

CICS Transaction Server for z/OS



CICSplex SM Administration

Version 3 Release 1

CICS Transaction Server for z/OS



CICSplex SM Administration

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 169.

Sixth 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.

© Copyright IBM Corporation 1994, 2011.

US Government Users Restricted Rights – Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Contents

| | |
|--|------|
| Preface | vii |
| Who this book is for | vii |
| What you need to know | vii |
| CICSplex SM management of CICS releases | vii |
| Notes on terminology | viii |
| Syntax notation and conventions used in this book | viii |
| Summary of changes | xi |
| Changes made to this book for CICS Transaction Server for z/OS, Version 3 | |
| Release 1 | xi |
| Changes for CICS Transaction Server for z/OS, Version 2 Release 3 | xi |
| Changes for CICS Transaction Server for z/OS, Version 2 Release 2 | xi |
| Changes for CICS Transaction Server for z/OS, Version 2 Release 1 | xi |
| Changes made to this book for CICSplex SM for CICS Transaction Server for | |
| OS/390, Version 1 Release 3 | xii |
| Chapter 1. Using CICSplex SM administration views | 1 |
| Setting the CMAS context, context and scope in the Web User Interface | 1 |
| Setting the context and scope in the end user interface | 1 |
| Accessing Web User Interface administration views | 2 |
| Accessing end user interface administration views | 3 |
| Issuing a view command | 4 |
| Selecting a view from a menu | 4 |
| Initiating a hyperlink to a view | 5 |
| Specifying command parameters | 5 |
| Using action commands and overwrite fields in the Web User Interface | 5 |
| Types of action commands | 6 |
| Using action commands and overwrite fields in the end user interface | 6 |
| Types of action commands | 6 |
| Repeating a line action command | 9 |
| Displaying a map of CICSplex SM definitions | 9 |
| Using selection lists | 12 |
| Using overwrite fields | 13 |
| Requesting online help | 14 |
| Chapter 2. Summary of administration tasks | 15 |
| Creating and maintaining administration definitions | 15 |
| Managing administration definitions | 16 |
| Chapter 3. Using the batched repository-update facility | 17 |
| Submitting a batched repository-update job | 17 |
| Creating an input file | 18 |
| Creating and maintaining CICSplex SM definitions | 18 |
| Creating CICS resource definitions | 21 |
| Producing a map of CICSplex SM definitions | 22 |
| Setting processing options for repository-update commands | 23 |
| Creating a data set for re-input to the batched repository-update facility | 24 |
| Using the WUI to submit a batched repository-update job | 25 |
| Using the EUI to submit a batched repository-update job | 26 |
| Action commands | 26 |
| Hyperlink fields | 27 |
| Using the batched repository-update utility | 28 |
| Batched repository-update utility parameters | 29 |

| | |
|---|-----------|
| Supported resource tables. | 30 |
| Examples of managing records in the data repository. | 34 |
| Example 1 - Creating a record | 34 |
| Example 2 - Removing a record | 35 |
| Example 3 - Creating a link record. | 35 |
| Example 4 - Listing records | 36 |
| Example 5 - Dumping records as a backup | 36 |
| Example 6 - Dumping records as input to create new records. | 37 |
| Example 7 - Adding a CICS system to a CICS system group | 38 |
| Chapter 4. Using PlexManager to manage CAS connections. | 39 |
| Accessing PlexManager and its views | 39 |
| Defining and controlling CAS cross-system communication. | 41 |
| CASACT (CAS cross-system activity) | 41 |
| CASDEF (Multiple CAS definitions) | 43 |
| CASDEFD (A specific CAS definition) | 49 |
| Monitoring CAS activity. | 49 |
| PLEX (Available service points by system). | 49 |
| PLEXOVER (Available service points) | 51 |
| Maintaining screen configurations | 52 |
| SCREENS (Screen configurations) | 52 |
| Chapter 5. Configuring a CMAS | 55 |
| Preparing to configure a CMAS. | 55 |
| Associating one or more CICSplexes with a CMAS | 55 |
| Associating a CICSplex with one or more CMASs | 56 |
| Using direct and indirect CMAS communication | 56 |
| Establishing communication links between a CMAS and a MAS | 57 |
| Working with maintenance point CMASs | 58 |
| CMAS configuration definitions and their related views | 62 |
| BATCHREP (Batched repository-update facility) | 64 |
| Managing CMAS to CMAS links using the Web User Interface | 64 |
| Managing CMAS to CMAS links using the end-user interface | 67 |
| CMAS to MAS links | 69 |
| CICSplex definitions | 69 |
| CPLXCMAS (CMASs associated with a CICSplex). | 74 |
| Managing a CMAS configuration | 76 |
| End-user interface CMAS configuration views | 76 |
| Chapter 6. Establishing the topology of a CICSplex | 89 |
| Preparing to define the topology of a CICSplex | 89 |
| Establishing a CICSplex | 89 |
| Combining CICS systems and CICS system groups | 89 |
| Components of a CICS system definition | 90 |
| CICSplex SM time zone attributes | 91 |
| Attribute definitions | 92 |
| Attribute usage | 93 |
| Topology definitions | 96 |
| Managing topology definitions using the Web User Interface | 97 |
| Managing CICS system group definitions using the Web User Interface | 97 |
| Working with CICS system definitions | 98 |
| Managing time period definitions using the Web User Interface. | 104 |
| Managing topology definitions using the end user interface | 106 |
| CICS system group definitions. | 106 |
| CICS system definitions | 111 |
| PERIODEF (Time period definitions) | 130 |

| | |
|--|-----|
| SYSGRPC (Members in CICS system groups) | 133 |
| Action commands | 134 |
| Hyperlink fields | 134 |
| Removing a member from a CICS system group | 135 |
| Working with MAS topology definitions using the Web User Interface | 135 |
| Stopping an active MAS | 135 |
| Updating an active MAS | 136 |
| Working with MAS topology definitions using the end user interface | 140 |
| MAS | 141 |
| Updating an active MAS | 143 |
| Chapter 7. Example tasks: configuration and topology | 149 |
| Establishing CMAS to CMAS connections | 149 |
| Creating time period definitions | 150 |
| Organizing CICS systems into groups | 151 |
| Enabling a CMAS to send generic alerts to NetView. | 152 |
| Chapter 8. Starting to use CICSplex SM | 155 |
| Bibliography | 157 |
| The CICS Transaction Server for z/OS library | 157 |
| The entitlement set | 157 |
| PDF-only books | 157 |
| Other CICS books | 159 |
| Determining if a publication is current | 159 |
| Accessibility | 161 |
| Index | 163 |
| Notices | 169 |
| Programming interface information | 170 |
| Trademarks. | 170 |
| Sending your comments to IBM | 171 |

Preface

This book provides information you need to administer the CICSplex® SM environment.

Who this book is for

This book is for the individual responsible for administering CICSplex SM to meet the needs of your enterprise.

What you need to know

When customizing CICSplex SM, it is assumed you have experience with the IBM® MVS/ESA operating system and the System Modification Program/Extended (SMP/E) licensed program.

It is also assumed that you have read:

CICSplex System Manager Web User Interface Guide

For information about using the CICSplex SM Web User Interface

CICSplex System Manager User Interface Guide

For information about using the ISPF user interface to CICSplex SM

CICSplex System Manager Concepts and Planning

For an introduction to CICSplex SM and the CICSplex SM Starter Set

Note: Many of the views in this book are based on the Starter Set. For useful examples of how to perform some of the tasks described in this book, explore the Starter Set itself.

CICSplex SM management of CICS releases

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 viii 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 |

Notes on terminology

In the text of this book, the term **CICSplex SM** (spelled with an uppercase letter *P*) means the IBM CICSplex System Manager element of CICS Transaction Server for OS/390. 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.

Other terms used in this book are:

Term Meaning

CICS TS for z/OS

The CICS element of the CICS TS for OS/390

KB 1 024 bytes

MB 1 048 576 bytes

MVS MVS™/Enterprise Systems Architecture SP (MVS)

The phrase *issue the command* is used in this book to mean that a command may be either typed in the COMMAND field of an Information Display panel or invoked by pressing the PF key to which it is assigned. When the location of the cursor affects command processing, this phrase also means that you can do one of the following:

- Type the command in the COMMAND field, place the cursor on the appropriate field, and press Enter.
- Move the cursor to the appropriate field and press the PF key to which the command is assigned.

Syntax notation and conventions used in this book

The syntax descriptions of the CICSplex SM commands use the following symbols:

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

The following conventions also apply to CICSplex SM syntax descriptions:

- Commands and keyword parameters are shown in uppercase characters. If a command or parameter may be abbreviated, the minimum permitted abbreviation is in uppercase characters; the remainder is shown in lowercase characters and may be omitted.

- Variable parameters are shown in lowercase characters. You must replace them with your own information.
- Parameters that are not enclosed by braces { } or brackets [] are required.
- A default parameter value is shown like this: KEYWORD. It is the value that is assumed if you do not select one of the optional values.
- Punctuation symbols, uppercase characters, and special characters must be coded exactly as shown.
- The ellipsis ... means that the immediately preceding parameter can be included one or more times.

Summary of changes

This book is based on the CICS Transaction Server for z/OS, Version 2 Release 3 edition of *CICSplex SM Administration*. It 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 marked by vertical bars in the left margin.

Changes made to this book for CICS Transaction Server for z/OS, Version 3 Release 1

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 no longer possible to set up a CICSplex SM remote MAS agent for Windows.

However, customers, who wish to do so, can continue to use the CICS Transaction Server Version 2.3 or Version 2.2 for CICSplex SM support of TXSeries.

This book has been updated to give greater emphasis to the use of the Web User Interface in performing administration tasks. Several new sections have been added.

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

The book has been updated to reflect the changes in the support of CICSplex SM remote MAS agents. There are no other major changes to this edition.

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

The following chapters have been updated in support of the changes to CICSplex SM remote MAS agents:

- Chapter 5, “Configuring a CMAS,” on page 55
- Chapter 7, “Example tasks: configuration and topology,” on page 149

The section in “Working with maintenance point CMASs” on page 58 on changing a maintenance point CMAS has been updated and extended.

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.

Changes for CICS Transaction Server for z/OS, Version 2 Release 1

The following additions and changes have been made to the book as a result of changed and new function in CICSplex SM for CICS Transaction Server for z/OS, Version 2 Release 1:

- New and changed information regarding workload management and RTA, as a result of the extensions to the dynamic routing program.

- Information added about data set re-input to the batched repository-update facility.

Changes made to this book for CICSplex SM for CICS Transaction Server for OS/390, Version 1 Release 3

In addition to the changes required by new and changed product function, the following changes have been made to this book:

- This book was Part 3 of the *CICSplex SM Setup* book at the previous release.
- The configuration views that were part of the *Operations Reference* at the previous release have been moved to this book and form part of Chapter 5, “Configuring a CMAS,” on page 55.
- The topology views that were part of the *Operations Reference* at the previous release have been moved to this book and form part of Chapter 6, “Establishing the topology of a CICSplex,” on page 89.

Chapter 1. Using CICSplex SM administration views

This chapter contains general information you need to know about using the CICSplex SM Web User Interface and ISPF end user interface (EUI) to perform CICSplex SM administration tasks.

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. For more information about PlexManager diagnostic facilities, refer to the *CICSplex SM Problem Determination* manual.

The remainder of this chapter describes:

- “Setting the CMAS context, context and scope in the Web User Interface”
- “Setting the context and scope in the end user interface”
- “Accessing Web User Interface administration views” on page 2
- “Accessing end user interface administration views” on page 3
- “Using action commands and overwrite fields in the Web User Interface” on page 5
- “Using action commands and overwrite fields in the end user interface” on page 6
- “Requesting online help” on page 14
- Chapter 2, “Summary of administration tasks,” on page 15.

Setting the CMAS context, context and scope in the Web User Interface

You can set the context, CMAS context and scope to be used when you navigate from the current menu in the selection criteria area of a menu and the selection criteria and refresh area of a view. To change one of these values, overwrite the required field and select the **Set** button.

Either the context or the CMAS context is used for all operations. In the Web User Interface these terms are used as follows:

- **Context**

This is the CICSplex name and is used for almost all views.

- **CMAS context**

This is the CMAS name. This is used only when you are viewing CMAS level configuration data such as CMAS status and the CICSplexes connected to a CMAS.

- **Scope**

This is a CICSplex, CICS group MAS or logical scope name. The scope is a subset of the context, and limits the effects of CICSplex SM commands to particular CICS systems or resources. If the CMAS context is being used, the scope is ignored. The scope is only used for certain resource types.

Setting the context and scope in the end user interface

The information you can display in a view is based on the context and scope that are currently in effect for the window in which the view is to be displayed. In the end user interface these terms are used as follows:

Context

Identifies a CMAS or one of the CICSplexes managed by a CMAS.

setting the context and scope in the end user interface

To create a context element, use the CMAS configuration views. For information about these views, see “Managing a CMAS configuration” on page 76.

When you are working with configuration views, set the context to a CMAS. For the topology views, the context must be set to a CICSplex.

If you have no need to set the context to a particular CMAS, you do not
need to start a CAS on that MVS system. See the *CICS Transaction Server*
for z/OS Installation Guide for information on omitting the CICSplex SM
CASNAME parameter to prevent the CMAS from attempting to connect to a
CAS.

Scope (Recognized only when the context is a CICSplex.) Identifies a CICS system, CICS system group, or BAS logical scope that is associated with the CICSplex, or identifies the CICSplex itself.

To create a scope element, use the CICSplex topology views.

To create a BAS logical scope, use the BAS resource definition views.

If the scope is set to an * (asterisk) (as occurs after you initiate a hyperlink from PlexManager), and if you attempt to display any view that requires a valid scope you will receive an error message. You can use the SCOPE, SET, or SETD display command to establish a scope.

The names of the context and scope that are currently in effect are reflected on the window information line.

To change the context or scope for:

- Any currently open window, use the CONTEXT, SCOPE, or SET display command
- All subsequently opened or cleared windows, use the SETD display command.

Additional information about using the CONTEXT, SET, SETD, and SCOPE commands is in the *CICSplex SM User Interface Guide*.

Accessing Web User Interface administration views

To access CICSplex SM administration views from the Web User Interface main menu click **Administration views** to open the menu shown in Figure 1 on page 3.

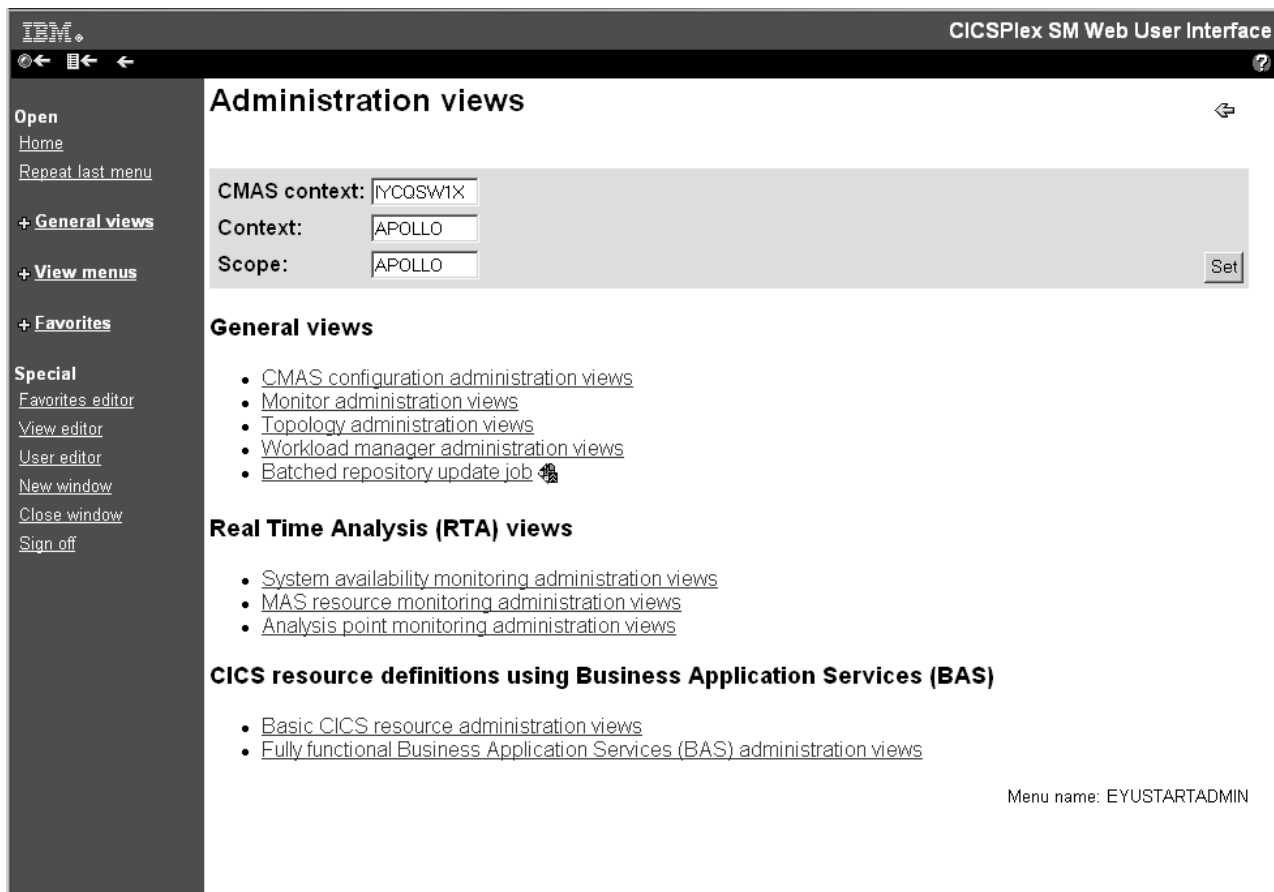


Figure 1. Administration views menu

See CICSPlex SM Web User Interface Guide for a complete list of WUI administration views and their associated resources

CICSPlex SM administration views display information about definitions that exist in the CMAS data repository. If you attempt to access a view for which no definitions currently exist:

- The view name appears on the window information line
- The following message is displayed in the window:
BBMXBD15I There is no data which satisfies your request

At that point, you can issue an action command to create the appropriate definitions.

Accessing end user interface administration views

You can access a CICSPlex SM administration view by:

- Issuing a view command
- Selecting the view from a menu
- Initiating a hyperlink from another view.

CICSPlex SM administration views display information about definitions that exist in the CMAS data repository.

Issuing a view command

The command that displays a view has the same name as the view itself. Thus, to display the ADMCONFG view, which contains a selection list of CMAS administration configuration views, you would issue the command:

```
ADMCONFG
```

You can issue the command either by typing the command in the COMMAND field and pressing Enter, or by pressing the PF key to which the command is assigned.

Some view commands have optional or required parameters. For information on how to specify parameters, see “Specifying command parameters” on page 5.

