,,ALLOC (List user allocations against DASD devices)

D U,VOL=volser (List 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

MVS Commands
Display miscellaneous

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

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 SA22-7526-06

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

$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

$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

$S - Start a JES2 controlled resource

$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

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

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

Documentation / Manuals

+ z/OS MVS

| z/OS MVS System Commands | SA38-0666-40 | 23 Jun 2020 | PDF ieag100_v2r4.pdf (4.05MB) |

+ z/OS JES2

| z/OS JES2 Commands | SA32-0990-40 | 23 Jun 2020 | PDF hasa200_v2r4.pdf (4.95MB) |

Unit summary

Having completed this unit, you should be able to:

- Describe MVS commands

- Locate MVS commands manual

- Get online assistance interpreting MVS command output

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- List facilities available to enter MVS and JES2 commands