

CICS Transaction Server for z/OS



CICSplex SM User Interface Guide

Version 3 Release 1

CICS Transaction Server for z/OS



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Version 3 Release 1

Note!

Before using this information and the product it supports, be sure to read the general information under "Notices" on page 81.

Second edition (July 2010)

This edition applies to Version 3 Release 1 of CICS Transaction Server for z/OS, program number 5655-M15, and to all subsequent versions, releases, and modifications until otherwise indicated in new editions. Make sure you are using the correct edition for the level of the product.

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Contents

Preface	v
Who this book is for	v
What you need to know	v
Notes on terminology	v
CICS system connectivity	v
 Summary of changes	vii
Changes for CICS Transaction Server for z/OS, Version 3 Release 1	vii
Changes for CICS Transaction Server for z/OS, Version 2 Release 3	vii
 Chapter 1. The CICSplex SM session	1
A brief introduction to CICSplex SM	1
The components of CICSplex SM	1
The CICSplex SM Starter Set.	2
Starting and ending a CICSplex SM session	3
The Profile option	4
The PlexManager option	4
The CICSplex SM option	5
Default criteria for option 2 (CPSM).	5
The CICSplex SM MENU menu	7
 Chapter 2. Panels, windows, and views	11
Panels	11
Menu panels	11
Input panels	12
Help pop-ups	15
Information display panel	15
Windows	17
The window information line	18
Clearing messages	20
Views	20
Displaying a view	21
The results of a hyperlink request	29
Using action commands to update data	32
 Chapter 3. The CICSplex SM display commands	37
How to issue commands	37
Command descriptions and conventions	38
Manipulating the windowed environment	38
Opening additional windows	39
Changing the current window	39
Directing command results to another window	40
Displaying the window status description	40
Displaying information about a view	41
Maximizing and restoring windows.	42
Setting the context and scope	42
Saving and reusing screen configurations	46
Closing windows	48
Manipulating the contents of a window	48
Refreshing the view in a single window	49
Refreshing all views automatically	49
Scrolling data in a window.	49
Sorting the contents of a view	51

Locating data within a view	51
Summarizing the data in a view.	52
Locking and unlocking a window	54
Redisplaying views and forms of views	54
Clearing a window	56
Chapter 4. The CICSplex SM help facility	57
Issuing HELP with parameters	58
Issuing HELP without parameters	59
Requesting help within help	59
Searching a help topic	60
Requesting help for error messages	61
Ending help	61
Appendix A. Tailoring your CICSplex SM profile	63
Setting session control parameters (option 1).	63
Setting information display parameters (option 2)	64
Setting PF keys (option 3).	65
Setting the date format (option 4)	66
Setting display attributes (option 5)	67
Appendix B. A summary of the CICSplex SM display commands.	69
Bibliography	71
The CICS Transaction Server for z/OS library	71
The entitlement set	71
PDF-only books	71
Other CICS books.	73
Determining if a publication is current	73
Accessibility	75
Index	77
Notices	81
Trademarks	82
Sending your comments to IBM	83

Preface

This book documents the general principles of the Interactive System Productivity Facility (ISPF) user interface to the CICSplex[®] System Manager (CICSplex SM) element of CICS Transaction Server for z/OS[®] Version 3 Release 1. It describes:

- How to start and end a CICSplex SM session
- How to use CICSplex SM panels, windows, and views
- The CICSplex SM display commands
- The CICSplex SM help facility
- How to tailor your CICSplex SM profile

Who this book is for

This book is for anyone who uses the CICSplex SM user interface, whether to establish the CICSplex SM operating environment or to use CICSplex SM as a system-management tool.

What you need to know

This book assumes that you are already an ISPF user and have an ISPF profile. It also assumes a general understanding of the purpose and functions of CICSplex SM. If you need more introductory information, see the *CICSplex System Manager Concepts and Planning* book.

Notes on terminology

In the text of this book, the term **CICSplex SM** (spelled with an uppercase letter *P*) means the CICSplex SM element of CICS TS for z/OS. The term **CICSplex** (spelled with a lowercase letter *p*) means the largest set of CICS systems to be managed by CICSplex SM as a single entity.

CICS system connectivity

This release of CICSplex SM can be used to control CICS[®] systems that are directly connected to it.

For this release of CICSplex SM, the connectable CICS systems are:

- CICS Transaction Server for z/OS 3.1
- CICS Transaction Server for z/OS 2.3
- CICS Transaction Server for z/OS 2.2
- CICS Transaction Server for OS/390[®] 1.3

You can use this release of CICSplex SM to control systems running supported releases of CICS that are connected to, and managed by, your previous release of CICSplex SM. However, if you have any directly-connectable release levels of CICS, as listed above, that are connected to a previous release of CICSplex SM, you are strongly recommended to migrate them to the current release of CICSplex SM, to take full advantage of the enhanced management services. See the *CICS Transaction Server for z/OS Migration from CICS TS Version 2.3* for information on how to do this.

Table 1 on page vi shows which supported CICS systems can be directly connected to which releases of CICSplex SM.

Table 1. Directly-connectable CICS systems by CICSplex SM release

CICS system	CICSplex SM component of CICS TS 3.1	CICSplex SM component of CICS TS 2.3	CICSplex SM component of CICS TS 2.2	CICSplex SM component of CICS TS 1.3
CICS TS 3.1	Yes	No	No	No
CICS TS 2.3	Yes	Yes	No	No
CICS TS 2.2	Yes	Yes	Yes	No
CICS TS 1.3	Yes	Yes	Yes	Yes
TXSeries 4.3.0.4	No	Yes	Yes	No
TXSeries 5.0	No	Yes	Yes	No

Summary of changes

This book is based on the CICS Transaction Server for z/OS, Version 2 Release 3 edition of the *CICSplex SM User Interface Guide*.

The information in this book has been updated to incorporate changes made for CICS Transaction Server for z/OS, Version 3 Release 1. Changes made since the last edition are indicated by vertical bars to the left of the change.

Changes for CICS Transaction Server for z/OS, Version 3 Release 1

There are no significant changes for this edition. No new views or function has been added to the ISPF user interface.

Changes for CICS Transaction Server for z/OS, Version 2 Release 3

There has been a change in CICSplex SM field naming conventions in this release. Data set name fields such as DSNAME, file name fields such as LOCFILE and REMFILE, and transient data queue name fields such as EXTRATDQ and INTRATDQ are now case-sensitive. When entering data set and file names into the CICSplex SM interfaces (end user interface, API and the web user interface), ensure that you enter the data in the correct case. In previous releases of CICSplex SM, the data set names and file names are automatically converted to upper case.

CICSplex SM support for the CICS for Windows component of IBM TXSeries (also known as Windows NT 4.3 and Windows NT 5.0) is no longer provided in CICS Transaction Server for z/OS, Version 3 Release 1. Therefore, it is not now possible to set up a CICSplex SM remote MAS agent for Windows.

However, you can continue to use the CICS Transaction Server Version 2.3 or Version 2.2 for CICSplex SM support of TXSeries.

There are no other significant changes for this edition.

Chapter 1. The CICSplex SM session

This chapter describes how to start and end a CICSplex SM session, and introduces the three types of function you can access from the CICSplex System Manager entry panel. This chapter (and indeed, this book) assumes that you have some knowledge of CICSplex SM. However, for reference purposes, this chapter begins with a brief reminder of CICSplex SM's purpose and major components. For a more detailed introduction, see *CICSplex System Manager Concepts and Planning*.

A brief introduction to CICSplex SM

CICSplex SM is a CICS system-management tool. That is, it provides CICS operators and CICS system administrators with:

- A *single-system image* of the enterprise CICS systems
- A *single point of control* from which CICS systems and their resources can be managed

The major functions of CICSplex SM are:

- The operations functions, which can provide CICS master-terminal (CEMT) and other, related functions to all CICS systems
- The monitoring functions, which collect data about the performance of selected CICS resources at user-defined intervals
- Business Application Services (BAS), which enables CICSplex SM to manage CICS resources in terms of the business application to which they belong, rather than their physical location in the CICSplex
- The workload management functions, which balance the CICS workload dynamically across specified CICS systems
- The real-time analysis functions, which compare the status of selected resources with user-specified norms for those resources, and report exceptions

The components of CICSplex SM

Terms that occur in every discussion of CICSplex SM include:

CAS The CAS (coordinating address space), of which there is usually one in each MVS™ image on which CICSplex SM is installed, is an MVS subsystem that supports the user interface to CICSplex SM. When there are multiple CASs in an enterprise, they are usually connected to each other, either directly or indirectly. When you sign on to CICSplex SM, you are automatically connected to a CAS, which in turn connects to a CMAS.

CMAS The CMAS (CICSplex SM address space) is the main component of any CICSplex SM environment. It supports all of the functions of CICSplex SM, and maintains a data repository of CICSplex SM data. There is usually one CMAS on each MVS image on which CICSplex SM is installed. When there are multiple CMASs in an enterprise, they are usually connected to each other, either directly or indirectly. A CMAS manages one or more MASs.

MAS The MAS (managed application system) is a CICS system on the same MVS image as the CMAS by which it is managed.

CICSplex

A CICSplex is a collection of CICS systems that is managed as a single

entity by CICSplex SM. A CICSplex can include every CICS system in the enterprise. Alternatively, an enterprise can define multiple, mutually exclusive CICSplexes.

CICS system group

A CICS system group is a subset of the CICS systems in a CICSplex. A CICSplex can include any number of CICS system groups, and a CICS system can belong to multiple CICS system groups in a single CICSplex.

Context and scope

The context and scope together identify the resources to be affected by commands you issue while using CICSplex SM. For example, the context of a session could be a particular CICSplex, and the scope, which is a subset of the context, could be three CICS systems belonging to the CICSplex. Context and scope are described in more detail in “Starting and ending a CICSplex SM session” on page 3.

The CICSplex SM Starter Set

CICSplex SM includes a *Starter Set* of CICSplex SM definitions and other resources. One of the purposes of the Starter Set is to provide new CICSplex SM users with an opportunity to use the CICSplex SM user interface. If the Starter Set has been installed in your enterprise, you might want to use it to test some of the functions and commands described in this book, and in other books in the CICSplex SM library.

Figure 1 shows the main components of a CICSplex SM environment and illustrates how they relate to each other. (As an aside, the structure shown in Figure 1 is that of the Starter Set.)

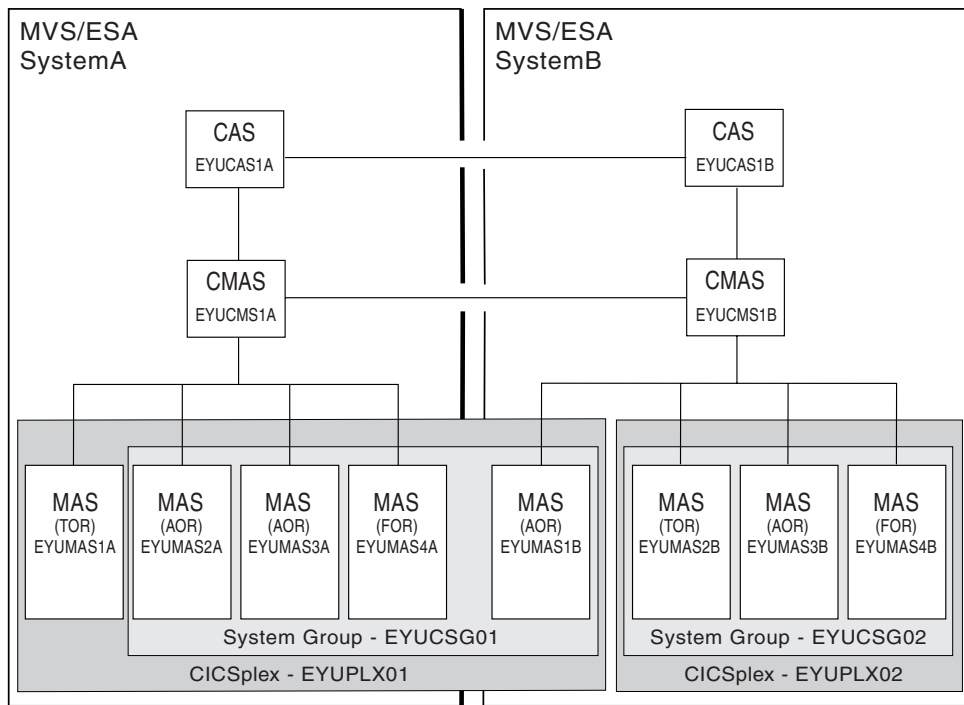


Figure 1. The components of a CICSplex SM environment

Starting and ending a CICSplex SM session

The way in which you start a CICSplex SM session is locally defined. Typically, when CICSplex SM is first installed, the ISPF primary option menu is updated to include a CICSplex SM option. In this case, you begin the session by selecting the CICSplex SM option. If CICSplex SM is not included on this menu, ask your system administrator how to invoke CICSplex SM. When you start the session, the CICSplex System Manager entry panel is displayed. The CICSplex System Manager entry panel is shown in Figure 2.

```
----- CICSplex System Manager -----
OPTION ==>

0  PROFILE      - User Session Parameters
1  PLEXMGR      - List of Service Points
2  CPSM         - CICSplex SM

      Default Criteria for CPSM:

Context          ==> EYUCMS1A
Scope            ==> EYUCMS1A
Warning Record Count ==> 0          0 for no checking
Require Set      ==> YES          YES, NO

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```

Figure 2. The CICSplex System Manager entry panel

The CICSplex System Manager entry panel presents you with three top-level options:

- PROFILE (User Session Parameters); see “The Profile option” on page 4
- PLEXMGR (List of Service Points); see “The PlexManager option” on page 4
- CPSM (CICSplex SM); see “The CICSplex SM option” on page 5

These three options represent the three main categories of function provided by CICSplex SM.

To end a CICSplex SM session, you must first return to the CICSplex System Manager entry panel. You can do this by issuing the command:

Quit

(Alternatively, you can use the ISPF command RETURN.)

From the CICSplex System Manager entry panel, you can return to the the ISPF primary option menu to perform other tasks. Note, however, that if you selected option 1 (PLEXMGR) or option 2 (CPSM) during the CICSplex SM session, a connection was established between the session and a CAS. As long as you remain in ISPF, the CICSplex SM session is still connected to the CAS. You can return to the CICSplex System Manager entry panel at any time without waiting to reconnect.

To disconnect the CICSplex SM session from the CAS it is communicating with, you must exit from ISPF to the TSO READY prompt. Then, the next time you start a CICSplex SM session, a new CAS connection is established.

The Profile option

You select the PROFILE option if you want to tailor the supplied CICSplex SM user profile. The first time you access CICSplex SM, a default user profile is created for you automatically. The user profile controls many aspects of a CICSplex SM session, such as the format of the date, the appearance of particular types of data, and the commands assigned to PF keys. It also identifies the CAS to which you connect when you start a CICSplex SM session: as the default user profile contains a default CAS identifier, you *must* tailor the default user profile in order to supply the correct CAS identifier. For more information, see Appendix A, “Tailoring your CICSplex SM profile,” on page 63.

The PlexManager option

The PlexManager functions of CICSplex SM allow you to manage CASs and their connections to other CICSplex SM entities. In particular, PlexManager is used to determine the status of:

- Connections between the CAS to which you are connected and other, adjacent CASs
- Connections from the CAS to the CMASs and the CICSplexes it manages

This is not a function that will be required frequently or by most users, and so a brief description only is included in this book. For a detailed description of the PlexManager functions, see *CICSplex System Manager Administration*.

The PLEXOVER view, which is displayed when you select option 1 from the CICSplex System Manager entry panel is shown in Figure 3. This view identifies the CASs, CMASs, and CICSplexes known to the CAS that is the context of this PlexManager session.

```

27FEB2005 11:19:52 ----- INFORMATION DISPLAY -----
COMMAND ==>
CURR WIN ==> 1      ALT WIN ==>
>W1 =PLEXOVER=====SYSC=====27FEB2005==11:19:52=PLEXMGR====6===
C Context  Product  Description                      Status  Server  System
-----
EYUCMS1A  CPSM      CMAS Service Point                Inactive EYUCMS1A SYSB
EYUCMS1B  CPSM      CMAS Service Point                Active  EYUCMS1B *
EYUPLX01  CPSM      CICSplex Service Point            Inactive EYUCMS1A SYSB
EYUPLX02  CPSM      CICSplex Service Point            Active  EYUCMS1B *
SYSB      PLEXMGR   Service Point Manager             Active  PLEXMGR  SYSB
SYSC      PLEXMGR   Service Point Manager             Active  PLEXMGR  *

```

Figure 3. The PLEXOVER view

You can use the PLEXOVER view to change the context that is to be in effect during your CICSplex SM session. The new context must be listed in the context column of the PLEXOVER view, and its status value must be Active. To change the context:

- Type an S (for Select) at the beginning of the row containing the appropriate context and product name, or

- Position the cursor in the product field of the row identifying the appropriate context and press Enter

If you select a CMAS or CICSplex as the new context, the CICSplex SM MENU menu (which is shown in Figure 4 on page 7) is displayed and the context is set to the designated CMAS or CICSplex. If you select a different CAS as the new context, the list of PlexManager views (the VIEWS view) is displayed.

The CICSplex SM option

Before you select option 2 (CPSM), from the CICSplex System Manager entry panel, ensure that you have correctly specified values for the Default Criteria for CPSM fields.

Default criteria for option 2 (CPSM)

The values shown for the Default Criteria (for CPSM) displayed on the CICSplex System Manager entry panel are the default values for the session. You can change these values by overtyping them on the menu. You can also change the context and scope once the session is in progress; ways of making these changes are described in Chapter 2, “Panels, windows, and views,” on page 11.

Context and scope

When you select option 0 (PROFILE) or option 1 (PLEXMGR), you can ignore any context and scope values because they have no effect.

Note: To specify the context for option 1, you must first select option 0 and identify the CAS. (For more information about option 0, see Appendix A, “Tailoring your CICSplex SM profile,” on page 63.)

When you select option 2 (CPSM) specify in the context and scope fields the CICS and CICSplex SM resources that are to be affected by any commands you issue during the CICSplex SM session. Context may be either a CICSplex or a CMAS. If you intend to update the CICSplex SM configuration (using the ADMCONFIG or CONFIG view commands, which are introduced in “The CICSplex SM option”), the context must be a CMAS and any scope value is ignored. For all other CICSplex SM functions, the context is the name of a CICSplex and the scope field contains the name of a single CICS system, a CICS system group, or the CICSplex itself.

Warning Record Count

The value in the Warning Record Count field indicates, for instances when you request general or summary views, the maximum number of requested records that can be displayed without a warning message. For example, if you enter **12** in this field, you are warned when more than 12 records may result from a request. When a larger number of records is available, a message informs you of the number of records that can be displayed.

Note: The number shown in the message is the largest number of requested records known to CICSplex SM at the time you issue your request. However, if the CICSplex SM environment changes (for example, if another CMAS connects to the CICSplex) after your request is received, but before the records are displayed, the number of records displayed may be either greater or fewer than the number shown in the message.

When the warning is displayed, you can continue processing your request and display the records or you can choose not to have any records displayed. This

allows you to cancel a request that may involve a larger number of records than you anticipated, thus saving the time required to gather and display the information.

If you do not wish to set a threshold, enter **0** (the default) in the Warning Record Count field; all requested records are displayed for each request.

Note: For MONITOR views, the number of records in the warning message is the number of resources being monitored by CICSplex SM. However, if resource monitoring recently has become active and one full sample interval has not yet elapsed, there will be no data to display for those resources.

Views for which no warning is issued: The record count warning is issued only for resources for which CICSplex SM keeps topology records. Thus, you will *not* receive a warning when you issue a command to display any of the following views:

CICS regions dynamic storage areas

CICSDSA, CICSDSAS, CICSrgn, CICSrgns, MCICSDSA, MCICSDSS, MCICSrgn, MCICSrgs

Transaction classes

TRNCLS, TRNCLSS, MTRNCLS, MTRNCLSS

Coupling facility data tables

CFDTPOOL, CFDTPOOS

DB2® and DBCTL

DBCTLSS, DBCTLSSS, DB2CONN, DB2SS, DB2SSS, DB2THRD, DB2THRDS, DB2TRAN, DB2TRANS, MDB2THRD, MDB2THRS

FEPI property sets

FEPROP, FEPROPS

Local shared resource (LSR) pools

LSRPBUF, LSRPBUS, LSRPOOL, LSRPOOS, MLSRPBUF, MLSRPBUS, MLSRPOOL, MLSRPOOS

Timed requests

REQID, REQIDS

Intrapartition transient data queue usage

TDQGBL, TDQGBLS, MTGQGBL, MTDQGBLS

Temporary storage queues

TSQ, TSQGBL, TSQGBLS, TSQNAME, TSQNAMES, TSQS, TSQSHR, TSQSHRS, MTSQGBL, MTSQGBLS

DFHRPL data sets

RPLLIST, RPLLISTS

Tasks TASK, TASKS

Analysis definitions

APACTV, EVENT, EVENTDTL, RTAACTV

Configuration definitions

CICSPLEX, CMAS, CMASPLEX, CMTCMLNK, CMTPMLNK

Monitor definitions

MONACTV

Topology definitions

MAS

Workload definitions

WLMATAFF, WLMATGRP, WLMATRAN, WLMAWAOR, WLMAWDEF,
WLMAWORD, WLMAWORK, WLMAWTOR

Require Set

The value in the Require Set field indicates whether or not you must type the SET line action command when you enter new data in an overtyping field. If you specify YES (the default) in the Require Set field, then when you overtype the contents of a field on a view you must type SET in the line command field, then press Enter to effect the change. If you specify NO in the Require Set field, you do not need to type SET in the line command field after you overtype a value and before you press Enter to effect the change.

At any point during your CICSPlex SM session, you can return to the CICSPlex System Manager entry panel, whether to end the session or to select a different menu option, by issuing either the CICSPlex SM command Quit or the ISPF command RETURN.

The CICSPlex SM MENU menu

When you select option 2 (CPSM) from the CICSPlex System Manager entry panel the MENU menu, which is shown in Figure 4, is displayed.