Selecting a view from a menu

You can select an administration view from a menu by using the MENU command. The MENU command has parameters that can be used to qualify the list of views from which you can select. For the administration views described in this book, you can use the following parameters with the MENU command:

ADMCONFG

For a menu of the CMAS configuration views

ADMTOP

For a menu of the topology views

For example, Figure 2, illustrates the selection list produced when you issue the MENU ADMCONFG command.

```
27FEB2005 16:50:40 ----- INFORMATION DISPLAY -----
COMMAND ===>                                SCROLL ===> PAGE
CURR WIN ===> 1          ALT WIN ===>
W1 =MENU=====EYUPLX01=EYUPLX01=27FEB2005==16:50:40=CPSM=====6===
CMD Name          Description
-----
ADMCONFG    CMAS Configuration Administration Views
BATCHREP    Batched Repository Updates
CPLEXDEF    CICSplex Definitions
CPLXCMAS    CMAS in CICSplex Definitions
CMTCMDEF    CMAS-to-CMAS Link Definitions
CMTPMDEF    CMAS-to-RMAS Link Definitions
```

Figure 2. A sample menu of administration views

To select a view from a menu, you can:

- Type an S (for Select) next to the view name and press Enter.
- Place the cursor on the line containing the view name and description and press Enter to initiate a hyperlink to that view.

When you select a view from a menu, you can also specify any optional or required parameters to be used by the view command. For information on how to specify parameters, see “Specifying command parameters” on page 5.

For a complete description of the MENU command, see the *CICSplex SM User Interface Guide*.

Initiating a hyperlink to a view

You can hyperlink to an administration view from another view that contains a hyperlink field. To initiate a hyperlink, place the cursor on the appropriate field and press Enter.

If you want the results of a hyperlink to be displayed in an alternate window, type a window identifier in the ALT WIN field before you press Enter.

Hyperlink fields appear on the screen either in high intensity or in a different color from other fields in the view. A list of the hyperlink fields available on each view is included with the view descriptions in this book. The online help for a view and its fields also identifies the hyperlink fields.

Specifying command parameters

You can specify parameters for a view command in one of two ways:

- When you issue a view command, type the parameters along with the command in the COMMAND field.
- When you select a view from a menu, overwrite the line containing the view name and description with parameters before pressing Enter.

If the parameters do not completely overwrite the view name and description, you can (but are not required to) delete the remainder of the line.

The parameters for a view command can be keywords or variables. A variable parameter can be used to identify:

- A specific value, as in CPLEXDEF EYUPLX01, which causes detailed information about the CICSplex named EYUPLX01 to be displayed.
- A generic value, as in:
 - CPLEXDEF EYUP*, which causes information about CICSplexes whose names begin with EYUP to be displayed.
 - CPLEXDEF EYUPLX+1, which causes information about CICSplexes whose names begin with EYUPLX and have a 1 in the eighth position to be displayed.

Using action commands and overwrite fields in the Web User Interface

Action commands allow you to perform actions such as create, update or remove on the contents of an administration view. Available actions for a particular view are displayed as buttons at the bottom of the view's work area.

To issue an action command from an open view:

1. Select the record or records on which you intend to apply the action by selecting one or more check boxes on the left of the work area, or by using the **Select all** button.
2. Click the required action button. This displays one or a succession of confirmation panels. The confirmation panel allows you to confirm or cancel the action for each selected resource, and in some cases contain additional options. See for more guidance on using confirmation panels.
3. Complete each confirmation panel by selecting the required button or in some cases by entering parameters, selecting check boxes or selecting radio buttons.

The action command is processed and the administration view is redisplayed showing the results of the action. If the action completed successfully, message

using action commands and overwrite fields in the Web User Interface

EYUVC1230I is displayed in the message area at the top of the work area. If the command is not successful one or more error messages are displayed.

Types of action commands

There are several common types of action commands that you can use with the administration views:

Create

creates a new definition and adds it to the data repository. An administration definition name can be 1 to 8 characters in length. The name can contain alphabetic, numeric, or national characters. However, the first character must be alphabetic.

Add

adds an association between two definitions. The resulting confirmation panel prompts you to identify the other definition with which you want to create an association. Adding an association creates a relationship between the definitions in the data repository. Associations can be added between definitions and groups, between groups and specifications, and between specifications and CICS systems.

Update

updates a definition in the data repository. The resulting panel is an editable detail view of a selected resource.

Remove

removes a definition or an association between two definitions from the data repository.

Note: The Web User Interface does not support the MAP command.

All of these actions affect the contents of the data repository and the changes are applied immediately. However most of these changes to the data repository have no effect, on CICS systems that are currently active. These changes affect a CICS system the next time the CICS system is restarted.

Notes:

1. When you use the Time period definition (EYUSTARTPERIODDEF) view to update definitions, the changes affect both the data repository and currently active CICS systems.
2. Changes to a currently running MAS are not included in the data repository.
3. All of these actions can also be performed using end user interface, described in "Using action commands and overwrite fields in the end user interface," and the batched repository-update facility, described in Chapter 3, "Using the batched repository-update facility," on page 17.

For a list of the specific action commands available for each view, see the entry for the associated resource table in the CICSplex SM Resource Tables Reference.

Using action commands and overwrite fields in the end user interface

Types of action commands

You can perform actions against the contents of an administration view by issuing a primary or line action command, where:

Primary action commands

Are issued in the COMMAND field of an Information Display panel. They affect the view shown in the current window.

Line action commands

Are issued in the line command field of a window. They affect the view in the window from which the command is issued. This window need not be the current window.

Line action commands can be repeated, as described in “Repeating a line action command” on page 9.

If you enter an invalid action command, or if a command cannot be processed for any reason, error messages are 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.

There are several common types of action commands that you can use with the administration views:

CREate

To create a definition and add it to the data repository you can:

- Issue the CREate primary action command. The fields in the resulting input panel contain blanks.
- Enter the CRE line action command next to the name of a definition you want to use as a model. The fields in the resulting input panel contain information about that definition.

An administration definition name can be 1 to 8 characters in length. The name can contain alphabetic, numeric, or national characters. However, the first character must be alphabetic.

ADD

To add an association between two definitions enter the ADD line action command next to the name of one of the definitions. The resulting panel prompts you to identify the other definition with which you want to create an association. Adding an association creates a relationship between the definitions in the data repository. Associations can be added between definitions and groups, between groups and specifications, and between specifications and CICS systems.

UPDate

To update a definition in the data repository enter the UPD line action command next to the name of the definition you want to change. The resulting panel is a modifiable version of the panel used to create the definition.

SET

To modify a definition directly from the view in which it appears:

1. Enter the SET line action command next to the name of the definition you want to change.

The value you specified in the Require Set field on the CICSplex SM entry panel determines whether or not you must use the SET command when you overwrite a field.

2. Move the cursor to the appropriate overwrite fields in the view and modify the contents of those fields.

The changes are applied to the data repository when you press Enter.

BROwse

To browse a definition in the data repository enter the BRO line action command next to the name of the definition you want to display. The resulting panel is a nonmodifiable version of the panel used to create the definition.

REMove

To remove a definition or an association between two definitions from the data repository enter the REM line action command next to the name of the definition you want to remove. When you press Enter, a confirmation panel is displayed. Press Enter again to remove the definition from the data repository. If the last resource is removed, subsequent REMove commands result in a “NO DATA” message being displayed.

TEMpmp

To specify a temporary maintenance point CMAS to be used when the identified maintenance point is unavailable enter the TEMPMP primary action command. The resulting panel prompts you to identify a CMAS to serve as the temporary maintenance point.

A temporary maintenance point keeps track of any changes you make to administration definitions while the maintenance point CMAS is unavailable. However, the information is not shared with other CMASs in the network. When the maintenance point CMAS becomes available again, the information is removed from the data repository of the temporary maintenance point.

For more information about working with maintenance point CMASs, refer to “Working with maintenance point CMASs” on page 58.

MAP

To display a visual map of the definitions in the data repository enter the MAP line action command next to the name of the definition you want to use as a starting point. The resulting panel prompts you to specify the type of definitions to be mapped: business application services (BAS), resource monitoring (MON), real-time analysis (RTA), or workload management (WLM).

Alternatively, you can use a specific line action command (BAS, MON, RTA, or WLM) to map the desired definitions.

For a complete description of the MAP action command and the display it produces, see “Displaying a map of CICSplex SM definitions” on page 9.

All of these actions, except MAP and BROWSE, affect the contents of the data repository and the changes are applied immediately. Most of the changes to the data repository have no effect, however, on CICS systems that are currently active. These changes affect a CICS system the next time the CICS system is restarted.

Notes:

1. When you use the CICSSYS or PERIODEF views to update definitions, the changes affect both the data repository and currently active CICS systems.
2. Changes to a currently running MAS are not included in the data repository.
3. All of these actions can also be performed using the batched repository-update facility, which is described in Chapter 3, “Using the batched repository-update facility,” on page 17.

A list of the specific action commands available for each view is included with the view descriptions in this book. The online help for a view also identifies the valid action commands.

For more information about using action commands and overwrite fields, see the *CICSplex SM User Interface Guide*.

Repeating a line action command

You can issue multiple line action commands in a window at one time when a general or summary view is displayed. To do this, you can either type each command individually, or repeat the same command on subsequent lines of the view.

To repeat a line action command within a view:

1. Type the command in the line command field next to the first line you want to act against.
2. Type the equals sign (=) in the command field next to any subsequent lines for which the same command should be issued.

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 a view.

Displaying a map of CICSplex SM definitions

You can use the MAP action command to display a visual map of the definitions in your data repository. The map can be of business application services, resource monitoring, real-time analysis, or workload management definitions.

Displaying a map from a view

You can display a map of definitions from any perspective by deciding what type of definition and, of that type, which definition you want to be the *starting point*. A map consists of a starting point definition and all the definitions that either refer to that definition or are referred to by it.

When you are looking at a view of CICSplex SM definitions, the line where you issue the MAP action command determines which definition is the initial starting point for the map. For example, suppose you are looking at a list of your CICS system groups in the CICSGRP view. You can issue the MAP action command next to group EYUCSG01. On the resulting panel you are prompted for the type of definitions to be mapped: business application services (BAS), resource monitoring (MON), real-time analysis (RTA), workload management (WLM).

Figure 3 shows an example of the map that is displayed when you specify RTA.

```

----- MAP of CSYSGRP EYUCSG01 -----Row 1 - 5 of 5
COMMAND ==>                               Scroll ==> PAGE
CSYSGRP   RTASPEC   RTAGROUP   PERIODEF   (R)RTADEF   (E)EVALDEF
              (S)STATDEF   (A)ACTION
-----
EYUCSG01---EYURTS01---EYURTG01---EYUPDF01+-(R)EYURTD01+-(A)EYURTA01
              |                               +- (E)EYURTE09
              +- (R)EYURTD02+-(A)EYURTA11
              |                               +- (E)EYURTE16
              +- (S)EYURTP01

```

Figure 3. Sample map of definitions referred to by a CICSGRP

using action commands and overwrite fields

Note: Alternatively, you can issue the BAS, MON, RTA, or WLM action command directly to map definitions of the specified type.

Notice that a map fills the screen and temporarily overlays the information display panel. A message in the ISPF short message area indicates how many rows of data there are and how many are currently displayed. You can use the ISPF scroll commands (UP, DOWN, LEFT, and RIGHT) to scroll the contents of a map that is larger than one screen. When you issue the END command, the map disappears and the information display panel is redisplayed.

In the map shown in Figure 3 on page 9, the CICS system group called EYUCSG01 is the starting point and it appears in the left-most position of the display. In most cases, the initial map display is built from left to right, with the starting point on the left.

An exception to this left-to-right perspective is a map built from a low-level definition that does not refer to other definitions; it is only referred to by higher level definitions. In that case, the map is built from right to left and the starting point is on the right.

For example, looking at Figure 3 on page 9, you might have issued the MAP action command from the EVALDEF view for the evaluation definition called EYURTE16. Evaluation definitions are among the lowest level of real-time analysis definitions. They do not refer to any definitions; they are only referred to by other definitions. So there are no definitions to be mapped to the right of an evaluation definition. In this example, then, EYURTE16 would appear on the right and all of the definitions that refer to it would be mapped to the left.

Note: The following definitions are low-level definitions. When they are the starting point for a map, they appear on the right and the map is built from right to left:

- ACTNDEF
- EVALDEF
- MONDEF
- TRANGRP
- Resource definitions (such as FILEDEF).

The definitions in a map are connected by one of the following symbols:

- The definition is associated with a definition to the left or right.
 - +
 - l
- The definition is associated with a definition to the left or right and there is another definition above or below it that has the same association.
- The definition is associated with the same definition as the one above or below it.

A definition that appears on the screen in either high intensity or a different color is considered an *orphan*; it is referred to by other definitions, but it does not exist in the data repository. For example, in Figure 3 on page 9, the evaluation definition EYURTE09 was referred to when analysis definition EYURTD01 was created; however, EYURTE09 itself has not yet been created.

In a business application services (BAS) map, additional fields of data related to one or more definitions appear on the screen in either low intensity or a different color. These fields contain descriptive data, rather than definition names; they are protected and you cannot tab to them.

Displaying related maps

Once a map is displayed, you can change the starting point for the map. This enables you to see additional, related definitions either to the right or to the left of a given definition. Also, as you move through a series of related maps, you can redisplay previous maps.

To change the starting point for a map, type one of the following commands in the COMMAND field, tab to the definition you want to be the starting point, and press Enter:

MAP LEFT

To display a map of definitions to the left of the selected starting point (that is, definitions that refer to the starting point).

MAP RIGHT

To display a map of definitions to the right of the selected starting point (that is, definitions that are referred to by the starting point).

Alternatively, if the MAP LEFT and MAP RIGHT commands have been assigned to PF keys, position the cursor to a starting point before pressing the appropriate PF key.

For example, you can start with Figure 3 on page 9, which is a map of definitions that are referred to by the CICS system group EYUCSG01. If you tab to EYURTG01 and issue the MAP LEFT command, you can see a map of the definitions that refer to that analysis group. Figure 4 shows the map that is displayed when you issue MAP LEFT from EYURTG01.

In this map, EYURTG01 is now the starting point. It appears on the right of the

```

----- MAP of RTAGROUP EYURTG01 -----Row 1 - 1 of 2
COMMAND ==>                               Scroll ==> PAGE
(S) CSYSDEF      (R) RTASPEC      RTAGROUP
(G) CSYSGRP      (A) APSPEC
(C) CPLXCMAS
-----
(S) EYUMAS1A--+-(R) EYURTS01---EYURTG01
(S) EYUMAS1B-|
(S) EYUMAS2A-|
(G) EYUCSG01-+

```

Figure 4. Map of an RTAGROUP after MAP LEFT

display and the definitions that refer to it (an analysis specification called EYURTS01, CICS systems called EYUMAS1A, EYUMAS1B, and EYUMAS2A, and the CICS system group EYUCSG01) appear to the left.

From this map, you can tab to EYUCSG01 and issue the MAP RIGHT command to redisplay the original map shown in Figure 3 on page 9. Alternatively, you can tab to any definition in the map and issue a MAP LEFT or MAP RIGHT command to display a new map of related definitions.

using action commands and oertype fields

For example, if you tab to a definition on the far left or far right of a map and issue the MAP LEFT or MAP RIGHT command, there may not be any more definitions to map in that direction. If that is the case, the definition you selected is displayed in a map by itself; you can then use that definition as the starting point for a map in the other direction.

As you use the MAP LEFT and MAP RIGHT commands to display various maps of related definitions, you may decide you want to redisplay one of those maps. To redisplay previous maps exactly as they appeared, issue the following command:

MAP PREV

Displays the map of definitions that appeared immediately before the current map. You can display up to 20 previously displayed maps.

Displaying another view from a map

While you are looking at a map, you can display a view of any one of the definitions in the map. To do this, place the cursor on a definition name and press Enter. The view that represents that type of definition is displayed with a single line of data for the definition you selected.

For example, in Figure 4 on page 11, if you place the cursor on EYURTS01 and press Enter, the RTASPEC view appears with information about that analysis specification. From the RTASPEC view, you can determine what types of real-time analysis are defined in that specification. You can also change the specification, which would affect the CICS systems that use EYURTS01.

Once you display a view, you cannot return directly to the map that preceded it. Displaying a view is equivalent to issuing the END command to exit from a map; you have to reissue the MAP action command to display another map.

Notes:

1. If the definition you select is an orphan, which means it does not yet exist, the view contains data for all definitions of that type that do exist. You can then create a definition using the name that appeared in the map.
2. You cannot display a view of CMAS or CICSplex definitions from a map. Because a map is made up of business application services, resource monitoring, real-time analysis, or workload management definitions, the context is necessarily a CICSplex. To display CMAS or CICSplex definitions, the context must be a CMAS. If you select a CMAS or CICSplex definition and press Enter, you receive an error message.

Using 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 oertype field.

One example is the selection list of period definitions that is displayed when the generic value 'period*' is entered in an input panel.

```

COMMAND ==>> Scroll ==> Page
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 5. Selection list displayed when a generic name is specified

You can select a value from a selection list in one of two ways:

- Type an S (for select) to the left of the value you want and press Enter.
- Enter the name of the selected resource 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 6 shows an example of this type of selection list.

You can do one of the following:

```

COMMAND ==>> Scroll ==> Page
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 6. Selection list displayed when a resource is not found

- Select another resource 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 resource you specified. You return to the input panel. The name of the resource you selected 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). You must later define that resource, by that name, using the appropriate view.
- Issue END or CANCEL to return to the input panel.

Using 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. Overtyping fields are shown either in high intensity or in a different color from other fields in the view.

using action commands and overwrite fields

To change the contents of one or more overwrite fields in a view, type over the current contents with 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. When you press Enter, CICSplex SM accepts the new values.

Notes:

1. If you specified YES in the Require Set field on the CICSplex SM entry panel, you must use the SET line action command when you overwrite a field to prevent inadvertent modification of information.
2. When the value you enter does not completely overwrite the old value, you can (but are not required to) delete the remainder of the old value.

For more information about overtyping fields, see the *CICSplex SM User Interface Guide*.

Requesting online help

At any time during a CICSplex SM session, you can request online help information about the product, the ISPF interface, or a specific view, field, or action. Table 2 shows the types of information available and how to request it.

Table 2. Summary of CICSplex SM online help

| For information about ... | Do this ... |
|---------------------------|--|
| A view | <ul style="list-style-type: none">• Place the cursor on the view or form name field on a window information line and issue the HELP command.• Issue the command HELP viewname where viewname is the name of the view. |
| Action commands | <ul style="list-style-type: none">• Place the cursor in the line command field of a view and issue the HELP command.• Type a question mark (?) in the line command field of a view and press Enter.• Issue the command HELP ACTIONS. |
| A field of data | Place the cursor on a field or field heading in a view and issue the HELP command. |
| An input panel | Issue the HELP command while the panel is displayed. |
| A display command | Issue the command HELP cmdname, where cmdname is the name of a CICSplex SM display command. |
| The help facility | Issue the command HELP HELP |
| CICSplex SM | Place the cursor anywhere in the control area of the Information Display panel and issue the HELP command. |

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

Chapter 2. Summary of administration tasks

This chapter identifies the administration views that you can use to create, maintain, and manage your CICSplex SM environment.

