CPMS®/SYSD®
ISPF/PDF-like Development Tool

REFERENCE MANUAL ◆◆◆

H+W®
H&W Computer Systems, Inc.

CPMS®/SYSD®
ISPF/PDF-Like Development Tool

Release 6.4.1

Reference Manual

Contents

Chapter 3   *Option 1: Browse Source Data (SYSD Only)* **39**

Chapter 4   *Option 2: Edit Source Data (SYSD Only)* **57**

About this Manual

The *CPMS/SYSD Reference Manual* provides instructions and information for using CPMS/SYSD. The manual is divided into chapters following the layout of the menu-driven system. The functional system commands are detailed after the menu-driven portion of the manual. This manual is used by the end user.

Manual Organization

The *CPMS/SYSD Reference Manual* is organized as follows.

Chapter 1, Introduction

Describes the menu-driven CPMS/SYSD system, explains the difference between SYSD and CPMS, explains the difference between the function-driven and menu-driven systems, describes how to move around the menu system and direct screen flow, describes the general format of the screens and the universal commands, provides instructions for signing on, and describes the Primary Options Menu.

Chapter 2, Option 0: CPMS/SYSD Parameters

Describes the screens you use to tailor how the CPMS/SYSD system works for you.

Chapter 3, Option 1: Browse Source Data (SYSD Only)

Describes the screens you use to browse source partitioned, sequential, and CA-Panvalet datasets.

Chapter 4, Option 2: Edit Source Data (SYSD Only)

Describes how the editor works, the screens you use to edit data, and the editor's primary, scroll, and line commands.

Chapter 5, Option 3: Perform Utility Functions (SYSD Only)

Describes the screens you use to rename, delete, and print partitioned and sequential datasets; display information about a specific dataset; allocate, rename, and delete datasets; compress libraries; catalog and uncatalog datasets; display the catalog entries for a high-level qualifier; display the VTOC for disk volumes; and display the UCBs for all devices.

Chapter 6, Option 4: Displaying Active Jobs

Describes the screen you use to list all the jobs executing in the system.

Chapter 7, Option 5: Following a Job Through the System

Describes the screens you use to display the input and output queues and track the progress of your jobs through the system.

Chapter 8, Option 6: Displaying a Job's Output Datasets

Describes the screens you use to change the characteristics of elements in the output queue.

Chapter 9, Option 7: Controlling the Printer

Describes the screens you use to display and change the status of all the spool printers.

Chapter 10, Option 8: SYSD/JFT (Job and File Tailoring)

Provides a brief overview of the Job and File Tailoring (JFT) optional product for both CPMS and SYSD.

Chapter 11, Option C: CICS Transactions

Explains how to exit your CPMS/SYSD session and execute native CICS transactions without ending the session. It also explains how to combine Option C and the SPLIT command to create a new partition.

Chapter 12, Option T: Online Help

Describes the layout and usage of SYSD's online help facilities.

Chapter 13, Option U: Maintaining the User File

Briefly describes the option you use to add, change, and delete user profiles.

Chapter 14, CPMS/SYSD Functional Commands

Lists and describes, in alphabetical order, all of CPMS/SYSD's functional commands.

Appendix A, Summary of CPMS/SYSD Commands

Provides a summary by function of all of CPMS/SYSD's functional commands.

Appendix B, Error Messages

Lists and explains, in order by number, all of CPMS/SYSD's error messages.

Conventions

The *CPMS/SYSD Reference Manual* uses the following conventions.

Text and Keyboard Conventions

This kind of text	*Identifies*
BOLD bold	Commands and text you type. Uppercase bold text represents information you must type exactly as shown. Lowercase bold text represents information you must substitute with the appropriate text. For example, if **user_id** is shown in a command format, you must type the appropriate user ID.
PF3	Special keys on the keyboard you press. The example here means press the **PF3** key.
Down	A command assigned to a program function key. For example, the instruction "press **Down**" means press the function key the Down command is assigned to.
[parameter]	An optional parameter in a command format.
parm1 | parm2	An either/or situation in a command format. You can type one parameter or the other, but not both.
<u>parm1</u> | parm2	The default parameter in a command format.

Symbol Conventions

This symbol	*Identifies*
➤	Instructions for performing special functions.
Note	Additional information that may be of value.
Tip	Tips or suggestions about using a particular feature.

This symbol	*Identifies*
Caution ▶	Important information you need to know about a feature or procedure.

Related Publications

For more information, see the following publications:

H&W manuals

- *CPMS/SYSD Installation Manual*
- *SYSD/JFT Reference Manual*

IBM manuals

- *Access Method Services Reference*
- *OS/SPL: Job Management Manual*

Computer Associates manual

- *CA-Panvalet System Management Manual*

Chapter 1
Introduction

Menu-driven CPMS/SYSD incorporates the flexibility and freedom of function-driven CPMS/SYSD in an easy-to-learn, easy-to-use structure. The power of the function-driven product is tied to a menu logic that channels the power without reducing the flexibility. The menu system links screens and functions in a stepped hierarchy. One screen provides options you can use to access related screens. These screens, in turn, offer other sets of options. You can access each screen by descending the stairway one step at a time, and you can access preceding screens by ascending the stairway one step at a time.

CPMS/SYSD's primary options are:

Option 0   CPMS/SYSD Parameters
             General Definitions
             JES/List Parameters
             PF Key Definitions
             JFT Parameters
             TS Queue Parameters
             Utility Parameters

Option 1   Browse Source Data (SYSD only)
             Dataset Menu

Option 2   Edit Source Data (SYSD only)
             Dataset Menu

Option 3   Utility Functions (SYSD only)
             Library
             Dataset
             Catalog
             VTOC
             Unit List

(continued)

Option 4   Active Jobs

Option 5   Input/Output Queue Jobs
                    Job Queue Display

Option 6   Output Queue Jobs
                    Output Element Display

Option 7   Printer Status
                    CPMS Printer Table Display
                    JES2 Printer Display

Option 8   Job/File Tailoring

Option C   CICS Transactions

Option T   CPMS/SYSD Help
                    Sequential Overview
                    Specific Help

Option U   User File
                    User File Maintenance

SYSD

SYSD is a complete package for submitting batch jobs, developing programs, and displaying and maintaining OS/VS and CICS/VS. SYSD includes:

- CPMS facilities
- An ISPF-like editor and browse facility
- DASD and dataset management facilities

The following is the CPMS/SYSD Primary Option Menu, which displays all the primary options you can access.

```
  ----------------- CPMS/SYSD PRIMARY OPTION MENU ----------------- (1/1)
  INPUT ===>                                                SCROLL: CSR
                                                  USER     - BW
    0 - PARMS    - Specify CPMS/SYSD parameters   DATE     - 11/03/97
    1 - BROWSE   - Display source data            TIME     - 10:45:10
    2 - EDIT     - Create or change source data   TERMINAL - G031
    3 - UTIL     - Perform utility functions      APPLID   - CICS31
    4 - ACTIVE   - Display active jobs            RELEASE  - 06.4.1V00
    5 - N        - Display jobs in the input and output queue
    6 - O        - Display jobs in the output queue
    7 - PRINTER  - Display/change a printer's status
    8 - JFT      - Job/file tailoring
    C - CICS     - Enter CICS transactions
    T - TUTORIAL - Display information about CPMS/SYSD
    U - USER     - Perform user file maintenance
    X - END      - Terminate CPMS/SYSD session




  PRESS END KEY TO TERMINATE CPMS/SYSD.
```

SYSD Editor

SYSD's ISPF-like editor lets you create and update source partitioned dataset (PDS) members and sequential datasets in real time under CICS. In addition, the optional SYSD/ATP (Access to CA-Panvalet) interface lets you edit and browse CA-Panvalet members.

SYSD uses a unique work file concept that provides security, recovery, and so on. SYSD lets you:

- Work on a member or dataset without updating the original until you are ready.

- Create temporary work sessions where you can change and submit JCL without changing the base member.

- Edit existing partitioned or sequential datasets.

- Create new partitioned or sequential datasets.

- Cut and paste data from any number of source datasets.

DASD and Dataset Management

SYSD makes it easy to manage your OS/VS DASD datasets. SYSD includes most of the IEHLIST and IEHPROGM commands online. You can quickly list VTOCs and PDSs; find, scratch, and rename datasets; and more.

CPMS

CPMS is a subset of the full SYSD product. It contains the CICS spool display and CICS printer management facilities that were once only available to TSO and CMS users. You can follow your work through the system from start to finish. CPMS lets you:

* Display the status of active jobs to determine where your job stands.
* Get a special condition code summary to see if your job ran successfully.
* Display a selection menu of print output you can view.
* View a specific report.
* Search for character strings to see specific information.
* View the console log.

The following is the CPMS Primary Option Menu, which displays all the primary options you can access:

```
----------------- CPMS PRIMARY OPTION MENU -----------------      (1/1)
INPUT ===>                                                 SCROLL: CSR
                                                    USER     - BW
   0 - PARMS     - Specify CPMS/SYSD parameters     DATE     - 11/03/97
   4 - ACTIVE    - Display active jobs              TIME     - 10:45:10
   5 - N         - Display jobs in the input/output queue  TERMINAL - G031
   6 - O         - Display jobs in the output queue APPLID   - CICS31
   7 - PRINTER   - Display/change a printers status  RELEASE  - 06.4.1V00
   8 - JFT       - Job/File Tailoring
   C - CICS      - Enter CICS transactions
   T - TUTORIAL  - Display information about CPMS/SYSD
   U - USER      - Perform user file maintenance
   X - END       - Terminate CPMS/SYSD session




PRESS END KEY TO TERMINATE CPMS/SYSD.
```

After viewing your job's output, you can use CPMS to:

* Print all or part of the output on any CICS printer.
* Control CICS printers to handle forms changes, restarts, repeats, and so on.
* Route the output to a standard JES printer, either local or remote.
* Purge the output.

A Typical CPMS Session

Whether you use the function-driven commands or the menu system, a typical CPMS session follows the same flow:

* You can use any batch or online facility to submit a job, or you can use CPMS if the JCL for your job is in a partitioned or sequential dataset.

* Once you submit the job, you can use the CPMS commands or menus to track the job through the processing stages. Commands and options let you limit the display to only your jobs, which makes it easy to find your job in the queues.

   Several CPMS commands let you control the job as it is being processed. You can hold, release, or cancel the job. This lets you temporarily stop a job's progress through the system or stop it completely.

* Once your job has executed, the output goes to the JES output spool where it stays until it is printed or deleted.

   You can use the CPMS commands or menus to view the output before printing it. CPMS lets you display a summary of a job's datasets or start the display with a specific dataset. CPMS commands and PF keys shift the display up, down, left, or right across the dataset. The FIND command lets you search for character strings. When you reach the end of each dataset in the job, CPMS displays the next dataset.

* After viewing the job, you can purge the output from the system, print it on a CICS printer with the CPMS spool print facility, or route it to a local or remote OS printer or to the CPMS writer.

Spool Print

CPMS provides a command that lets you route a job's output to a CICS printer. If the printer is busy, CPMS queues the output and prints it when the printer becomes available. Once a job starts printing, you can hold the print job, restart it, terminate printing completely, or skip the current dataset and start printing the next dataset.

Spool print leaves printed jobs on the JES spool. You can print them as many times as you want or issue a command to delete them.

Hot Writer and JOE Writer

The hot writer or job output element (JOE) writer automatically prints your job's output on a CICS printer. Once started, the writer periodically scans the JES output queue for jobs that meet your selection criteria and prints them. You can issue commands to control printing while the print job is active. When the job is done printing, the writer purges it from the JES spool. The writer keeps scanning the queue until you issue the command to stop it or shut down CPMS or CICS.

Menu-Driven versus Function-Driven

You can use SYSD as a menu-driven system or as a function-driven system. In the menu-driven portion of SYSD, as explained in this chapter and Chapters 2 through 13, you type commands in the *Input* field or type options in an *O* (Option) column. In the function-driven portion of SYSD, you type commands on a CICS screen, either at the top of a blank CICS screen or at the bottom of a formatted screen. See Chapter 14, CPMS/SYSD Functional Commands, for a description of the functional commands. See Appendix A, Summary of CPMS/SYSD Commands, for a list of the commands grouped according to function.

Moving Around in the Menu System

You can visualize each screen in CPMS/SYSD as a landing in a series of stairways. One passage leads you up to the previous screen. Any number of passages, in the form of options, lead you down to other screens in the system.

The Primary Option Menu is the main landing in the stairway. You can access all screens from the Primary Option Menu by descending the appropriate stairway. There are several different stairways leading down from the Primary Option Menu. Selecting an option from the Primary Option Menu takes you one step down that particular stairway. For example, to go one step down the stairway marked Parameters, type 0 in the *Input* field and press **Enter**. The Parameter Options screen is displayed. To go another step down the stairway, type 0 in the *Input* field and press **Enter**. The General Parameter Definitions screen is displayed. By repeating this process, you can descend a stairway until you reach the screen you want to display. You can also return to the Primary Option Menu, one step at a time, by repeatedly pressing **End**.

Direct Screen Flow

Once you are familiar with the system, you may find it more convenient to move directly from screen to screen. CPMS/SYSD provides several ways of moving quickly among screens:

- To return to the Primary Option Menu from anywhere in the system, press **Return**.

- To display a specific screen, type the screen's **address** in the *Input* field on any screen and press **Return**.

- To create a new partition and display a specific screen, type the screen's **address** in the *Input* field and press **Split**.

The screen's address is made up of the options and/or commands, in descending order and separated by periods, you would issue to access the screen from the Primary Option Menu.

The following example shows how the components of the direct screen flow address for the Program Function Key Definition screen are derived.

```
-------------- CPMS/SYSD PRIMARY OPTION MENU ----------------  (1/1)
INPUT ===>                                              SCROLL: CSR
                                                USER     - BW
    0 - PARMS     - Specify CPMS/SYSD parameters DATE     - 11/03/97
    1 - BROWSE    - Display source data          TIME     - 11:00:57
    2 - EDIT      - Create or change source data TERMINAL - G031
    3 - UTIL      - Perform utility functions    APPLID   - CICS31
    4 - ACTIVE    - Display active jobs          RELEASE  - 06.4.1V00
    5 - N         - Display jobs in the input and output queue
    6 - O         - Display jobs in the output queue
    7 - PRINTER   - Display/change a printer's status
    8 - JFT       - Job/file tailoring
    C - CICS      - Enter CICS transactions
    T - TUTORIAL  - Display information about CPMS/SYSD
    U - USER      - Perform user file maintenance
    X - END       - Terminate CPMS/SYSD session




PRESS END KEY TO TERMINATE CPMS/SYSD.
```

To display the Parameter Options screen from the Primary Option Menu, type 0 in the *Input* field and press **Return**.

```
-------------- CPMS/SYSD PARAMETER OPTIONS ----------------  (1/1)
INPUT ===>                                              SCROLL: CSR
                                                USER     - BW
    0 - GENERAL   - Display/change general parameters  DATE     - 11/03/97
    1 - LIST      - Display/change JES and list defaults TIME    - 11:02:08
    2 - PF        - Display/change PF key assignments  TERMINAL - G031
    3 - JFTPANEL  - Set initial JFT panel to display   APPLID   - CICS31
    4 - QUEUEIDs  - Set GET/PUT TS queue identifiers   RELEASE  - 06.4.1V00
    5 - UTILPRMs  - Set UTILITY parameters
    X - END       - Return to main menu
```

To display the Program Function Key Definition screen from the Parameter Options screen, type 2 in the *Input* field and press **Return**.

So to display the Program Function Key Definition screen using direct screen flow, type 0.2 in the *Input* field on any screen and press **Return**.

To display the Program Function Key Definition screen using the commands instead of the options, type **PARMS.PF** and press **Return**.

Note

If your terminal does not have PF keys, you can still use direct screen flow by typing an equal sign (=) in front of the address and pressing **Enter**. For this example, type **=0.2** or **=PARMS.PF** in the *Input* field on any screen and press **Enter**.

General Screen Format

CPMS/SYSD provides the following types of screens:

- Menu screens provide options that lead to other logical levels in the system. You cannot perform any data manipulation operations on menu screens.

- Read-only screens provide source or summary data for browsing. You cannot update data on read-only screens. On some read-only screens you can issue scrolling commands—like TOP, BOTTOM, UP, and DOWN—and primary commands like FIND.

- Read-update screens display source and summary data and let you manipulate the data. These screens accept all the commands available on read-only screens plus a full set of data-manipulation commands.

Each screen in the menu-driven system includes:

- The screen's title centered on the first line.

- A numeric field on the right side of the first line tells you which menu partition you are in and how many active partitions you have. For example, (3/4) means you are in the third of four partitions. You can create up to four partitions.

- The *Input* field on the left side of the second line where you enter commands.

- The *Scroll* field on the right side of the second line where you specify the type of scrolling performed.

Type	*To scroll*
CSR	Based on the cursor position. When you press **Down**, the line the cursor is positioned on moves to the first line on the screen. When you press **Up**, the line the cursor is positioned on moves to the last line on the screen.
FULL|PAGE	A full screen at a time.
HALF	A half a screen at a time.

- System and error messages on the third line.

Universal Commands

CPMS/SYSD provides several commands that perform the same functions on every screen.

CLEAR

Terminates the menu-driven session and returns to CICS or optionally returns to the Primary Option Menu.

DOWN [nn]

| Note | The DOWN command only works on read-only and read-update screens with more than one page of data. |

Moves the display down by the number (**nn**) of lines you type in the *Input* field or by the amount specified in the *Scroll* field. If you type a number of lines in the *Input* field, that number takes priority over the amount specified in the *Scroll* field.

END

Returns to the next-highest logical level.

Enter key

Submits the command or option to the CPU.

HELP

Displays the online help for the screen.

RECALL

Displays the last command you issued. CPMS/SYSD saves the commands you issue in a special command buffer. The RECALL command redisplays the commands in this buffer starting with the last command you issued. This lets you keep track of what you have been doing in the system and go back and issue a command again.

REPEAT

Repeats the last command you issued.

RETURN

Returns to the Primary Option Menu.

SET

Temporarily sets a variable to a new value. The variables you can change correspond to the fields on Option 0.1, JES/List Parameter Definitions, and Option 0.2, Program Function Key Definition. The format of the SET command is:

```
SET [CLASS A-Z,0-9|*]
    [CLASSEL Y|N]
    [CLEAR command]
    [DESTID remote|unit_queue]
    [DESTSEL Y|N]
    [DSPSTCS Y|N|*]
    [JOBCRD1,2,3,4 job_info]
    [PREFSEL Y|N]
    [PREFIX job_name]
    [PA1,2,3 command]
    [PF1-24 or PF01-24 command]
    [PRINTER printer]
    [SYSINOK Y|N]
```

For example, **SET PREFIX SY** changes the job selection criteria to only display jobs that start with the characters *SY*.

Variable settings are only in effect during the current menu flow. To reset the variables to their original state, press **Return** or issue the SET command without specifying any parameters.

SPLIT

Creates and displays a new CPMS/SYSD partition. You can create up to four active partitions. To delete a partition and display the last partition, if any are active, press **Return** on the Primary Option Menu in the partition you want to delete.

SWAP

Moves from the current partition to the previous partition partition. For example, if you are in partition 3 and issue the SWAP command, CPMS/SYSD takes you to partition 2.

UP [nn]

| Note | The UP command only works on read-only and read-update screens with more than one page of data. |

Moves the display up by the number (**nn**) of lines you type in the *Input* field or by the amount specified in the *Scroll* field. If you type a number of lines in the *Input* field, that number takes priority over the amount specified in the *Scroll* field.

Signing on to CPMS/SYSD

You can enter the CPMS/SYSD menu-driven system in three ways. Each method displays a different screen in the system.

Using the Signon Screen

The Signon screen is where you enter your user ID and password. For security reasons, the password is not displayed when you type it on this screen. To access the Signon screen:

1. On a clear CICS screen or at the bottom of any function-driven CPMS/SYSD screen, type **SYSD,MENU** and press **Enter**.

```
 11/03/97          MVS/ESA VERSION OF CPMS/SYSD RELEASE 6.4.1
 MONDAY                     ***  CPMS/SYSD SIGNON  ***              11:16:59

 ENTER/VERIFY PARAMETERS BELOW:


 SESSION CONTROL:

    USER IDENTIFIER ===>

    PASSWORD        ===>
```

2. Type your **user_id** in the *User Identifier* field.

3. **Tab** to the *Password* field and type your **password**.

4. Press **Enter**. The Primary Option Menu is displayed.

Bypassing the Signon Screen

Caution ▶ *Your password is displayed on the screen when you type it as a parameter on the MENU command. To maintain a secure password, use the procedure described in "Using the Signon Screen" on page 15.*

You can bypass the Signon screen by including your user ID and password as positional parameters on the MENU command. To bypass the Signon screen, type the following command and press **Enter**:

```
SYSD,MENU,user_id,password
```

The Primary Option Menu screen is displayed.

Going Directly to a Specific Screen

Caution ▶ *Your password is displayed on the screen when you type it as a parameter on the MENU command. To maintain a secure password, use the procedure described in "Using the Signon Screen" on page 15.*

After you learn the system, you can sign on and go directly to a specific screen by including the screen's address as the last positional parameter on the MENU command. To go directly to a specific screen, type the following command and press **Enter**:

```
SYSD,MENU,user_id,password,address
```

Primary Option Menu

The Primary Option Menu is the main CPMS/SYSD menu. This screen acts as the primary landing in the stepped hierarchy. You can access all other screens and functions from the Primary Option Menu.

```
---------------- CPMS/SYSD PRIMARY OPTION MENU ---------------- (1/1)
INPUT ===>                                            SCROLL: CSR
                                             USER     - BW
   0 - PARMS    - Specify CPMS/SYSD parameters        DATE     - 11/03/97
   1 - BROWSE   - Display source data                 TIME     - 11:23:35
   2 - EDIT     - Create or change source data        TERMINAL - G031
   3 - UTIL     - Perform utility functions           APPLID   - CICS31
   4 - ACTIVE   - Display active jobs                 RELEASE  - 06.4.1V00
   5 - N        - Display jobs in the input and output queue
   6 - O        - Display jobs in the output queue
   7 - PRINTER  - Display/change a printer's status
   8 - JFT      - Job/file tailoring
   C - CICS     - Enter CICS transactions
   T - TUTORIAL - Display information about CPMS/SYSD
   U - USER     - Perform user file maintenance
   X - END      - Terminate CPMS/SYSD session




 PRESS END KEY TO TERMINATE CPMS/SYSD.
```

Option Definitions

Type the single-character **option** or the **command** in the *Input* field and press **Enter**.

0 – PARMS

Displays the Parameter Options menu where you can access the parameter screens and functions.

1 – BROWSE

Lets you display and browse the source data you are authorized to access.

2 – EDIT

Lets you access SYSD's full-screen editor where you can create or update source data.

3 – UTIL

Displays the Utility Selection Menu where you can perform library, dataset, catalog, VTOC, and unit device operations.

4 – ACTIVE

Displays the address spaces in MVS.

5 – N

Displays the jobs in the input and output queues.

6 – O

Displays the jobs in the output queues.

7 – PRINTER

Lets you review and change CICS printer assignments or display and control JES2 printers.

8 – JFT

Executes previously defined SYSD/JFT (Job and File Tailoring) panels. You can use these user-developed panels to submit jobs and update files.

> **Note** This option is only valid if your company has installed the SYSD/JFT option.

C – CICS

Exits the menu-driven CPMS/SYSD system and displays a clear CICS screen, but does not terminate your CPMS/SYSD session. You can execute native CICS transactions and return to your CPMS/SYSD session where you left it.

To return to the Primary Option Menu in the partition you were in when you exited, type **SYSD** on the CICS screen and press **Enter**.

> **Tip** If you have an available partition, you can also create a new partition and display the CICS screen. To do so, type **C** in the *Input* field on any screen and press **Split**. Return to the menu-drive system and press **End** to return to the original screen.

T – TUTORIAL

Displays a tutorial on how to use the CPMS/SYSD online help. From here you can access other topics in the help system.

U – USER

Lets authorized users add, update, delete, and review the SYSD user file.

X – END

Terminates the menu-driven CPMS/SYSD session and returns to a clear CICS screen.

Chapter 2

Option 0: CPMS/SYSD Parameters

The menu-driven CPMS/SYSD system makes extensive use of profile variables, or parameters, that let you tailor the way the system works for you without affecting other users. Once you have set a profile variable, that setting is tied to your user profile. Whenever you sign on to the menu-driven system, CPMS/SYSD pulls the preset variables from your user profile and applies them throughout the system.

This chapter describes the following screens you use to specify your profile variables:

Screen	Address
Parameter Options	0
General Parameter Definitions	0.0
JES/List Parameter Definitions	0.1
Program Function Key Definition	0.2
Job/File Tailoring Parameters	0.3
GET/PUT TS Queue Identifiers	0.4
Utility Parameters	0.5

Parameter Options

Option 0, Parameter Options, displays a list of options that let you access the screens you use to set various profile variables.

➤ To access the Parameter Options menu

On the Primary Options Menu, type 0 in the *Input* field and press **Enter**.

or

On any screen, type 0 in the *Input* field and press **Return**.

```
------------------- CPMS/SYSD PARAMETER OPTIONS -----------------    (1/1)
INPUT ===>                                                  SCROLL: CSR
                                                USER     - BW
    0 - GENERAL   - Display/change general parameters      DATE     - 11/03/97
    1 - LIST      - Display/change JES and list defaults    TIME     - 11:28:01
    2 - PF        - Display/change PF key assignments       TERMINAL - G031
    3 - JFTPANEL  - Set initial JFT panel to display        APPLID   - CICS31
    4 - QUEUEIDs  - Set GET/PUT TS queue identifiers        RELEASE  - 06.4.1V00
    5 - UTILPRMs  - Set UTILITY parameters
    X - END       - Return to main menu
```

Option Definitions

Type the single-character **option** or the **command** in the *Input* field and press **Enter**.

0 – GENERAL

Lets you review and update your user profile, which includes your password, name, title, department, and address.

1 – LIST

Lets you set and change JES parameters, which include your default CICS printer ID, job display criteria, and default JOB card information.

2 – PF

Lets you review and change your PF key assignments.

3 – JFTPANEL

Lets you specify the default SYSD/JFT (Job and File Tailoring) and JES panels displayed when you access the SYSD/JFT option. Optionally lets you dynamically define JFT panel, skeleton, and message datasets.

4 – QUEUEIDs

Lets you specify the default temporary storage queue name and CICS system ID name CPMS/SYSD uses when you issue a PUT, GET, or DELQ command.

5 – UTILPRMs

Lets you specify the JOB card and default parameters for the batch print jobs you submit from Option 3.1, Library Utilities Menu.

General Parameter Definitions

Option 0.0, General Parameter Definitions, displays your user profile information including your password, name, title, department, and address. CPMS/SYSD uses the information in this file throughout the system. You can change the information on this screen.

➤ **To access the General Parameter Definitions screen**

On the Parameter Options Menu, type 0 in the *Input* field and press **Enter**.

or

On any screen, type 0.0 in the *Input* field and press **Return**.

```
---------------- GENERAL PARAMETER DEFINITIONS ----------------- (1/1)
INPUT ===>                                                  SCROLL: CSR
                                               USER    - BW

PASSWORD          ==> BW        NAME       ==> BILL WELLS
                                TITLE      ==> SYSTEMS PROGRAMMER
                                DEPARTMENT ==> INFORMATION SERVICES
                                ADDRESS    ==>
```

Field Definitions

Address

Your mailing address, up to four lines.

Department

The department you work in.

Name

Your name.

Password

Your password. You can change this field.

> You should change your password regularly to maintain security.

Title

Your job title.

JES/List Parameter Definitions

Option 0.1, JES/List Parameter Definitions, lets you set the following job-related profile variables:

* The default CICS printer you print on from Option 5, MVS/JES2 Job Queue Display, and Option 6, MVS/JES2 Job Output Display.

* The job-selection criteria that limits what is displayed on Option 5, MVS/JES2 Job Queue Display, and Option 6, MVS/JES2 Job Output Display.

* The default JOB card CPMS/SYSD automatically puts in each batch job you run. If you specify a different JOB card in the batch job itself, that JOB card overrides the default JOB card defined on Option 0.1, JES/List Parameter Definitions.

➤ **To access the JES/List Parameter Definitions screen**

On the Parameter Options Menu, type 1 in the *Input* field and press **Enter**.

or

On any screen, type 0.1 in the *Input* field and press **Return**.

```
----------------- JES/LIST PARAMETER DEFINITIONS ----------------- (1/1)
INPUT ===>                                                    SCROLL: CSR
                                                   USER    - BW

PRINT CONTROL:
     Printer identifier ==>        Printer display (Cpms/Jes2) ==> C

JOB SELECTION CRITERIA:         USE:
     Job prefix    ==> BW          Y
     Class         ==> *           N
     Destination   ==> U304        N
     Display SYSIN ==> Y           Display TSO/STC ==> Y

JOB STATEMENT INFORMATION:
 ==> //BW JOB 'BILL WELLS',CLASS=A,MSGCLASS=Z
 ==> /*ROUTE PRINT RMT1
 ==> //*JOB FROM BW
 ==> //*
```

Field Definitions

Class

The SYSOUT class of the jobs CPMS/SYSD displays on Option 6, MVS/JES2 Job Output Display. The default is an asterisk (*), which means CPMS/SYSD displays all classes.

The *Use* column turns the class criteria on or off. If set to **Y**, CPMS/SYSD only displays jobs with the SYSOUT class specified in this field on Option 6. If set to **N**, CPMS/SYSD displays all classes on Option 6.

> **Note** Option 5, MVS/JES2 Job Queue Display, does not use class as a selection criteria because it only sees the execution class, not the SYSOUT class.

Destination

The destination of the jobs CPMS/SYSD displays on Option 5, MVS/JES2 Job Queue Display, and Option 6, MVS/JES2 Job Output Display. You can specify a JES queue, unit queue, or any remote destination.

The *Use* column turns the destination criteria on or off. If set to **Y**, CPMS/SYSD only displays jobs with the destination specified in this field on Options 5 and 6. If set to **N**, CPMS/SYSD displays all destinations on Options 5 and 6.

Display SYSIN

A **Yes/No** field that specifies if CPMS/SYSD displays SYSIN datasets on Option 5, MVS/JES2 Job Queue Display, and Option 6, MVS/JES2 Job Output Display.

Display TSO/STC

Specifies what CPMS/SYSD displays on Option 4, MVS/JES2 Display Active Jobs.

Type	To display
*	TSO users, started tasks, initiators, and batch jobs.
N	Only batch jobs.
Y	TSO users, started tasks, and batch jobs. This is the default.

Job prefix

The prefix of the jobs CPMS/SYSD displays on Option 5, MVS/JES2 Job Queue Display, and Option 6, MVS/JES2 Job Output Display. For example, type **ABC** to display all the jobs that start with the characters *ABC*.

> To exclude a column of the job prefix, type a plus sign (+) in that column. For example, type **A+C*** to display all the jobs that have an *A* as the first character, any character in the second position, and *C* as the third character.

The *Use* column turns the prefix criteria on or off. If set to **Y**, CPMS/SYSD only displays jobs with the prefix specified in this field on Options 5 and 6. If set to **N**, CPMS/SYSD displays all jobs on Options 5 and 6.

Job Statement Information

The JOB card CPMS/SYSD automatically puts in the batch jobs you submit from the SYSD editor. There are four lines for JCL information. If the first line of your edit session is not a JOB card, CPMS/SYSD puts the four job statements specified in this field in the batch job when you issue the SUBMIT primary command.

Printer display (Cpms/Jes2)

Specifies which type of printers CPMS/SYSD initially displays on Option 7, CPMS Printer Table Display/Change.

Type	*To display*
C	CICS printers.
J	JES2 printers.

Printer identifier

The default CICS printer CPMS/SYSD uses when you print from Option 5, MVS/JES2 Job Queue Display or MVS/JES2 Job Dataset Display, and Option 6, MVS/JES2 Job Output Display.

Use

A **Yes/No** field that specifies if CPMS/SYSD uses the corresponding job, prefix, class, and destination criteria to limit the jobs it displays on Option 5, MVS/JES2 Job Queue Display, and Option 6, MVS/JES2 Job Output Display.

Program Function Key Definition

CPMS/SYSD lets you take full advantage of your program function (PF) keys. Option 0.2, Program Function Key Definition, lets you review and change the commands assigned to your PF keys. CPMS/SYSD is shipped with preassigned values for PF1 through PF12. If your terminal has 24 PF keys, PF13 through PF24 are the same as PF1 through PF12.

> ### To access the Program Function Key Definition screen

On the Parameter Options Menu, type 2 in the *Input* field and press **Enter.**

or

On any screen, type 0.2 in the *Input* field and press **Return.**

```
---------------- PROGRAM FUNCTION KEY DEFINITION ----------------  (1/1)
 INPUT ===>                                                SCROLL: CSR

                   DEFAULT                                  DEFAULT
 PF1  ==> HELP     (help)          PF13 ==> HELP     (help)
 PF2  ==> SPLIT    (split)         PF14 ==> SPLIT    (split)
 PF3  ==> END      (end)           PF15 ==> END      (end)
 PF4  ==> NOP      (nop)           PF16 ==> NOP      (nop)
 PF5  ==> FIND     (find)          PF17 ==> FIND     (find)
 PF6  ==> CHANGE   (change)        PF18 ==> CHANGE   (change)
 PF7  ==> UP       (up)            PF19 ==> UP       (up)
 PF8  ==> DOWN     (down)          PF20 ==> DOWN     (down)
 PF9  ==> SWAP     (swap)          PF21 ==> SWAP     (swap)
 PF10 ==> LEFT     (left)          PF22 ==> LEFT     (left)
 PF11 ==> RIGHT    (right)         PF23 ==> RIGHT    (right)
 PF12 ==> RETURN   (return)        PF24 ==> RETURN   (return)

 CLEAR => CLEAR    (clear)         PA1  ==> NOP      (nop)
 PA2  ==> NOP      (nop)           PA3  ==> NOP      (nop)

      Clearing a field resets it to the default option.
```

> **Tip:** You can use the PA keys defined as **NOP** (non-operational) for the RECALL command during an edit session.

Default PF Key Assignments

CLEAR (CLEAR)

Ends the CPMS/SYSD session and returns to a clear CICS screen.

PA1 (NOP)

Non-operational.

PA2 (NOP)

Non-operational.

PA3 (NOP)

Non-operational.

PF1 (HELP)

Displays the online help for the screen you are on.

PF2 (SPLIT)

Creates a new partition and displays the Primary Option Menu in the new partition. You can create up to four full-screen partitions. This is similar to the split screen concept except each partition fills the full screen.

You can visualize menu partitions as a set of windowpanes. The number field on the right side of the first line of the screen tells you which of the available windowpanes you are in. For example, (1/4) means you are in partition one of four.

If you issue the RETURN command on the Primary Option Menu in the first partition, CPMS/SYSD deletes partition one and moves to partition four. The number field now displays (4/3), which means you are in the fourth partition you created, you have deleted one of the partitions, and you have three partitions left.

> (Tip) You can use the SWAP command or its corresponding PF key to move between the existing partitions.

PF3 (END)

Returns to the previous screen or the next-highest logical level.

PF4 (NOP)

Non-operational.

PF5 (FIND)

Issues a search command.

PF6 (CHANGE)

Issues a search and replace command.

PF7 (UP)

Scrolls up through a list of data.

PF8 (DOWN)

Scrolls down through a list of data.

PF9 (SWAP)

Swaps from one partition to another. See "PF2 (Split)" on page 30 for instructions on creating new partitions.

PF10 (LEFT)

Moves to the left across the data.

PF11 (RIGHT)

Moves to the right across the data.

PF12 (RETURN)

Returns to the Primary Option Menu.

PF13 through PF24

The same assignments as PF1 through PF12.

Changing Function Key Assignments

➢ **To change a PF key assignment**

1. **Tab** to the field to the right of the PF key you want to change.

2. Type the new **function** over the existing one, deleting any remaining characters.

3. Press **Enter.**

➢ **To disable a PF key**

    1.   **Tab** to the field to the right of the PF key you want to disable.

    2.   Type **NOP** (non-operational), deleting any remaining characters.

    3.   Press **Enter**.

➢ **To return a PF key to its default**

    1.   **Tab** to the field to the right of the PF key you want to change.

    2.   Press **Erase EOF** to delete the characters in the field.

    3.   Press **Enter**.

Job/File Tailoring Parameters

Option 0.3, Job/File Tailoring Parameters, lets you specify the default panel names CPMS/SYSD executes when you invoke SYSD/JFT (Job and File Tailoring).

➤ ## To access the Job/File Tailoring Parameters screen

On the Parameter Options Menu, type **3** in the *Input* field and press **Enter**.

or

On any screen, type **0.3** in the *Input* field and press **Return**.

```
----------------- JOB/FILE TAILORING PARAMETERS ----------------- (1/1)
INPUT ===>                                                   SCROLL: CSR

   DEFAULT PANEL NAME: SYSD08                   USER    -  BW

DEFAULT JES PANEL NAME:                      EXECUTE ANY PANEL: Y

PANEL LIBRARIES    ==>
                   ==>
                   ==>
                   ==>
                   ==>

SKELETON LIBRARIES ==>
                   ==>
                   ==>
                   ==>
                   ==>

MESSAGE LIBRARIES  ==>
                   ==>
                   ==>
                   ==>
                   ==>
```

Field Definitions

Default JES Panel Name

The name of the SYSD/JFT panel CPMS/SYSD executes when you invoke SYSD/JFT from Option 5, MVS/JES2 Job Queue Display, or Option 6, MVS/JES2 Job Output Display.

Default Panel Name

The name of the panel CPMS/SYSD executes when you invoke SYSD/JFT. The default is **SYSD08**.

Execute Any Panel

A **Yes/No** field that specifies if you can issue the EXEC panel_name primary command to access other panels. If set to **N** or blank, a security violation occurs if you try to access another panel.

Message Libraries

Up to five dataset names SYSD/JFT uses for processing messages. SYSD/JFT searches these datasets based on the dataset concatenation defined when SYSD/JFT was installed. Most likely this is set up so SYSD/JFT searches the first dataset listed, then the second, and so on. This is an optional feature of SYSD/JFT.

Panel Libraries

Up to five dataset names SYSD/JFT uses for processing panels. SYSD/JFT searches these datasets based on the dataset concatenation defined when SYSD/JFT was installed. Most likely this is set up so SYSD/JFT searches the first dataset listed, then the second, and so on. This is an optional feature of SYSD/JFT.

Skeleton Libraries

Up to five dataset names SYSD/JFT uses for processing skeletons. SYSD/JFT searches these datasets based on the dataset concatenation defined when SYSD/JFT was installed. Most likely this is set up so SYSD/JFT searches the first dataset listed, then the second, and so on. This is an optional feature of SYSD/JFT.

GET/PUT TS Queue Identifiers

Option 0.4, GET/PUT TS Queue Identifiers, defines the default temporary storage (TS) queue name and the CICS system ID. CPMS/SYSD uses these values when you issue a GET, PUT, or DELQ primary command.

➤ ## To access the GET/PUT TS Queue Identifiers screen

On the Parameter Options Menu, type **4** in the *Input* field and press **Enter**.

or

On any screen, type **0.4** in the *Input* field and press **Return.**

```
---------------- GET/PUT TS Queue Identifiers ----------------- (1/1)
INPUT ===>                                               SCROLL: CSR

                                              USER     - BW

    GET/PUT TS Queue Name: CFTRG031    <eof> = IND$ default    '****' = termid
       CICS Region SYSID: CI31        <eof> or '*' = local SYSID

Queue and SYSID command
       override retention: 0           0 = Current command only
                                       1 = Life of current session
                                       2 = Permanent
```

Field Definitions

CICS Region SYSID

The system ID of the CICS region where CPMS/SYSD reads from or writes to the temporary storage queue. If set to an asterisk (*), CPMS/SYSD reads from and writes to the temporary storage queue in the current CICS region.

GET/PUT TS Queue Name

The name of the temporary storage queue CPMS/SYSD uses when you issue a GET, PUT, or DELQ command. If set to a single asterisk (*), CPMS/SYSD uses the default temporary storage queue called **CFTRterminal _id**, where **terminal_id** is the ID of the terminal you are signed on to; for example **CFTRG031**. If set to characters followed by four asterisks in a row (****), CPMS/SYSD uses the terminal ID in place of the asterisks; for example, **ABC****** means CPMS/SYSD uses a temporary storage queue called **ABCG031**.

Queue and SYSID command override retention

Specifies how long a temporary storage queue name or CICS system ID you specify on a GET, PUT, or DELQ command overrides the temporary storage queue name or CICS system ID you specify on this screen.

Type	*To*
0	Only override the temporary storage queue name or CICS system ID specified on this screen for the current command. If you do not specify an override on the next command, CPMS/SYSD uses the values specified on this screen for the temporary storage queue name and CICS system ID.
1	Override the temporary storage queue name or CICS system ID specified on this screen until you exit CPMS/SYSD or end the current spool display, browse, or edit session.
2	Permanently override the temporary queue name or CICS system ID specified on this screen and remain the default until you change it.

Utility Parameters

Option 0.5, Utility Parameters, defines the JOB cards, default lines per page, and SYSOUT class CPMS/SYSD uses when you submit a batch job to print a dataset from Option 3.1, Library Utilities Menu. This screen also defines the default high-level qualifier CPMS/SYSD uses for Option 3.4, LISTCAT Utility.

➤ ## To access the Utility Parameters screen

On the Parameter Options Menu, type **5** in the *Input* field and press **Enter.**

or

On any screen, type **0.5** in the *Input* field and press **Return.**

```
---------------------- UTILITY PARAMETERS  -------------------- (1/1)
INPUT ===>                                            SCROLL: CSR


Library Parameters:

  Lines Per Page ===>
  Sysout Class   ===>
  Jobcard Information:

 ===>
 ===>
 ===>
 ===>

Catalog Parameters:

  Index ===>



```

Field Definitions

Index

The high-level qualifier CPMS/SYSD uses for Option 3.4, LISTCAT Utility. If set to blanks, the default is your SYSD user ID.

Jobcard Information

The JOB card information CPMS/SYSD attaches to the front of the batch print job you submit from Option 3.1, Library Utilities Menu.

Lines Per Page

The number of output lines per page CPMS/SYSD uses for the batch print jobs you submit from Option 3.1, Library Utilities Menu.

Sysout Class

The output class where CPMS/SYSD writes the batch reports you submit from Option 3.1, Library Utilities Menu.

Chapter 3

Option 1: Browse Source Data (SYSD Only)

The full CPMS/SYSD package includes a powerful feature that lets you browse source partitioned dataset (PDS) members and sequential datasets. This feature lets you view datasets without changing the data. If your company has installed the SYSD/ATP option, you can also browse CA-Panvalet datasets.

This chapter describes the following screens you use to browse source datasets:

Screen	Address
Browse – Dataset Menu	1
Browse – Member Selection	n/a
Browse – Dataset Display	n/a

Browse – Dataset Menu

Option 1, Browse – Dataset Menu, is the first browse screen you access from the Primary Option Menu. From here you can select and browse members of a browse library. The browse library is a partitioned dataset (PDS) made up of members containing the same type of information. Each browse library has a three-part name that usually follows a naming convention of **project.library.type.**

You can browse a partitioned or sequential dataset that does not conform to the browse library's three-part naming convention. To do so, type the dataset name in the *Other Partitioned or Sequential Dataset* section. If the dataset name is not enclosed with apostrophes, CPMS/SYSD automatically puts your user ID in front of the dataset name. For an uncataloged dataset, you must also specify the volume serial number.

➢ **To access the Browse – Dataset Menu**

On the Primary Option Menu, type 1 in the *Input* field and press **Enter.**

or

On any screen, type 1 in the *Input* field and press **Return.**

```
------------------------- BROWSE - DATASET MENU ----------------------- (1/1)
 INPUT ===>                                                    SCROLL: CSR


 ENTER/VERIFY PARAMETERS BELOW:

 BROWSE LIBRARY:
    PROJECT ===> SYSD
    LIBRARY ===> PROD      ===> PTFB    ===> PROD      ===>
    TYPE    ===> MACLIB
    MEMBER  ===>                        (Blank for member selection list)

 OTHER PARTITIONED OR SEQUENTIAL DATASET:
    DATASET NAME   ===>
    VOLUME SERIAL  ===>                 (If not cataloged)

 DATASET PASSWORD ===>                  (If password protected)
```

Field Definitions

Dataset Name

The 1- to 44-character name of the partitioned or sequential dataset you want to browse. You use this field if the dataset name does not conform to the browse library's three-part naming convention. This field overrides a dataset name specified in the *Browse Library* section.

To display a PDS member, type the PDS name followed by the member name enclosed with parentheses; for example, **'SYSD.PROD.USRLIB(PTFLIST)'**. If the PDS name is not enclosed with apostrophes, CPMS/SYSD adds your user ID in front of the dataset name; for example, **BW.SYSD.PROD.USRLIB(PTFLIST)**.

Dataset Password

The password for the dataset. This field is only required if the dataset is password protected. The password is not displayed on the screen when you type it.

Library

The name of the library you want to browse. This is the second level of the three-part library naming convention.

You can concatenate up to four libraries. CPMS/SYSD searches each library in order starting with the first one listed. If the member you want to browse is in more than one of the libraries, CPMS/SYSD displays the member in the first library it finds the member name in.

Member

The name of the member you want to browse. CPMS/SYSD displays the contents of the member on the Browse – Dataset Display screen. See "Browse – Dataset Display" on page 50 for more information about the screen.

If you do not specify a member name, CPMS/SYSD displays a list of all the members in the first library on the Browse – Member Selection screen. See "Browse – Member Selection" on page 47 for more information about the screen.

Project

The name of the project you want to browse. This is the first level of the three-part library naming convention. It is the identifier for libraries that belong to the same project.

Type

The type of data in the library. This is the third level in the three-part library naming convention. Common data types are: **ASM, COBOL, HELP, LOAD,** and **OBJ.**

Volume Serial

The volume serial number where an uncataloged dataset resides. If the dataset you want to browse is cataloged, leave this field blank.

Example

```
------------------------ BROWSE - DATASET MENU ----------------------- (1/1)
INPUT ===>                                                      SCROLL: CSR


ENTER/VERIFY PARAMETERS BELOW:

BROWSE LIBRARY:
   PROJECT ===> SYSD
   LIBRARY ===> PTFA      ===> PTFB      ===> PTFC      ===>
   TYPE    ===> ASM
   MEMBER  ===>                        (Blank for member selection list)

OTHER PARTITIONED OR SEQUENTIAL DATASET:
   DATASET NAME   ===>
   VOLUME SERIAL ===>                 (If not cataloged)

DATASET PASSWORD ===>                 (If password protected)
```

This example shows:

* The project name is SYSD.