```
27FEB2005 18:49:03 ----- INFORMATION DISPLAY -----
COMMAND ===>                                SCROLL ===> PAGE
CURR WIN ===> 1          ALT WIN ===>
W1 =MENU=====EYUPLX01=EYUPLX01=27FEB2005==18:49:03=CPSM=====14===
CMD Name          Description
-----
ANALYSIS          Real Time Analysis Operations Views
CONFIG            CMAS Configuration Operations Views
MONITOR           Monitoring Views
OPERATE           Operations Views
TOPOLOGY          Topology Operations Views
WORKLOAD          Workload Operations Views
=====
ADMSAM            RTA System Availability Monitoring Administration Views
ADMMRM            RTA MAS Resource Monitoring Administration Views
ADMAPM            RTA Analysis Point Monitoring Administration Views
ADMCONFIG         CMAS Configuration Administration Views
ADMMON            Monitor Administration Views
ADMTOPOL          Topology Administration Views
ADMWLM            Workload Manager Administration Views
ADMBAS            Business Application Services Administration Views
ADMRES            Business Application Services Resource Views
```

Figure 4. The CICSPlex SM MENU menu

Note: If the PlexManager extended security message option is turned on at your enterprise, message BBMSS201I is displayed each time you open a new window or change the context of a window. You can press Enter to clear the message and display the CICSPlex SM MENU menu.

The items on the MENU menu identify the major functional areas of CICSPlex SM, which are:

Real-time analysis

The real-time analysis functions provide external notification of “interesting” conditions in CICS regions: you define what you consider to be of interest using the ADMAPM, ADMMRM, and ADMSAM views, and use the ANALYSIS views to view some of the external notifications arising from real-time analysis activity. All real-time analysis views are described in *CICSplex System Manager Managing Resource Usage*.

Configuration

The ADMCONFIG views support the configuration of CMASs. In particular, you use the ADMCONFIG views to both define and maintain links between adjacent CMASs and CICSplex definitions. You use the CONFIG views to view information about the current configuration. All configuration views are described in *CICSplex System Manager Administration*.

Monitoring

The monitoring functions support the collection of performance-related data, at user-defined intervals, for named resource instances within a CICSplex. You use the ADMMON views to define and maintain your monitoring requirements. You use the MONITOR views to display the resultant data. All monitoring views are described in *CICSplex System Manager Monitor Views Reference*.

Operations

The OPERATE views enable you to display and update information about the status of all CICS regions and CICS resources in a CICSplex. There are no administration tasks (and therefore no administration views) associated with the operations functions of CICSplex SM. All operations views are described in *CICSplex System Manager Operations Views Reference*.

Topology

You use the ADMTOPOL views to create and maintain CICS system definitions, CICS system group definitions, and time period definitions. You use the TOPOLOGY views to obtain information about those definitions, and to make temporary changes to them. All topology views are described in *CICSplex System Manager Administration*.

Workload management

The workload management functions of CICSplex SM support dynamic routing. You use the ADMWLM views to define your workload management requirements to CICSplex SM, and the WORKLOAD views to obtain information about active workloads. All workload management views are described in *CICSplex System Manager Managing Workloads*.

To make a selection from the MENU menu, do one of the following:

- Type an S (for Select) to the left of a view name and press Enter.
- Position the cursor on the name of the view or its description and press Enter. (This is known as a *hyperlink*. Hyperlinks are described in “Initiating a hyperlink to another view” on page 29.)
- Type its name in the COMMAND field and press Enter.

The resulting menu lists all views or classes of views belonging to the selected functional area. For example, when you select the OPERATE view, a list of all OPERATE menus is displayed, as shown in Figure 5 on page 9.

```

27FEB2005 19:34:08 ----- INFORMATION DISPLAY -----
COMMAND ===>
CURR WIN ===> 1      ALT WIN ===>
W1 =MENU=====EYUPLX01=EYUPLX01=27FEB2005==19:34:08=CPSM=====15===
CMD Name      Description
-----
OPERATE      Operations Views
CICSBTS      CICS BTS Views
CONNECT      Connection Views
DOCTEMP      Document Template Views
DB2          DB2 and DBCTL Views
ENQUEUE      Global Enqueue Views
EXIT         Exit Views
FEPI         FEPI Views
FILE         File Views
JOURNAL      Journal Views
PROGRAM      Program Views
REGION       CICS Region Views
TASK         Task Views
TCPIPS       TCPIP Service Views
TDQ          Transient Data Queue Views
TEMPSTOR     Temporary Storage Queue Views
TERMINAL     Terminal Views
TRANS        Transaction Views
UOW          Unit of Work Views

```

Figure 5. The OPERATE menu

You can return to the MENU menu at any time during the CICSplex SM session by issuing the MENU command.

Chapter 2. Panels, windows, and views

This chapter describes how to use CICSplex SM under ISPF. It includes information about:

- The types of CICSplex SM panels that you see during a CICSplex SM session
- How to use CICSplex SM windows
- How to display a CICSplex SM view and how to initiate an action against the information in that view

CICSplex SM display handling is very similar to that of ISPF. Indeed, you will find references throughout this book to individual ISPF commands that are most useful in a CICSplex SM session.

Note: The user interface can display a maximum of 65535 items. If you need more than this, you could consider using the web user interface. You could also use the SUMMARIZE command to provide a subset of the data.

Panels

During a CICSplex SM session, you will see up to four different types of panel. These are:

- Menu panels
- Input panels
- Help pop-up panels
- Information display panel

Menu panels

A menu panel contains a list of options, from which you select one by entering the appropriate number or letter in the OPTION field and pressing Enter. A menu panel, of which the CICSplex System Manager entry panel (shown in Figure 6 on page 12) is an example, occupies the entire screen.

```

----- CICSplex System Manager -----
OPTION ==>

0 PROFILE      - User Session Parameters
1 PLEXMGR      - List of Service Points
2 CPSM         - CICSplex SM

      Default Criteria for CPSM:

Context          ==> EYUCMS1A
Scope            ==> EYUCMS1A
Warning Record Count ==> 0          0 for no checking
Require Set      ==> YES          YES, NO

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```

Figure 6. Menu panel example

Input panels

Some of the CICSplex SM commands require you to supply additional information before they can be processed. CICSplex SM requests this information by presenting you with an input panel, of which an example is shown in Figure 7.

```

----- CICS TRANSACTION DUMP CREATE -----
COMMAND ==>

Specify the transaction dump code and options desired:

Scope          ==> EYUCSG01      CICS System or Group for Dump
Trans dump code ==>              4-character Transaction Dump Code
Maximum dumps   ==> 0           0 - 999
Shut option     ==>              SHUTDOWN or NOSHUTDOWN
Trans dumping   ==>              TRANDUMP or NOTRANDUMP
System dumping  ==>              SYSDUMP or NOSYSDUMP

Press Enter to add transaction dump code.
Type END or CANCEL to terminate without adding.

```

Figure 7. A CICSplex SM input panel

An input panel fills the screen. When you provide the requested information and press Enter, command processing resumes and the screen contents are restored.

Selection lists

When you enter a value for which specific input is required and your value does not meet the requirements for that value, a selection list is displayed. The selection list includes all values that meet the requirements for that type of input. Selection lists can be displayed when you enter any of the following:

- A generic value
- The name of an undefined CICSplex SM resource
- An inappropriate command parameter
- An invalid value in an overtype field

One example is a selection list that is displayed when a generic name is entered in an input panel. Generic names can contain:

- An asterisk (*), which must be the last or the only character in the string. It represents any number of characters, including zero. For example:
ABC* All names beginning with the characters ABC
***** All names
- A plus sign (+), in any position, to represent a single character. For example:
TERM0+ All 6-character names starting with TERM0
A+BC+DE
All 7-character names with any character in the second and fifth positions, A in the first position, B in the third, C in the fourth, D in the sixth, and E in the seventh position.

An example of an input panel from which you can request a selection list of values is shown in Figure 8.

```

----- Create System - General Attributes - for EUPLX01 -----
COMMAND ==>

System Name ==>
Description ==>
Primary CMAS or Generic ==> EYUCMS01    CMAS to which CICS normally connects
Active Time or Generic  ==> *           Hours of operation
APPLID                  ==>             VTAM application ID
SYSIDNT                 ==>             System communication ID

                                SECURITY
CICS Command Checking   ==> NO          Simulated CICS Cmd Checks (YES, NO, or *)
CICS Resource Checking  ==> NO          Simulated CICS Res Checks (YES, NO, or *)
Exemption Checking      ==> NO          Check for Exempt Users (YES, NO, or *)

                                TIME
Time Zone                ==> U          Time Zone for System (B-Z or *)
Time Zone Offset         ==> 00        Time Zone Offset for System (0-59 or *)
Daylight Savings Time    ==> YES       Daylight Savings for System (YES, NO, or *)

Enter DOWN or UP to view other System screens.
Press Enter to create the System.
Type END or CANCEL to cancel without creating.

```

Figure 8. Requesting selection lists of values from input panels

As shown in Figure 9 on page 14, a selection list of period definitions is displayed when the generic value '*' is entered in the Active Time field of the input panel shown in Figure 8

```

COMMAND ==>
Active Time requires a specific resource.
Select a single entry, change the key, or enter END or CANCEL to terminate.

Resources matching key: *

C Name      Description      Type      Status
-----
- EYUPDF01 SSet - Normal day PERIODEF  N/A
- EYUPDF02 SSet - Batch time PERIODEF  N/A
***** BOTTOM OF DATA *****

```

Figure 9. Selection list displayed when a generic name is specified

You select a value from the selection list shown in Figure 9 in one of two ways:

- Type an S (for select) to the left of the value you want then press Enter.
- Type the name in the Resource matching key field and press Enter. If you specify another generic name in this field, a second selection list is displayed.

Another way a selection list can be displayed is when, on an input panel, you specify a resource name for a CICSplex resource that does not exist. For example, when you create a CICS system definition, you might specify a name for a period definition that has not been created. When this happens, a selection list for that type of resource is displayed, with a message indicating that the resource is not found. Figure 10 shows an example of the message displayed with the selection list.

```

COMMAND ==>
Active Time EYUPDF04 is not found on the repository.
Select an entry, press Enter to accept, or enter END or CANCEL to terminate.

Selected Active EYUPDF04

C Name      Description      Type      Status
-----
- EYUPDF01 SSet - Normal day PERIODEF  N/A
- EYUPDF02 SSet - Batch time PERIODEF  N/A
***** BOTTOM OF DATA *****

```

Figure 10. Selection list displayed when a resource is not found

You can do one of the following:

- Select an entry by typing S to the left of the value you want or by entering the name in the Resource matching key field.
- Press Enter to accept the name you specified. You return to the input panel. The name of the resource you specified appears on the input panel.

When you do this, the action command for which the input panel was displayed is executed (for example, the CICS system definition is created). However, you must later define the specified resource, by that name, using the appropriate view.

- Issue END or CANCEL to return to the input panel.

Note: CICSplex SM checks to see if the referenced resource exists only the first time it encounters the resource name, or when the name of the referenced resource itself is changed. In the example above, if you are creating a CICS system definition and you reference a resource for which no definition exists, simply accept the name of the referenced resource and complete the

definition of the CICS system. CICSplex SM does not again remind you that the referenced resource does not exist. On the other hand, if you change the name of the referenced resource to the name of another undefined resource and again try to create the CICS system, CICSplex SM notifies you that the new resource is not known to the repository; you have the same options again. In either case, you must still remember to create a definition for the referenced resource.

Help pop-ups

To request help at any time during a CICSplex SM session, issue the HELp display command (or press the PF key to which it is assigned). When you enter the HELp display command from an information display panel, the help information is displayed in a scrollable pop-up window, as shown in Figure 11. This temporarily overwrites the contents of the panel. The contents are restored when you exit from the help facility.

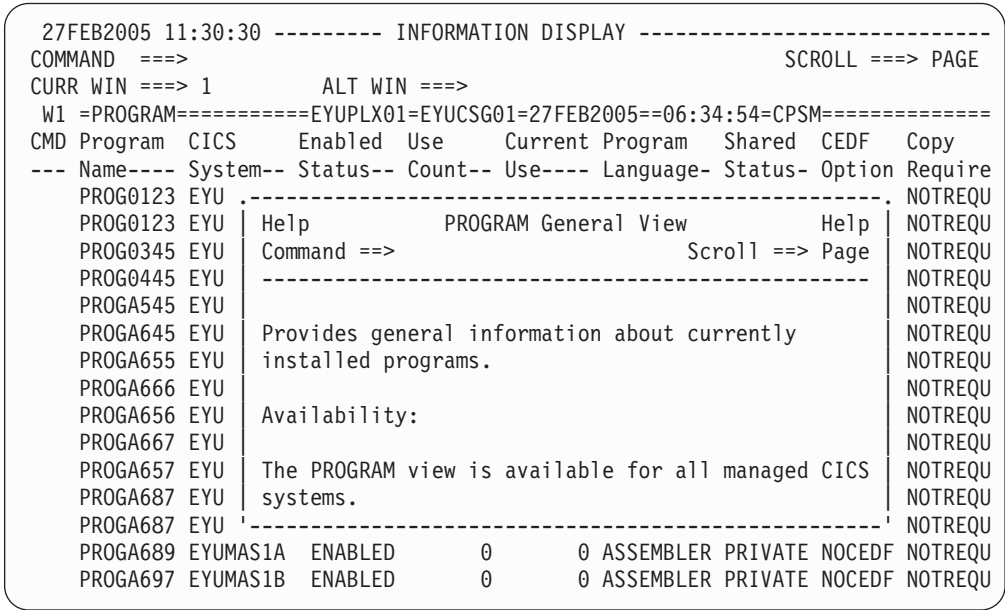


Figure 11. Help pop-up panel

When you issue the HELp display command from the CICSplex System Manager entry panel, from an input panel, or from the panels associated with option 0 (PROFILE), a full-screen help panel is displayed. The previous screen configuration is restored when you exit from the help facility.

For more information about the CICSplex SM help facility, see Chapter 4, “The CICSplex SM help facility,” on page 57.

Information display panel

The information display panel displays the results of CICSplex SM command processing. It is the panel you see during most of any CICSplex SM session. Figure 12 on page 16 shows a typical information display panel.

```

27FEB2005 20:25:10 ----- INFORMATION DISPLAY -----
COMMAND ==>
CURR WIN ==> 1 ALT WIN ==>
W1 =PROGRAM=====EYUPLX01=EYUPLX01=27FEB2005==20:25:05=CPSM=====652===
CMD Program CICS Enabled Use Current Program Shared CEDF Copy
--- Name---- System-- Status-- Count-- Use---- Language- Status Option Require
DFHACP EYUMAS1A ENABLED 1 1 ASSEMBLER PRIVATE NOCEDF NOTREQU
DFHACP EYUMAS2A ENABLED 1 1 ASSEMBLER PRIVATE NOCEDF NOTREQU
DFHACP EYUMAS3A ENABLED 1 1 ASSEMBLER PRIVATE NOCEDF NOTREQU
DFHACP EYUMAS4A ENABLED 1 1 ASSEMBLER PRIVATE NOCEDF NOTREQU
DFHAKP EYUMAS1A ENABLED 1 0 ASSEMBLER PRIVATE NOCEDF NOTREQU
DFHAKP EYUMAS2A ENABLED 1 0 ASSEMBLER PRIVATE NOCEDF NOTREQU
DFHAKP EYUMAS3A ENABLED 1 0 ASSEMBLER PRIVATE NOCEDF NOTREQU
DFHAKP EYUMAS4A ENABLED 1 0 ASSEMBLER PRIVATE NOCEDF NOTREQU
DFHAMP EYUMAS1A ENABLED 1 0 ASSEMBLER PRIVATE NOCEDF NOTREQU
DFHAMP EYUMAS2A ENABLED 1 0 ASSEMBLER PRIVATE NOCEDF NOTREQU
DFHAMP EYUMAS3A ENABLED 1 0 ASSEMBLER PRIVATE NOCEDF NOTREQU
DFHAMP EYUMAS4A ENABLED 1 0 ASSEMBLER PRIVATE NOCEDF NOTREQU

```

Figure 12. The information display panel

The information display panel consists of a *display area* and a *control area*.