Creating and maintaining administration definitions

Table 3 summarizes the tasks used to set up, maintain, and manage CMASs and CICS systems together with the corresponding Web User Interface and end user interface views. To access these Web User Interface views click **Main menu** —>**Administration views**.

Table 3. Creating and maintaining administration definitions

| Web User Interface View | End user interface view | Tasks supported |
|--|---|--|
| CICSplex definition (EYUSTARTCPLEXDEF) "CICSplex definitions" on page 69 | CPLXDEF "Managing CICSplex definitions using the end-user interface" on page 72 | <ul style="list-style-type: none">• Create, browse, or remove a CICSplex definition.• Update the description of a CICSplex.• Add a CMAS to a CICSplex definition. |
| CICSplex definition (EYUSTARTCPLEXDEF) "CICSplex definitions" on page 69 | CPLXCMAS "CPLXCMAS (CMASs associated with a CICSplex)" on page 74 | <ul style="list-style-type: none">• Browse, force, or remove a CMAS from a CICSplex definition. |
| CMAS to CMAS link definition (EYUSTARTCMTCMDEF) | CMTCMDEF "Managing CMAS to CMAS links using the end-user interface" on page 67 | <ul style="list-style-type: none">• Create, browse, update, or remove a direct CMAS to CMAS link. |
| CICS System definition (EYUSTARTCSYSDEF) | CICSSYS "CICS system definitions" on page 111 | <ul style="list-style-type: none">• Create, browse, remove, or update a CICS system definition.• Add a CICS system to a CICS system group. |
| System group definition (EYUSTARTCSYSGRP) | CICSGRP "CICS system group definitions" on page 106 | <ul style="list-style-type: none">• Create or remove a CICS system group definition.• Update the description of a CICS system group.• Add a CICS system or CICS system group to a CICS system group. |
| Link between CICS system and CICS system group (EYUSTARTCSGLCGCS) | SYSGRPC "SYSGRPC (Members in CICS system groups)" on page 133 | <ul style="list-style-type: none">• Remove a CICS system from a CICS system group definition. |
| CICS system group to CICS system group link (EYUSTARTCSGLCGCG) | SYSGRPC "SYSGRPC (Members in CICS system groups)" on page 133 | <ul style="list-style-type: none">• Remove a CICS system group from a CICS system group definition. |
| Time period definition (EYUSTARTPERIODEF) "Managing time period definitions using the Web User Interface" on page 104 | PERIODEF "PERIODEF (Time period definitions)" on page 130 | <ul style="list-style-type: none">• Create, update, or remove a time period definition. |
| Batched repository update job (EYUSTARTBATCHREP) | BATCHREP "BATCHREP (Batched repository-update facility)" on page 64 | <ul style="list-style-type: none">• Submit a task to add, update, or remove records in the data repository. |

Managing administration definitions

Table 4 summarizes the tasks used to obtain status information about an active CMAS or CICSplex system and the corresponding Web User interface and end user interface views. To access these Web User Interface views click **Main menu** → **CICSplex SM operations views**.

Table 4. Managing administration definitions

| Web User Interface view | End user interface command syntax | Task |
|--|-----------------------------------|---|
| CMAS instance within CICSplex (EYUSTARTCICSplex) | CICSplex plexid | <ul style="list-style-type: none"> Display information about the CMASs associated with a CICSplex known to the local CMAS. |
| Known CMAS instances (EYUSTARTCMAS) | CMAS [cmasid] | <ul style="list-style-type: none"> Display information about CMASs known to the local CMAS. Shut down a CMAS. Alter CMAS component trace settings. The default is: All CMASs known to the local CMAS. |
| Known CMAS instances (EYUSTARTCMAS) | CMASD cmasid | <ul style="list-style-type: none"> Display information about a specific CMAS known to the local CMAS. Shut down a CMAS. Alter CMAS component trace settings. |
| Known CICSplex instances (EYUSTARTCMASplex) | CMASplex | <ul style="list-style-type: none"> Display information about the CICSplexes being managed by the local CMAS. |
| CMAS to CMAS link information (EYUSTARTCMTMMLNK) | CMTMMLNK [cmasid] | <ul style="list-style-type: none"> Display information about all or specific CMASs linked to the local CMAS. Discard a CMAS to CMAS link. |
| CMAS to CMAS link information (EYUSTARTCMTMMLND) | CMTMMLND cmasid | <ul style="list-style-type: none"> Display information about the link between a specific CMAS and the local CMAS. Discard the CMAS to CMAS link. |
| CMAS to MAS link information (EYUSTARTCMTMMLNK) | CMTMMLNK [masid] | <ul style="list-style-type: none"> Display information about all or specific MASs linked to the local CMAS. Discard the CMAS to MAS link. The default is: All MASs known to the local CMAS. |
| CMAS to MAS link information (EYUSTARTCMTMMLND) | CMTMMLND masid | <ul style="list-style-type: none"> Display information about a specific MAS linked to the local CMAS. Discard the CMAS-to-MAS link. |
| Runtime MAS display (EYUSTARTMAS) | MAS [cmasid] | <ul style="list-style-type: none"> Display information about CICS systems known to a CICSplex or connected to the designated CMAS involved in managing the CICSplex. Browse or temporarily update the general, workload management, real-time analysis, resource monitoring, and MAS trace attributes of an active CICS system. Stop MAS agent code in an active CICS system. The default is: All CICS systems known to the CICSplex. |

Chapter 3. Using the batched repository-update facility

The data repository associated with each CMAS contains the definitions that establish your CICSplex SM environment. These definitions are stored as individual records. In general, you can create and maintain these definitions by using either end-user interface views or the batched repository-update facility to do the following:

- Create, update, or remove CICSplex SM definitions.
- Add an association to a definition, as in adding an association between a CICS system and a CICS system group.

When creating and maintaining CMAS and CICSplex definitions, you can use the views described in Chapter 5, “Configuring a CMAS,” on page 55. For all other CICSplex SM definitions, depending on the action to be performed, you can use either of the following:

- The views described in:
 - Chapter 6, “Establishing the topology of a CICSplex,” on page 89.
 - *CICSplex System Manager Managing Resource Usage*.
 - *CICSplex System Manager Managing Workloads*.
 - *CICSplex System Manager Managing Business Applications*.
- The batched repository-update facility.

When you use views, input panels prompt you for the information you must supply to perform the action (such as creating, adding, updating, or removing a definition). Another advantage of using views is the fact that all instances of a given resource type (such as workload management definitions) are displayed together.

The batched repository-update facility offers advantages of its own. Instead of using multiple view screens repeatedly to create large numbers of definitions, you can create a standard input file to add the definitions to the data repository all at one time. This can reduce the effort of creating such definitions as the Transaction in Transaction Group (DTRINGRP) associations, which can involve identifying hundreds of transactions. Similarly, when you use Business Application Services (BAS) to create and maintain your CICS resource definitions, the batched repository-update facility can streamline the definition process.

Submitting a batched repository-update job

To submit a batched repository-update job, you must:

1. Create a sequential data set or partitioned data set member to contain your input to the batched repository-update facility. The data set must have a fixed blocked format, RECFM(FB), and a logical record length of 80, LRECL(80).
2. Create your input, as described in “Creating an input file” on page 18.
3. Use one of the following methods to submit the batched repository-update job:
 - BATCHREP WUI view, as described in “Using the WUI to submit a batched repository-update job” on page 25.
 - BATCHREP view using the TSO end-user interface, as described in “Using the EUI to submit a batched repository-update job” on page 26.
 - Batched repository-update utility, as described in “Using the batched repository-update utility” on page 28.

submitting a batched repository-update job

- CICSplex SM API to make use of the BATCHREP resource table. For guidance on using the CICSplex SM API refer to the *CICSplex SM Application Programming Guide* and the *CICSplex SM Application Programming Reference*

Submitting a batched repository-update job that processes the same definition in quick succession may result in one or more control statements failing. In such circumstances the best procedure would be to divide the repository-update job and submit the resultant jobs sequentially.

Creating an input file

A batched repository-update facility input file consists of control statements that describe the updates you want to make to the data repository. The input file must adhere to the following requirements:

- Control statements must be in upper case.
- Each control statement must be terminated with a semicolon (;).
- A control statement can span multiple lines.
- Comments must be delimited with /* at the beginning and */ at the end. (Any line with * in column 1 is also treated as a comment.)
- Comments can also span multiple lines.

When creating your input file, you must first identify the context (CMAS or CICSplex) to which the updates apply. To do this, use the control statement:

```
CONTEXT [plexid]
```

where `plexid` is the name of the local CMAS or of a CICSplex associated with the local CMAS (the local CMAS is the CMAS on which the batched repository-update job runs). If you specify a CICSplex as the context for the update, the local CMAS must be the maintenance point for that CICSplex. If you omit this parameter, the local CMAS is assumed to be the context.

Once you have established a context, it remains in effect for the batched repository-update job until you explicitly change it with another `CONTEXT` statement.

The rest of the control statements in an input file vary according to the type of updates you are making. The following sections describe the control statements for each type of update in detail.

Creating and maintaining CICSplex SM definitions

To create, update, remove, or review CICSplex SM definitions in the data repository, use one or more control statements in the form:

```
command object keyword1(value) keyword2
```

where:

command

Is the name of a batched repository-update facility command, in uppercase letters. Specify one of the following:

CREATE

To create a record and add it to the data repository associated with the local CMAS.

UPDATE

To update an existing record in the data repository.

Note: You cannot update LNKSxSCG records using the batched repository-update facility, although you can do so through the end-user interface.

REMOVE

To remove an existing record from the data repository.

When you remove a record, all associations between that record and other records in the data repository are lost. For example, if you remove a CICS system definition, associations between that CICS system and any CICS system groups or component specifications are also removed.

When removing BAS definitions the DEFVER() keyword must be specified.

LIST To list a record from the data repository.

DUMP To list a record from the data repository and insert a CREATE control statement in front of it.

You can use the output resulting from a DUMP command as input to another batched repository-update job that creates definitions. The output of a DUMP command is formatted as follows:

- Data lines are broken at column 72
- Continuation characters are placed in column 1.

By default, the output is written to a spool file and must be extracted from the spool, and edited, before it can be used as input to the batched repository-update facility. The extracted records contain ANS control characters in column 1, therefore you must shift the records one character to the left to align the data for processing by CICSplex SM. You also have to remove all the page header information from the data set. For an example of a listing, see Figure 11 on page 36. However, you can use the OUTPUT command to write the output in the correct format, direct to a data set. For details, see “Creating a data set for re-input to the batched repository-update facility” on page 24.

CICSplex SM requires certain definitions to exist before others can be created. Therefore, you should adhere to the following guidelines when dumping data repository records:

- Always dump CICS system (CSYSDEF) and CICS system group (CSYSGRP) records first.
- Dump basic CICSplex SM definition records (such as, xxxDEF, xxxGROUP, and xxxSPEC) before association records (such as, LNKxxxxx, xxxINGRP, or xxxINSPC).
- For Business Application Services:
 - Dump RESGROUP records before RESDESC and RASGNDEF records.
 - Dump RESDESC and RASGNDEF records before RESINDSC and RASINDSC records.
 - Dump resource definition records (such as FILEDEF) before xxxINGRP records (such as FILINGRP).

- Dump CONNDEF and SESSDEF records before SYSLINK records.

If you follow these guidelines, the output from a DUMP command will be in the correct order for the batched repository-update facility to create new definitions. For an example of using the DUMP command output to create new definitions, see “Examples of managing records in the data repository” on page 34.

Note: Output from the DUMP and LIST commands contains a visible record of any passwords associated with CICS resources (such as connections or files). To prevent possible security exposures, you should restrict access to such output.

object Is one of the resource table names shown in Table 6 on page 30.

For a detailed description of each of these resource tables, their fields, and valid values, see the *CICSplex System Manager Resource Tables Reference*.

keyword1(value)

Is the name of a field in the specified resource table and the data that is appropriate for that field, in uppercase letters. The required input for the various commands is as follows:

CREATE

Provide all of the information required to define the resource, for example the same type of information as required by the equivalent end-user interface CREate view.

You can derive the input to the CREATE statement from the output of a DFHCSDUP EXTRACT or BATCHREP DUMP request. See “Creating a data set for re-input to the batched repository-update facility” on page 24, “Example 6 - Dumping records as input to create new records” on page 37 for further information. If you do not create your input in this way, you must specify all the required attributes.

Note: For some definition records you should not specify certain operands; for example, for CPLEXDEF, do not specify the STATUS operand.

UPDATE

Identify the specific record to be updated. For CICS resource definitions created as part of business application services (BAS), this must include the version (DEFVER) of the resource. Specify the attributes that will be updated.

REMOVE

Identify the specific record to be removed. For CICS resource definitions created as part of business application services (BAS), this must include the version (DEFVER) of the resource.

LIST and DUMP

Provide a specific or generic record name, where generic names can contain the plus sign (+), asterisk (*), or both.

keyword2

Indicate how the creation or removal of a specification-to-CICS system group link record (LNKSxSCG) should affect the current members of the

CICS system group. The keywords for the CREATE and REMOVE commands must be entered in uppercase letters and are as follows:

CREATE

Specify one of the following:

FORCE All current members of the CICS system group should have implicit links established to the named specification. When a link already exists, it is replaced with the newly CREATED link.

NULL Current members of the CICS system group should have implicit links established to the named specification only if no link already exists.

NONE No implicit links should be established.

When you use the CREATE command, the default value for keyword2 is NONE

REMOVE

Specify one of the following:

KEEP All implicit links are to be converted to explicit links.

NONE No implicit links are to be converted to explicit links.

There is no default value for keyword2 when you use the REMOVE command; you must specify a value.

When you submit the batched repository-update job, the syntax of each command is checked for validity. If multiple commands are being issued, syntax checking can have the following results:

- When a LIST, DUMP, MAPLEFT or MAPRIGHT command is invalid, that command is not executed; processing of all subsequent commands continues .
- When a modification command (CREATE, UPDATE, or REMOVE) is invalid, that command is not executed. All subsequent modification commands are checked for validity; however, no subsequent modification commands are executed.

Creating CICS resource definitions

To create CICS resource definitions and optionally add them to a resource group in the data repository, use one or more control statements in the form:

```
CREATE object NAME(defname) [RESGROUP(resgroup)]
```

where:

object Is one of the resource table names shown in Table 6 on page 30 that represent a CICS resource type (such as CONNDEF).

defname

Is the name of the resource definition you are creating.

resgroup

Is the name of an existing resource group in the data repository to which the resource definition should be added.

Producing a map of CICSplex SM definitions

In addition to creating and maintaining CICSplex SM definitions, you can produce a visual map of the definitions in the data repository. The map is similar to the one displayed when you issue the MAP action command from an end-user interface view.

To produce a map, use one or more control statements in the form:

```
command object NAME(defname)
```

where:

command

Is the name of a batched repository-update facility command, in uppercase letters. Specify one of the following:

MAPLEFT

To produce a map of the definitions to the left of the starting point; that is, those definitions that refer to the starting point.

MAPRIGHT

To produce a map of the definitions to the right of the starting point; that is, those definitions that are referred to by the starting point.

object Is a resource table name that identifies the type of definition to be displayed in the map.

You can produce a map of the following definitions:

Topology

CSYSDEF
CSYSGRP
PERIODEF

Workload management

TRANGRP
WLMDEF
WLMGROUP
WLMSPEC

Real-time analysis

ACTION
APSPEC
EVALDEF
RTADEF
RTAGROUP
RTASPEC
STATDEF

Resource monitoring

MONDEF
MONGROUP
MONSPEC

Business application services

xxxxDEF (resource definitions such as FILEDEF)
RESGROUP
RESDISC
RASGNDEF

NAME Is the field name of the key field for the resource being mapped. For all resources the key field name is NAME, with the following exceptions:

- The key field for CSYSGRP is GROUP.
- The key field for RESGROUP is RESGROUP.
- The key field for RESDESC is RESDESC.
- The key field for RASGNDEF is RESASSGN.

defname

Is the specific or generic name of a definition that is to be the starting point for a map. If you enter a generic name, a map is produced for each definition whose name matches the pattern.

For an example of a visual map of definitions, see “Displaying a map of CICSplex SM definitions” on page 9.

Setting processing options for repository-update commands

The default behavior of batched repository-update commands can be modified by the OPTION command. The format of the OPTION command is:

```
OPTION type keyword [keyword ...]
```

where

- *type* identifies the option which is being set.
- *keyword* specifies the value(s) to be set for an option type.

The following option types are currently supported:

DUPREC

Specify how the CREATE command will handle the RECORD_EXISTS condition. One of the following keywords must be specified:

REJECT (default)

The existing record is not be modified; the BATCHREP input stream is flushed and no more commands are processed.

SKIP The existing record is not modified; processing continues with the next BATCHREP command.

UPDATE

The existing record is updated by redriving the CREATE command as if it were an UPDATE.

Notes:

1. Several link type CICSplex SM resource tables do not support the UPDATE action. If a BATCHREP input stream that creates any of the following resource types must be restarted, OPTION DUPREC SKIP must be specified or the command retry will fail. Affected resource tables are:

CMDMPAPS - APSPEC to Primary CMAS

CMDMSAPS - APSPEC to Secondary CMAS

CSGLCGCG - CICSGRP in CICSGRP

CSGLCGCS - CICSSYS in CICSGRP

LNKSxSCG - xxxSPEC to CICSGRP, where xxx is MON, RTA or WLM

LNKSxSCS - xxxSPEC to CICSSYS, where xxx is MON, RTA or WLM

If a STATUS other than RECORD_EXISTS is returned by the CREATE command, the command is not retried and all remaining commands in the input file are flushed.

creating an input file

Multiple OPTION commands can be placed in the BATCHREP input stream. An OPTION command affects all commands until another OPTION command is encountered for the same option type or the input command stream reaches end-of-file.

Creating a data set for re-input to the batched repository-update facility

You can create an output data set from the batched repository-update facility to hold the CREATE statements produced from DUMP commands. This data set is in the correct format for re-input to the batched repository-update facility without further editing; that is, it does not contain heading lines and the data is aligned in the correct columns. Note, however, that you may still need to edit this output data to modify the context, group names, version numbers, and so on.

When you use the DUMP command (see “Creating and maintaining CICSplex SM definitions” on page 18), you may use the OUTPUT command to request that any resulting CREATE commands are written to an output data set, in addition to the normal report. The OUTPUT command must be the first command in the BATCHREP input data stream, to ensure that the command precedes any DUMP commands. You cannot specify more than one OUTPUT command.

Note: If a partitioned data set is used as the output data set, you must ensure that the data set has enough space to handle the output. A full partitioned data set without sufficient directory space may cause multiple abends resulting in the termination of the CMAS. To avoid multiple abends during CICS recovery, direct output to a sequential data set. If required, you can then copy the sequential data set output to a partitioned data set.

The format of the OUTPUT command is:

```
OUTPUT DATASET DSNAME(data.set.name(member)) INQUOTES(NO|YES);
```

where:

DATASET

This keyword must be specified.