* The PTFA, PTFB, and PTFC libraries have been concatenated. CPMS/SYSD searches these libraries in order starting with PTFA.

* The type of data in the library is ASM (Assembler).

◆ The full library names are:

- SYSD.PTFA.ASM
- SYSD.PTFB.ASM
- SYSD.PTFC.ASM

| Note |

CPMS/SYSD only searches these libraries if you specify a name in the *Member* field. If you do not specify a member name, CPMS/SYSD displays a list of all the members in the first library, which in this example is SYSD.PTFA.ASM.

Browse – Dataset Menu for CA-Panvalet

If your company has installed the SYSD/ATP option, you can browse CA-Panvalet library members. The fields in the *PANVALET (R) Access Security* section on the Browse – Dataset Menu screen control your access to CA-Panvalet members.

You must provide security codes to access CA-Panvalet members with a security level greater than 0. You can provide the codes separately for the libraries, member, and installation; or you can provide the sum of the codes in the member code.

> **Note** If you do not specify a member name, you may have to provide the library code to display a list of members in a library.

```
------------------------- BROWSE - DATASET MENU ------------------------- (1/1)
INPUT ===>                                                        SCROLL: CSR


ENTER/VERIFY PARAMETERS BELOW:

BROWSE LIBRARY:
    PROJECT ===> PAN
    LIBRARY ===> TEST      ===> ACPT      ===> PROD      ===>
    TYPE    ===> SOURCE
    MEMBER  ===>                         (Blank for member selection list)

OTHER PARTITIONED OR SEQUENTIAL DATASET:
    DATASET NAME  ===>
    VOLUME SERIAL ===>                   (If not cataloged)

DATASET PASSWORD ===>                    (If password protected)

PANVALET(R) ACCESS SECURITY:
    LIBRARY CODES ===>        ===>          ===>         ===>
    MEMBER CODE   ===>                   INSTALLATION CODE ===>
```

Field Definitions

> **Note** See "Browse – Dataset Menu" on page 40 for definitions of the *Dataset Password* field and the fields in the *Browse Library* and *Other Partitioned or Sequential Dataset* sections.

Installation Code

The installation security code for a CA-Panvalet member with a security level greater than 2.

Library Codes

The library security code for the CA-Panvalet libraries. You can concatenate up to four libraries. For a secured library, you must specify the library code to display a list of the members in the library.

Member Code

The member security code for a CA-Panvalet member with a security level greater than 0. You can also specify the sum of the codes for the libraries, member, and installation in this field.

Example

```
-------------------- BROWSE - DATASET MENU ---------------------- (1/1)
INPUT ===>
                                                          SCROLL: CSR


ENTER/VERIFY PARAMETERS BELOW:

BROWSE LIBRARY:
   PROJECT ===> PAN
   LIBRARY ===> TEST      ===> ACPT    ===> PROD     ===>
   TYPE    ===> SOURCE
   MEMBER  ===>                        (Blank for member selection list)

OTHER PARTITIONED OR SEQUENTIAL DATASET:
   DATASET NAME   ===>
   VOLUME SERIAL  ===>                 (If not cataloged)

DATASET PASSWORD ===>                  (If password protected)

PANVALET(R) ACCESS SECURITY:
   LIBRARY CODES ===>       ===>         ===>         ===>
   MEMBER CODE   ===>             INSTALLATION CODE ===>
```

This example shows:

* The project name is PAN.

* The TEST, ACPT, and PROD libraries have been concatenated. CPMS/SYSD searches these libraries in order starting with TEST.

* The type of data in the library is SOURCE.

♦ The full library names are:

- PAN.TEST.SOURCE
- PAN.ACPT.SOURCE
- PAN.PROD.SOURCE

| Note | CPMS/SYSD only searches these libraries if you specify a name in the *Member* field. If you do not specify a member name, CPMS/SYSD displays a list of all the members in the first library, which in this example is PAN.TEST.SOURCE. |

Browse – Member Selection

The Browse – Member Selection screen displays a list of members in a library and the statistics for each member. From here you can scan the list for a specific member and display it.

➤ ## To access the Browse – Member Selection screen

On the Browse – Dataset Menu screen, type a browse library name in the *Browse Library* section. Leave the *Member* field blank. Press **Enter**. If several libraries are concatenated, SYSD displays the members in the first library.

or

On the Browse – Dataset Menu screen, type a partitioned or sequential dataset name that does not conform to the three-part naming convention in the *Other Partitioned or Sequential Dataset* section. Do not specify a member name. Press **Enter**.

```
BROWSE - BW.LIBRARY.DOC                                           (1/1)
INPUT ===>                                              SCROLL: CSR

 O   --NAME--    VER.MOD   CREATED  LAST MODIFIED  SIZE  INIT  MOD    --ID--
     CILABELS    001.04    97.020   97.149 16:08     20    21    29 BW
     MANUALS     001.22    97.183   97.227 15:04    976   815  1027 BW

















OPTIONS ==> S = SELECT, D = DELETE, P = PRINT
```

Field Definitions

> **Note** The *VER.MOD, Created, Last Modified, Size, INIT, MOD,* and *ID* fields only contain data if the PDS member has the ISPF Statistics feature turned on.

Created

The date the member was created.

ID

The user ID of the last person who updated the member.

INIT

The member's initial size.

Last Modified

The date and time the member was last updated.

MOD

The number of updates made to the member.

Name

The member name.

O

Option column. Type the single-character **option** next to the member and press **Enter**.

D=Delete

Deletes the member from the library.

P=Print

Prints the member on the local OS printer.

S=Select

Displays the member on the Browse – Dataset Display screen. See "Browse – Dataset Display" on page 50 for more information about the screen.

Size

The member's current size.

VER.MOD

The member's version and modification level.

Command Definitions

Type the **command** in the *Input* field and press **Enter**.

BOTTOM

Moves the display to the bottom of the member list.

DOWN

Scrolls down through the member list.

FIND

Searches for a specific member. Type **FIND member_name** in the *Input* field and press **Enter**.

SELECT

Displays a member on the Browse – Dataset Display screen. Type **SELECT member_name** in the *Input* field and press **Enter**. See "Browse – Dataset Display" on page 50 for more information about the screen.

TOP

Moves the display to the top of the member list.

UP

Scrolls up through the member list.

Browse – Dataset Display

The Browse – Dataset Display screen displays the contents of the original source member. You can use the primary commands to browse through the member and search for data. A hexadecimal command lets you display the member in vertical or horizontal hexadecimal notation.

➤ **To access the Browse – Dataset Display screen**

On the Browse – Dataset Menu, type a browse library and member name in the *Browse Library* section and press **Enter**.

or

On the Browse – Dataset Menu, type a partitioned or sequential dataset name that does not conform to the three-part naming convention in the *Other Partitioned or Sequential Dataset* section and press **Enter**.

or

On the Browse – Member Selection screen, type **S** (Select) in the *O* (Option) column next to the member you want to display and press **Enter**.

```
 BROWSE - BW.LIBRARY.DOC(MANUALS)                      COL: 0001 0080 (1/1)
 INPUT ===>                                                    SCROLL: CSR
      LINE = 000001, RECFM = FB, LRECL = 000080, BLOCKSIZE = 004080
 ----+----1----+----2----+----3---- TOP OF DATA --5----+----6----+----7- CAPS ON
             BW LIBRARY MANUALS                                   00010000
 GA18=2-81-0  3270 INFO DISPL SYS 3276 CU DISP STAT & PROG GD     00020058
 GA21-9026-3  2501 MODELS B1 & B2 COMPONENT DESC AND OPER PROCED  00030000
 GA21-9033-3  S/360 COMPONENT DESC & OPER PROCED                  00040000
 GA21-9182-5  IBM DISKETTE GEN INFO MANUAL                        00050008
 GA21-9465-1  3180 MODEL 1 DISPL STATION INTRO & PREINSTL PLAN MANUAL 00060000
 GA21-9468-0  3180 DISPLAY STATION MODEL 2 USER'S GUIDE           00070000
 SA21-9837-0  ANALYZING PROBLEMS - 9332 DISK UNIT                 00091069
 GA22-6974-6  S/360/370 I/O INTERFACE CHANNEL OEM                 00100000
 ----+----1----+----2----+----3---- END OF DATA --5----+----6----+----7----+----8
```

| Note | A format line at the top of the screen and line numbers down the right side help you quickly find information. |

Field Definitions

Blocksize

The dataset's physical block size.

COL

The first and last columns displayed.

Line

The line number displayed on the first line of the screen.

LRECL

The dataset's logical record length.

RECFM

The dataset's record format.

This code	Means the record format is
F	Fixed
FB	Fixed block
U	Undefined
V	Variable
VB	Variable block

Command Definitions

Type the **command** in the *Input* field and press **Enter**.

BOTTOM

Moves the display to the bottom of the member.

CAPS

Turns uppercase translation on or off. When the translator is off, you can search for both uppercase and lowercase characters. The format of the CAPS command is:

```
CAPS [ON|OFF]
```

DELQ

Deletes a temporary storage queue you created with the PUT or PCSND command. The format of the DELQ command is:

```
DELQ [Q=queue_name] [S=sysid]
DQ
```

This parameter	Specifies
queue_name	The 8-character name of the temporary storage queue you want to delete.
sysid	The 4-character system ID of the CICS region the temporary storage queue is in. This parameter lets you delete a temporary storage queue in a different CICS region.

The default temporary storage queue name and CICS system ID are defined on Option 0.4, GET/PUT TS Queue Identifiers. See "GET/PUT TS Queue Identifiers" on page 35 for more information about defining the defaults.

DOWN

Scrolls down through the member. The format of the DOWN command is:

```
DOWN [nn|M]
```

This parameter	Specifies to scroll
nn	By the specified number of lines.
M	To the bottom of the member.

If you do not specify one of the parameters, SYSD scrolls by the amount specified in the *Scroll* field.

FIND

Searches for a specific string of text. Several scan parameters let you control the search operation. The format of the FIND command is:

```
FIND string [left_column] [right_column]] [NEXT|ALL|FIRST|LAST|PREV|XALL]
```

This parameter	Specifies
string	The string you want to find.
left_column	The left column where you want the search to start. SYSD excludes data to the left of this column from the search. The default is **1**.
right_column	The right column where you want the search to end. SYSD only searches the text between, and including, the left and right columns. The default is the end of the record.
NEXT	Display the next occurrence of the string. This is the default.
ALL	Display all occurrences of the string and their relative line locations.
FIRST	Display the first occurrence of the string.
LAST	Display the last occurrence of the string.
PREV	Display the previous occurrence of the string.
XALL	Search all records and exclude the lines that do not contain the string from the display.

There are two ways to search for a string that contains both uppercase and lowercase data:

♦ To find the string exactly as it is entered, issue the CAPS OFF command. Then issue the FIND command, typing the string exactly as it appears in the member and enclosing it with quotes. For example, type **FIND "John"** or **FIND "john"**.

♦ To find all occurrences of the string regardless of the case, do not enclose the string with quotes. For example, type **FIND JOHN**.

HEX

Displays the member in hexadecimal notation. The format of the HEX command is:

```
HEX [ON|OFF]  [VERT|DATA]
```

This parameter	Specifies
ON	Turn hexadecimal notation on. This is the default.
OFF	Turn hexadecimal notation off.
VERT	Display the 2-digit hexadecimal number in the column below each character. This is the default.
DATA	Display the 2-digit hexadecimal number in linear format below the alphanumeric data.

LEFT

Moves the display to the left across the data. The format of the LEFT command is:

```
LEFT [nn|M]
```

This parameter	Specifies to move the display
nn	By the specified number of columns.
M	To the first column.

LINE

Positions a line so it is displayed on the first line of the screen. Type **LINE nn,** where nn is the line number you want to move to the first line, in the *Input* field and press **Enter.**

PRINT

Prints the dataset on the JES2 local destination queue, which is normally the system printer.

PUT

Writes all or some of the records in a browse session to a temporary storage queue. You can then use the GET command from an edit session to copy the data from the temporary storage queue into the edit session. You can also use a file transfer program to download the data from the temporary storage queue to a PC file.

You can only write 5,000 records per PUT command. CPMS/SYSD truncates records to 255 bytes if necessary. You can issue multiple PUTs to concatenate data from several sources.

The format of the PUT command is:

```
PUT [begin_line] [end_line] [Q=queue_name] [S=sysid]
```

This parameter	Specifies
begin_line	The number of the first line you want to write to the temporary storage queue. The default is 1.
end_line	The number of the last line you want to write to the temporary storage queue. The default is the end of the file or 5,000 records, whichever is less.
queue_name	The 8-character name of the temporary storage queue you want to write the records to.
sysid	The 4-character system ID of the CICS region the temporary storage queue is in. This parameter lets you write to a temporary storage queue in a different CICS region.

The default temporary storage queue name and CICS system ID are defined on Option 0.4, GET/PUT TS Queue Identifiers. See "GET/PUT TS Queue Identifiers" on page 35 for more information about defining the defaults.

RIGHT

Moves the display to the right. The format of the RIGHT command is:

```
RIGHT [nn|M]
```

This parameter	Specifies to move the display
nn	By the specified number of columns.
M	To the last column.

TOP

Moves the display to the top of the member.

UP

Scrolls up through the member. The format of the UP command is:

```
UP [nn|M]
```

This parameter	Specifies to scroll
nn	By the specified number of lines.
M	To the top of the member.

Chapter 4

Option 2: Edit Source Data (SYSD Only)

SYSD provides an ISPF-like editor that lets you create and update source PDS members or sequential datasets in real time under CICS. SYSD's time-saving advantages include:

+ Full-screen, context editing for multiple-line updates with a single interaction.

+ Three types of editing commands—primary, scroll, and line.

+ Full support of the SPLIT and SWAP commands that let you create and move between up to four active, full-screen sessions.

+ Full use of program function (PF) keys for performing SYSD operations.

+ Extensive online help.

+ Temporary work datasets that are not tied to an existing dataset.

This chapter describes how the SYSD editor works and how to manage your edit session. It then describes the following screens where you can edit data:

Screen	Address
Edit – Dataset Menu	2
Edit – Session Display	2.S
Edit – Member Selection	n/a
Edit – Dataset Display	n/a

After the screens, this chapter describes the editor's primary, scroll, and line commands.

How the SYSD Editor Works

The SYSD editor uses an edit session concept that provides security, recovery, and flexibility. SYSD copies a member or dataset to a work session for editing. SYSD does not update the original data until you issue the END or SAVE command. This means you can work on a member without changing it until you are ready. If CICS crashes, SYSD recovers all the changes you made up to the last time you pressed **Enter** or a PF key.

To start an edit session, you must specify a new or existing PDS member or sequential dataset on the Edit – Dataset Menu and press **Enter**. Once you are in an edit session, you can issue the following types of commands:

   * Primary commands, like END or CANCEL, that change the session's flow.

   * Scroll commands that act with certain primary commands to control paging.

   * Line commands that perform various functions on a specific line of data.

You can update or enter data directly on each line as you page through the edit session. The screen acts as a window traveling up, down, left, or right over the data.

The SYSD editor processes each screen in the same sequence. This lets you enter data, line commands, and a primary command on the same input screen before you press **Enter** or a PF key. The sequence the SYSD editor processes items is:

1.   Process the data portion. SYSD stores all updated data in the edit session, including lines you have inserted or added.

2.   Check and perform any line commands.

3.   Check and perform any primary commands.

Managing Your Edit Sessions

Once you are in an edit session, SYSD provides several commands for handling updated files:

Issue this command	To
ABORT	Exit the editor and return to the screen you entered the edit session from without updating the source member. You can return later and continue the edit session where you left off.
CANCEL	End the edit session without updating the original dataset. SYSD ends new source datasets without saving them.
CLEAR	Exit the editor and menu-driven SYSD without canceling the edit session or updating the source member. You can return later and continue the edit session where you left off.
END	End the session and merge the edited work dataset back into the original. If you are creating a new source dataset, SYSD saves the dataset.
RETURN	Display the Primary Option Menu without canceling the edit session or updating the source member. You can return later and continue the edit session where you left off.
SAVE	Merge the current updates into the original source dataset and stay in the edit session.
SPLIT	Exit the current edit session and display the Primary Option Menu in a new partition without merging the updates into the source dataset. To return to the edit session where you left off, issue the SWAP command. You can create up to four active partitions.

Edit – Dataset Menu

Option 2, Edit – Dataset Menu, is the first screen displayed when you select the Edit option on the Primary Option Menu. This screen is where you specify the name of the source dataset you want to edit. You can access all other edit screens directly or indirectly from here. The Edit – Dataset Menu lets you:

+ Edit existing datasets.
+ Create new members.
+ Start a new edit session.
+ Re-enter a current edit session.
+ Concatenate libraries belonging to the same project.
+ Create temporary edit sessions.

> ## To access the Edit – Dataset Menu

On the Primary Option Menu, type 2 in the *Input* field and press **Enter**.

or

On any screen, type 2 in the *Input* field and press **Return**.

```
-------------------------- EDIT - DATASET MENU ------------------------- (1/1)
  INPUT ===>                                                    SCROLL: CSR


  EDIT LIBRARY:
     PROJECT ===>
     LIBRARY ===>             ===>         ===>          ===>
     TYPE    ===>
     MEMBER  ===>                         (Blank for member selection list)

  OTHER PARTITIONED OR SEQUENTIAL DATASET:
     DATASET NAME   ===>
     VOLUME SERIAL ===>                   (If not cataloged)

  DATASET PASSWORD ===>                   (If password protected)
  PROFILE NAME     ===>                   (Blank defaults to dataset type)
```

Field Definitions

Dataset Name

The 1- to 44-character name of the partitioned or sequential dataset you want to edit. You use this field when the dataset name does not conform to the edit library's three-part naming convention. This field overrides a dataset name specified in the *Edit Library* section.

To display a PDS member, type the PDS name followed by the member name enclosed with parentheses; for example, **'SYSD.PROD.USRLIB(PTFLIST)'**. If the PDS name is not enclosed with apostrophes, SYSD adds your user ID to the front of the dataset name; for example, **BW.SYSD.PROD.USRLIB(PTFLIST)**.

To create a temporary dataset, type **&&name**, where **name** is the dataset name. See "Temporary Edit Sessions" on page 62 for more information.

Dataset Password

The password for the dataset. This field is only required if the dataset is password protected. The password is not displayed on the screen when you type it.

Library

The name of the library you want to edit. This is the second level of the three-part library naming convention.

You can concatenate up to four libraries. SYSD searches the libraries in order starting with the first one listed. If the member you want to edit is in one of the libraries other than the first one, SYSD copies the member to the edit session. When you have made the changes in the edit session, you can use the SAVE or END command to put the edit session in the first library. The original member in the other library is unaffected.

Member

The name of the member you want to edit. SYSD displays the contents of the member on the Edit – Dataset Display screen. See "Edit – Dataset Display" on page 72 for more information about the screen.

If you do not specify a member name, SYSD displays a list of all the members in the first library on the Edit – Member Selection screen. See "Edit – Member Selection" on page 69 for more information about the screen.

To create a temporary member, type **&&member**, where **member** is the name of a new or existing member. See "Temporary Edit Sessions" on page 62 for more information.

Profile Name

The type of numbering sequence you want the member to have.

Type	To display
COBOL	Sequence numbers in columns 1 through 6.
NONUM	No sequence numbers.
STANDARD	Sequence numbers in columns 73 through 80.

Project

The name of the project the member you want to edit is in. This is the first level of the three-part library naming convention. It is the identifier for libraries that belong to the same project.

To create a temporary edit session, type **&&name**, where **name** is the name of your temporary project. See "Temporary Edit Sessions" for more information.

Type

The type of data in the library. This is the third level of the three-part library naming convention. Common types are: **ASM, COBOL, HELP, OBJ,** and **SOURCE.** For two-level names, you can leave this field blank.

Volume Serial

The volume serial number where an uncataloged dataset resides. If the dataset you want to edit is cataloged, leave this field blank.

Note
This volume serial number only applies to the *Dataset Name* field. It does not apply to the *Project*, *Library*, and *Type* fields.

Temporary Edit Sessions

Temporary edit sessions are ideal for editing an existing job's JCL, submitting it, and deleting the edit session without updating the original member or dataset.

To create a temporary edit session, prefix a project, member, or dataset name with two ampersands (&&). If the project, member, or dataset already exists, SYSD uses the data to create a temporary member. If the project, member, or dataset is new, SYSD creates a new temporary edit session.

SYSD does not save temporary edit sessions when you issue the END command. To delete a temporary edit session, issue the CANCEL command or the D=Delete option on the Edit – Session Display screen. See "Edit – Session Display" on page 67 for more information about the CANCEL command and the D=Delete option.

Edit – Dataset Menu for CA-Panvalet

If your company has installed the SYSD/ATP option, SYSD lets you edit CA-Panvalet library members. If you are using the SYSD/ATP option, the Edit – Dataset Menu contains two additional sections. The *PANVALET(R) Access Security* section controls your access to CA-Panvalet members. The *PANVALET(R) New Member Options* section lets you create new CA-Panvalet members.

You must provide security codes to access CA-Panvalet members with a security level greater than 0. You can provide the codes separately for the libraries, member, and installation; or you can provide the sum of the codes in the member code.

| Note | If you do not provide a member name, you may have to provide the library code to display a member selection list. |

```
----------------------- EDIT - DATASET MENU ----------------------- (1/1)
 INPUT ===>                                              SCROLL: CSR


 EDIT LIBRARY:
    PROJECT ===>
    LIBRARY ===>            ===>         ===>            ===>
    TYPE    ===>
    MEMBER  ===>                         (Blank for member selection list)

 OTHER PARTITIONED OR SEQUENTIAL DATASET:
    DATASET NAME   ===>
    VOLUME SERIAL  ===>                  (If not cataloged)

 DATASET PASSWORD ===>                   (If password protected)
 PROFILE NAME     ===>                   (Blank defaults to dataset type)

 PANVALET(R) ACCESS SECURITY:
    LIBRARY CODES ===>          ===>         ===>          ===>
    MEMBER CODES  ===>          INSTALLATION CODE ===>
 PANVALET(R) NEW MEMBER OPTIONS:
    LANGUAGE TYPE ===>          FORMAT        ===> Y (y or n)
    USER CODE     ===>          SECURITY LEVEL ===> 0 (0 - 3)
    ++COPY MEMBER ===>
```

Field Definitions

| Note | See "Edit – Dataset Menu" on page 60 for definitions of the *Dataset Password* and *Profile Name* fields and the fields in the *Edit Library* and *Other Partitioned or Sequential Dataset* sections. |

++COPY Member

Lets you perform the ++COPY function before you edit the member. The ++COPY member must exist in the same library as the member you are creating or editing.

Format

A **Yes/No** field that specifies if CA-Panvalet uses the NOFORMAT parameter when storing the new member in the CA-Panvalet library.

Installation Code

The installation security code for a CA-Panvalet member with a security level greater than 2.

Language Type

The standard CA-Panvalet language type. See the *CA-Panvalet System Management Manual* for more information about language types.

Library Codes

The library security code for the CA-Panvalet library. You can concatenate up to four libraries. To display a list of members in a secured library, you must specify the library code.

Member Code

The member security code for a CA-Panvalet member with a security level greater than 0. You can also specify the sum of the codes for the libraries, member, and installation in this field.

Security Levels

The security level for the new member.

Type	To specify
0	There is no security. This is the default.
1	The member access code must be supplied.
2	The member and library access codes must be supplied.
3	The libraries, member, and installation access codes must be supplied. See the *CA-Panvalet System Management Manual* for more information about CA-Panvalet security access codes.

User Code

The user code security for the new member.

Edit – Session Display

The Edit – Session Display screen displays a list of your current edit sessions and related statistics. From here you can delete an edit session or select an edit session and continue working on it.

➤ **To access the Edit – Session Display screen**

On the Edit – Dataset Menu, type **S** (Session) in the *Input* field and press **Enter.**

```
EDIT - SESSION DISPLAY FOR USERID - BW                           (1/1)
INPUT ===>                                         SCROLL: CSR

O    MEMBER          --------- DATASET NAME ----------    VOLSER  RCDS UPD
     RB00000         BW.ABC.ASM                                    13   5
     RBA0001         BW.BBC.ASM                           S2002    13  10
     RBA0002         BW.BCB.ASM                                    11   0

















OPTIONS ==>  D = DELETE, S = SELECT
```

Field Definitions

Dataset Name

The 1- to 44-character name of the partitioned or sequential dataset you are editing.

Member

The name of the member you are editing.

O

Option column. Type the single-character **option** next to the edit session and press **Enter**.

D=Delete

Deletes the edit session without updating the source data. SYSD displays a prompt asking you to verify that you want to delete the member.

| Note | Deleting an edit session does not delete the actual PDS member. SYSD only deletes the work session. |

S=Select

Re-opens the edit session and displays it on the Edit – Dataset Display screen. See "Edit – Dataset Display" on page 72 for more information about the screen.

RCDS

The number of records in the PDS member or sequential dataset.

UPD

The number of records you updated during the current edit session. If you update a line more than once, SYSD counts them as a single update.

VOLSER

The volume serial number where an uncataloged dataset resides. If the dataset you are editing is cataloged, this field is blank.

Edit – Member Selection

The Edit – Member Selection screen displays a list of members in a partitioned dataset. You can select a member to create and start an edit session, or you can delete a member from the PDS.

> ## To access the Edit – Member Selection screen

On the Edit – Dataset Menu, fill in all the information in the *Edit Library* section except the *Member* field and press **Enter.**

or

On the Edit – Dataset Menu, type a PDS name without a member name in the *Other Partitioned or Sequential Dataset* section and press **Enter.**

```
  EDIT - SYSD.PROD.HELP                                            (1/1)
  INPUT ===>                                              SCROLL: CSR

  O    --NAME--   VER.MOD   CREATED  LAST MODIFIED  SIZE  INIT  MOD   --ID--
       $ACTIVOO
       $BROCMB4
       $BROCM00
       $BROCM01
       $BROCM02
       $BROCM03
       $BROCM04
       $BROCM05
       $BROCM06
       $BROCM07
       $BROCM08
       $BROCM09
       $BROCM10
       $BROCM11
       $BROCM12   001.01    90.240   90.240 10:43    23    23     0 BW
       $BROCM13   001.01    90.240   90.240 11:04    20    20     0 BW
       $BRODM00
       $BRODM12
       $BROM000   001.03    90.240   90.240 11:09    30    30     2 BW
  OPTIONS ==>  S = SELECT,  D = DELETE
```

The *Created, Last Modified, Size, INIT, MOD,* and *ID* fields only contain data if the PDS member has the ISPF Statistics feature turned on.

Field Definitions

Created

The date the member was created.

ID

The user ID of the last person who updated the member.

INIT

The member's initial size.

Last Modified

The date and time the member was last updated.

MOD

The number of updates made to the member.

Name

The member name.

O

Option column. Type the single-character **option** next to the member and press **Enter**.

D=Delete

Deletes the member from the PDS. SYSD displays a prompt asking you to verify that you want to delete the member.

S=Select

Creates and starts an edit session for the member and displays it on the Edit – Dataset Display screen. See "Edit – Dataset Display" on page 72 for more information about the screen.

Size

The member's current size.

VER.MOD

The member's version and modification level.

Command Definitions

Type the **command** in the *Input* field and press **Enter**.

BOTTOM

Moves the display to the bottom of the member list.

DOWN

Scrolls down through the member list.

FIND

Searches for a member. Type **FIND member_name** in the *Input* field and press **Enter**.

SELECT

Creates and starts an edit session for a member and displays it on the Edit - Dataset Display screen. Type **SELECT member_name** in the *Input* field and press **Enter**. See "Edit – Dataset Display" on page 72 for more information about the screen.

TOP

Moves the display to the top of the member list.

UP

Scrolls up through the member list.

Edit – Dataset Display

The Edit – Dataset Display screen displays the edit session where you perform all the editing operations. A full range of editing functions let you perform virtually any type of data manipulation.

See "Editor Primary Commands" on page 74, "Editor Scroll Commands" on page 105, and "Editor Line Commands" on page 106 for more information about the commands you can use on this screen.

➤ ### To access the Edit – Dataset Display screen

On the Edit – Dataset Menu, fill in the necessary fields and press **Enter.**

or

On the Edit – Session screen or Edit – Member Selection screen, type **S** (Select) in the *O* (Option) column next to the member name and press **Enter.**

```
EDIT - CICS.STARTLIB(CIO1LOGO) - 01.09            RCDS=26 UPD=0 COL=1-72 (1/1)
INPUT ===>                                                       SCROLL: CSR
==MSG> -CAUTION- NUMBER MODE HAS BEEN TURNED OFF FOR THIS SESSION
****** ----+----1----+----2----+----3----+----4----+----5----+----6----+----7--
000100 CMSG
000200 .
000300 .
000400 .    HHHHHHH    HHHHHHH   WWWWWWW    WWWWWWW      WWWWWWWW
000500 .    HHHHHHH   ·HHHHHHH   WWWWWWW   WWWWWWWW     WWWWWWWW
000600 .    HHHHHHH    HHHHHHH   WWWWWWW   WWWWWWWWWW   WWWWWWWW
000700 .    HHHHHHH    HHHHHHH   WWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
000800 .    HHHHHHH    HHHHHHH   WWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
000900 .    HHHHHHHHHHHHHHHHHHH  WWWWWWWWWWWWWWWWWWWWWWWWWWWWW
001000 .    HHHHHHHHHHH                WWWWWWWWWWWWWWWWWWWWW
001100 .    HHHHHHHHHHHHHHHHHHHH  WWWWWWWWWWWWWWWWWWWWWWWWWWW
001200 .    HHHHHHH    HHHHHHH   WWWWWWWWWWWWWWWWWWWWWWWWW
001300 .    HHHHHHH    HHHHHHH   WWWWWWWWWWWWWWWWWWWWWWW
001400 .    HHHHHHH    HHHHHHH   WWWWWWWWW   WWWWWWWWWWW
001500 .    HHHHHHH    HHHHHHH   WWWWWWWW    WWWWWWWWW
001600 .    HHHHHHH    HHHHHHH   WWWWWWW     WWWWWWW
001700 .                                    COMPUTER SYSTEMS IN
001800 .
001900 .    ***********************************************************
****** ----+----1----+----2----+----3----+----4----+----5----+----6----+----7--
```

Note
> Format lines at the top and bottom of the screen let you quickly find and edit data. Sequence numbers on the left help you quickly find lines of information. Apostrophes (' ' ' ' ' ') in place of sequence numbers on the left identify insert lines where you can enter new data.

Field Definitions

COL

The beginning and ending columns displayed on the screen.

RCDS

The number of records in the member.

UPD

The number of records you updated during the current edit session. If you update a line more than once, SYSD counts them as a single update.

Editor Primary Commands

Primary commands control the edit session. They manage the movement of the window across the data and let you terminate or end the session.

To issue a primary command, type the **command** in the *Input* field and press **Enter.**

Many primary commands have aliases or are assigned to PF keys. If your terminal does not have PF keys, you can type **PFn**, where **n** is the PF key number, in the *Input* field and press **Enter.** For example, The END command is assigned to PF3. To issue the END command, you can either:

* Type **END** in the *Input* field and press **Enter.**

* Press **PF3.**

* Type **PF3** in the *Input* field and press **Enter.**

The following is an alphabetical list of primary commands, their parameters, and any aliases. A detailed description of each command follows the list.

Primary command	Alias
+	RECALL
-	REPEAT
: nnnnnn	LINE
ABORT	CLEAR
AUTONUM [ON|OFF]	
BACK [nnn|M]	UP, PF7
BOTTOM	LAST
CANCEL	QQ
CAPS [ON|OFF]	
CHANGE 'string1' 'string2' [left_column] [right_column]] [NEXT|ALL|FIRST|LAST|PREV|X|NX]	CHG, PF6
CHG 'string1' 'string2' [left_column] [right_column]] [NEXT|ALL|FIRST|LAST|PREV|X|NX]	CHANGE, PF6

Primary command	*Alias*
CLEAR	ABORT
COPY	
CREATE 'dsn'|'dsn(member)'|member	
DELQ [Q=queue_name] [S=sysid]	PCDEL, DQ
DOWN [nnn|M]	NEXT, PF8
DQ [Q=queue_name] [S=sysid]	PCDEL, DELQ
END	FILE, PF3
Enter key	
EXCLUDE	
FILE	END, PF3
FIND 'string' [left_column] [right_column]] [NEXT|ALL|FIRST|LAST|PREV|XALL|X|NX]	LOCATE, PF5
FIRST	TOP
GET [KEEP] [Q=queue_name] [S=sysid]	PCRCV
HEX [ON|OFF] [VERT|DATA]	
KEEP ['dsn'|'dsn(member)'|member]	SAVE
LAST	BOTTOM
LEFT [nnn|M]	PF10
LINE nnnnnn	:
LOCATE 'string' [left_column] [right_column]] [NEXT|ALL|FIRST|LAST|PREV|XALL|X|NX]	FIND, PF5
MASK [ON|OFF]	
MODID [ON|OFF] [[mod_id] [begin_column]]	
NEXT [nnn|M]	DOWN, PF8

Primary command	Alias
NULLS [ON|OFF]	
NUMBER [ON|OFF] [STD] [COBOL]	
PCDEL [Q=queue_name] [S=sysid]	DELQ, DQ
PCRCV [KEEP] [Q=queue_name] [S=sysid]	GET
PCSND [Q=queue_name] [S=sysid]	PUT
PRINT	
PROFILE	
PUT [Q=queue_name] [S=sysid]	PCSND
QQ	CANCEL
RECALL	+
RENUMBER [STD] [COBOL]	
REPEAT	-
REPLACE 'dsn'|'dsn(member)'|member	
RESET	
RETURN	Return key, PF12
RIGHT [nnn|M]	PF11
SAVE ['dsn'|'dsn(member)'|member]	KEEP
SHOW [ALL] [DELETES [OFF]] [COMMENTS [OFF]] [CHANGES [OFF]] [MODS [OFF]] [INSERTS [OFF]] [UPDATES [OFF]]	
SPLIT [address]	PF2
STATS [ON|OFF]	

Primary command	*Alias*
SUBMIT	
SWAP	PF9
TABS [ON|OFF] [character] [columns]	
TOP	FIRST
TRUNC [ON|OFF] column	
UNNUM	
UP [nnn|M]	BACK, PF7
ZONE [ON|OFF] begin_column end_column	

+

See the RECALL command for more information.

```
+
RECALL
```

-

See the REPEAT command for more information.

```
-
REPEAT
```

:

See the LINE command for more information.

```
: nnnnnn
LINE
```

ABORT

The ABORT command ends the edit session, leaving it intact, and returns to the screen you entered the edit session from. The format of the ABORT command is:

```
ABORT
CLEAR
```

Note > Pressing **Clear** clears the screen and returns to CICS.

AUTONUM

The AUTONUM command turns automatic numbering on or off. The format of the AUTONUM command is:

```
AUTONUM [ON|OFF]
```

This parameter	*Specifies*
ON	Turn automatic numbering on. SYSD numbers the lines in increments of 100 starting with the first line (line 100). Every time you save or end the edit session, SYSD automatically renumbers the source member, updating all the line numbers to account for new and deleted lines. This is the default.
OFF	Turn automatic numbering off. To renumber the lines, you must issue the RENUMBER command.

BACK

See the UP command for more information.

```
BACK [nnn|M]
UP
PF7
```

BOTTOM

The BOTTOM command moves the display to the bottom of the edit session. SYSD displays the last line of the member on the last line of the screen. The format of the BOTTOM command is:

```
BOTTOM
LAST
```

CANCEL

The CANCEL command ends and deletes the edit session without updating the source dataset. The format of the CANCEL command is:

```
CANCEL
QQ
```

CAPS

The CAPS command turns automatic uppercase translation on or off. The format of the CAPS command is:

```
CAPS [ON|OFF]
```

This parameter	Specifies
ON	Turn automatic uppercase translation on. SYSD translates alphabetic input to uppercase when you press **Enter**. This is the default.
OFF	Turn automatic uppercase translation off. SYSD leaves alphabetic input as entered.

CHANGE

The CHANGE command searches the member for a string of characters and replaces it with another string. SYSD moves the line where the first change occurred to the first line on the screen and automatically reprompts the change parameters. To issue the CHANGE command again, press **PF6**.

The format of the CHANGE command is:

```
CHANGE 'string1' 'string2' [left_column] [right_column]]
       [NEXT|ALL|FIRST|LAST|PREV|X|NX]
CHG
PF6
```

This parameter	Specifies
'string1'	The string you want to search for. You can type an alphanumeric string as is. If the string contains special characters, enclose it with apostrophes. To include an apostrophe in the search, type it twice. Examples of valid strings are: **ABC**, **'ABC'**, **'DON''T'**, and **'AND HIS'**.
'string2'	The string you want to replace the search string with. Follow the rules described in the definition for **'string1'**.
left_column	The column you want the search and replace to start. SYSD does not search or change data to the left of this column. The default is 1.
right_column	The column you want the search and replace to end. SYSD does not search or change data to the right of this column. The default is 1.
NEXT	Search down from the current line and change the next occurrence of the search string. This is the default.
ALL	Change all occurrences of the search string.
FIRST	Only change the first occurrence of the search string.
LAST	Change the last occurrence of the search string.
PREV	Search up from the current line and change the previous occurrence of the search string.
X	Only change lines that have been excluded with the EXCLUDE primary or X (Exclude) line command.
NX	Only change lines that have not been excluded with the EXCLUDE primary or X (Exclude) line command.

You can use the CHANGE command with the TRUNC and ZONE primary commands. You can use the X (Exclude) line command to limit the extent of the change operation.

You can use the PF keys the FIND and CHANGE commands are assigned to together to search for a string, look at it, either change the string or leave it as is, and find the next occurrence. To do this:

1. Type **CHANGE 'string1' 'string2'** in the *Input* field and press **Find**. SYSD positions the cursor at the first occurrence of the search string without changing it.

2. To change the string, press **Change**.

    or

    To leave the string as is and search for the next occurrence, press **Find**.

3. Repeat step 2 until you reach the end of the member.

CHG

See the CHANGE command for more information.

```
CHG 'string1' 'string2' [left_column] [right_column]]
    [NEXT|ALL|FIRST|LAST|PREV|X|NX]
CHANGE
PF6
```

CLEAR

The CLEAR command clears the screen and returns to CICS, leaving the current edit session intact. You can assign the CLEAR command to a number of PF keys. The format of the CLEAR command is:

```
CLEAR
ABORT
```

COPY

The COPY command inserts data from an external member into the current edit session. You must also use the A (After) or B (Before) line command to tell SYSD where you want to insert the data. The format of the COPY command is:

```
COPY
```

SYSD prompts you for the dataset name and the beginning and ending line numbers. Once SYSD makes sure the data is valid, it copies the data into the current edit session at the position indicated by the A or B line command and renumbers all the lines according to the current edit session. If you do not specify the beginning and ending line numbers, SYSD copies the entire dataset.

To copy data:

1. Type **COPY** in the *Input* field.

2. Type **A** (After) or **B** (Before) in the number sequence field next to the appropriate line.

3. Press **Enter**. The Copy Menu is displayed.

```
-------------------------- EDIT - COPY MENU -------------------------- (1/1)
INPUT ===>                                                  SCROLL: CSR
I0007 - MOVE/COPY IS IN PROGRESS.

DATASET BEING EDITED: BW.JCL.SOURCE(BWTEMP)
    PROJECT ===> SYSD
    LIBRARY ===> HWTEST    ===> TEST    ===> PTFB    ===> PROD
    TYPE    ===> SOURCE
    MEMBER  ===>

OTHER PARTITIONED OR SEQUENTIAL DATASET:
    DATASET NAME   ===> 'BW.JCL.SOURCE(COPYBOOK)'
    VOLUME SERIAL ===>                  (If not cataloged)

DATASET PASSWORD ===>                   (If password protected)

LINE NUMBERS (Blank for entire member):
    FIRST LINE    ===>
    LAST LINE     ===>
    NUMBER TYPE   ===> STANDARD         (standard, cobol, or relative)
```

4. Type the name of the external member you want to copy into the current edit session.

5. Press **Enter**.

CREATE

The CREATE command copies all or part of the current menu-driven edit session into a new member in the same dataset or another dataset. The format of the CREATE command is:

```
CREATE 'dsn'|'dsn(member)'|member
```

This parameter	Specifies
'dsn'	The name of the dataset you want to create the new member in. SYSD copies or moves the data from the current edit session into a new member in a different dataset. The new member name is the same as the current edit session.
'dsn(member)'	The name of the dataset and member you want to create. SYSD copies or moves the data from the current edit session into a new member in a different dataset.
member	The name of the new member you want to create. SYSD copies or moves the data from the current edit session into a new member in the same dataset as the current edit session.

To only copy specific lines from the current edit session into the new member, use the C (Copy) or CC (Copy Block) line command.

To only move specific lines from the current edit session into the new member, use the M (Move) or MM (Move Block) line command.

To copy the entire current edit session, issue the CREATE command without any line commands.

DELQ

See the PCDEL command for more information.

```
DELQ [Q=queue_name] [S=sysid]
PCDEL
DQ
```

DOWN

The DOWN command scrolls down through the edit session. The format of the DOWN command is:

```
DOWN [nnn|M]
NEXT
PF8
```

This parameter	Specifies to scroll
nnn	By the specified number of lines. This number overrides the amount in the *Scroll* field.
M	To the bottom of the edit session.

DQ

See the PCDEL command for more information.

```
DQ [Q=queue_name] [S=sysid]
PCDEL
DELQ
```

END

The END command saves the current edit session in the dataset and then deletes the edit session. SYSD returns to the screen you started the edit session from. If you issue the END command on the Edit – Copy Menu screen, SYSD returns to the current edit session. You should only issue the END command when you have completed all editing and you want to save the data.

The format of the END command is:

```
END
FILE
PF3
```

Enter Key

The Enter key submits all text changes, line commands, and primary commands to the CPU. SYSD executes them in order starting with the text changes and ending with the primary commands. If the primary command line is empty and there are no pending line commands or text changes, SYSD does not change the screen. SYSD updates the work session each time you press **Enter.**

EXCLUDE

The EXCLUDE command hides all the records from the display. The format of the EXCLUDE command is:

```
EXCLUDE
```

To redisplay the records, issue the SHOW command.

FILE

See the END command for more information.

```
FILE
END
PF3
```

FIND

The FIND command searches the edit session for a specific string and, if found, displays the string on the first line. If SYSD reaches the end of the file without finding the string, it displays a prompt and sets the internal starting point for the search to the beginning of the file. The format of the FIND command is:

```
FIND 'string' [left_column] [right_column]] [NEXT|ALL|FIRST|LAST|PREV|XALL|X|NX]
LOCATE
PF5
```

This parameter	Specifies
'string'	The string you want to search for. You can type an alphanumeric string as is. If the string contains special characters or blanks, enclose it with apostrophes. To include an apostrophe in the search string, type it twice. Examples of valid strings are: **ABC,** **'ABC',** **'DON''T',** and **'AND HIS'.**
left_column	The left column where you want the search to start. SYSD does not search the columns to the left of this column. The default is **1.**
right_column	The right column where you want the search to end. SYSD only searches the data that falls between, and including, the left and right columns. The default is the end of the record.
NEXT	Start the search on the current line and move forward to find the next occurrence of the string. If SYSD finds the string on an excluded line, it redisplays the line unless you specify the **NX** parameter. This is the default.
ALL	Start the search at the top of the dataset and move forward to find all occurrences of the string. If SYSD finds the string on an excluded line, it redisplays the line unless you specify the **NX** parameter.
FIRST	Start the search at the top of the dataset and move forward to find the first occurrence of the string. If SYSD finds the string on an excluded line, it redisplays the line unless you specify the **NX** parameter.
LAST	Start the search at the bottom of the dataset and move backward to find the last occurrence of the string. If SYSD finds the string on an excluded line, it redisplays the line unless you specify the **NX** parameter.
PREV	Start the search on the current line and move backward to find the previous occurrence of the string. If SYSD finds the string on an excluded line, it redisplays the line unless you specify the **NX** parameter.
XALL	Search all lines and remove any lines that do not contain the string from the display.

This parameter	Specifies
X	Only search lines that have been excluded. If you do not specify either the **X** or **NX** parameter, SYSD searches all the lines.
NX	Only search lines that have not been excluded. If you do not specify either the **X** or **NX** parameter, SYSD searches all the lines.

To display the next occurrence of the string, press **Find**.

You can use the FIND command with the TRUNC and ZONE primary commands. You can use the X (Exclude) line command to limit the search.

FIRST

See the TOP command for more information.

```
FIRST
TOP
```

GET

The GET command retrieves data that was put in a temporary storage queue by a previous PUT or PCSND command or by a PC using a file transfer program. SYSD inserts the data in the current edit session at the place marked by the A (After) or B (Before) line command. The format of the GET command is:

```
GET [KEEP] [Q=queue_name] [S=sysid]
PCRCV
```

This parameter	Specifies
KEEP	Do not delete the data from the temporary storage queue after inserting it in the current edit session.
queue_name	The name of the temporary storage queue the data you want to retrieve is in.

(continued)

This parameter	*Specifies*
sysid	The 4-character system ID of the CICS region the temporary storage queue is in. This parameter lets you retrieve data from a temporary storage queue in a different CICS region.

The default temporary storage queue name and CICS system ID are defined on Option 0.4, GET/PUT TS Queue Identifiers. See "GET/PUT TS Queue Identifiers" on page 35 for more information about defining the defaults.

HEX

The HEX command redisplays the source data in hexadecimal notation either in columnar or linear format. You can edit or update the data in hexadecimal or alphanumeric mode. The format of the HEX command is:

```
HEX [ON|OFF]  [VERT|DATA]
```

This parameter	*Specifies*
ON	Turn hexadecimal notation on. This is the default.
OFF	Turn hexadecimal notation off and translate the data back to alphanumeric.
VERT	Display the hexadecimal number in columnar format, which is two lines per byte. This is the default.
DATA	Display the hexadecimal number in linear format, which is two character positions per byte.

KEEP

See the SAVE command for more information.

```
KEEP ['dsn'|'dsn(member)'|member]
SAVE
```

LAST

See the BOTTOM command for more information.

```
LAST
BOTTOM
```

LEFT

The LEFT command moves the display to the left. The format of the LEFT command is:

```
LEFT [nnn|M]
PF10
```

This parameter	Specifies to move the display
nnn	By the specified number of columns. This number overrides the amount specified in the *Scroll* field.
M	All the way to the left.