The display area

The display area contains one or more *windows*:

```

W1 =PROGRAM=====EYUPLX01=EYUPLX01=02FEB1995==20:25:05=CPSM=====652===
CMD Program CICS Enabled Use Current Program Shared CEDF Copy
--- Name---- System-- Status-- Count-- Use---- Language- Status Option Require
DFHACP EYUMAS1A ENABLED 1 1 ASSEMBLER PRIVATE NOCEDF NOTREQU
DFHACP EYUMAS2A ENABLED 1 1 ASSEMBLER PRIVATE NOCEDF NOTREQU
DFHACP EYUMAS3A ENABLED 1 1 ASSEMBLER PRIVATE NOCEDF NOTREQU
DFHACP EYUMAS4A ENABLED 1 1 ASSEMBLER PRIVATE NOCEDF NOTREQU
DFHAKP EYUMAS1A ENABLED 1 0 ASSEMBLER PRIVATE NOCEDF NOTREQU
DFHAKP EYUMAS2A ENABLED 1 0 ASSEMBLER PRIVATE NOCEDF NOTREQU
DFHAKP EYUMAS3A ENABLED 1 0 ASSEMBLER PRIVATE NOCEDF NOTREQU
DFHAKP EYUMAS4A ENABLED 1 0 ASSEMBLER PRIVATE NOCEDF NOTREQU
DFHAMP EYUMAS1A ENABLED 1 0 ASSEMBLER PRIVATE NOCEDF NOTREQU
DFHAMP EYUMAS2A ENABLED 1 0 ASSEMBLER PRIVATE NOCEDF NOTREQU
DFHAMP EYUMAS3A ENABLED 1 0 ASSEMBLER PRIVATE NOCEDF NOTREQU
DFHAMP EYUMAS4A ENABLED 1 0 ASSEMBLER PRIVATE NOCEDF NOTREQU
DFHBRCP EYUMAS1A ENABLED 0 0 ASSEMBLER PRIVATE NOCEDF NOTREQU
DFHBRCP EYUMAS2A ENABLED 0 0 ASSEMBLER PRIVATE NOCEDF NOTREQU
DFHBRCP EYUMAS3A ENABLED 0 0 ASSEMBLER PRIVATE NOCEDF NOTREQU
DFHBRCP EYUMAS4A ENABLED 0 0 ASSEMBLER PRIVATE NOCEDF NOTREQU
DFHCCNV EYUMAS1A ENABLED 0 0 ASSEMBLER PRIVATE NOCEDF NOTREQU
DFHCCNV EYUMAS2A ENABLED 0 0 ASSEMBLER PRIVATE NOCEDF NOTREQU

```

Figure 13. A display area containing a single window

Information returned by a CICSplex SM command is directed to one of the windows in the display area. For a detailed description of CICSplex SM windows, see “Windows” on page 17.

You can display your program function (PF) key assignments in the last two lines of the display area. Depending on the amount of data returned by a CICSplex SM command, the last two lines of data may be overlaid by your PF key assignments. To prevent this you can use the ISPF command PFSHOW OFF to suppress display of the PF key assignments. Use the PFSHOW ON command to redisplay them.

The control area

The control area comprises the top three lines of the information display panel:

```
COMMAND  ==>                                SCROLL ==> PAGE
CURR WIN ==> 1                                ALT WIN ==>
```

Figure 14. The control area

The control area controls activity in the remainder of the information display panel. The components of the control area are:

Title line

Displays the date and time of the latest update to the panel and includes the panel title, "INFORMATION DISPLAY". ISPF short messages appear at the right end of the title line.

COMMAND field

In which you can enter CICSplex SM, ISPF, and TSO commands.

The position of the COMMAND line is user-selectable; you can place it at either the top or the bottom of the information display panel.

All of the examples show the COMMAND field in the control area at the top of the information display panel. Depending on your ISPF options, you may see the COMMAND field at either the top or the bottom of the information display panel.

SCROLL field

Shows the default amount of data to be scrolled in a window when you issue a scroll command. You can replace this value with any of the parameters of the ISPF scroll commands (Up, Down, LEft, and RIght). The parameters are described in "Scrolling data in a window" on page 49.

CURR WIN field

Identifies the *current window*. This is the window to which command results are directed.

When there are multiple windows in the display area, you can overwrite the value in the CURR WIN field to make a different window the current window. For information about display commands you can use to select the current window, see "Changing the current window" on page 39.

ALT WIN field

Identifies a window that is to display the results of any hyperlink operation. This type of window is known as an *alternate window*. Hyperlinks are described in "Initiating a hyperlink to another view" on page 29.

Windows

A window is a subdivision of the display area of the information display panel. When you begin a CICSplex SM session, the display area of the information display panel contains one window by default. During the session, you can open up to 19 additional windows (giving a maximum of 20) in a single display area. This means that you can see a variety of related information all at one time. How to open and use additional windows is described in "Manipulating the contents of a window" on page 48.

Windows® in a single information display panel are logically independent of each other, and independent processing can occur simultaneously in those windows. You

can simultaneously perform actions in more than one window by pressing Enter only once after you type commands in several windows. The results of commands entered in this manner are displayed simultaneously as soon as the command having the longest processing time is processed. Only those windows in which you typed commands contain new information; other windows are not affected.

Note: If you type no commands, but press Enter, the contents of all windows are updated.

If you issue the ISPF command SPLIT to divide the physical screen into two logical screens, or windows, you can open a different CICSplex SM session in each screen. The display area of each panel can contain up to 20 windows.¹

Figure 15 shows an information display panel that contains three windows. In this example, windows 1 and 3 contain information, while window 2 is open but contains no data.

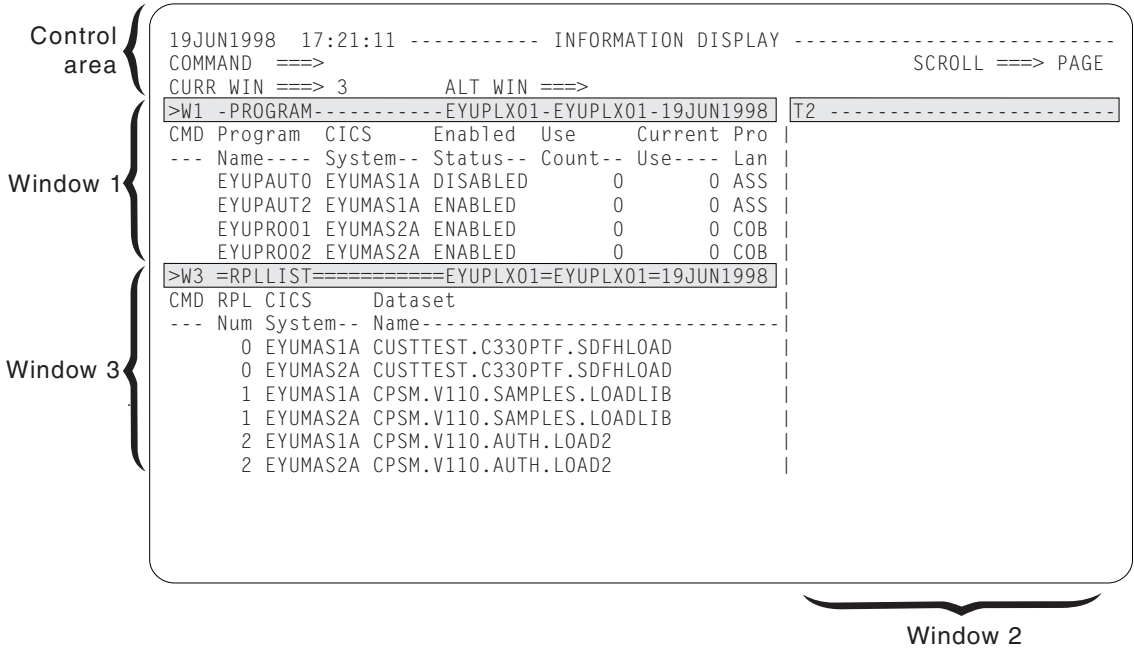


Figure 15. Multiple windows in the display area

The window information line

The top line of a CICSplex SM window is called the *window information line*. It differentiates the window from other windows in the display area, and describes the window contents. Figure 16 shows an example of the window information line:

```
>W1=PROGRAM==PROGRAMS==EYUPLX01=EYUCSG01=02FEB1994==11:30:30==CPSM=====166=
```

Figure 16. The window information line

Reading from left to right in Figure 16, the window information line includes:

- A left and right scroll indicator (>)
- A window identifier (W1)
- A view name (PROGRAM)

1. The ISPF command SPLITV is not supported.

- A form name (PROGRAMS)
- The current context of the window (EYUPLX01)
- The current scope of the window (EYUCSG01)
- The date (02FEB1994) and time (11:30:30)
- The product name (CPSM)
- The number of records in the view (166)

The window information line of the current window contains equal signs (=). The window information lines of all other windows contain dashes (-). Each of the fields in the window information line is described in the rest of this section.

Left and right scroll indicator

At the extreme left of the window information line you might see any of the characters <, >, and +. The less than symbol (<) means that there is more data to the left; the greater than symbol (>) means that there is more data to the right; the plus sign (+) means that there is more data to both the left and the right that can be scrolled into view.

Window identifier

The window identifier is a two- or three-character code, where:

- The first character shows the current status of the window. It can be one of:
 - W (waiting), meaning that the window contains data and is available for use
 - T (temporary), meaning that the window is empty and no commands are processing
 - E (error), meaning that an error has occurred as a result of an action directed to that window
 - L (locked), meaning that the window contents cannot be updated automatically
 - P (pending), meaning that a command is currently processing

For a more detailed discussion of the window status values, see “Displaying the window status description” on page 40.

- The rest of the code shows the number assigned by CICSplex SM to the window. Window numbers range from 1 through 20 and are assigned sequentially.

View View is the name of the view resulting from the view command most recently directed to this window. Views are described in “Views” on page 20.

Form Form is the name of the form of data resulting from the most recently issued view command. The form name is displayed only when it differs from the view name. If the form name ends with the letter “S” (as in PROGRAMS), the form is a summary of the view. If the form name ends with the letter “D” (as in PROGRAMD), the form is a detail view, usually of a single occurrence of a resource. View forms are described in “Views” on page 20.

Context

The context value is the name of a CICSplex or CMAS. It identifies the set of CICSplex SM or CICS resources that can be affected by commands directed to this window.

Scope The scope value is the name of a CICS system or CICS system group that is a subset of the CICSplex identified as the context, or is the name of the CICSplex itself. This field is ignored when the context is a CMAS.

Note: This field contains an asterisk (*), meaning no scope is in effect, when this window is displayed as a result of initiating a hyperlink from PlexManager. It also contains an asterisk (*) if no scope is specified on the CICSplex System Manager entry panel. When the context is a CICSplex, you *must* specify a scope before performing any other actions.

Date This value is the date of the most recent change to the view.

Time This value is the time of the most recent change to the view.

Product

This value is the abbreviated name of the product. It can be either CPSM or PLEXMGR.

Number of records

At the extreme right of the window information line is a count of the number of records in the view. For a *detail* view, which provides information about a single resource, this value is always 1. For a *summary* view or a *general* view, which contain information about multiple resources in a tabular form, the count is the number of rows in the table. (Detail, summary, and general views are described in “Views.”)

The information display panel always contains at least two sets of date and time values. The date and time in the control area of the information display panel indicate when the panel was last updated. Each window information line also contains date and time values that indicate when the contents of the window were last updated.

Clearing messages

CICSplex SM messages appear in the window, completely overlaying the displayed view. When there are more messages than will fit in the window, you can press Enter to display the next group of messages. When there are no more messages, press Enter again to clear the messages and redisplay the view.

(You can press PF8 to scroll through the messages and redisplay the view. This has the effect of also scrolling the view. When you redisplay the view, different information is visible.)

Views

A CICSplex SM view is a formatted display of data about one or more CICS resources or CICSplex SM definitions. There are three forms of most CICSplex SM views:

General view

A general view contains information about multiple CICS resources or CICSplex SM definitions within the context and scope of the window. This information is presented in tabular form (rows and columns).

Summary view

A summary view contains summarized information about multiple CICS resources within the context and scope of the window. Each column of data is summarized using rules appropriate to the type of data. This information is presented in tabular form.

Detailed view

A detailed view contains information about a single CICS resource or CICSplex SM definition within the context and scope of the window.

If your CICSplex includes systems running a release of CICS for which a view is not available, those systems are not included in that view. If you issue a view command and your CICSplex consists solely of such systems, the following message is displayed:

BBMXBD15I There is no data that satisfies your request.

The online help facility provides view availability information. Refer to Chapter 4, “The CICSplex SM help facility,” on page 57 for details.

Displaying a view

You can display a view:

- By entering the relevant view command in the COMMAND field of the information display panel control area
- By selecting the view name from a menu
- By performing a hyperlink from one view to another

Each of these ways of displaying a view is described in the remainder of this section.

Issuing a view command

A view command has the same name as the view it produces, or of the form of the view it produces. For example, the PROGRAM view command produces the PROGRAM view; the PROGRAMD command produces a detail form of the PROGRAM view. Many of the view commands have parameters that you can use to refine your request. For example, the full form of the PROGRAM view command is:

```
PROGRAM [prgrmid [ENABLED|DISABLED]]
```

Therefore, you can request a display of all enabled programs, or all disabled programs, or of a particular program, within the current context and scope. If you specify more parameters than are valid on any particular view command, a message is issued.

Note: If you issue a command that results in a display of general or summary views, thousands of records may be displayed. (For example, you might issue the LOCTRAN command to display a list of all local transactions.) The value you specified in the Warning Record Count field on the CICSplex System Manager entry panel determines the maximum number of records that are displayed without a warning message. (For more information about the Warning Record Count field, see page “Warning Record Count” on page 5.) When the number you specify is exceeded, a warning message similar to the following example is displayed:

The data for the current request may result
in more than 5000 records.

The number of records shown in the message is the number of records available when your request is processed. The number that is actually displayed may be different, depending on events that occur in the CICSplex SM environment during the interval between your request and the display of records.

To display the records, press Enter. To terminate the request without displaying the records, type END or CANCEL. When you terminate the request, the name of the view for which you issued the command is shown, and the following message is displayed:

Request for data has been cancelled.

You can either reissue the original command, with parameters that reduce the number of records that will be displayed, or issue a different command.

You issue a view command by entering it in the COMMAND field of the information display panel and pressing Enter. You can also assign CICSplex SM view commands to PF keys, as described in Appendix A, “Tailoring your CICSplex SM profile,” on page 63.

This book does not describe the CICSplex SM view commands. For detailed descriptions of the view commands and of their effects, see the appropriate books in the CICSplex SM library.

Selecting a view name from a menu

When you know the name of the view you want to see, you can display it simply by issuing the appropriate view command. Sometimes, however, you might not know the name of the view you want to see. When this happens, you can find the name of the view in a menu.

A menu is a list of other menu names or of view names. Figure 17 and Figure 18 on page 23 show the different levels of menus. In Figure 17:

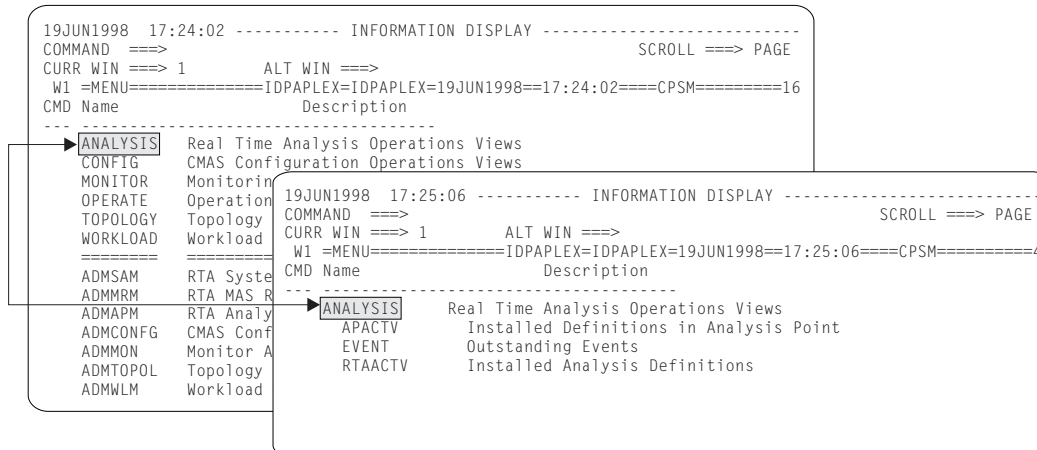


Figure 17. MENU and ANALYSIS menus

- The MENU menu, displayed when you issue the command MENU, lists classes of other menus or of views.
- The ANALYSIS menu, displayed when you enter the command MENU ANALYSIS, lists views.



Figure 18. MENU, OPERATE, and FILE menus

In Figure 18:

- The MENU menu, displayed when you issue the MENU command, lists classes of other menus or of views.
- The OPERATE menu, displayed when you issue the MENU OPERATE command, lists classes of views.
- The FILE menu, displayed when you issue the MENU OPERATE FILE command, lists views.

You can display a menu by issuing a command that specifies the menu you want to see or by selecting its name from another menu. From any menu, you can select and display another menu or a view. To make a selection from a menu, do one of the following:

- Issue the appropriate view or menu command. You can type the parameters along with the command in the COMMAND field; press Enter.
- Type an S (for select) next to the appropriate menu or view name and press Enter. When you are selecting a view, overwrite the line with any appropriate parameters before you press Enter.
- Position the cursor anywhere on the line that lists your selection and press Enter to initiate a hyperlink to the menu or view.

For example, when you issue the command MENU, the menu shown in Figure 19 appears.

```

27FEB2005 18:49:03 ----- INFORMATION DISPLAY -----
COMMAND ===>                                SCROLL ===> PAGE
CURR WIN ===> 1          ALT WIN ===>
W1 =MENU=====EYUPLX01=EYUPLX01=27FEB2005==18:49:03=CPSM=====14===
CMD Name          Description
-----
ANALYSIS   Real Time Analysis Operations Views
CONFIG     CMAS Configuration Operations Views
MONITOR    Monitoring Views
OPERATE    Operations Views
TOPOLOGY   Topology Operations Views
WORKLOAD   Workload Operations Views
=====
ADMSAM     RTA System Availability Monitoring Administration Views
ADMMRM     RTA MAS Resource Monitoring Administration Views
ADMAMP     RTA Analysis Point Monitoring Administration Views
ADMCONFG   CMAS Configuration Administration Views
ADMMON     Monitor Administration Views
ADMTOPOL   Topology Administration Views
ADMWLM     Workload Manager Administration Views
ADMBAS     Business Application Services Administration Views
ADMRES     Business Application Services Resource Views

```

Figure 19. The MENU menu

You can also display the MENU menu by selecting option 2 CPSM from the CICSplex System Manager entry panel.