DSNAME

Specifies a data set name. You must specify a data set name and the data set must exist. The output data set cannot be the same as the input data set. The data set must consist of fixed-length, 80-byte records; the records may be blocked and any block size is acceptable.

data.set.name

The data set name must not exceed 44 characters in length. Each component of the name cannot be more than 8 characters long, and the components must be separated by full stops. The data set name must be a fully-qualified data set name. The first component of the data set name does not default to the logged-on user id.

member

The member name, if the output data set is partitioned. The member name cannot be more than 8 characters long. The member name must be omitted if the output data set is not partitioned.

INQUOTES(NO|YES)

Identifies whether or not you want field values enclosed in quotes on the output data set. You may need to use this control statement if you have any

data on your data repository that contains unbalanced parentheses. If you omit this keyword, the default value of NO is assumed.

NO The values of parameters are not enclosed in quotes on the output data set. This setting is perfectly adequate for input to the batched repository-update facility, but you might encounter problems if the parameter values contain unbalanced parentheses.

Note that, if you specify INQUOTES(NO), the BATCHREP output can be used as input to any release of the CICSplex SM batched repository-update facility.

YES All values of parameters are enclosed in quotes on the output data set. The CICSplex SM batched repository-update facility terminates the parameter value at the final quote, not at an embedded parenthesis.

Note that, if you specify INQUOTES(YES), the BATCHREP output can be used only with the CICSplex SM batched repository-update facility at CICS Transaction Server for OS/390, Version 1 Release 3 and later. The BATCHREP output is not compatible with, and cannot be used as input to, the batched repository-update facility supplied with earlier releases of CICSplex SM.

For example, suppose a DESCRIPTION field contains the value:

1) Describe Resource

If you specify INQUOTES(NO), which is the default, the DUMP routine will produce the following statement in the output data set:

DESCRIPTION(1) Describe Resource)

The CICSplex SM batched repository-update facility interprets this as a DESCRIPTION field containing the value 1, followed by two unrecognizable keywords.

If you specify INQUOTES(YES), the DUMP routine places quotes around the field value. The output data set would contain the statement:

DESCRIPTION('1) Describe Resource')

This statement is interpreted correctly by the CICSplex SM batched repository-update facility.

Using the WUI to submit a batched repository-update job

To submit a batched repository-update job using the WUI from the main menu (EYUSTARTMENU) click **Administration views**—>**Batched repository update job**. This will display the Batched Repository Update Job view which will allow you to view information about currently running batched repository-update jobs.

The following procedure allows you to submit a selected batched repository-update job:

1. Open the **Batched repository-update job** view.
2. Select the record you intend to submit and click Execute. This opens the Execute view. If no batched repository-update jobs are running then only the dummy stopped record is available for selection.

Note: Clicking the Check button opens the Check view which allows you to check the command format of all the input statements of the batched repository-update job.

creating a data set

3. Fill in the Execute view by completing the following fields:

Input data set name

Specify the name of the sequential or partitioned data set (PDS) containing the input to the batched repository-update job.

Input member name

When using a PDS, specify the name of the member that contains the input to the batched repository-update job.

Print class

(Optional.) Specify a 1-character class designation. If you omit a value, class A is assumed.

Print node

Specify the 8-character identifier of a designation node that the system spooler is to use to route the file.

Destination userid

Specify the 8-character identifier of the eventual writer program or of the user who will process the report for spooled records intended for the printer. The report will carry this identifier, which will be used to select the report at its destination.

4. Select Yes to submit the job.

To apply updates to a particular data repository, you must ensure that the WUI server is connected to the CMAS which is associated with the data repository you want to update.

Using the EUI to submit a batched repository-update job

To display information about currently running batched repository-update jobs using the end-user interface, set the context to the CMAS and issue the command:

BATCHREP

If no tasks are currently running, the resulting view is blank. Figure 7 illustrates the information provided when a job is running.

```
27FEB2005 14:45:02 ----- INFORMATION DISPLAY -----
COMMAND ==>                                SCROLL ==> PAGE
CURR WIN ==> 1          ALT WIN ==>
W1 =BATCHREP=====EYUCMS01=EYUCMS01=27FEB2005==14:45:02=CPSM=====
CMD Input  Run    Prt Print  Output  Input DSN
--- Member-- Type--- Cls Node---- User-----
DRELOAD CHECK    F          *          * CPSM110.EYUCMS01.UTIL
```

Figure 7. The BATCHREP view

Action commands

Table 5 on page 27 summarizes the action commands you can use with the BATCHREP view.

Table 5. BATCHREP view action commands

| Primary command | Line command | Description |
|-----------------|--------------|--|
| SUBmit | SUB | Start a task to modify the records comprising the data repository, as described in “Using the EUI to submit a batched repository-update job” on page 26. Note: When you issue the SUBmit command from the BATCHREP view, the context must be a CMAS. |

Hyperlink fields

There are no hyperlink fields for the BATCHREP view. Figure 8 shows the format of the panel produced when you use the submit primary (SUBmit) or line (SUB) action command from the BATCHREP view.

The batched repository-update facility uses standard CICS spooling facilities for output.

```

----- Start Batch Run for EYUCMS01 -----
COMMAND  ===>

Data Set Name    ===>

Data Set Member  ===>

Print Class      ===>

Print Node       ===>

Output Userid    ===>

Run Type         ===>                                (CHECK or EXECUTE)

Press Enter to Run the Job.
Type END or CANCEL to cancel without Running.
```

Figure 8. Submitting a batched repository-update job

Provide the following information, when appropriate:

Data Set Name

Specify the name of the sequential or partitioned data set (PDS) containing the input to the batched repository-update job.

Data Set Member

When using a PDS, specify the name of the member that contains the input to the batched repository-update job.

Print Class

(Optional.) Specify a 1-character class designation. If you omit a value, class A is assumed.

Print Node

Specify the 8-character identifier of a designation node that the system spooler is to use to route the file.

Output Userid

Specify the 8-character identifier of the eventual writer program or of the

user who will process the report for spooled records intended for the printer. The report will carry this identifier, which will be used to select the report at its destination.

Run Type

Indicate whether you want to syntax check (CHECK) or submit (EXECUTE) the input to the batched repository-update job.

When you specify CHECK, the following things occur:

- Command format of all input statements is checked.
- You get the syntax check messages. You may get some run-time messages, as well.

For more information about the commands and their values, see “Creating an input file” on page 18.

Using the batched repository-update utility

The batched repository-update utility connects to a CMAS and submits batched repository updates to run in that CMAS. To make batched repository updates to a particular data repository, you need to run the utility so that it connects to, and submits batched updates to run in, the CMAS that is associated with the data repository you want to update.

In order to run the utility you need to prepare the necessary JCL and to define input parameters for the utility itself, such as the name of the CMAS associated with the data repository you want to update.

Here is an example of JCL to run the batched repository update utility:

```
//jobname JOB (acct),'name',CLASS=x,MSGCLASS=x
//BTCHUPD EXEC PGM=EYU9XDBC,REGION=2048K
//STEPLIB DD DSN=CICSTS31.CPSM.SEYUAUTH,DISP=SHR
// DD DSN=CICSTS31.CPSM.SEYULOAD,DISP=SHR
//SYSPRINT DD SYSOUT=*
//SYSABEND DD SYSOUT=*
//SYSIN DD *
CMASNAME(EYUCMS1A)
CHECK
INPUTDSN(EXAMPLE.INPUT.DATASET)
INPUTMEMBER(MEMBER1)
OUTPUTUSER(EXUSER)
PRINTNODE(LOCAL)
/*
```

Here is an example of the output from the batched repository-update utility:

```
CICSplex/SM Batched Repository Update Utility          Version 310

Parameters specified:

CMASNAME(EYUCMS1A)
CHECK
INPUTDSN(EXAMPLE.INPUT.DATASET)
INPUTMEMBER(MEMBER1)
OUTPUTUSER(EXUSER)
PRINTNODE(LOCAL)
```

```
EYUXD0908I  A batched repository update has been submitted to run in CMAS EYUCMS1A.
```

The output of the batched repository-update utility is a short report that lists the input parameters and a message to show the CMAS in which the batched updates

have been submitted. You should review this output to verify the utility successfully submitted the batched updates in the CMAS.

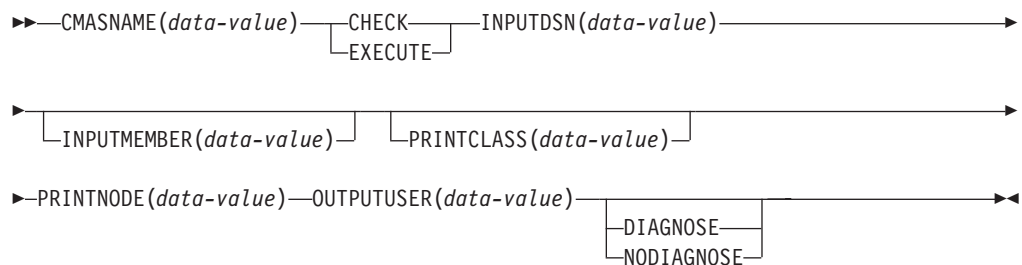
The batched updates that run in the CMAS produce output using the standard CICS spooling facilities. You need to review this second output to verify batched updates have run successfully.

Batched repository-update utility parameters

This section describes the input parameters that you must specify to use the batched repository update utility. These parameters must be supplied in the SYSIN data set.

The following syntax rules apply:

- Parameters must be specified in uppercase
- Parameters can be specified in any order
- A given parameter must be specified once only in a given SYSIN stream
- A given parameter must appear all on one line
- Spaces will be ignored
- An asterisk (*) as the first character will mean that the line is ignored.



The parameters can be specified as follows :

CMASNAME

specifies the 1-to-8 character name of a CMAS to which the utility is to connect and whose data repository is to be modified by the batched repository update processing. This parameter is mandatory. It is this CMAS in which batched repository update processing takes place and from which output is produced by the CICS spooling facilities.

CHECK or EXECUTE

must be specified for the type of run. CHECK specifies a syntax check of the input file and EXECUTE specifies the commands in the input file that must be executed. These keywords are mutually exclusive.

INPUTDSN

specifies a 1-to-44 character string for the dataset name of a sequential dataset or a PDS that contains the input to the batched repository update processing. The CMAS must have access to the dataset specified via the INPUTDSN parameter. This parameter is mandatory.

INPUTMEMBER

specifies a 1-to-8 character name of a member when using a PDS that contains the input file. This parameter is optional.

batched repository-update utility parameters

PRINTCLASS

specifies a 1-character print class identifier. This parameter is optional. The default is A.

PRINTNODE

specifies a 1-to-8 character print node identifier to be used by the system spooler for routing the job output. This parameter is mandatory.

OUTPUTUSER

specifies a 1-to-8 character user identifier to be associated with the spooled output. This parameter is mandatory.

DIAGNOSE

intended for use only under guidance by IBM service personnel.

NODIAGNOSE

intended for use only under guidance by IBM service personnel.

Supported resource tables

Table 6 lists the CICSplex SM resource tables that you can process using the batched repository-update facility.

Table 6. Resource table names

| Resource type | Table name | Definitions affected |
|---------------------|------------|--|
| Configuration | CMTCMDEF | CMAS-to-CMAS definitions |
| | CMTPMDEF | CMAS-to-remote MAS definitions |
| | CPLEXDEF | CICSplex definitions |
| Topology | CSGLCGCG | Association between a CICS system group and a CICS system group |
| | CSGLCGCS | Association between a CICS system and a CICS system group |
| | CSYSDEF | CICS systems |
| | CSYSGRP | CICS system groups |
| | PERIODEF | Time periods |
| | SYSLINK | System links |
| Workload management | DTRINGRP | Association between a transaction and a transaction group |
| | LNKSWSCG | Association between a workload specification and a CICS system group |
| | LNKSWSCS | Association between a workload specification and a CICS system |
| | TRANGRP | Transaction groups |
| | WLMDEF | Workload definitions |
| | WLMGROUP | Workload groups |
| | WLMINGRP | Association between a workload definition and a workload group |
| | WLMINSPC | Association between a workload group and a workload specification |
| | WLMSPEC | Workload specifications |

Table 6. Resource table names (continued)

| Resource type | Table name | Definitions affected |
|--------------------|------------|---|
| Real-time analysis | ACTION | Action definitions |
| | APSPEC | Analysis point specifications |
| | CMDMPAPS | Association between a primary CMAS and an analysis point specification |
| | CMDMSAPS | Association between a secondary CMAS and an analysis point specification |
| | EVALDEF | Evaluation definitions |
| | LNKSRSCG | Association between an analysis specification and a CICS system group |
| | LNKSRSCS | Association between an analysis specification and a CICS system |
| | RTADEF | Analysis definitions |
| | RTAGROUP | Analysis groups |
| | RTAINAPS | Association between an analysis group and an analysis point specification |
| | RTAINGRP | Association between an analysis definition and an analysis group |
| | RTAINSPC | Association between an analysis group and an analysis specification |
| | RTASPEC | Analysis specifications |
| | STAINGRP | Association between a status definition and an analysis group |
| | STATDEF | Status definitions |
| Monitor | LNKSMSCG | Association between a monitor specification and a CICS system group |
| | LNKSMSCS | Association between a monitor specification and a CICS system |
| | MONDEF | Monitor definitions |
| | MONGROUP | Monitor groups |
| | MONINGRP | Association between a monitor definition and a monitor group |
| | MONINSPC | Association between a monitor group and a monitor specification |
| | MONSPEC | Monitor specifications |

Table 6. Resource table names (continued)

| Resource type | Table name | Definitions affected |
|-------------------------------|------------|--|
| Business application services | CONINGRP | Association between a connection definition and a resource group |
| | DOCINGRP | Association between a document template definition and a resource group |
| | D2CINGRP | Association between a DB2® connection definition and a resource group |
| | D2EINGRP | Association between a DB2 entry definition and a resource group |
| | D2TINGRP | Association between a DB2 transaction definition and a resource group |
| | EJCINGRP | Association between a CorbaServer definition and a resource group |
| | EJINGRP | Association between a DJAR definition and a resource group |
| | ENQINGRP | Association between an ENQ/DEQ model definition and a resource group |
| | FILINGRP | Association between a file definition and a resource group |
| | FNOINGRP | Association between a FEPI node definition and a resource group |
| | FPOINGRP | Association between a FEPI pool definition and a resource group |
| | FPRINGRP | Association between a FEPI property set definition and a resource group |
| | FSGINGRP | Association between an OS/2 file segment definition and a resource group |
| | FTRINGRP | Association between a FEPI target definition and a resource group |
| | JRMINGRP | Association between a journal model definition and a resource group |
| | MAPINGRP | Association between a map set definition and a resource group |
| # # | PARINGRP | Association between a partner definition and a resource group |
| | PGMINGRP | Association between a program definition and a resource group |
| | PIPINGRP | Association between a pipeline definition and a resource group |
| | PRCINGRP | Association between a process type definition and a resource group |

Table 6. Resource table names (continued)

| Resource type | Table name | Definitions affected |
|---|------------|---|
| Business application services (continued) | PRNINGRP | Association between a partition set definition and a resource group |
| | PROINGRP | Association between a profile definition and a resource group |
| | RASINDSC | Association between a resource assignment and a resource description |
| | RESDESC | Description of a set of logically related resource definitions |
| | RESGROUP | Association between a resource definition and a resource group or groups |
| | RESINDSC | Association between a resource group and a resource description |
| | RQMINGRP | Association between a request model definition and a resource group |
| | SESINGRP | Association between a session definition and a resource group |
| | TCLINGRP | Association between a transaction class definition and a resource group |
| | TCPINGRP | Association between a TCP/IP service definition and a resource group |
| | TDQINGRP | Association between a transient data queue definition and a resource group |
| | TRMINGRP | Association between a terminal definition and a resource group |
| | TRNINGRP | Association between a transaction definition and a resource group |
| | TSMINGRP | Association between a temporary storage model definition and a resource group |
| # # # # | TYPINGRP | Association between a typeterm definition and a resource group |
| | URIINGRP | Association between the universal resource identifier definition and a resource group |
| | WEBINGRP | Association between a Web services definition and a resource group |
| Note: The information displayed in the RESINGRP end-user interface view can be found separately in the xxxINGRP resource table for each resource type. | | |

supported resource tables

Table 6. Resource table names (continued)

| Resource type | Table name | Definitions affected |
|---|------------|---|
| Business application services (continued) | CONNDEF | Connection definitions |
| | DB2CDEF | DB2 connection definitions |
| | DB2EDEF | DB2 entry definitions |
| | DB2TDEF | DB2 transaction definitions |
| | DOCDEF | Document template definitions |
| | EJCODEF | CorbaServer definitions |
| | EJDJDEF | DJAR definitions |
| | ENQMDEF | ENQ/DEQ model definitions |
| | FENODDEF | FEPI node definitions |
| | FEPOODEF | FEPI pool definitions |
| | FEPRODEF | FEPI property set definitions |
| | FETRDEF | FEPI target definitions |
| | FILEDEF | File definitions |
| | FSEGDEF | OS/2 file segment definitions |
| | JRNMDEF | Journal model definitions |
| | LSRDEF | LSR pool definitions |
| | MAPDEF | Mapset definitions |
| | PARTDEF | Partner definitions |
| | PIPEDEF | Pipeline definitions |
| | PROCDEF | Process type definitions |
| | PROFDEF | Profile definitions |
| | PROGDEF | Program definitions |
| | PRTNDEF | Partition set definitions |
| | RASGNDEF | Resource assignments definitions |
| | RQMDEF | Request model definitions |
| | SESSDEF | Session definitions |
| | TCPDEF | TCP/IP service definitions |
| | TDQDEF | Transient data queue definitions |
| | TERMDEF | Terminal definitions |
| | TRANDEF | Transaction definitions |
| | TRNCLDEF | Transaction class definitions |
| | TSMDEF | Temporary storage model definitions |
| | TYPTMDEF | Typeterm definitions |
| | URIMPDEF | Universal resource identifier definitions |
| | WEBSVDEF | Web services definitions |

Examples of managing records in the data repository

The following examples illustrate how you might create, remove, list, and dump definition records in the data repository, and add a CICS system to a CICS system group.

Example 1 - Creating a record

To create a workload specification, you can use either the input panel, shown in Figure 9 on page 35, which is produced when you issue the CREATE action

command from the WLMSPEC view, or the batched repository-update facility. Figure 10 illustrates how to specify the same information when preparing a batched

```

----- Create WLM Specification for EYUPLX01 -----
COMMAND  ===>

WLM Spec Name      ===> EYUWMS01
Description        ===> SSet - Basic Workload

Affinity Relation  ===>          Default Affinity Relation
                                   (USERID, LUNAME, GLOBAL, BAPPL)
Affinity Lifetime  ===>          Default Affinity Lifetime
                                   (SIGNON, LOGON, SYSTEM, PERMANENT,
                                   PCONV, DELIMIT, ACTIVITY, PROCESS)
Match Key          ===> USERID    Default Primary search criterion
                                   (USERID,LUNAME)
Create Affinity     ===>          Create Auto Affinity (YES, NO, N/A)
Target Scope       ===> EYUCSG03  Default CICS System,Group or Generic
Event Name         ===>          RTADEF, STATDEF, or Generic

Abend Health       ===> 0          Target ABEND Health Factor (0 - 99)
Abend Load         ===> 0          Target ABEND Load Factor (0 - 99)
Algorithm Type     ===> Queue      Algorithm Type (GOAL, QUEUE)

Press Enter to create WLM Specification.
Type END or CANCEL to cancel without creating.