LINE

The LINE command moves a specific line to the first line on the screen. The format of the LINE command is:

```
LINE nnnnnn
:
```

This parameter	Specifies
nnnnnn	The line number you want to start the display on. To display the first line of the dataset, type **1** or **0**. To display the end of the dataset, type a large number, such as **999999**.

LOCATE

See the FIND command for more information.

```
LOCATE 'string' [left_column] [right_column]]
       [NEXT|ALL|FIRST|LAST|PREV|XALL|X|NX]
FIND
PF5
```

MASK

The MASK command used with the INSERT line command lets you prefill inserted lines with the contents of a mask. You can only have one mask. The format of the MASK command is:

```
MASK [ON|OFF]
```

This parameter	Specifies
ON	Enable the MASK command. This is the default.
OFF	Disable the MASK command.

The first time you issue the MASK command, SYSD displays a blank line with =MASK> at the start of the line. To define the contents of the mask, type the characters in their respective positions on the =MASK> line. If you have already issued the MASK command, the contents of the previous mask is displayed. You can type new characters over the existing ones.

To put the contents of the mask in any inserted lines, issue the INSERT line command. You must make some change to the inserted line so SYSD recognizes the line as a permanent entry. Pressing **space bar** while on the line is a sufficient change.

When you press **Enter**, SYSD deletes any inserted mask lines that have not been changed in any way.

MODID

The MODID command identifies changes made during an edit session. SYSD displays the line number of each updated line and inserts your modification ID. The format of the MODID command is:

```
MODID [ON|OFF] [[mod_id] [begin_column]]
```

This parameter	Specifies
ON	Turn the MODID command on.
OFF	Turn the MODID command off. This is the default.
mod_id	The 1- to 8-character modification ID you want SYSD to insert. To include a blank in the modification ID, enclose it with apostrophes.
begin_column	The column you want to display the first character of the modification ID in. If you do not specify a beginning column, the modification ID appears as follows:

For	The modification ID is
STD numbering	Right justified and ends in column 71.
COBOL numbering	Right justified and ends in column 80.

NEXT

See the DOWN command for more information.

```
NEXT [nnn|M]
DOWN
PF8
```

NULLS

The NULLS command replaces trailing blanks with nulls so you can use the Insert key to insert data in the middle of a line. Otherwise, you must press **Erase EOF** or delete trailing blanks to provide spaces for inserting data. The format of the NULLS command is:

```
NULLS [ON|OFF]
```

This parameter	Specifies
ON	Turn nulls on. This is the default.
OFF	Turn nulls off.

NUMBER

The NUMBER command makes sure all the lines are sequenced properly. SYSD renumbers any unnumbered lines or any lines that are out of sequence. The format of the NUMBER command is:

```
NUMBER [ON|OFF] [STD] [COBOL]
```

This parameter	Specifies
ON	Turn numbering on. This is the default.
OFF	Turn numbering off.
STD	Number the data in the standard sequence number field, which is the first 8 bytes of variable-length records or the last 8 bytes of fixed-length records. This is the default.
COBOL	Number the data in the COBOL sequence number field, which is the first 6 bytes of fixed-length records.

If you do not specify either the **STD** or **COBOL** parameter, the default is either STD or the value previously used if the number mode was in effect at the time of the last edit session.

If you specify both the **STD** and **COBOL** parameters, numbering occurs in both fields. SYSD copies the COBOL numbering from the STD numbers. If the COBOL and STD fields are not synchronized, this can result in out-of-sequence COBOL numbers. Use the RENUM command to force synchronization.

PCDEL

The PCDEL command deletes data from a temporary storage queue that was put there by a previous PUT or PCSND command or by a PC using a file transfer program. If you are using a PC, you must issue the PCDEL command after retrieving the data because the PC does not perform a delete. The format of the PCDEL command is:

```
PCDEL [Q=queue_name] [S=sysid]
DELQ
DQ
```

This parameter   **Specifies**

queue_name   The name of the temporary storage queue you want to delete.

sysid   The 4-character system ID of the CICS region the temporary storage queue is in. This parameter lets you delete a temporary storage queue in a different CICS region.

The default temporary storage queue name and CICS system ID are defined on Option 0.4, GET/PUT TS Queue Identifiers. See "GET/PUT TS Queue Identifiers" on page 35 for more information about defining the defaults.

PCRCV

See the GET command for more information.

```
PCRCV [KEEP] [Q=queue_name] [S=sysid]
GET
```

PCSND

See the PUT command for more information.

```
PCSND [Q=queue_name] [S=sysid]
PUT
```

PRINT

The PRINT command prints the edit session on the JES2 local destination queue, which is normally the system printer. SYSD prints the name of the dataset you are editing and your user ID on the banner page. The format of the PRINT command is:

```
PRINT
```

PROFILE

The PROFILE command displays the current profile and edit session options—like ISPF STATS, NULLS, and CAPS—at the top of the display. The format of the PROFILE command is:

```
PROFILE
```

PUT

The PUT command writes all or part of an edit session to a temporary storage queue where you can retrieve the data by issuing the PCRCV or GET command or by using a file transfer program on a PC. The format of the PUT command is:

```
PUT [Q=queue_name] [S=sysid]
PCSND
```

This parameter	Specifies
queue_name	The name of the temporary storage queue you want to write the data to.
sysid	The 4-character system ID of the CICS region the temporary storage queue is in. This parameter lets you write data to a temporary storage queue in a different CICS region

The default temporary storage queue name and CICS system ID are defined on Option 0.4, GET/PUT TS Queue Identifiers. See "GET/PUT TS Queue Identifiers" on page 35 for more information about defining the defaults.

You can use the C (Copy), CC (Copy Block), M (Move), and MM (Move Block) line commands to write parts of an edit session to the temporary storage queue.

If you issue multiple PUT commands, SYSD concatenates the data in the temporary storage queue. This lets you build a dataset from several sources.

The data stays in the temporary storage queue until you issue a PCRCV, PCDEL, or GET command or CICS clears the temporary storage queue. Remember, retrieving data with a PC does not delete the data from the temporary storage queue. This lets you retrieve data more than once if there are problems.

QQ

See the CANCEL command for more information.

```
QQ
CANCEL
```

RECALL

The RECALL command displays the previous commands you have issued in the *Input* field. The format of the RECALL command is:

```
RECALL
+
```

To issue a recalled command, press **Enter** while the command is in the *Input* field.
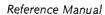
| Note | This command works anywhere in the menu system, not just in the editor.

RENUMBER

The RENUMBER command renumbers the lines in the edit session in increments of 100 starting with 100. Use this command to renumber inserted lines and to force synchronization of COBOL and STD line numbers. The format of the RENUMBER command is:

```
RENUMBER [STD] [COBOL]
```

This parameter	Specifies
STD	Number the data in the standard sequence number field, which is the first 8 bytes of variable-length records or the last 8 bytes of fixed-length records.
COBOL	Number the data in the COBOL sequence number field, which is the first 6 bytes of fixed-length records.

REPEAT

The REPEAT command repeats the last command you issued. The format of the REPEAT command is:

```
REPEAT
-
```

REPLACE

The REPLACE command copies or moves all or part of the current edit session into a new or existing member. Use the C (Copy), CC (Copy Block), M (Move), or MM (Move Block) line commands to only copy or move part of the edit session. If the member you want to copy or move data to already exists, SYSD replaces the existing data with the selected part of the edit session. If you do not specify any line commands, SYSD replaces the entire member.

The format of the REPLACE command is:

```
REPLACE 'dsn'|'dsn(member)'|member
```

This parameter	Specifies
'dsn'	The name of the dataset you want to copy or move the data to. SYSD copies or moves the data from the current edit session into a new member in a different dataset. The new member name is the same as the current edit session.
'dsn(member)'	The name of the dataset and member you want to create. SYSD copies or moves the data from the current edit session into a new member in a different dataset.

This parameter	*Specifies*
member	The name of the member you want to create or replace. SYSD copies or moves the data from the current edit session into a new member in the same dataset as the current edit session.

RESET

The RESET command resets pending line editor commands, change indicators, and error messages. SYSD removes all incomplete or incorrect line commands. Because SYSD processes line commands before primary commands, the RESET command does not reset complete and correct line commands. The format of the RESET command is:

```
RESET
```

RETURN

The RETURN command displays the Primary Option Menu, leaving the edit session intact. You can restart the edit session at any time. The format of the RETURN command is:

```
RETURN
Return
PF12
```

If you have more than one active partition and you issue the RETURN command on the Primary Option Menu of a partition, SYSD cancels that partition and moves to the last partition. See the SPLIT command on page 100 for more information about creating partitions.

> **Tip:** To return to a specific screen in the last partition, type the screen's **address** in the *Input* field and press **Return.**

RIGHT

The RIGHT command moves the display to the right across the data. The format of the RIGHT command is:

```
RIGHT [nnn|M]
PF11
```

This parameter	Specifies to move the display
nnn	By the specified number of columns.
M	All the way to the right.

SAVE

The SAVE command saves an edit session in the source dataset, in a new member, or in a new dataset. Use this command when performing long edit sessions to protect yourself from data loss. The format of the SAVE command is:

```
SAVE ['dsn'|'dsn(member)'|member]
KEEP
```

This parameter	Specifies
'dsn'	The name of the dataset you want to save the data in. SYSD saves the data from the current edit session in a new member in a different dataset. The new member name is the same as the current edit session.
'dsn(member)'	The name of the dataset and member you want to save the data in. SYSD saves the data from the current edit session in a new member in a different dataset.
member	The name of the new member you want to save the data in. SYSD saves the data from the current edit session in a new member in the same dataset.

If you do not specify any parameters with the SAVE command, SYSD saves the data from the current edit session in the original dataset and member.

SHOW

The SHOW command marks the indicated records for display or non-display. This command only works on lines you have previously deleted or excluded from the display. The format of the SHOW command is:

```
SHOW [ALL]
     [DELETES [OFF]]
     [COMMENTS [OFF]]
     [CHANGES [OFF]]
     [MODS [OFF]]
     [INSERTS [OFF]]
     [UPDATES [OFF]]
```

This parameter	Specifies to display
ALL	All previously excluded records. This is the default.
DELETES	All previously deleted records. To exclude the deleted records from the display again, type DELETES OFF.
COMMENTS	The comment records. To exclude the comment records from the display again, type COMMENTS OFF.
CHANGES	All changed records. To exclude the changed records from the display again, type CHANGES OFF. You can substitute CHG for the CHANGES command.
MODS	All modified records. To exclude the modified records from the display again, type MODS OFF.
INSERTS	All newly inserted lines. To exclude the newly inserted lines from the display again, type INSERTS OFF.
UPDATES	All updated lines. To exclude the updated lines from the display again, type UPDATES OFF.

You can use the EXCLUDE command before the SHOW command to display comments, inserts, changes, modifications, or updates.

SPLIT

The SPLIT command creates a CPMS/SYSD partition. SYSD saves all the updates in the edit session and displays the Primary Option Menu in the new partition. You can create up to four concurrent partitions. The format of the SPLIT command is:

```
SPLIT [address]
PF2
```

This parameter	Specifies
address	The address of the screen you want to display in the new partition.

A field in the upper-right corner of the screen tells you which partition you are in and the number of active partitions. For example, (2/4) tells you that you are in the second of four partitions. The SWAP command moves between partitions.

To delete a partition and swap to another partition, if one is available, issue the RETURN command on the Primary Option Menu in that partition. If there are no available partitions, CPMS/SYSD returns to CICS.

STATS

The STATS command turns the ISPF Statistics feature on or off. The format of the STATS command is:

```
STATS [ON|OFF]
```

This parameter	Specifies
ON	Turn the ISPF Statistics feature on. SYSD saves and updates all ISPF information for this PDS member. SYSD displays this information on the Edit and Browse member selection screens. This is the default.
OFF	Turn the ISPF Statistics feature off. SYSD does not update the ISPF statistics for this PDS member.

SYSD maintains the STATS setting as a user profile variable. SYSD remembers the last STATS setting and uses it in each edit session until you change it. You can use the PROFILE command in an edit session to display the current STATS setting.

SUBMIT

The SUBMIT command submits the edit session to the operating system. The format of the SUBMIT command is:

```
SUBMIT
```

The SUBMIT command processes ++INCLUDE cards for CA-Panvalet and non-CA-Panvalet members. The ++INCLUDE card must begin in column 8 and the member you want to include must reside in the same dataset as the member you are submitting. You can have up to five levels of nested ++INCLUDEs.

SWAP

The SWAP command moves to the previous partition. The format of the SWAP command is:

```
SWAP
PF9
```

The numbers in the upper-right corner tell you which partition you are in and how many active partitions you have. For example, (2/3) means you have three active partitions and are currently in the second partition.

TABS

The TABS command turns logical tabbing on or off and lets you specify the tab character. You can assign from 1 to 15 tab columns. The format of the TABS command is:

```
TABS [ON|OFF] [character] [columns]
```

This parameter	Specifies
ON	Turn logical tabbing on. This is the default.
OFF	Turn logical tabbing off.

(continued)

This parameter	*Specifies*
character	The character SYSD interprets as a logical tab when it finds it in the input. The tab character can be any non-alphanumeric character. SYSD displays the tab character in the format lines on the edit screen.
columns	The columns where you want tabbing to occur. Separate each column number by a space.

For example, if you issue the following command in the edit session:

```
TABS ON ! 5 10 15
```

When you type the following in a line of data:

```
!aaa!bb!cccc
```

SYSD repositions the data at the appropriate tab columns in the following manner:

```
----!----!----!----2----+----3----+----4----+----5----+----6----+----7--

   aaa   bb    cccc
```

TOP

The TOP command moves the display to the top of the edit session. SYSD displays the first line of the edit session on the first line of the screen. The format of the TOP command is:

```
TOP
FIRST
```

TRUNC

The TRUNC command works with the CHANGE and FIND primary commands to let you change data in one part of the edit session without affecting the column positions of other data on the line. Everything to the right of and including the TRUNC column is unaffected by the CHANGE command. The format of the TRUNC command is:

```
TRUNC [ON|OFF] column
```

This parameter	Specifies
ON	Turn truncation on. This is the default.
OFF	Turn truncation off.
column	The column number where you want the truncation to occur. SYSD marks this column with a V in the format line.

UNNUM

The UNNUM command sets all sequence fields to blanks and turns numbering off. This applies to both STD and COBOL sequence numbers. The format of the UNNUM command is:

```
UNNUM
```

UP

The UP command scrolls up through the edit session. The format of the UP command is:

```
UP [nnn|M]
BACK
PF7
```

This parameter	Specifies to scroll
nnn	By the specified number of lines. This overrides the amount specified in the *Scroll* field.
M	To the top of the edit session.

ZONE

The ZONE command works with the FIND and CHANGE primary commands to specify the zone you want the find or change operation to occur in. Any data outside the zone is not subject to the find or change operation. The format of the ZONE command is:

```
ZONE [ON|OFF] begin_column end_column
```

This parameter	Specifies
ON	Turn the zone on. This is the default.
OFF	Turn the zone off.
begin_column	The beginning column of the zone where you want the find or change operation to occur.
end_column	The ending column of the zone.

Editor Scroll Commands

Scroll commands are specified in the *Scroll* field located in the upper-right corner of the screen. Scroll commands work with certain primary commands—like LEFT, RIGHT, UP, and DOWN—to define the extent of the screen movement. Once you specify a scroll command, it remains constant until you change it.

HALF

The HALF command moves the display up, down, left, or right (depending on the primary command) by one-half a screen.

```
HALF
```

PAGE

The PAGE command moves the display up, down, left, or right (depending on the primary command) by one full screen.

```
PAGE
FULL
```

CSR

The CSR command moves the display up, down, left, or right (depending on the primary command) to the position of the cursor in the data portion of the screen.

```
CSR
```

Editor Line Commands

Line commands are entered in the line number fields to edit the dataset at the line level. The following is a list of the available line commands. A detailed description of each command follows the list.

Command	*Format*	*Alias*
After	A[nn] or [nn]A	
Before	B[nn] or [nn]B	
Column shift left	([nn] or [nn](	
Column shift left block	(([nn] or [nn]((	
Column shift right	)[nn] or [nn])	
Column shift right block	))[nn] or [nn]))	
Copy Lines	C[nn] or [nn]C	
Copy Block	CC	
Data Shift Left	<[nn] or [nn]<	
Data shift left block	<<[nn] or [nn]<<	
Data shift right	>[nn] or [nn]>	
Data shift right block	>>[nn] or [nn]>>	
Delete lines	D[nn] or [nn]D	¬
Delete block	DD	¬¬
Exclude lines	X[nn] or [nn]X	
Exclude block	XX	
First (show) lines	F[nn] or [nn]F	

Command	Format	Alias
Insert lines	I [nn] or [nn] I	
Last (show) lines	L [nn] or [nn] L	
Move lines	M [nn] or [nn] M	
Move block	MM	
Overlay lines	O [nn] or [nn] O	
Overlay block	OO	
Repeat line	R [nn] or [nn] R	"
Repeat block	RR [nn] or [nn] RR	""
Set current line	/	
Show lines	S [nn] or [nn] S	
Text merge	TM [nn]	
Text split	TS	

A – After

The A command tells SYSD to perform the specified operation after this line. You use this command with the C (Copy), CC (Copy Block), M (Move), MM (Move Block), column shift, and data shift line commands and the COPY and GET primary commands. The format of the A command is:

```
A [nn]
[nn] A
```

This parameter	Specifies
nn	The number of times you want to repeat the operation. The default is 1.

For example, if you type C on line 100 and A3 on line 400, SYSD copies line 100 three times and inserts them after line 400. If the operation is for a block of lines, SYSD copies the entire block three times and inserts them one after the other.

B – Before

The B command tells SYSD to perform the specified operation before this line. You use this command with the C (Copy), CC (Copy Block), M (Move), MM (Move Block), column shift, and data shift line commands and the COPY and GET primary commands. The format of the B command is:

```
B [nn]
[nn] B
```

This parameter	Specifies
nn	The number of times you want to repeat the operation. The default is 1.

For example, if you type C on line 100 and B3 on line 400, SYSD copies line 100 three times and inserts them before line 400. If the operation is for a block of lines, SYSD copies the entire block three times and inserts them one after the other.

(– Column Shift Left

The (command shifts the contents of a line to the left. You can use the (command with the ZONE command to control the shift area. In that case, SYSD only shifts the data in the zone. The format of the (command is:

Caution ▶ *There are no restrictions on shifting characters out of the record or zone area. Characters shifted out of the record or zone area are lost.*

```
( [nn]
[nn] (
```

This parameter	Specifies
nn	The number of columns you want to shift the line to the left. The default is 1.

((– Column Shift Left Block

The ((command shifts the contents of a block of lines to the left. Type the ((command in the line number fields for the first and last lines you want to shift. You can use the ((command with the ZONE command to control the shift area. In that case, SYSD only shifts the data in the zone. The format of the ((command is:

Caution ▶ *There are no restrictions on shifting characters out of the record or zone area. Characters shifted out of the record or zone area are lost.*

```
(( [nn]
[nn] ((
```

This parameter	Specifies
nn	The number of columns you want to shift the block to the left. The default is 1. If you specify two different numbers, SYSD shifts the block by the higher of the two numbers.

) – Column Shift Right

The) command shifts the contents of a line to the right. You can use the) command with the ZONE command to control the shift area. In that case, SYSD only shifts the data in the zone. The format of the) command is:

Caution ▶ *There are no restrictions on shifting characters out of the record or zone area. Characters shifted out of the record or zone area are lost.*

```
) [nn]
[nn] )
```

This parameter	Specifies
nn	The number of columns you want to shift the line to the right. The default is 1.

)) – Column Shift Right Block

The)) command shifts the contents of a block of lines to the right. Type the)) command in the line number fields for the first and last lines you want to shift. You can use the)) command with the ZONE command to control the shift area. In that case, SYSD only shifts the data in the zone. The format of the)) command is:

Caution ▶ *There are no restrictions on shifting characters out of the record or zone area. Characters shifted out of the record or zone area are lost.*

```
)) [nn]
[nn] ))
```

This parameter	Specifies
nn	The number of columns you want to shift the block to the right. The default is 1. If you specify two different numbers, SYSD shifts the block by the higher of the two numbers.

C – Copy Lines

The C command copies lines to the point in the edit session marked by an A (After), B (Before), or O (Overlay) line command. SYSD leaves the original lines unchanged. The format of the C command is:

```
C [nn]
[nn] C
```

This parameter	Specifies
nn	The number of lines you want to copy, including the line you specify the C command on. The default is 1.

For example, if you type **C3** on line 100 and **A** on line 400, SYSD copies lines 100, 200, and 300 and inserts them after line 400.

CC – Copy Block

The CC command copies a block of lines to the point in the edit session marked by an A (After), B (Before), or O (Overlay) line command. SYSD leaves the original lines unchanged. The format of the CC command is:

Note You cannot specify a repetition count.

```
CC
```

For example, if you type **CC** on lines 100 and 300 and type **A** on line 500, SYSD copies lines 100, 200, and 300 and inserts them after line 500.

< – Data Shift Left

The < command shifts the body of a line to the left. You can use the < command with the ZONE command to control the shift area. In that case, SYSD only shifts the contents of the body in the zone. The format of the < command is:

```
<[nn]
[nn]<
```
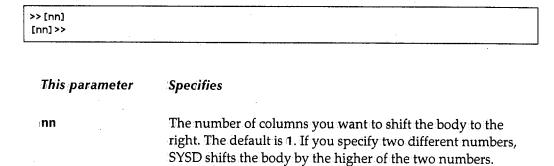
This parameter	Specifies
nn	The number of columns you want to shift the body to the left. The default is 1.

The body is determined by the following rules:

1. SYSD starts scanning in the left column.

2. SYSD finds the first blank character.

3. When SYSD finds the next non-blank character, it considers that character the start of the body. This character is where SYSD starts shifting the data.

4. When SYSD finds the first two consecutive blanks, it considers that the end of the body. This is where SYSD stops shifting the data.

<< – Data Shift Left Block

The << command shifts the body of a block of lines to the left. Type the << command in the line number fields for the first and last lines you want to shift. You can use this command with the ZONE command to control the shift area. In that case, SYSD only shifts the body of the data in the zone. The format of the << command is:

```
<<[nn]
[nn]<<
```

This parameter	Specifies
nn	The number of columns you want to shift the body to the left. The default is 1. If you specify two different numbers, SYSD shifts the body by the higher of the two numbers.

The body is determined by the following rules:

1. SYSD starts scanning in the left column.

2. SYSD finds the first blank character.

3. When SYSD finds the next non-blank character, it considers that character the start of the body. This character is where SYSD starts shifting the data.

4. When SYSD finds the first two consecutive blanks, it considers that the end of the body. This is where SYSD stops shifting the data.

> – Data Shift Right

The > command shifts the body of a line to the right. You can use the > command with the ZONE command to control the shift area. In that case, SYSD only shifts the data in the zone. The format of the > command is:

```
> [nn]
[nn] >
```

This parameter	*Specifies*
nn	The number of columns you want to shift the body to the right. The default is **1**.

The body is determined by the following rules:

1. SYSD starts scanning in the left column.

2. SYSD finds the first blank character.

3. When SYSD finds the next non-blank character, it considers that character the start of the body. This character is where SYSD starts shifting the data.

4. When SYSD finds the first two consecutive blanks, it considers that the end of the body. This is where SYSD stops shifting the data.

>> – Data Shift Right Block

The >> command shifts the body of a block of lines to the right. Type the >> command in the line number fields for the first and last lines you want to shift. You can use the >> command with the ZONE command to control the shift area. In that case, SYSD only shifts the body of the data in the zone. The format of the >> command is:

```
>> [nn]
[nn] >>
```

This parameter	Specifies
nn	The number of columns you want to shift the body to the right. The default is 1. If you specify two different numbers, SYSD shifts the body by the higher of the two numbers.

The body is determined by the following rules:

1. SYSD starts scanning in the left column.

2. SYSD finds the first blank character.

3. When SYSD finds the next non-blank character, it considers that character the start of the body. This character is where SYSD starts shifting the data.

4. When SYSD finds the first two consecutive blanks, it considers that the end of the body. This is where SYSD stops shifting the data.

D – Delete Lines

The D command deletes lines from the edit session. The format of the D command is:

```
D [nn]
[nn] D
¬ [nn]
[nn] ¬
```

This parameter	Specifies
nn	The number of lines you want to delete. If the number exceeds the number of lines left in the dataset, SYSD deletes the rest of the edit session. The default is 1.

For example, if you type **D3** on line 100, SYSD deletes lines 100, 200, and 300.

> If you accidentally delete an original line, you can redisplay the line by typing **SHOW DELETES** in the *Input* field and pressing **Enter**. To recover the deleted line, change it.

DD – Delete Block

The DD command deletes a block of lines from the edit session. Type the DD command in the line number fields of the first and last lines of the block you want to delete. The format of the DD command is:

> You cannot specify a repetition count.

```
DD
¬¬
```

For example, if you type **DD** on lines 100 and 300, SYSD deletes lines 100, 200, and 300.

X – Exclude Lines

The X command hides lines from the display. The format of the X command is:

```
X [nn]
[nn] X
```

This parameter	*Specifies*
nn	The number of lines you want to exclude. This includes the line you specify the X command on. The default is **1**.

For example, if you type **X3** on line 500, SYSD hides lines 500, 600, and 700 from the display.

> To redisplay the excluded lines, issue the SHOW primary or line command.

XX – Exclude Block

The XX command hides a block of lines from the display. Type the XX command in the line number fields for the first and last lines of the block you want to exclude. The format of the XX command is:

```
XX
```

F – First (Show) Lines

The F command redisplays the first lines in a block you previously excluded with the X (Exclude) line command. The format of the F command is:

```
F [nn]
[nn] F
```

This parameter	Specifies
nn	The number of excluded lines you want to redisplay. The default is the first line of the excluded block.

I – Insert Lines

The I command inserts null lines below the current line. An insert line has six apostrophes in the line number field. The format of the I command is:

```
I [nn]
[nn] I
```

This parameter	Specifies
nn	The number of lines you want to insert. If this number exceeds the number of lines left on the screen, only the remaining lines are eligible for inserting text. The default is 1.

If you update a null line and leave the cursor on that line, SYSD inserts another line after the line you edited when you press **Enter**. If you do not enter data on a null line, SYSD deletes it when you press **Enter**.

L – Last (Show) Lines

The L command redisplays the last lines in a block you previously excluded with the X (Exclude) line command. The format of the L command is:

```
L [nn]
[nn] L
```

This parameter   **Specifies**

nn   The number of lines you want to redisplay. The default is the last line of the excluded block.

M – Move Lines

The M command moves lines to the point in the edit session indicated by an A (After), B (Before), or O (Overlay) line command. SYSD deletes the original lines after the move. The format of the M command is:

```
M [nn]
[nn] M
```

This parameter   **Specifies**

nn   The number of lines you want to move, including the line you specify the M command on. The default is 1.

For example, if you type **M3** on line 100 and **A** on line 500, SYSD moves lines 100, 200, and 300 after line 500.

MM – Move Block

The MM block command moves a block of lines to the point in the edit session indicated by an A (After), B (Before), or O (Overlay) line command. The format of the MM command is:

```
MM
```

For example, if you type **MM** on lines 100 and 300 and type **A** on line 500, SYSD moves lines 100, 200, and 300 after line 500.

O – Overlay Lines

The O command fills in the blank spaces on receiving lines with characters from the sending lines. The O command only puts characters in the blank spaces on a line. The receiving lines are marked with the O command. The sending lines are marked with the M (Move) or C (Copy) command. You can use the COPY or MOVE primary command to put data on the receiving lines without impacting existing characters on the receiving line. The format of the O command is:

```
O[nn]
[nn]O
```

This parameter	Specifies
nn	The number of lines you want to overlay. The default is 1.

If there are more receiving lines (O) than there are sending lines (M or C), SYSD repeats the sending lines in sequential order until all receiving lines are filled. If there are more sending lines (M or C) than receiving lines (O), SYSD ignores the extra sending lines.

You can also use the O command with the ZONE command to copy or move an overlay into the blanks within specified zones.

OO – Overlay Block

The OO block command fills in the blanks on selected lines with characters from another line. Type the OO command in the line number fields for the first and last lines of the block you want to overlay. To put data on selected lines without impacting existing characters, use the C (Copy), CC (Copy Block), M (Move), or MM (Move Block) commands. The format of the OO command is:

```
OO
```

R – Repeat Line

The R command repeats a line. You cannot repeat more than one line. The format of the R command is:

```
R [nn]
[nn] R
" [nn]
[nn] "
```

This parameter	Specifies
nn	The number of times you want to repeat the line. The default is 1.

RR – Repeat Block

The RR command repeats a block of lines. Type the RR command in the line number fields for the first and last lines of the block you want to repeat. The format of the RR command is:

```
RR [nn]
[nn] RR
"" [nn]
[nn] ""
```

This parameter	Specifies
nn	The number of times you want to repeat the block. If you specify two different numbers, SYSD repeats the block the higher of the two numbers. The default is 1.

For example, if you type **RR** on lines 100 and 300, SYSD repeats lines 100, 200, and 300 once and inserts them after line 300.

/ – Set Current Line

The / command moves a line to the top of the screen. The format of the / command is:

```
/
```

S – Show Lines

The S command redisplays lines you previously excluded with the X (Exclude) line command. The format of the S command is:

```
S [nn]
[nn] S
```

This parameter	Specifies
nn	The number of lines in the excluded block you want to redisplay. The default is the entire block.

TM – Text Merge

The TM command deletes the rest of the current line starting at the cursor position and merges as much of the subsequent lines as possible. The format of the TM command is:

```
TM [nn]
```

This parameter	Specifies
nn	The number of lines you want to merge. The default is 1.

The TM command and the cursor must be on the same line. The text merge operation does not break up words.

➤ To reformat a single line

1. Type **TM** in the line number field for the line where you want the merge to occur.

2. Move the cursor to the location in the line where you want the subsequent line to move.

3. Press **Enter**.

SYSD deletes data on the line to the right of the cursor up to and including the TRUNC column, merges as much of the subsequent line as possible, left justifies any remaining data on the line below the TM command, and pads to the right with nulls or blanks.

➤ To reformat a specific number of lines

1. Type **TMnn**, where **nn** is the number of lines you want to reformat, in the line number field for the first line you want to reformat.

2. Press **Enter.**

If the cursor is not positioned in the data area on the line, the last word is the default merger point.

➤ To reformat a paragraph

You can use the TM, TS, and TRUNC commands together to reformat a paragraph.

1. Use the TS command to split the first line at the point where you want to set the right margin.

2. Use the TRUNC command to set the new right margin.

3. Use the TMnn command to merge the remaining lines in the paragraph. The TRUNC column becomes the new right margin.

When merging multiple lines, SYSD uses the beginning column of the line being merged into the first line as the left margin. If the second line is indented 5 columns, subsequent lines specified by the **nn** parameter are indented 5 columns.

TS – TEXT SPLIT

The TS command breaks a line and moves all the text to the right of the cursor up to and including the TRUNC column to a new line below the specified line. The format of the TS command is:

```
TS
```

The TS command and cursor must appear on the same line. The text split operation does not break up any words. To split a line of text:

1. Type **TS** in the line number field for the line you want to split.

2. Move the cursor to the position in the line where you want the split to occur.

3. Press **Enter.**

SYSD moves all text to the right of the cursor to a new line below the current line, pads the current line to the right with nulls or blanks, and left-aligns and pads the current line to the right with nulls or blanks.

Chapter 5
Option 3: Perform Utility Functions (SYSD Only)

Option 3, Perform utility functions, in menu-driven CPMS/SYSD provides a full range of functions that let you create and maintain disk datasets, including:

- Rename, delete, and print partitioned and sequential datasets.
- Display information about a specific dataset.
- Allocate, rename, and delete datasets.
- Compress libraries.
- Catalog and uncatalog datasets.
- Display the catalog entries for a high-level qualifier.
- Display the volume table of contents for a disk volume.
- Display the UCBs for all devices.

This chapter describes the following screens:

Screen	Address
Utility Selection Menu	3
Library Utilities Menu	3.1
Dataset Utilities Menu	3.2
Dataset Information	n/a
Dataset Extents	n/a
Allocate Utility	3.2.A
Catalog Utility	3.2.C
LISTCAT Utility	3.4

(continued)

Screen	**Address**
VTOC Utility	3.7
System Device Unit Status Display	3.U

Utility Selection Menu

Option 3, Utility Selection Menu, is the first screen displayed when you select the UTIL option on the Primary Option Menu. This screen provides access to the utility display screens.

➢ To access the Utility Selection Menu

On the Primary Option Menu, type 3 in the *Input* field and press **Enter**.

or

On any screen, type 3 in the *Input* field and press **Return**.

```
---------------------------- UTILITY SELECTION MENU ---------------------- (1/1)
INPUT ===>

   1  LIBRARY    - Library utilities:
                        Print index listing or entire data set
                        Print, rename, delete, or browse members
                        Compress data set

   2  DATASET    - Dataset utilities:
                        Display dataset information
                        Allocate, rename, or delete entire dataset
                        Catalog or uncatalog dataset

   4  CATALOG    - Display Catalog entries

   7  VTOC       - Display VTOC entries for a DASD volume

   U  UNIT LIST  - Display unit status information of devices
```

Library Utilities Menu

Option 3.1, Library Utilities Menu, lets you manage partitioned and sequential datasets
From here you can:

- Compress a dataset.
- Print an index listing.
- Print an entire dataset.
- Display dataset information.
- Browse a member.
- Print a member.
- Rename a member.
- Delete a member.

➤ **To access the Library Utilities Menu**

On the Utility Selection Menu, type **1** in the *Input* field and press **Enter**.

or

On any screen, type **3.1** in the *Input* field and press **Return**.

```
  9:22:22 -------------------- LIBRARY UTILITIES MENU ------------------- (1/1)
 INPUT ===>

                                        B - Browse member
      C - Compress data set             P - Print member
      G - Print index listing           R - Rename member
      L - Print entire data set         D - Delete member
      S - Data set information

 PDS LIBRARY DATASET:
     PROJECT ===> SYSD
     LIBRARY ===> PROD
     TYPE    ===> SOURCE
     MEMBER  ===>              (If option "P", "R", "D", or "B" selected)
     NEWNAME ===>              (If option "R" selected)

 OTHER PARTITIONED OR SEQUENTIAL DATASET:
     DATASET NAME   ===>
     VOLUME SERIAL  ===>       (If not cataloged)

 DATASET PASSWORD ===>         (If password protected)
```

Field Definitions

Dataset Name

The 1- to 44-character name of the partitioned or sequential dataset. You use this field if the dataset name does not conform to the library's three-part naming convention. This field overrides a dataset name specified in the *PDS Library Dataset* section.

Dataset Password

The password for a dataset. This field is only required if the dataset is password protected. The password is not displayed on the screen when you type it.

Library

The name of the library the PDS member resides in. This is the second level of the three-part library naming convention.

Member

The member name.

Newname

The new member name. This field is only required if you are renaming a PDS member.

Project

The name of the project. This is the first level of the three-part library naming convention. It is the identifier for libraries that belong to the same project.

Type

The type of data in the library. This is the third level of the three-part library naming convention. Common data types are: **ASM, COBOL, HELP, LOAD, and OBJ**.

Volume Serial

The volume serial number where an uncataloged dataset resides. If the dataset is cataloged, leave this field blank.

Command Definitions

B - Browse member

Displays the Browse – Dataset Menu for the specified PDS member or sequential dataset. See "Browse – Dataset Menu" on page 40 for more information about the screen.

C - Compress data set

Compresses the dataset and displays a message telling you the batch compress process has started.

D - Delete member

Deletes the PDS member. You must specify the member name you want to delete in the *Member* field.

G - Print index listing

For a PDS, prints general information about the PDS and a list of the members in the PDS. For a sequential dataset, only prints general information about the dataset.

L - Print entire data set

For a PDS, prints general information about the PDS, a list of the members in the PDS, and the contents of each member. For a sequential dataset, prints general information about the dataset and the contents of the dataset.

P - Print member

Submits a batch job to print the PDS member. The default JOB cards for this batch print job are defined on Option 0.5, Utility Parameters.

R - Rename member

Renames the PDS member. You must specify the name of the member you want to rename in the *Member* field and the new member name in the *NEWNAME* field.

S - Data set information

Displays information about the partitioned or sequential dataset on the Dataset Information screen. See "Dataset Information" on page 132 for more information about the screen.

Dataset Utilities Menu

Option 3.2, Dataset Utilities Menu, provides access to the rest of the utility function screens. From here you can:

+ Allocate new datasets.
+ Rename entire datasets.
+ Delete entire datasets.
+ Display dataset information.
+ Catalog datasets.
+ Uncatalog datasets.
+ Compress datasets.

➤ To access the Dataset Utilities Menu

On the Utility Selection Menu, type **2** in the *Input* field and press **Enter.**

or

On any screen, type **3.2** in the *Input* field and press **Return.**

```
 9:30:50  ------------------ DATASET UTILITIES MENU ------------------ (1/1)
INPUT ===>

   A - Allocate new dataset          C - Catalog dataset
   R - Rename entire dataset         U - Uncatalog dataset
   D - Delete entire dataset         O - Compress dataset
   blank - Display dataset information

PDS LIBRARY DATASET:
   PROJECT ===>    SYSD
   LIBRARY ===>    PROD
   TYPE    ===>    SOURCE

OTHER PARTITIONED OR SEQUENTIAL DATASET:
   DATASET NAME  ===>
   VOLUME SERIAL ===>          (If not cataloged, required for option "C")

DATASET PASSWORD ===>          (If password protected)

NEW DATASET NAME:              (Required for rename only)
   DATASET NAME  ===>
```

Field Definitions

Dataset Name

The 1- to 44-character name of the partitioned or sequential dataset. You use this field if the dataset name does not conform to the library's three-part naming convention. This field overrides a dataset name specified in the *PDS Library Dataset* section.

Dataset Password

The password for the dataset. This field is only required if the dataset is password protected. The password is not displayed on the screen when you type it.

Library

The name of the library. This is the second level of the three-part library naming convention.

New Dataset Name

The 1- to 44-character name you want to assign to the dataset. This field is only required if you are renaming the entire dataset.

Project

The name of the project. This is the first level of the three-part library naming convention. It is the identifier for libraries that belong to the same project.

Type

The type of data in the library. This is the third level of the three-part naming convention. Common data types are: **ASM, COBOL, OBJECT, LOAD,** or **HELP.**

Volume Serial

The volume serial number where an uncataloged dataset resides. If the dataset is cataloged, leave this field blank.

Command Definitions

blank - Display dataset information

Displays information about the dataset on the Dataset Information screen. See "Dataset Information" on page 132 for more information about the screen.

A - Allocate new dataset

Dynamically allocates the new dataset. If the allocate fails, SYSD displays the IBM reason code, reason code error, and reason code information at the bottom of the screen. See the IBM *OS/SPL: Job Management Manual* for an explanation of the codes.

C - Catalog dataset

Displays the Catalog Utility screen where you can catalog multiple datasets. See "Catalog Utility" on page 139 for more information about the screen.

D - Delete entire dataset

Deletes the dataset. If the dataset is cataloged, SYSD also uncatalogs it. SYSD displays a prompt asking you to verify that you want to delete the dataset. To continue with the delete, press **Enter**. To cancel the delete, remove the **D** from the *Input* field and press **Enter**.

O - Compress dataset

Compresses the dataset and displays a message telling you the batch compress process has started.

R - Rename entire dataset

Renames the dataset. SYSD displays the Dataset Utilities Menu where you specify the new dataset name. See "Dataset Utilities Menu" on page 129 for more information about the screen.

U - Uncatalog dataset

Uncatalogs the dataset from the volume specified.

Dataset Information

The Dataset Information screen displays allocation and utilization information for a specific dataset. From here you can allocate, catalog, delete, compress, rename, and uncatalog the dataset. You can also display more information about the dataset's extents.

➤ To access the Dataset Information screen

On the Dataset Utilities Menu, leave the *Input* field blank, fill in the necessary fields, and press **Enter.**

```
 9:34:35  ------------------ DATASET INFORMATION -------------------- (1/1)
INPUT ===>

DATASET NAME   ===> 'SYSD.PROD.SOURCE'


GENERAL DATA:                          CURRENT ALLOCATION:
   Volume serial  ===>  HWS04X            Allocated TRACKS:     500
   Device type:         3380              Allocated extents:      1
   Organization:        PO                Maximum dir. blocks:   50
   Record format:       FB
   Record length:       80             CURRENT UTILIZATION:
   Blocksize:           6160              Used tracks:          489  97 %
   1st extent TRACKS:   500               Used extents:           1 100 %
   Secondary TRACKS:    0                 Used dir. blocks:      40  80 %
                                          Number of aliases:
   Creation date:       95173 06/22/95    Number of members:    255
   Expiration date:     00000
   Last referenced:     96108 04/17/96 EXTENT DATA:
                                          SEQ   CC    HH    CC    HH   TRKS
   Last block   TT R LL: 01E8 03 8740      1   024E  0000  026F  0004 00500
   DSCB ptr     TT R:    0010 23
   DSCB ptr     CC HH R: 0001 0001 23
A=allocate C=catalog D=delete E=extents O=compress R=rename U=uncatalog
```

The data on the screen is divided into four sections.

Section Definitions

Current Allocation

The dataset's current space allocations.

Current Utilization

The percentages of allocated space the dataset is using.

Extent Data

Detailed information about the dataset's current space allocations.

General Data

Information about the dataset, like the location, device type, and record size.

Command Definitions

Type the **command** in the *Input* field and press **Enter**.

A=allocate

Dynamically allocates a new dataset.

C=catalog

Catalogs a multiple-volume dataset.

D=delete

Deletes the dataset. SYSD displays a prompt asking for you to verify that you want to delete the dataset.

E=extents

Displays more extent information, up to 16, on the Dataset Extents screen. See "Dataset Extents" on page 134 for more information about the screen.

O=compress

Compresses the dataset.

R=rename

Renames the dataset. SYSD displays the Dataset Utilities Menu where you specify the new dataset name. See "Dataset Utilities Menu" on page 129 for more information about the screen.

U=uncatalog

Uncatalogs the dataset from the volume.

Dataset Extents

The Dataset Extents screen displays the volume the dataset resides on and information about each of the dataset's extents. From here you can allocate, catalog, delete, compress, rename, and uncatalog the dataset.

➤ To access the Dataset Extents screen

On the Dataset Information screen, type E in the *Input* field press **Enter**.

```
 9:46:24  ------------------ DATASET EXTENTS ------------------------ (1/1)
 INPUT ===>

 DATASET NAME  ===> 'SYSD.PROD.SOURCE'
 EXTENT DATA:                              SEQ   CC    HH   CC    HH   TRKS
   Volume serial  ===>  HWS04X              1   024E  0000  026F  0004  00500
                                           TOTAL TRACKS = 00500
```

```
 A=allocate C=catalog D=delete O=compress R=rename S=select U=uncatalog
```

Field Definitions

CC

The cylinder on the disk where the dataset extent starts and ends.

Dataset Name

The name of the dataset displayed.

HH

The dataset's beginning and ending locations in **head-head** format.

SEQ

The dataset extent's sequence number.

TRKS

The number of tracks in each extent.

Volume Serial

The volume the dataset resides on.

Command Definitions

A=allocate

Dynamically allocates a new dataset.

C=catalog

Catalogs a multiple-volume dataset.

D=delete

Deletes the dataset. SYSD displays a prompt asking you to verify that you want to delete the dataset.

O=compress

Compresses the dataset.

R=rename

Renames the dataset. SYSD displays the Dataset Utilities Menu where you specify the new dataset name. See "Dataset Utilities Menu" on page 129 for more information about the screen.

S=select

Displays the dataset's allocation and utilization information on the Dataset Information screen. See "Dataset Information" on page 132 for more information about the screen.

U=uncatalog

Uncatalogs the dataset from the volume.

Allocate Utility

Option 3.2.A, Allocate Utility, lets you dynamically allocate a new dataset. If the allocate fails, SYSD displays the reason code, reason code error, and reason code information at the bottom of the screen. See the IBM *OS/SPL: Job Management Manual* for an explanation of the codes.

> ### To access the Allocate Utility screen

On the Dataset Utilities Menu, type **A** (Allocate) in the *Input* field and press **Enter**.

or

On any screen, type **3.2.A** in the *Input* field and press **Return**.

```
 9:50:35  --------------------- ALLOCATE UTILITY --------------------- (1/1)
 INPUT ===>

DATASET NAME   ===> 'SYSD.PROD.SOURCE'

   Volume serial     ===>
   Space units       ===> TRKS          (blks, trks or cyls)
   Primary quan      ===> 15            (in above units)
   Secondary quan    ===> 5             (in above units)
   Directory blocks  ===> 0             (zero for sequential dataset)
   Record format     ===> FB
   Record length     ===> 80
   Blocksize         ===> 6160

   Catalog the dsn   ===> YES           (yes/no for allocate only)




 ENTER=Allocate C=Catalog D=Delete R=Rename S=Select U=Uncatalog
```

Field Definitions

Blocksize

The length of the dataset's blocks. For fixed and fixed-block records, the block size must be a multiple of the record length. For unblocked records, the block size should be the same as the record length.

Note	For systems that support block sizes determined by the system, you can leave this field blank or set it to 0.

Catalog the dsn

A **YES/NO** field that specifies if you want to catalog the dataset as well as allocate it.

Dataset Name

The name of the dataset you want to allocate.

Directory blocks

The number of directory blocks you want to allocate for the dataset. For sequential datasets, type **0**.

Primary quan

The primary number of space units you want to allocate for the dataset.

Record format

The dataset's record format. For example, **FB** means the records are fixed block.

Record length

The length of the dataset's records.

Secondary quan

The secondary number of space units you want to allocate for the dataset. This determines the size of the extents.

Space units

The dataset's allocation type. Valid allocation types are: **BLKS, TRKS,** or **CYLS.**

Volume serial

The volume serial number where you want to allocate the dataset.

Command Definitions

C=Catalog

Catalogs the dataset.

D=Delete

Deletes the dataset.

Enter=Allocate

Dynamically allocates the dataset. If you specified **YES** in the *Catalog the dsn* field, SYSD also catalogs the dataset.

R=Rename

Renames the datasets. SYSD displays the Dataset Utilities Menu where you specify the new dataset name. See "Dataset Utilities Menu" on page 129 for more information about the screen.

> This command is useful if the dataset you want to allocate already exists or if the dataset name allocated is incorrect.

S=Select

Displays the dataset's allocation and utilization information on the Dataset Information screen. See "Dataset Information" on page 132 for more information about the screen.

U=Uncatalog

Uncatalogs the dataset.

Catalog Utility

Option 3.2.C, Catalog Utility, lets you catalog up to five volume datasets.