The MENU menu is a list of other menu names. To display the menu of ANALYSIS views, you can either select ANALYSIS from the MENU menu, or type the command MENU ANALYSIS. When you do this, the ANALYSIS menu shown in Figure 20 appears.

```

27FEB2005 16:51:23 ----- INFORMATION DISPLAY -----
COMMAND ===>                                SCROLL ===> PAGE
CURR WIN ===> 1          ALT WIN ===>
W1 =MENU=====EYUPLX01=EYUPLX01=27FEB2005==16:51:23=CPSM=====4===
CMD Name          Description
-----
ANALYSIS   Real Time Analysis Operations Views
  APACTV   Installed Definitions in Analysis Point
  EVENT    Outstanding Events
  RTAACTV  Installed Analysis Definitions

```

Figure 20. The ANALYSIS menu

In the same ways, you can display a menu that is a list of OPERATE menus, or classes of OPERATE views, as shown in Figure 21 on page 25.

```

27FEB2005 19:34:08 ----- INFORMATION DISPLAY -----
COMMAND ===>
CURR WIN ===> 1      ALT WIN ===>
W1 =MENU=====EYUPLX01=EYUPLX01=27FEB2005==19:34:08=CPSM=====15===
CMD Name      Description
-----
OPERATE      Operations Views
CICSBTS      CICS BTS Views
CONNECT      Connection Views
DOCTEMP      Document Template Views
DB2          DB2 and DBCTL Views
ENQUEUE      Global Enqueue Views
EXIT         Exit Views
FEPI         FEPI Views
FILE         File Views
JOURNAL      Journal Views
PROGRAM      Program Views
REGION       CICS Region Views
TASK         Task Views
TCPIPS       TCPIP Service Views
TDQ          Transient Data Queue Views
TEMPSTOR     Temporary Storage Queue Views
TERMINAL     Terminal Views
TRANS        Transaction Views
UOW          Unit of Work Views

```

Figure 21. The OPERATE menu

As a shortcut, you can display a menu by typing only the name of the menu (for example, instead of MENU OPERATE, you can type only OPERATE) in the COMMAND field. However, when you display a menu in this manner, you cannot specify any qualifier with the menu name; thus, you will always get a list of all general and summary views when you use this method. (The qualifiers are described on page 27.) To display the OPERATE menu of FILE views, you can select it from the OPERATE menu, or you can issue the command MENU OPERATE FILE. In fact, the order of the classes does not matter, so you can achieve the same result by issuing the command MENU FILE OPERATE.

Similarly, you can display a menu that lists classes of MONITOR views, as shown in Figure 22 on page 26.

```

27FEB2005 19:34:08 ----- INFORMATION DISPLAY -----
COMMAND ===>
CURR WIN ===> 1          ALT WIN ===>
W1 =MENU=====EYUPLX01=EYUPLX01=27FEB2005==19:34:08=CPSM=====14===
CMD Name          Description
-----
MONITOR           Monitoring Views
  MONACTV         Installed Monitor Definitions
=====
CONNECT          Connection Monitoring Views
  DB2             DB2 and DBCTL Monitoring Views
  FEPI            FEPI Monitoring Views
  FILE            File Monitoring Views
  GLOBAL          Global Resource Monitoring Views
  JOURNAL          Journal Monitoring Views
  PROGRAM          Program Monitoring Views
  REGION          CICS Region Monitoring Views
  TDQ             Transient Data Queue Monitoring Views
  TEMPSTOR        Temporary Storage Queue Monitoring Views
  TERMINAL        Terminal Monitoring Views
  TRANS           Transaction Monitoring Views

```

Figure 22. The MONITOR menu

Note that the MONITOR menu, like the OPERATE menu, also lists a FILE class of views. To display a menu that lists *all* of the FILE views, for both MONITOR and OPERATE, issue the command MENU FILE. This produces a menu like the one shown in Figure 23 on page 27.

```

27FEB2005 19:34:08 ----- INFORMATION DISPLAY -----
COMMAND ==>
CURR WIN ==> 1      ALT WIN ==>
W1 =MENU=====EYUPLX01=EYUPLX01=27FEB2005==19:34:08=CPSM=====28===
CMD Menu/View      Description
-----
MONITOR      Monitoring Views
  FILE        File Monitoring Views
    MCMDT      Monitor Data Tables
    MCMDTS     Monitor Data Table Summary
    MLOCFILE   Monitor Local Files
    MLOCFILS   Monitor Local File Summary
    MREMFILS   Monitor Remote File Summary
    MREMFILS   Monitor Remote File Summary
OPERATE      Operations Views
  FILE        File Views
    CFDTPOOL   Coupling Facility Data Tables
    CFDTPOOS   Coupling Facility Data Table Summary
    CMDT       Data Tables
    CMDTS      Data Table Summary
    DSNAME     Data Sets
    DSNAMEs    Data Set Summary
    FILE       Files
    FILES      File Summary
    LOCFILE    Local Files
    LOCFILES   Local File Summary
    LSRPBUF    LSR Pool Buffers
    LSRPBUS    LSR Pool Buffer Summary
    LSRPOOL    LSR Pools
    LSRPOOS    LSR Pool Summary
    REMFILE    Remote Files
    REMFILES   Remote File Summary

```

Figure 23. The FILE menu

Usually, on a menu that lists views, only general and summary views are shown. You can qualify a menu command to include or exclude subsets of views, by adding a qualifier to the command, as follows:

- +** Expands the specified menu, so that *all* levels below the level specified are listed.
- +D** Includes general, detail, and summary views. (That is, detail views are added to the normally displayed list.)
- G** Excludes general views. Includes summary views.
- S** Excludes summary views. Includes general views.

Note: You can combine qualifiers. Thus, if you issue the command MENU OPERATE +D –S, the menu displayed shows all of the OPERATE general and detail views. As an example, issuing the command MENU OPERATE + produces a menu like the one shown in Figure 24 on page 28.

```

27FEB2005 19:34:08 ----- INFORMATION DISPLAY -----
COMMAND ===>                                SCROLL ===> PAGE
CURR WIN ===> 1          ALT WIN ===>
W1 =MENU=====EYUPLX01=EYUPLX01=27FEB2005==19:34:08=CPSM=====15===
CMD Name          Description
-----
OPERATE           Operations Views
  CICSSTS         CICS BTS Views
    PROCTYP       CICS BTS ProcessTypes
    PROCTYPS      CICS BTS ProcessType Summary
  CONNECT         Connection Views
    CONNECT       ISC/MRO Connections
    CONNECTS      ISC/MRO Connection Summary
    MODENAME      LU6.2 Modenames
    MODENAMS      LU6.2 Modename Summary
    PARTNER       CICS Partners
    PARTNERS      CICS Partner Summary
    PROFILE       CICS Profiles
    PROFILES      CICS Profile Summary
  DOCTEMP         Document Template Views
    DOCTEMP       Document Templates
    DOCTEMPS      Document Template Summary
  DB2             DB2 and DBCTL Views
    DBCTLSS       DBCTL Subsystems
    DBCTLSSS      DBCTL Subsystem Summary
    DB2SS         DB2 Subsystems
    DB2SSS        DB2 Subsystem Summary

```

Figure 24. An example of a partial OPERATE + menu

Another example shows that issuing the command MENU OPERATE FILE -S produces a menu of OPERATE FILE views, excluding the summary views, as shown in Figure 25.

```

27FEB2005 19:34:08 ----- INFORMATION DISPLAY -----
COMMAND ===>                                SCROLL ===> PAGE
CURR WIN ===> 1          ALT WIN ===>
W1 =MENU=====EYUPLX01=EYUPLX01=27FEB2005==19:34:08=CPSM=====9===
CMD Name          Description
-----
OPERATE           Operations Views
  FILE            File Views
    CFDTPOOL      Coupling Facility Data Tables
    CMDT          Data Tables
    DSNAME        Data Sets
    FILE          Files
    LOCFILE       Local Files
    LSRPBUF       LSR Pool Buffers
    LSRPOOL       LSR Pools
    REMFILE       Remote Files

```

Figure 25. The OPERATE FILE -S menu

Selecting a view from the VIEWS menu

The VIEWS menu also provides access to views; you can display it by issuing the VIEWS command. The VIEWS menu lists all of the available views in alphabetic order. To display a partial list of views, issue the command with a specific or generic view name. For example, to display a list of all the views that begin with the letter C, issue the following command:

```
VIEWS C*
```

To select and display a view from the VIEWS menu, do either of the following:

- Type an S to the left of the view name and press Enter.
- Place the cursor on the view name and press Enter.

Note that on the VIEWS menu list, unlike the MENU menu, you *cannot* overtype command parameters in the view name and description fields.

Initiating a hyperlink to another view

Many views contain *hyperlink fields*, which provide a direct route from information shown in one view to related information in a different view. Hyperlink fields appear either in high intensity or in a different color from other fields in the view.

The view that results from a hyperlink can be displayed:

- In the window from which you initiate the hyperlink (which need not be the current window), or
- In an alternate window

To direct the results of a hyperlink to the window from which you initiate the hyperlink, simply place the cursor anywhere within the data portion of a hyperlink field and press Enter.

To direct the results of a hyperlink to a second window, type the identifier of that window in the ALT WIN field, place the cursor anywhere within the data portion of the hyperlink field, and press Enter. If you want to direct the results of all subsequent hyperlink requests to the same alternate window, prefix the value in the ALT WIN field with an ampersand (&). For example, entering the value

&3

in the ALT WIN field causes the results of all subsequent hyperlink requests to appear in window 3.

Regardless of where the results of the hyperlink are directed, the window in which the results are displayed becomes the current window.

Notes:

1. You cannot hyperlink to an alternate window from a summary view.
2. You cannot hyperlink on a name which is in mixed case if this name is the key field of another resource.

The results of a hyperlink request

The view resulting from a hyperlink request can contain either new data or a different form of the existing data. Whether you get new or existing data is determined by the window in which the resulting view is to be displayed, and the existing contents of that view. That is:

- When the results of a hyperlink are directed to a second window, new data is always provided. For example, in Figure 26 on page 30, Tran ID is a hyperlink field in the LOCTRAN view shown in window 1. If you enter the identifier of a second window in the ALT WIN field, position the cursor on the ETVP value under the Tran ID heading, and press Enter, detailed information about transaction ETVP is displayed in window 2.
- When the results of a hyperlink are displayed in the window from which you initiated the hyperlink:
 - A different form of the existing data is provided when the resulting view is from the same family of views for a given resource type. For example,

initiating a hyperlink from the Tran ID field in Figure 26 produces the LOCTRAN view, which contains detailed information about a specific transaction. As LOCTRAN and LOCTRAN belong to the same family of views, a different form of existing data is provided.

- New information is provided when the resulting view is not within the same family of views. For example, if you were to initiate a hyperlink from the Program Name field of the LOCTRAN view in Figure 26, the result would be the PROGRAMD view, which contains detailed information about the program associated with the designated transaction. As LOCTRAN and PROGRAMD are not within the same family of views, new information is provided.

```

19JUN1998 17:28:59 ----- INFORMATION DISPLAY -----
COMMAND ==>
CURR WIN ==> 2          ALT WIN ==> &2          SCROLL ==> PAGE
>W1 -LOCTRAN-----EYUPLX01-EYUPLX01-19JUN1998--17:28:29---CPSM-----128
CMD Tran CICS Enabled Use Program Pri TranCls Purge Dmp Rout
--- ID-- System-- Status-- Count Name-----
ETVP EYUMAS1A ENABLED 0 EYUWLMVP 1 00 NOTPURGEABLE YES DYNA
ETVP EYUMAS2A ENABLED 0 EYUWLMVP 1 00 NOTPURGEABLE YES STAT
ET01 EYUMAS1A ENABLED 0 EYUPRO01 1 00 PURGEABLE YES DYNA
ET01 EYUMAS2A ENABLED 0 EYUPRO01 1 00 PURGEABLE YES STAT
>W2 =LOCTRAN==LOCTRAN=EYUPLX01=EYUPLX01=19JUN1998==17:28:48====CPSM=====1
Tran ID..... ETV CICS System.. EYUMAS2A Routing..... STAT
Program Name EYUWLMVP Remote System Route Profile.
Remote Name. Tran Priority 1 Use Count..... 0
Enabled Stat ENABLED Task Data Loc BELOW Local Dyn Cnt. 0
Isolate Stat N/A Task Data Key USERDATA Remote Dyn Cnt 0
Shutdwn Stat N/A Resource Sec. RESSECNO Restarted..... 0
System Purge NOTPURGEABLE Screen Size.. DEFAULT Rem Start Cnt. N/A
Tran Dump... TRANDUMP Read Timeout. 0 Stg Violations 0
DTB Opt..... BACKOUT DLock Timeout 0 Clear Stg..... N/A
CMDSEC Opt.. CMDSECNO Runaway Time. N/A TWA Size..... 0
Trace Opt... STANTRACE Runaway Type. N/A Profile..... DFHCICSTV
Tran Class.. 00 TRAN INDOUBT. FORCE Due To..

```

Figure 26. Hyperlink fields within CICSplex SM views

How hyperlinks affect context and scope values

When you direct the results of a hyperlink to an alternate window, CICSplex SM ensures that the context and scope of that window are the same as those of the window from which the hyperlink was requested. The context and scope of the alternate window are restored to their previous values when you next clear that window.

Specifying command parameters

Many of the CICSplex SM view and display commands can be qualified by parameters. For example, here's the syntax of the PROGRAM view command, which displays general information about programs currently listed in the processing program table (PPT):

```
PROGRAM [prgmid [ENABLED | DISABLED]]
```

The parameter *prgmid* is a variable that identifies one or more instances of a program. The values ENABLED and DISABLED are literals that can be used to list the group of programs you're interested in according to their status.

For any variable parameter, you can provide either a specific or a generic name. Generic names can contain:

- An asterisk (*), which must be the last or the only character in the string. It represents any number of characters, including zero. For example:
ABC* All names beginning with the characters ABC
***** All names
- A plus sign (+), in any position, to represent a single character. For example:
TERM0+ All 6-character names starting with TERM0
A+BC+DE
All 7-character names with any character in the second and fifth positions, A in the first position, B in the third, C in the fourth, D in the sixth, and E in the seventh position.

CICSplex SM command parameters are positional: they must be entered in the order shown and be separated from the command and each other by one or more blank spaces. For example, the view command:

```
PROGRAM DFHB* ENABLED
```

displays general information about all enabled programs whose names begin with the characters DFHB. The view command:

```
PROGRAM DISABLED DFHB*
```

is invalid, because the parameters are not specified in the correct order.

Note: When you select a view from a menu, you can overwrite the line containing the view name and description with parameters before you press Enter.

When you specify an incorrect parameter a panel appears, containing messages telling you that your request is incorrect and describing or showing the correct parameters. Figure 27 is an example of the panel that appears when you type a numeric value instead of a correct program name.

```
----- CICSplex SM Command Prompter -----
COMMAND ==>
Request for PROGRAM View incorrect.
HIGHLIGHTED FIELDS IN ERROR.
Type over value or Select option where presented.

Program Name      *                Field may be Generic.
                                   And Must be: NAME.

Program Status    CT1VW            Specify or Select:
                                   _  ENABLED
                                   _  DISABLED
                                   _  *

Press ENTER to process command.
Type END or CANCEL to terminate without processing.
```

Figure 27. Example of command parameters panel

You can type the correct value over the incorrect value in the highlighted field or, when the parameter must be a specific value (for example, program status, which must be ENABLED, DISABLED, or * for both), you can select the correct value from the selection list.

Using action commands to update data

CICSplex SM action commands act on the data displayed in a view and cause the view to be refreshed. Action commands are either *primary action commands* or *line action commands*.

Primary action commands

Primary action commands affect one or more instances of a CICS resource or CICSplex SM definition in a view. You issue primary action commands and their parameters by entering them in the COMMAND field of the control area, or by pressing the PF key to which they are assigned. Note that, if you specify more parameters than are valid on a primary action command, the surplus parameters are ignored: no warning message is issued.

When you use a form of a CICSplex SM primary action command that is the same as an ISPF command, the ISPF command takes effect. For example, when you issue the START primary action command, you are swapped to an ISPF session. To avoid this, issue the action command STA from the SYSTEMS view, specifying a parameter that identifies the system that is to be started.

Line action commands

Line action commands affect either a specific occurrence of a resource or definition or, in a summary view, all of the resource instances that contributed to the summary line. Line action commands are issued from the line command field.

Not all action commands are available for all of the supported CICS releases. If you issue an action command that is not available for the specified CICS system, the following message is displayed:

```
EYUEI0596E Action action for sysname not supported for this release of CICS
```

The online help facility provides availability information for action commands that are not available for all of the supported CICS releases. Refer to Chapter 4, "The CICSplex SM help facility," on page 57 for details.

If you issue an invalid action command, or if a command cannot be processed for any reason, error messages may be displayed in the window. When you press Enter, any additional messages that could not fit in the window are displayed. Once all the messages have been displayed, you can press Enter to clear the messages from the window. The view reappears with ERR in the field where the action command was entered. (When the action command is entered from a summary view and the command was successful for only some of the resources summarized, MIX appears in the field; this indicates the action command produced mixed results.) The next time you press Enter, ERR (or MIX) is removed.

In some cases, messages are not automatically displayed in the window. Instead, the ERR indicator appears where the action command was entered. When this happens, you can position the cursor on the ERR indicator and press Enter to display the messages in the window.

Figure 28 on page 33 shows the location of the COMMAND field and of the line command field in both general and detailed views.