```

Figure 9. Example of using a view to create a definition

repository-update job:

```

/* after setting context, create workload specification */
CONTEXT EYUPLX01;
CREATE WLMSPEC NAME(EYUWMS01) DESC(Sample description)
              AFFINITY(USERID)
              AFFLIFE(SIGNON)
              MATCH(USERID)
              AORSCOPE(EYUCSG01)
              EVENTNAME(PAGERATE)
              ABENDCRIT(0)
              ABENDTHRESH(0)
              ALGTYPE(QUEUE);

```

Figure 10. Using the batched repository-update facility to create a definition

Example 2 - Removing a record

To remove the workload specification named EYUWMS01, you might specify:

```

CONTEXT EYUPLX01;
REMOVE WLMSPEC NAME(EYUWMS01);

```

To remove the BAS PROGDEF named EYUPROG1, you might specify:

```

CONTEXT EYUPLX01;
REMOVE PROGDEF NAME(EYUPROG1)
              DEFVER(1);

```

Example 3 - Creating a link record

To create a link called WLMSPC01 between a workload specification and a CICS system group, you might specify:

```

CREATE LNKSWSCG SPEC(WLMSPC01)
              GROUP(EYUCSG01)
              FORCE;

```

Example 4 - Listing records

To list all workload specification records that have names beginning with EYU, you would specify:

```
CONTEXT EYUPLX01;  
LIST WLMSPEC NAME(EYU*);
```

Figure 11 illustrates the output format of records that you list from the data repository. Note that the output produced by the DUMP control statement is very similar; the major difference being that the word CREATE precedes the resource table name. If you use the OUTPUT command, the DUMP command will produce both a report, as illustrated in Figure 11, and a data set, which contains the CREATE commands in a form suitable for re-input to the CICSplex SM batched repository-update facility; see “Example 6 - Dumping records as input to create new records” on page 37.

```
CICSplex SM - Repository Process Report  
  
Input DSN:      CPSM.BATCH.SAMPLE                      Input Member: TEST  
  
CONTEXT EYUPLX01;  
LIST WLMSPEC NAME(EYU*);  
EYUXU0218I  CVMBBC Batch LIST request complete - Status(OK)  
Last Change:  9/06/93 21:18:25.85895  
      WLMSPEC NAME(EYUWMS02)  
              DESC(Sample definition 1)  
              AFFINITY(USERID)  
              AFFLIFE(SIGNON)  
              MATCH(USERID)  
              AORSCOPE(EYUCSG01)  
              EVENTNAME(PAGERATE)  
              ABENDCRIT(0)  
              ABENDTHRESH(0)  
              ALGTYPE(GOAL)  
              ;  
  
Last Change:  8/14/93 15:27:05.34023  
      WLMSPEC NAME(EYUWMS03)  
              DESC(Sample definition 2)  
              AFFINITY(GLOBAL)  
              AFFLIFE(PERMANENT)  
              MATCH(N/A)  
              AORSCOPE(EYUCSG01)  
              EVENTNAME( )  
              ABENDCRIT(0)  
              ABENDTHRESH(0)  
              ALGTYPE(N/A)  
              ;
```

Figure 11. Sample output produced when listing data repository definitions

Note: In the EYUWMS03 record in Figure 11, EVENTNAME is an example of a keyword that has no value; MATCH and ALGTYPE are examples of keywords with a value of N/A.

Example 5 - Dumping records as a backup

To back up all of the workload management records in the data repository, you would specify:

```
CONTEXT EYUPLX01;  
DUMP WLMSPEC NAME(*);  
DUMP WLMGROUP NAME(*);  
DUMP WLMDEF NAME(*);
```

```
DUMP TRANGRP NAME(*);
DUMP DTRINGRP TRANGRP(*);
DUMP WLMINGRP GROUP(*);
DUMP WLMINSPC NAME(*);
```

Example 6 - Dumping records as input to create new records

To dump all versions of the CICS resource definitions in the correct order, directly to a data set that is to be resubmitted as input for creating new records, you would specify the following. The OUTPUT command causes all CREATE records to be written to data set EYUIR01.MYOUT1.

```
OUTPUT DATASET DSNAME(EYUIR01.MYOUT1) INQUOTES(NO);
CONTEXT EYUPLX01;
DUMP CSYSDEF NAME(*);
DUMP CSYSGRP GROUP(*);
DUMP RESGROUP RESGROUP(*);
DUMP RESDESC RESDESC(*);
DUMP RASGNDEF RESASSGN(*);
DUMP RASINDSC RESDESC(*)
                RESASSGN(*);
DUMP RESINDSC RESDESC(*)
                RESGROUP(*);
DUMP CONNDEF NAME(*);
DUMP SESSDEF NAME(*);
DUMP xxxxDEF NAME(*);
.
.
.
DUMP CONINGRP CONNGROUP(*)
                CONNNAME(*);
DUMP SESINGRP SESSGROUP(*)
                SESSNAME(*);
DUMP xxxINGRP xxxxGROUP(*)
                xxxxNAME(*);
.
.
.
DUMP SYSLINK FROMCSYS(*)
                TOCSYS(*);
```

where:

- xxxxDEF is the CICS resource definition type. Examples are CONNDEF, FILEDEF, and MAPDEF, the xxxx string representing either a 3- or 4- character string and is the same for xxxxDEF, xxxNAME, and xxxGROUP.
- xxxNAME is the name of the CICS resource definition, given as an attribute in the xxxINGRP resource table.
- xxxGROUP is the name of the resource group to which the resource definition belongs, given as an attribute in the xxxINGRP resource table.
- xxxINGRP is the CICSplex SM Business Application Services definition describing the membership of the CICS resource definition in a resource group. Examples are CONINGRP, FILINGRP, and MAPINGRP.

See the *CICSplex System Manager Resource Tables Reference* for all possible variants of xxxxDEF and xxxINGRP definitions.

Note: The xxxxDEF and xxxINGRP resource tables also include version attributes, which enable you to process a specific version of the record. You can specify:

- DEFVER(n) for an xxxxDEF record
- xxxVER(n) for an xxxINGRP record

Example 7 - Adding a CICS system to a CICS system group

To add a CICS system to a CICS system group associated with a monitor specification, and to create the link between the CICS system and the monitor specification, you might specify:

```
CONTEXT EYUPLX01;  
CREATE CSGLCGCS GROUP(EYUCSG01) CICSNAME(EYUMAS1A);  
CREATE LNKSMSCS SPEC(MONSPC01) SYSTEM(EYUMAS1A);
```

When used to create a CICS system to CICS system group link record (CSGLCGCS) with the system group already associated with a specification, the batched repository-update facility does not create a specification-to-CICS system link record (LNKSxSCS). To associate the CICS system with the specification, the LNKSxSCS record must be created explicitly.

Chapter 4. Using PlexManager to manage CAS connections

This chapter describes PlexManager. PlexManager is a service utility that you can use to determine the status of the connections between a CAS and its associated CICSplex SM address spaces (CMASs) and CICSplexes. You can also use PlexManager to manage the connections between multiple CASs.

Sections in this chapter describe:

- “Accessing PlexManager and its views”
- “Defining and controlling CAS cross-system communication” on page 41
- “Monitoring CAS activity” on page 49
- “Maintaining screen configurations” on page 52.

Accessing PlexManager and its views

One way you can access PlexManager is by selecting option 1 from the CICSplex SM entry panel. (For a detailed description of the CICSplex SM entry panel and its options, see the *CICSplex System Manager User Interface Guide*). After you press Enter, the PLEXOVER view is displayed.

You can also access PlexManager from any CICSplex SM window and display a specific PlexManager view. To do this, you would perform one of the following:

- Issue the CONTEXT display command with a view name, as in:

```
CONTEXT * PLEXMGR;view_name
```

where:

*** (asterisk)**

Accesses the MVS image (or system) you are logged on to, rather than the system you are currently viewing.

view_name

Is the name of a PlexManager view.

- Issue the SET display command to display the input panel illustrated in Figure 12 on page 40.

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. To remove the message, press Enter. For more information about PlexManager diagnostic facilities, refer to the *CICSplex System Manager Problem Determination* manual.

```
----- 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 12. The SET input panel as displayed from a CICSplex SM window

Change the information in the input panel to provide the following information, as appropriate:

Context

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

Product

Specify PLEXMGR.

Server

Specify asterisk (*).

Scope Specify asterisk (*).

View Specify the name of a PlexManager view.

For example, you might complete the input panel as shown in Figure 13.

To display any PlexManager view from within PlexManager, you can:

```
-----SET WINDOW CONTEXT, PRODUCT, SERVER, SCOPE AND VIEW -----  
COMMAND ==>                                                     ==> PAGE  
  
Window Parameters:  
  
Context      ==> *  
Product      ==> PLEXMGR  
Server       ==> *  
Scope       ==> *  
View        ==> CASACT  
  
Type End to Set Window Parameters  
Cancel to quit without setting
```

Figure 13. Using SET to display a PlexManager view

- Select a PlexManager view from the selection list produced by the VIEWS command.
- Issue a PlexManager view command directly.

You can use the following PlexManager views to manage your CAS environment:

CASACT

Manage the activity of your VTAM® cross-system communication links.

CASDEF

Create and maintain CAS cross-system communication definitions.

CASDEFD

Display information about a specific CAS definition.

PLEX Display a list of the available combinations of product and context (or *service points*) in one or more systems known to the CAS to which you are currently connected.

PLEXOVER

Display a list, by context, of the available service points known to the CAS to which you are currently connected.

SCREENS

Display a list of user-created screen configurations.

These views are described in the remainder of this section.

In addition, you can use these PlexManager views to obtain diagnostic information:

DIAGMSG

For information about the PlexManager message options. (This command should be used only at the request of customer support personnel.)

DIAGSESS

For information about the communication sessions that are currently active between systems.

DIAGSYS

For information about the VTAM connections between the CASs defined to CICSplex SM.

For complete descriptions of these commands, see the *CICSplex System Manager Problem Determination* manual.

Defining and controlling CAS cross-system communication

This section describes how you can use the CASACT, CASDEF, and CASDEFD views to define and control the VTAM cross-system communication between CASs. The CAS in the MVS system to which you are connected is considered the local CAS. A CAS in another MVS system with which the local CAS communicates is a remote CAS.

CASACT (CAS cross-system activity)

The CASACT view can help you manage the activity of your VTAM cross-system communication links. The action commands you can use from the CASACT view affect only the running CAS; they do not affect the CAS definition in the parameter repository.

To display information about current CAS cross-system communication activity, you can:

- From any PlexManager view, issue the command:
CASACT
- From a CICSplex SM window, issue the CASACT command with the CONTEXT or SET display command, as described on page 39.

Figure 14 on page 42 is an example of the CASACT view.

```

27FEB2005 10:37:40 ----- INFORMATION DISPLAY ----
COMMAND ==>
CURR WIN ==> 1          ALT WIN ==>
W1 =CASACT=====MV26=====15FEB2005==10:37:40====PLEXMGR=====
CMD System  Cur Description          SPCF XCF  VTAM VTAMApp1
--- ----- Sys -----          Act  Conv Act  -----
ASATACAS No  AR Saturn CAS on MVS29.    No   No   No
BASETEC1 No  basetec testing at inc49 - JON    No   No   No  BASETEC1
BASETEC2 No  basetech tesing at inc49 - JON    No   No   No  BASETEC2
MV26      Yes Use CasDef to update..    No   No   Yes
MV27      No  Use CasDef to update    No   No   No
MV28      No  Use CasDef to update..    No   No   No
MV29      No  Use CasDef to update..    No   No   No
QSATACAS No  AR Saturn CAS on MVS26.    No   No   No
RSATACAS No  AR Saturn CAS on MVS27.    No   No   No
SSATACAS No  AR Saturn CAS on MVS28.    No   No   No

```

Figure 14. The CASACT view

Action commands

Table 7 summarizes the action commands you can use with the CASACT view.

Table 7. CASACT view action commands

| Primary command | Line command | Description |
|-----------------|--------------|--|
| HALt system | HAL | <p>Halts VTAM communication between the local CAS and a remote CAS.</p> <p>All communication sessions between the local CAS and the specified CAS are terminated immediately, regardless of any outstanding requests for information. Once communication is halted, you cannot access the remote CAS again until you restart communication using the START action command.</p> |
| QUIEsce system | QUI | <p>Quiesces communication between the local CAS and a remote CAS.</p> <p>Communication sessions between the local CAS and the specified CAS are terminated only after all information requests between the sessions are complete. Once communication is quiesced, you cannot access the remote CAS again until you restart communication using the START action command.</p> |
| STart system | S | <p>Starts communication between the local CAS and a remote CAS that is newly defined or one that was previously quiesced or halted.</p> |

The START command is not valid for a remote CAS with which communication is currently active.

Note: These action commands are not valid for the local CAS, which is identified by a value of YES in the Cur Sys field.

Hyperlink fields

There are no hyperlink fields in the CASACT view.

CASDEF (Multiple CAS definitions)

Each CAS must be defined to the MVS system on which it resides. In addition, for a CAS to communicate with other CASs through VTAM or join an XCF group, the CAS must be defined to other MVS systems. The CASDEF view allows you to create and maintain these local and cross-system CAS definitions.

A CAS definition includes:

- Information that uniquely identifies the CAS
- A VTAM major node name
- An XCF group name for XCF communication.

To display information about your CAS definitions, you can:

- From any PlexManager view, issue the command:

```
CASDEF
```

- From a CICSplex SM window, issue the CASDEF command with the CONTEXT or SET display command, as described on page 39.

Figure 15 is an example of the CASDEF view.

```
27FEB2005 10:42:14 ----- INFORMATION DISPLAY -----
COMMAND ==>
CURR WIN ==> 1          ALT WIN ==>
W1 =CASDEF=====MV26===== (00 BROWSE)====PLEXMGR=====
CMD CAS      Cur Description          Status      VTAM      Del
--- Name---- Sys -----
ASATACAS No  AR Saturn CAS on MVS29.          Installed   *NONE*    No
BASETEC1 No  basetec testing at inc49 - JON      Installed   BASETEC1  No
BASETEC2 No  basetech tesing at inc49 - JON      Installed   BASETEC2  No
MV26      Yes Use CasDef to update..              Installed   *NONE*    No
MV27      No  Use CasDef to update..              Installed   *NONE*    No
MV28      No  Use CasDef to update..              Installed   *NONE*    No
MV29      No  Use CasDef to update..              Installed   *NONE*    No
QSATACAS No  AR Saturn CAS on MVS26.          Installed   *NONE*    No
RSATACAS No  AR Saturn CAS on MVS27.          Installed   *NONE*    No
SSATACAS No  AR Saturn CAS on MVS28.          Installed   *NONE*    No
```

Figure 15. The CASDEF view

Notes:

1. Scroll to the right to see the Del field, which indicates whether a CAS definition has been marked for deletion.
2. The CASDEF view in Figure 15 is shown in browse mode, which means no editing actions can be performed. For a description of the CASDEF edit and browse modes, see “Editing CAS definitions” on page 45.

The first time you display the CASDEF view (that is, before you have added any CAS definitions), information for a default definition is displayed. The VTAM ApplName field contains a value of *NONE*, and the Description field contains the words Use CASDEF to update.

Action commands

Table 8 on page 44 summarizes the action commands you can use with the CASDEF view.

Note that the CASDEF view can be displayed in two modes, browse and edit. By default, CASDEF appears in browse mode, which allows you to review CAS

definitions, but not modify them. Most of the CASDEF action commands require you to be in edit mode, as noted in Table 8. For a description of the CASDEF browse and edit modes, see “Editing CAS definitions” on page 45.

Table 8. CASDEF view action commands

| Primary command | Line command | Description |
|-----------------|--------------|--|
| ADD system | A | Displays the ADD CAS SYSTEM DEFINITION input panel, which lets you create a CAS definition, as described on page 45. Before you can add a CAS definition, you must issue the EDIT action command to obtain access to the parameter repository. |
| CANCEL | n/a | Cancels CAS definition changes you are currently making or returns from edit mode to browse mode. |
| CHANGE system | C | Displays the CHANGE CAS SYSTEM DEFINITION input panel, which lets you change an existing CAS definition. The format of this panel is similar to that shown in Figure 16 on page 46. You can modify any field in the panel except CAS System Name. Before you can change a CAS definition, you must issue the EDIT action command to obtain access to the parameter repository. |
| DELeTe system | DEL | Marks a CAS definition for deletion from the parameter repository, as described on page 48. Before you can mark a CAS definition for deletion, you must issue the EDIT action command to obtain access to the parameter repository. |
| EDIT | n/a | Provides editing access to CAS definitions in the parameter repository, as described on page 45. |
| INStall system | INS | Immediately updates a running CAS with new or changed CAS definitions, as described on page 48. |
| SAVE | n/a | Saves in the parameter repository any CAS definition changes you have made while in edit mode. |
| UNDelete system | UND | Reinstates a CAS definition that was marked for deletion but not saved, as described on page 48. Before you can mark a CAS definition for deletion, you must issue the EDIT action command to obtain access to the parameter repository. |

Hyperlink fields

Table 9 shows the hyperlink field on the CASDEF view.

Table 9. CASDEF view hyperlink field

| Hyperlink field | View displayed | Description |
|-----------------|----------------|--|
| CAS Name | CASDEFD | Displays detailed information about a specific CAS definition. |

Editing CAS definitions

Before you can add, change, or delete CAS definitions, you must obtain editing access to the parameter repository. You cannot issue any action command that affects a CAS definition in the parameter repository until you have issued the EDIT command.

To edit a CAS definition in the parameter repository, do the following:

1. Display the CASDEF view.
2. Issue the EDIT primary action command to obtain editing access to the CAS parameter repository.

The edit mode status field on the window information line changes from (00 BROWSE) to (00 EDIT) to indicate that edit mode is active.

3. Issue any of these action commands:

- ADD, to add a definition
- CHANGE, to change a definition
- DELETE, to delete a definition
- UNDELETE, to reinstate a definition.

As you modify CAS definitions, the edit mode status field on the window information line changes from (00 EDIT) to (00 EDIT MOD). This means you have made changes that have not yet been saved in the CAS parameter repository.

4. When you are ready to save your changes, issue the SAVE primary action command.

The edit mode status field on the window information line changes from (00 EDIT MOD) to (00 EDIT) to indicate that edit mode is still active, but all outstanding modifications have been saved.

At any time while you are editing CAS definitions, you can issue the CANCEL primary action command to cancel your changes or exit edit mode and return to browse mode:

- If you issue the CANCEL command when either the ADD or CHANGE CAS SYSTEM DEFINITION panel is displayed, you return to the CASDEF view. Edit mode is still active, but the changes you were making when you issued CANCEL do not take effect.
- If you issue the CANCEL command when the CASDEF view is displayed and edit mode is active, you are returned to browse mode. The edit mode status field on the window information line changes from (00 EDIT) to (00 BROWSE) to indicate that edit mode is no longer active.

The CAS parameter repository returns to its previous state. If you saved any changes during the edit session, the contents of the repository are as they were the last time you issued the SAVE command. Otherwise, the repository is as it was when you first entered edit mode.

Adding a CAS definition

To add a CAS definition to the parameter repository, do the following:

1. Display the CASDEF view.
2. Issue the EDIT primary action command to obtain editing access to the CAS parameter repository.
3. Issue the add primary (ADD) or line (A) action command from the CASDEF view.

The ADD CAS SYSTEM DEFINITION input panel appears, as shown in Figure 16.