➢ **To access the Catalog Utility screen**

On the Dataset Utilities Menu, type **C** (Catalog dataset) in the *Input* field and press **Enter.**

or

On any screen, type **3.2.C** in the *Input* field and press **Return.**

```
 9:53:39 --------------------- CATALOG UTILITY -------------------- (1/1)
 INPUT ===>


    Multiple volumes may be entered
    Device type is required

 PDS LIBRARY DATASET:
    PROJECT ===> SYSD
    LIBRARY ===> PROD
    TYPE    ===> SOURCE

 OTHER PARTITIONED OR SEQUENTIAL DATASET:
    Dataset name   ===>
    Volume serial  ===>
    Device type    ===>
    GDG max count  ===>
    GDG options    ===>        (D-delete E-empty DE-both)

 DATASET PASSWORD ===>         (if password protected)



 A=allocate B=bldg C=catalog D=delete O=compress R=rename S=select U=uncatalog
```

Field Definitions

Dataset name

The 1- to 44-character name of the partitioned or sequential dataset you want to catalog. You use this field if the dataset name does not conform to the library's three-part naming convention. This field overrides a dataset name specified in the *PDS Library Dataset* section.

Dataset password

The password for the dataset. This field is only required if the dataset is password protected. The password is not displayed on the screen when you type it.

Device type

The storage device you want to catalog the dataset on. For example, **DASD** or **TAPE**.

GDG max count

The number of generation data groups (GDG) the catalog maintains for the dataset.

GDG options

Specifies what happens to the generation data group when the maximum number of GDGs specified by the *GDG max count* field is reached.

Type	To
D	Delete the GDG.
E	Empty the GDG.
DE	Delete and empty the GDG.

Library

The name of the library you want to catalog. This is the second level of the three-part library naming convention.

Project

The name of the project you want to catalog. This is the first level of the three-part library naming convention. It is the identifier for libraries that belong to the same project.

Type

The type of data in the library. This is the third level of the three-part library naming convention. Common data types are: **ASM, COBOL, HELP, LOAD,** and **OBJ.**

Volume serial

The volume serial number where an uncataloged dataset resides.

Command Definitions

A=allocate

Dynamically allocates the dataset.

B=bldg

Builds a generation data group entry for the dataset you are cataloging. You must specify values in the *GDG max count* and *GDG options* fields if you issue this command.

C=catalog

Catalogs the dataset.

D=delete

Deletes the dataset.

O=compress

Compresses the dataset.

R=rename

Renames the dataset. SYSD displays the Dataset Utilities Menu where you can specify the new dataset name. See "Dataset Utilities Menu" on page 129 for more information about the screen.

S=select

Displays the dataset's allocation and utilization information on the Dataset information screen. See "Dataset Information" on page 132 for more information about the screen.

U=uncatalog

Uncatalogs the dataset.

LISTCAT Utility

Option 3.4, LISTCAT Utility, lists the catalog entries for a specific high-level qualifier. From here you can browse, delete, edit, compress, rename, and catalog the dataset. You can also display the dataset's VTOC information.

➤ To access the LISTCAT Utility screen

On the Data Utilities Menu, type 4 in the *Input* field and press **Enter**.

or

On any screen, type **3.4** in the *Input* field and press **Enter**.

```
 10:03:59 --------------------- LISTCAT UTILITY --------------------- (1/1)
 INPUT ===>                                                 SCROLL: CSR

 INDEX ===> SYS1.
 RECORD SELECTION ===>
 O DSN(S) IN HWMVSR51.MASTER.CATALOG          VOLSER  DEVICE    SEQ#  FLAGS
    SYS1.AADFMAC1                             R51DLB  3380            NVSAM
    SYS1.AADRLIB                             R51DLB  3380            NVSAM
    SYS1.ABLSCLIO                            R51DLB  3380            NVSAM
    SYS1.ABLSKELO                           R51DLB  3380            NVSAM
    SYS1.ABLSMSGO                           R51DLB  3380            NVSAM
    SYS1.ABLSPNLO                           R51DLB  3380            NVSAM
    SYS1.ABLSTBLO                           R51DLB  3380            NVSAM
    SYS1.ABMFMODO                           R51DLB  3380            NVSAM
    SYS1.ACBDCLST                            R51DLB  3380            NVSAM
    SYS1.ACBDHENU                           R51DLB  3380            NVSAM
    SYS1.ACBDMENU                           R51DLB  3380.           NVSAM
    SYS1.ACBDMOD1                           R51DLB  3380            NVSAM
    SYS1.ACBDMOD2                           R51DLB  3380            NVSAM
    SYS1.ACBDPENU                           R51DLB  3380            NVSAM
    SYS1.ACBDTEMP                           R52SMP  3380            NVSAM
    SYS1.ACBDTENU                           R51DLB  3380            NVSAM
    SYS1.ACBRDBRM                           R51DLB  3380            NVSAM
 B=browse D=delete E=edit O=compress R=rename S=select U=uncatalog
```

If an error occurs when retrieving the dataset information from the catalog, SYSD does one of the following:

♦ Puts question marks (?) in the *VOLSER* field and **RC=nnnn** in the *Device* field. See IDC3009I in IBM's message manual for more information.

♦ Puts question marks (?) in the *VOLSER, Device,* or *SEQ#* field without displaying a return code. In this case, the dataset has more than 29 volume serial numbers cataloged and SYSD could not retrieve all the information. SYSD displays as much data as possible.

Field Definitions

Device

The type of device the dataset resides on.

DSN(S)

The 1- to 44-character dataset name.

Flags

The dataset's record type.

Index

A complete high-level qualifier. This field is required. All entries are treated as generic.

If the high-level qualifier is an alias for a CVOL catalog, you must specify complete qualifiers; otherwise, you can specify partial qualifiers after the high-level qualifier.

> **Tip** You can define a default high-level qualifier on Option 0.5, Utility Parameters.

O

Option column. Type the single-character **option** next to the catalog entry and press **Enter.**

> **Note** If you specify multiple options, SYSD performs the C=compress, R=rename, and U=uncatalog options first; then the D=delete option with a verification prompt; and then the first occurrence of either the B=browse, E=edit, S=select, or /=reposition option.

/=reposition

Moves the dataset to the first line on the screen.

B=browse

Displays the Browse – Dataset Menu for the dataset. See "Browse – Dataset Menu" on page 40 for more information about the screen.

D=delete

Deletes the dataset.

E=edit

Displays the Edit – Dataset Menu for the dataset. See "Edit – Dataset Menu" on page 60 for more information about the screen.

O=compress

Compresses the dataset.

R=rename

Renames the dataset.

S=select

Displays the dataset's VTOC information.

U=uncatalog

Uncatalogs the dataset.

Record Selection

The type of records displayed. If this field is left blank, SYSD displays all record types. The following valid record types are IBM abbreviated keywords. The uppercase characters are the minimum abbreviation allowed. Separate each keyword by blanks or commas.

Type	To display
ALias	Aliases.
AIx	Alternate indexes.
CL	Clusters.
DAta	A VSAM dataset's data components.
GDg	Generation data groups. If the dataset is cataloged in a CVOL catalog, these record types are not displayed.
IX	A VSAM dataset's index components.
NVsam	Non-VSAM datasets.
PAth	Paths.

Type	*To display*
PGspc	Page spaces.
UCat	User catalogs.

Note See the IBM *Access Method Services Reference* manual for more information about these record types.

SEQ#

The file sequence number. This field is only valid for tape and cartridge datasets.

VOLSER

The volume serial number. A plus sign (+) means the dataset has multiple volumes.

VTOC Utility

Option 3.7, VTOC Utility, lets you display a DASD VTOC online and perform dataset management functions. You can display an entire volume or limit the entries displayed to only those datasets whose name agrees with a specified prefix.

➤ ## To access the VTOC Utility screen

On the Dataset Utilities Menu, type 7 in the *Input* field and press **Enter**.

or

On any screen, type **3.7** in the *Input* field and press **Return**.

```
------------------------------ VTOC UTILITY    ------------------------------ (1/1)
INPUT ===>                                                         SCROLL: CSR

VOL. ===> HWS917 DSN PREFIX ===>

 VOLUME DATA:          VTOC DATA:              FREE SPACE:
  TOTAL:    33390 TRKS  TOTAL:    700 DSCBS    TOTAL:     1228 CYLS   18426 TRKS
  USED:     14964 TRKS  USED:     340 DSCBS    LARGEST:   1198 CYLS   17980 TRKS
  DATASETS:  338 DSNS   FREE:     360 DSCBS    EXTENTS:                  22 EXTS

O  DATASET NAME             CREDT EXPDT ORG RECFM LRECL BLKSZ EX   TRKS USE%
   SYS1.VTOCIX.HWS917        97038       PS  F     2048  2048  1      1 100
   SYSD.PRODR630.SOURCE      93195       PO  FB      80  6160  1    405  99
   SYSD.CUSTV610.SC015       92155       PO  FB      80  6160  1     12 100
   SYSD.TEST.JOUT            92161       PS  FB      80   800  1      1 100
   SYSD.TEST02.JOUT          92168       PS  FB      80   800  1      1 100
   SYSD.ATP.TEST             88168       PO  FB      80  6160  1     15  26
   SYSD.ATP1.TEST            88351       PO  FB      80  6160  1     15  40
   SYSD.ATP2.TEST            88351       PO  FB      80  6160  1     15  13
   SYSD.HOLD.MISC            89221       PO  FB      80  6160  1     51  98
   SYSD.NEW.RELEASE          87216       PO  FB      80  4080  1     45  86
   SYSD.TEST.JINP            92168       PS  FB      80   800  1      1 100
   SYSD.BW.PTFB.HELP         90117       PO  FB      80  4080  1     13  92
   B=browse C=catalog D=delete E=edit O=compress R=rename S=select U=uncatalog
```

Field Definitions

BLKSZ

The dataset's block size.

CREDT

The date the dataset was created.

Dataset Name

The 1- to 44-character dataset name.

DSN Prefix

The full or partial prefix. SYSD only displays the entries for the datasets on the volume whose names agree with the prefix you specify. You can use the not sign (¬) in front of the prefix to limit the entries displayed to all the datasets *except* the ones whose names agree with the specified prefix.

EX

The number of extents the dataset has used.

EXPDT

The date the dataset expires.

Free Space

The total number of free cylinders and tracks on the volume, the largest single free cylinder or track area on the volume, and the number of extents the free tracks are in.

LRECL

The dataset's logical record length.

O

Option column. Type the single-character **option** next to the VTOC entry and press **Enter**.

B=browse

Displays the Browse – Dataset Menu for the dataset. See "Browse – Dataset Menu" on page 40 for more information about the screen.

C=catalog

Catalogs the dataset.

D=delete

Deletes the dataset.

E=edit

Displays the the Edit – Dataset Menu for the dataset. See "Edit – Dataset Menu" on page 60 for more information about the screen.

O=compress

Compresses the dataset.

R=rename

Renames the dataset.

S=select

Displays the dataset's VTOC information.

U=uncatalog

Uncatalogs the dataset.

ORG

The dataset's organization type.

RECFM

The dataset's record format.

TRKS

The number of tracks allocated for the dataset.

Use%

The percentage of allocated tracks the dataset has used.

VOL

The volume serial number you want to display.

Volume Data

The total number of tracks available on the volume, the number of tracks on the volume that have been used, and the total number of datasets on the volume.

VTOC Data

The total number of dataset control blocks (DSCBs) available on the volume, the number of DSCBs the volume is using, and the number of DSCBs available for the volume.

System Device Unit Display

Option 3.U, System Device Unit Display, lets you list the unit control blocks (UCBs) defined in your operating system. You can limit the units displayed by typing over the information in the *Type* and *Unit Status* fields.

➤ **To access the System Device Unit Display screen**

On the Utilities Selection Menu, type **U** (Unit List) in the *Input* field and press **Enter**.

or

On any screen, type **3.U** in the *Input* field and press **Return**.

```
---------------------- SYSTEM DEVICE UNIT DISPLAY --------------------(1/1)
INPUT ===>                                                   SCROLL: CSR

TYPE  ===> DASD      UNIT STATUS  ===> ONLINE
O  VOLSER   DEVICE   ADDR   STATUS       TYPE         USE
   339000   3390     0100   ONLINE       STRG RES     0000
   339001   3390     0101   ONLINE       PRIV RES     0000
   339002   3390     0102   ONLINE       STRG RES     0002
   339003   3390     0103   ONLINE       PRIV RES     0000
   339004   3390     0104   ONLINE       PRIV RES     0031
   339005   3390     0105   ONLINE       STRG RES     0004
   339006   3390     0106   ONLINE       PRIV RES     0000
   339007   3390     0107   ONLINE       STRG RES     0006
   HWE914   3390     0114   ONLINE       PRIV RES     0000
   HWS915   3390     0115   ONLINE       PRIV RES     0001
   HWE916   3390     0116   ONLINE       PRIV RES     0000
   HWS917   3390     0117   ONLINE       PRIV RES     0000
   HWE918   3390     0118   ONLINE       PRIV RES     0000
   HWS919   3390     0119   ONLINE       PRIV RES     0000
   SMSV07   3390     011B   ONLINE       PRIV RES     0000
   HWE05X   3380     0120   ONLINE       PRIV RES     0001
   HWS04X   3380     0121   ONLINE       PRIV RES     0000
   HWC001   3380     0122   ONLINE       STRG RES     0016
   V=view VTOC  P=print VTOC  (DASD Only)
```

Field Definitions

ADDR

The 3- to 4-digit UCB ID.

Device

The type of device.

O

Option column. Type the single-character **option** next to the UCB and press **Enter.**

P=print VTOC (DASD Only)

Submits a job to print the VTOC. The print job uses the JOB statements defined on Option 0.5, Utility Parameters. See "Utility Parameters" on page 37 for more information about defining the default JOB statements. You can view the output from the spool.

V=view VTOC

Displays the VTOC Utility screen for the volume serial number. See "VTOC Utility" on page 146 for more information about the screen.

Status

Specifies the device's status. The status is **ONLINE** or **OFFLIN.**

Type

Located below the *Input* field, the type of UCBs you want to display. Valid UCB types are: **ALL, DASD, DISK, GRAPHICS, SYSDA, TAPE, TERM, TP, TRM, UR,** or blanks. The default is **DASD.**

Type

Located to the right of the *Status* field, the type of device displayed. Depending on what you specify in the *Type* field located below the *Input* field, this field may be blank.

Unit Status

Limits the display to the devices that match the status entered. Valid unit statuses are: **ALL, OFFLINE, ONLINE,** or blanks. The default is **ONLINE.**

Use

The number of DCBs open for this volume.

VOLSER

The volume serial number of the unit.

Chapter 6

Option 4: Displaying Active Jobs

Option 4, MVS/JES2 Display Active Jobs, displays the statistics for the jobs executing in the operating system. This screen is helpful in estimating a job's completion time once it has started executing. It also indicates the current state of the operating system with respect to overall execution.

> ## To access the Display Active Jobs screen

On the Primary Option Menu, type **4** in the *Input* field and press **Enter**.

or

On any screen, type **4** in the *Input* field and press **Return**.

```
----------------- MVS/JES2 DISPLAY ACTIVE JOBS ------------------(1/1)
INPUT ===>                                             SCROLL: CSR

  ASID JOBNAME  STEPNAME PROCNAME  CPUR  STATUS   REAL    AUX   PRTY    #I/O
  0017 LLA      LLA      LLA         17  NSWAP    276K   3232K   33     3073
  0019 VLF      VLF      VLF        482  NSWAP    268K   5384K   40      106
  0021 NET      NET      NET      11230  NSWAP   1148K   3676K  159      692
  0025 JES2     JES2     IEFPROC  22368  NSWAP   1040K   2948K  159  1112582
  0028 CICS31   CICS330  CICS3133  1325  NSWAP   7768K  14756K  142 10167987
  0252 SYSBINIT SYSBINIT SYSBINIT        NSWAP    124K    316K   33       30
  0024 SYSXINIT SYSXINIT SYSXINIT        NSWAP    128K    292K   33       28
  0029 CICS33   CICS330  CICS33NN  3548  IN-N     2108K   8348K  141    13763
  0039 CICS32   CICS330  CICS3233  2759  IN-N     2824K  12156K  141   179165
  0023 SYSZINIT SYSZINIT SYSZINIT        OUT  - LWAIT     308K  255       14
  * * * END OF DATA * * *
```

Every time you press **Enter**, CPMS/SYSD updates the statistics.

Field Definitions

#I/O

The number of input and output operations the job has performed.

ASID

The job's address space ID.

AUX

The amount of virtual memory the job is using, including VIO datasets.

CPUR

The real CPU time in seconds the current step has used.

Jobname

The name of the job or started task procedure that is executing.

PROCNAME

The step name of the procedure in the job that is executing.

PRTY

The job's dispatching priority.

Real

The amount of real memory the job is using.

Stepname

The job step that is executing.

Status

The job's dispatching status.

Chapter 7

Option 5: Following a Job Through the System

Option 5 on the Primary Option Menu lets you follow a job through the input and output queues. This chapter describes the following screens:

Screen	Address
MVS/JES2 Job Queue Display	5
MVS/JES2 Job Dataset Display	n/a

MVS/JES2 Job Queue Display

Option 5, MVS/JES2 Job Queue Display, displays a list of the jobs in the JES queues. This screen tells you if your job is waiting to execute, executing, or waiting in the output queue. From here you can release a held job; cancel, delete, hold, print, route, or view a job; and display a summary of the job's output elements or output datasets.

➤ ### To access the MVS/JES2 Job Queue Display screen

On the Primary Option Menu, type 5 in the *Input* field and press **Enter**.

or

On any screen, type 5 in the *Input* field and press **Return**.

```
  14:53:13 -------------- MVS/JES2 JOB QUEUE DISPLAY -------------------(1/1)
  INPUT ===>                                                    SCROLL: CSR

 O JOB#    JOBNAME  STA XHA PRI HELD     PRT          PUN
   J3117   BWCCLRPT PPU      1           R0001        LOCAL
   J3761   BWPRNT   PPU      1           R0001        LOCAL
   J3763   BWCOPY   PPU      1           U0354        LOCAL
   J3762   BWB0032  PPU      1           LOCAL        LOCAL
   J3765   BWDBPTF1 PPU      1           R0002        LOCAL
   J3781   BWCCLRPT PPU      1           LOCAL        LOCAL
   J3836   BWPRNT   PPU      1           R0001        LOCAL
   J3887   BWCCLRPT PPU      1           R0001        LOCAL
   J3995   BWCCLRPT PPU      1           LOCAL        LOCAL
   J4036   BWPRNTT  PPU      1           R0002        LOCAL
   J4037   BWPRINT  PPU      1           R0001        LOCAL
   * * * END OF DATA * * *




 A=release C=cancel D=delete H=hold O=output P=print S=select T=route V=view
```

| Note | There are more fields to the right. See "MVS/JES2 Job Queue Display (Right)" on page 160 for more information about these fields

Field Definitions

Held

The number of held datasets in the job.

Job#

The job's JES-assigned job number.

Jobname

The started task procedure name or the job name on the JOB card.

O

Option column. Type the single-character **option** next to the job and press **Enter.**

A=release

Releases a job held by the H=hold option.

C=cancel

Cancels an executing job.

D=delete

Cancels the job and purges it.

H=hold

Holds the job.

J=JFT

Displays and executes the default JES SYSD/JFT panel defined on Option 0.3, Job/File Tailoring Parameters. See "Job/File Tailoring Parameters" on page 33 for more information about defining the default JFT panel.

O=output

Displays the job's output elements on Option 6, MVS/JES2 Job Output Display. See "MVS/JES2 Job Output Display" on page 170 for more information about the screen.

P=print

Prints the job on the default CICS printer defined on Option 0.1, JES/List Parameter Definitions. See "JES/List Parameter Definitions" on page 26 for more information about defining the default CICS printer.

S=select

Displays a summary of the job's output datasets on the MVS/JES2 Job Dataset Display screen where you can determine the characteristics for displaying or printing them. See "MVS/JES2 Job Dataset Display" on page 163 for more information about the screen.

T=route

Changes the job's print or punch destination ID. To change the destination, type **T** in the O (Option) column next to the job, change the *PRT* or *PUN* field, and press **Enter**.

V=view

Displays the job's output from the JES spool on the MVS/JES2 Spool Display screen. See "MVS/JES2 Spool Display" on page 177 for more information about the screen.

PRI

The job's priority in its queue.

PRT

The job's print destination ID. To change this field, use the T=route option.

PUN

The job's punch destination ID. To change this field, use the T=route option.

STA

The job's queue type.

This type	Identifies
INP	The input queue prior to JCL conversion.
OUT	The output queue for jobs waiting to print.
PPU	The print and punch queue for jobs waiting to print.
PRG	The purge queue for jobs waiting to be purged.
RCV	The receive queue for jobs being read into the system.
STC	The started task queue for jobs waiting or executing.

This type	*Identifies*
t**	The execution queue for jobs waiting to execute or executing, where t is the execution class.
UNK	The unknown queue. This queue type should not occur.
XEQ	The execution queue for jobs waiting or executing.

XHA

Three columns that display information about the job.

This column	*Displays*
X	A W if the job is waiting for execution or the **number** of the CPU the job is executing on. Otherwise, this column is blank.
H	An H if the job is held.
A	An A if the job was held by a HOLD ALL command.

MVS/JES2 Job Queue Display (Right)

The MVS/JES2 Job Queue Display (Right) screen displays more information about the jobs in the JES queue. This screen displays specific information from the job's JOB card. From here you can release a held job; cancel, delete, hold, print, and update a job; and display a summary of a job's output elements or output datasets.

> ## To access the MVS/JES2 Job Queue Display (Right) screen

On the MVS/JES2 Job Queue Display screen, type **RIGHT** in the *Input* field and press **Enter**.

or

On the MVS/JES2 Job Queue Display screen, press **PF11**.

```
  15:15:22 -------------- MVS/JES2 JOB QUEUE DISPLAY --------------------(1/1)
  INPUT ===>                                                    SCROLL: CSR

  O JOB#    JOBNAME   EC MC  PROGRAMMER NAME     DATE     TIME    #LINES
    J3117   BWCCLRPT  A Z                      11/03/97 23:06:59   3188
    J3761   BWPRNT    A Z                      11/03/97 16:32:55    477
    J3763   BWCOPY    A A                      11/03/97 16:35:11     49
    J3762   BWB0032   A 8                      11/03/97 16:34:27   2835
    J3765   BWDBPTF1  A 8                      11/03/97 16:37:00    614
    J3781   BWCCLRPT  A Z                      11/03/97 23:08:04   3382
    J3836   BWPRNT    A Z                      11/03/97 11:45:40    304
    J3887   BWCCLRPT  A Z                      11/03/97 23:08:04   3423
    J3995   BWCCLRPT  A Z                      11/03/97 23:03:17   1527
    J4036   BWPRNTT   A Z                      11/03/97 11:10:03    106
    J4037   BWPRINT   A 8                      11/03/97 11:26:32     91
                       * * * END OF DATA * * *




  A=release C=cancel D=delete H=hold O=output P=print S=select U=update V=view
```

Field Definitions

#Lines

The number of printable lines in the job.

Date

The date the job entered the system.

EC

The job's execution class. If this field is highlighted, the job has not executed yet and you can use the U=update option to change the job's execution class.

Job#

The job's JES-assigned job number.

Jobname

The started task procedure name or the job name found on the JOB card.

MC

The job's message class.

O

Option column. Type the single-character **option** next to the job and press **Enter**.

A=release

Releases a job held by the H=hold option.

C=cancel

Cancels an executing job.

D=delete

Cancels the job and purges it.

H=hold

Holds the job.

J=JFT

Displays and executes the default JES SYSD/JFT panel defined on Option 0.3, Job/File Tailoring Parameters. See "Job/File Tailoring Parameters" on page 33 for more information about defining the default JFT panel.

O=output

Displays the job's output elements on Option 6, MVS/JES2 Job Output Display. See "MVS/JES2 Job Output Display" on page 170 for more information about the screen.

P=print

Prints the job on the default CICS printer defined on Option 0.1, JES/List Parameter Definitions. See "JES/List Parameter Definitions" on page 26 for more information about defining the default CICS printer.

S=select

Displays a summary of the job's output datasets on the MVS/JES2 Job Dataset Display screen where you can determine the characteristics for displaying or printing them. See "MVS/JES2 Job Dataset Display" on page 163 for more information about the screen.

U=update

Changes the execution class of a job waiting to execute. Type U in the O (Option) column next to the job, change the EC field, and press **Enter**.

V=view

Displays the job's output from the JES spool on the MVS/JES2 Spool Display screen. See "MVS/JES2 Spool Display" on page 177 for more information about the screen.

Programmer Name

The programmer's name specified on the JOB card.

Time

The time the job entered the system.

MVS/JES2 Job Dataset Display

The MVS/JES2 Job Dataset Display screen displays a complete list of datasets belonging to a job in the JES spool along with various dataset statistics. These statistics help you determine each dataset's printer display characteristics. From here you can print the dataset and display information about it. If your company has installed the SYSD/JFT option, you can use the J=JFT option to access SYSD/JFT panels.

➤ **To access the MVS/JES2 Job Dataset Display screen**

On the MVS/JES2 Job Queue Display screen, type **S** (Select) in the O (Option) column next to the job and press **Enter.**

```
---------- MVS/JES2 JOB DATASET DISPLAY - SYSLOG  /S00118 ----------(1/1)
INPUT ===>                                                     SCROLL: CSR

O   DSN DDNAME    STEPNAME PROCNAME HSNC  NUMLIN RECFM  LRECL
    101 SYSLOG00 BLSJPRMI           HS L    4255 U      130
    102 SYSLOG01 BLSJPRMI           HS L   28878 U      130
    103 SYSLOG02 BLSJPRMI           HS L    6637 U      130
    104 SYSLOG03 BLSJPRMI           HS L   22415 U      130
    105 SYSLOG04 BLSJPRMI           HS L    8024 U      130
    * * * END OF DATA * * *






OPTIONS ==>  P = PRINT, V = VIEW
```

Note There are more fields to the right. See "MVS/JES2 Job Dataset Display (Right)" on page 166 for more information about these fields.

Field Definitions

DDNAME

The dataset's DDNAME.

DSN

The dataset's JES-assigned name or number.

HSNC

A summary of the dataset's status.

This column	Specifies
H	The dataset is held.
S	This is a spin dataset.
N	The dataset cannot be printed.
C	The dataset's class. The class can be **A** through **Z** or **0** through **9**.

LRECL

The dataset's logical record length.

NUMLIN

The estimated number of lines in the dataset.

O

Option column. Type the single-character **option** next to the dataset and press **Enter**.

J=JFT

Displays and executes the default JES SYSD/JFT panel defined on Option 0.3, Job/File Tailoring Parameters. See "Job/File Tailoring Parameters" on page 33 for more information about defining the default JFT panel.

P=print

Prints the dataset on the default CICS printer defined on Option 0.1, JES/List Parameter Definitions. See "JES/List Parameter Definitions" on page 26 for more information about defining the default CICS printer.

V=view

Displays the dataset's information on the MVS/JES2 Spool Display screen. See "MVS/JES2 Spool Display" on page 177 for more information about the screen.

PROCNAME

The step name of the PROC that created the dataset.

RECFM

The format of the dataset's records.

This value	Means the records are
F	Fixed
FA	Fixed ANSI (carriage control information)
FB	Fixed blocked
FBA	Fixed blocked with ANSI control characters
FBM	Fixed blocked with machine control characters
FM	Fixed machine (carriage control information)
U	Undefined
V	Variable
VB	Variable blocked

Stepname

The name of the step that created this dataset.

MVS/JES2 Job Dataset Display (Right)

The MVS/JES2 Job Dataset Display (Right) screen displays more information about a dataset.

➤ **To access the additional information**

On the MVS/JES2 Job Dataset Display screen, type **RIGHT** in the *Input* field and press **Enter**.

or

On the MVS/JES2 Job Dataset Display screen, press **PF11**.

```
----------- MVS/JES2 JOB DATASET DISPLAY - SYSLOG  /S00118 ----------(1/1)
INPUT ===>                                                   SCROLL: CSR

O   DSN DDNAME    STEPNAME PROCNAME DEST      FORM     COPIES FCB  UCS
    101 SYSLOG00 BLSJPRMI           LOCAL     STD         1  **** ****
    102 SYSLOG01 BLSJPRMI           LOCAL     STD         1  **** ****
    103 SYSLOG02 BLSJPRMI           LOCAL     STD         1  **** ****
    104 SYSLOG03 BLSJPRMI           LOCAL     STD         1  **** ****
    105 SYSLOG04 BLSJPRMI           LOCAL     STD         1  **** ****
    * * * END OF DATA * * *

















OPTIONS ==>  P = PRINT, V = VIEW
```

Field Definitions

Copies

The number of printed copies requested.

DDNAME

The dataset's DDNAME.

DEST

The dataset's printer or queue destination.

DSN

The dataset's JES-assigned name or number.

FCB

The forms control buffer the dataset will use to print. An **** means the dataset will use the default FCB defined in SYSDSETS.

Form

The type of form the dataset will print on.

O

Option column. Type the single-character **option** next to the dataset and press **Enter**.

J=JFT

Displays and executes the default JES SYSD/JFT panel defined on Option 0.3, Job/File Tailoring Parameters. See "Job/File Tailoring Parameters" on page 33 for more information about defining the default JFT panel.

P=print

Prints the dataset on the default CICS printer defined on Option 0.1, JES/List Parameter Definitions. See "JES/List Parameter Definitions" on page 26 for more information about defining the default CICS printer.

V=view

Displays the dataset information on the MVS/JES2 Spool Display screen. See "MVS/JES2 Spool Display" on page 177 for more information about the screen.

PROCNAME

The step name of the procedure that created this dataset.

Stepname

The name of the step that created this dataset.

UCS

The universal character set the dataset will use to print. An **** means the dataset will use the default UCS defined in JES2.

Chapter 8
Option 6: Displaying a Job's Output Datasets

Option 6, Display Jobs in the Output Queue, lets you display and change certain characteristics of jobs in the output queue. This chapter describes the following screens:

Screen	*Address*
MVS/JES2 Job Output Display	6
MVS/JES2 Job Dataset Display	n/a
MVS/JES2 Spool Display	n/a

MVS/JES2 Job Output Display

Option 6, MVS/JES2 Job Output Display, is the first screen you access in the process of displaying a job's output datasets. This screen lists the output datasets eligible for printing or punching.

| Note | If you are on JES2 SP version 4.1 or above, this screen displays held datasets. Otherwise, you must use Option 5, MVS/JES2 Job Queue Display to display held datasets. See "MVS/JES2 Job Queue Display" on page 156 for more information about the screen. |

➢ **To access the MVS/JES2 Job Output Display screen**

On the Primary Option Menu, type 6 in the *Input* field and press **Enter**.

or

On any screen, type 6 in the *Input* field and press **Return**.

```
 17:59:04 -------------- MVS/JES2 JOB OUTPUT DISPLAY --------------------(1/1)
 INPUT ===>                                                    SCROLL: CSR

 O JOB#    JOBNAME  DISP C DEST      WRITER    FORM     FCB  UCS  HTP PP  #LINE
   T4774  BW       HOLD X LOCAL                STD      **** ****     144    32
   J4770  BKUPSYSM HOLD X CLEANUP              STD      **** ****     144   679
   J4768  BKUPSYST HOLD X CLEANUP              STD      **** ****     144   814
   J4764  BKUPLIBS HOLD X CLEANUP              STD      **** ****     144   892
   J4766  BKUPWIZM HOLD X CLEANUP              STD      **** ****     144   379
   T4708  BW       HOLD X LOCAL                STD      **** ****     144    31
   T4714  DC       HOLD X LOCAL                STD      **** ****     144    29
   T4713  DC       HOLD X LOCAL                STD      **** ****     144    29
   S4707  TSO      HOLD X LOCAL                STD      **** ****     144    19
   S4618  SYSLOG   HOLD L LOCAL                STD      **** ****     128  2957
   J4696  BKUPSYSM HOLD X CLEANUP              STD      **** ****     144   677
   J4694  BKUPSYST HOLD X CLEANUP              STD      **** ****     144   828
   J4691  BKUPLIBS HOLD X CLEANUP              STD      **** ****     144   889
   J4692  BKUPWIZM HOLD X CLEANUP              STD      **** ****     144   379
   J4592  CICS31   HOLD D CICS                 STD      **** ****     144  1914
   J4592  CICS31   HOLD D CICS                 STD      **** ****     144
   J4591  CICS32   HOLD D CICS                 STD      **** ****     144  1690
   J4591  CICS32   HOLD D CICS                 STD      **** ****     144
   S4568  SYSLOG   HOLD L LOCAL                STD      **** ****     128  2244
 A=release D=delete H=hold P=print S=select U=update V=view
```

Field Definitions

#Line

The real number of lines in the job's output element.

C

The job class the output element is assigned to. To change this field, use the U=update option.

Dest

The ID of the local or remote device the output is sent to. To change this field, use the U=update option.

DISP

| Note | This field is not used for versions of JES2 prior to 4.1.

For JES2 version 4.1 and above, this field is the output element's disposition. Valid dispositions are: **HOLD, KEEP, LEAV, PURG,** and **WRIT.** To change this field, use the U=update option.

FCB

The forms control buffer the output element will use to print. To change this field, use the U=update option.

Form

The form the output element will use to print. To change this field, use the U=update option.

HTP

For versions of JES2 prior to 4.1, this field indicates if the output is non-selectable (**NSL**). You cannot change this field, but you can control it with the A=release or H=hold options.

For JES2 version 4.1 and above, this field is the hold type. Valid hold types are: **ALL, OPR,** and **SYS.** You can use the A=release and H=hold options to control this field. When you issue the A=release option, SYSD ignores the contents of the field and issues a REL=OPER command. When you issue the H=hold option, you can specify the type of hold to issue by typing a new hold type over the current one.

Job#

The JES-assigned job number the output element belongs to.

JOBNAME

The name of the job the output element belongs to.

O

Option column. Type the single-character **option** next to the dataset and press **Enter**.

A=release

Releases a dataset held by the H=hold option for printing.

D=delete

Purges the job's output from the system.

H=hold

Holds the dataset. You must release the dataset before it will print.

J=JFT

Displays and executes the default JES SYSD/JFT panel defined on Option 0.3, Job/File Tailoring Parameter. See "Job/File Tailoring Parameters" on page 33 for more information about defining the default JFT panel.

P=print

Prints the dataset on the default CICS printer defined on Option 0.1, JES/List Parameter Definitions. See "JES/List Parameter Definitions" on page 26 for more information about defining the default CICS printer.

S=select

Displays the job's datasets on the MVS/JES2 Job Dataset Display screen. See "MVS/JES2 Job Dataset Display" on page 163 for more information about the screen.

U=update

Dynamically changes the fields on the screen. Type U in the O (Option) column, change the field, and press **Enter**.

V=view

Displays the job on the MVS/JES2 Spool Display screen. See "MVS/JES2 Spool Display" on page 177 for more information about the screen.

PP

The output element's print priority. If the output element is currently printing or punching, this field contains **PRT/PUN**.

UCS

The universal character set the output element will use to print. To change this field, use the U=update option.

Writer

The writer ID. To change this field, use the U=update option.

MVS/JES2 Job Output Display (Right)

The MVS/JES2 Job Output Display (Right) screen displays more information about the job's output elements.

➤ ## To access the additional information

On the MVS/JES2 Job Output Display screen, type **RIGHT** in the *Input* field and press **Enter**.

or

On the MVS/JES2 Job Output Display screen, press **PF11**.

```
 17:59:27 ------------- MVS/JES2 JOB OUTPUT DISPLAY -------------------(1/1)
 INPUT ===>                                                   SCROLL: CSR

O JOB#     JOBNAME   S OVLY B PRCSMODE DY HR  DATE      TIME    GROUPID
  T4774    BW          **** N LINE         97/11/03 12:34     1.1.1
  J4770    BKUPSYSM    **** N LINE         97/11/03  7:32     1.1.1
  J4768    BKUPSYST    **** N LINE         97/11/03  7:06     1.1.1
  J4764    BKUPLIBS    **** N LINE         97/11/03  6:44     1.1.1
  J4766    BKUPWIZM    **** N LINE         97/11/03  6:11     1.1.1
  T4708    BW          **** N LINE         97/11/02 14:14     1.1.1
  T4714    DC          **** N LINE         97/11/02 11:48     1.1.1
  T4713    DC          **** N LINE         97/11/02 11:08     1.1.1
  S4707    TSO       S **** N LINE         97/11/02 10:03     1.1.1
  S4618    SYSLOG    S **** N LINE         97/11/02  8:39     1.1.1
  J4696    BKUPSYSM    **** N LINE         97/11/02  7:25     1.1.1
  J4694    BKUPSYST    **** N LINE         97/11/02  7:07     1.1.1
  J4691    BKUPLIBS    **** N LINE         97/11/02  6:45     1.1.1
  J4692    BKUPWIZM    **** N LINE         97/11/02  6:13     1.1.1
  J4592    CICS31    S **** N LINE         97/11/01 18:41     3.1.1
  J4592    CICS31    S **** N LINE         97/11/01 18:41     2.1.1
  J4591    CICS32    S **** N LINE         97/11/01 18:41     3.1.1
  J4591    CICS32    S **** N LINE         97/11/01 18:41     2.1.1
  S4568    SYSLOG    S **** N LINE         97/11/01 18:41     1.1.1
 A=release D=delete H=hold P=print S=select U=update V=view
```

Field Definitions

B

A **Yes/No** field that specifies if the output element is to be burst.

Date

The date the output element was last updated. If the job output element (JOE) has not been changed, this is the date the JOE was created.

DY

Changes the creation date by **nn** days ago. This field is not valid for versions of JES2 prior to 4.1.

> **Note** This field is not valid for versions of JES2 prior to 4.1.

GROUPID

The group ID the output element belongs to. Together, the JES-assigned group ID and JOE ID form the OUTGROUP.

HR

Changes the creation time by nn hours ago. This field is not valid for versions of JES2 prior to 4.1.

> **Note** This field is not valid for versions of JES prior to 4.1.

Job#

The JES-assigned job number the output element belongs to.

JOBNAME

The name of the job the output element belongs to.

O

Option column. Type the single-character **option** next to the dataset and press **Enter**.

A= release

Releases a dataset held by the H=hold option for printing.

D=delete

Purges the job's output from the system.

H=hold

Holds the dataset. You must release the dataset before it will print.

J=JFT

Displays and executes the default JES SYSD/JFT panel defined on Option 0.3, Job/File Tailoring Parameter. See "Job/File Tailoring Parameters" on page 33 for more information about defining the default JFT panel.

P=print

Prints the dataset on the default CICS printer defined on Option 0.1, JES/List Parameter Definitions. See "JES/List Parameter Definitions" on page 26 for more information about defining the default CICS printer.

S=Select

Displays the job's datasets on MVS/JES2 Job Dataset Display screen. See "MVS/JES2 Job Dataset Display" on page 163 for more information about this screen.

U=Update

Lets you dynamically change the fields on the screen. Type U in the O (Option) column, change the field, and press **Enter.**

V=View

Displays the job on the MVS/JES2 Spool Display screen. See "MVS/JES2 Spool Display" on page 177 for more information about this screen.

OVLY

The overlay name (FLASH) the output element will use to print.

PRCSMODE

The output element's process mode.

S

The output element's attributes. An S means it is a spin dataset, which is eligible to print as soon as it has been closed no matter how many other datasets the job is creating.

Time

The time the output element was last updated. If the job output element (JOE) has not been changed, this is the time the JOE was created.

MVS/JES2 Spool Display

The MVS/JES2 Spool Display screen displays a job's printable and punchable output from the JES spool.

> ## To access the MVS/JES Spool Display screen

On the MVS/JES2 Job Queue Display screen, type **V** in the O (Option) column next to the job and press **Enter**.

or

On the MVS/JES2 Job Dataset Display screen, type **V** in the O (Option) column next to the dataset and press **Enter**.

or

On the MVS/JES Job Output Display screen, type **V** in the O (Option) column next to the dataset and press **Enter**.

```
-------------- MVS/JES2 SPOOL DISPLAY - BWBKUP /J02738 ------------(1/1)
INPUT ===>                                                 SCROLL: CSR

DSN= LOG     LINE= 0000001  SIZE= 0000023  COLS= 001 080  LRECL= 133 CAPS ON
1                    J E S 2  J O B  L O G  --  S Y S T E M  M 3 9 0  --  N O
0
 14:00:33 JOB02738 ---- MONDAY,  03 NOV 1997 ----
 14.00.33 JOB02738  IRR010I  USERID HWCS      IS ASSIGNED TO THIS JOB.
 14.00.42 JOB02738  $HASP373 BWBKUP  STARTED - INIT    7 - CLASS B - SYS M390
 14.00.42 JOB02738 *IEF233A M 0262,DCBK1 ,,BWBKUP,DUMPDSN,BACKUP.DC.BKUSER.D081
 14.02.21 JOB02738  IEC512I LBL ERR 0262,SYTHU3,SL,DCBK1,SL,BWBKUP,DUMPDSN.BACK
 14.02.21 JOB02738 *IEC534D A 0262,SYTHU3,SL,BWBKUP,DUMPDSN.BACKUP1
 14.02.21 JOB02738 *04 IEC534D REPLY 'U'-USE OR 'M'-UNLOAD
 14.02.31 JOB02738  R 4,U
 14.02.31 JOB02738 *IEC704A L 0262,DCBK1,SL,NOCOMP,BWBKUP,DUMPDSN.BACKUP1,BACKU
 14.02.31 JOB02738 *05 IEC704A REPLY 'VOLSER,OWNER INFORMATION','M'OR'U'
 14.02.36 JOB02738  R 5,U
 14.02.42 JOB02738  IEC705I TAPE ON 0262,DCBK1,SL,NOCOMP,BWBKUP,DUMPDSN.BACKUP1
 14.04.59 JOB02738  IEF234E K 0262,DCBK1 ,PVT,BWBKUP
 14.04.59 JOB02738  $HASP395 BWBKUP  ENDED
0------ JES2 JOB STATISTICS ------
-  09 OCT 1997 JOB EXECUTION DATE
-         33 CARDS READ
-        579 SYSOUT PRINT RECORDS
```

Field Definitions

CAPS

Specifies if uppercase translation is on or off.

COLS

The beginning and ending columns displayed. The normal setting for this field is **001** for the left margin and **080** for the right margin. To move the display across the data, change these margin numbers.

You can display the full line, even if it exceeds 80 columns. CPMS/SYSD wraps the line and puts the rest of the text below it. To display a line of 133 columns, type **133** in place of **080** and press **Enter**.

DSN

The SYSOUT dataset type.

This value	Means
CC	Condition codes.
LOG	System log messages.
JCL	Execution JCL messages.
MSG	System job messages.
nnnn	User SYSOUT datasets. These are referred to by the dataset number displayed on the MVS/JES2 Job Dataset Display screen.

To display any of these SYSOUT datasets, type the dataset **type** and press **Enter**.

LRECL

The SYSOUT dataset's logical record length. If the record length is greater than 080, SYSD does not automatically display the rest of the line. To display the rest of the line, press **Right** or **Left** or change the margins in the *COLS* field.

Line

The real line number displayed on the first line of the screen. To move the display up or down without pressing **Up** or **Down**, type the relative **line_number** and press **Enter**.

Size

The number of lines in the dataset.

Command Definitions

Type the **command** in the *Input* field and press **Enter.**

BOTTOM

Moves the display to the bottom of the dataset.

CAPS

Turns uppercase translation on or off. The format of the CAPS command is:

```
CAPS [ON|OFF]
```

When uppercase translation is off, you can search for both uppercase and lowercase characters.

DELETE

Caution ▶ *SYSD does not display a delete verification message for this primary command.*

Deletes spool output while you are viewing it. CPMS/SYSD only deletes the group ID you are currently viewing.

DELQ

Deletes the temporary storage queue created with the PUT command. The format of the DELQ command is:

```
DELQ [Q=queue_name] [S=sysid]
DQ
```

This parameter	Specifies
queue_name	The 8-character name of the temporary storage queue you want to delete.

(continued)

This parameter	Specifies
sysid	The 4-character system ID of the CICS region the temporary storage queue is in. This parameter lets you delete a temporary storage queue in a different CICS region.

The default temporary storage queue name and CICS system ID are defined on Option 0.4, GET/PUT TS Queue Identifiers. See "GET/PUT TS Queue Identifiers" on page 35 for more information about defining the defaults.

DOWN

Scrolls down through the dataset. The format of the DOWN command is:

```
DOWN [nn|M]
```

This parameter	Specifies to scroll
nn	By the specified number of lines.
M	To the bottom of the dataset.

FIND

Searches for a string. The search starts on the second line and is confined to the area between the left and right margins specified in the *COLS* field. The search is limited to 5,000 lines at a time. The format of the FIND command is:

```
FIND ['string'] [NEXT|FIRST|PREV|LAST|XALL]
```

This parameter	Specifies
'string'	The string you want to find. If the string is alphanumeric, you can enter it as is. If it contains special characters or blanks, enclose it with apostrophes. To include an apostrophe as part of the search string, type it twice. Examples of valid strings are: ABC, 'ABC', 'DON''T', and 'AND HIS'.
NEXT	Find the next occurrence of the string.
FIRST	Find the first occurrence of the string.

This parameter	Specifies
PREV	Find the previous occurrence of the string.
LAST	Find the last occurrence of the string.
XALL	Find all occurrences of the string.

If you are positioned in the middle of the dataset when you issue the FIND command, CPMS/SYSD does not automatically wrap around and continue the search at the top of the dataset when it reaches the end of the dataset. To start the search on the first line of the dataset, use the FIRST option or display the top of the dataset by issuing the TOP line command or by setting the *Line* field to 1 before you issue the FIND command.

You can also type the string you want to find in the *Input* field and press **Find**.

JFT

Displays and executes the default JES SYSD/JFT panel defined on Option 0.3, Job/File Tailoring Parameters. See "Job/File Tailoring Parameters" on page 33 for more information about defining the default JFT panel.

LEFT

Moves the display to the left. The format of the LEFT command is:

```
LEFT [nn|M]
```

This parameter	Specifies move the display
nn	By the specified number of columns.
M	All the way to the left.

PRINT

Prints the output on a CICS printer. The format of the PRINT command is:

```
PRINT [nnn nnn] [tttt]
```

This parameter	Specifies
nnn nnn	The beginning and ending output line numbers you want to print. The default is the entire dataset.
tttt	The CPMS printer you want to send the output to. The default is the printer defined on Option 0.1, JES/List Parameter Definitions. See "JES/List Parameter Definitions" on page 26 for more information about defining the default printer.