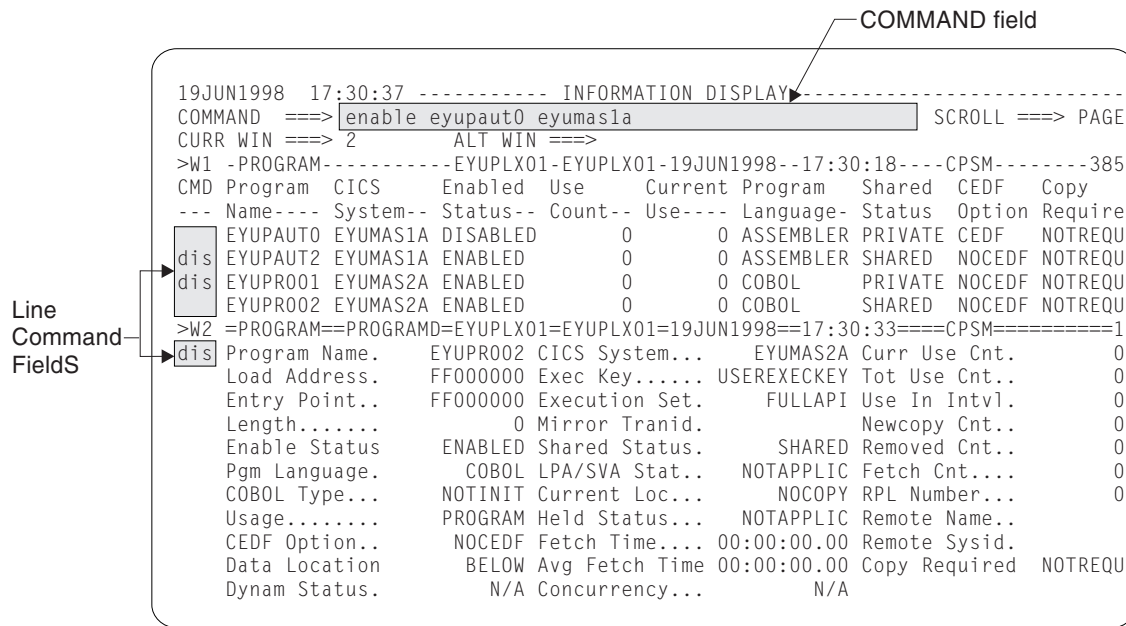


Figure 28. The COMMAND field and some line command fields

Notes:

1. The primary command typed in the COMMAND field enables the program EYUPAUTO shown in the general view in window 1, the current window.
2. Two line commands are specified in the general view shown in window 1. Each line command causes a specific program shown in that view to be disabled. If window 1 contained a summary view, the line commands would affect all of the resources represented by each line in the view.
3. One line command is specified in the detail view shown in window 2. This command causes the program identified in this view (EYUPR002) to be disabled.
4. When you press either Enter or a PF key, all outstanding primary and line action commands in all windows are processed.

To discover which action commands are valid for a particular view, issue the HELP ACTIONS display command, as described in “Requesting help within help” on page 59. Action commands that are valid for a particular view are also identified in the description of that view. Views are described in detail in other books in the CICSplex SM library.

Repeating a line action command within a view

As you can see from Figure 28, you can enter one line action command at a time in a detail view, but multiple line action commands in a general or summary view. You can repeat a line action command within a view by typing the equals sign (=) in the line command field before pressing Enter. When multiple line action commands are entered (either explicitly or by using the equals sign) they are processed from the top to the bottom of the view. For example:

```
CMD Program CICS
--- Name---- System--
dis PROG0123 CICS1232
  PROG0323 CICS1233
=  PROG0345 CICS1234
ena PROG0445 CICS1234
=  PROG0355 CICS1235
```

These line action commands disable programs PROG0123 and PROG0345, and enable programs PROG0445 and PROG0355. The status of PROG0323 is unaltered.

Overtyping fields

An *overtyping field* is a modifiable field in a view that contains data related to a specific CICS resource or CICSplex SM definition. The data can be either of the following:

- A specific value known to CICSplex SM. An example is the Status field that shows that a program is ENABLED or DISABLED.
- A value defined at your site. An example is the program name (which must conform to CICS program name requirements but which itself cannot be specified by CICSplex SM).

Overtyping fields are shown in either high intensity or color. For you to change the contents of an overtyping field, the entire field must be visible. If it is not, you can scroll the window to the left or right to display the remainder of the field. Alternatively, you can use the MAXimize display command, as described in “Maximizing and restoring windows” on page 42, to maximize the window containing the view.

When the value you enter does not completely overwrite the old value, you do not have to delete the remainder of the field. After you press Enter, only the newly overtyped information is in effect.

If you specified YES in the Require Set field on the CICSplex System Manager entry panel, you must also use the SET line action command to prevent inadvertent modification of information. When you overtype the contents of a field (using SET, if required) and press Enter, CICSplex SM accepts the new values.

For specific values known to CICSplex SM, you need not type the entire value; you can type the smallest number of unique characters needed to distinguish your request from any other appropriate entry for that field. For example, to specify program status, you need type only E (for ENABLED) or D (for DISABLED). When your request is not specific enough, or when you enter a value that is not one of the specific values known to CICSplex SM, you are prompted for more specific information and provided with a selection list from which to select a value. (For example, this occurs when you overtype only S on the LOCTRAN view in the Trace Option field, where the possible values are SPECTRACE, STANTRACE, and SPRSTRACE.)

When, in a field for which CICSplex SM expects no specific values but has certain requirements, you enter a value that does not meet the requirements, a popup panel appears containing both a message describing the requirements and a field in which you can enter the correct value. (For example, this occurs when you enter a value outside the range of acceptable values for a numeric field.)

Note: When you want to make more significant modifications to a definition in the data repository, you can use the UPDATE command to display a panel similar to the panel used to create the definition.

To change the contents of one or more overtyping fields in a general or summary view:

1. If the value in the Require Set field on the CICSplex System Manager entry panel is YES, specify the SET action command in the line command field next

- to each resource occurrence to be altered. (For more information about the Require Set field, see “Require Set” on page 7.)
2. Overtyping the current contents of any overtype fields you want to alter with new values.
 3. Repeat steps 1 on page 34 and 2 for each resource occurrence that you want to modify.
 4. Press Enter.

For example, window 1 in Figure 29 shows how you might change the attributes of two programs. EYUPAUT2 is to change from disabled to enabled status, and EYUPR001 is to be both enabled and marked as shared.

To change the contents of one or more overtype fields in a detail view:

1. If the value in the Require Set field on the CICSplex System Manager entry panel is YES, specify the SET action command in the line command field next to each resource occurrence to be altered. (For more information about the Require Set field, see “Require Set” on page 7.)
2. Overtyping the contents of each field you want to alter.
3. Press Enter.

Window 2 in Figure 29 shows how you might change multiple attributes associated with a single resource. In this case, program EYUPR002 is to be enabled, marked as private, and its CEDF option is to be set to NOCEDF.

Overtyping fields containing the value “N/A” or “NOTAPPLIC” (meaning “not applicable”) are not modifiable. Typically, an overtype field contains this value because the field does not apply to a particular release of CICS. If you position the cursor on the affected field before entering the HELP command (as described in “Issuing HELP without parameters” on page 59), a description of the field, identifying those CICS releases to which it applies, is displayed.

```

19JUN1998 17:30:37 ----- INFORMATION DISPLAY -----
COMMAND ==>
CURR WIN ==> 2      ALT WIN ==>
>W1 -PROGRAM-----EYUPLX01-EYUPLX01-19JUN1998--17:30:18---CPSM-----385
CMD Program CICS Enabled Use Current Program Shared CEDF Copy
--- Name---- System-- Status-- Count-- Use---- Language- Status Option Require
EYUPAUT0 EYUMAS1A ENABLED 0 0 ASSEMBLER PRIVATE CEDF NOTREQU
set EYUPAUT2 EYUMAS1A enabledD 0 0 ASSEMBLER SHARED NOCEDF NOTREQU
set EYUPR001 EYUMAS2A enabledD 0 0 COBOL sharedE NOCEDF NOTREQU
EYUPR002 EYUMAS2A DISABLED 0 0 COBOL SHARED CEDF NOTREQU
>W2 =PROGRAM==PROGRAMD=IDPAPLEX=IDPAPLEX=19JUN1998==17:30:33====CPSM=====1
Program Name. EYUPR002 CICS System... EYUMAS2A Curr Use Cnt. 0
Load Address. FF000000 Exec Key..... USEREXECKEY Tot Use Cnt.. 0
Entry Point.. FF000000 Execution Set. FULLAPI Use In Intvl. 0
Length..... 0 Mirror Tranid. Newcopy Cnt.. 0
Enable Status enabledD Shared Status. private Removed Cnt.. 0
Pgm Language. COBOL LPA/SVA Stat.. NOTAPPLIC Fetch Cnt.... 0
COBOL Type... NOTINIT Current Loc... NOCOPY RPL Number... 0
Usage..... PROGRAM Held Status... NOTAPPLIC Remote Name..
CEDF Option.. NOCEDF Fetch Time... 00:00:00.00 Remote Sysid.
Data Location BELOW Avg Fetch Time 00:00:00.00 Copy Required NOTREQU
Dynam Status. N/A Concurrency... N/A

```

Figure 29. Using overtype fields in CICSplex SM views

Moving the cursor

To move the cursor between multiple windows in an information display panel, you can use:

- The cursor-movement keys
- The New Line key, repeated use of which moves the cursor to the first modifiable field in the next and subsequent lines, crossing any window borders that may be encountered
- The Tab key, which moves the cursor to the next modifiable field in a line or to the first modifiable field in the next window

The New Line key and the Tab key do not move the cursor to empty windows.

Chapter 3. The CICSplex SM display commands

During a CICSplex SM session, you can issue:

- ISPF session commands. However you cannot use the ISPF jump function.
- TSO commands, which must be prefixed with the “TSO” command.
- CICSplex SM *view commands* which enable you to manipulate both CICSplex SM and CICS resources. Those view commands that support the creation and maintenance of a CICSplex SM environment are described in *CICSplex System Manager Administration*. Other view commands are described in the appropriate books in the CICSplex SM library.
- CICSplex SM *display commands*, which allow you to set up a window environment under ISPF and to manipulate the way in which CICSplex SM data is displayed. All display commands, except the HELp display command, are described in detail in this chapter. The HELp display command is described in Chapter 4, “The CICSplex SM help facility,” on page 57. A list of all display commands is provided in Appendix B, “A summary of the CICSplex SM display commands,” on page 69.

This chapter begins with some general information about issuing commands of any sort in a CICSplex SM environment. The remainder of the chapter describes the CICSplex SM display commands.

How to issue commands

There are two ways of issuing any ISPF, TSO, view, or display command:

- You can assign the command to a PF key. It is recommended that you assign commands that you use frequently to PF keys. For information about changing your CICSplex SM PF key assignments, see Appendix A, “Tailoring your CICSplex SM profile,” on page 63.
- You can enter the command and any parameters in the COMMAND field of the information display panel and press Enter.

Multiple commands can be entered on the COMMAND line, provided they are separated by a command delimiter. You can use either the CICSplex SM command delimiter, which is the semicolon (;), or the ISPF command delimiter, which is defined in your ISPF profile. For example, to make window 3 the current window and to display a list of monitor-related menus in that window, you would enter:

```
W3;MENU MONITOR
```

where ; is the command delimiter. The maximum number of commands you can issue at one time is determined by the length of the COMMAND field.

Multiple commands entered in the COMMAND field are processed sequentially. If you press a PF key while these commands are processing, the command currently being processed is completed, then the command assigned to the PF key is processed, then processing of the remaining commands in the COMMAND field resumes. Note, however, that processing does not resume if the command assigned to the PF key is the Quit command. Also, the Quit command does not interrupt processing of the current command.

Command descriptions and conventions

The descriptions of the CICSplex SM commands in the remainder of this book use the following notation:

- Braces { } enclose two or more values, one of which must be specified.
- Square brackets [] enclose optional values.
- The OR symbol | separates alternatives.

The following conventions also apply:

- Commands and keyword parameters that are literals are shown in uppercase characters. If a command or parameter may be abbreviated, the minimum permitted abbreviation is in uppercase characters and the remainder is shown in lowercase characters. For example, this syntax:

`PREVIOUS`

means that `PREV` is an acceptable abbreviation for the command.

- Variable parameters are shown in lowercase characters. You supply your own data for these parameters. For example, in the command:

`ASU [asu]`

you can supply a value in place of the `asu` variable.

- Default values for an optional parameter are underscored. If the parameter is not specified, the default value is used. For example, this syntax:

`Sort [D|A]`

means that `D` (for descending order) is the default value for the `SORT` command.

- Parameters enclosed by neither braces { } nor brackets [] are required.
- Punctuation symbols and special characters must be coded exactly as shown.

Note: Display command parameters are specified in the same way as view command parameters, which are described in “Specifying command parameters” on page 30.

Manipulating the windowed environment

This section describes those CICSplex SM display commands that allow you to define and alter the windowed environment in which you are working. It describes how to:

- Open additional windows (see “Opening additional windows” on page 39)
- Change the current window (see “Changing the current window” on page 39)
- Direct the results of a command to a second window (see “Directing command results to another window” on page 40)
- Display and understand the window status (see “Displaying the window status description” on page 40)
- Display information about a view (see “Displaying information about a view” on page 41)
- Maximize a window and restore it to its previous size (see “Maximizing and restoring windows” on page 42)
- Set the context and scope values (see “Setting the context and scope” on page 42)
- Save the screen configuration so that it can be reused (see “Saving and reusing screen configurations” on page 46)
- Close a window (see “Closing windows” on page 48)

Opening additional windows

When the Information Display panel is initially produced, its display area contains one open window. You can open additional windows, up to a maximum of 20 windows per display area, by splitting any window either horizontally or vertically.

To split a window horizontally, type the command

`HSplit`

in the COMMAND field, move the cursor to the row in which the window information line of the new window is to appear, and press Enter. (Alternatively, if the HSplit command has been assigned to a PF key, move the cursor into position before pressing the PF key.)

To split a window vertically, type the command

`VSplit`

in the command field, move the cursor to the column in which the left border of the new window is to appear, and press Enter. (Alternatively, if the VSplit command has been assigned to a PF key, move the cursor into position before pressing the PF key.)

A window must be at least four lines deep (of which the first is the window information line) and eight columns wide. If you position the cursor inside an open window prior to issuing HSplit or VSplit, space for the new window is taken from that window. If the cursor is on a window information line or window border, space for the new window is taken from the adjacent windows.

The newly opened window becomes the current window and its status code is T (temporary). Window status codes are described in “Displaying the window status description” on page 40.

Changing the current window

The window to which the results of a command are directed by default is known as the *current window*. Regardless of the number of windows on the information display, only one window at any one time can be the current window.

You can change the current window by:

- Overtyping the value in the CURR WIN field with the number of the window you want to become the current window
- Issuing the command:

`NEXT`

which causes the next window in the sequence to become the current window

- Issuing the command:

`PREVIOUS`

which causes the previous window in the sequence to become the current window

- Issuing the command:

`Wn`

where *n* is the number of an existing window

For example, assume you have three open windows and that window 1 is the current window. Issuing the command `W3` causes window 3 to become the current window. Issuing the `NEXt` command causes window 1 to become the current window. Finally, issuing the `PREVious` command causes window 3 to become the current window again.

Directing command results to another window

By default, the results of a command are displayed in the current window. However, you can direct the results of a command to a different window by prefixing the command with the value:

`Wn.`

where *n* is the number of the open window that is to receive the results of the command. For example, if window 1 is the current window and you issue `W2.MENU OPERATE`, a list of all operations-related menus is displayed in window 2. Window 1 remains the current window.

The Wn. prefix

This prefix can be used with *all* view commands, and with any of the display commands described in the remainder of this chapter whose effects are felt by a single window.

As described in “Changing the current window” on page 39, the `Wn` value can also be used as a command. To illustrate the difference between the use of `Wn` as a command and as a prefix, consider this example:

`W2;W3.MENU OPERATE;MENU MONITOR`

- `W2` makes window 2 the current window.
- `W3.MENU OPERATE` causes the list of operations-related menus to be displayed in window 3.
- `MENU MONITOR` causes the list of monitor-related menus to be displayed in the current window, window 2.

Displaying the window status description

Every window has a one-character code that describes its status. To display the meaning of the status code for the current window in the short message area, issue the command:

`STATus`

The status codes are described in Table 2.

Table 2. Window status codes

Code	Meaning	Description
W	Waiting	The window contains data and is available for use.
T	Temporary	The window is empty and no commands are processing. A window's status is T when it is first opened and when it is subsequently cleared.
E	Error	An error has occurred as the result of an action directed to the window.

Table 2. Window status codes (continued)

Code	Meaning	Description
L	Locked	The LOCK command (which is described in “Locking and unlocking a window” on page 54) has been issued to prevent the window’s contents from being automatically updated.
P	Pending	CICSplex SM is processing one or more commands. (Pending status is described in more detail below.)

Pending status:

While a CICSplex SM command is being processed, you cannot issue commands against any window. In most cases, this does not present difficulties. However, if CICSplex SM is processing a command or stack of commands that require complex processing, you might require access to the remaining windows before that processing is complete. In order to “release” the remaining windows, you must cause a TSO terminal attention. You do this by pressing either the ATTN key, on an IBM® 3270 display, or any combination of keys that simulates the ATTN function. (For example, the RESET key followed by the PA1 key simulates the ATTN function on the IBM Personal Computer display and the IBM 3179 display.) This causes CICSplex SM to:

- Update the contents of each window in which processing is complete
- Change the status code of any window in which processing is not complete from W to P

This will allow you to issue commands in windows whose status is not P. If command processing is complete the next time you press Enter or a PF key, the contents of the window are updated and the status code changes from P to W.

In a window whose status is P you can issue only the CLEAr, CLOSe, RESeT, and Quit commands.

If you issue the STATus command as part of a list of commands, it is recommended that you place it last in the list. This is because the STATus command remains displayed after it is issued, and any commands following it cannot be processed until you remove STATus and press Enter.

To display a detailed explanation of a status code, issue the HELp display command while the status-code meaning is displayed (that is, after you have issued the STATus command). The explanation of the status code temporarily replaces the CURR WIN and ALT WIN fields. These fields are restored when you press Enter or a PF key.

Displaying information about a view

The window information line, which is described in “The window information line” on page 18, provides some information about the view currently on display in a window. For example, the window information line tells you the number of records in the view. For a more detailed definition of the view contents, issue:

```
SHOWPos i
```

which causes a pop-up window to overlay the information display panel. To remove the pop-up window, press PF3.

The SHOWPosi pop-up window contains the following information about the view:

- The number of the window to which this information relates.
- The view name.
- The view type. For example, the view type could be “tabular”.
- The view width, which is the maximum number of characters in a row of the view.
- The number of fields, which is the maximum number of fields in a row of the view.
- The number of records in the view.
- The number of records currently on display in the window.

Maximizing and restoring windows

When you are working with multiple windows, you can expand one of those windows to fill the display area. A maximized window can later be restored to its previous position and size in the window configuration.

To expand the current window to its maximum size, issue the command:

MAXimize

The other windows in the display area remain active, but are hidden behind the maximized window.

While the window is maximized:

- MAX is shown in the panel title line
- You can use the NEXt or PREVIOUS display commands to display the next or previous window in the sequence in its maximized form
- You cannot use the CLOse, RESet, Quit, HSplit, VSplit, SAVEScr, SCReen, or SCREENS display commands.

To restore the maximized window and redisplay all open windows in their previous configuration, issue the command:

RESTore

The window that is maximized at the time you issue the RESTore command becomes the current window. Also, the data in any window whose status is W (waiting) is refreshed.

Note that, in some circumstances, the END display command can have the same effect as the RESTore command. For more information about the END display command, see “Redisplaying views and forms of views” on page 54.

Setting the context and scope

The context and scope of a window determine which CICSplex SM or CICS resources are affected by commands directed to that window. The window information line identifies a window’s current context and scope.