```

----- ADD CAS SYSTEM DEFINITION -----
COMMAND ==>

CAS System Name    ==> EYUA      (Recommended same as MVS System Name)
Description        ==>

System Identification Information:
MVS System Name    ==> EYUA      SMF ID          ==> *
SysPlex Name       ==> *        Subsystem ID     ==> *

System Communication Information:
VTAM App1 Name     ==> EYUCAS0A
XCF Group Name     ==> EYUGR310

Enter END to add the CAS System Definition.
Enter CANCEL to leave without adding.

```

Figure 16. Adding a CAS definition

4. Provide the following information, as appropriate:

CAS System Name

Specify a unique 1- to 8-character name for the CAS.

Since there is generally only one CAS per MVS image, you should make this name the same as the MVS system name. The only exception would be if you are defining a test CAS on a system where a production CAS already exists.

Description

Specify a 1- to 40-character description of the CAS definition.

System Identification Information

Use the fields in this section of the panel to uniquely identify the CAS.

MVS System Name

Specify the name of the MVS system in which the CAS resides.

Sysplex Name

Specify the name of the sysplex to which the MVS system belongs. (Every MVS system has a sysplex name, even if it is not part of a formal sysplex configuration.) You can code * (asterisk) if the MVS System Name uniquely identifies the system.

SMF ID

Specify the name of the MVS system as it appears in the active SMFPRMxx member of SYS1.PARMLIB. You can code * (asterisk) if the MVS System Name uniquely identifies the system.

Subsystem ID

Specify the SSID= value used in the CAS startup procedure. You can code * (asterisk) if the MVS System Name uniquely identifies the system.

System Communication Information

Use the fields in this section of the panel to specify the CAS cross-system communication parameters.

VTAM Application Name

Specify the name you used in the APPL statement when defining a VTAM major node for this CAS (see the *CICS Transaction Server for z/OS Installation Guide* manual). This name is unique for each CAS across multiple MVS systems; it is the name that VTAM uses to identify a CAS.

XCF Group Name

Use the default value of EYUGR310, even if you do not use XCF communication links at your enterprise.

5. Issue the END command to return to the CASDEF view.
6. Issue the SAVE action command to save the CAS definition in the parameter repository.

Note: If you decide not to add this CAS definition to the parameter repository, you can use the CANCEL action command at any time before you issue SAVE.

7. Repeat this procedure for each CAS with which you want the local CAS to communicate.

The definitions on the local CAS are now complete. However, the remote CASs that were defined to this CAS still need information about themselves and the other CASs with which they will communicate.

For example, suppose your environment consists of three CASs, named EYUCAS01, EYUCAS02, and EYUCAS03 respectively, and you are currently connected to the system in which EYUCAS01 resides.

If each CAS has a separate parameter repository that it does not share with any other CAS, then you must establish a connection to each CAS in turn and define them to each other, as follows:

1. After adding definitions for EYUCAS01, EYUCAS02, and EYUCAS03 to the parameter repository for EYUCAS01, exit PlexManager.
2. Log on to the MVS system in which the CAS executes and change the CAS identified in your CICSplex SM profile to EYUCAS02.
3. Return to PlexManager and display the CASDEF view.
4. Add definitions of EYUCAS01, EYUCAS02, and EYUCAS03 to the parameter repository for EYUCAS02.
5. Repeat steps 1 through 4 to add definitions of EYUCAS01, EYUCAS02, and EYUCAS03 to the parameter repository for EYUCAS03.

If the CASs operate in a shared DASD, shared parameter repository environment, then you can do the following:

1. After adding definitions for EYUCAS01, EYUCAS02, and EYUCAS03 to the parameter repository for EYUCAS01, exit PlexManager.
2. Log on to the MVS system in which the CAS executes and change the CAS identified in your CICSplex SM profile to EYUCAS02.
3. Return to PlexManager and display the CASDEF view.
4. Issue the INSTALL * action command to dynamically update the cross-system communication parameters for the local CAS.
5. Repeat steps 1 through 4 to update the definitions for EYUCAS03.

Note: For a complete description of the CICSplex SM profile where you specify a CAS name, see the *CICSplex System Manager User Interface Guide*.

Deleting a CAS definition

To delete a CAS definition from the parameter repository, do the following:

1. Display the CASDEF view.
2. Issue the EDIT primary action command to obtain editing access to the CAS parameter repository.
3. Issue the delete primary (DELeTe) or line (DEL) action command from the CASDEF view.

The CAS definition is marked for deletion and is removed from the CASDEF view. However, the definition is not yet removed from the parameter repository.

4. To complete the deletion process, issue the SAVE action command. The definition is removed from the repository.

If you change your mind, you can use the UNDELETE action command to reinstate a deleted CAS definition. Note, however, that you must issue UNDELETE before using the SAVE action command. Once a delete request is saved, the definition cannot be reinstated.

If you know the name of the CAS definition you want to reinstate, you can issue the primary action command as follows:

```
UNDelete casname
```

where casname is the name of the deleted CAS definition that you want to reinstate.

If you do not remember the name of the deleted CAS definition, first issue this command:

```
PARMS DELETED(*)
```

CAS definitions that have been marked for deletion since the last time you issued the SAVE command are redisplayed in the CASDEF view. The deleted definitions have a value of YES in the Del field.

Once you have identified the CAS definition you want to reinstate, you can:

- Issue the UNDelete casname primary action command.
- Place the cursor next to the definition in the CASDEF view and issue the UNDeLeTe line action command.

Installing CAS definition changes

To update a running CAS with new or changed CAS definitions, you can install the changes using the INStall action command. This allows the changes to take effect immediately, without waiting until the CAS is restarted or the MVS system is IPLed.

After you have added or changed CAS definitions, issue the install primary (INStall) or line (INS) action command from the CASDEF view. You can issue the INSTALL action command while the CASDEF view is in either edit or browse mode.

Note: The INSTALL action command does not save the CAS definition changes in the parameter repository. If you have not already saved the changes, use the SAVE action command, as described in “Editing CAS definitions” on page 45. Otherwise, the changes that you installed in the running CAS are lost the next time the CAS is restarted.

CASDEFD (A specific CAS definition)

The CASDEFD view provides detailed information about a specific CAS definition in the parameter repository. You can use the same action commands to maintain CAS definitions from the CASDEFD view as you can from the CASDEF view.

To display information about a specific CAS definition:

- From any PlexManager view, issue the command:

CASDEFD system

where system is the name of a specific CAS system.

- From the CASDEF view, place the cursor on a definition name in the CAS Name field and press Enter to initiate a hyperlink.

Figure 17 is an example of the CASDEFD view.

```

27FEB2005 14:53:48 ----- INFORMATION DISPLAY -----
COMMAND ==>
CURR WIN ==> 1      ALT WIN ==>
>W1 =CASDEF==CASDEFD==EYUA===== (00 BROWSE      )=PLEXMGR=====1===
Cas Name..... EYUA      Description... System A CAS
Current System. Yes      Status..... Installed
Identification--
MVS Sysname.... EYUA      SMF ID..... *
Sysplex..... *      Subsys Name... *
Communication--
VTAM Appl..... EYUCAS1A   XCF Group.... EYUGROUP
VTAM Mode..... *NONE*

Update Info-----
UpdSystem..... EYUA      UpdTime..... 09:05:00
UpdUser..... LGS181      UpdDate..... 23FEB1995
Deleted?..... No

```

Figure 17. The CASDEFD view

Action commands

The action commands you can use with the CASDEFD view are the same as those for the CASDEF view, as shown in Table 8 on page 44.

Hyperlink fields

There are no hyperlink fields in the CASDEFD view.

Monitoring CAS activity

This section describes how you can use the PLEX and PLEXOVER views to obtain information about available service points.

PLEX (Available service points by system)

To determine the status of the available service points in one or more systems known to the CAS to which you are currently connected, you can:

- From any PlexManager view, issue the command:

PLEX [product [context]]

where:

product

Is the specific or generic name of a product or * (asterisk) for all products. (Specific product names are CPSM and PLEXMGR.)

context

Is the specific or generic name of a context. When the product is CPSM, set the context to a CMAS or CICSplex; when the product is PLEXMGR, set the context to a system. If this parameter is omitted, the view includes information about all contexts associated with the designated product.

If no parameters are specified, the view, illustrated in Figure 18, includes information about all products and their associated contexts.

- From a CICSplex SM window, include the PLEX command with the CONTEXT or SET display command, as described on page 39.

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

Figure 18. The PLEX view

The information reflected in the PLEX view is automatically updated every 30 seconds. To update the displayed information you must press Enter for each update, or you must ensure that the view is in ASU mode.

To display the Server field, which contains the names of the CMASs to which the service point (identified in the Product and Context fields) is connected, shift the display to the right.

Action commands

Table 10 summarizes the action command you can use with the PLEX view.

Table 10. PLEX view action command

| Primary command | Line command | Description |
|-----------------|--------------|---|
| n/a | S | Set the context and display a selection list. For the CICSplex SM primary selection list, set the context to a CMAS or CICSplex; for the PlexManager VIEWS selection list, set the context to a system. |

Note: Changing the context causes the scope to be changed to * (asterisk). When the context is a CICSplex, you must establish a scope before attempting to perform any action. The scope can be set to a CICS system or CICS system group associated with the CICSplex or to the CICSplex itself. (The scope is ignored when the context is a CMAS or system.)

Hyperlink fields

Table 11 shows the hyperlink field on the PLEX view.

Table 11. PLEX view hyperlink field

| Hyperlink field | View displayed | Description |
|-----------------|----------------|--|
| Product | MENU | When the product is CPSM, displays the CICSplex SM main menu (MENU) and sets the context to the designated CMAS or CICSplex. The scope is set to * (asterisk). |
| | PLEXOVER | When the product is PLEXMGR, displays the PlexManager PLEXOVER view. |

PLEXOVER (Available service points)

To determine the status, by context, of the available service points known to the CAS to which you are currently connected, you can:

- From any PlexManager view, issue the command:

```
PLEXOVER [context [product ]]
```

where:

context

Is the specific or generic name of a CMAS, CICSplex, system, or * (asterisk) for all contexts.

product

Is the specific or generic name of a product. (Specific product names are CPSM and PLEXMGR.) If this parameter is omitted, the view includes information about all products associated with the designated context.

If no parameters are specified, the PLEX view, illustrated in Figure 18 on page 50, includes information about all products and their associated contexts.

- From a CICSplex SM window, include the PLEXOVER command with the CONTEXT or SET display command, as described on page 39.

Figure 19 is an example of a PLEXOVER view.

```
27FEB2005 11:19:52 ----- INFORMATION DISPLAY -----
COMMAND ==> SCROLL ==> PAGE
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 19. The PLEXOVER view

Action commands

Table 12 on page 52 summarizes the action command you can use with the PLEXOVER view.

PLEXOVER

Table 12. PLEXOVER view action commands

| Primary command | Line command | Description |
|-----------------|--------------|---|
| n/a | S | Set the context and display a selection list. For the CICSplex SM primary selection list, set the context to a CMAS or CICSplex; for the PlexManager VIEWS selection list, set the context to a system. |

Note: Changing the context causes the scope to be changed to * (asterisk). When the context is a CICSplex, you must establish a scope before attempting to perform any action. The scope can be set to a CICS system or CICS system group associated with the CICSplex or to the CICSplex itself. (The scope is ignored when the context is a CMAS or system.)

Hyperlink fields

Table 13 shows the hyperlink fields on the PLEXOVER view.

Table 13. PLEXOVER view hyperlink fields

| Hyperlink field | View displayed | Description |
|-----------------|----------------|---|
| Context | PLEX | For multiple occurrences of the designated context, displays detailed information about each occurrence. |
| | MENU | For a single occurrence of a CMAS or CICSplex, displays the CICSplex SM main menu (MENU) and sets the context to the designated CMAS or CICSplex. The scope is set to * (asterisk). |
| | VIEWS | For a single occurrence of a system, displays the PlexManager VIEWS selection list and sets the context to the designated system. The scope setting is ignored. |
| Product | MENU | When the product is CPSM, displays the CICSplex SM main menu (MENU) and sets the context to the designated CMAS or CICSplex. Note: When the product is PLEXMGR, this hyperlink is not active; the PLEXOVER view is redisplayed. |
| Status | PLEX | Displays detailed information about the designated CMAS, CICSplex, or system. |

Maintaining screen configurations

This section describes how you can use the SCREENS view to obtain information about, and manage user-created screen configurations.

For information about saving and reusing screen configurations, see the *CICSplex System Manager User Interface Guide*.

SCREENS (Screen configurations)

To display information about existing user-created screen configurations, you can:

- From any PlexManager view, issue the command:

```
SCREENS [screen-config]
```

where screen-config is the specific or generic name of a screen configuration. If this parameter is not specified, information about all screen configurations is displayed.

- From a CICSplex SM window, issue the SCREENS command with the CONTEXT or SET display command, as described on page 39.