PUT

Writes all or part of a SYSOUT dataset to a temporary storage queue. For SYSD users, you can issue the GET command to retrieve the data from the temporary storage queue and put it in an edit session. For CPMS users, you can use a file transfer program to download the data from the temporary storage queue to a PC file. The format of the PUT command is:

```
PUT [begin_line] [end_line] [Q=queue_name] [S=sysid]
```

This parameter	Specifies
begin_line	The first line you want to write to the temporary storage queue. The default is line 1.
end_line	The last line you want to write to the temporary storage queue. The default is the end_line number or line 5,000, whichever is less.
queue_name	The 8-character name of the temporary storage queue you want to write the SYSOUT dataset to.
sysid	The 4-character system ID of the CICS region the temporary storage queue is in. This parameter lets you write to a temporary storage queue in a different CICS region.

Note To tailor the data passed, change the column in the COLS field.

The default temporary storage queue name and CICS system ID are defined on Option 0.4, GET/PUT TS Queue Identifiers. See "GET/PUT TS Queue Identifiers" on page 35 for more information about defining the defaults.

RIGHT

Moves the display to the right. The format of the RIGHT command is:

```
RIGHT [nn|M]
```

This parameter	Specifies to move the display
nn	By the specified number of columns.
M	All the way to the right.

TOP

Moves the display to the top of the SYSOUT dataset.

UP

Scrolls up through the SYSOUT dataset. The format of the UP command is:

```
UP [nn|M]
```

This parameter	Specifies to scroll
nn	By the specified number of lines.
M	To the top of the dataset.

Chapter 9

Option 7: Controlling the Printer

Option 7 displays either the CPMS Printer Table Display/Change screen or the JES2 Printer Display screen. The default printer type displayed for Option 7 is defined on Option 0.1, JES/List Parameter Definitions. See "JES/List Parameter Definitions" on page 26 for more information about defining the default. Once you have accessed Option 7 you can display the other printer.

This chapter describes the following screens:

Screen	Address
CPMS Printer Table Display/Change	7[C]
CPMS Spool Writer Start	n/a
JES2 Printer Display	7[J]

CPMS Printer Table Display/Change

The CPMS Printer Table Display/Change screen displays the status of all spool printers. From here you can change various characteristics for the print tasks. This provides a great deal of flexibility in controlling your own print tasks. For example, you can use the SELECT mask primary command to limit the display to certain printers. Specify a unique printer ID as the mask, or use the plus sign (+) and asterisk (*) in positions of the ID you want to match to all characters.

➤ **To access the CPMS Printer Table Display/Change screen**

On the CPMS Primary Option Menu, type 7 in the *Input* field and press **Enter**.

or

On any screen, type 7 in the *Input* field and press **Return**.

```
         ---------------- CPMS PRINTER TABLE DISPLAY/CHANGE ----------------(1/1)
       INPUT ===>                                               SCROLL: CSR

       O TERM TPA JOB#   JOBNAME DATASET   FORM     COPY LINE# PAGE  STATUS
         G002 TW  W=        D=G002    C=AG     F=               WAITING - WORK
         G003 TW  W=        D=G003    C=AG     F=               WAITING - WORK
         LSCS T                                                 NONE STARTED
         LOEF T                                                 NONE STARTED
         L12F T                                                 NONE STARTED
         L51A T                                                 NONE STARTED
         L511 T                                                 NONE STARTED
         L514 T                                                 NONE STARTED
         L519 T                                                 NONE STARTED
         PRNT D                                                 NONE STARTED
         S002 T                                                 NONE STARTED
         S003 TW  W=        D=U0050    C=G      F=              WAITING - WORK
         S021 T                                                 NONE STARTED
         S121 TW  W=        D=RMT1     C=G      F=              WAITING - WORK
         S154 T                                                 NONE STARTED
         S155 TW  W=        D=S155     C=AG     F=              WAITING - WORK
         S156 T                                                 NONE STARTED
         V33A T                                                 NONE STARTED
          A=adjust  C=cancel  F=forms  H=hold  P=purge  R=release  T=stop  S=start
                              W=waiting  E=restart
```

Field Definitions

Copy

The number of copies being printed.

Dataset

The name of the dataset being printed.

Form

The form the printer is printing on.

Job#

The job's JES-assigned number.

Jobname

The name of the job being printed.

Line#

The number of lines in the output dataset.

O

Option column. Type the single-character **option** next to the printer and press **Enter**.

A=adjust

Stops printing the current page and starts printing on the page number you type in the *Page* field. This can be a real or a relative number.

Type real numbers as is, including leading zeros.

Precede relative numbers with a plus (+) or minus (-) sign to indicate which direction from the current page you want to start printing. A plus sign (+) moves the printing ahead and a minus sign (-) moves the printing back. If a relative number forces the page number past the end of the dataset, printing stops. If a relative number forces the page number before the first page, printing starts on page 1.

C=cancel

Cancels a PDDB that is printing, but does not purge the job from the JES queue.

E=restart

Restarts a held hot writer (PRTQUE) or JOE writer (STRWTR) task.

F=forms

Replies to a forms change request. This option notifies the print task the forms have been changed and printing can resume.

H=hold

Puts a job that is printing on hold. If the job is being printed by a hot writer (PRTQUE) task, you must use the R=release option to release the printer before printing continues.

P=purge

Purges the spool print task. For a print job (PRTJOB) task, CPMS/SYSD stops printing the current job and terminates it. For a hot writer (PRTQUE) task, CPMS/SYSD purges the current job and the selection continues. You can issue this command after the print task starts, even if it has been held.

R=release

Releases a printer held by the H=hold option. This frees the printer to continue printing where it left off.

S=start

Displays the Spool Writer Start screen. See "CPMS Spool Writer Start" on page 191 for more information about the screen.

T=stop

Stops the hot writer (PRTQUE) or JOE writer (STRWTR) spool print task. The spool writer completes any job it is printing and stops. This is not an immediate stop, but an orderly shutdown of the function. For an immediate stop, use the P=purge option.

W=waiting

Displays a list of all the jobs waiting to print on the Output Waiting for Printer screen. See "Output Waiting for Printer" on page 199 for more information about the screen.

Page

The number of the page that is printing.

Status

The print task's status.

This status	Means
PRINTING	The dataset is printing.

This status	*Means*
WAITING FORMS	The printer is waiting for a forms change before continuing. The *Form* field lists the form the printer is looking for.
HELD	The job is on hold. You must release the job for it to print.
RECOVERY WAIT	An abend occurred. If the job was started with the PRTQUE or STRWTR command, CPMS/SYSD automatically restarts the job when the scan delay expires.
DRAINING	The print buffer is draining. Stopping a print task does not stop the printing immediately. Because of the difference in speed between the CPU and the printer, the print task often terminates before the printer's buffer is drained. This message means the print task has terminated and the contents of the printer's buffer is still printing. When the printer's buffer is drained, printing stops.
SCANNING	The PRTQUE task is scanning the JES queues for jobs to print.
ADJUSTING PAGE	A page adjust request was issued. You can **Tab** to the *Page* field and change the printing to start on a different page.
NONE-STARTED	No print tasks have been initiated on this terminal.
WAITING WORK	A PRTQUE or STRWTR was issued and the task is waiting for jobs that meet the criteria listed on the printer display line. This line displays the destination queue, classes, and form eligible for printing.

Term

The CICS terminal ID.

TPA

Three columns that display the job's status.

This column	Specifies
T	The terminal destination type.

This value	Means
D	The destination is a dataset.
T	The destination is a terminal.

This column	Specifies
P	Which print queue is started.

This value	Means
S	The hot writer is started. See the S=start option on page 188 or the PRTQUE functional command on page 288 for more information.
W	The JOE writer is started. See the S=start option on page 188 or the STRWTR functional command on page 305 for more information.

This column	Specifies
A	If the PRTJOB, PRTQUE, or STRWTR tasks are active. PRTJOB emulates the function of a normal OS writer, except it does not purge any part of the job. PRTQUE starts the hot writer that scans the JES queues, prints the selected jobs, purges them, and repeats the JES queue scan. STRWTR starts the JOE writer that scans the JES queues, prints the selected jobs, purges them, and repeats the JES queue scan.

This value	Means
J	The PRTJOB task is active.
Q	The PRTQUE task is active.
W	The STRWTR task is active.

CPMS Spool Writer Start

The Spool Writer Start screen displays a printer's default selection criteria and disposition parameters. If authorized, you can change the selection criteria and disposition parameters before starting the spool writer. This screen is the menu system's equivalent to the PRTQUE and STRWTR commands, which are CPMS/SYSD's spool display and print functional commands.

➤ **To access the CPMS Spool Writer Start screen**

On the CPMS Printer Table Display/Change screen, type **S** (Start) in the O (Option) column next to the printer you want to display and press **Enter**.

```
------------------------- CPMS SPOOL WRITER START --------------------(2/2)
 INPUT ===>
                                                            SCROLL: CSR

 Writer Type ===> SW    Terminal Id.     ===> S003
 'PQ' = PRTQUE          Writer Id.       ===>            (SW only)
 'SW' = STRWTR          Dest. queue      ===> U0050
                        Class            ===> G
                        Form             ===>
                     ** Disposition of WTR selected data **
                        Purge (Y/N)      ===> Y
                        Newdest          ===>
                        Newclass         ===>
                        Hold (Y/N)       ===>


                     Enter 'START' to initiate spool writer.
```

Field Definitions

Class

The JES2 classes the spool writer looks for when selecting jobs to print.

Dest. queue

The name of the JES2 destination the spool writer looks for when selecting jobs to print.

Form

The form ID the spool writer looks for when selecting jobs to print.

Hold (Y/N)

A **Yes/No** field that specifies if output is held after it is printed. If set to **N** (No), CPMS/SYSD does not issue a hold command, allowing the output to be deleted after it is printed.

Newclass

The new JES2 class CPMS/SYSD assigns to the output after it is printed.

Newdest

The new JES2 destination CPMS/SYSD assigns to the output after it is printed.

Purge (Y/N)

A **Yes/No** field that specifies if CPMS/SYSD performs a normal JOE purge after the output is printed. If set to **N** (No), CPMS/SYSD performs special disposition processing after the output is printed. The special disposition is defined by the *Newdest, Newclass,* and *Hold (Y/N)* fields.

Terminal ID

The CICS name of the terminal or destination CPMS/SYSD sends the spool writer output to.

Writer ID

The writer ID the spool writer looks for when selecting jobs to print. This field only applies if the *Writer Type* field is **SW**.

Writer Type

The type of writer started for this printer.

Type	To start
PQ	The hot writer.
SW	The JOE writer.

Both types of writers allow for automatic selection of output for printing. The hot writer uses the SSOB interface and has a SYSI transaction associated with each printer started. The JOE writer has one SYSI transaction that scans for output that meets each printer's work selection criteria. The JOE writer uses less overhead.

Command Definitions

Type the **command** in the *Input* field and press **Enter**.

START

Validates the screen data and initiates the spool writer. If the start is successful, CPMS/SYSD returns to the Printer Table Display/Change screen and displays the updated status of the selected printer.

JES2 Printer Display

The JES2 Printer Display screen maps the status and attributes of local and remote JES2 printers. If authorized, you can control a printer by line options or you can change the printer attributes by typing over the information in the fields.

➤ To access the JES2 Printer Display screen

Type **JES2** in the *Input* field on the CPMS Printer Table Display/Change screen and press **Enter.**

```
---------- JES2 PRINTER DISPLAY ----------              LINE 1-3 (3)     (1/1)
INPUT ===>                                                       SCROLL: CSR

O    PRT NAME STATUS   JOBNAME   JNUM  PRTY C FORM FCB  RMT   TOT REC    PRT REC
     PRT1     INACTIVE
     PRT2     INACTIVE
     R1.PR1   INACTIVE

















C=Cancel   I=Interrupt  N=Repeat  E=Restart  S=Start  P=Stop  Z=Halt  W=Waiting
           Bnnn=Backspace nnn pages; Fnnn=Forward space nnn pages
```

For 80 column terminals, the following fields are displayed by pressing **Right.**

```
----------- JES2 PRINTER DISPLAY ----------            LINE 1-3 (3)   (1/1)
INPUT ===>                                                   SCROLL: CSR

O    PRT NAME UCS  WTRID    FLASH  B SCLASS   SFORMS SFCB SUCS
     PRT1                          A8         STD    ST18 0
     PRT2                          M          STD    ST18 0
     R1.PR1                        AJ         STD    ST18 0














   C=Cancel  I=Interrupt  N=Repeat  E=Restart  S=Start  P=Stop  Z=Halt  W=Waiting
         Bnnn=Backspace nnn pages;  Fnnn=Forward space nnn pages
```

Field Definitions

B

A **Yes/No** field that specifies if the output is to be burst.

C

The JES2 output class.

FCB

The output forms control buffer ID.

Flash

The output flash ID. You can change this field.

Form

The output form name.

JNUM

The JES2-assigned job number.

This value	Means
Jnnnnn	A normal batch job.
Snnnnn	A started task job.
Tnnnnn	A time sharing option (TSO) job.

Jobname

The JES2 name of the job being printed.

O

Option column. Type the single-character **option** next to the printer and press **Enter**.

Bnnn=Backspace nnn pages

Backspaces a printer, where **nnn** is one of the following:

Type	To backspace
blank	One page. This is the default.
C	To the last checkpoint.
Cnn	A specific number of pages past the last checkpoint.
D	To the beginning of the current dataset.
nnn	A specific number of pages.

C=Cancel

Cancels the printer output.

E=Restart

Restarts the printer activity.

Fnnn=Forward space nnn pages

Forwardspaces a printer, where **nnn** is one of the following:

Type	*To forwardspace*
blank	One page. This is the default.
D	To the start of the next dataset.
nnn	A specific number of pages.
nnC	A specific number of pages past the last checkpoint.

I=Interrupt

Interrupts the printer activity and requeues it.

N=Repeat

Prints the job output again.

P=Stop

Stops the printer.

S=Start

Starts the printer.

W=Waiting

Displays the JES2 datasets waiting for the JES2 writer.

Z=Halt

Temporarily stops the printer activity.

PRT Name

The name of the printer.

PRT REC

The number of records printed.

PRTY

The output dataset's priority.

RMT

Specifies if the print routing is local or remote.

SCLASS

The classes the printer is set up to print. You can change this field.

SFCB

The forms control buffer the printer is set up to use. You can change this field.

SFORMS

The form the printer is set up to print. You can change this field.

Status

The printer's status. Valid statuses are: **ACTIVE, DRAINED, DRAINING, HALTED,** and **INACTIVE.**

SUCS

The universal character set the printer is set up to use. You can change this field.

TOT REC

The number of records to be printed.

UCS

The output UCS ID (print train).

WTRID

The writer or dataset ID. You can change this field.

Output Waiting for Printer

The Output Waiting for Printer screen displays the JES2 datasets waiting for a specific CPMS/SYSD or JES2 writer. From here you can reroute or purge these datasets.

➤ To access the Output Waiting for Printer screen

On the CPMS Printer Table Display/Change screen, type **W** (Waiting) in the O (Option) column next to the printer and press **Enter**.

```
 10:16:29 ------------ OUTPUT WAITING FOR PRINTER S003      -------------(2/2)
 INPUT ===>
                                                              SCROLL: CSR

 O JOB#    JOBNAME  DISP C DEST        WRITER   FORM     FCB  UCS  HTP PP  #LINE
   J1243   BWJASMH  WRIT G U0055                STD     **** ****     144   284
   J1244   BWJASMH  WRIT G U0055                STD     **** **** OPR 144   174
   J1246   BWJASMH  WRIT G U0055                STD     **** **** OPR 144   174
   J1247   BWJASMH  WRIT G U0055                STD     **** ****     128  3409
   * END OF DATA *












 A=release D=delete H=hold P=print S=select U=update V=view
```

Field Definitions

#Lines

The actual number of lines in the output element.

C

The job class the output element is assigned to. You can change this field.

DEST

The ID of the local or remote device the output is sent to. You can change this field.

DISP

For versions of JES2 prior to 4.1, this field is not used.

For JES2 version 4.1 and above, this is the output element's disposition. You can change this field to set a new disposition. Valid dispositions are: **HOLD, KEEP, LEAV, PURG,** and **WRIT.**

FCB

The forms control buffer to be used. You can change this field.

Form

The type of form to be used. You can change this field.

HTP

For versions of JES2 prior to 4.1, this field indicates if the output is non-selectable (**NSL**). You cannot change this field, but you can use the A=release and H=hold options to control it.

For version 4.1 and above, this field is the hold type. Valid hold types are: **ALL, OPR,** and **SYS.** You can use the A=release and H=hold options to control this field. When you issue the A=release option, CPMS/SYSD ignores the contents of this field and issues an REL=OPER command. When you issue the H=hold option, type over the information in this field with a valid hold type.

Job#

The JES-assigned job number the output element belongs to.

Jobname

The name of the job the output element belongs to.

O

Option column. Type the single-character **option** next to the dataset and press **Enter.**

A=release

Releases a dataset held by the H=hold option for printing.

D=delete

Purges the job's output from the system.

H=hold

Holds the dataset. You must release the dataset before it will print.

P=print

Prints the dataset on the default CICS printer defined on Option 0.1, JES/List Parameter Definitions. See "JES/List Parameter Definitions" on page 26 for more information about defining the default printer.

S=select

Displays the job's datasets on the MVS/JES2 Job Dataset Display screen. See "MVS/JES2 Job Dataset Display" on page 163 for more information about the screen.

U=update

Dynamically changes the fields on the screen. Type U in the O (Option) column, change the field, and press **Enter**.

V=view

Displays the job on the MVS/JES2 Spool Display screen. See "MVS/JES2 Spool Display" on page 177 for more information about the screen.

PP

The print priority assigned to the output. If the output is printing or punching, this field contains **PRT/PUN**.

UCS

The character set the output will use to print. You can change this field.

Writer

The writer ID. You can change this field.

Chapter 10
Option 8: SYSD/JFT (Job and File Tailoring)

The SYSD/JFT (Job and File Tailoring) option for both CPMS and SYSD lets you submit JCL without seeing any JCL statements. Features include easy editing and verification of user input, easy screen definition, and dynamic panel, skeleton, and message processing. The ISPF flavor of SYSD/JFT makes it simple to learn.

SYSD/JFT uses the same type of definitions for displaying screens as ISPF's Dialog Manager. A panel can consist of up to five of the following sections:

* The)ATTR section defines the single character that represents an attribute byte in the)BODY section. The attribute byte can be defined as text, input, or output. It can have an intensity of high, low, or dark.

* The)BODY section defines the appearance of the screen. Fields on the screen are defined by typing an attribute byte followed by either text or a variable name for input or output fields. The field is terminated at the next attribute byte or the end of the line. This makes it easy to create and change screens.

* The)INIT section executes the first time you access the panel. The types of logic statements you can use in the)INIT section are:

  * assignment
  * IF
  * LINK
  * SUBSKEL
  * VERIFY
  * FILESKEL

* The)PROC section executes every time you access the panel *except* the first time. You can use the logic statements described for the)INIT section in the)PROC section.

* The)END section marks the end of the panel.

SYSD/JFT's built-in functions make it easy to complete necessary tasks. The VERIFY statement provides an easy way to edit input data. Some of the validations for input fields are:

+ must enter
+ alphabetic
+ numeric
+ member names
+ dataset names
+ numeric ranges

Other functions—like TRUNC, TRANS, SUBSKEL, and FILESKEL—facilitate processing.

Skeleton definitions, which are members of a PDS, are models of JCL or data with embedded variable names. SYSD/JFT substitutes the contents of the variable for the variable name and either submits the PDS member to the internal reader or saves it to a file, depending on the function.

Messages are defined in PDS members. The message ID defines the member name. SYSD/JFT searches the PDS member for the exact message ID and displays the message on the panel. Panel, skeleton, and message libraries can have concatenated datasets and are defined in a user exit.

See the *SYSD/JFT Reference Manual* for more information about the SYSD/JFT option.

SYSD/JFT is an optional program for both CPMS and SYSD. For more information about purchasing this option, call your H&W sales representative at (800) 377-0336.

Chapter 11
Option C: CICS Transactions

Option C lets you exit menu-driven CPMS/SYSD and execute native CICS transactions without terminating the CPMS/SYSD session.

> ## To access the CICS transactions screen

On the Primary Option Menu, type **C** in the *Input* field and press **Enter**.

or

On any SYSD screen, type **C** in the *Input* field and press **Return**.

```
                    YOU MAY NOW ENTER CICS TRANSACTIONS.
          TO RETURN TO CPMS/SYSD ENTER    'SYSD'  OR  'D   '
```

To return to the menu system, type **SYSD** on the CICS screen and press **Enter**. The Primary Option Menu in the partition you were in before exiting is displayed.

You can also use Option C with the SPLIT command if you have an available partition. Returning to the menu system returns to the Primary Option Menu of the partition created when you exited. To exit the screen location, press **End.**

Chapter 12

Option T: Online Help

An extensive online help and tutorial system compliments menu-driven CPMS/SYSD. The online help provides information about the help system itself, navigating through the help screens, and the parts of the system.

➤ **To access the online documentation**

On the Primary Option Menu, type **T** in the *Input* field and press **Enter.**

or

On any screen, type **T** in the *Input* field and press **Return.**

```
HELP                ----------- CPMS/SYSD TUTORIAL -----------              (1/1)
INPUT ===>                                                   $TUTOR00

                        CPMS/SYSD Conversational Facility


    This tutorial  provides on-line  help for the conversational  portion of
     CPMS/SYSD.   You may view the tutorial sequentially,  or choose selected
    topics from  lists on many of the tutorial pages.

    The Table  of Contents  lists the  major topics.   Subsequent pages list
    additional topics leading to more specific levels of detail.

    The following pages outline the use of this tutorial.



           Press the  ENTER  key to proceed to the next page, or
           Press the  END  key to return to the "PRIMARY OPTION MENU."
```

Note | Because the help screens are self explanatory, only the primary display is shown in this manual. Some screens have **more...** on the last line. If you press **Enter** on these screens, the next screen is displayed. Any page continued to another accepts this key.

There are several ways to move around in the online help. In addition to the options included on the Tutorial screens and the prompts that are sometimes listed at the bottom of the screens, you can use the following paging commands. The uppercase characters represent the minimum abbreviation allowed.

Type	To go
Back	Back to the previous page.
Up	To a higher-level menu screen.
Top	To the first page of the tutorial section.
Index	To the help file's Table of Contents screen. From here you can select any help topic in the system.

You can also use the following PF keys:

Press this PF key	To go to
Up	A higher-level menu screen.
Left	The previous page.
Right	The next page.
Down	The next page.

The HELP INDEX command (or just INDEX while you are in the help system) displays the Table of Contents screen for the online help. You can display the online help for any part of the menu-driven system by selecting the appropriate option on the Table of Contents screen.

The HELP NEW command (or just NEW while you are in the help system) displays the Changes, Improvements and Enhancements screen for the current release of CPMS/SYSD.

The HELP command on a screen bypasses the Tutorial and Table of Contents sections and displays the online help for that screen.

You can exit the online help several ways. To return to the screen you entered online help from, press **End**. To display the Primary Option Menu, press **Return**. To go directly to a specific screen, type the screen's **address** in the *Input* field and press **Return**.

Chapter 13

Option U: Maintaining the User File

Option U, Perform User File Maintenance, lets you add, change, or delete user profiles. For ease in making changes, CPMS/SYSD displays the first user profile when you access the screen. Once changes are completed, you must log off and log on again for the changes to be recognized.

See the CPMS/SYSD Installation Manual for more information about maintaining the user file.

Chapter 14
CPMS/SYSD Functional Commands

The CPMS/SYSD function-driven system consists of commands you enter as a single line of input either at the top of a clear CICS screen or at the bottom of a CPMS/SYSD functional display. The functional commands let:

- System programmers use the CICS management facilities to display the status of CICS and dynamically change the CICS tables. They can also use the CORE display function to dynamically display and change memory.

- Computer operators use CPMS/SYSD to reply to outstanding operator requests and monitor the status of CICS.

- CPMS/SYSD users perform limited job submission.

CICS Management

SYSD provides two important facilities for managing CICS. You can monitor CICS activity and change CICS while it is executing. This offers greater control and less down time for your CICS system.

With SYSD, you can display overall CICS statistics or concentrate on particular areas within CICS. For example, the STAT command gives you a snapshot of CICS' status including the number of transactions processed, associated limits, the number of times the limits have been reached, dynamic storage area (DSA) usage, temporary storage usage, and current task usage.

Other SYSD commands display and dynamically change the status of CICS tables. You can display a summary of all the entries in a table or the settings for a specific entry in a table.

CICS Debugging Aids

SYSD provides several debugging aids to help application developers. They can display and change (zap) memory, display the CICS trace table, display the last ASRA abend, and display internal CICS information—all of which helps them get their CICS applications up and running as quickly as possible.

Issuing Functional Commands

The CPMS/SYSD function-driven system consists of commands you enter as a single line of input either at the top of a clear CICS screen or at the bottom of a CPMS/SYSD functional display.

Command Format

The format of a functional command includes a CICS transaction code, the CPMS/SYSD functional command, and any associated positional parameters. Each item is separated by a comma or a blank. In the command definitions starting on page 218, commands are displayed in boxes in the following format:

```
SYSD,COMMAND,parm1,PARM2,[parm3],parm4|parm5,parm6|parm7,parm8...,parmn
     CMD
```

This kind of text	Identifies
COMMAND	The command.
CMD	An alias for the command.
parm1	A value you must supply. For example, if the **vol_ser** parameter appears in a command format, type the volume serial number.
PARM2	A parameter you must type exactly as it appears.
[parm3]	An optional parameter.
parm4|parm5	An either/or situation. You can specify one parameter or the other, but not both.
parm6|parm7	The default if you issue the command without specifying either parameter.
parm8,...,parmn	A parameter that you can repeat.

For example, to rename the dataset called JANE.DOE to JOHN.DOE on the disk volume labeled HWDISK, type one of the following commands:

```
SYSD,RENAME,HWDISK,JANE.DOE,JOHN.DOE
SYSD RENAME HWDISK JANE.DOE JOHN.DOE
```

Aliases

For your convenience, many commands allow shortened aliases. In the functional command formats starting on page 218, the alias is shown below the full command. For example:

```
SYSD,CANCEL,job
    CAN
```

So to cancel the job called JDOE, you can type either of the following commands:

```
SYSD,CANCEL,JDOE
SYSD,CAN,JDOE
```

Parameter Formats

You can type single-word, alphanumeric parameters as is. Enclose multiple-word parameters or parameters that contain special characters with apostrophes. To include an apostrophe, type it twice. For example:

```
SYSD,command,oneword
SYSD,command,'two words'
SYSD,command,'Bob''s box'
```

Omitting Positional Parameters

If you omit a positional parameter, you must still type its separator character. For example, if the JANE.DOE dataset is cataloged, you do not have to specify a volume serial number when you issue the RENAME command. You could type either of the following commands:

```
SYSD,RENAME,,JANE.DOE,JOHN.DOE
SYSD RENAME  JANE.DOE JOHN.DOE
```

Using Parameter Lists

Some CPMS/SYSD commands let you specify a parameter list instead of a single parameter. Parameter lists can be null or can contain one or more parameters. To indicate a null parameter list, type two separator characters in a row just as you would for a normal parameter. If the list contains one parameter, type it as a regular parameter or enclose it with parentheses. If the list contains two or more parameters, separate each by a separator character and enclose the list with parentheses. For example, to catalog the JANE.DOE dataset on the disk volume labeled HWDISK, type one of the following commands:

```
SYSD,CATLG,3380,HWDISK,JANE.DOE
SYSD,CATLG,3380,(HWDISK),JANE.DOE
```

To catalog the same dataset on the disk volumes labeled HWDISK and HWDSK2, type the following command:

```
SYSD,CATLG,3380,(HWDISK,HWDSK2),JANE.DOE
```

Displaying a Command's Online Help

CPMS/SYSD includes an extensive online help facility. There are two types of online help commands:

* To display a summary of the commands you are authorized to use, type **SYSD,HELP** on a clear CICS screen and press **Enter**.

* To display the online help for a particular command, type the following command on a clear CICS screen and press **Enter**:

```
SYSD,HELP,command
```

For example, to display the online help for the RENAME command, type **SYSD,HELP,RENAME** and press **Enter**.

Functional Commands

This section describes each CPMS/SYSD functional command. The commands are listed alphabetically. Commands that are only available to SYSD users are marked **SYSD only**. Unmarked commands are available to both CPMS and SYSD users.

A – Displaying Executing Jobs

The A command displays statistics for the jobs that are executing. This helps you estimate a job's completion time and determine the state of the operating system with respect to overall execution. The format of the A command is:

```
SYSD,A[,ALL]
```

This parameter	Specifies
ALL	Display started tasks and TSO users in addition to batch jobs. The default is only regular batch jobs.

The following is an example of the screen displayed when you issue the **SYSD,A,ALL** command:

```
 11/03/97           MVS/OS390 VERSION OF CPMS/SYSD RELEASE 6.4.1          PAGE 001
 MONDAY                         OS/VS ACTIVE TASK DISPLAY                   13:03:52
 ASID JOBNAME  STEPNAME PROCNAME  CPUR STATUS     REAL    AUX PRTY    #I/O
 0020 LLA      LLA      LLA       1129 NSWAP      364K   4188K 142    6866
 0023 VLF      VLF      VLF        343 NSWAP      372K   9848K 142      37
 0024 DLF      DLF      DLF             NSWAP     240K    584K 142      32
 0025 APPC     APPC     APPC         2 NSWAP      448K   5256K 142      45
 0026 SYSBINIT SYSBINIT SYSBINIT        NSWAP     224K    416K 142      12
 0032 JES2     JES2     IEFPROC  24121 NSWAP     1632K   4872K 142  827814
 0033 RACF     RACF     RACF       441 NSWAP      308K   1280K         158
 0030 SYSXINIT SYSXINIT SYSXINIT        NSWAP     220K    408K 142      15
 0021 TCPIP    TCPIP    TCPIP     4869 NSWAP     2872K  24112K 142    4311
 0046 NET      NET      NET       1215 NSWAP     2004K   5660K 142     255
 0047 EZAFTSRV EZAFTSRV EZAFTSRV     3 NSWAP      308K   5924K 142      57
 0029 EWXDISK  EWXDISK  SERVER     325 NSWAP      680K   4688K 142    7634
 0022 TSO      TSO      TSO          2 OUT    - LWAIT    316K 255       16
 0019 CICS31   CICS330  CICS3133 31194 NSWAP     9136K  16264K 142 1618158
 0017 CICS33   CICS330  CICS33NN   856 IN-N     3528K  11092K 141   10127
 0044 CICS32   CICS330  CICS3233  2095 IN-N     5092K  12700K 141   62551
 0048 SYSZINIT SYSZINIT SYSZINIT        OUT    - LWAIT      K 255       2
 0031 SYSMWTRB SYSMWTRB SYSMWTRB    13 OUT    - LWAIT      K 255     542

 P/N
```

Field Definitions

#I/O

The number of input/output operations the job has executed.

ASID

The job's address space ID.

AUX

The amount of virtual memory, including VIO datasets, the job is using.

CPUR

The real CPU time in seconds the job has used.

Jobname

The started task procedure name or the job name from the JOB card.

PROCNAME

The procedure that is executing.

PRTY

The job's dispatching priority.

Real

The amount of real memory the job is using.

Status

The job's dispatching status.

Stepname

The step that is executing.

AA – Dynamically Displaying Executing Jobs

The AA command dynamically displays statistics for the jobs that are executing. This command is the same as the A command except it automatically issues itself at an interval your company defined when CPMS/SYSD was installed. This auto-display feature lets you constantly monitor executing jobs. The format of the AA command is:

```
SYSD,AA[,ALL]
```

This parameter	Specifies
ALL	Display started tasks and TSO users in addition to batch jobs. The default is only regular batch jobs.

This command displays the MVS/JES2 Display Active Jobs screen. See "A – Displaying Executing Jobs" on page 218 for a screen sample and field definitions.

AID – Displaying CICS's Automatic Initiate Descriptors

| Note | This command is not supported for CICS version 3.2 and above. |

SYSD only

The AID command displays CICS's automatic initiate descriptors (AIDs). The format of the AID command is:

```
SYSD,AID,[terminal_id]
```

This parameter	Specifies
terminal_id	The ID of the terminal you want to display. The default is a summary of all AIDs. You can also specify a mask. A plus sign (+) in place of a character means SYSD only selects characters at that position. An asterisk (*) following a character means SYSD ignores characters at that position and beyond in a comparison.

AL – Displaying CICS's Allocated Datasets

SYSD only

See the ALLOC command for more information.

```
SYSD,AL[,dsn][,type]
     ALLOC
```

ALLOC – Displaying CICS's Allocated Datasets

SYSD only

The ALLOC command displays a summary of CICS's currently allocated datasets. The format of the ALLOC command is:

```
SYSD,ALLOC[,dsn][,type]
     AL
```

This parameter	Specifies
dsn	The name of the allocated dataset you want to display.
type	The dataset name you want to display is a data definition name (DDN), dataset name (DSN), or relative record number (RRN).

If you do not specify the dataset name and type, SYSD displays a summary of all allocated datasets.

ASRA – Displaying CICS's Last ASRA Abend

| Note | This command is not supported for CICS version 3.3 and above. |

SYSD only

The ASRA command displays a summary of information about CICS's last ASRA abend. This display provides the PSW and registers from the abend and tries to display the program name and program displacement of the instruction that caused the abend. The program information should be valid if the ASRA just occurred and the program that caused the abend is a CICS application program; for example, the program has a PPT entry.

The format of the ASRA command is:

```
SYSD,ASRA
```

BIO – Displaying a Biorhythm Chart

The BIO command displays a biorhythm chart based on three bodily cycles. The first is the 23-day masculine rhythm cycle, which supposedly affects the physical aspects of the body encompassing energy levels, resistance, and endurance. The second is the 28-day feminine rhythm cycle, which supposedly governs the nervous system, or sensitivity, and affects attitude and creativity. The third is the 33-day intellectual rhythm cycle, which supposedly affects logic and computational abilities.

The format of the BIO command is:

```
SYSD,BIO,birthday,start_day
```

This parameter	Specifies
birthday	The date of your birth in **mmddyyyy** format. For example, type 03181949 if you were born on March 18, 1949.
start_day	The date you want to start the biorhythm chart on in **mmddyyyy** format. The chart starts with this date and display the next 18 days.

CANCEL – Canceling a Job

The CANCEL command purges a batch job from the JES2 queue. If the job is executing, it abends with an S222 abend. CPMS/SYSD purges the job without printing no matter which JES queue the job is in. The format of the CANCEL command is:

```
SYSD,CANCEL,job
```

This parameter   **Specifies**

job   The job number you want to purge.

CATLG – Cataloging an OS Dataset

SYSD only

The CATLG command adds the dataset name and the associated volume serial numbers to the catalog. The format of the CATLG command is:

```
SYSD,CATLG,unit_type,vol_list,dsn
```

This parameter   **Specifies**

unit_type   The 1- to 8-character device type. You must specify this parameter the same way you specify the UNIT parameter on a DD statement in the JCL.

vol_list   A list of one to five volume serial numbers. Each number is 1- to 6-characters long. These volumes must be mounted on the operating system when you issue the CATLG command. If you specify multiple volume serial numbers, separate each by a comma or blank and enclose the list with parentheses.

dsn   The 1- to 44-character name of the dataset you want to catalog.

CICSTRAN – Displaying CICS's Transaction IDs

SYSD only

The CICSTRAN command displays all CICS's transaction IDs you are authorized to issue. The format of the CICSTRAN command is:

```
SYSD,CICSTRAN
```

COMPRESS – Compressing a Cataloged PDS

SYSD only

The COMPRESS command compresses a cataloged partitioned dataset (PDS). The format of the COMPRESS command is:

```
SYSD,COMPRESS,,dsn
```

Note   The first parameter is omitted.

This parameter	Specifies
dsn	The 1- to 44-character name of the dataset you want to compress.

SYSD issues an OS/VS start command to execute the SYSDCMPR procedure. This means SYSDCMPR operates asynchronously with CICS.

CORE – Displaying and Changing Virtual Memory

The CORE command lets you display all the virtual memory in an OS/MVS environment and change memory in the CICS address space. CPMS/SYSD displays a prompt asking you for verification before changing virtual storage.

When you display the requested storage area, SYSD converts the specified address to the hexadecimal address of the next section of memory. This lets you page through memory by pressing **Enter**. However, you may want to chase chains or monitor a specific location in memory. To keep SYSD from converting the address, type an ampersand (&) as the first character of the address.

The formats of the CORE command are:

```
SYSD,CORE,address,[verify_data,change_data]
SYSD,CORE,[,,scan_data]
```

Caution▶ *The* **verify_data** *and* **change_data** *parameters must be the same length and must consist of an even number of hexadecimal digits.*

This parameter	Specifies
address	The hexadecimal virtual memory address you want to display or change. See "Address Formats" on page 225 for more information about specifying the address.
verify_data	The hexadecimal data you want to verify. SYSD checks the data to make sure it is at the specified **address**. If not, SYSD does not change the data.
change_data	The hexadecimal data you want to replace the data at the specified **address** with. This only occurs if the **verify_data** parameter is equal to the data at the specified address.
scan_data	The character string you want to scan for. The scan limit is 64K. When scanning, you cannot use an ampersand (&) as part of the address.

Address Formats

The following are the formats for the **address** parameter:

♦ A constant value CPMS/SYSD appends to address calculations. These address calculations consist of the following operands:

This operand	Means
+	Add a displacement to the current address value. For example, **2A+11** generates the address 3B.

(continued)

This operand	*Means*
-	Subtract a displacement from the current address value. For example, **2A-16** generates the address 14.
@	Add a displacement to the current address value. SYSD uses this address to load a new address from that location. This operation is particularly useful for chasing storage chains. For example, **0@10** loads the address of the OS/VS Communications Vector Table (CVT).

♦ A symbol representing a predefined internal storage address. Valid constants are:

This constant	*Means*
CSA	CICS Common System Area (CICS version 3.1.x and below)
CVT	OS/VS Communications Vector Table
DCT	CICS Destination Control Table (CICS version 3.1.x and below)
FCT	CICS File Control Table (CICS version 3.1.x and below)
JESCT	JES Communications Table
SIT	CICS System Initialization Table (CICS version 3.1.x and below)
TCT	CICS Terminal Control Table (CICS version 3.1.x and below)
TRT	CICS Trace Table (CICS version 3.1.x and below)

For example, **CVT@0@4** displays CICS's current TCB.

♦ You can also enter the following address character constants.

```
SYSD,CORE,ASID=xxxxxxxx[+/-/@]
```

This format displays the memory in a specific address space. You can code ASID= as a job name or an ASID number.

```
SYSD,CORE,DEST=xxxxxxxx[+/-/@]
```

This format displays a specific destination in the CICS DCT. It is only valid for CICS version 3.1.x and below.

```
SYSD,CORE,PROG=xxxxxxxx[+/-/@]
```

This format displays the PPT entry for a specific program. It is only valid for CICS version 3.1.x and below.

```
SYSD,CORE,PGM=xxxxxxxx[+/-/@]
```

This format displays a specific program in memory if it has been loaded.

```
SYSD,CORE,FILE=xxxxxxxx[+/-/@]
```

This format displays a specific file entry in the CICS FCT. It is only valid for CICS version 3.1.x and below.

```
SYSD,CORE,SSCT=xxxx[+/-/@]
```

This format displays the memory at a specific entry in the subsystem control table. For example, SSCT=JES2 points to the SSCT JES2 entry.

```
SYSD,CORE,TERM=xxxxxxxx[+/-/@]
```

This format displays a specific terminal entry in the CICS TCT. It is only valid for CICS version 3.1.x and below.

```
SYSD,CORE,TRAN=xxxxxxxx[+/-/@]
```

This format displays a specific transaction in the CICS PCT. It is only valid for CICS version 3.1.x and below.

DEST – Displaying and Changing the DCT

SYSD only

The DEST command displays either a summary of all the entries in the Destination Control Table (DCT) or a summary of the variable settings for a specific DCT entry. Each DCT entry is an intrapartition or extrapartition (or ISC) CICS sequential dataset. You can use this command to change a DCT entry's variable settings. The format of the DEST command is:

```
SYSD,DEST [,destination] [,subfunction] [,new_value]
```

This parameter	Specifies
destination	The ID of the DCT entry you want to display or change. The default is a summary of all the entries in the DCT. This parameter is required if you are changing a DCT entry's variable settings.
subfunction	The subfunction you want to display or change for a specific DCT entry. The default is a summary of the variable settings for the entry specified by the **destination** parameter.

Type	To
BLKSIZE	Change the DCB block size to **new_value**.
BUFNO	Change the DCB number of buffers to **new_value**.
CLO	Close the destination to processing.
DIS	Disable the DCT entry.
DSTNTRM	Change the Destination facility to non-terminal.
DSTTRM	Change the Destination facility to a terminal.
ENA	Enable the DCT entry.

Type	*To*
LRECL	Change the DCB logical record length to **new_value**.
OPE	Open the destination for processing.
TRAN	Change the trigger transaction ID to **new_value**.
TRIGGER	Change the trigger level to **new_value**.

new_value The new value you want to assign to the DCT entry's variable. This parameter is only required if you specify a **subfunction** that requires a new value, such as BLKSIZE.

Type	*To assign*
blksize	A number from **10** to **32767**.
bufno	A number from **1** to **255**.
lrecl	A number from **10** to **32767**.
tran	A 1- to 4-character transaction ID.
trigger	A number from **0** to **32767**.

DLTA – Deleting a High-Level Index Alias

SYSD only

The DLTA command deletes a high-level index alias from the OS/VS catalog. The format of the DLTA command is:

```
SYSD,DLTA,[control_vol],index
```

This parameter	Specifies
control_vol	The 1- to 6-character control volume serial number where the catalog resides. SYSD starts the catalog search with the catalog found on the control_vol. The default is the master catalog.
index	The 1- to 8-character high-level index alias you want to delete.

DLTX – Disconnecting Catalogs

SYSD only

The DLTX command deletes the primary index that connects one OS/VS catalog to another. The format of the DLTX command is:

```
SYSD,DLTX,[control_vol],index
```

This parameter	Specifies
control_vol	The 1- to 6-character control volume serial number where the catalog resides. SYSD starts the catalog search with the catalog found on the control_vol. The default is the master catalog.
index	The 1- to 44-character primary index you want to delete.

DRPX – Deleting a Primary or Generation Index

SYSD only

The DRPX command deletes a primary or generation index and all the index's subindexes from the OS/VS catalog. The format of the DRPX command is:

```
SYSD,DRPX,[control_vol],index
```

This parameter	Specifies
control_vol	The 1- to 6-character control volume serial number where the catalog resides. SYSD starts the catalog search with the catalog found on the control_vol. The default is the master catalog.
index	The 1- to 44-character primary or generation index you want to delete.

DSN – Displaying a Dataset's Attributes

SYSD only

The DSN command reads the VTOC entry for a dataset and displays the dataset's attributes and space usage. Information includes general data control block (DCB) information, extent statistics, and, when applicable, ISAM definitions. The format of the DSN command is:

```
SYSD,DSN,[vol_ser],dsn
```

This parameter	Specifies
vol_ser	The 1- to 6-character volume serial number where the dataset resides. The default is the first volume serial number from the catalog.
dsn	The 1- to 44-character name of the dataset you want to display.

For example, the following screen is displayed when you issue the
SYSD,DSN,,SYSD.PROD.HELP command:

```
 11/03/97            MVS/ESA VERSION OF CPMS/SYSD RELEASE 6.4.1        PAGE 001
 MONDAY         VTOC FOR SYSD.PROD.HELP                                16:05:43

                      * *  GENERAL INFORMATION  * *
  VOLUME  CREDT  EXPDT  DSORG  OPTCD  RECFM  LRECL  BLKSIZE  KEYL  RKP  VOLSQ
  HWS05X  95173  00000   PO     00     FB    00080   06160   000  00000 00001
 INITIAL ALLOC  2ND ALLOC   LAST BLK - TTRLL   DSCB PTR - CCHHR     TTR
    TRK          00000000    001C04  7B40         0001000020      000F20

                      * *  EXTENT INFORMATION  * *
                  TYPE    SEQ   CC    HH    CC    HH    TRKS
                   01     000  0020  000C  0024  000B  00060
                  TOTAL TRACKS = 00060
 00048 PERCENT OF DATA SET USED.
 * * *  END OF DATA  * * *




 SYSD DSN HWS05X SYSD.PROD.HELP
```

Field Definitions

2nd ALLOC

The amount of secondary space allocated for the dataset.

BLKSIZE

The dataset's block size.

CC

The beginning and ending cylinders in **cylinder-cylinder** format.

CREDT

The date the dataset was created.

DSCB PTR - CCHHR

The dataset's control block pointer in **cylinder-cylinder-head-head-record** format.

DSORG

The dataset's organization.

EXPDT

The date the dataset expires.

HH

The beginning and ending heads in **head-head** format.

Initial ALLOC

The initial allocation type.

KEYL

The length of the access key.

Last BLK - TTRLL

The last block in **track-track-record-length-length** format.

LRECL

The dataset's logical record length.

OPTCD

The dataset's option code.

RECFM

The dataset's record format.

RKP

The dataset's relative key position.

SEQ

The dataset's extent sequence number.

Total Tracks

The total number of tracks.

TRKS

The number of tracks.

TTR

Track-track-record.

Type

The type of extent.

VOLSQ

The volume sequence.

Volume

The volume serial number.

DSPCHR – Displaying a DASD Record

SYSD only

The DSPCHR command displays a physical record on a DASD COUNT, KEY, and DATA (CKD) volume. The COUNT describes the rest of the record and consists of the CCHHR for the record, the key length, and the record length. If the record length is zero, SYSD assumes the record indicates the end of file (EOF).

> **Note** The volume must be mounted and ready before you issue this command.

The format of the DSPCHR command is:

```
SYSD,DSPCHR,vol_ser,cchhr
```

This parameter	*Specifies*
vol_ser	The 1- to 6-character volume serial number where the record resides.
cchhr	The DASD's cylinder, head, and record. This consists of 1 to 5 bytes of hexadecimal characters. You can omit leading zeros.