When you begin a CICSplex SM session, the context and scope for all windows are set to one of the following:

- The default values shown on the CICSplex System Manager entry panel
- The values in effect for any saved screen configuration you have installed

At any time during the session, you can change the context and scope settings of individual windows or of all windows opened or cleared subsequently. You can also change the default context and scope values that are to be in effect when a session is next started.

Changing the context of an existing window

To change the context of an existing window, issue the command:

```
CONtext name [product [server]]
```

If you are performing any of the functions made available to you by option 2 (CICSplex SM) of the CICSplex System Manager entry panel:

name is the identifier of a CMAS or of a CICSplex. If you are using the CICSplex SM interface to manage the CICSplex SM environment itself using the CONFIG views (as described in *CICSplex System Manager Administration*), *name* identifies a CMAS. For other uses of CICSplex SM, *name* identifies a CICSplex.

product

is CPSM. If the window information line is currently displaying the product value CPSM, you can specify an asterisk (*) as the *product* value.

server is valid only when the *name* value identifies a CICSplex. It is the name of a CMAS to which the CICSplex is defined. If you are happy to work with any CMAS involved in managing the CICSplex, you can omit this value.

For example:

1. To change the context of the current window to CMAS EYUCMS01 when the product identifier in the window information line is already CPSM, issue:

```
CON EYUCMS01 *
```

2. To change the context of window 4 to CICSplex EYUPLX02 and nominate CMAS EYUCMS02 as the CMAS with which you want to work, issue:

```
W4.CON EYUPLX02 CPSM EYUCMS02
```

If you are performing any of the CAS-management tasks accessible via option 1 (PLEXMGR) of the CICSplex System Manager entry panel:

name identifies a system that is running PLEXMGR (that is, a CAS). To select the CAS that you are currently signed on to, specify a *name* value of asterisk (*). To select a different system, which must be connected to the system you are signed on to and be running PLEXMGR, specify its MVS sysid.

product

is PLEXMGR. If the window information line is currently displaying the product value PLEXMGR, you can specify an asterisk (*) as the *product* value.

server is not valid.

For example:

1. To set the context in window 3 to the CAS you are currently signed on to in order to perform PLEXMGR tasks, issue:

```
W3.CON * PLEXMGR
```

2. To set the context in the current window to CAS SYSC for PLEXMGR tasks, issue:

```
CON SYSC PLEXMGR
```

3. To set the context in the current window to the CAS you are currently signed on to when the product value in the window information line is already set to PLEXMGR, issue:

```
CON * *
```

Notes:

1. If the PlexManager extended security message option is turned on at your enterprise, message BBMSS201I is displayed each time you open a new window or change the context of a window. You can press Enter to clear the message.
2. When the CONtext command is successful, the view currently on display in the window is automatically updated to reflect the change. Be aware, however, that if you change the context from a CICSplex to a CMAS and the view that was displayed required a context of CICSplex, an error message is issued. The same observation applies when the context is changed from a CMAS to a CICSplex. Similarly, if you change the product value from CPSM to PLEXMGR, the view in the affected window will not be recognized. To avoid such errors, you can name the view that you want displayed in the same command string as the CONtext command. For example, the command:

```
W2.CON EYUPLX02 CPSM *; MLOCTRAN QAB*
```

changes the context of window 2 to CICSplex EYUPLX02 and displays in that window a general view of all monitored local transactions whose names begin with the characters QAB.

Changing the scope of an existing window

To change the scope of an existing window, issue the command:

```
SCOpe name
```

where *name* is the name of a CICS system or CICS system group associated with the current CICSplex, or is the name of the CICSplex itself. The scope value is ignored if the context is not a CICSplex.

When you issue this command, the window is automatically updated to reflect the change. That is, the contents of any view displayed in the window are updated to reflect the new scope.

Changing both context and scope of an existing window

To change both the context and the scope of an existing window in either CICSplex SM or PlexManager, issue the command:

```
SET
```

Figure 30 on page 45 shows the input panel displayed when you issue the SET command.

```

----- SET WINDOW CONTEXT, PRODUCT, SERVER, SCOPE AND VIEW -----
COMMAND ==>

Window Parameters:

Context      ==> EYUPLX01
Product      ==> CPSM
Server       ==> *
Scope        ==> EYUPLX01
View         ==> MENU

Type End to Set Window Parameters
Cancel to quit without setting

```

Figure 30. The SET command input panel

Context

For CICSplex SM, the name of either the CICSplex or the CMAS that is to become the context.

For PlexManager, an asterisk (*), meaning the system you are currently using, or the name of any system in which PlexManager is available.

Product

CPSM or PLEXMGR for CICSplex SM or PlexManager, respectively.

Server For CICSplex SM, a CMAS to which the CICSplex is defined. It can be set to an asterisk (*), meaning that any valid CMAS is acceptable.

For PlexManager, an asterisk (*).

Scope For CICSplex SM, any CICS system or CICS system group associated with the CICSplex, or the name of the CICSplex itself. (When the context is a CMAS, scope is ignored.)

For PlexManager, an asterisk (*).

View For CICSplex SM, the name of any view that is valid for the context and scope.

For PlexManager, the name of any PlexManager view.

This causes the window to contain the specified view, qualified by the new context and scope.

Changing context and scope for the rest of the session

To change:

- The context and the scope that are to be in effect for all opened *or cleared* windows for the remainder of the CICSplex SM session
- The default context and scope for your next CICSplex SM session

issue the command:

```
SETD
```

Figure 31 on page 46 shows the input panel that is displayed when you issue the SETD command.

```

----- SET DEFAULT CONTEXT, PRODUCT AND SCOPE -----
COMMAND ==>                                     SCROLL ==> PAGE

Please confirm Default Parameters:

Context      ==> EYUPLX01
Product      ==> CPSM
Scope        ==> EYUCSG01

Type End to Set Default Parameters
          Cancel to quit without setting

```

Figure 31. The SETD command input panel

Context

is the name of either a CICSplex or a CMAS.

Product

is CPSM.

Scope

is any CICS system or CICS system group associated with the CICSplex, or is the CICSplex itself. (When the context is a CMAS, scope is ignored.)

The values you specify on the SETD input panel come into effect for any window that is subsequently opened or cleared. They also become the default values, and will appear on the CICSplex System Manager entry panel when a session is next started. SETD has no effect on windows that are currently open. The new values remain in effect until you next change them using SETD, CONTEXT, SCOPE, or SET²

Notes:

1. You can use the SETD command to make the PlexManager product and context values the defaults. That is, the product value could be PLEXMGR, and the context value could be an MVS sysid. However, to have these values as defaults would be the exception rather than the rule.
2. As SETD has no effect on the current context and scope settings, the values you specify are not validated until you next open a window (as described in “Opening additional windows” on page 39) or clear a window (as described in “Clearing a window” on page 56).

Saving and reusing screen configurations

You can save a configuration of windows and views so that they can be reused. To save the current configuration, issue the command:

```
SAVEScr
```

This command causes an input panel to be displayed, into which you enter a name for the configuration (1 through 8 characters) and, optionally, a description (1 through 30 characters).

The saved screen configuration consists of:

- The number of windows, and the size of each one
- The identifier of the current window
- The screen size (24 or 43 lines)

2. Initiating a hyperlink to a different window may cause the context and scope in the second window to change to match those of the first window. For additional information, see “How hyperlinks affect context and scope values” on page 30.

- The context and scope in effect in each window
- The command and its parameters that produced the view in each window
- Forms of views previously displayed in each window, up to a maximum of 20 for each window
- The sort order in effect for each view

The saved screen configuration does *not* include:

- The window status codes
- The automatic screen update (ASU) setting

Screen configuration definitions are stored in the screen repository. The data set containing this repository is usually allocated to your TSO user ID when you start a CICSplex SM session. If the data set is not available, you receive a message stating the reason. If this happens, contact your system administrator for assistance.

The ability to save screen configurations effectively enables the CICSplex SM environment to be tailored for less skilled users, for example, or to support routine and repeated tasks. For example, if, in your environment, four windows are created at the start of every CICSplex SM session, with the same context and scope each time, the CICSplex SM operator does not have to create that configuration from scratch each time: it can be created once, then saved. To use a saved screen configuration, issue the command:

`SCReen name`

where *name* identifies an existing configuration. For example, issuing the command `SCR SAMPLE` causes the configuration named `SAMPLE` to replace the current configuration.

The total height and width of the windows that make up a configuration must be equal to or less than the size of the display area in which the configuration is used. For example, a configuration created from a 43-line screen cannot be used on a 24-line screen.

To display a view that lists previously saved configurations, issue the command:

`SCREENS`

An example of the resulting view is shown in Figure 32. From the resulting view you can:

```

27FEB2005 16:19:45 ----- INFORMATION DISPLAY -----
COMMAND ==>                                     SCROLL ==> PAGE
CURR WIN ==> 1          ALT WIN ==>
W1 =SCREENS=====EYUPLX01=EYUCSG01=27FEB2005==16:19:45=CPSM=====3===
C Name      Description                                Userid
-----
SCR02       Two windows - PROGRAM and FILE             USER01
SCR03       Three windows                               USER01
W3H1V2      Three windows - one over two               USER02

```

Figure 32. An example of the `SCREENS` view

- Activate a screen configuration by entering an S (for select) next to the appropriate configuration name
- Hyperlink to the screen configuration by moving the cursor to the configuration name and pressing Enter

- Remove a screen configuration by entering a D (for delete) next to the appropriate configuration name

You can select screen configurations created by other users, but note that the “sign-on” message is displayed when you select such a configuration.

SAVEScr, SCReen, and SCREENS cannot be issued when a window is maximized.

Once a screen configuration has been invoked, issuing the END command ends the current view and redisplay the previous view in that screen configuration. Any views displayed prior to invoking the screen configuration are discarded.

Closing windows

You can close one or more windows at any time during a CICSplex SM session.

- To close the current window and have the freed space redistributed among the remaining windows, issue the command:

`CLOSe`

Note that the CLOSe command is invalid when the target window is maximized, or when there is only one open window.

- To close all windows except window 1, issue the command:

`RESet`

This command also clears the contents of window 1 and sets its status code to T (temporary). The RESet command is invalid when a window is expanded. If the RESet command is issued when only one window is open, its effects are the same as those of the CLEAr command.

- To close all windows and return to the CICSplex System Manager entry panel, issue the command:

`Quit`

(Alternatively, you can use the ISPF command RETURN to return to the CICSplex System Manager entry panel.)

If the status code of any of the affected windows is P (pending) when you issue the CLOSe, RESet, or Quit command, or the ISPF command RETURN, the command that is currently processing in each of those windows is completed. Other outstanding commands are discarded.

Manipulating the contents of a window

This section describes those display commands that allow you to alter the way in which the contents of a view are displayed in a specific window. It describes how to:

- Refresh the contents of a view (see “Refreshing the view in a single window” on page 49)
- Scroll the data in a view (see “Scrolling data in a window” on page 49)
- Sort the contents of a view (see “Sorting the contents of a view” on page 51)
- Go directly to a field within a view (see “Locating data within a view” on page 51)
- Summarize the data in a view (see “Summarizing the data in a view” on page 52)
- Lock and unlock a view (see “Locking and unlocking a window” on page 54)
- Redisplay previously displayed views (see “Redisplaying views and forms of views” on page 54)
- Clear the contents of a window (see “Clearing a window” on page 56)

Refreshing the view in a single window

To update the view in the current window, issue the command:

```
DATARefresh
```

This has the effect of reissuing the command that produced the view.

To change the parameter values associated with the command that produced the view and refresh the data, issue the command:

```
PARm parm1 [parm2 parm3 parm4]
```

where the values *parm1* through *parm4* are valid parameters of the view command that produced the view. You can specify a maximum of four parameter values.

The view in the designated window is updated to reflect the new parameter values. These values replace the previous or default parameters for the view command and remain in effect until you change them or issue a different view command.

Refreshing all views automatically

Views in windows whose status is W (waiting) are updated automatically when you press the Enter key, if the cursor is in the control area and no commands are pending. Such views can also be updated automatically, and at predefined intervals, if you activate the automatic screen update (ASU) facility. To activate ASU, issue the command:

```
ASU [asu]
```

where *asu* is the number of seconds, in the range 3 through 999, between automatic screen updates. The value remains in effect until you next change it, or until ASU is deactivated. If you do not specify a value, the default interval, specified in your user profile, is used. The default ASU interval is described in Appendix A, "Tailoring your CICSplex SM profile," on page 63.

Note that a small interval can increase the CPU overhead if the amount of data to be updated is large.

While ASU is active, no command can be issued for any window, and the COMMAND field contains the message:

```
ASU MODE interval SECONDS - PRESS ATTN TO CANCEL
```

where *interval* is the length of time between updates.

Note: To deactivate ASU, you must cause a TSO terminal attention. How you do this depends on the hardware you are using. For example, if you are using an IBM 3270 display, you can cause a TSO terminal attention by pressing the ATTN key. On other types of display, such as the IBM Personal Computer or the IBM 3179 display, you must unlock the keyboard, by pressing the RESET key, and then press the PA1 key. **Be sure to find out how to invoke the ATTN function on your terminal before starting ASU.**

Scrolling data in a window

The amount of information visible in a window is determined by the size of that window. The window information line indicates whether there is more information to scroll into view:

- A greater than symbol (>) preceding the window identifier means that there is more information to the right.

- A less than symbol (<) preceding the window identifier means that there is more information to the left.
- A plus sign (+) preceding the window identifier means that there is more information to both the left and the right.
- The number at the far right of the window information line is the number of elements in the view.

You can also use the SHOWPosi display command (which is described in “Displaying information about a view” on page 41) to discover how much data the view contains.

To scroll the contents of a window to see additional information, you can use the ISPF scroll commands:

```
Up
Down
LEft
RIght
```

To specify the amount of scrolling to occur, use one of the following parameters on the appropriate scroll command:

Page Scrolls a full page, which is the total scrollable area visible in a window. This is the CICSplex SM default.

Data Scrolls one row (if the command is Up or Down) or one field (if the command is LEft or RIght) less than a page.

Half Scrolls half a page.

number

Scrolls a number of rows or fields in the range 0 through 9999.

Csr Scrolls to the cursor position. If the cursor is in a field, the display begins at the start of that field.

Max Scrolls to the top, bottom, left, or right margin of the window, as appropriate, and resets the SCROLL field to its previous setting.

Notes:

1. If you specify no parameter on a scroll command, the default scroll parameter, which is displayed in the SCROLL field in the control area of the information display panel, is used. You can use any of these parameters to overwrite the default scroll value. This changes the default value for the remainder of the CICSplex SM session, or until it is next changed.
2. If your PF key settings are displayed, they may cover the last two lines in a window or help pop-up panel. To prevent this from happening, issue the ISPF command PFSHOW OFF.
3. Scrolling to the left or right occurs by field, not by column. The amount of a left or right scroll is reduced by the width of these fields, which are not scrollable:
 - The line command field and the first data field in a general view
 - The line command field in a detailed view

If you scroll right and then left again by a full page, the original contents of the view may not be restored. This situation arises because, when CICSplex SM scrolls to the right, the first field that is not completely within the view becomes the leftmost scrollable field; when you scroll left again, CICSplex SM keeps that field *wholly* within the visible part of the view in its new position as the rightmost field.

4. If you scroll to or beyond the last line of data in a view, two lines of data remain visible.

Sorting the contents of a view

You can sort the rows of data in a general or summary view using any of the fields in the view as a sort key. To sort the contents of a view, you

1. Type the command:

`SOrt [D|A]`

in the COMMAND field of the Information Display panel. The value D means that the data is to be sorted in descending order; A means that it is to be sorted in ascending order. If neither is specified, numeric data is sorted in descending order, and nonnumeric data is sorted in ascending order.

2. Move the cursor to the column that is to act as sort key, and press Enter.

Alternatively, if the SOrt command is assigned to a PF key, position the cursor on the appropriate field before pressing the PF key.

For example, suppose that a field in the view in the current window contains statistical data in descending order. To rearrange the rows so that the contents of that field are in ascending order in the view, you would type SOrt A in the COMMAND field, place the cursor on any occurrence of the field or on the field heading, and press Enter.

Locating data within a view

The Locate command moves the cursor to a specified data string in a selected column of a general or summary view. (It cannot be used in a detail view.) Once a Locate command has been issued, it can be repeated using the RFind command.

You must move the cursor to the relevant column before you issue the Locate command. If you issue the locate command without first positioning the cursor in the appropriate column, the target string is sought in the leftmost column of the view.

If the target string is in a column that is not in the visible portion of the view, a message is issued telling you to scroll to the left or right to move the data into view.

To go directly to a string within a view of tabular data, issue the command:

`Locate string [FIRST | LAST | PREV | NEXT]`

where:

string is the character string you want to locate, and must be specified. The *string* value may begin or end with an asterisk (*) in place of one or more characters. For example, the command:

`L *lgs`

locates a string ending with the characters "lgs" in the specified column.

FIRST | LAST | PREV | NEXT

In views where there may be multiple occurrences of the target string in the specified column, you can go directly to the first, last, previous, or next occurrence of the string by specifying the FIRST, LAST, PREV, or NEXT parameter on the Locate command.

If you issue the Locate command without the FIRST, LAST, PREV, or NEXT parameter, the search begins at the row following the cursor position. If the cursor is in the command field, the search begins with the first visible row.

If you issue the Locate command with the PREV parameter, the search begins at the row before the cursor position. If you issue the Locate command with the LAST or PREV parameter, and then issue the RFIND command, Locate continues to work backwards through the occurrences of the string and goes to the occurrence before the last one that it located.

Summarizing the data in a view

You can summarize the data in a general or summary view using any field in that view as the grouping factor. When you summarize a summary view, the data is resummarized by the new grouping factor.

Note: The SUM command always summarizes the data originally collected for a general or summary view. If you expand a summary line and display the information used to create the line, a subset of the summarized data is displayed; if you then issue another SUM command, all of the original data (not just the subset of data you just displayed) is resummarized using the new grouping factor. Likewise, if the original general or summary view command was qualified with parameters, only the data collected for the original view can be summarized.

For example, in a view containing the fields Program Language, CEDF Option, and Enabled Status, you can summarize the view contents by using program language, CEDF option, or enabled status as the grouping factor. The summary comprises one summary line for each possible value of the chosen field. So if you summarize a view of program data using CEDF Option as the grouping factor, the summary comprises two lines, one for programs with CEDF, and one for programs with NOCEDF.