Figure 20 is an example of the SCREENS view.

```

27FEB2005 16:19:45 ----- INFORMATION DISPLAY -----
COMMAND ===>
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 20. The SCREENS view

Action commands

Table 14 summarizes the action commands you can use with the SCREENS view.

Table 14. SCREENS view action commands

| Primary command | Line command | Description |
|-----------------|--------------|--|
| n/a | D | Delete a screen configuration from the CAS screen repository. |
| n/a | S | Select a screen configuration from the CAS screen repository. Note: When you select a new screen configuration, the stack of previously displayed views associated with each window is cleared. The windows in the new screen configuration do not have any previous views associated with them. |

Hyperlink fields

Table 15 shows the hyperlink field on the SCREENS view.

Table 15. SCREENS view hyperlink field

| Hyperlink field | View displayed | Description |
|-----------------|----------------|---|
| Name | n/a | Causes the current screen configuration to be replaced by the designated screen configuration. Note: When you replace the current screen configuration with a new one, the stack of previously displayed views associated with each window is cleared. The windows in the new screen configuration do not have any previous views associated with them. |

SCREENS

Chapter 5. Configuring a CMAS

This chapter describes the CICSplex SM configuration definitions. These definitions establish the relationships that can exist between a CICSplex SM address space (CMAS) and a CICSplex, and another CMAS.

Sections in this chapter describe:

- “Preparing to configure a CMAS”
- “Working with maintenance point CMASs” on page 58
- “CMAS configuration definitions and their related views” on page 62
- “Managing a CMAS configuration” on page 76.

Preparing to configure a CMAS

Configuration views allow you to establish and maintain definitions that:

- Define one or more CICSplexes to a CMAS and, optionally, identify other CMASs that are involved in managing those CICSplexes.
- Link a CMAS to another CMAS to permit direct communication.

Associating one or more CICSplexes with a CMAS

When you define a CICSplex to a CMAS, as described on page 72, the definition is stored in the data repository for that CMAS. There is no limit to the number of CICSplexes that you can associate with a CMAS as long as the name of each CICSplex is unique within your CICSplex SM environment.

Figure 21 illustrates a CMAS named EYUCMS1A and its data repository. In this example, the data repository contains a single CICSplex definition. The definition identifies the CICSplex as EYUPLX01 and associates it with the CMAS named EYUCMS1A.

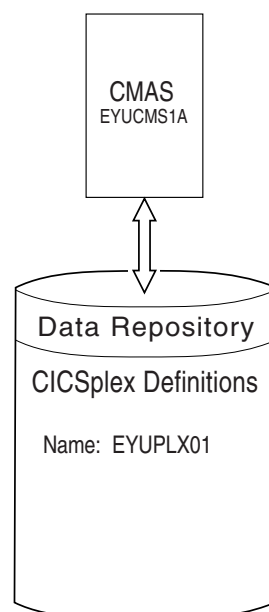


Figure 21. A CICSplex defined to a CMAS

Associating a CICSplex with one or more CMASs

When multiple CMASs are involved in the management of a CICSplex, the CMAS identified as the current context when the CICSplex was defined becomes the maintenance point CMAS for the CICSplex. As described on page 73, the names of the other CMASs are then added to the CICSplex definition. In Figure 22, for example, the data repository for the CMAS named EYUCMS1A shows that the CICSplex named EYUPLX01 is to be managed by three CMASs. In this example, EYUCMS1A is the maintenance point CMAS.

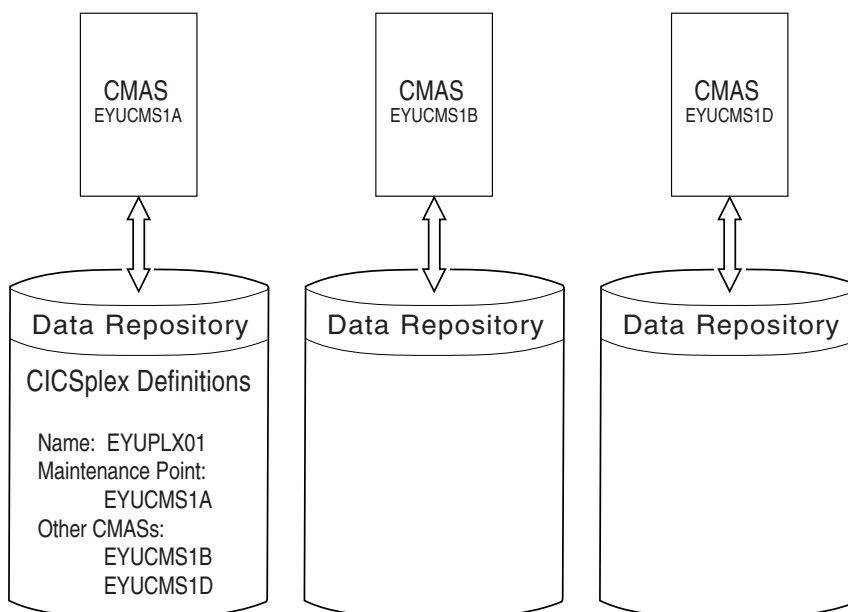


Figure 22. A CICSplex definition identifying multiple CMASs

Note that because no communication links exist between the CMASs shown in Figure 22, the data repositories for the CMASs named EYUCMS1B and EYUCMS1A do not contain any CICSplex definitions. Once communication is established, the maintenance point CMAS informs the other CMASs that they are involved in managing the CICSplex. The maintenance point CMAS also informs the other CMASs, via repository resynchronization, when any administration definitions relating to the CICSplex are added, updated, or removed. This ensures that the data repository for each CMAS contains the same information.

For additional information about working with multiple CMASs, see “Working with maintenance point CMASs” on page 58.

Using direct and indirect CMAS communication

When multiple CMASs are involved in an action, such as managing a CICSplex, they can communicate with each other either directly or indirectly, where:

- Direct communication is established when you define a CMAS-to-CMAS link, as described on page 67. This allows one CMAS to communicate with an adjacent CMAS.
- Indirect communication occurs when a CMAS uses one or more intermediary CMASs to communicate with another CMAS.

Figure 23 on page 57 illustrates direct communication links that exist between EYUCMS1A and EYUCMS1B and between EYUCMS1B and EYUCMS1D. In this

example, there is no direct link between EYUCMS1A and EYUCMS1D. This means that for EYUCMS1A to communicate with EYUCMS1D, it must pass information to EYUCMS1B, the adjacent CMAS to which it does have a direct link. (Indirect links, such as the connection between EYUCMS1A and EYUCMS1D, can be seen in the access type column of the CICSplex SM operation view EYUSTARTCMASLIST (the CMAS view in the end-user interface). Because EYUCMS1B has a direct link to EYUCMS1D, the information is passed on to that CMAS.

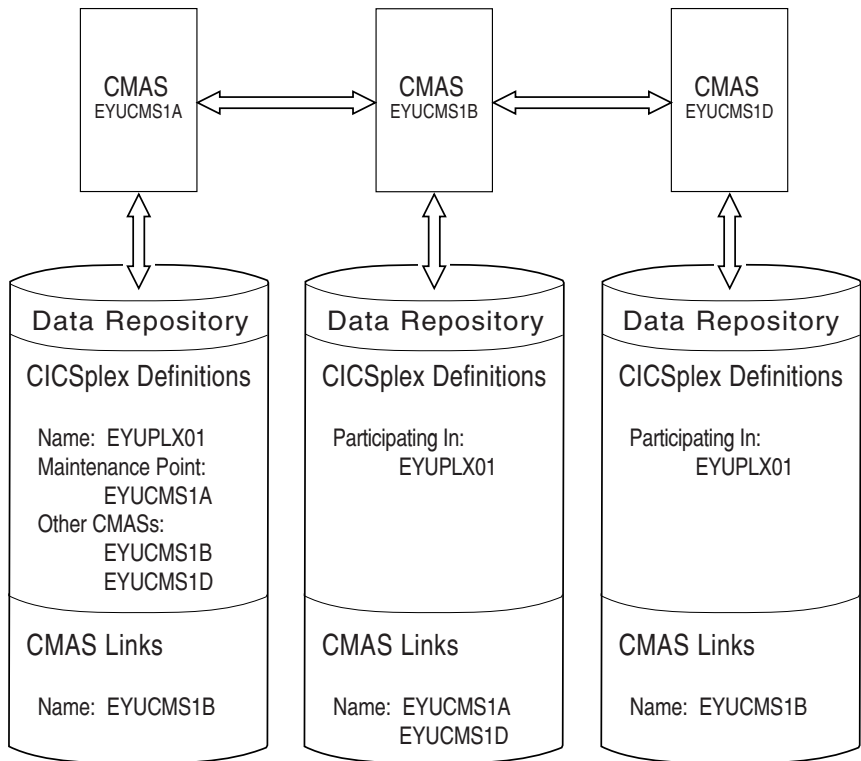


Figure 23. Direct communication links between CMASs

The only requirement on your use of direct and indirect communication links between CMASs is that there must be at least one path from each CMAS to every other CMAS.

Establishing communication links between a CMAS and a MAS

A MAS is a CICS system that is defined to CICSplex SM and contains MAS agent code. As illustrated in Figure 24 on page 58, a MAS is local to the CMAS to which it is associated.

A *local* MAS resides in the same MVS image as the CMAS and uses CICSplex SM facilities provided by Environment Services System Services (ESSS) to communicate with the CMAS. (The ESSS is the component that owns all of the data spaces used by CICSplex SM in an MVS image.)

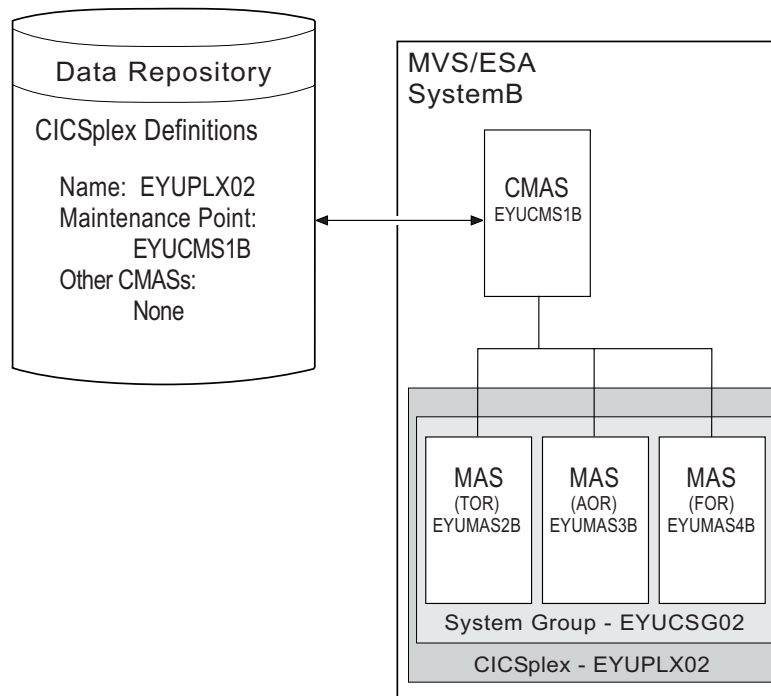


Figure 24. CMAS-to-MAS communication link

Working with maintenance point CMASs

A CMAS provides the single-system image of the CICS systems comprising each CICSplex it manages. To do this, the CMAS uses the CICSplex SM definitions stored in the *data repository*. There is one data repository for each CMAS that you establish.

When a CICSplex consists of a large number of CICS systems or when the systems are spread across multiple MVS images, you may want multiple CMASs to be involved in managing the CICSplex. In cases like this, one of the CMASs is identified as the *maintenance point* for the CICSplex. The maintenance point CMAS is responsible for informing the other CMASs when any administration definitions relating to the CICSplex are added, updated, or changed. This ensures that the data repository for each CMAS involved in managing a CICSplex contains the same information.

If the maintenance point CMAS is unavailable when you attempt to perform an administration task, you are prompted to name another CMAS, as illustrated in Figure 25 on page 59.


```

----- Maintenance Point Required -----
COMMAND ==>

Context: EYUPLX01

Maintenance Point CMAS: EYUCMS1A

Temporary CMAS: eyucms*      Specify CMAS or generic to select

The view you have requested must run in the Maintenance Point CMAS for
the CICSplex specified, but communications to that CMAS is unavailable.

You may now direct the view to another CMAS that is part of this CICSplex.

                        WARNING

Any maintenance that is performed to this CMAS will be backed out
when communications with the Maintenance Point CMAS is again established.

Specify Temporary CMAS name and press Enter.
Enter END or CANCEL to terminate.

```

Figure 25. Prompt for temporary maintenance point CMAS name

Note: The maintenance point CMAS must be available when you are creating or maintaining Business Application Services (BAS) definitions. The Business Application Services component does not support temporary maintenance points.

Provide the following information if you want to identify a CMAS as the temporary maintenance point:

Temporary CMAS

Specify a specific or generic name of a CMAS involved in managing the designated CICSplex. Identifying a specific CMAS causes it to become the temporary maintenance point CMAS. Identifying a generic name causes a selection list of available CMASs to be displayed, as illustrated in Figure 26. (For more information about displaying and using selection lists, see “Using selection lists” on page 12.)

```

COMMAND ==>                                Scroll ==> Page
Temporary Maintenance Point requires a specific resource.
Select a single entry, change the key, or enter END or CANCEL to terminate.

                        Resource matching key: EYUCMS*

C Name      Description                      Type      Status
- - - - -
_ EYUCMS1A                                     CMASDEF   INACTIVE
_ EYUCMS1B                                     CMASDEF   LOCAL
***** BOTTOM OF DATA *****

```

Figure 26. Prompt for temporary maintenance point CMAS name

After establishing a temporary maintenance point CMAS, you can change it to any other CMAS involved in managing the CICSplex. To do this, issue the following primary action command from any view:

working with maintenance point CMASs

TEMPMP cmasid

where `cmasid` is the specific or generic name of a CMAS. When you identify a specific CMAS, that CMAS becomes the new temporary maintenance point. When you specify a generic name, you can choose the appropriate CMAS from the resulting selection list of available CMASs.

The CMAS that you designate as the temporary maintenance point CMAS is informed of any definitions that you add, update, or remove. It temporarily stores this information in its data repository. The information is removed when the maintenance point CMAS becomes available.

Notes:

1. The temporarily stored information is not at any time passed to other CMASs involved in managing the CICSplex. It exists only in the data repository for the CMAS designated to serve as the temporary maintenance point.
2. You can retrieve the names of definitions, *but not the actual definitions*, that were added to or deleted from the data repository of the temporarily designated maintenance point by setting the CICSplex SM system parameter JRNLDEFCH to YES. (For more information about JRNLDEFCH, see the *CICS Transaction Server for z/OS Installation Guide*.)
3. It is recommended that you select a temporary CMAS as the temporary maintenance point at the same level as the inactive maintenance point.

When the maintenance point becomes available, you are reminded, as illustrated in Figure 27, that any changes made while the maintenance point CMAS was unavailable will be ignored.

```
----- Maintenance Point Available -----  
COMMAND ==>  
  
Context: EYUPLX01  
  
Maintenance Point CMAS: EYUCMS1A  
  
Temporary CMAS: EYUCMS1B  
  
You requested that views requiring the Maintenance Point for this CICSplex  
should be directed to the temporary CMAS specified until  
communications with the Maintenance Point was again established.  
  
The Maintenance Point is now available. All views requiring the Maintenance  
Point will now run in the proper CMAS.  
  
Any maintenance that was performed to the temporary CMAS will now be  
backed out. You may want to review your actions and reissue them against  
the Maintenance Point CMAS.  
  
Press ENTER to continue.
```

Figure 27. Maintenance point availability notice

You can remove the association between a CMAS and a CICSplex (as described in “CPLXCMAS (CMASs associated with a CICSplex)” on page 74), as long as the CMAS is not the maintenance point for the CICSplex.

CAUTION:

IBM strongly recommends that you never change the maintenance point CMAS for a CICSplex. If you need to move the maintenance point CMAS from one OS/390 image to another, the preferred method is to submit the existing CMAS to run on the new OS/390 image without changing any of its attributes.

Each CMAS is identified by 4 attributes:

- jobname
- VTAM applid
- CPSM name
- CICS SYSIDNT

Although it is possible to change the jobname and VTAM applid of a CMAS, it is not possible to change the CPSM name and the CICS SYSIDNT. If it is necessary to have a different CPSM name or CICS SYSIDNT for a CMAS, you must create a new CMAS with the attributes you want.

If you must change the CPSM name and/or CICS SYSIDNT of the maintenance point CMAS, which creates a different CMAS to be the maintenance point CMAS, you need to remove the CICSplex and all of its associated definitions from the data repository and redefine them to the new CMAS, as follows:

1. With the context set to the old maintenance point CMAS, issue the CPLXCMAS view against the CICSplex to get the list of all CMASs that participate in the management of the CICSplex.
2. Terminate normally all CMASs that participate in the management of the CICSplex. You can do this using the CMAS view SHUT command or CPSM API equivalent, or through the COSD transaction. It is imperative that you terminate the CMASs normally to ensure the integrity of the data repositories for the next step.
3. Back up the data repositories for each CMAS that participates in the management of the CICSplex.
4. Start all CMASs that currently participate in the management of the CICSplex.
5. With the context set to the old maintenance point CMAS, use the batched repository-update facility DUMP command to extract all the CICSplex SM definitions associated with the CICSplex from the data repository.
See the description of the DUMP command in “Creating and maintaining CICSplex SM definitions” on page 18 for guidance on ordering the command. This also describes possible editing requirements for the command output before it can be used as input in creating the new maintenance point CMAS. Also, see “Creating a data set for re-input to the batched repository-update facility” on page 24 for further guidance.
6. Ensure that all MASs for the CICSplex are terminated. You can verify this through the MASSTAT view, specifying the CICSplex as the context and scope for the view.
7. Ensure that all CMASs that participate in the management of the CICSplex are active and connected, either directly or indirectly, to the maintenance point CMAS. You can verify this through the CMAS view, with the context set to the old maintenance point CMAS.
8. With the context still set to the old maintenance point CMAS, use the CPLXCMAS view to completely remove all non-maintenance point CMASs from the CICSplex, as described in “CPLXCMAS (CMASs associated with a CICSplex)” on page 74.

9. With the context still set to the old maintenance point CMAS, use the CPLEXDEF view to remove the CICSplex definition from the data repository, as described in “Managing CICSplex definitions using the end-user interface” on page 72.
All of the topology, workload management, real-time analysis, resource monitoring, and business application services definitions associated with that CICSplex are also removed from the data repository.
10. Terminate all CMASs in the network, whether or not they participate in the management of the CICSplex.
11. Start the CMAS that is to be defined as the new maintenance point for the CICSplex.
12. With the context set to the CMAS that is to be the new maintenance point for the CICSplex, use the CPLEXDEF view to create the CICSplex definition on the new maintenance point CMAS, as described in “Creating a CICSplex definition” on page 73.
13. Using the output from the DUMP command, submit a batched repository-update facility job to recreate all the CICSplex SM definitions for the CICSplex on the new CMAS data repository. For an example of using DUMP output from the batched repository-update facility to create new definitions, see “Examples of managing records in the data repository” on page 34.
14. With the maintenance point CMAS still active, start all the other CMASs in the network.
15. For each CMAS that should have a connection to the maintenance point CMAS, set the context to that CMAS and use the CMTCMDEF view to build a connection to maintenance point CMAS, as described in “Managing CMAS to CMAS links using the end-user interface” on page 67.
16. With the context set to the maintenance point CMAS, use the CMTCMDEF view to build connections from the maintenance point CMAS to CMASs for which CMTCMDEFs were created by the batched repository-update facility job.
17. After all CMASs have been allowed to connect as defined, with the context set to the new maintenance point CMAS, use the CPLEXDEF view to add the non-maintenance point CMASs to the CICSplex, as described in “Managing CICSplex definitions using the end-user interface” on page 72.
18. Update the EYUPARMs for all MASs that are to connect to the maintenance point CMAS, ensuring that if CMASYSID is specified, it points to the maintenance point.
19. Start the MASs that participate in the management of the CICSplex.

CMAS configuration definitions and their related views

Figure 28 on page 63 illustrates the relationship between a CMAS configuration and the end user interface views used to create and maintain that configuration. It also shows that CMAS configuration definitions are stored in the data repository associated with the CMAS identified as the maintenance point for the CICSplex. This CMAS ensures that any other CMASs involved in managing the CICSplex also know about the configuration definitions.

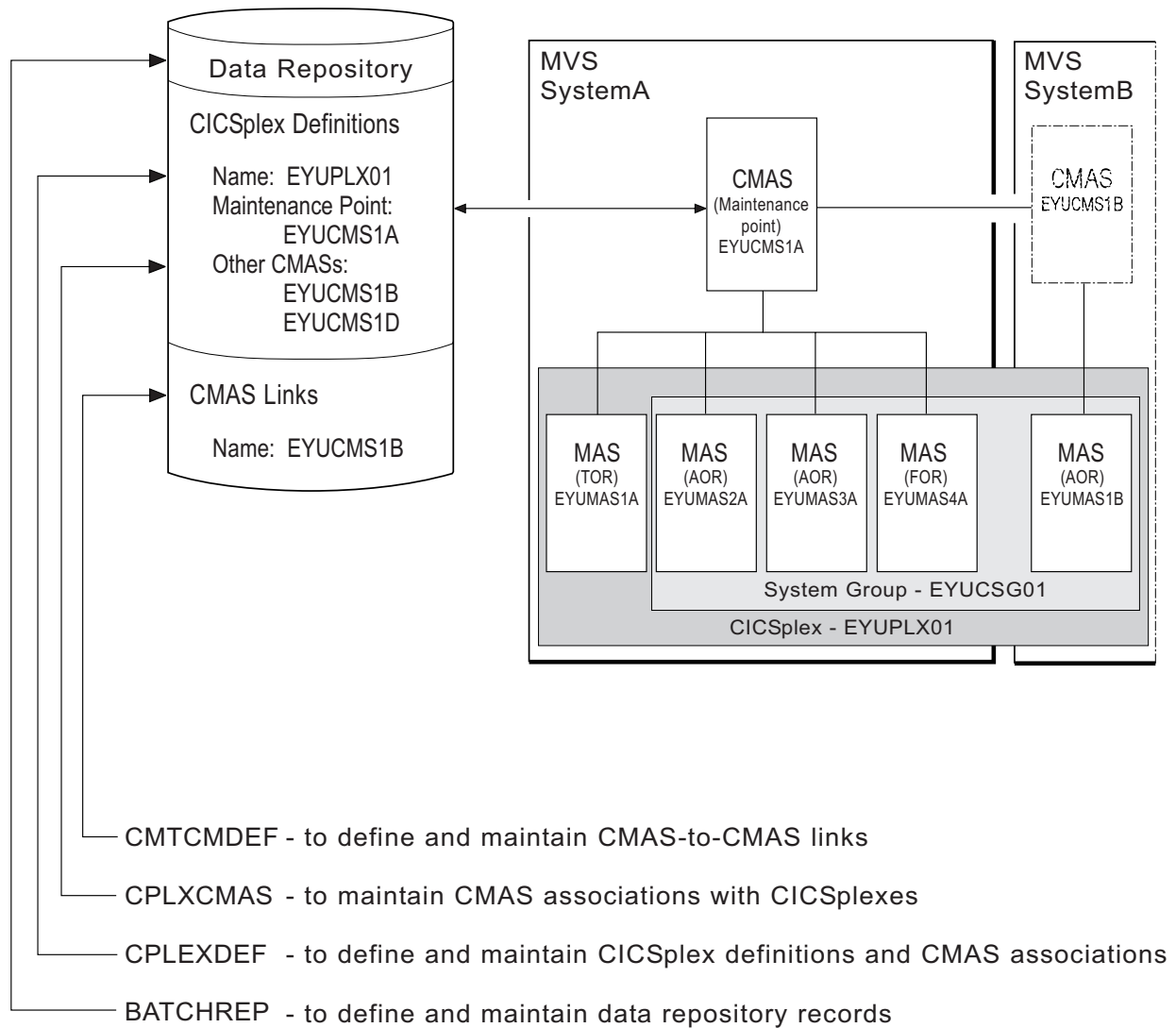


Figure 28. Defining a CMAS configuration

Additional views that you can use to manage configuration definitions once their associated CMASs or CICS systems are active are identified in Table 4 on page 16, and are described in “Managing a CMAS configuration” on page 76.

Online help is available for each view and for the fields in each view. CMAS configuration views

You can access a configuration view by:

- Issuing the MENU ADMCONFIG command and selecting the view from the menu that is displayed. (The menu is shown in Figure 29 on page 64.)
- Issuing the appropriate configuration view command.
- Initiating a hyperlink from one view to another by placing the cursor on a hyperlink field and pressing Enter.