For example, the following screen is displayed when you issue the
SYSD,DSPCHR,HWS917,1 command:

```
  11/03/97        MVS/OS390 VERSION OF CPMS/SYSD RELEASE 6.4.1        PAGE 001
  MONDAY            MBBCCHHR = 0000000000000001 OF HWS917             14:13:58

  ***   RECORD COUNT (CC CC HH HH RR KL DL DL)  ***
        000000    00000000 01040018                    *              *
  ***   RECORD KEY (IF PRESENT)  ***
        000000    C9D7D3F1                              *IPL1          *
  ***   RECORD DATA  ***
        000000    000A0000 0000000F 03000000 00000001  *              *
        000010    00000000 00000000                     *              *
  * * *  END OF DATA  * * *







  SYSD DSPCHR HWS917 0000000000000001
```

Field Definitions

CC

Cylinder-cylinder.

DL

The data length.

HH

Head-head.

KL

The key length.

RR

Record-record.

ENDAUTO – Ending a Dynamic Display

Some functional commands dynamically re-issue themselves; for example, compare the A and AA commands. This lets you monitor a display without re-issuing the command. The ENDAUTO command terminates a dynamic display. Because CPMS/SYSD automatically reprompts the command, you must press **Enter** to end the auto-display.

The format of the ENDAUTO command is:

```
SYSD,ENDAUTO
```

ENQ – Displaying the OS Global Resource Serialization Queue

The ENQ command displays the global resource serialization (GRS) queue. The format of the ENQ command is:

```
SYSD,ENQ,[queue_name],[dsn]
SYSD,ENQ,[WAIT]
```

Caution ▶

Displaying all the GRS queue names in a multiple-CPU complex may significantly degrade the CICS region's performance.

This parameter	Specifies
queue_name	The GRS queue name you want to display; for example, **SYSDSN** or **SYSVSAM**. The default is to display all the GRS queue names. This parameter is required if you specify the **dsn** parameter.
dsn	The dataset name. If you specify a high-level qualifier, CPMS/SYSD displays all the enqueues starting with that high-level qualifier.

This parameter	Specifies
WAIT	Only display the resources with waiting tasks.

The following is an example of the information displayed when you issue the **SYSD,ENQ** command:

```
 11/03/97         MVS/OS390 VERSION OF CPMS/SYSD RELEASE 6.4.1        PAGE 001
 MONDAY                             OS ENQS                           11:56:24

  SCOPE    QNAME     RNAME
                     TYPE SYSNAME   JOBNAME

 SYSTEMS  SYSZIGW1  CLM00001
                     SHR  OS390    SMXC
 SYSTEMS  SYSVSAM   CICS410.CICS4Y.DFHGCD.DATAHWMVSR51.CICS410.CATALOG    I
                     SHR  OS390    CICS4Y
 SYSTEM   SYSDSN    MVS390.PROCLIB
                     SHR  OS390    CICS4Y
                     SHR  OS390    CICS31
                     SHR  OS390    CICS32
                     SHR  OS390    CICS33
 SYSTEMS  SYSVSAM   CICS330.CICS31.DFHLCD.INDEXHWMVSESA.CICS330.CATALOG   O
                     SHR  OS390    CICS31
 SYSTEM   SYSDSN    CICS330.CICS31.DFHGCD
                     SHR  OS390    CICS31
 SYSTEMS  SYSVSAM   SYSBII.SYSX.CONTROL.FILE.DCHWMVSESA.MASTER.CATALOG    O
                     SHR  OS390    SYSXINIT

 P/N
```

Field Definitions

Jobname

The requester's job name. This could also be a TSO user ID or a started task name.

QNAME

The resource's major name.

RNAME

The resource's minor name. Non-displayable bytes are shown as spaces.

Scope

The scope of the resource requested. Valid scopes are: **GLOBAL**, **SYSTEMS**, and **SYSTEM STEP**. If the scope is **GLOBAL**, CPMS/SYSD puts an asterisk (*) in front of the scope.

SYSNAME

The requester's system name. If the system name is not defined in the PARMLIB IEASYSxx entry, this field contains **NONAME**.

Type

The request type of either **SHR** (shared) or **EXC** (exclusive). If the type is **EXC**, the line is highlighted. If the request is a RESERVE, a plus sign (+) follows. If GRS converted the RESERVE to an ENQ, a minus sign (-) is displayed.

FILE – Displaying and Changing the FCT

SYSD only

The FILE command displays either a summary of all the entries in the File Control Table (FCT) or a summary of the variable settings for a specific FCT entry. Each FCT entry represents a database file—BDAM, ISAM, or VSAM—to CICS. You can use this command to change an FCT entry's variable settings. The format of the FILE command is:

```
SYSD,FILE[,file_id] [,subfunction] [,new_value]
```

This parameter	Specifies
file_id	The ID of the FCT entry you want to display or change. The default is a summary of all the entries in the FCT. This parameter is required if you are changing an FCT entry's variable settings.
subfunction	The subfunction you want to change for an FCT entry. The default is to display a summary of the variable settings for the FCT entry specified for the file_id parameter.

Type	To
CLO	Close the file.
DIS	Disable the FCT entry.
DSN	Change the dataset's name to **new_value**. (CICS version 3.1.x and above only)
ENA	Enable the FCT entry.

Type	To
OPE	Open the file.

new_value   The new value you want to assign to the FCT entry. This parameter is only required if you specify a **subfunction** that requires a new value. For example, you can specify **DSN,dataset_name**, where **dataset_name** can be a maximum of 44 characters.

This parameter is only valid for CICS version 3.1.x and above.

HELP – Displaying Help Information

The HELP command displays either general information for operating CPMS/SYSD or specific information for using a particular command. The online help summarizes the information in this manual and includes descriptions of each command. The format of the HELP command is:

```
SYSD,HELP[,function]
```

This parameter	Specifies
function	The command you want to display the online help for.

HOLD – Holding a Job

The HOLD command puts a job in a JES queue on hold. The job stops in its cycle through the operating system. If the job is in the JES input queue, it is not executed until you release it. If the job is in the JES output queue, it is not printed until you release it. The format of the HOLD command is:

```
SYSD,HOLD,job
```

This parameter	Specifies
job	The JES2 job number you want to put on hold.

IC – Displaying CICS's Interval Control Elements

SYSD only

The IC command displays CICS's interval control elements (ICEs). You can display all or part of the ICEs. This command is used for debugging purposes. The format of the IC command is:

```
SYSD,IC,[tran_id]
```

This parameter *Specifies*

tran_id The transaction ID of the ICE you want to display. The default is a summary of all the ICEs.

You can also specify a mask. A plus sign (+) in place of a character means SYSD selects characters in that position. An asterisk (*) following a character means SYSD ignores characters in that position and beyond.

JES2LJOB – Displaying a Job's JES2 Control Blocks

The JES2LJOB command displays the control blocks in the JES2 job queue and spool. This command provides job information that will help H&W debug CPMS/SYSD. Use this command as instructed by H&W Computer Systems. The format of the JES2LJOB command is:

```
SYSD,JES2LJOB,job
```

This parameter *Specifies*

job The job name or number of the batch job you want to display. For multiple jobs with the same name, CPMS/SYSD displays the first job with that name. If you specify the job number, type it exactly as shown when you issue the N or JOB command, omitting leading zeros.

JES2TTR – Displaying a JES2 Spool Block

The JES2TTR command displays a JES2 spool block and helps you follow the JES2 chains to debug programs. The format of the JES2TTR command is:

```
SYSD,JES2TTR,ttr
```

This parameter	Specifies
ttr	The TTR used to read the spool block.

JOB – Displaying a Job's Status

The JOB command finds all occurrences of a job in the JES spool and lets you track the job through the queues. CPMS/SYSD displays each occurrence of the job and its identifying information. You can display or print each job using its job number. The format of the JOB command is:

```
SYSD,JOB,[job]
     STATUS
```

This parameter	Specifies
job	The name of the batch job you want to display. The default is to display all the jobs in the JES spool.
	You can select several jobs by entering the beginning letters of the job name followed by an asterisk (*). For example, type **ABC*** to display all the jobs that start with the characters *ABC*.

The following is an example of the screen displayed when you issue the **SYSD,JOB** command:

```
 11/03/97              MVS/ESA VERSION OF CPMS/SYSD RELEASE 6.4.1       PAGE 001
 MONDAY                    OS/VS - JOB STATUS DISPLAY                    15:38:53
 JOB#    JOBNAME  STA XHA PRI HELD  PRT        PUN
 S00002 $MASCOMM PPU      15        LOCAL      LOCAL
 J02313 BWA0047  PPU      1         BILL       LOCAL
 J02720 BW#XREF  PPU      1         BILL       LOCAL
 J02887 BW#XREF  PPU      1         BILL       LOCAL
 J04000 BW#TRACE PPU      1         BILL       LOCAL
 S03942 TSO      PPU      1         BILL       LOCAL
 J05406 FL743    PPU      1         DIANA      LOCAL
 J05637 BW#A0321 PPU      1         BILL       LOCAL
 J06057 BW#TRACE PPU      1         BILL       LOCAL
 J06416 DTFIXME  PPU      1         JOHN       LOCAL
 J06881 BNT66025 PPU      1         LARRY      LOCAL
 J06883 PUT66025 PPU      1         LARRY      LOCAL
 J07007 BWSYSI   PPU      1         BILL       LOCAL
 J07038 BW##SYSI PPU      1         BILL       LOCAL
 J07145 JRNLPRNT PPU      1         DIANA      LOCAL
 J07178 JRXREF   PPU      1         JULIA      LOCAL
 J07203 DCV420   PPU      1         DIANA      DIANA
 J07205 DCV420   PPU      1         DIANA      DIANA

 P/N
```

Field Definitions

Held

The number of held datasets in the job.

Job#

The JES-assigned job number.

Jobname

The started task procedure or job name found on the JOB card.

PRI

The job's priority in its queue.

PRT

The job's print destination ID.

PUN

The job's punch destination ID.

STA

The job's queue type.

This value	Means
INP	The input queue prior to JCL conversion.
OUT	The output queue for jobs waiting to print.
PPU	The print and punch queue for jobs waiting to print.
PRG	The purge queue for jobs waiting to be purged.
RCV	The receive queue for jobs being read into the system.
STC	The started task queue for jobs waiting or executing.
t**	The execution queue for jobs waiting to execute or executing, where t is the execution class.
UNK	An unknown queue. This type should not occur.
XEQ	The execution queue for jobs waiting or executing.

XHA

Three columns that display information about the job.

This column	Specifies
X	The executing job's CPU number. A **W** means the job is waiting to execute.
H	If the job was held.
A	If the job was held by a HOLD ALL command.

JOECLN – Purging Job Output Elements

The JOECLN command selectively purges the job output elements in a JES2 queue. CPMS/SYSD scans the queue for jobs that are older than 36 hours or have more than 25,000 lines of output and purges them.

> **Note** This command does not operate on Saturday, Sunday, or Monday.

The format of the JOECLN command is:

```
SYSD,JOECLN,[queue_name]
```

This parameter	Specifies
queue_name	The name of the JES2 queue you want to scan. The default is the JES2 queue the systems programmer has defined.

L – Displaying a PDS Source Member

SYSD only

See the PDSDSPLY command for more information.

```
SYSD,L,[vol_ser],dsn,member
      PDSDSPLY
      LIST
```

LC – Listing an OS CVOL Catalog

SYSD only

See the LISTCAT command for more information.

```
SYSD,LC,[control_vol],node
      LISTCAT
      LISTC
```

LD – Displaying a PDS Directory

SYSD only

See the LISTPDS command for more information about this command.

```
SYSD,LD,[vol_ser],dsn,[member] [,format]
     LISTPDS
     LISTD
```

LIST – Displaying a PDS Source Member

SYSD only

See the PDSDSPLY command for more information about this command.

```
SYSD,LIST,[vol_ser],dsn,member
     PDSDSPLY
     L
```

LISTC – Listing an OS CVOL Catalog

SYSD only

See the LISTCAT command for more information.

```
SYSD,LISTC,[control_vol],node
     LISTCAT
     LC
```

LISTCAT – Listing an OS CVOL Catalog

SYSD only

The LISTCAT command displays the entries in an OS CVOL. This command only operates on OS CVOL structures. The format of the LISTCAT command is:

```
SYSD,LISTCAT,[control_vol],node
     LISTC
     LC
```

This parameter	Specifies
control_vol	The volume serial number where the OS CVOL resides. The default is to search the master catalog and display the catalog indicated by the first level of the **node** parameter.
node	The 1- to 44-character node you want to display. The node must be a complete index node.

LISTD – Displaying a PDS Directory

SYSD only

See the LISTPDS command for more information.

```
SYSD,LISTD,[vol_ser],dsn,[member][,format]
     LISTPDS
     LD
```

LISTPDS – Displaying a PDS Directory

SYSD only

The LISTPDS command lists the members in a PDS. The format of the LISTPDS command is:

```
SYSD,LISTPDS,[vol_ser],dsn,[member][,format]
     LISTD
     LD
```

This parameter	Specifies
vol_ser	The volume serial number where the dataset resides. The default is to use the first volume serial number in the OS/VS catalog.
dsn	The 1- to 44-character name of the PDS you want to display.
member	The 1- to 8-character name of the member you want to display.

This parameter	Specifies
format	The type of information you want to display. The default is a list of each member and its TTR pointer. The uppercase character represents the minimum abbreviation allowed.

Type	To display
Dump	Each member in dump format.
Format	Each member in a formatted display that explains the variables in the entry. Only specify this parameter for a source or object PDS.
Spf	The Structured Programming Facility statistics in SPF format.

Example 1

The following is an example of the information displayed when you issue the
SYSD,LISTPDS,,SYSD.PROD.SOURCE,,DUMP command:

```
  11/03/97        MVS/OS390 VERSION OF CPMS/SYSD RELEASE 6.4.1        PAGE 001
MONDAY DIRECTORY FOR  SYSD.PROD.SOURCE                                13:19:48
NAME     TTRC     ALIAS        *----------USER DATA----------*
CICSDSCT 00280300
JES2DSCT 00280500
PRNTTEST 00280700
SYSDATPM 00290300
SYSDATP1 00290600
SYSDBRWS 00250400
SYSDCOPY 0025060F        0000  0102 0000 0090 143F  *          *
                        0008  0090 143F 1428 0066  *          *
                        0010  0066 0003 D3D7 4040  *     BW   *
                        0018  4040 4040 4040       *          *
SYSDEXIT 00240A0F        0000  0106 0000 0092 198F  *     k   *
                        0008  0092 199F 0705 00F0  * k      0*
                        0010  0223 03CB D3D7 4040  *     BW   *
                        0018  4040 4040 4040       *          *
SYSDINIT 0026090F        0000  0101 0000 0092 203F  *     k   *
                        0008  0092 203F 1332 000A  * k        *
                        0010  000A 0000 D3D7 4040  *     BW   *
                        0018  4040 4040 4040       *          *

P/N
```

Field Definitions

Alias

The alias assigned to the member.

Name

The member name.

TTRC

Track-track-record-count.

User Data

A hexadecimal dump of the directory entry for the member.

Example 2

The following is an example of the information displayed when you issue the
SYSD,LISTPDS,,SYSD.PROD.SOURCE,,FORMAT command:

```
   11/03/97            MVS/OS390 VERSION OF CPMS/SYSD RELEASE 6.4.1        PAGE 001
 MONDAY DIRECTORY FOR   SYSD.PROD.SOURCE                                   13:22:29
 NAME     TTRC     ALIAS       SIZE      ENTRY    SSI    RENT REUS
 CICSDSCT 00280300
 JES2DSCT 00280500
 PRNTTEST 00280700
 SYSDATPM 00290300
 SYSDATP1 00290600
 SYSDBRWS 00250400
 SYSDCOPY 0025060F           1326868   660066
 SYSDEXIT 00240A0F           1679111   F00223
 SYSDINIT 0026090F           2113299   0A000A
 SYSDJLNK 003A040F           2170646   3C0253
 SYSDLKED 00CC060F           1335057   690066
 SYSDM01  00140100
 SYSDM02  00D0020F           1511191   A70CD9
 SYSDM03  00140300
 SYSDM04  0194090F           1670928   CE08EA
 SYSDM05  006B080F            478992   DA0AC3 40404040
 SYSDM06  00520B0F           2244374   C4085D
 SYSDM07  00140700

 P/N
```

Field Definitions

Alias

The alias assigned to the member.

Entry

The displacement in the load module where execution should start.

Name

The member name.

RENT

Specifies if the program is reentrant.

REUS

Specifies if the program is reusable.

Size

The member's size.

SSI

System status information.

TTRC

Track-track-record-count.

Example 3

The following is an example of the information displayed when you issue the
SYSD,LISTPDS,,SYSD.PROD.SOURCE,,SPF command:

```
   11/03/97          MVS/OS390 VERSION OF CPMS/SYSD RELEASE 6.4.1           PAGE 001
 MONDAY DIRECTORY FOR   SYSD.PROD.SOURCE                                    13:25:01
 NAME       TTRC    VER.MOD CREATED LAST MODIFIED SIZE  INIT   MOD  ID
 CICSDSCT 00280300
 JES2DSCT 00280500
 PRNTTEST 00280700
 SYSDATPM 00290300
 SYSDATP1 00290600
 SYSDBRWS 00250400
 SYSDCOPY 0025060F 001.02  90.143  90.143 14:28 00102 00102 00003 BW
 SYSDEXIT 00240A0F 001.06  92.198  92.199 07:05 00240 00547 00971 BW
 SYSDINIT 0026090F 001.01  92.203  92.203 13:32 00010 00010 00000 BW
 SYSDJLNK 003A040F 001.02  90.318  92.211 16:32 00572 00595 00033 BW
 SYSDLKED 00CC060F 001.02  96.122  96.145 11:16 00105 00102 00010 BW
 SYSDM01  00140100
 SYSDM02  00D0020F 001.45  88.006  97.170 17:32 04007 03289 02518 BW
 SYSDM03  00140300
 SYSDM04  0194090F 001.61  88.308  97.197 10:53 03278 02282 02921 BW
 SYSDM05  006B080F 001.87  87.327  95.074 10:25 06362 02755 15972 BW
 SYSDM06  00520B0F 001.05  88.288  93.223 16:48 02244 02141 00237 BW
 SYSDM07  00140700

 P/N
```

Field Definitions

Created

The date the member was created.

ID

The ID of the user who changed the member last.

INIT

The number of lines in the member when it was created.

Last Modified

The date the member was last changed.

MOD

The number of changes made to the member.

Name

The member name.

Size

The size of the member.

TTRC

Track-track-record-count.

VER.MOD

The version and modification level.

LISTVTOC – Displaying a Volume Table of Contents

SYSD only

The LISTVTOC command reads all the VTOC entries on a DASD volume and displays information about each entry. The display includes all the datasets on the volume, the available free space, general information, and current indicators. The format of the LISTVTOC command is:

```
SYSD,LISTVTOC,vol_ser
      LV
```

This parameter	Specifies
vol_ser	The 1- to 6-character volume serial number you want to display.

Example

The following are examples of the screens displayed when you issue the **SYSD,LISTVTOC,HWWORK** command. Field definitions follow the third screen.

```
 11/03/97         MVS/OS390 VERSION OF CPMS/SYSD RELEASE 6.4.1          PAGE 001
MONDAY                    VTOC LISTING FOR HWWORK                        12:52:14
DATASET NAME                           DSORG CREDT EXPDT EXTENTS  SPACE
SYS1.VTOCIX.HWWORK                       PS  93323 00000   001    00003
DC.HCD.TERM                              UN  96043 00000   001    00001
SMTP.PROD.MAPLIB                         PO  97080 00000   001    00090
BA.SYSMFBXP.EXTOUT                       PS  96045 00000   001    00009
DC.TEST.OBJ                              PO  94090 00000   001    00010
DC.TEST.LOAD                             PO  94090 00000   001    00010
SYS1.IODF00.WORK.ACTLOG                  PS  96229 00000   001    00010
DC.ISPF.ISPPROF                          PO  96037 00000   001    00002
BW.TEMP.SYSSDATA                         PS  96233 00000   001    00004
JR.ISPF.ISPPROF                          PO  96232 00000   001    00002
SYSBII.SYSBUSER.INSTALL.DC               AM  97197 99365   008    00008
JR.JCL.SOURCE                            PS  97122 00000   001    00060
SYSBII.SYSBUSER.INSTALL.IC               AM  97197 99365   001    00001
SYSBII.V410P30.FIXJRNRV.LOADLIB          PO  97037 00000   001    00015
SYSP.PROD.LOADLIB                        PO  96241 00000   002    00180
SYS1.IODF04.ACTLOG                       PS  97049 00000   001    00010
DC.TEST.COBJ                             PO  97128 00000   001    00010
EDC.V2R1M0.SEDCCOMP                      PO  94273 00000   002    00133

P/N
```

LISTVTOC – Page 001

```
 11/03/97         MVS/OS390 VERSION OF CPMS/SYSD RELEASE 6.4.1          PAGE 003
MONDAY                    VTOC LISTING FOR HWWORK                        12:52:14
** FREE SPACE LIST IN TRACKS **    RELATIVE AVAILABLE
                                    00012   000003
                                    00033   000034
                                    00070   000011
                                    00085   000020
                                    00115   000004
                                    00125   000011
                                    00137   000008
                                    00150   000044
                                    00245   000055
                                    00309   000002
                                    00312   000018
                                    00345   000015
                                    00420   000092
                                    00516   000008
                                    00564   000134
                                    00703   000062
                                    00768   000048
                                    00819   000015

P/N
```

LISTVTOC – Page 002

```
  11/03/97        MVS/OS390 VERSION OF CPMS/SYSD RELEASE 6.4.1        PAGE 005
  MONDAY                    VTOC LISTING FOR HWWORK                    12:52:14
                            GENERAL INFORMATION
         OF 00795 DSCBS AVAILABLE, 00035 ARE IN USE, AND 00760 ARE FREE.
  NO OF PDS BLOCKS PER TRACK = 046
  ***VTOC IS INDEXED BY IBM DSDF PROGRAM PRODUCT.***
  * * *  END OF DATA  * * *




















  SYSD LISTVTOC HWWORK
```

LISTVTOC – Page 003

Field Definitions

Available

The number of tracks available at the relative track position.

CREDT

The date the dataset was created.

Dataset Name

The dataset's name.

DSORG

The dataset organization.

EXPDT

The date the dataset expires.

Extents

The number of extents for the dataset.

Relative

The relative track number where the free space begins.

Space

The number of tracks the dataset has used.

LOCATE – Displaying the OS Catalog Entry for an OS Dataset

SYSD only

The LOCATE command lists all the volume serial numbers associated with an OS dataset. First, SYSD lists the OS/VS catalog entry for the dataset and the volume serial numbers in it. Second, SYSD searches every online DASD volume and lists any volumes it finds the dataset on. The format of the LOCATE command is:

```
SYSD,LOCATE,[control_vol],dsn,[BYPASS]
```

This parameter	Specifies
control_vol	The 1- to 6-character control volume serial number where the catalog resides. SYSD starts the search with the catalog found on the **control_vol**. The default is the master catalog.
dsn	The 1- to 44-character name of the dataset you want to display.
	For generation data groups (GDGs), enclose the dataset name in apostrophes; for example, '**SYSD.USRLIB (1)**'.
BYPASS	Do not perform the DASD search.

LPAD – Displaying the OS/VS Link Pack Directory

SYSD only

The LPAD command displays all or part of the OS/VS link pack directory with an entry point for each module. The format of the LPAD command is:

```
SYSD,LPAD[,program_id]
```

This parameter	Specifies
program_id	The ID of the program you want to display. The default is the entire directory.
	To display several programs, specify the first letters of the program name followed by an asterisk (*). For example, type ABC* to display all programs starting with the characters *ABC*.

LV – Displaying a Volume Table of Contents

SYSD only

See the LISTVTOC command for information.

```
SYSD,LV,vol_ser
     LISTVTOC
```

MENU – Signing On to Menu-Driven CPMS/SYSD

The MENU command lets you sign on to the menu-driven version of CPMS/SYSD, which provides all spool display and print commands as well as the SYSD editor in an easy-to-use menu system. The format of the MENU command is:

```
SYSD,MENU[,user_id][,password][,address]
```

This parameter	Specifies
user_id	Your CPMS/SYSD user ID.
password	Your password. Your password is displayed on the screen when you enter it as a parameter. To keep it from being displayed when you type it, issue the MENU command without the **user_id** and **password** parameters and sign on with the regular Signon screen.

(continued)

This parameter	Specifies
address	The direct screen flow address of the CPMS/SYSD screen you want to display. The address consists of a series of numbers or names separated by periods. Each number represents an option and each name represents a command on a screen in the chain leading to the screen you want to display. For example, to display Option 0.0, General Parameter Definitions, type one of the following commands:

> **SYSD,MENU,user_id,password,0.0**
> **SYSD,MENU,user_id,password,PARMS.GENERAL**

See "Moving Around in the Menu System" on page 9 for a complete explanation of direct screen flow.

If you do not specify a user ID or password, the Signon screen is displayed.

MLPAD – Displaying OS/VS Modified Link Pack Directory

SYSD only

The MLPAD command displays all or part of the OS/VS modified link pack directory with an entry point for each module. The format of the MLPAD command is:

```
SYSD,MLPAD [,program_id]
```

This parameter	Specifies
program_id	The ID of the program you want to display. The default is the entire directory.

To display several programs, type the first letters of the program name followed by an asterisk (*). For example, type **ABC*** to display all programs starting with the characters *ABC*.

MODULE – Displaying CICS's Module Addresses

SYSD only

The MODULE command displays the addresses in main memory of CICS's control programs and tables. This helps you use the SYSD CORE command by providing a quick reference to tables and program addresses. The format of the MODULE command is:

```
SYSD,MODULE
```

N – Displaying All the Jobs in a Queue

The N command displays the statistics for the jobs in the JES2 queue and tells you if they are waiting for execution, executing, or waiting in the output queue. The format of the N command is:

```
SYSD,N,[queue_name][,destination]
```

This parameter	*Specifies*
queue_name	The JES2 queue you want to display. The default is all the queues.

Type	*To display*
INP	The input queue before JCL conversion.
OUT	The output queue for jobs waiting to print.
PPU	The print and punch queue for jobs waiting to print.
PRG	The purge queue for jobs waiting to be purged.
RCV	The receive queue for jobs being read into the system.
STC	The started task queue for jobs waiting or executing.

Type	To display
t**	The execution queue for jobs waiting or executing, where t is the execution class.
UNK	An unknown queue. This type should not occur.
XEQ	The execution queue for jobs waiting or executing.
destination	The ID of a specific remote or unit queue. The default is all remote and unit queues.

Example

The following is an example of the screen displayed when you issue the **SYSD,N** command:

```
 11/03/97         MVS/OS390 VERSION OF CPMS/SYSD RELEASE 6.4.1      PAGE 001
 MONDAY                  OS/VS - JOB QUEUE DISPLAY                   12:46:39
  JOB#    JOBNAME  STA XHA PRI HELD  PRT        PUN
  S00002 $MASCOMM  PPU     15     LOCAL       LOCAL
  J05406 FL743     PPU      1     DIANA       LOCAL
  J05637 BW#A0321  PPU      1     BILL        LOCAL
  J06881 BNT66025  PPU      1     JOHN        LOCAL
  J07145 JRNLPRNT  PPU      1     DIANA       LOCAL
  S05279 SYSLOG    PPU      1     LOCAL       LOCAL
  J09511 DC        PPU      1     DIANA       LOCAL
  J09512 DC        PPU      1     DIANA       LOCAL
  J00376 BW#IDCAM  PPU      1     BILL        LOCAL
  S09171 SYSLOG    PPU      1     LOCAL       LOCAL
  J00851 JRPRNTI   PPU      1     JULIA       LOCAL
  J00904 JRPRNTJ   PPU      1     JULIA       LOCAL
  J01112 JRTEST1   PPU      1     JULIA       LOCAL
  J01624 BW#XREF   PPU      1     BILL        LOCAL
  J01858 BW#IDCAM  PPU      1     BILL        LOCAL
  J02245 BW#RENAM  PPU      1     BILL        NANCY
  S02267 SYSXINIT  PPU      1     LOCAL       LOCAL
  S02270 SYSXINIT  PPU      1     LOCAL       LOCAL

 P/N
```

Field Definitions

Held

The number of held datasets in the job.

Job#

The JES2-assigned job number.

Jobname

The started task procedure name or job name on the JOB card.

PRI

The job's priority in its queue.

PRT

The job's print destination ID.

PUN

The job's punch destination ID.

STA

The queue type as defined by the **queue_type** parameter.

XHA

Three columns that provide information about the job.

This column	Specifies
X	The CPU number the job is executing on. A **W** means the job is waiting to execute.
H	If the job was held.
A	If the job was held by a HOLD ALL command.

NONSWAP – Changing CICS's Swap Status to Non-Swappable

> **Note** This command only works in OS/MVS.

The NONSWAP command changes the swap status of the current CICS to non-swappable. The format of the NONSWAP command is:

```
SYSD,NONSWAP
```

OC – Issuing an Operator Command

See the OSCMD command for more information.

```
SYSD,OC,command
     OSCMD
```

OKSWAP – Changing CICS's Swap Status to Swappable

> **Note** This command only works with OS/MVS.

The OKSWAP command changes the current CICS's swap status to swappable. The format of the OKSWAP command is:

```
SYSD,OKSWAP
```

OP – Printing a PDS Member

SYSD only

See the OSPRINT command for more information.

```
SYSD,OP,,,dsn,member
     OSPRINT
```

OSCMD – Issuing an Operator Command

The OSCMD command issues a command to the operating system or JES. You can issue any command the CPU console operator can issue. The format of the OSCMD command is:

```
SYSD,OSCMD,command
    OC
```

This parameter	*Specifies*
command	The 1- to 79-character OS or JES command you want to issue. CPMS/SYSD takes the command literally from the separator character following the OSCMD command to the end of the line.

OSPRINT – Printing a Cataloged PDS Member

SYSD only

The OSPRINT command prints a cataloged PDS member on the OS/VS printer. SYSD prints the output with a job name of SYSDPRNT. SYSD issues an OS/VS START command to execute the SYSDPRNT procedure. This means SYSDPRNT operates asynchronously with CICS. The format of the OSPRINT command is:

```
SYSD,OSPRINT,,dsn,member
    OP
```

Note   The first parameter is omitted.

This parameter	*Specifies*
dsn	The 1- to 44-character dataset name of the PDS the member is in.
member	The 1- to 8-character name of the PDS member you want to print.

PA – Adjusting a Spool Printer

See the PRTADJ command for more information.

```
SYSD,PA,printer_id,page_number
     PRTADJ
```

PC – Canceling a Spool Print Dataset

| Note | Only the originating, forms change, and master terminals can issue this command. |

See the PRTCNL command for more information.

```
SYSD,PC,printer_id
     PRTCNL
```

PD – Displaying a Spool Printer Status

See the PRTDSP command for information.

```
SYSD,PD[,printer_id] [,subfunction] [,new_value]
     PRTDSP
```

PDSALIAS – Adding an Alias to a PDS Member

SYSD only

The PDSALIAS command adds an alias to a PDS member. The format of the PDSALIAS command is:

```
SYSD,PDSALIAS,[vol_ser],dsn,member,alias
```

This parameter	Specifies
vol_ser	The volume serial number where the PDS resides. The default is the first volume serial number in the OS/VS catalog entry.
dsn	The 1- to 44-character name of the PDS the member is in.

This parameter	Specifies
member	The 1- to 8-character name of the member you want to add the alias to.
alias	The 1- to 8-character alias you want to add to the PDS member.

PDSCHG – Renaming a PDS Member

SYSD only

The PDSCHG command renames a PDS member. The format of the PDSCHG command is:

```
SYSD,PDSCHG,[vol_ser],dsn,member,new_name
```

This parameter	Specifies
vol_ser	The volume serial number where the PDS resides. The default is the first volume serial number in the OS/VS catalog entry.
dsn	The 1- to 44-character name of the PDS the member is in.
member	The 1- to 8-character name of the member you want to rename.
new_name	The new 1- to 8-character member name.

PDSDEL – Deleting a PDS Member

SYSD only

The PDSDEL command deletes a PDS member. The format of the PDSDEL command is:

```
SYSD,PDSDEL,[vol_ser],dsn,member
```

This parameter	Specifies
vol_ser	The volume serial number where the PDS resides. The default is the first volume serial number in the OS/VS catalog entry.
dsn	The 1- to 44-character name of the PDS the member is in.
member	The 1- to 8-character name of the member you want to delete.

PDSDSPLY – Displaying a PDS Source Member

SYSD only

The PDSDSPLY command lists a member of a source PDS. You can use this command to browse a PDS. The format of the PDSDSPLY command is:

```
SYSD,PDSDSPLY,[vol_ser],dsn,member
     LIST
     L
```

This parameter	Specifies
vol_ser	The volume serial number where the PDS resides. The default is the first volume serial number in the OS/VS catalog entry.
dsn	The 1- to 44-character name of the PDS the member is in.
member	The 1- to 8-character name of the member you want to display.

PF – Replying to a Forms Change Request

| Note | Only the originating, forms change, or master terminal can issue this command. |

See the PRTFRM command for more information.

```
SYSD,PF,printer_id
     PRTFRM
```

PH – Holding a Spool Printer

| Note | Only the originating, forms change, or master terminals can issue this command. |

See the PRTHLD command for more information.

```
SYSD,PH,printer_id
     PRTHLD
```

PJ – Printing a Job on a CICS Printer

| Note | Only the originating, forms change, and master terminals can issue this command. |

See the PRTJOB command for more information.

```
SYSD,PJ,job,printer_id,[sysout_id],[line],[begin_col],[scan_parms]
     PRTJOB
     SPLPRT
```

PP – Purging a Spool Printer

| Note | Only the originating, forms change, and master terminals can issue this command. |

See the PRTPRG command for more information.

```
SYSD,PP,printer_id
     PRTPRG
```

PQ – Starting a Spool Writer on a CICS Printer

See the PRTQUE command for more information.

```
SYSD,PQ,printer_id,queue[,sysout_classes],[FORM,form_id] |
     ,[DISP,NONSEL|PURGE|NEWDEST,new_dest|NEWCLASS,new_class]
  PRTQUE
```

PROG – Displaying and Changing the PPT

SYSD only

The PROG command displays either a summary of all the entries in the Processing Program Table (PPT) or a summary of the variable settings for a specific PPT entry. Each entry represents an application program or BMS map to CICS. You can use this command to change the PPT entry's variable settings. The format of the PROG command is:

```
SYSD,PROG[,program_id][,subfunction][,new_value]
```

This parameter	Specifies
program_id	The name of the PPT entry you want to display or change. The default is a summary of all the entries in the PPT. This parameter is required if you are changing a PPT entry's variable settings.
	Use a plus sign (+) in any position of the program name you want matched to all characters in that position. Use an asterisk (*) to match any character in the program name located in this position and beyond.
subfunction	The subfunction you want to display or change. The default is a summary of the variable settings for the PPT entry specified by the **program** parameter.

Type	To
CHA	Change the program ID to **new_value**.
DEL	Delete a previously loaded program.
DIS	Disable the PPT entry.

Type	To
ENA	Enable the PPT entry.
LOA	Permanently load a program.
NEW	Reset the TTR to indicate a new version of the program.

new_value — The new value you want to assign to the PPT entry. This parameter is only required if you specify a **subfunction** that requires a new value. For example, the CHA subfunction lets you assign a 1- to 8-character program ID.

PRTADJ – Adjusting a Spool Printer

Note — Only the originating, forms change, and master terminals can issue this command.

The PRTADJ command stops a PRTJOB, PRTQUE, or PRTJOE spool print task and restarts it on a different page. You can issue this command any time after the print task starts, even if the job is on hold. The format of the PRTADJ command is:

```
SYSD,PRTADJ,printer_id,page_number
    PA
```

This parameter	Specifies
printer_id	The ID of the CICS printer the task is active on.

(continued)

This parameter	Specifies
page_number	The actual or relative page number you want to restart the printing on.

An actual page number restarts the printing on that page.

Typing a plus (+) or minus (-) sign before a number restarts the printing that many pages before or after the current page. For example, if the current page is 33, -22 restarts the printing on page 11 and +22 restarts the printing on page 55. If a relative number forces the page number to be less than 1, CPMS/SYSD starts printing on page one. If the relative number forces the page number beyond the end of the dataset, CPMS/SYSD stops printing.

PRTCNL – Canceling a Spool Print Dataset

Note Only the originating, forms change, and master terminals can issue this command.

The PRTCNL command cancels a PRTJOB, PRTQUE, or PRTJOE spool print task and stops it from printing the current SYSOUT dataset. If the SYSOUT dataset contains multiple copies, the rest of the copies are not printed. The next dataset in the job starts printing. You can issue this command any time after the print task starts, even if the task is on hold. The format of the PRTCNL command is:

```
SYSD,PRTCNL,printer_id
    PC
```

This parameter	Specifies
printer_id	The ID of the CICS printer the task is active on.

PRTDSP – Displaying a Spool Printer's Status

The PRTDSP command displays the status of one or all the spool printers. The format of the PRTDSP command is:

```
SYSD,PRTDSP[,printer_id] [,subfunction] [,new_value]
    PD
```

This parameter	Specifies
printer_id	The ID of the CICS printer you want to display. The default is all printers.
subfunction	The functions used to dynamically change printer parameters. See the field definitions in "Example 2" starting on page 271 for more information about the subfunctions.
new_value	The new value you want to assign to the **subfunction**. See the field definitions in "Example 2" starting on page 271 for more information about the new value for each subfunction.

Example 1

The following is an example of the screen displayed when you issue the **SYSD,PRTDSP** command:

```
 11/03/97    ·        MVS/ESA VERSION OF CPMS/SYSD RELEASE 6.4.1        PAGE 001
 MONDAY                PRINTER STATUS SUMMARY        .                   16:32:11
 TERM TPA JOBNAME   JOB#    DATA SET FORM      COPY LINE# PAGE STATUS
 G002 TW                                                      WAITING - WORK
    **SW SCAN**  WRITERID=       DEST=G002        CLASS=AG      FORM=
 G003 TW                                                      WAITING - WORK
    **SW SCAN**  WRITERID=       DEST=G003        CLASS=AG      FORM=
 LSCS T                                                       NONE STARTED
 LOEF T                                                       NONE STARTED
 L12F T   .                                                   NONE STARTED
 L51A T                                                       NONE STARTED
 L511 T                                                       NONE STARTED
 L514 T                                                       NONE STARTED
 L519 T                                                       NONE STARTED
 PRNT D                                                       NONE STARTED
 S002 T                                                       NONE STARTED
 S003 TW                                                      WAITING - WORK
    **SW SCAN**  WRITERID=       DEST=U0050       CLASS=G       FORM=
 S021 T                                                       NONE STARTED
 S121 TW                                                      WAITING - WORK
    **SW SCAN**  WRITERID=       DEST=RMT1        CLASS=G       FORM=

 P/N
```

Field Definitions

Copy

The number of copies being printed.

Data Set

The ID of the dataset being printed.

Form

The type of form the dataset is being printed on.

Job#

The job's JES-assigned number.

Jobname

The name of the job being printed.

Line#

The number of lines in the output dataset.

Page

The number of the page being printed.

Status

The print task's status.

This status code	Means
ADJUSTING PAGE	A page adjust request was issued. See the PRTADJ command on page 267 for more information.
DRAINING	Printing will stop when the printer's buffer is drained. This message may be displayed after you issue a PRTSTP command on a PRTQUE or PRTJOE task.
HELD	The printer is on hold. To continue printing, you must release the printer.
NONE STARTED	There are no active print tasks.
PRINTING	The job is printing.

This status code	Means
RECOVERY RESTART	An abend occurred. If the job was started with the PRTQUE or PRTJOE command, CPMS/SYSD automatically restarts the printer when the scan delay expires.
SCAN CRITERIA	The selection criteria for the PRTQUE or PRTJOE task. CPMS/SYSD displays the destination queue and classes eligible for printing.
SCANNING	A PRTQUE command was issued. CPMS/SYSD is searching the JES QUE for a job that meets the scan criteria.
WAITING FORMS	The job is waiting for a forms change request.
WAITING WORK	A PRTQUE or PRTJOE command was issued and the task is waiting for jobs that meet the scan criteria.

Term

The CICS terminal ID.

TPA

Three columns that specify the job's status.

This column	Specifies
T	The terminal destination type: **T** means a terminal and **D** means a dataset.
P	The print queue indicator: **S** means the Hot Writer facility is started and **W** means the JOE Writer facility is started.
A	If the PRTJOB, PRTJOE, or PRTQUE is active: **J** means the PRTJOB task is active, **W** means the PRTJOE (JOE writer) task is active, and **Q** means the PRTQUE hot writer task is active.

Example 2

The following are examples of the screens displayed when you issue the **SYSD,PRTDSP,S003** command. An explanation of the fields and subfunctions begins after the fourth screen example.

```
   11/03/97         MVS/OS390 VERSION OF CPMS/SYSD RELEASE 6.4.1         PAGE 001
   MONDAY               PRINTER STATUS FOR S003                          12:56:23


                         *** GENERAL INFORMATION ***
              PRINTER TERMINAL IDENTIFIER= S003
              EMULATION=3289
              DESTINATION TYPE=TERMINAL
              MASTER TERMINAL= ****
              FORMS CHANGE TERMINAL=
              CURRENT FORM TYPE LOADED= STD
              DEFAULT FCB FOR THIS PRINTER= FCB2S156
              DEFAULT UCS FOR THIS PRINTER= POR3
              CURRENT LINE NUMBER= 0000000000
              CARRIAGE SIZE= 00132
              NUMBER OF PRINT BUFFERS= 00001
              PRINT BUFFER SIZE= 01920
              DELAY BETWEEN BUFFERS(SECS)= 00000
              CURRENT BUFFER PTR= 00000000
              CURRENT TWA PTR= 00000000
              MAXIMUM NUMBER OF LINES PER DATA SET= 0000050000
              SCAN DELAY WHEN WAITING FOR WORK= 0000000120

   P/N
```

PRTDSP – Page 001

```
   11/03/97         MVS/OS390 VERSION OF CPMS/SYSD RELEASE 6.4.1         PAGE 002
   MONDAY               PRINTER STATUS FOR S003                          12:56:23

              BEGINNING SEPARATOR PAGES= 00000
              ENDING SEPARATOR PAGES= 00000
              DEFINITE RESPONSE FREQUENCY= 000
              SPECIAL PRINTER OPTIONS IN EFFECT:
              ...(FMCGBP)  BYPASS FORM CHANGES
              ...(FRMFED)  PRINT USING FORM FEED
              ...(UCSCTL)  UCS CONTROLLED PRINTER SETUP

                         *** HOT WRITER INFORMATION ***
              HOT WRITER IS NOT STARTED.


                         *** JOE WRITER INFORMATION ***
              OUTSTANDING PRINT TASK LIMIT =  002
              CURRENT OUTSTANDING PRINT TASKS =  000
              JOE WRITER IS STARTED.
              JOE WRITER IS WAITING FOR WORK.
              SELECTION CRITERIA:
                  QUEUE TO BE PRINTED = U0050

   P/N
```

PRTDSP – Page 002

```
 11/03/97            MVS/OS390 VERSION OF CPMS/SYSD RELEASE 6.4.1        PAGE 003
 MONDAY                     PRINTER STATUS FOR S003                      12:56:23

             CLASS(ES) TO BE PRINTED = G
         SYSOUT DISPOSITION OPTIONS:
             EACH JOE PURGED AFTER PRINTING
             EACH JOE SET NONSELECTABLE WHILE PRINTING

                 *** HOT WRITER AUTO-START DEFAULT OPTIONS ***
         JOE WRITER AUTOMATIC START IN EFFECT.
                 *** HOT WRITER AUTO START ERRORS FOUND ***
         .THE FOLLOWING TERMINAL STATUS ERRORS FOUND:
         ...HOT WRITER ALREADY STARTED
         SELECTION CRITERIA:
             QUEUE TO BE PRINTED = U0050
             CLASS(ES) TO BE PRINTED = G
         SYSOUT DISPOSITION OPTIONS:
             EACH JOE PURGED AFTER PRINTING
             EACH JOE SET NONSELECTABLE WHILE PRINTING

                 *** PRINTER STATUS INFORMATION ***

 P/N
```

PRTDSP – Page 003

```
 11/03/97            MVS/OS390 VERSION OF CPMS/SYSD RELEASE 6.4.1        PAGE 004
 MONDAY                     PRINTER STATUS FOR S003                      12:56:23

         NO CPMS/SYSD PRINT TASK IS ACTIVE.
 * * *   END OF DATA  * * *




 SYSD PRTDSP S003
```

PRTDSP – Page 004

Section Definitions

General Information

A list of general terminal specifications. Most of these specifications are set in PTBLMAIN. You can dynamically change some of these specifications. The format for dynamically changing a setting is provided in the field definitions. However, because of the power of these changes, only people who are familiar with the system should be allowed to change the printer specifications.

Hot Writer Auto-Start Default Options

The hot writer auto-start options for this printer. Fields similar to the fields on *PRTDSP – Page 003* on page 273 are displayed showing the selection criteria and SYSOUT disposition options.

Hot Writer Auto Start Errors Found

When hot writers are started automatically, CPMS/SYSD sets error indicators in the printer's table entry. This section lists any errors found when the hot writer is started. An error condition is listed if the terminal/printer is not defined to CICS or if other auto start parameters, like the scan destination or class, are invalid.

Hot Writer Information

Displays the status of the hot writer. If active, fields similar to the fields on *PRTDSP – Page 002* on page 272 are displayed. You can view the selection criteria and SYSOUT disposition options for this printer.

JOE Writer Information

The status of the JOE writer. If the JOE writer is active, fields similar to the fields on *PRTDSP – Page 002* on page 272 are displayed. You can view the selection criteria and SYSOUT disposition options for this printer.

Printer Status Information

Statistics about the job being printed. If a print task is active, fields similar to *PRTDSP – Page 003* and *PRTDSP – Page 004* on page 273 are displayed.

Field Definitions

Beginning Separator Pages

The number of separator pages printed at the beginning of the output. To change the number of beginning separator pages, issue the following command:

```
SYSD,PD,printer_id,SEPBGN,number
```

This parameter	Specifies
printer_id	The ID of the printer you want to change.
number	The number of separator pages you want to print.

Carriage Size

The number of columns the printer is set to print. To change the carriage size, issue the following command:

```
SYSD,PD,printer_id,CARSIZ,number
```

This parameter	Specifies
printer_id	The ID of the printer you want to change.
number	The number of columns you want the printer to print.

Class(es) to be Printed

A list of the JES output classes the hot writer or JOE writer scans for when looking for jobs to print.

Copies

The number of copies being printed.

Current Buffer PTR

The buffer pointer's current hexadecimal address.

Current Form Type Loaded

The form the printer is set to print on. To change the form type, issue the following command:

```
SYSD,PD,printer_id,FORM,form
```

This parameter	Specifies
printer_id	The ID of the printer you want to change.
form	The new form you want the printer to handle.