To summarize data using CICS system name as the grouping factor, simply issue the command:

```
SUM
```

as shown in Figure 33.

```
27FEB2005 11:30:30 ----- INFORMATION DISPLAY -----
COMMAND ==> SUM_                                SCROLL ==> PAGE
CURR WIN ==> 1      ALT WIN ==>
W1 =PROGRAM=====EYUPLX01==EYUCSG01=27FEB2005==11:30:30==CPSM=====
CMD Program  CICS   Enabled Use   Current Program Shared CEDF Copy
--- Name---- System-- Status-- Count-- Use---- Language- Status- Option Require
PROG0123 EYUMAS1A ENABLED      1      0 ASSEMBLER PRIVATE CEDF NOTREQU
PROG0123 EYUMAS1B DISABLED      0      0 COBOL   SHARED NOCEDF NOTREQU
PROG0345 EYUMAS1B DISABLED      0      0 PLI     PRIVATE NOCEDF NOTREQU
PROG0445 EYUMAS1A ENABLED      0      0 C       SHARED NOCEDF NOTREQU
PROGABCD EYUMAS1B DISABLED      0      0 PLI     PRIVATE NOCEDF NOTREQU
PROGABCD EYUMAS1A DISABLED      0      0 C       SHARED NOCEDF NOTREQU
```

Figure 33. Summarizing data by CICS system name

Figure 34 on page 53 shows the summary that results from issuing the SUM command against the view shown in Figure 33.

```

27FEB2005 11:30:30 ----- INFORMATION DISPLAY -----
COMMAND ===>
CURR WIN ===> 1      ALT WIN ===>
W1 =PROGRAM==PROGRAMS==EYUPLX01=EYUCSG01=27FEB2005==11:30:30==CPSM=====
CMD Program CICS      Count Enabled Use      Current Program Shared CEDF C
--- Name---- System-- ----- Status-- Count-- Use---- Language- Status- Option R
PROG0345 EYUMAS1B      3 DISABLED      0      0 PLI      PRIVATE NOCEDF N
PROGABCD EYUMAS1A      _ 3 DISABLED      0      0 C      SHARED NOCEDF N

```

Figure 34. A Program view summarized by CICS system name

To summarize data using a specific column of the view (other than CICS system) as the grouping factor, type the SUM command in the COMMAND field, position the cursor anywhere in the appropriate column, and press Enter. Alternatively, if the SUM command has been assigned to a PF key, position the cursor before pressing the PF key.

The online help facility provides information about the way CICSplex SM summarizes the contents of each column in a view. Data can be summarized in the following ways:

AVG Shows the average value of all the values in the summarized field.

LAST Shows information for all data elements having the like condition (for example, ENABLED).

When all elements in the summarized field have the same value, shows that value. When all elements in the summarized field are identical in part of their values, shows the like parts of the value with asterisks (*) representing the unlike parts (for example, CMAS1***). When no part of the value is common to all elements in the summarized field, shows asterisks.

Note: The comparison between the like condition and the data elements is not case-sensitive. The generic result is presented in upper case.

MAX Shows the maximum value of all the values in a summarized field.

MIN Shows the minimum value of all the values in a summarized field.

SUM Shows the total of all values in the summarized field.

Note: All methods of summarizing, except LAST, apply only to numeric fields.

To display this information, position the cursor in the appropriate column of the summary before you issue the HELP command.

You can issue line action commands against any of the summary lines. If you do this, however, all of the CICS resources combined to form the summary line are affected by the command. Therefore, before you issue an action command, it is recommended that you display the information used to create the summary line. To do this, position the cursor in the Count field of the appropriate summary line and press Enter. Figure 35 shows an example view in which the second of the two summary lines in Figure 34 has been expanded.

```

27FEB2005 11:30:30 ----- INFORMATION DISPLAY -----
COMMAND ==>
CURR WIN ==> 1          ALT WIN ==>
W1 =PROGRAM=====EYUPLX01=EYUCSG01=27FEB2005==11:30:30==CPSM=====
CMD Program CICS Enabled Use Current Program Shared CEDF Copy
--- Name---- System-- Status-- Count-- Use---- Language- Status- Option Require
PROG0123 EYUMAS1A ENABLED 1 0 ASSEMBLER PRIVATE CEDF NOTREQU
PROG0445 EYUMAS1A ENABLED 0 0 C SHARED NOCEDF NOTREQU
PROGABCD EYUMAS1A DISABLED 0 0 C SHARED NOCEDF NOTREQU

```

Figure 35. A summary line expanded

Note that a summary line can be expanded only within the window containing the summary line.

Locking and unlocking a window

The information in windows whose status code is W (waiting) is updated automatically:

- At specific intervals, if the automatic screen update facility (ASU) is active. (ASU is described in “Refreshing all views automatically” on page 49.)
- When you press Enter, if the cursor is in the control area and no commands are pending.

To prevent this automatic screen update occurring, issue:

```
LOCK
```

This command locks the contents of the target window and changes its status code to L (locked). The contents of any other windows continue to be updated automatically.

While a window remains locked, its contents cannot be updated automatically. However, you can change the contents of a locked window by directing commands directly to that window. That is, the locked window can be the current window, or you can prefix commands with the identifier of the locked window.

To remove the lock from a window, and so restore its ability to be updated automatically, issue:

```
UNLOCK
```

The window status code is changed from L (locked) to W (waiting).

Redisplaying views and forms of views

The CICSplex SM view commands cause data about CICS resources and CICSplex SM definitions to be displayed. Once a view is displayed, you can create a new form of the data by:

- Hyperlinking from a hyperlink field to related, general or detailed, information.
- Issuing the SUM display command to produce a summary of the displayed data. (SUM is described in “Summarizing the data in a view” on page 52.)
- issuing the CONtext or SET display command to change the context and scope qualifying the information contained in a view. (CONtext and SET are described in “Setting the context and scope” on page 42.)

Occasionally you will need to redisplay previously displayed forms of views. For this purpose, CICSplex SM supplies two display commands, the effects of which differ somewhat from the hierarchical order of the ISPF END command.

1. To redisplay, in reverse order, each previously displayed view, issue:

ENDQ

Each view is redisplayed in the form in which it was last displayed.

This command can be issued up to 10 times in succession to redisplay, in reverse order, each of the 10 previously displayed views.

The data shown in each view is refreshed as it is redisplayed.

2. To redisplay, in reverse order, each form of each previously displayed view, issue:

END

This command can be issued up to 20 times in succession. When the forms of the last view have been exhausted, the forms of the immediately preceding view are redisplayed.

For the first redisplayed view (and all of its forms), the data shown is the same data as previously displayed.

For each subsequently redisplayed view the data is refreshed. (The data is not separately refreshed for each redisplayed form.)

By using both the ENDQ and the END commands, you can redisplay (in reverse order) up to 20 forms of a maximum of 10 previously displayed views. To illustrate the way the two commands redisplay views and forms of views, suppose you have displayed the following views, in this order:

- LOCTRAN
- TERMNL
- TERMNLD
- TERMNL2
- PROGRAM
- PROGRAMD

Tables 3, 4, and 5 show the results of issuing either ENDQ or END repeatedly or both in combination.

Table 3. Results of issuing ENDQ

Issue this command	To display this view	In which data is...
	PROGRAMD	
ENDQ	TERMNL2	Refreshed
ENDQ	LOCTRAN	Refreshed

Table 4. Results of issuing END

Issue this command	To display this view	In which data is...
	PROGRAMD	
END	PROGRAM	As you last displayed it
END	TERMNL2	Refreshed
END	TERMNLD	Same refresh as TERMNL2
END	TERMNL	Same refresh as TERMNL2

Table 4. Results of issuing END (continued)

Issue this command	To display this view	In which data is...
END	LOCTRAN	Refreshed

Table 5. Results of combining ENDQ and END

Issue this command	To display this view	In which data is...
	PROGRAMD	
END	PROGRAM	As you last displayed it
ENDQ	TERMNL2	Refreshed
END	TERMNLD	Same refresh as TERMNL2
ENDQ	LOCTRAN	Refreshed

When you have redisplayed the last view or form that CICSplex SM has retained, the message NO MORE VIEWS IN STACK appears in the short message area. If you continue to issue the END command after having received this message, CICSplex SM:

- Reduces the window, if it is maximized, and restores the previous window configuration
- Closes the designated window when multiple windows are open
- Ends the CICSplex SM session when there is only one open window

Note: While using a screen configuration, issuing END ends the current view and redisplayes the previous view in that screen configuration. Any views displayed prior to specifying the screen configuration are discarded. (Refer to “Saving and reusing screen configurations” on page 46 for more information.)

Clearing a window

To remove the contents of the current window, issue:

CLEAr

The CLEAr command sets the status code of the affected window to T (temporary).

If the status code of the target window is P (pending) when you issue the CLEAr command, the command that is currently processing in that window is completed. Other outstanding commands are discarded.

Chapter 4. The CICSplex SM help facility

At any time during a CICSplex SM session, you can request online assistance by issuing the HELP display command.

When you issue the HELP command:

- From the CICSplex System Manager entry panel
- From any of the panels associated with option 0 (PROFILE) on the CICSplex System Manager entry panel
- From any input panel

a full-screen help panel is displayed. If there is more than one such panel for a help topic, an indication of further panels is provided at the bottom of the panel. To display the next panel in the sequence, you press Enter. To leave the help information, you issue the END command.

When you request help from the information display panel, a scrollable pop-up window partially, and temporarily, overwrites the contents of the panel.³

An example help pop-up is shown in Figure 36.

```
27FEB2005 11:30:30 ----- INFORMATION DISPLAY -----
COMMAND ===>                                SCROLL ===> PAGE
CURR WIN ===> 1          ALT WIN ===>
W1 =PROGRAM=====EYUPLX01=EYUCSG01=27FEB2005==06:34:54=CPSM=====
CMD Program CICS   Enabled Use   Current Program Shared CEDF Copy
--- Name---- System-- Status-- Count-- Use---- Language- Status- Option Require
PROG0123 EYU |-----|-----|-----|-----|-----|-----| NOTREQU
PROG0123 EYU | Help          PROGRAM General View          Help | NOTREQU
PROG0345 EYU | Command ==>                                Scroll ==> Page | NOTREQU
PROG0445 EYU |-----|-----|-----|-----|-----|-----| NOTREQU
PROGA545 EYU |-----|-----|-----|-----|-----|-----| NOTREQU
PROGA645 EYU | Provides general information about currently | NOTREQU
PROGA655 EYU | installed programs. | NOTREQU
PROGA666 EYU |-----|-----|-----|-----|-----|-----| NOTREQU
PROGA656 EYU | Availability: | NOTREQU
PROGA667 EYU |-----|-----|-----|-----|-----|-----| NOTREQU
PROGA657 EYU | The PROGRAM view is available for all managed CICS | NOTREQU
PROGA687 EYU | systems. | NOTREQU
PROGA687 EYU |-----|-----|-----|-----|-----|-----| NOTREQU
PROGA689 EYUMAS1A  ENABLED      0      0 ASSEMBLER PRIVATE NOCEDF NOTREQU
PROGA697 EYUMAS1B  ENABLED      0      0 ASSEMBLER PRIVATE NOCEDF NOTREQU
```

Figure 36. Help pop-up

There are three ways of requesting help from the information display panel. You can:

- Issue the HELP display command with parameters
- Issue the HELP display command without parameters, in which case the information you get depends on the position of the cursor
- Request further help from within a help topic

Note: Any HELP command that you issue frequently (for example, HELP ACTIONS), can be assigned to a PF key.

3. If you are using a version of ISPF prior to Version 3 Release 1, all help information is provided in full-screen panels.

This chapter describes the three ways of requesting help from the information display panel, describes how to obtain help for some error messages, and explains how to end the help function.

Issuing HELP with parameters

You can request help information by entering the HELP command in the COMMAND field of the information display panel. The syntax of the HELP command is:

```
HELp [HELp | cmd-name | view-name | ACTIONS]
```

where:

HELp causes information about the help facility itself to be displayed

cmd-name

is the name of a display command for which help information is to be displayed

view-name

is the name of the view for which help information is to be displayed

ACTIONS

causes information about the action commands associated with the view shown in the current window to be displayed

For example, if the current window contains the MONSPEC view:

1. The command HEL HEL displays explanatory information about the CICSplex SM help facility.
2. The command HEL SO displays help for the SOrt display command.
3. The command HEL MONSPEC displays help for the MONSPEC view.
4. The command HEL ACTIONS displays help for the CRE, ADD, BRO, REM, UPD, and TEMPMP action commands, which are valid for the MONSPEC view.

Issuing HELP without parameters

If you specify no parameters on the HELP command, the location of the cursor determines the type of help information that is displayed:

If the cursor is ...	You get ...
Anywhere in the control area of the Information Display panel	The introduction to CICSplex SM, which includes a list of primary help topics.
On the view or form-name field on a window information line	An explanation of the view is displayed in the window, along with availability information. The explanation includes the names of any hyperlink fields, overtypable fields, and action commands associated with the view.
On any field other than the view or form-name field on a window information line	A description of the appropriate field.
On a line command field of a view	A description of the action commands valid for the view and any CICS release-level restrictions. Note: You can also display a description of the action commands by typing a question mark (?) in the line command field and pressing Enter.
On a field or field heading in a view	An explanation of the field. The explanation indicates whether the field is a hyperlink or overtypable field, describes how the data is summarized in a summary line, and includes any CICS release-level restrictions. In addition, if the field contains a CVDA value, the value shown in the view may be truncated; the description of the field, however, shows the full CVDA value.

This is known as *cursor-sensitive help*. Requesting cursor-sensitive help is the easiest way to obtain help information for a view, a field, or an action command, particularly if you have assigned the HELP display command to a PF key. (For information about assigning commands to PF keys, see Appendix A, “Tailoring your CICSplex SM profile,” on page 63.)

Requesting help within help

Many of the help pop-up windows contain highlighted words or phrases. These are hyperlinks: if you place the cursor on any of these highlighted words or phrases and press Enter, additional information about the word or phrase is displayed.

The help pop-up window has its own command field in which you can enter further help requests. When the help pop-up window contains information about the online help facility itself, issuing:

HELP Displays information about the online help facility

HELP topic

Displays information about the designated help topic

INDEX

Displays a list of available help topics

When the help pop-up window contains help information for a view, a field within a view, or an action command, issuing:

HELP Displays information about the online help facility

HELP ACTIONS

Displays information about the action commands valid for the view

INDEX

Displays a list of the fields in the view for which help can be requested

INDEX VIEWS

Displays a list of the names of all views that are related to the view in the current window and for which help can be requested. The list item ACTION indicates that help for the actions that can be performed is available.

All entries in the lists produced by both INDEX and INDEX VIEWS are hyperlinks, which means that you can display additional information by placing the cursor on an entry and pressing Enter.

When you request additional information from a pop-up window, a second pop-up window overlays most of the original pop-up window, as shown in Figure 37.

```
27FEB2005 11:30:30 ----- INFORMATION DISPLAY -----
COMMAND ==>                                     SCROLL ==> PAGE
CURR WIN ==> 1          ALT WIN ==>
W1 =PROGRAM=====EYUPLX01=EYUCSG01=27FEB2005==11:30:30=CPSM=====
CMD Program CICS      Enabled Use      Current Program Shared CEDF
--- Name----- System-- Status-- Count-- Use---- Language- Status- Option
-----
Help      CICSplex SM Introduction      Help | SHARED NOCEDF
-----
Help      How can I use CICSplex SM?      Help | SHARED NOCEDF
-----
Help      What are action commands?      Help | SHARED NOCEDF
Command ==>                               Scroll ==> Page
-----
Action commands affect one or more CICSplex
resources or CICSplex SM definitions represented
in a view. There are primary and line action
commands.

o Primary action commands and their parameters
  can be entered in the COMMAND field or
  assigned to a PF key. They act against the
  view that is in the current window.
```

Figure 37. Nested help pop-ups

Searching a help topic

When information about a specific help topic is displayed in a help pop-up window (in response to the HELP topic command, for example), you can search the help topic by issuing the command:

Find *string*

where *string* is a word or a phrase. Find is not case-sensitive, so you can enter the string in uppercase or lowercase characters. If the string contains a space, you must enclose the string in single quotation marks:

F 'an example'

Requesting help for error messages

CICSplex SM can produce two types of message via its user interface. The first of these—the *information message*, whose identifier ends with the letter “I”—confirms the successful completion of a command. You do not need to respond to information messages. The second type of message—the *error message*, whose identifier ends with the letter “E”—identifies an incorrect command or the failure of a command.

Error messages relating to CICSplex SM panel and window management are displayed in the short message area in the title line of the information display panel. The command that caused the error is left in the COMMAND field. When an error message appears in the short message area, you can issue the HELP command to obtain a brief description (also known as a *long message*) of the error. This description replaces the CURR WIN and ALT WIN fields in the control area. These fields are restored when you next press Enter or a PF key. If you issue the HELP command again while the long message is displayed, CICSplex SM displays the tutorial relating to the command in error. If the error in the short message area does not relate to a specific command, issuing HELP twice in succession causes information about the online help facility to be displayed.

Error messages relating to a view or to a CICS problem encountered during command processing are treated in one of two ways. Either the messages are displayed in the window to which they apply, or the view is redisplayed with ERR in one or more line command fields. When ERR is displayed without any messages, you can position the cursor on the ERR indicator and press Enter to display the messages. Online help information is not available for this category of message. Such messages overwrite the contents of the window, but the data is restored when you next press Enter or a PF key. Several messages might appear for a single error. The first message in the sequence explains the error; the remainder are for diagnostic purposes and can usually be ignored.

All CICSplex SM messages are described in the *CICSplex System Manager Messages and Codes* book.

Ending help

When you have finished using the online help facility, you can issue either of the following commands:

- END** which removes the current level of help pop-up information
- Quit** which removes all levels of help information

Appendix A. Tailoring your CICSplex SM profile

A default CICSplex SM user profile is created automatically the first time you access CICSplex SM. The main function of the user profile is to control specific aspects of the display appearance. To tailor the default profile, you select option 0 from the CICSplex System Manager entry panel. When you select option 0, the profile options panel, shown in Figure 38, is displayed.

```
----- PROFILE OPTIONS -----  
OPTION    ==>  
  
1  CONTROL      - Specify session control parameters  
2  DISPLAY      - Specify information display parameters  
3  PFKEYS       - Specify PF keys  
4  DATE         - Specify date format  
5  ATTRIBUTES   - Specify display attributes for highlighting
```

Figure 38. The profile options panel

The options presented on the profile options panel are described in the remainder of this appendix.

Setting session control parameters (option 1)

The session control parameters affect two distinct features of a CICSplex SM session: they determine which CAS you connect to when you sign on to CICSplex SM, and they control the *extended diagnostic mode* (XDM).

Note: Any changes that you make to the session control parameters take effect the next time you connect to a CAS:

- If option 0 (PROFILE) was the first option you selected from the CICSplex System Manager entry panel, you are not yet connected to a CAS. The next time you select option 1 (PLEXMGR) or option 2 (CPSM), you are connected to a CAS and the session control parameters you specify here take effect.
- If you selected option 1 or 2 from the CICSplex System Manager entry panel during this ISPF session and prior to making profile changes, you are already connected to a CAS. For the changes to take effect, you must first end the current CICSplex SM session by exiting from ISPF; this will disconnect your session from the CAS. Then, the next time you start a CICSplex SM session, the new session control parameters take effect.

The panel displayed when you select option 1 (CONTROL) from the profile options panel is shown in Figure 39 on page 64.

```

----- SESSION CONTROL PARAMETERS -----
COMMAND  ===>

Subsystem ID    ===> CAS3      (Co-ordinating Address Space subsystem ID)

Confirm Parms   ===> NO       (Display parameter confirmation panel, Yes/no)
XDM Mode        ===> NO       (Execute session in diagnostic mode, Yes/No)

Press END to save updates or HELP for more information.