Current Outstanding Print Tasks

The print tasks queued up for the JOE writer. To reset the current outstanding print task counter to 0 for recovery purposes, issue the following command:

Note	This command is only for recovery purposes. You should only issue it when a printer task is hung up and needs to be restarted.

```
SYSD,PD,printer_id,RSETTASK
```

This parameter	Specifies
printer_id	The ID of the printer you want to reset.

Current Line Number

The current SYSOUT line number being printed.

Current TWA PTR

The transaction work area pointer's current hexadecimal address.

Dataset

The JES2 dataset number of the dataset being printed.

Default FCB For This Printer

The default forms control buffer the printer is using. To change the default FCB, issue the following command:

```
SYSD,PD,printer_id,DFTFCB,new_fcb
```

This parameter	Specifies
printer_id	The ID of the printer you want to change.
new_fcb	The 8-byte name of the FCB you want to assign to the printer.

Default UCS For This Printer

The default universal character set the printer is using. To change the UCS, issue the following command:

```
SYSD,PD,printer_id,DFTUCS,new_ucs
```

This parameter	Specifies
printer_id	The ID of the printer you want to change.
new_ucs	The name of the new UCS you want to assign to the printer.

Definite Response Frequency

The number of buffers printed before CICS requests a definite response from the printer. To change the number of buffers, issue the following command:

```
SYSD,PD,printer_id,CHKRESP,number
```

This parameter	Specifies
printer_id	The ID of the printer you want to change.
number	The number of buffers you want to print before CICS requests a definite response.

Delay Between Buffers(SECS)

The delay in seconds between printing the buffers. To set or change the delay, issue the following command:

```
SYSD,PD,printer_id,DELAY,setting
```

This parameter	Specifies
printer_id	The ID of the printer you want to change.
setting	The number of seconds to delay between printing the buffers. You can omit leading zeros.

Destination Type

The destination type assigned to this device. The type can be either a terminal or a DCT destination. For a terminal, SYSD prints the output. For a DCT destination, SYSD stores the output on a disk.

Emulation

The terminal type the printer emulates. To change the type of emulation, issue the following command:

```
SYSD,PD,printer_id,emulation
```

This parameter	Specifies
printer_id	The ID of the printer you want to change.
emulation	The type of emulation you want to assign to the printer. Valid emulation types are: **3286, 3287, 3289,** or **ASIS**.
	The **ASIS** option is mainly used for debugging. If you specify **ASIS**, CPMS/SYSD does not perform character translation.

Ending Separator Pages

The number of separator pages printed at the end of a print out. To change the number of ending separator pages, issue the following command:

```
SYSD,PD,printer_id,SEPEND,number
```

This parameter	Specifies
printer_id	The ID of the printer you want to change.
number	The number of ending separator pages you want to print. You can omit leading zeros.

FCB

The forms control buffer the printer is using.

Form

The type of forms the printer is using.

Forms Change Terminal

The forms change terminal assigned to the printer. To change the forms change terminal, issue the following command:

```
SYSD,PD,printer_id,CHGTERM,term
```

This parameter	Specifies
printer_id	The ID of the printer you want to change.
term	The forms change terminal you want to assign to the printer.

Job Name

The name of the job being printed.

Job Number

The JES-assigned job number.

Line Number

The line number in the dataset being printed.

Line Number Within Page

The number of the line printing on the given page. See the *Page Number* field.

Lines Per Page

The number of lines the printer prints on each page.

Master Terminal

The master terminal assigned to this printer. You can set the master terminal for all devices in SYSDPTBL or you can dynamically change each terminal. To dynamically change the master terminal, issue the following command:

```
SYSD,PD,printer_id,MASTERM,master_id
```

This parameter	Specifies
printer_id	The ID of the printer you want to change.
master_id	The ID of the master terminal you want to assign to the printer.

Maximum Number of Lines Per Data Set

The maximum number of lines in the dataset that can be printed. This number is set in PTBLMAIN.

Number of Print Buffers

The number of print buffers assigned to this terminal.

Originating Terminal

The ID of the terminal that issued the print command.

Outstanding Print Task Limit

The AIDLIMT setting for a printer. To change the limit, issue the following command:

```
SYSD,PD,printer_id MAXTASK,number
```

This parameter	Specifies
printer_id	The ID of the printer you want to change.
number	The number of outstanding CICS print tasks for a JOE writer you want the global JOE writer scanning task to queue. You must type a number from 0 to 10.

Page Number

The number of the page being printed.

Print Buffer Size

The number of bytes in each buffer.

Printer Terminal Identifier

The printer ID.

PRTJOB Is Doing the Printing

The task doing the printing. Valid tasks are: **PRTJOB**, **PRTJOE**, or **PRTQUE**.

Queue to be Printed

The JES2 queue names this printer prints.

Scan Delay When Waiting For Work

The delay in seconds between queue scans and/or print tasks. To change the scan delay, issue the following command:

```
SYSD,PD,printer_id,SCAN,delay
```

This parameter	Specifies
printer_id	The ID of the printer you want to change.
delay	The delay in seconds between print tasks or queue scans. You can omit leading zeros.

Special Printer Options In Effect

The options in effect for this printer. To change the options, issue the following command:

```
SYSD,PD,printer_id,OPTON|OPTOFF,options
```

This parameter	Specifies
printer_id	The ID of the printer you want to change.
options	The options you want to assign to the printer.

Type	To have the printer
DISCON	Disconnect from CICS when printing is done. (VTAM only)
FMCGBP	Bypass all forms change requests.
FRMFED	Use form feed characters on printers that support X'0C' as 'TOP OF FORM'. This speeds up the printing process and provides better top-of-form recovery.
FRMPRT	Process printer-attended forms changes. Printer PA keys are supported.

Type	*To have the printer*
FRMSEL	Print the same forms together. (PQ and SW Only)
RTACMP	Use repeat-to-address control characters to compress printer output data streams. The RTACMP and SCSCMP options are mutually exclusive.
SCSCMP	Use SCS horizontal tabs to compress printer output data streams. The SCSCMP and RTACMP options are mutually exclusive.
SETVRT	Use vertical tabs from the forms control buffer for the forms length.
UCSCTL	Issue leading and trailing control characters based on the UCS= parameter of the SYSOUT.

Status

The status of the task. Valid statuses are: **HELD, PRINTING,** or **WAITING FOR xxx.**

SYSOUT Disposition Options

Specifies what the writer does with the SYSOUT after it is done printing. These options are specified when the hot writer and JOE writer are started. The writer may purge the output or route it to a new class and/or destination. This section also describes the dispositions of the output during printing; for example, if it is enqueued during printing.

PRTFRM – Replying to a Forms Change Request

Note Only the originating, forms change, or master terminal can issue this command.

The PRTFRM command replies to a forms change request from a PRTJOB, PRTJOE, or PRTQUE spool print task. When the print task requires a different form, CPMS/SYSD issues a request on the originating terminal indicating the current form and the new form and waits for your response. After you change the form in the printer, issue the PRTFRM command to restart the printing. If a print task is hanging, it is usually waiting for new forms. The format of the PRTFRM command is:

Caution *This command answers a forms change request. Do not use it to halt the printer so you can change forms.*

```
SYSD,PRTFRM,printer_id
     PF
```

This parameter	Specifies
printer_id	The ID of the CICS printer the print task is active on.

If the originating terminal is a console, CPMS/SYSD displays the forms change message on the console. The forms change message scrolls off the console when the operator responds to the forms change request (FCR) with the OS modify command.

CPMS/SYSD automatically prompts the PRTFRM command at the bottom of the forms change request display. Press **Enter** to issue the command.

PRTHLD – Holding a Spool Printer

Note Only the originating, forms change, or master terminals can issue this command.

The PRTHLD command holds a PRTJOB, PRTJOE, or PRTQUE spool print task after the current buffer is printed. You can issue this command any time after the print task starts. The format of the PRTHLD command is:

```
SYSD,PRTHLD,printer_id
     PH
```

This parameter	Specifies
printer_id	The ID of the CICS printer the print task is active on.

The print task accepts all other commands once it has been held. They automatically restart the printing unless otherwise indicated.

To restart the spool print task, issue the PRTHLD command again.

PRTJOB – Printing a Job on a CICS Printer

Note | Only the originating, forms change, and master terminals can issue this command.

The PRTJOB command prints all or part of a job's output on a CICS printer. This command emulates a normal JES writer, except it does not purge any of the job. The format of the PRTJOB command is:

```
SYSD,PRTJOB,job,printer_id,[sysout_id],[line],[begin_col],[scan_parms]
    PJ
    SPLPRT
```

This parameter	Specifies
job	The name or number of the batch job you want to print. For multiple jobs with the same name, CPMS/SYSD uses the first job it finds. If you specify the job number, type it exactly as it is shown when you issue the N or JOB command, omitting leading zeros.
printer_id	The ID of the printer you want to print the job on.
sysout_id	The type of JES2 SYSOUT dataset you want to print. The uppercase character represents the minimum abbreviation allowed.

Type	To print
Jcl	Execution JCL messages.

(continued)

Type	To print
Log	System log messages. This is the default.
Msg	System job messages.
nnn	User SYSOUT datasets referred to by the job number displayed when you issue the SPLDSN command.

line The line number in the SYSOUT dataset where you want to start and/or stop the printing. This parameter is a sublist of the beginning and ending line numbers. The default beginning line number is 1. The default ending line number is the last line in the dataset. For example:

Type	To
,111	Start on line 111 and print to the end of the dataset.
,(111)	Start on line 111 and print to the end of the dataset.
,(,10)	Start on line 1 and end on line 10.
,(10,20)	Start on line 10 and end on line 20.

To see the number of lines in the dataset, use the SPLDSN command.

begin_col The column number you want the output to start in. The carriage control character does not print. The default is 1.

scan_parms A sublist indicating you want CPMS/SYSD to perform a scan. This parameter is optional. Printing starts with the scan constant. The first subparameter is the search constant. If this subparameter contains non-alphanumeric characters, enclose it with apostrophes. The second subparameter is the beginning column where the scan is to start. The default is 1. The third subparameter is the ending scan column. The default is the actual line length. The following examples use these subparameters to find the word *error*:

Type	To scan
,ERROR	Each entire line.
,'ERROR'	Each entire line.
,('ERROR',10)	Each line starting in column 10.
,(ERROR,10,20)	From column 10 to column 20.
,(ERROR,,20)	From column 1 to column 20.

You must always specify a constant for the scan to occur.

PRTJOE – Starting a Spool JOE Writer

See the STRWTR command for more information.

```
SYSD,PRTJOE,printer_id,[writer_id],[queue_id],[sysout_classes],[form_id]
        [,DISP,NONSEL|PURGE|NEWDEST,new_dest|NEWCLASS,new_class]
    STRWTR
    SW
```

PRTPRG – Purging a Spool Printer

Note | Only the originating, forms change, and master terminals can issue this command.

The PRTPRG command purges a spool print task. For a PRTJOB task, the task stops printing the current job and stops. For a PRTQUE or PRTJOE task, the task purges the current job and continues selecting work. You can issue this command any time after the print task starts, even if it is on hold. The format of the PRTPRG command is:

```
SYSD,PRTPRG,printer_id
    PP
```

This parameter	Specifies
printer_id	The ID of the CICS printer the task is active on.

PRTQUE – Starting a Spool Writer on a CICS Printer

The PRTQUE command starts the hot writer. This command assigns CPMS/SYSD writer and selection criteria to a CICS printer. The writer scans the specified JES2 queues for SYSOUT datasets that meet the selection criteria. If CPMS/SYSD finds any datasets that meet the criteria, the writer prints the SYSOUT datasets; purges, holds, or routes them; and then repeats the JES2 queue scan. If no SYSOUT datasets meet the criteria, the writer sleeps for a specified delay interval and repeats the scan. In the interval, other printing can occur. The format of the PRTQUE command is:

```
SYSD,PRTQUE,printer_id,queue[,sysout_classes],[FORM,form_id]|
         ,[DISP,NONSEL|PURGE|NEWDEST,new_dest|NEWCLASS,new_class]
     PQ
```

This parameter	Specifies
printer_id	The ID of the CICS printer you want the writer to use.
queue	The JES2 destination queue the writer selects jobs from. You can type **LOCAL,** **remote_number,** or **unit_queue.**
sysout_classes	The JES2 SYSOUT classes the writer selects jobs from. The SYSOUT class is specified in the SYSOUT parameter of the print file's DD statement. The default is to select or print all classes. If you specify multiple classes, enclose them with parentheses. For example to select jobs from classes A and B, type ,(AB).
form_id	The forms type for the SYSOUT datasets to be selected.
NONSEL	Put the SYSOUT dataset on hold status after it is printed.
PURGE	Purge the SYSOUT dataset after it is printed.
NEWDEST,new_dest	Route the SYSOUT dataset to a new destination after it is printed.
NEWCLASS,new_class	Route the SYSOUT dataset to a new class after it is printed.

If the JES2 queue is local or remote, use a SYSOUT class that is not serviced by an OS writer. This eliminates any conflict with standard OS writers.

To stop a spool writer, issue the PRTSTP command or the T=stop option on Option 7, CPMS Printer Table Display/Change. See "CPMS Printer Table Display/Change" on page 201 for more information about the T=stop option.

PRTSTP – Stopping a Spool Writer

Note: Only the originating, forms change, and master terminals can issue this command.

The PRTSTP command stops a spool print task that was started by the PRTQUE command. If the spool writer is printing a job, it finishes printing the job before it stops. This is not an immediate stop; it is an orderly shutdown of the function. For an immediate stop, issue a PRTPRG command.

If a PRTQUE task has abended, this command resets it and stops the job.

The format of the PRTSTP command is:

```
SYSD,PRTSTP,printer_id
     PS
```

This parameter   **Specifies**

printer_id   The ID of the CICS printer the print task is active on.

PS – Stopping a Spool Writer

Note: Only the originating, forms change, and master terminals can issue this command.

See the PRTSTP command for more information.

```
SYSD,PS,printer_id
     PRTPRG
```

R – Displaying Outstanding Operator Requests

The R command displays the outstanding messages shown on the main operator console. Each message has a number the operator uses to answer the request. The format of the R command is:

```
SYSD,R
```

The following is an example of the information displayed when you issue the **SYSD,R** command:

```
  11/03/97          MVS/OS390 VERSION OF CPMS/SYSD RELEASE 6.4.1        PAGE 001
 MONDAY                  OS/VS - OUTSTANDING OPERATOR MESSAGES          12:55:24

 JOB03071 *70 IEC704A REPLY 'VOLSER,OWNER INFORMATION','M'OR'U'
 THERE ARE 00001 OUTSTANDING REPLIES.
 * * *  END OF DATA  * * *













 SYSD R
```

RECATLG – Recataloging an OS Dataset

SYSD only

The RECATLG command deletes a dataset entry from the OS/VS catalog and adds it and any associated volume serial numbers to the catalog. The format of the RECATLG command is:

```
SYSD,RECATLG,unit_type,vol_list,dsn
```

This parameter	*Specifies*
unit_type	The 1- to 8-character device type defined at system generation. You must specify the unit type the way you specify the UNIT parameter on a DD statement in the JCL.
vol_list	A list of one to five volume serial numbers. Each number is 1 to 6 characters long. The volumes must be mounted on the operating system when you issue this command. If you enter multiple volume serial numbers, separate each by a comma or blank and enclose the whole list with parentheses.
dsn	The 1- to 44-character name of the dataset you want to recatalog.

RELEASE – Releasing a Held Job

The RELEASE command releases a job held in a JES2 queue. The job continues its cycle through the operating system. If the job is in the JES2 input queue, it becomes eligible for execution. If the job is in the JES2 output queue, it becomes eligible for printing. The format of the RELEASE command is:

```
SYSD,RELEASE,job
```

This parameter	*Specifies*
job	The job number you want to release.

RENAME – Renaming a Dataset

SYSD only

The RENAME command renames a dataset but does not change the dataset's catalog entry. The format of the RENAME command is:

```
SYSD,RENAME,vol_list,old_dsn,new_dsn
```

This parameter	Specifies
vol_list	A list of one to five volume serial numbers. Each number is 1 to 6 characters long. The volumes must be mounted on the operating system when you issue this command. If you enter multiple volume serial numbers, separate each by a comma or blank and enclose the list with parentheses.
old_dsn	The 1- to 44-character dataset name you want to rename.
new_dsn	The new 1- to 44-character dataset name.

ROUTE – Routing a Job's Output

SYSD only

See the SPLRTE command for information.

```
SYSD,ROUTE,job,destination_class
     SPLRTE
     SR
```

SCRATCH – Scratching a Dataset

SYSD only

The SCRATCH command scratches a dataset, but does not uncatalog it. This command completely removes the dataset from the volume table of contents (VTOC) and returns the space it occupied to free space. The format of the SCRATCH command is:

```
SYSD,SCRATCH,vol_list,dsn
```

This parameter	Specifies
vol_list	A list of one to five volume serial numbers where the dataset may reside. Each number is 1 to 6 characters long. The volumes must be mounted on the operating system when you issue this command. If you enter multiple volume serial numbers, separate each by a comma or blank and enclose the list with parentheses.
dsn	The 1- to 44-character name of the dataset you want to scratch.

SD – Displaying a Job's Output

See the SPLDSP command for more information.

```
SYSD,SD,job,[sysout_id],[line_number],[begin_col],[scan_parms]
      SPLDSP
```

SHUT – Terminating CPMS/SYSD

The SHUT command terminates CPMS/SYSD's auxiliary tasks, disables the CPMS/SYSD transactions, and optionally terminates CICS depending on the **type** parameter. Normally, you only issue this command when you no longer need the functions of CPMS/SYSD.

Caution ▶ *You must shut down CPMS/SYSD with this command or through a PLT entry. Otherwise, CICS abends with an SA03 upon termination.*

The format of the SHUT command is:

```
SYSD,SHUT [,type]
```

This parameter	Specifies
type	The parameter CPMS/SYSD passes to the CEMT PERFORM SHUT command.

Type	To
NO	Indicate a normal CICS shutdown. PLT processing does not occur when CICS is shut down.
T	Temporarily shut down the CPMS/SYSD auxiliary tasks without disabling the transactions. The next CPMS/SYSD operation requiring the tasks must reinitialize them. This parameter is normally used to get a new copy of the auxiliary task programs.
YES	Indicate an immediate CICS shutdown. PLT processing occurs when CICS is shut down.

SJ – Displaying a Job's Output Elements

See the SPLJOE command for more information.

```
SYSD,SJ,[job],[destination]
     SPLJOE
```

SN – Displaying a Job's Output Dataset Summary

See the SPLDSN command for more information.

```
SYSD,SN,job
     SPLDSN
```

SP – Purging a Job's Output

See the SPLPRG command for more information.

```
SYSD,SP,job
     SPLPRG
```

SPLCLN – Cleaning Up the Spool Print Queue

The SPLCLN command selectively purges jobs from the JES2 queue. CPMS/SYSD scans for jobs that are more than 36 hours old or have output over 25,000 lines and purges them.

| Note | To protect Friday night jobs, this command does not operate on Saturday, Sunday, or Monday. |

The format of the SPLCLN command is:

```
SYSD,SPLCLN[,queue_name]
```

This parameter	Specifies
queue_name	The JES2 queue you want to scan. The default is established by the systems programmer.

SPLDSN – Displaying a Job's Output Dataset Summary

The SPLDSN command displays statistics about the datasets for a job in the JES2 spool and helps you determine the characteristics for displaying or printing the dataset. The format of the SPLDSN command is:

```
SYSD,SPLDSN,job
       SN
```

This parameter	Specifies
job	The name or number of the batch job you want to display. If you have multiple jobs with the same name, CPMS/SYSD displays the first one. When using the job number, type it exactly as shown when you issue the N or JOB command, omitting leading zeros.

Example

The following is an example of the screen displayed when you issue the **SYSD,SPLDSN,J07145** command:

```
  11/03/97              MVS/OS390 VERSION OF CPMS/SYSD RELEASE 6.4.1          PAGE 001
 MONDAY              OS/VS - JOB DATASET DISPLAY FOR JRNLPRNT J07145        11:56:39
 DSN  HSNC NUMLIN DEST       FORM      COPIES FCB  UCS  RECFM LRECL
 LOG      A    13 BW         STD         1    **** **** UA      133
     DDNAME=JES2.JESMSGLG                         GROUP ID = 1.1
 JCL      A    13 BW         STD         1    **** **** F       132
     DDNAME=JES2.JESJCL                          GROUP ID = 1.1
 MSG      A    26 BW         STD         1    **** **** VA      133
     DDNAME=JES2.JESYSMSG                         GROUP ID = 1.1
 101     NA     3 BW         STD         1    **** **** F        80
     DDNAME=PRINT.SYSIN
 104      A    27 BW         STD         1    **** **** FB      132
     DDNAME=PRINT.JRNLMSG                         GROUP ID = 1.1
     * * *  END OF DATA  * * *




 SYSD SD (J07145,*)
```

Field Definitions

Copies

The number of printed copies requested.

DDNAME

The 1- to 8-character DDNAME that is the last qualifier of the JES dataset name.

DEST

The ID of the printer the dataset is to be printed on.

DSN

The dataset name or number.

FCB

The forms control buffer being used. An **** means the default FCB defined in SYSDSETS.

Form

The form the dataset is to be printed on.

Group ID

The ID of the group the output element belongs to. JES assigns the group ID and the JOE ID. Together they form the OUTGROUP.

HSNC

Four columns that specify the dataset's status.

This column	Specifies
H	If the dataset is held.
S	If this is a spin dataset.
N	If the dataset is non-printable.
C	The dataset class. The class can be **A** through **Z** or **0** to **9**.

LRECL

The dataset's logical record length

NUMLIN

The approximate number of lines in the dataset.

RECFM

The format of the records in the dataset.

UCS

The universal character set used to display or print the dataset.

SPLDSP – Displaying a Job's Output

The SPLDSP command displays a job's output from the JES spool. The display acts as a window passing over the output. Various parameters shift the display up, down, left, or right. The format of the SPLDSP command is:

```
SYSD,SPLDSP,job,[sysout_id],[line_number],[begin_col],[scan_parms]
    SD
```

This parameter	*Specifies*
job	The name or number of the batch job you want to display. For multiple jobs with the same name, CPMS/SYSD uses the first one. If you use the job number, type it exactly as shown when you issue the N or JOB command, omitting leading zeros. This parameter consists of the following subparameters:

  * The job name or number.

  * For input, the execution class. For output, the message class. The default is the message class.

  * The queue ID. The default is **LOCAL**.

| **sysout_id** | The SYSOUT dataset type you want to display. Specify input and output datasets with the same parameter. The uppercase characters represent the minimum abbreviation allowed. |

Type	*To display*
CC	Condition codes.
Log	System log messages. This is the default.
Jcl	Execution JCL messages.
Msg	System job messages.
nnn	User SYSOUT datasets by number as displayed with the SPLDSN command.

line_number   The first line number in the SYSOUT dataset you want to display. The default is **1**. To display the last line, type **E** as the first character of this parameter. The SPLDSN command displays the number of lines in the dataset.

begin_col   The first column you want to display. The default is column **1**. Most SYSOUT data is formatted in 132 columns.

scan_parms   The constant you want to scan the dataset for. If this parameter is not specified, no scan occurs. This parameter consists of the following subparameters:

- The search constant. If this parameter contains non-alphanumeric characters or blanks, enclose it with apostrophes.

- The left-hand search column.

- The right-hand search column.

CPMS/SYSD searches between these two columns. If the left-hand search column is not specified, the default is column 1. If the right-hand search column is not specified, the default is the ending column, which is usually 132. The following examples search for the word *error*:

Type	To scan
,ERROR	Each entire line.
,'ERROR'	Each entire line.
,('ERROR',10)	Each line starting in column 10.
,(ERROR,10,20)	From column 10 to column 20.
,(ERROR,,20)	From column 1 to column 20.

You only need to enter the search constant once. CPMS/SYSD performs the search each time you press **Enter**. To browse the data without performing the search, use the following PF keys. CPMS/SYSD ignores the search constant, but reprompts it.

Use this PF key	To page
PF7	Up by one-half a screen.
PF8	Down by one-half a screen.
PF10	Left by one-half a screen.
PF11	Right by one-half a screen.

SPLJOE – Displaying a Job's Output Elements

The SPLJOE command displays the job's output elements (JOEs) that JES2 maintains. CPMS/SYSD displays information about each output group. This helps you determine the characteristics for printing the job. The format of the SPLJOE command is:

```
SYSD,SPLJOE,[job],[destination]
    SJ
```

This parameter	Specifies
job	The name of the batch job you want to display. The default is all JOEs.
destination	The destination ID of a remote or unit queue. The default is all remote or unit queues.

Example

The following is an example of the screen displayed when you issue the **SYSD,SPLJOE** command:

```
11/03/97          MVS/OS390 VERSION OF CPMS/SYSD RELEASE 6.4.1        PAGE 001
MONDAY          OS/VS - JOB OUTPUT ELEMENT DISPLAY                      10:17:38
JOB#   JOBNAME  CNOHSRU  PP DEST       FORM     FCB   UCS  #LINES   GRPID
J03039 BKUPSYSM X  H      144 CLEANUP   STD    **** ****     658   1.1.1
J03037 BKUPWIZM X  H      144 CLEANUP   STD    **** ****     371   1.1.1
J03034 BKUPLIBS X  H      144 CLEANUP   STD    **** ****     891   1.1.1
J03036 BKUPSYST X  H      144 CLEANUP   STD    **** ****     843   1.1.1
T02998 BW       X  H      144 LOCAL     STD    **** ****      32   1.1.1
T02964 BW       X  H      144 LOCAL     STD    **** ****      32   1.1.1
T02881 BW       X  H      144 LOCAL     STD    **** ****      32   1.1.1
J02858 BKUPSYST X  H      144 CLEANUP   STD    **** ****     848   1.1.1
J02857 BKUPSYSM X  H      144 CLEANUP   STD    **** ****     674   1.1.1
J02851 BKUPLIBS X  H      144 CLEANUP   STD    **** ****     932   1.1.1
J02855 BKUPSYST X  H      144 CLEANUP   STD    **** ****     300   1.1.1
J02853 BKUPWIZM X  H      144 CLEANUP   STD    **** ****     377   1.1.1
T02725 BW       X  H      144 LOCAL     STD    **** ****      31   1.1.1
J02673 BKUPSYSM X  H      144 CLEANUP   STD    **** ****     659   1.1.1
J02672 BKUPSYST X  H      144 CLEANUP   STD    **** ****     842   1.1.1
J02667 BKUPLIBS X  H      144 CLEANUP   STD    **** ****     967   1.1.1
J02669 BKUPWIZM X  H      144 CLEANUP   STD    **** ****     377   1.1.1
J02624 CICS44   D  H      144 CICS      STD    **** ****      1K   2.1.1

P/N
```

Field Definitions

#Lines

The approximate number of lines in the output element.

CNOHSRU

Seven columns that specify the output element's attributes.

This column	Specifies
C	The output element's job class.
N	A non-printable output element.
O	If the output element will be offloaded to a tape or disk.
H	A held output element.

(continued)

This column	Specifies
S	If the output element is a spin dataset. This means the output is eligible for printing as soon as the dataset has been created, no matter how many of the job's datasets are left to print.
R	If the output element is printing.
U	If the output element is punching.

DEST

The destination ID of the local or remote device the output is sent to.

FCB

The forms control buffer used to print the output element.

Form

The form the output element is to be printed on.

GRPID

The ID of the group the element belongs to. JES assigns the group ID and the JOE ID. Together they form the OUTGROUP.

Job#

The JES-assigned job number.

Jobname

The name of the job on the JOB card.

PP

The job's priority level.

UCS

The universal character set used to print or display the job.

SPLPRG – Purging a Job's Output

The SPLPRG command purges a batch job's output from the JES output queue and removes the output from the system. The format of the SPLPRG command is:

```
SYSD,SPLPRG,job
     SP
```

This parameter	Specifies
job	The JES2 job name or number of the job you want to purge.

SPLPRT – Printing a Job on a CICS Printer

Note Only the originating, forms change, and master terminals can issue this command.

See the PRTJOB command for more information.

```
SYSD,SPLPRT,job,printer_id,[sysout_id],[line],[begin_col],[scan_parms]
     PRTJOB
     PJ
```

SPLRTE – Routing a Job's Output

The SPLRTE command routes a batch job from the JES2 output queue to an OS writer and modifies it for printing. CPMS/SYSD routes the job to the destination and releases it. If the job is on hold or already resides in the specified destination, CPMS/SYSD releases it. The format of the SPLRTE command is:

```
SYSD,SPLRTE,job,destination_class
     ROUTE
     SR
```

This parameter	Specifies
job	The job number of the job you want to route.

(continued)

This parameter	Specifies
destination_class	The destination you want to route the job to.
	For JES2, this is a destination queue. The default is **LOCAL**.
	For JES3, this is a job class.

SR – Routing a Job's Output

See the SPLRTE command for more information.

```
SYSD,,SR,job,destination_class
     SPLRTE
     ROUTE
```

STAT – Displaying CICS's General Statistics

SYSD only

The STAT command displays general statistics about CICS including execution, current task, main storage, and temporary storage information. The format of the STAT command is:

```
SYSD,STAT[,TASK]
```

This parameter	Specifies
TASK	Display all active and suspended CICS tasks.

STATUS – Displaying a Job's Status

See the JOB command for more information.

```
SYSD,STATUS,[job]
     JOB
```

STPWTR – Stopping a Spool JOE Writer

> **Note** Only the originating, forms change, and master terminals can issue this command.

The STPWTR command stops a STRWTR spool print task. The spool writer finishes printing the current job and stops. This is not an immediate stop, but an orderly shutdown of the function. For an immediate stop, issue the PRTPRG command after you issue the STPWTR command.

The format of the STPWTR command is:

```
SYSD,STPWTR,printer_id
```

This parameter	Specifies
printer_id	The CICS printer the task is active on.

STRWTR – Starting a Spool JOE Writer

The STRWTR command starts the CPMS/SYSD job output element (JOE) writer. This command assigns CPMS/SYSD writer and selection criteria to a printer. The writer scans the specified JES2 queues for SYSOUT datasets that meet the selection criteria. If it finds any, the writer prints the datasets; purges, holds, or routes them; and then repeats the JES2 queue scan. If it does not find any, the writer sleeps for the specified scan interval and then repeats the scan. In the sleep interval, other printing can occur.

The format of the STRWTR command is:

```
SYSD,STRWTR,printer_id,[writer_id],[queue_id],[sysout_classes],[form_id]
          [,DISP,NONSEL|PURGE|NEWDEST,new_dest|NEWCLASS,new_class]
     SW
     PRTJOE
```

This parameter	Specifies
printer_id	The CICS printer you want to start the writer on.
writer_id	The JES2 SYSOUT writer name the writer selects datasets from.

(continued)

This parameter	Specifies
queue_id	The JES2 destination queue the writer selects jobs from. Valid destinations are: **LOCAL, remote_number**, or **unit_queue.**
sysout_classes	The JES2 SYSOUT classes the writer selects jobs from. The job class is specified in the SYSOUT parameter on the DD statement for the print file. The default is **A** through **Z** and **0** through **9.**
form_id	The forms type the writer selects jobs from.
NONSEL	Put the SYSOUT dataset on hold status after it is printed.
PURGE	Purge the SYSOUT dataset after it is printed.
NEWDEST,new_dest	Route the SYSOUT dataset to a new destination after it is printed.
NEWCLASS,new_class	Route the SYSOUT dataset to a new class after it is printed.

SUBD – Submitting a Job for Executing Using the DCT Entry

See the SUBMITD command for more information.

```
SYSD,SUBD, [vol_ser],dsn[,member]
    SUBMITD
```

SUBMIT – Submitting a Job for Execution

The SUBMIT command submits a job stream from a sequential dataset or PDS member to JES. The dataset must contain a proper JCL job stream. CPMS/SYSD only checks to make sure the dataset exists; it does not check it for JCL errors. The format of the SUBMIT command is:

```
SYSD,SUBMIT, [vol_ser],dsn[,member]
```

This parameter	Specifies
vol_ser	The volume serial number where an uncataloged dataset resides. This parameter is optional if the dataset is cataloged.
dsn	The name of a partitioned or sequential dataset you want to submit.
member	The name of the PDS member you want to submit. For sequential datasets, omit this parameter.

CPMS/SYSD starts a separate task to submit the job. A job has not necessarily been submitted when you receive the completion message.

SUBMITD – Submitting a Job for Execution Using the DCT Entry

The SUBMITD command submits a job stream from a sequential dataset or PDS member to JES. This command uses the SYSD DCT entry, which points to the internal reader, to perform the submit. The dataset must contain a proper JCL job stream. The only checking CPMS/SYSD does it to make sure the dataset exists. The format of the SUBMITD command is:

```
SYSD,SUBMITD,[vol_ser],dsn[,member]
    SUBD
```

This parameter	Specifies
vol_ser	The volume serial number where an uncataloged dataset resides. This parameter is optional if the dataset is cataloged.
dsn	The name of the partitioned or sequential dataset you want to submit.
member	The name of the PDS member you want to submit. For a sequential dataset, omit this parameter.

SUBTD – Submitting a Job from a TD Queue

The SUBTD command submits a job stream from a CICS transient data (TD) queue to JES. The transient data queue must contain the proper JCL job stream. The format of the SUBTD command is:

```
SYSD,SUBTD,td_queue,[P],[N]
```

This parameter	Specifies
td_queue	The 1- to 4-character name of the CICS transient data queue where the JCL resides. This parameter is required.
P	Purge the CICS transient data queue. If this parameter is not specified, the CICS transient data queue will not be purged.
N	Do not send a message to the user's terminal. This is used to support EXEC CICS LINKs from user application programs to the CPMS/SYSD Application Program Interface (API). The default is to send all messages to the user's terminal.

If the transient data queue does not support purge, the purge indicator may cause an ATDT abend.

SUBTS – Submit a Job from a TS Queue

The SUBTS command submits a job stream from a CICS temporary storage (TS) queue to JES. The temporary storage queue must contain the proper JCL job stream. The format of the SUBTS command is:

```
SYSD,SUBTS,[ts_queue],[K],[N]
```

This parameter	Specifies
ts_queue	The CICS temporary storage queue where the JCL resides. The default is **CFTRterminal_id**.
K	Keep the CICS temporary storage queue. If this parameter is not specified, the CICS temporary storage queue will be purged.

This parameter	Specifies
N	Do not send a message to the user's terminal. This parameter is used to support EXEC CICS LINKs from user application programs to the CPMS/SYSD Application Program Interface (API). The default is to send all messages to the user's terminal.

If the first 8 bytes of the first record is the queue ID, CPMS/SYSD ignores the first record and starts the job submission at the second record.

SW – Starting a Spool JOE Writer

See the STRWTR command for more information about this command.

```
SYSD,SW,printer_ID,[writer_id],[queue_id],[sysout_classes],[form_id]
     [,DISP,NONSEL|PURGE|NEWDEST,new_dest|NEWCLASS,new_class]
   STRWTR
   PRTJOE
```

SYSDTASK – Displaying the Status of the Auxiliary Tasks

The SYSDTASK command displays the status of the auxiliary tasks CPMS/SYSD uses. This command is used for debugging purposes. The format of the SYSDTASK command is:

```
SYSD,SYSDTASK,[task_id]
```

This parameter	Specifies
task_id	The ID of the task you want to display. The default is the general status of all the auxiliary tasks.

TERM – Displaying and Changing the TCT

The TERM command displays either a summary of all the entries in the Terminal Control Table (TCT) or a summary of the variable settings for a specific TCT entry. Each entry represents a terminal to CICS. You can use this command to change a TCT entry's variable settings. The format of the TERM command is:

```
SYSD,TERM[,terminal_id] [,subfunction] [,new_value]
```

Caution ▶ *The user must sign on and then sign off for the alternate screen size to take effect. Be careful when you use the MODx parameters.*

This parameter	*Specifies*
terminal_id	The ID of the TCT entry you want to display or change. The default is a summary of the table. To summarize the entry for your terminal, type a question mark (?) as this parameter.
	If you do not know your terminal ID, type a question mark (?) and press **Enter**.
	Use a plus sign (+) in any position of the terminal ID to match all characters in that position. Use an asterisk (*) to match any character in the terminal ID in that position and beyond.
subfunction	The subfunction you want to assign a new value to. The default is a summary of the variable settings for the TCT entry specified by the **terminal** parameter.

Type	*To*
AUTH	Set all the terminal's TCTTE security bits to 1. CICS version 3.2 and above does not support this feature.
DCKYBD	Toggle the dual-case keyboard indicator off and on.

Type	*To*
EXTG	Toggle the extended features indicators off and on. These indicators include color, extended data streams, and highlighting. CICS version 3.2 and above does not support the extended features indicators.
IN	Change the terminals' status to in service.
LTPN	Toggle the light pen indicator off and on. CICS version 3.2 and above does not support the light pen feature.
MOD2	Set the terminal's alternate screen size to 0. CICS version 3.2 and above does not support this alternate screen size.
MOD3	Set the terminal's alternate screen size to 32 rows by 80 columns. CICS version 3.2 and above does not support this alternate screen size.
MOD4	Set the terminal's alternate screen size to 43 rows by 80 columns. CICS version 3.2 and above does not support this alternate screen size.
MOD5	Set the terminal's alternate screen size to 27 rows by 132 columns. CICS version 3.2 and above does not support this alternate screen size.
OUT	Change the terminal's status to out of service.
PRTY	Change the terminal's priority to **new_value**.
UCTRAN	Switch the uppercase translation indicator off and on.

new_value   The new priority you want to assign to the **subfunction**. For example, you can change the PRTY subfunction to a number from 0 to **255**.

TRAN – Displaying and Changing the PCT

SYSD only

The TRAN command displays either a summary of all the entries in the Program Control Table (PCT) or a summary of the variable settings for a specific PCT entry. Each entry represents a transaction ID to CICS. You can use this command to change a PCT entry's variable settings. The format of the TRAN command is:

```
SYSD,TRAN[,tran_id] [,subfunction] [,new_value]
```

This parameter	Specifies
tran_id	The ID of the transaction you want to display or change. The default is a summary of all the entries in the PCT. This parameter is required if you are changing the PCT.
subfunction	The subfunction you want to change for the PCT entry. The default is a summary of the variable settings for the PCT entry specified by the trans_id parameter.

Type	To
DIS	Disable the entry.
ENA	Enable the entry.
NEW	Change the initial program to new_value.
PRTY	Change the transaction priority to new_value.
TRAN	Change the transaction ID to new_value.
TWA	Change the transaction work area size to new_value.

This parameter	Specifies
new_value	The new value you want to assign to the **subfunction**. For example:

If subfunction is	Specify new_value as
NEW	A 1- to 8-character program ID.
PRTY	A number from 0 to 255.
TRAN	A 1- to 4-character transaction ID.
TWA	A number from 0 to 32767.

TRT – Displaying the CICS Trace Table

Note The TRT command is only for CICS version 2.1.x and below.

SYSD only

The TRT command displays the CICS Trace Table, which provides a snapshot of the actions CICS has just performed. The format of the TRT command is:

```
SYSD,TRT
```

TSQ – Displaying and Purging Temporary Storage Queues

See the TSQUEINQ command for more information.

```
SYSD,TSQ,[queue_name],[PURGE]
     TSQUEINQ
```

TSQUEINQ – Displaying and Purging Temporary Storage Queues

The TSQUEINQ command displays either a summary of the temporary storage queues or a specific temporary storage queue. It also lets you purge a temporary storage queue. The format of the TSQUEINQ command is:

```
SYSD,TSQUEINQ, [queue_name], [PURGE]
     TSQ
```

This parameter	Specifies
queue_name	The name of the temporary storage queue you want to display or purge. The default is a summary of all the allocated temporary storage queues. To display a summary of a selected group of temporary storage queues, specify an asterisk (*) as part of the temporary storage queue name. For example, type **CFTR*** to display a list of all the temporary storage queues that begin with the characters CFTR.
PURGE	Purge the temporary storage queue. The **queue_name** parameter is required to purge a temporary storage queue.

U – Displaying All the DASD Volumes

SYSD only

The U command displays the unit control blocks (UCBs). There is one UCB for each peripheral device attached to the computer. Each UCB identifies the device and its status. The format of the U command is:

```
SYSD,U[,unit_type] [,ADDR]
```

This parameter	Specifies
unit_type	The classification of the devices you want to display. The default is all devices.

Type	To display
DASD	Direct access devices or disks.
GRAPHICS	Graphic display devices.
TAPE	Magnetic tape devices.
TP	Teleprocessing terminals.
UR	Unit record devices such as card readers.

ADDR	Display the address of the UCB for the unit.

UNCATLG – Uncataloging an OS Dataset

SYSD only

The UNCATLG command removes a dataset name entry from the OS/VS catalog. The format of the UNCATLG command is:

```
SYSD,UNCATLG,[control_vol],dsn
```

This parameter	Specifies
control_vol	The 1- to 6-character control volume serial number where the catalog resides. SYSD starts the catalog search with the catalog found on the control_vol. The default is the master catalog.
dsn	The 1- to 44-character dataset name you want to uncatalog.

VC – Issuing VM Commands

See the VMCMD command for more information about this command.

```
SYSD,VC,command
    VMCMD
```

VMCMD – Issuing VM Commands

The VMCMD command lets you issue VM console commands from your own terminal. The format of the VMCMD command is:

```
SYSD,VMCMD,command
     VC
```

This parameter	Specifies
command	The VM command or sublist of VM commands you want to issue. If you specify a sublist of VM commands, separate each command with the number sign (#).

VMRESET – Ending a Dialed Session

Caution ▶ *You should only use this command with BTAM terminals. Issuing this command under VTAM may cause a LOST PORT condition.*

The VMRESET command returns the terminal to VM's control if the terminal was initially dialed into an operating system under the control of VM. The format of the VMRESET command is:

```
SYSD,VMRESET
     VR
```

VR – Ending a Dialed Session

See the VMRESET command for more information.

```
SYSD,VR
     VMRESET
```

Appendix A

Summary of CPMS/SYSD Commands

This appendix lists the CPMS/SYSD commands organized by function.

CPMS/SYSD Spool Display and Print Commands

The following is an alphabetical list of the commands you can use to display and print jobs in the spool:

Command	Function
SYSD,A[,ALL]	Displays executing jobs.
SYSD,AA[,ALL]	Dynamically displays executing jobs.
SYSD,CANCEL,job	Cancels a job.
SYSD,ENDAUTO	Ends a dynamic display.
SYSD,HOLD,job	Holds a job.
SYSD,JOB,[job] STATUS	Displays a job's status.
SYSD,JOECLN,[queue_name]	Purges the job output elements in a JES2 queue.
SYSD,MENU[,user_id] [,password] [,address]	Signs on to menu-driven CPMS/SYSD.
SYSD,N, [queue_name] [,destination]	Displays all the jobs in a queue.
SYSD,OSCMD,command OC	Issues an operator command.
SYSD,PRTADJ,printer_id,page_number PA	Adjusts a spool printer.
SYSD,PRTCNL,printer_id PC	Cancels a spool print dataset.
SYSD,PRTDSP[,printer_id] [,subfunction] [,new_value] PD	Displays a spool printer's status.
SYSD,PRTFRM,printer_id PF	Replies to a forms change request.

Command	Function
SYSD,PRTHLD,printer_id 　　PH	Holds a spool printer.
SYSD,PRTJOB,job,printer_id,[sysout_id],[line],[begin_col] 　　　　,[scan_parms] 　　PJ 　　SPLPRT	Prints a job on a CICS printer.
SYSD,PRTPRG,printer_id 　　PP	Purges a spool printer.
SYSD,PRTQUE,printer_id,queue[,sysout_classes],[FORM,form_id]| 　　　　,[DISP,NONSEL|PURGE|NEWDEST,new_dest| 　　　　NEWCLASS,new_class] 　　PQ	Starts a spool writer (hot writer) on a CICS printer.
SYSD,PRTSTP,printer_id 　　PS	Stops a spool writer (hot writer).
SYSD,R	Displays outstanding operator requests.
SYSD,RELEASE,job	Releases a held job.
SYSD,SPLCLN[,queue_name]	Cleans up the spool print queue.
SYSD,SPLDSN,job 　　SN	Displays a job's output dataset summary.
SYSD,SPLDSP,job,[sysout_id],[line_number],[begin_col] 　　　　,[scan_parms] 　　SD	Displays a job's output.
SYSD,SPLJOE,[job],[destination] 　　SJ	Displays a job's output elements.
SYSD,SPLPRG,job 　　SP	Purges a job's output.
SYSD,SPLRTE,job,destination_class 　　ROUTE 　　SR	Routes a job's output.
SYSD,STPWTR,printer_id	Stops a STRWTR spool print task.

Command	Function

SYSD,STRWTR,printer_id,[writer_id],[queue_id],[sysout_classes]
    ,[form_id][,DISP,NONSEL|PURGE|NEWDEST,new_dest|
    NEWCLASS,new_class]
  SW
  PRTJOE
	Starts a spool JOE writer.

SYSD,SUBMIT,[vol_ser],dsn[,member]	Submits a job for execution.
SYSD,SUBMITD,[vol_ser],dsn[,member] SUBD	Uses the DCT entry to submit a job.
SYSD,SUBTD,td_queue,[P],[N]	Submits a job from a transient data queue.
SYSD,SUBTS,[ts_queue],[K],[N]	Submits a job from a temporary storage queue.

SYSD DASD Commands

The following is an alphabetical list of the commands you can use to manage your DASD:

Command	Function
`SYSD,CATLG,unit_type,vol_list,dsn`	Catalogs an OS dataset.
`SYSD,COMPRESS,,dsn`	Compresses a PDS dataset.
`SYSD,DLTA,[control_vol],index`	Deletes a high-level index alias.
`SYSD,DLTX,[control_vol],index`	Disconnects a catalog.
`SYSD,DRPX,[control_vol],index`	Deletes a primary or generation index.
`SYSD,DSN,[vol_ser],dsn`	Displays a dataset's attributes.
`SYSD,DSPCHR,vol_ser,cchhr`	Displays a DASD record.
`SYSD,ENQ,[queue_name],[dsn]` `SYSD,ENQ,[WAIT]`	Displays the OS global resource serialization queue.

`SYSD,LISTCAT,[control_vol],node`
`    LISTC`
`    LC`
	Lists an OS CVOL catalog.

`SYSD,LISTPDS,[vol_ser],dsn,[member][,format]`
`    LISTD`
`    LD`
	Displays a PDS directory.

`SYSD,LISTVTOC,vol_ser` `    LV`	Displays a volume table of contents.
`SYSD,LOCATE,[control_vol],dsn,[BYPASS]`	Displays the OS catalog for an OS dataset.
`SYSD,OSPRINT,,dsn,member` `    OP`	Prints a PDS member.
`SYSD,PDSALIAS,[vol_ser],dsn,member,alias`	Adds an alias to a PDS member.
`SYSD,PDSCHG,[vol_ser],dsn,member,new_name`	Renames a PDS member.

Command	Function
SYSD,PDSDEL,[vol_ser],dsn,member	Deletes a PDS member.

SYSD,PDSDSPLY,[vol_ser],dsn,member
    LIST
    L
	Displays a PDS source member.

SYSD,RECATLG,unit_type,vol_list,dsn	Recatalogs an OS dataset.
SYSD,RENAME,vol_list,old_dsn,new_dsn	Renames a dataset.
SYSD,SCRATCH,vol_list,dsn	Scratches a dataset.
SYSD,U[,unit_type] [,ADDR]	Displays all UCBs.
SYSD,UNCATLG,[control_vol],dsn	Uncatalogs an OS dataset.

SYSD CICS Management Commands

The following is an alphabetical list of the commands you can use to manage CICS:

Command	Function
`SYSD,AID,[terminal_id]`	Displays outstanding AIDs.
`SYSD,ALLOC[,dsn] [,type]` `   AL`	Displays CICS's currently allocated datasets.
`SYSD,ASRA`	Displays CICS's last ASRA abend.
`SYSD,CICSTRAN`	Displays CICS's transaction IDs.
`SYSD,CORE,address,[verify_data,change_data]` `SYSD,CORE,[,,scan_data]`	Displays or changes virtual memory.
`SYSD,DEST[,destination] [,subfunction] [,new_value]`	Displays or changes the DCT.
`SYSD,FILE[,file_id] [,subfunction] [,new_value]`	Displays or changes the FCT.
`SYSD,IC,[tran_id]`	Displays CICS's interval control elements.
`SYSD,LPAD [,program_id]`	Displays the OS/VS link pack directory.
`SYSD,MLPAD [,program_id]`	Displays the OS/VS modified link pack directory.
`SYSD,MODULE`	Displays CICS's module addresses.
`SYSD,NONSWAP`	Changes CICS's swap status to non-swappable.
`SYSD,OKSWAP`	Changes CICS's swap status to swappable.
`SYSD,PROG[,program_id] [,subfunction] [,new_value]`	Displays or changes the PPT.
`SYSD,STAT [,TASK]`	Displays general CICS statistics.

Command	Function
`SYSD,TERM[,terminal_id] [,subfunction] [,new_value]`	Displays or changes the TCT.
`SYSD,TRAN[,tran_id] [,subfunction] [,new_value]`	Displays or changes the PCT.
`SYSD,TRT`	Displays the CICS trace table.
`SYSD,TSQUEINQ, [queue_name] , [PURGE]` `    TSQ`	Displays or purges temporary storage queues.

CPMS/SYSD Management Commands

The following is an alphabetical list of the commands you can use to manage CPMS/SYSD:

Command	Function
`SYSD,HELP[,function]`	Displays the online help.
`SYSD,JES2LJOB,job`	Displays a job's JES2 control blocks.
`SYSD,JES2TTR,ttr`	Displays a JES2 spool block.
`SYSD,SHUT[,type]`	Shuts down CPMS/SYSD.
`SYSD,SYSDTASK,[task_id]`	Displays the status of the auxiliary task.
`SYSD,VMCMD,command` `VC`	Issues a VM command.
`SYSD,VMRESET` `VR`	Ends a dialed session.

Appendix B

Error Messages

This appendix lists the error messages CPMS/SYSD generates. To identify what type of error it is, the error message ID is preceded by one of the following characters:

This character	Means
E	Error message
I	Informational message
T	Temporary error; retry the function
W	Warning message

Message ID	Messages text	Description
E0001	INVALID PRIMARY COMMAND (ENTER ASSUMED).	The primary command is invalid or unknown to this function. Correct the command and issue it again.
E0002	ONE OR MORE INVALID LINE OPTIONS WERE FOUND.	The line option command is invalid or unknown to this function. Correct the command and issue it again.
W0003	PUT/PRINT NOT SUPPORTED WITH CONDITION CODE DISPLAY.	The request was ignored.
E0004	INVALID LINE NUMBER GIVEN.	The line number specified is non-numeric or too large.

Message ID	Messages text	Description
I0005	AUTONUM IS ALREADY ACTIVE.	Automatic numbering is active. The request was ignored.
E0006	WTR IS ALREADY ACTIVE.	A start was issued for an active printer. The request was ignored.
I0007	MOVE/COPY IS IN PROGRESS.	A M (Move) or C (Copy) line command is pending. Complete or cancel the command.
I0008	BLOCK COMMAND IS INCOMPLETE.	An unpaired block line command was entered. Complete or cancel the command.
E0009	BLOCK COMMAND IS INVALID.	An unmatched block command pair was entered. Correct or cancel the command.
I0010	NULLS IS ALREADY ACTIVE.	The NULLS ON command has already been issued. The command is ignored.
I0011	NULLS IS NOT ACTIVE.	The NULLS OFF command has already been issued. The command is ignored.
E0012	INVALID OR MISSING SCAN STRING.	The parameters for this command are invalid or missing. Correct the command and issue it again.
I0013	END OF FILE REACHED.	The FIND command reached the end of the file without finding the character string.
E0014	UNAUTHORIZED DESTINATION.	The user is not authorized to specify this destination.
I0015	JOB HAS BEEN SUBMITTED.	The job has been submitted to the operating system with the SUBMIT command.
E0016	CHARACTER STRING NOT FOUND.	The FIND command could not find the character string.
I0017	CHARACTER STRING FOUND.	The FIND command found the character string.
T0018	I/O ERROR, DATA NOT UPDATED.	The work session was not saved. You may need to do a compress.

Message ID	Messages text	Description
W0019	FILE IS EMPTY, SAVE NOT PERFORMED.	The work file did not have any records. The OS file was not updated.
E0020	SUBMIT FAILED.	System error. Call your SYSD administrator.
I0021	CHARACTER STRING CHANGED.	The CHANGE command processed successfully.
I0022	TOP OF FILE REACHED.	The FIND PREVIOUS command reached the top of the file without finding the character string.
E0023	INVALID TRUNC VALUE SPECIFIED.	The column number specified on the TRUNC command is invalid.
E0024	INVALID ZONE(S) SPECIFIED.	The column numbers specified on the FIND command are invalid.
E0025	MODID COLUMN IS INVALID.	The column number specified on the MODID command is invalid.
E0026	USER IDENTIFIER IS INVALID.	The specified user ID is unknown or is a duplicate.
E0027	INVALID DESTINATION SPECIFIED.	The specified JES2 destination is invalid.
E0028	PASSWORD IS MISSING OR INVALID.	The specified password is invalid or the password was not specified at all.
E0029	FILE, SYSDUSER, IS NOT USABLE.	An I/O error occurred on the user file. Call your SYSD administrator.
E0030	COMMAND/FUNCTION NOT AVAILABLE.	The requested function is not supported at the current system level.
E0031	INVALID DESTINATION IDENTIFIER.	The route request specified an invalid JES2 destination.
E0032	INVALID CLASS (USE A-Z, 0-9 OR *.).	The specified class was non-numeric or non-alphabetic.
E0033	THIS FIELD MUST BE "Y" OR "N".	Type Y (Yes) or N (No) in this field.

Message ID	Messages text	Description
E0034	CLASS MUST BE SPECIFIED FOR LOCAL DESTINATION.	A class must be specified for the local print queue.
E0035	INVALID TERMINAL IDENTIFIER.	The target terminal for the print request is unknown or out of service.
E0036	DATA SET NOT FOUND.	The dataset was not cataloged or was not on the specified volume.
W0037	NO LINES TO DISPLAY.	The job has no output to display.
W0038	NO OUTPUT TO PROCESS.	The job has no output to print or punch.
E0039	*** SECURITY VIOLATION - ACCESS DENIED.	The user is not authorized for the requested function.
E0040	NO RECORD TO PROCESS.	A PUT request was specified for an empty edit session.
E0041	RECORD KEY HAS CHANGED, NOT UPDATED.	The displayed record does not correspond to the entered key. The update request was ignored.
E0042	RECORD WAS NOT FOUND.	A delete request was specified for a record that does not exist.
W0043	RECORD ALREADY EXISTS.	The request to add a record specified a duplicate key.
E0044	&&$HLPNAME HELP DATA SET NOT FOUND.	The SYSD help file is unavailable. Call your SYSD administrator.
E0045	INVALID OR DUP DESTINATION SPECIFIED.	A JES2 destination ID is invalid or the new destination is a duplicate of the selection criteria destination.
E0046	INVALID OR DUP CLASS SPECIFIED.	A JES2 class is invalid or the new class is a duplicate of the selection criteria class.
W0047	JOB NOT FOUND.	The job is not available in the JES queue.

Message ID	Messages text	Description
E0048	LINE OPTION FAILED.	The requested action for the job was not successful.
I0049	MEMBER UPDATED.	The edit work subfile was successfully written to the OS dataset.
I0050	EDIT SESSION HAS BEEN CANCELED.	The edit work subfile was deleted from SYSD.
I0051	NO EDIT SESSIONS IN PROGRESS.	The request to display an edit session shows there are no active sessions.
I0052	EDIT SESSION RESUMED.	The request to start an edit session resulted in an existing edit session being resumed.
E0053	CONFLICTING DISPOSITION PARAMETERS SPECIFIED.	The disposition parameters conflict or are incomplete.
E0054	MEMBER NOT FOUND.	The specified member is not in the specified PDS.
E0055	MEMBER NAME GIVEN FOR SEQUENTIAL FILE.	The requested file is not a PDS.
E0056	SESSION NOT FOUND.	The request to delete an edit session failed.
W0057	SESSION EMPTY. SUBMIT NOT PERFORMED.	The work session does not have any records. The submit request was ignored.
E0058	INVALID DATASET ORGANIZATION.	The DSORG for the requested dataset was not **PS** or **PO**.
E0059	INVALID RECORD FORMAT.	The dataset's record format was not fixed, undefined, or variable.
E0060	LRECL IS BELOW THE MINIMUM VALUE.	The file's logical record length is less than 10.
E0061	LRECL EXCEEDS THE MAXIMUM VALUE.	The file's logical record length is greater than 255.
E0062	OPEN ERROR OCCURRED ON THE DATASET.	The dataset could not be processed. Call your SYSD administrator.

Message ID	Messages text	Description
E0063	SPOOL WRITER NOT STARTED.	System error. Call your SYSD administrator.
E0064	PRINTER ID NOT FOUND IN SYSDPTBL.	The SYSD print subsystem does not recognize the selected printer.
W0065	PRINTER IS NOT ACTIVE.	The request for a status change was issued for a printer that is not active.
I0066	SPOOL WRITER HAS BEEN STARTED.	The start process has completed.
E0067	INVALID DATASET NAME ENTERED.	There was a syntax error in the DSN and/or member name entry.
E0068	REQUESTED SESSION NOT FOUND.	A current edit session with the specified name does not exist.
W0069	DATASET(MEMBER) BEING EDITED BY ANOTHER USER.	The request to start an edit session will result in duplicate sessions.
E0070	DATASET(MEMBER) BEING EDITED BY ANOTHER USER (user_id) IN ANOTHER REGION.	The request to start an edit session failed. Another user ID is displayed if possible.
E0071	I/O ERROR READING SPOOL.	A JES spool read error occurred. The processing for this job was terminated.
W0072	INVALID JCT -JOB NO LONGER AVAILABLE.	The processing for this job was terminated.
W0073	INVALID IOT -JOB NO LONGER AVAILABLE.	The processing for this job was terminated.
W0074	DATASET UNAVAILABLE FOR PRINT/DISPLAY.	The processing for this job was terminated.
E0075	SVC99 (ALLOCATE) FAILED.	The dynamic allocation failed. Call your SYSD administrator.

Message ID	Messages text	Description
E0076	SVC99 (DE-ALLOCATE) FAILED.	The dynamic deallocation failed. Call your SYSD administrator.
I0077	MEMBER UPDATED, (INPLACE).	The work session was successfully saved in the PDS (INPLACE).
E0078	TEMP STORAGE GETQ ERROR.	System error. Call your SYSD administrator.
E0079	LINE EXCEEDS SPOOL DISPLAY MAXIMUM.	The processing for this job was terminated.
E0080	MEMBER ALREADY EXISTS, USE REPLACE.	The CREATE request specified an existing member.
E0081	SECURITY VIOLATION ON THIS PRINTER.	The user is not authorized to control this printer.
W0082	PRIOR COMMAND STILL ACTIVE, TRY LATER.	The request was ignored.
E0083	INVALID OR MISSING PAGE NUMBER.	The request was ignored.
E0084	UNEXPECTED ERROR HAS OCCURRED.	The processing for this job was terminated.
E0085	SPOOL WRITER NOT ACTIVE.	The STOP request was ignored.
I0086	RECORD HAS BEEN ADDED.	The user record was successfully added.
I0087	RECORD HAS BEEN DELETED.	The user record was successfully deleted.
I0088	RECORD HAS BEEN INITIALIZED.	The user record has been prepared for being added.
I0089	RECORD HAS BEEN UPDATED.	The user record was successfully updated.

Message ID	Messages text	Description
E0090	I/O ERROR ON OUTPUT, SAVE FAILED.	The work session save failed. Call your SYSD administrator.
E0091	DIRECTORY FULL OR I/O ERROR, SAVE FAILED.	The PDS directory was full. The save failed.
I0092	NOTHING UPDATED, SAVE NOT PERFORMED.	The work session was not updated. The data was not rewritten.
E0093	MEMBER NAME MISSING OR INVALID.	The valid commands are HELP INDEX or HELP NEW.
I0094	CONTINUING TO NEXT PRINT DATA SET.	The print job will continue with the next dataset or job.
I0095	PRINTER PLACED IN HOLD STATUS.	The printer is waiting for the release command.
I0096	SYSD/CPMS PRINT ADJUST ISSUED.	This is an audit message for the PRTADJ command.
I0097	SYSD/CPMS PRINT CANCEL ISSUED.	This is an audit message for the print cancel command.
I0098	SYSD/CPMS PRINT PURGE ISSUED.	This is an audit message for the PRTPRG command.
W0099	NO LINES TO PRINT.	There is no output available for printing.
W0100	NO OUTPUT TO PRINT.	There is no output available for printing.
E0101	UNEXPECTED ERROR OCCURRED (INITTSA).	System error. Call your SYSD administrator.
W0102	SELECTED SAME JOB TWICE - POSSIBLE LOOP.	The hot writer was put in hold status. Call your SYSD administrator.
I0103	MEMBER(S) DELETED.	The request to delete a member was successful.
E0104	MEMBER(S) COULD NOT BE DELETED.	The request to delete a member failed.

Message ID	Messages text	Description
I0105	COMMAND AVAILABLE ONLY WITH JES2 SP.	The current version of JES does not support the function requested.
I0106	PDS DIRECTORY CONTAINS NO MEMBERS.	The request for a directory display was ignored.
W0107	FIRST CARD NOT JOB CARD, SUBMIT CONTINUING.	The user profile JOB statements were not available CPMS/SYSD submitted the work file as is.
I0108	JOB SUBMITTED WITH USER PROFILE JOB STATEMENT(S).	The user profile JOB statements have been prefixed to the work session and submitted.
I0109	VERIFY DELETE(S), PRESS ENTER TO PROCESS.	SYSD is waiting for confirmation or cancellation of the delete request.
I0110	SELECTED FUNCTION NOT ALLOWED FOR THIS USERID.	The user is not authorized for this function.
I0111	SELECTED FUNCTION HAS BEEN DISABLED BY SYSTEM ADMINISTRATOR.	This function is not available to any users.
I0112	CHARACTER STRING NOT FOUND AFTER 5,000 RECORDS SEARCHED.	The record scan limit was reached before CPMS/SYSD found the string.
W0113	DATA SET BEING COMPRESSED OR IN USE BY ANOTHER JOB - RETRY LATER.	The dataset was unavailable. The request was ignored.
I0114	END OF ADDRESSABLE AREA REACHED.	The request referenced an invalid virtual storage address.
E0115	SYSD ATP INTERFACE NOT INSTALLED, SEQUENTIAL ASSUMED.	Installation error. Call your SYSD administrator.

Message ID	Messages text	Description
I0116	SPLIT LIMIT HAS BEEN REACHED.	The request to create a new partition was ignored.
I0117	NO ACTIVE SPLITS, SWAP NOT PERFORMED.	The request to swap to another partition was ignored.
I0118	MULTIPLE SESSIONS FOUND, CHOOSE ONE.	The same member name was found in two different datasets.
E0119	EDIT SESSION COULD NOT BE OPENED.	An error occurred while starting the edit session. Call your SYSD administrator.
I0120	++INCLUDE COULD NOT BE EXPANDED.	The member to be included could not be found. Processing continues.
E0121	EDITOR WORK DATA SET IS FULL.	The processing was terminated. Call your SYSD administrator.
E0122	EDITOR BLOCK NUMBER INVALID.	System error. Call your SYSD administrator.
E0123	FUNCTION NOT SUPPORTED FOR PANVALET(R) DATA SETS.	The delete request for a CA-Panvalet dataset was ignored.
E0124	SYSD ATP INTERFACE NOT INSTALLED, SAVE NOT PERFORMED.	Installation error. Call your SYSD administrator.
T0125	SLAM BLOCK CHAIN DESTROYED, EDIT SESSION IS NO LONGER VALID.	System error. Call your SYSD administrator.
I0126	PRINT REQUEST PROCESSED.	The print request was successful.
I0127	PRINT REQUEST NOT PROCESSED.	The print request failed. Call your SYSD administrator.
I0128	LANGUAGE FORMAT MUST BE SPECIFIED FOR NEW PAN MEMBER.	Specify the language type and re-enter.

Message ID	Messages text	Description
E0129	INVALID PANVALET SECURITY LEVEL.	Specify the correct security level and re-enter.
E0130	SYSDPTBL ENTRY NOT FOUND IN TCT.	CICS did not recognize the specified printer.
E0131	SYSDPTBL ENTRY NOT FOUND IN DCT.	CICS did not recognize the specified printer.
W0132	PRINTER NOT WAITING FOR FORMS CHANGE.	The forms change request was ignored.
W0133	PRINTER ALREADY HELD.	The request to hold the printer was ignored.
W0134	PRINTER NOT HELD.	The request to release the printer was ignored.
I0135	TS QUEUE RECORDS TRANSFERRED.	The PUT request was successful.
E0136	TS QUEUE NOT FOUND.	The GET request was successful, but there were no data records.
E0137	ERROR IN WORK SESSION.	An error occurred during the GET or PUT processing. Call your SYSD administrator.
I0138	TS QUEUE DELETED.	The PCDEL command was successful.
I0139	VOLUME SERIAL NUMBER IS BLANK OR INVALID.	The volume was not found. Correct and re-enter.
E0140	DATASET NOT FOUND.	Correct and re-enter.
E0141	INVALID LINE COMMAND FOUND.	Correct and issue the line command again.
E0142	REQUEST EXCEEDS PRINTER LINE COUNT LIMIT.	The request was ignored.
I0143	CATALOG WAS SUCCESSFUL.	The catalog process is complete.

Message ID	Messages text	Description
E0144	REQUIRED CONTROL VOL NOT AVAILABLE.	The requested function failed.
E0145	INCONSISTENT CATALOG STRUCTURE.	The requested function failed.
E0146	CATALOG STRUCTURE DOES NOT EXIST.	The requested function failed.
E0147	CATALOG IS OUT OF SPACE.	The requested function failed.
E0148	GDG DS IS FULL OR IMPROPERLY NAMED.	The requested function failed.
E0149	A PERMANENT I/O ERROR HAS OCCURRED.	The requested function failed.
E0150	INVALID PARAMETER LIST PASSED.	The requested function failed. Call your SYSD administrator.
E0151	AN UNKNOWN ERROR HAS OCCURRED.	The requested function failed. Call your SYSD administrator.
E0152	DEVICE TYPE INVALID OR MISSING.	Correct the invalid field and re-enter.
E0153	VOLUME LIST INVALID OR MISSING.	Correct the invalid field and re-enter.
E0154	DATASET NAME INVALID OR MISSING.	Correct the invalid field and re-enter.
E0155	AT LEAST ONE LIB MUST BE SPECIFIED.	Enter the missing field.
E0156	DATASET NOT CATALOGED.	Correct the DSN or enter the volume serial number.
E0157	JOB OUTPUT ELEMENTS NOT AVAILABLE DUE TO MEMORY CONSTRAINTS.	The function is not available. Call your SYSD administrator.

Message ID	Messages text	Description
I0158	DATASET DELETED, CATALOG NOT MODIFIED.	The scratch was successful, but the dataset was not uncataloged.
E0159	NO VOLUMES CONTAINING THE DATASET WERE MOUNTED.	The requested function failed.
E0161	THE VOLUME LIST WAS INVALID.	The volume serial number is invalid.
E0163	DATASET NOT FOUND.	The requested function failed.
E0167	VOLUME NOT MOUNTED.	The requested function failed.
I0172	DATASET HAS BEEN UNCATALOGED.	The requested function was successful.
E0173	THE CVOL NAME IS INVALID.	The requested function failed.
E0174	THE INDEX HAS AN ALIAS, INDEX OR DSN.	The requested function failed.
E0175	INVALID INPUT PARAMETERS SUPPLIED.	Correct the invalid fields and re-enter.
E0176	NEW DATASET NAME MISSING OR INVALID.	Correct the invalid field and re-enter.
I0177	RENAME WAS SUCCESSFUL.	The requested function was successful.
E0179	NECESSARY INPUT PARAMETER MISSING.	Enter the missing field.
E0180	DYNAMIC ALLOCATION UNSUCCESSFUL.	The requested function failed. Call your SYSD administrator.

Message ID	Messages text	Description
E0181	DATASET NOT PARTITIONED ORGANIZATION.	The requested function failed.
I0182	COMPRESS ISSUED.	The compress has been scheduled.
E0183	DATASET CATALOGED TO OTHER VOLUME.	The requested function failed.
E0187	VSAM MANAGEMENT IS NOT SUPPORTED AT THIS TIME.	The requested function failed because it is not supported.
E0188	CATALOG LOCATE FAILED.	SYSD could not get the catalog information for a dataset.
E0189	SYSDATPM TASK FAILED ACCESSING PANVALET(R) LIBRARY. SEE OS CONSOLE.	The requested function failed. Call your SYSD administrator.
E0190	SYSDATP1 TASK FAILED ACCESSING PANVALET(R) LIBRARY. SEE OS CONSOLE.	The requested function failed. Call your SYSD administrator.
E0191	INCONSISTENT HELP STRUCTURE.	An error occurred in the online help processing. Call your SYSD administrator.
E0192	DATASET NAME IS AN INDEX.	The requested function failed.
I0193	INDEX HAS BEEN DELETED.	The requested function was successful.
I0194	GDG COUNT IS REQUIRED.	Enter the required field.
E0195	INVALID OPTIONS SPECIFIED.	Correct the options and re-enter.
I0196	INDEX BUILT SUCCESSFULLY.	The requested function was successful.

Message ID	Messages text	Description
E0197	INVALID NUMBER SPECIFIED.	Correct the invalid field and re-enter.
E0198	GDG COUNT IS OUT OF RANGE.	Correct the invalid field and re-enter.
E0199	OPTION NOT VALID WITH THIS FUNCTION.	Correct the invalid field and re-enter.
E0200	INVALID DEVICE TYPE SPECIFIED.	Correct the invalid field and re-enter.
E0201	INVALID DEVICE STATUS SPECIFIED.	Correct the invalid field and re-enter.
E0202	DATASET ALREADY EXISTS ON VOLUME.	The requested function failed.
E0203	INSUFFICIENT SPACE ON VOLUME.	The request could not be processed. Try again later.
I0204	SUCCESSFULLY ALLOCATED.	The requested function was successful.
W0205	ATP SUBTASK BUSY - RETRY LATER.	The requested function failed. Try again later.
E0206	INVALID PASSWORD OR VSAM SPACE.	The requested function failed.
E0207	DATASET ALREADY EXISTS.	The requested function failed.
E0208	VTOC I/O ERROR OR INVALID F1 DSCB.	The requested function failed. Call your SYSD administrator.
E0209	VOLUME NOT MOUNTED.	The requested function failed.
E0210	UNABLE TO MOUNT VOLUME.	The requested function failed.
E0211	DATASET IS IN-USE.	The requested function failed.

Message ID	Messages text	Description
E0212	RACF DATA SET AND NO AUTHORIZATION.	The requested function failed.
E0213	RACF COULD NOT DELETE.	The requested function failed.
E0214	MAXIMUM SESSION SIZE EXCEEDED.	The number of records for this session exceeds the limit. See the *CPMS/SYSD Installation Manual* for more information about determining session sizes.
W0215	DATASET IS EMPTY.	The requested function failed.
E0216	DATASET HAS ZERO EXTENTS.	The requested function failed.
E0217	SUBMIT FAILED ++INCLUDE PROCESSING ERROR.	The dataset is invalid for ++INCLUDE processing.
E0218	SUBMIT FAILED MAX. NUMBER ++INCLUDES EXCEEDED.	The number of nested ++INCLUDE statements exceeded the limit.
E0219	INVALID COMMAND FOR SEQUENTIAL / GDGS.	The requested function failed.
E0220	INVALID GENERATION DATASET SPECIFIED.	The requested function failed.
E0221	TS QUEUE RECORD LENGTH GREATER THAN 255.	The requested function failed.
E0222	CICS TRACE TABLE HAS BEEN CAPTURED IN TEMP STORAGE.	The initial TRT request was successful.
E0223	EDIT SESSION ALREADY IN PROGRESS FOR SPECIFIED MEMBER.	Specify a new member for the TRT command.

Message ID	Messages text	Description
E0224	MEMBER SPECIFIED MUST NOT CONTAIN PRIOR DATA.	Specify a new member for the TRT command.
E0225	TEMP STORAGE ERROR HAS OCCURRED IN TRT CAPTURE PROCESSING.	The requested function failed. Call your SYSD administrator.
E0226	TRACE TABLE TOO LARGE FOR CAPTURE (MAXIMUM ENTRIES-- 4095).	The requested function failed. Call your SYSD administrator.
E0227	TRACE TABLE TOO LARGE FOR CAPTURE (MAXIMUM ENTRIES-- 1023).	The requested function failed. Call your SYSD administrator.
E0228	TEMP STORAGE PUTQ ERROR HAS OCCURRED IN TRT CAPTURE PROCESSING.	The requested function failed. Call your SYSD administrator.
E0229	CICS TRACE TABLE HAS BEEN CAPTURED IN SPECIFIED SESSION NAME.	The requested function was successful.
E0230	GENERIC LIST FOR THIS INDEX COULD NOT BE GENERATED.	The requested function failed. Call your SYSD administrator.
E0231	TOO MANY ENTRIES TO PROCESS FOR THIS INDEX LEVEL, BE MORE SPECIFIC.	The work area of 32K was exceeded. Qualify the index further.
E0232	CATALOG COULD NOT BE FOUND FOR THIS INDEX.	The requested function failed. Call your SYSD administrator.
E0233	CONVERSATIONAL MGR ERROR OCCURRED.	The requested function failed. Call your SYSD administrator.

Message ID	Messages text	Description
E0234	NO ENTRIES FOUND FOR THIS INDEX.	There were no datasets cataloged for the specified index.
E0235	CATALOG READ ERROR.	The requested function failed. Call your SYSD administrator.
W0237	SAVE SUCCESSFUL, RELOAD FAILED. - RESELECT MEMBER.	Restart the edit session with the S=select option.
E0238	INVALID LANGUAGE OR DATA TYPE SPECIFIED.	Correct the invalid field and re-enter.
I0240	DATASET ALLOCATED AND CATALOGED.	The requested function was successful.
I0241	DATASET DELETED AND UNCATALOGED.	The requested function was successful.
E0242	DATASET IS ALREADY CATALOGED.	The requested function was ignored.
E0243	SECURITY VIOLATION ON ++INCLUDE MEMBER.	The requested function failed.
E0244	ONE OR MORE RECORD SELECTION TYPES IS NOT VALID.	The record selection was not valid. Correct the invalid entry and try again.
E0245	LINE OPTION SELECTED IS NOT VALID FOR THIS RECORD TYPE.	Correct the invalid line option and try again.
E0246	$JES2PRT HAS FAILED.	The requested function failed. Call your SYSD administrator.
E0247	UNABLE TO GETMAIN STORAGE.	There is not enough storage to proceed with the request. Retry later.
I0248	SELECTION CRITERIA NOT MATCHED.	There were no printers available for display.

Message ID	Messages text	Description
W0249	NOT IN NUMBER MODE.	The UNNUM request was ignored.
I0250	COMMAND TO DELETE JOB HAS BEEN ISSUED.	The delete request was scheduled.
E0251	GENERIC DESTIDS ARE NOT ALLOWED.	Specific destinations or blanks must be entered.
I0252	ENTER DATASET PASSWORD TO VERIFY DELETE(S).	A password is required for the delete function.
E0253	THIS FIELD MUST BE 'Y', 'N', OR '*'.	Invalid data was supplied. Correct and re-enter.
E0254	UNAUTHORIZED CLASS.	Security violation. The user is not authorized for the specified class.
I0255	COMMAND HAS BEEN ISSUED.	An operator command was issued.
E0256	INVALID NUMBER TYPE SPECIFIED.	The numbering type must be standard, relative, or COBOL.
E0257	INVALID FIRST LINE NUMBER SPECIFIED.	The first line number must be numeric.
E0258	INVALID LAST LINE NUMBER SPECIFIED.	The last line number must be numeric.
E0259	FIRST LINE GREATER THAN LAST.	The first or beginning copy line number is larger than the last or ending copy line number. The first line number must be smaller than the last line number.
E0260	FIRST LINE SPECIFIED NOT FOUND IN DATASET.	When using relative line numbering, the first line number specified was not found in the copied dataset.
W0261	MEMBER UPDATED. (PDS NEARLY FULL).	The PDS is over 90 percent full.

Message ID	Messages text	Description
I0262	RECORDS TRANSFERRED (EXCLUDES SKIPPED).	Records, except for lines that were excluded, were written to a temporary storage queue.
E0263	INVALID TS QUEUE SYSID SPECIFIED.	The system ID specified in Option 0.4, GET/PUT TS Queue Identifiers, is invalid.
E0264	CICS TS QUEUE I/O ERROR.	An error occurred while writing the data to temporary storage.
E0265	USER NOT AUTHORIZED FOR CICS TS QUEUE.	The user is not authorized to use the specified temporary storage queue ID.
E0266	CICS TS QUEUE ISC LINK FAILURE.	The connection to the remote region was not available.
E0267	INVALID REPETITION COUNT.	The repetition count specified was less than zero.
E0268	CICS TS QUEUE IS CURRENTLY IN USE.	The specified temporary storage queue is already in use.
E0269	NEW NAME ALREADY EXISTS.	The new member name already exists.
E0270	NO DIRECTORY SPACE AVAILABLE.	There is no directory space available in the PDS.
E0271	DATA SET IS READ ONLY OR INVALID DCB.	The dataset is in read-only mode or it has an invalid DCB parameter.
I0272	PRINT JOB SUCCESSFULLY SUBMITTED.	The job to print the requested information was submitted.
E0273	INVALID JOB CARD, PRINT JOB NOT SUBMITTED.	The JOB card specified on Option 0.5, Utility Parameters, is invalid.
E0274	SECURITY VIOLATION, COMMAND NOT ISSUED.	The user is not authorized to issue the command from the SYSLOG display.

Message ID	Messages text	Description
E0275	QUEUE IDENTIFIER SPECIFIED IS RESERVED.	The specified temporary storage queue ID is reserved. See the MENU06 user exit for a list of reserved queue IDs.
E0276	NEW MEMBER NAME MISSING OR INVALID.	The new member name for the rename option is missing or invalid.
E0277	SYS1.IMAGELIB IS NOT CATALOGUED.	SYS1.IMAGELIB is not cataloged. CPMS/SYSD needs this dataset to find the forms control buffers (FCBs).
E0278	SYS1.IMAGELIB IS NOT FOUND IN VTOC.	SYS1.IMAGELIB was not found on the volume it is cataloged on.
E0279	FCB FCB2xxxx COULD NOT BE FOUND IN SYS1.IMAGELIB.	The forms control buffer (FCB) was not found in SYS1.IMAGELIB.
E0280	INVALID TTR POINTER FOR FCB.	The TTR pointer for the forms control buffer (FCB) is invalid.
E0281	FCB LENGTH MUST BE GREATER THAN 0.	The length of the forms control buffer (FCB) is zero.
E0282	WRITER TYPE MUST BE PQ OR SW.	When starting a writer, you must specify either **PQ** for a hot writer or **SW** for a JOE writer.
E0283	THE SYSDUSER FILE IS FULL.	The SYSDUSER file is full. Increase the size.
E0284	ERROR UPDATING THE SYSDUSER FILE.	SYSD found an error while trying to update the SYSDUSER file.
E0285	DATASET HAS INVALID BLOCKSIZE.	The dataset had an invalid block size.
W0286	ARCHIVED DATASET. END TO CANCEL, DEL TO DELETE, <ENTER> TO RESTORE.	The dataset accessed has been archived. To cancel the command, type **END** in the *Input* field and press **Enter**. To delete the dataset, type **DEL** in the *Input* field and press **Enter**. To restore the dataset, press **Enter**.

Message ID	Messages text	Description
I0287	DATASET RESTORE HAS BEEN CANCELLED.	The archived dataset will not be restored.
I0288	ARCHIVED DATASET HAS BEEN DELETED.	The archived dataset has been deleted.
I0289	DATASET RESTORE HAS BEEN SCHEDULED.	The archived dataset has been scheduled for restore.
E0290	CICS FAILED AUTHORIZATION FOR CATALOG ACCESS.	The user is not authorized to catalog the dataset.
E0291	INVALID CLASS (USE 'A-Z', '0-9' or ' '.	The user specified an invalid character for the class.
E0292	UNCATALOG CANNOT BE DONE FOR STORAGE MANAGED DATASETS.	The storage management product does not allow a dataset to be uncataloged.
E0293	SUPERSET MEMBERS CANNOT BE EDITED.	Individual members of an ATP superset cannot be edited.
E0294	BLOCK SIZE IS NOT A MULTIPLE OF LRECL.	When allocating fixed-blocked datasets, the block size must be a multiple of the record size.
E0295	TEMPORARY STORAGE FULL - QUEUE DELETED.	The temporary storage queue specified with the PUT command found a full condition. The temporary storage queue was deleted and the function failed.
E0296	RECORD LENGTH MUST BE GREATER THAN ZERO.	For fixed or variable datasets, the record length must be greater that zero.
E0297	FILE SUBMITTED.	The request was successful.
E0298	FILE SUBMIT ERROR - INVALID RECORD LENGTH.	The record length is invalid. It must be 80 bytes when submitting from browse.
E0299	FILE SUBMIT ERROR - INVALID RECORD FORMAT.	The record format is invalid. The file must be fixed or fixed block to allow submit from browse.

Index

G

H

I

M

N

O

Maintenance Policies

Problem Reporting

In the event of a problem, contact your product administrator. If your administrator cannot answer your question, your administrator will contact H&W Computer Systems' Customer Support staff. This group is responsible for answering questions about the installation, operation, and maintenance of all H&W products.

If you are responsible for contacting H&W Customer Support, you will be asked to provide:

- Your name.

- Your company's name.

- Your customer number, which can be found on all H&W tapes, diskettes, and invoices.

- Your operating environment—for example, operating system and release, and CICS release.

- The H&W product's release level.

- A description of the problem including all error messages.

- The severity of the problem.

If the problem involves a CICS or transaction abend, obtain a dump and have the dump accessible when calling for support.

If it appears that the problem will require programming support from H&W, please complete the Program Error Report (PER) form located in this manual. Send the completed form along with all supporting documentation to H&W.

> When sending diagnostic information on tape, avoid processing delays by making sure that all dumps, traces, and so on are preformatted (print ready) and that the 3480 cartridge tapes are created with DCB=TRTCH=NOCOMP (no IDRC) specified.

Maintenance

Program Temporary Fixes (PTFs) are created to solve problems as they occur. PTFs are accumulated and distributed as Program Update Tapes (PUTs). Some sites may need to reassemble and link edit the affected modules after loading a PUT tape.

User Enhancements

Some products have built-in user exits and interfaces that allow product customization. Changes outside of these exits and interfaces are discouraged because they interfere with normal maintenance procedures.

Suggested enhancements should be written on the Customer Enhancement Request (CER) form located in this manual and sent to H&W Computer Systems for consideration.

General

Comments, suggestions, and enhancement requests for this product and its documentation are welcomed. Your needs and ideas help shape the future of the product. We do listen.

You can contact H&W Computer Systems, Inc. at:

	P.O. Box 46019 Boise, ID 83711	12438 W. Bridger Street, Suite 100 Boise, ID 83713
	Main: (208) 377-0336	Customer Support: (208) 377-8436
	Fax: (208) 377-0069	
	World Wide Web: http://www.hwcs.com	E-mail: support@hwcs.com

Program Error Report (PER)

For H&W use only:

Customer #: _____   PER #: _____   PTF #: _____

Customer, please fill in the following:

Reported By: _____   Phone: (___) ____-_____ Ext.:____

Company Name: _____

H&W Product: _____   Release: ____.____._____   Date: ___/___/___

Severity Level: ❑ 1 (highest) ❑ 2 ❑ 3 ❑ 4 (lowest)

Environment:

Operating System: _____   PUT Level:_____

CICS Release: _____   PUT Level:_____

JES Release: _____   PUT Level:_____

VTAM Release: _____   PUT Level:_____

Connected to any other products: _____

Problem Description:

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

Enclosures:

❑ Dump with trace   ❑ Program listings   ❑ Screen display   ❑ File dump

> **Tip** When sending diagnostic information on tape, avoid processing delays by making sure that all dumps, traces, and so on are preformatted (print ready) and that the 3480 cartridge tapes are created with DCB=TRTCH=NOCOMP (no IDRC) specified.

Send PER to Customer Support at:

P.O. Box 46019
Boise, ID 83711

12438 W. Bridger Street, Suite 100
Boise, ID 83713

Fax:
(208) 377-0069

Customer Enhancement Request (CER)

For H&W use only:

Customer #: _____ CER #: C _____

Customer, please check one of the following:

❑ FYI ❑ Action requested immediately (describe in Request section)

Customer, please fill in the following:

Reported To: _____ Trial: ❑ Yes ❑ No

Requested By: _____ Phone: (_____) _____-_____ Ext.:_____

Company Name: _____

H&W Product: _____ Release: ____.____._____ Date: ___/___/___

Urgency Level: ❑ 1 (highest) ❑ 2 ❑ 3 ❑ 4 (lowest)

Environment:

Operating System: _____ PUT Level:_____

CICS Release: _____ PUT Level:_____

JES Release: _____ PUT Level:_____

VTAM Release: _____ PUT Level:_____

Connected to any other products: _____

Request:

_____

_____

_____

_____

Synopsis:

_____

_____

_____

Date: ____/____/____ Action: _____

Date: ____/____/____ Action: _____

Date: ____/____/____ Action: _____

Send CER to Customer Support at:

P.O. Box 46019
Boise, ID 83711

12438 W. Bridger Street, Suite 100
Boise, ID 83713

Fax:
(208) 377-0069

Reader's Comment Form

Use this form to forward your comments about this publication to H&W Computer Systems, Inc. Topics to consider are: organization, accuracy, completeness, clarity, and general usefulness.

We continually strive to produce easy-to-use, quality documentation. Any comments and suggestions you have are greatly appreciated.

Publication Title: _____

H&W Product: _____ Release: ____.____._____ Page #:_____

Comments:

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

❑ Please send a reply to me at:

Name: _____ Phone: (___) ____-_____ Ext.:_____

Company: _____

Address: _____

Send Reader's Comment Form to Documentation Department at:

P.O. Box 46019
Boise, ID 83711

12438 W. Bridger Street, Suite 100
Boise, ID 83713

Fax:
(208) 377-0069

Systems Software Documentation Order Form

Quantity Orders per unit	1-100	101-500	501-1000	over 1000
☐ CPMS® Release 6.4 .1 ☐ SYSD® Release 6.4.1 (Please check one)				
__Installation Manual	$16.00	$12.00	$10.00	$ 9.00
__Reference Manual	16.00	12.00	10.00	9.00
__Quick Reference Cards (Pkg. of 10)	7.00	5.50	5.00	4.50
SYSD® Optional Interfaces				
__SYSD/JFT Reference Manual, Release 6.4.1	$12.00	$10.00	$ 9.00	$ 8.00
SYSB-II®/MVS Release 4.1				
__Commands and API Reference Manual	$10.00	$ 8.25	$ 7.00	$ 6.25
__Control Language Reference Manual	12.00	10.00	9.00	8.00
__Transparent VSAM File Sharing Reference Manual	12.00	10.00	9.00	8.00
__Installation and Operations Manual	10.00	8.25	7.00	6.25
__The above can be purchased as a set	35.00	31.50	27.50	23.00
SYSB-II®/VSE Release 2.1				
__Commands and API Reference Manual	$10.00	$ 8.25	$ 7.00	$ 6.25
__Transparent VSAM File Sharing Reference Manual	12.00	10.00	9.00	8.00
__Installation and Operations Manual	10.00	8.25	7.00	6.25
SYSB/VSE Release 1.1				
__Reference and Installation Manual	$16.00	$12.00	$10.00	$ 9.00
SYSI® Release 2.0				
__Reference and Installation Manual	$16.00	$12.00	$10.00	$ 9.00
SYSJ® Release 2.0				
__Reference and Installation Manual	$10.00	$ 8.25	$ 7.00	$ 6.25
SYSS® Release 3.0				
__Reference and Installation Manual	$10.00	$ 8.25	$ 7.00	$ 6.25

Note: Please fill out the shipping and billing information on the back of this form.

Ship to:

Company: _____

Name: _____ Title: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: (_____) _____-_____ Ext.: _____

Bill to:

Company: _____

Name: _____ Title: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: (_____) _____-_____ Ext.: _____

Quantities over 100—one week shipping; over 500—two weeks shipping.

Shipped by Federal Express. All prices FOB, Boise, Idaho. Shipping charges are extra.

Prices are subject to change without prior notice.

Refunds are not given on documentation after shipment. However, defective documentation will be replaced.

No portion of any documentation may be copied without written permission from H&W Computer Systems, Inc.

P.O. #: _____

Authorized Signature: _____

Send order form to Shipping Department at:

P.O. Box 46019   12438 W. Bridger Street, Suite 100
Boise, ID 83711   Boise, ID 83713

Fax:
(208) 377-0069

Electronic Mail Documentation Order Form

Quantity Orders per unit	1-100	101-500	501-1000	over 1000
SYSM® Release 6.6				
__Installation Manual	$16.00	$12.00	$10.00	$ 9.00
__Reference Manual, Function Key Version	18.00	13.00	11.00	10.00
__Reference Manual, Command Version	18.00	13.00	11.00	10.00
__Administrator's Manual	10.00	8.25	7.00	6.25
__Electronic Forms Language Guide	10.00	8.25	7.00	6.25
__Import/Export Manual	10.00	8.25	7.00	6.25
__The above can be purchased as a set	50.00	45.00	40.00	38.00
__Quick Reference Guide, Function Key Version (25/Pkg.)	16.50	13.75	11.00	9.65
__Quick Reference Guide, Command Version (25/Pkg.)	16.50	13.75	11.00	9.65
__Quick Start Booklet, Function Key Version	6.45	6.45	5.25	5.25
__Quick Start Booklet, Command Version	6.45	6.45	5.25	5.25
__SYSM Training Package: Release 6.5	400.00			
__SYSM Training Package: Release 6.5 Upgrade	200.00			
SYSM® Optional Interfaces				
__SYSM/HOST Installation and Reference Manual, Release 1.5.4	5.00	4.15	3.50	3.00
__SYSM/MHS Installation and Administration Manual, Release 1.2	10.00	8.25	7.00	6.25
__SYSM/MHS User Manual, Release 1.2	7.50	6.75	5.75	5.00
__SYSM E-Mail Connectivity Series / PC Edition, Release 2.0	10.00	8.25	7.00	6.25
__SYSM/INET Internet Interface Installation/Reference, Release 1.0	5.00	4.15	3.50	3.00
__SYSM/INET PC Internet Gateway Installation/Reference, Release 1.0	5.00	4.15	3.50	3.00
__SYSM Pager Installation and Administration Manual, Release 1.0	5.00	4.15	3.50	3.00
__SYSM/FAX Installation, Administration, and User Guide, Release 2.0	5.00	4.15	3.50	3.00
__SYSM Client User Guide, Release 2.0	16.00	12.00	10.00	9.00
__SYSM/PC2 Installation and Administration Manual, Release. 2.0.1	7.50	6.75	5.75	5.00
__SYSM/PC2 Electronic Forms User Guide, Release. 2.0.1	10.00	8.25	7.00	6.25
__SYSM/PC2 Quick Start, Release 2.0.1	4.45		3.25	
__SYSM/PC2 Diskettes, Release 2.0.1 (Extra copies)	9.50			
__SYSM/OV-LINK Installation and Interface Manual, Release 1.0	10.00	8.25	7.00	6.25
Wizard Mail™ Release 6.4				
__Installation Manual	$16.00	$12.00	$10.00	$ 9.00
__Reference Manual	16.00	12.00	10.00	9.00
__Administrator's Manual	10.00	8.25	7.00	6.25
__Wizard Mail Connectivity, Release 1.0	16.00	12.00	10.00	9.00

Note: Please fill out the shipping and billing information on the back of this form.

Ship to:

Company: _____

Name: _____ Title: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: (_____) _____-_____ Ext.: _____

Bill to:

Company: _____

Name: _____ Title: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: (_____) _____-_____ Ext.: _____

Quantities over 100—one week shipping; over 500—two weeks shipping.

Shipped by Federal Express. All prices FOB, Boise, Idaho. Shipping charges are extra.

Prices are subject to change without prior notice.

Refunds are not given on documentation after shipment. However, defective documentation will be replaced.

No portion of any documentation may be copied without written permission from H&W Computer Systems, Inc.

P.O. #: _____

Authorized Signature: _____

Send order form to Shipping Department at:

P.O. Box 46019
Boise, ID 83711

12438 W. Bridger Street, Suite 100
Boise, ID 83713

Fax:
(208) 377-0069

H&W®

H&W Computer Systems, Inc.
Systems Software Division

P.O. Box 46019
Boise, ID 83711
208-377-0336
FAX: 208-377-0069