```

Figure 39. The profile options panel: session control parameters

Subsystem ID

is the enterprise-defined name of the coordinating address space (CAS) to which you connect when you start a CICSplex SM session.

In the default user profile, the CAS subsystem ID is "CPSM". You should replace this value with the identifier of the CAS on the MVS image from which you are using CICSplex SM. If you do not know the name of the CAS to which you want to be connected, ask your system administrator for assistance.

When you next select option 1 or 2 from the CICSplex System Manager entry panel, CICSplex SM establishes a connection to the CAS, and from the CAS to a CMAS managing the CICSplex that is to be the context of the session. If you decide, during a CICSplex SM session, that you want to identify a different CAS, you can return to this panel and overwrite the CAS subsystem ID. To establish a connection to the new CAS, however, you must end the current CICSplex SM session by exiting from ISPF and then start a new session.

Confirm parms

controls whether the session control parameters panel is displayed automatically each time you connect to a CAS.

YES causes the session control parameters panel to be displayed the first time you select option 1 or 2 from a CICSplex System Manager entry panel in any ISPF session. This allows you to change the subsystem ID and the XDM setting before a CAS connection is established.

NO prevents the session control parameters panel from being displayed the first time you select option 1 or 2 from a CICSplex System Manager entry panel in any ISPF session. When Confirm Parms is set to NO, you must explicitly select option 0 (PROFILE) from the CICSplex System Manager entry panel to change the session control parameters.

XDM Mode

activates and deactivates the XDM (extended diagnostic mode). You should activate XDM *only* when you are asked to do so by an IBM Support Representative.

YES Activates XDM. When diagnostic messages are produced, they are displayed in the affected window and written to the job log.

NO Deactivates XDM.

XDM is described in the *CICSplex System Manager Problem Determination* book.

Setting information display parameters (option 2)

The information display parameters set the default screen configuration and the default automatic screen update (ASU) interval.

Figure 40 shows the information display parameters panel displayed when you select option 2 from the profile options panel.

----- INFORMATION DISPLAY PARAMETERS -----

COMMAND ===>

Initial screen ===>

(Name of initial screen to be displayed)

ASU interval ===> 30

(Auto screen update interval. 15-999 seconds)

Enter END command when all updates are complete.

Figure 40. The profile options panel: information display parameters

Initial screen

When an information display panel is first displayed during any CICSplex SM session, its display area contains a single, open window by default. If you would like to be presented with a different screen configuration at the start of a session (for example, if you have discovered that you could usefully start each CICSplex SM session with several windows, each having a different context and scope), you can specify the name of that screen configuration in the Initial screen field of the information display parameters panel.

For more information about screen configurations, see “Saving and reusing screen configurations” on page 46.

ASU interval

The ASU command, described in “Refreshing all views automatically” on page 49, activates the automatic screen update facility. When this facility is active, the data in all unlocked windows is updated automatically at specified intervals.

You can define the length of the ASU interval on the ASU command. Alternatively, you can use the default value, which is specified in the ASU interval field of the information display parameters panel.

By default, the ASU interval is 15. You can overtype the default ASU interval with a value in the range 15 through 999.

Notes:

1. A small interval adds to the CPU overhead when there is a large amount of data to be updated.
2. You should consider increasing the ASU interval value when the status code for all or most windows frequently changes from W (waiting) to P (pending). (This is because, in these circumstances, the window contents are unlikely to be changing between screen updates.)
3. You can use the ASU display command to override temporarily the default ASU interval. This new interval remains in effect until the ASU facility is next deactivated. The minimum ASU value you can specify on the ASU command is 3.

Setting PF keys (option 3)

The default CICSplex SM profile uses the default ISPF PF key assignments. To change these assignments, you can:

- Issue the ISPF KEYS command from anywhere within CICSplex SM, or
- Select option 3 from the Profile Options panel

The resulting panel, shown in Figure 41, shows the current PF key assignments.

```
----- PF KEY DEFINITIONS AND LABELS - PRIMARY KEYS -----
COMMAND ==>

NUMBER OF PF KEYS . . 24                                TERMINAL TYPE ==> 327x

PF1 . . . HELP
PF2 . . . SPLIT
PF3 . . . END
PF4 . . . RETURN
PF5 . . . RFIND
PF6 . . . RCHANGE
PF7 . . . UP
PF8 . . . DOWN
PF9 . . . SWAP
PF10 . . LEFT
PF11 . . RIGHT
PF12 . . RETRIEVE

PF1 Label . .      PF2 Label . .      PF3 Label . .
PF4 Label . .      PF5 Label . .      PF6 Label . .
PF7 Label . .      PF8 Label . .      PF9 Label . .
PF10 Label . .     PF11 Label . .     PF12 Label . .

Press ENTER key to display alternate keys. Enter END command to exit.
```

Figure 41. The profile options panel: PF key definitions and labels

To change a PF key assignment, overwrite the current value with one or more:

- CICSplex SM commands
- ISPF commands
- TSO commands

Any command or series of commands that you can type in the COMMAND field of an Information Display panel can be assigned to a PF key. The number of commands you can assign to a single PF key is determined by the length of the field into which you are typing the command string. You can use the LABEL fields at the bottom of the panel to assign an identifier to the commands assigned to any particular PF key. For information about commands valid in a CICSplex SM session, see Chapter 2, “Panels, windows, and views,” on page 11.

Your CICSplex SM PF key settings remain in effect between CICSplex SM sessions; they do not affect non-CICSplex SM applications.

PF key assignments are shown in the last two lines of the display. To prevent these two lines from covering data lines, you can issue the ISPF command PFSHOW OFF to suppress display of the PF key assignments.

Setting the date format (option 4)

When you select option 4 from the profile options panel, the SET DATE FORMAT panel, shown in Figure 42 on page 67, is displayed. You use this panel to define the date format for all CICSplex SM panels, windows, and views.

```

----- SET DATE FORMAT -----
COMMAND  ==>

Date ==> 8 (Date format to be used in Information Display.
Valid specifications are:
1 - mm/dd/yy    2 - dd/mm/yy    3 - yy/mm/dd    4 - ddmmyy
5 - mm/dd/yyyy  6 - dd/mm/yyyy  7 - yyyy/mm/dd  8 - ddmmyyyy )

Press END to save updates or HELP for more information.

```

Figure 42. The profile options panel: date format

Each valid date format is associated with a number. To change the format, enter the appropriate number in the Date field.

mm is the 2-digit month

dd is the 2-digit day of the month

yy is the 2-digit year

mmm is a 3-character abbreviation for the month name

yyyy is the 4-digit year

For example, the 26th August 2000 can be displayed in these formats:

1. 08/26/00
2. 26/08/00
3. 00/08/26
4. 26AUG00
5. 08/26/2000
6. 26/08/2000
7. 2000/08/26
8. 26AUG2000

Setting display attributes (option 5)

The display attributes control the appearance of column headings and window borders. Selecting option 5 from the profile options panel produces the DISPLAY ATTRIBUTES panel, which is shown in Figure 43 on page 68.

```

----- DISPLAY ATTRIBUTES -----
COMMAND ==>
Specify display attributes for headings and window borders.

          INTENS  COLOR  HILITE
          -----
Headings:
  with hyper  ____  ____  ____  (for columns with a hyperlink defined)
  w/o hyper   ____  ____  ____  (for other columns)
Borders:
  with focus  ____  ____  ____  (around the current window)
  w/o focus   ____  ____  ____  (around all other windows)

Column Values: (Only first letter required)
  INTENS - High, Low.

  COLOR  - White, Red, Blue, Green, Pink, Yellow, Turquoise.
           (For terminals that support color)

  HILITE - Uscore, Blink, Reverse.
           (For terminals that support extended highlighting)

Enter END when all updates are complete.

```

Figure 43. The profile options panel: display attributes

Headings

The display attributes (intensity, color, and highlighting) of column headings in CICSplex SM views allow you to differentiate those fields that support hyperlinks from those that do not. For example, the column headings of fields that are hyperlinks could be white and underscored, and those that are not could be green.

To change an intensity (INTENS), color, or highlighting (HILITE) attribute, overwrite the appropriate field with one of the values shown in the right half of the panel.

All terminals recognize the intensity (INTENS) attribute. If your terminal does not support color or highlighting, these attribute values are ignored.

Borders

The display attributes of the border surrounding a window allow you to identify the current window (that is, the window with focus). To change the intensity, color, or highlighting attribute of a window border, overwrite the appropriate field with one of the values shown in the right half of the panel.

Appendix B. A summary of the CICSplex SM display commands

This appendix lists all of the CICSplex SM display commands. For each display command it provides the command name, a brief description of its function, and a reference to additional information.

Table 6. CICSplex SM display commands

Command	Description	See
ASU	Turns on the automatic screen update (ASU) facility for all open windows.	49
CLEAr	Clears the contents of a window.	56
CLOse	Closes a window and reassigns its space to neighboring windows.	48
CONtext	Changes the context of a window.	43
DATARefresh	Updates the contents of a view in a specific window using the parameter values associated with the command that produced the view.	49
Down	Scrolls the data within a window toward the bottom.	49
END	Redisplays, in reverse order, a maximum of 10 previously issued views and a maximum of 20 alternate forms of each of those views.	54
	Exits one level of nested help.	57
	Reduces expanded window; redisplays last window configuration.	42
	Closes a window and ends a CICSplex SM session.	48
ENDQ	Redisplays, in reverse order, the last form of a maximum of 10 previously issued views.	54
HELp	Displays information about CICSplex SM, panels, views, fields, and messages.	57
HSplit	Splits a window horizontally to open a new window.	39
LEft	Scrolls the data in a window to the left. “Scrolling data in a window” on page 49	
Locate	Locates a data string within a specified column of a view. “Locating data within a view” on page 51	
LOCK	Prevents the contents of a window from being updated.	54
MAXimize	Expands a window to fill the display area.	42
NEXt	Sets the next sequential window as the current window.	39
PARm	Updates the contents of a view in a specific window by changing the parameter values associated with the command that produced the view. Query data is refreshed.	49
PREVious	Sets the previous sequential window as the current window.	39
Quit	Closes all open windows and displays the CICSplex System Manager entry panel.	48
	Exits from help, regardless of the nesting levels.	57
RESet	Closes all open windows except window 1 and clears the contents of window 1.	48
REStore	Reduces an expanded window to redisplay all Maximizing and restoring windows” on page 42 previous configuration.	
Right	Scrolls the data in a window to the right. “Scrolling data in a window” on page 49	
SAVEScr	Saves a new screen configuration, or replaces an existing screen configuration. “Saving and restoring screen configurations” on page 46	
SCOpe	Changes the scope of a window. “Changing the scope of an existing window” on page 44	
SCReen	Activates a specific screen configuration.	46
SCREENS	Displays a view from which you can select or delete a screen configuration.	46
SET	Changes the context, product, server, scope, and view associated with an open window.	44

Table 6. CICSplex SM display commands (continued)

Command	Description	See
SETD	Sets the context, product, and scope to be associated with all subsequently opened or cleared windows.	45
SHOWPosi	Displays information about a view, such as the number of records it contains and the number of records currently displayed.	41
SOrt	Rearranges the rows within a general view (in ascending or descending order) based on the contents of a field within that view.	51
STATus	Displays an explanation of the window status codes.	40
SUM	Displays summary information about the contents of a column in a general or summary view.	52
UNLOck	Allows the contents of a previously locked window to be updated.	54
UP	Scrolls the data in a window toward the top.	49
VSplit	Splits a window vertically to open a new window.	39
Wn	Makes the window identified by <i>n</i> the current window.	39
	Directs the results of the command to which it is prefixed—as in Wn.LEFT—to the window identified by <i>n</i> .	40

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Accessibility features help a user who has a physical disability, such as restricted mobility or limited vision, to use software products successfully.

You can perform most tasks required to set up, run, and maintain your CICSplex SM system in one of these ways:

- using a 3270 emulator connected to CICSplex SM
- using a 3270 emulator logged on to CICS
- using a 3270 emulator logged on to TSO
- using a 3270 emulator as an MVS system console
- using the CICSplex SM web user interface.

IBM Personal Communications (Version 5.0.1 for Windows 95, Windows 98, Windows NT® and Windows 2000; version 4.3 for OS/2) provides 3270 emulation with accessibility features for people with disabilities. You can use this product to provide the accessibility features you need in your CICSplex SM system.

Index

A

action command
 requesting help for 57
 using to update data 31
ALT WIN field
 description 17
alternate window
 description 17
ANALYSIS view 7
ASU (automatic screen update) 64
automatic screen update (ASU) 64

B

BBMSS201I message 7, 44
BBMXBD15I message 21

C

CAS (coordinating address space)
 description 1
changing appearance of
 column headings 67
 window borders 67
changing display attributes 67
 current window 39
CICS system group
 description 2
CICSplex
 description 1
CICSplex SM
 ending 7
 panels 11
 profile 63
 starting 3
 windows 17
CICSplex SM Starter Set
 description 2
CLEAR display command 56
clearing a window 56
CLOSE display command 48
closing a window 48
CMAS (CICSplex SM address space)
 description 1
column headings, changing 67
commands
 display 37
 ISPF 37
 SPLIT 18
 issuing 37
 syntax notation 37
 TSO 37
 view 37
CONFIG view 8
context
 changing 43, 44
 default 45

context (*continued*)
 for CICSplex SM session 2, 5
 setting 42
CONTEXT display command 43
control area
 description 17
coordinating address space (CAS)
 description 1
coordinating address space subsystem ID
 specifying 64
CURR WIN field
 description 17
current window
 changing 39
cursor movement between windows 36
cursor-sensitive help information 59

D

DATAREFRESH display command 49
date format 66
detailed view 20
different window, directing commands to 40
display area 16
display attributes
 changing 67
display command 37
 CLEAR 56
 CLOSE 48
 CONTEXT 43
 DATAREFRESH 49
 DOWN 49
 END 54, 61
 ENDQ 54
 HELP 57
 HSPLIT 39
 LEFT 49
 LOCATE 51
 LOCK 54
 MAXIMIZE 42
 NEXT 39
 parameters of 30
 PARM 49
 PREVIOUS 39
 QPARM 49
 QUIT 48, 61
 requesting help for 57
 RESET 48
 RESTORE 42
 RFIND 51
 RIGHT 49
 SAVESCR 46
 SCOPE 44
 SCREEN 46
 SCREENS 46
 SET 44
 SETD 45
 SHOWPOS 41

display command (*continued*)

- SORT 51
- STATUS 40
- SUM 52
- summary list 69
- UNLOCK 54
- UP 49
- VSPLIT 39
- window environment 38
- WN 39, 40

displaying information about a view 41

displaying possible values 12

DOWN display command 49

E

E (error) window status 40

END display command 54

ending CICSplex SM 7

ENDQ display command 54, 61

entry panel, CICSplex system manager 3

equals sign (=) in line action field 33

ERR indicator 32

error messages, help for 61

extended diagnostic mode (XDM)

- activating 63

EYUEIO596E message 32

F

FIND help command 60

forms of a view 20

G

general view 20

generic values, specifying 12

H

HELP display command 57

HSPLIT display command 39

hyperlink, initiating 29

I

INDEX help command 59

information display panel

- control area 17

- description 15

- display area 16

information display parameters

- specifying 64

information line, window 18

input panels 12

ISPF commands, issuing 18, 37

L

L (locked) window status 40

LEFT display command 49

line action command 32

list, selection 12

LOCATE display command 51

locating data in a view 51

LOCK display command 54

locking CICSplex SM windows 54

M

managed application system (MAS)

- description 1

MAS (managed application system)

- description 1

MAXIMIZE display command 42

maximizing windows 42

menu

- description of 22

- displaying 23

- selecting from 22

MENU command 22

menu panel 11

messages

- BBMSS201I 7, 44

- BBMXBD15I 21

- EYUEIO596E 32

- NO MORE VIEWS IN STACK 56

MIX indicator 32

MONITOR view 8

N

NEXT display command 39

NO MORE VIEWS IN STACK message 56

O

online help

- cursor-sensitive 59

- ending 61

- FIND command 60

- for error messages 61

- INDEX command 59

- pop-up windows 60

- requesting 57

- requesting help for 59

OPERATE view 8

overtime field

- using 34

P

P (pending) window status 40

panels

- CICSplex SM 11

- help 15

- information display 15

- input 12

- panels (*continued*)
 - menu 11
 - pop-up help 15
- parameters
 - information display 64
 - session control 63
- PARM display command 49
- PF keys 65
- PLEXMGR option 4
- pop-up windows 15
- PREVIOUS display command 39
- primary action commands 32
- PROFILE option 4
- profile, CICSplex SM 63

Q

- QPARM display command 49
- QUIT display command
 - ending a session 3
 - ending a window 48
 - ending help 61

R

- redisplaying views and forms of views 54
- repeating a Locate command in a view 51
- Require Set field 7
- RESET display command 48
- RESTORE display command 42
- RIGHT display command 49

S

- SAVESCR display command 46
- saving screen configurations 46
- scope
 - changing 44
 - default 45
 - for CICSplex SM session 2, 5
 - setting 42
- SCOPE display command 44
- screen configuration
 - saving 46
- SCREEN display command 46
- SCREENS display command 46
- scrolling data in a window 49
- selection list
 - using 12
- session control parameters
 - specifying 63
- session, CICSplex SM 1
- SET command
 - specifying if required 7
 - using when overtyping 34
- SET display command 44
- SETD display command 45
- SHOWPOSI display command 41
- SORT display command 51
- sorting the contents of a view 51
- SPLIT command 18

- Starter Set
 - description 2
- starting CICSplex SM 3
- STATUS display command 40
- SUM display command 52
- summarizing the data in a view 52
- summary view 20

T

- T (temporary) window status 40
- TOPOLOGY view 8
- TSO commands 37

U

- UNLOCK display command 54
- unlocking CICSplex SM windows 54
- UP display command 49
- user profile, CICSplex SM 63

V

- view
 - description 20
- view command
 - parameters of 30
 - requesting help for 57
- VIEWS command 28
- VSPLIT display command 39

W

- W (waiting) window status 42, 54
- warning, record count
 - field on CICSplex system manager entry panel 5
 - when exceeded 21
- window borders, changing 67
- window information line
 - description 18
- window status 40
- windows
 - CICSplex SM 17
 - clearing 56
 - closing 48
 - context, changing 43, 44
 - creating additional 39
 - cursor movement between 36
 - locking 54
 - making current 39
 - maximizing 42
 - redisplaying contents 54
 - refreshing contents of 49
 - restoring to previous size 42
 - scope, changing 44
 - scrolling contents of 49
 - status of 40
 - unlocking 54
 - setting context 42
 - setting scope 42

windows (*continued*)
 using multiple 17
Wn display command 39, 40
WORKLOAD view 8

X

XDM (extended diagnostic mode)
 activating 63

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