```
27FEB2005 16:50:40 ----- INFORMATION DISPLAY -----
COMMAND ==>                                SCROLL ==> PAGE
CURR WIN ==> 1          ALT WIN ==>
W1 =MENU=====EYUPLX01=EYUPLX01=27FEB2005==16:50:40=CPSM=====6===
CMD Name          Description
-----
ADMCONFG    CMAS Configuration Administration Views
  BATCHREP   Batched Repository Updates
  CPLEXDEF   CICSplex Definitions
  CPLXCMAS   CMAS in CICSplex Definitions
  CMTCMDEF   CMAS-to-CMAS Link Definitions
  CMTPMDEF   CMAS-to-RMAS Link Definitions
```

Figure 29. The ADMCONFG menu

For additional information about accessing these views, see “Accessing end user interface administration views” on page 3.

Reminders:

- Unless noted otherwise, only the context setting is recognized when you are creating and maintaining configuration definitions. For additional information about setting the context to a CMAS, see “Setting the context and scope in the end user interface” on page 1.
- To verify that the CMAS you want to use as the context is successfully connected to a CAS, use the PLEX or PLEXOVER view, as described in Chapter 4, “Using PlexManager to manage CAS connections,” on page 39.

The remainder of this chapter contains detailed descriptions of the CMAS configuration views.

BATCHREP (Batched repository-update facility)

The batched repository-update facility allows you to create, update, remove, list, or dump one or more definitions from the data repository associated with the local CMAS. This is described on page 17.

Notes:

1. When definitions are listed or dumped, they can be modified and used as input to the data repository. For more information about creating and maintaining the data repository, see Chapter 3, “Using the batched repository-update facility,” on page 17.
2. CMAS-related definitions can be updated on any local CMAS. However, definitions related to the CICSplex must be processed on the maintenance point CMAS.

| Managing CMAS to CMAS links using the Web User Interface

To manage the direct LU 6.2 and MRO communication links between the local
CMAS and any other CMAS click **Administration views—>CMAS configuration**
administration views—>CMAS to CMAS link definition. This view allows you to
create update and remove links. In order to create a link between CMASs, each
must have a WUI attached.

| Creating CMAS to CMAS links

| Follow this procedure to create a link definition to another CMAS and add it to the
| data repository of the local CMAS.

1. Open the **CMAS to CMAS link definition** view, which displays any existing links in tabular form. If you want to base a new link definition on an existing link, select a link definition using the adjacent check box.
2. Click the **Create** action button at the bottom of the view.

The **CMAS to CMAS link definition** create panel

(EYUSTARTCMTCMDEF.CREATE) is displayed. If you first selected an existing link definition, this panel contains values from the selected link.

3. Fill in the Create panel by supplying (or overtyping) the following information:

Target CMAS Name

Specify the 1- to 8-character name of the CMAS to which you want to establish a link.

Description

Specify a 1- to 30-character description of the link.

Target application ID

Specify the VTAM APPLID for the target CMAS.

Target system ID

Specify the 1- to 4-character system ID of the CMAS to which you want to establish a link. The valid characters for a system ID are A – Z and 0 – 9.

This name must match the name specified via the SYSIDNT parameter in the CICS system initialization table (SIT). .

Link protocol

Specify the protocol to be used as either LU62 or MRO.

Send buffer size

Specify the size of the send buffer for the link, in the range 256 - 30720. The size specified should be 36 bytes less than the smallest MAXDATA value in any NCP through which the link may pass. The 36 bytes provides allowance for VTAM required headers.

Note: For MRO, the SENDSIZE and RECEIVESIZE values on a connection are mostly ignored by CICS, especially when the only use of the connections is CICS DTP (which is the model that CMAS to CMAS communications uses). Therefore, it does not really matter what it is set to. More important for MRO links is IOAREALEN. However, with a CMAS to CMAS link definition you cannot change the IOAREALEN used on the SESSIONS definition that is subsequently installed in the CMAS. CICSplex SM sets the IOAREALEN of MRO SESSIONS definitions to 8192, which is the maximum size of the buffer that CMAS to CMAS communications uses.

Receive buffer size

Specify the size of the receive buffer for the link, in the range 256 - 30720. The size specified should be 36 bytes less than the smallest MAXDATA value in any NCP through which the link may pass. The 36 bytes provides allowance for VTAM required headers.

Notes:

- a. If the values specified for the Send and Receive buffers are too large for VTAM, VTAM errors cause attempted connections to fail. In fact, soon after the 2 CMASs connect, the connection is timed out.

Connections can be reestablished, but they will continue to time out. When this occurs, verify that the specified buffer sizes are within the guidelines listed here.

When the buffer sizes are not as recommended, recreate the definition on both sides, using the **CMAS to CMAS link definition** view, specifying appropriate buffer sizes.

- b. For MRO, the SENDSIZE and RECEIVESIZE values on a connection are mostly ignored by CICS, especially when the only use of the connections is CICS DTP (which is the model that CMAS to CMAS communications uses). Therefore, it does not really matter what these are set to. More important for MRO links is IOAREALEN. However, with a CMTCMDEF you cannot change the IOAREALEN used on the SESSIONS definition that is subsequently installed in the CMAS. CICSplex SM sets the IOAREALEN of MRO SESSIONS definitions to 8192. This is the maximum size of the buffer that CMAS to CMAS communications uses.

Note:

LU 6.2 mode name

(Required for LU 6.2 connections.) Specify the 1- to 8-character VTAM LOGMODE name that identifies the group of related sessions. If you do not specify a name, the field will contain blanks, which is a valid name.

MRO receive prefix

Specify the 2-character prefix that is used as the first two characters of the Terminal Control Table Terminal Entry (TCTTE) names. Be careful that the prefix does not cause a TCTTE name to be generated that matches an existing connection or terminal name. (Required for MRO connections only.)

MRO send prefix

Specify the 2-character prefix that is used as the first two characters of the TCTTE names. Be careful that the prefix does not cause a TCTTE name to be generated that matches an existing connection or terminal name. (Required for MRO connections only.)

Type of attach—time security

Specify the source of the user ID(s) to be associated for incoming transactions on the link as:

LOCAL

The user ID associated with incoming transactions is the value associated with the Security Name field.

IDENTIFY

The user IDs associated with incoming transactions are the following:

- The system already verified user ID received from the target system, or the CICS default user if none is received.
- The user ID associated with the Security Name field.

User ID of remote system for security purposes

(Optional.).

For MRO links this value is ignored and the Security Name value used is the CICS region user ID associated with the target system.

For LU 6.2 links specify a user ID to be associated with incoming transactions. If no value is specified the CICS default user ID is used.

If transaction security is active in the CMAS, the user ID associated with the Security Name field needs to have access to attach the transactions listed in *CICS RACF® Security Guide*.

Depending on your requirements security administration may be simpler if the CICS region user ID or PLTPUIUSR is specified for the CMAS.

For further details about the Security Name field and its relationship with the Attach Security field see the *CICS RACF Security Guide*.

4. Click **Yes** at the bottom of the Create panel to add the link definition to the data repository of the local CMAS.
5. Repeat this procedure for each CMAS with which the local CMAS is to have direct communication. Then, change the context to another CMAS and repeat this procedure for that CMAS. For example, to establish two-way communication between EYUCMS1A and EYUCMS1B, first set the context to EYUCMS1A and define a link to EYUCMS1B. Then, change the context to EYUCMS1B and define a link to EYUCMS1A.

The CICS resource definitions needed to establish communication with the designated CMAS are installed automatically using EXEC CICS CREATE interface.

Updating a CMAS to CMAS link definition description

Follow this procedure to update a CMAS to CMAS link definition description in the data repository.

1. Select a link definition from the **CMAS to CMAS link definition** view and click the **Update** action button.
The **CMAS to CMAS link definition** create panel is displayed containing details of the selected link. You can modify only the Description field.
2. Update the description and click **Yes** to update the link definition in the data repository.

Removing a CMAS to CMAS link definition description

Follow this procedure to remove a CMAS link definition from the data repository of the local CMAS. When you do this, the appropriate CICS resource definitions are automatically removed from the CICS system definition (CSD) file for that CMAS.

1. Select a link definition from the **CMAS to CMAS link definition** view and click the **Remove** action button.
A confirmation panel is displayed.
2. Click **Yes** to remove the link definition from the data repository or click **No** to return.

Managing CMAS to CMAS links using the end-user interface

To display information about the direct LU 6.2 and MRO communication links between the local CMAS and any other CMASs, issue the command:

```
CMTCMDEF [cmas]
```

where *cmas* is the specific or generic name of a CMAS defined to the local CMAS. If this parameter is omitted, the view, illustrated in Figure 30 on page 68, includes information about all CMASs defined to that CMAS.

```

27FEB2005 17:26:32 ----- INFORMATION DISPLAY -----
COMMAND ===>                                SCROLL ===> PAGE
CURR WIN ===> 1          ALT WIN ===>
W1 =CMTCMDEF=CMTCMDEF=EYUCMS1A=EYUCMS1A=27FEB2005==17:26:30=CPSM=====1===
CMD Target  Sys          Sess
--- CMAS---- Id-- Applid  Type Prfx- Modename Description-----
      EYUCMS1B CM1B EYUCMS1B LU62                Starter Set CMAS on System B

```

Figure 30. The CMTCMDEF view

Action commands

Table 16 summarizes the action commands you can use with the CMTCMDEF view.

Table 16. CMTCMDEF view action commands

| Primary command | Line command | Description |
|-----------------|--------------|---|
| n/a | BRO | Browse a link definition in the data repository. |
| CREate | CRE | <p>The format of the resulting, nonmodifiable panel is identical to that shown in Figure 31 on page 69.</p> <p>Create a link definition to another CMAS and add it to the data repository of the local CMAS, as described on page 68.</p> <p>When you use the primary command CREate, some fields in the new view may contain values supplied by CICSplex SM; you may change these values. When you enter the line command CRE next to the name of a link definition, fields in the new view contain values to be modelled (from the existing link definition).</p> |
| n/a | REM | Remove a CMAS link definition from the data repository of the local CMAS. |
| n/a | UPD | <p>Update a link definition in the data repository.</p> <p>The format of the resulting panel is identical to the panel shown in Figure 31 on page 69. You can modify the contents of only the Description field.</p> |

You can use the CMTCMLNK or CMTCMLND view, as indicated in Table 4 on page 16, to discard a link definition without removing it from the data repository.

Hyperlink fields

There are no hyperlink fields for the CMTCMDEF view.

Creating a CMAS-to-CMAS link definition

Figure 31 on page 69 shows the format of the panel produced when you use the create primary (CREate) or line (CRE) action command from the CMTCMDEF view.

```

----- Define CMAS Link for EYUCMS01 -----
COMMAND  ===>

Target CMAS Name ===>

Description      ===> Starter Set CMAS on System B

Target Applid    ===> EYUCMS1B      Target CMAS VTAM Applid
Target Sysid     ===> CM1B          Sysid of Target CMAS

Protocol         ===> LU62          Connection Type (LU62/MRO)
Send Buffer       ===> 8192          Size of send buffer (256 - 30720)
Receive Buffer    ===> 8192          Size of receive buffer (256 - 30720)

Modename         ===>              Modename for LU62 Link
Receive Prefix   ===>              Unique 2 character prefix for MRO
Send Prefix      ===>              Unique 2 character prefix for MRO

Attach Security  ===> LOCAL        Attach User Security (LOCAL/IDENTIFY)
Security Name    ===>              Userid associated with link

Press Enter to define CMAS Link with the options specified.
Type END or CANCEL to cancel without defining.

```

Figure 31. Creating a CMAS-to-CMAS link

Provide the information as described in “Creating CMAS to CMAS links” on page 64 and press Enter to add the link definition to the data repository of the local CMAS.

Repeat this procedure for each CMAS with which the local CMAS is to have direct communication. Then, change the context to another CMAS and repeat this procedure for that CMAS. For example, to establish two-way communication between EYUCMS1A and EYUCMS1B, first set the context to EYUCMS1A and define a link to EYUCMS1B. Then, change the context to EYUCMS1B and define a link to EYUCMS1A.

The CICS resource definitions needed to establish communication with the designated CMAS are installed automatically using EXEC CICS CREATE interface.

CMAS to MAS links

A CMAS can communicate with other MASs.

- A local MAS resides in the same MVS image as the CMAS and uses CICSplex SM facilities to communicate with that CMAS. All of the information CICSplex SM needs to know about a local MAS is automatically provided by CICSplex SM itself.

CICSplex definitions

A CICSplex consists of one or more CICS systems or CICS system groups and is managed by one or more CMASs. Establishing a CICSplex requires that you:

- Define the CICSplex to the local CMAS, as described in this section.
- Associate CICS systems and CICS system groups with the CICSplex, as described on page 89.

Managing CICSplex definitions using the Web User Interface

To display information about the CICSplexes associated with the local CMAS click **Administration views—>CMAS configuration administration views—>CICSplex**

definition. This view lists summary information of the CICSplexes defined to the local CMAS in tabular form. To view details of one of the listed CICSplexes, select from the Record column the adjacent check box. The **CICSplex definition** view includes action buttons that allow you to do the following:

- Create a CICSplex definition and add it to the data repository. See “Creating a CICSplex definition.”
- Update a CICSplex definition in the data repository. You can modify any of the CICSplex definition fields except the CICSplex definition name.
- Remove a CICSplex definition from the data repository. When you remove a CICSplex definition, all of its topology, workload management, real-time analysis, resource monitoring, and business application services definitions are also removed. When multiple CMASs are involved in managing the CICSplex, these definitions are removed from the data repository associated with each CMAS.
- Assign a CMAS to a CICSplex definition in the data repository. See “Assigning a CMAS to a CICSplex” on page 71.
- Unassign a CMAS from a CICSplex definition in the data repository.

Creating a CICSplex definition: Follow this procedure to create a CICSplex definition and add it to the data repository.

1. Open the **CICSplex definition** tabular view. If you want to base a new link definition on an existing link, select a link definition using the adjacent check box.

2. Click the **Create** action button at the bottom of the view.

The **CICSplex definition** create panel is displayed. If you first selected an existing link definition, this panel contains values from the selected link.

3. Fill in the create panel by supplying (or overtyping) the following information:

CICSplex name

Specify a 1- to 8-character name for the CICSplex that is unique within your CICSplex SM environment. The name can contain alphabetic, numeric, or national characters. However, the first character must be alphabetic.

Notes:

- a. The name of a CICSplex should not be the same as the name of a CMAS, a CICS system, a CICS system group, or another CICSplex at your enterprise.
- b. If a CICSplex with the same name is defined to any other CMAS and that CMAS attempts to communicate with the local CMAS, all direct and indirect communication links between the two CMASs are automatically removed.

CICSplex description

Specify a 1- to 30-character description of the CICSplex.

Monitor interval

Specify the number of minutes during which monitoring data is to be collected and accumulated before the statistics counters are reset. The value must be:

- Between 15 and 1440 and evenly divisible into 1440. If you specify a value that is not evenly divisible into 1440, you are prompted for one that is.
- Omitted, when you want to use the default interval value of 480 minutes (8 hours).

Note: The Monitor Interval can be updated using the update action. However, when you do so, the new value does not take effect in a MAS until that MAS is shut down and restarted.

Daylight savings in effect

Specify Yes or No to indicate whether you currently recognize daylight saving time.

Time zone

Specify one of the codes shown in Table 32 on page 105 to identify the time zone that is associated with this CICSplex. For more information about the time zone attributes and how to use them, see “CICSplex SM time zone attributes” on page 91

Time Zone offset

Specify a value between 0 and 59 to identify the number of minutes to be added to the time for that time zone (for areas that do not use a standard time zone).

Resource status facility population

Specify Yes or No to indicate whether the CICSplex is to be reported to the resource status facility.

Simulated CICS command security checking

Specify Yes or No to indicate whether or not CICSplex SM security checking is to simulate CICS command checking for the CICS systems associated with this CICSplex. (If you do not specify a value, the default is NO.)

Simulated CICS resource security checking

Specify Yes or No to indicate whether or not CICSplex SM security checking is to simulate CICS resource checking for the CICS systems associated with this CICSplex. (If you do not specify a value, the default is NO.)

Security checking exemption

Specify Yes or No to indicate whether or not simulated CICS security checking is to be bypassed for specific users or resources in this CICSplex. (If you do not specify a value, the default is NO.)

4. Click **Yes** to add the CICSplex definition to the data repository.

There is no restriction on the number of CICSplexes that you can associate with a single CMAS.

The CICSplex becomes available as soon as its definition is added to the data repository for the local CMAS.

Assigning a CMAS to a CICSplex: Follow this procedure to add a CMAS to a CICSplex definition in the data repository.

When a CICSplex is to be managed by multiple CMASs, the CMAS in effect when you create the CICSplex becomes the maintenance point CMAS for that CICSplex. There is no restriction on the number of CMASs that can be involved in the management of a single CICSplex.

1. Open the **CICSplex definition** tabular view and select the CICSplex you wish to assign.
2. Click the **Assign** action button.

The **CICSplex definition** assign panel is displayed.

3. Specify the 1- to 8-character name of the CMAS that is to be associated with the designated CICSplex
 4. Click **Yes** to confirm the operation or **No** to cancel.
- The specified CMAS is added to the CICSplex definition in the data repository and the **CICSplex definition** tabular view is redisplayed.

Managing CICSplex definitions using the end-user interface

To display information about the CICSplexes associated with the local CMAS, issue the command:

```
CPLEXDEF [cicsplex]
```

where `cicsplex` is the specific or generic name of a CICSplex known to the local CMAS. If this parameter is omitted, the view, illustrated in Figure 32, includes information about all CICSplexes that are associated with that CMAS.

```
27FEB2005 18:22:02 ----- INFORMATION DISPLAY -----
COMMAND ===>                                SCROLL ===> PAGE
CURR WIN ===> 1          ALT WIN ===>
W1 =CPLEXDEF=====EYUCMS1A=EYUCMS1A=27FEB2005==18:22:00=CPSM=====1==
CMD Name      Mon Time Zone Day  Cmd Res  Xmp Res Description
---  ---  ---  ---  ---  ---  ---  ---  ---  ---  ---  ---
      EYUPLX01 480 Z      0 NO   NO   NO   YES YES Starter Set Plex 1 on System
```

Figure 32. The CPLEXDEF view

Action commands: Table 17 summarizes the action commands you can use with the CPLEXDEF view.

Table 17. CPLEXDEF view action commands

| Primary command | Line command | Description |
|-----------------|--------------|---|
| n/a | ADD | Add a CMAS to a CICSplex definition in the data repository, as described on page 73. |
| n/a | BRO | Browse a CICSplex definition in the data repository. |
| CREate | CRE | The format of the resulting, nonmodifiable panel is identical to that shown in Figure 33 on page 73. Create a CICSplex definition and add it to the data repository, as described on page 73. The CMAS that is the current context becomes the maintenance point CMAS. |
| n/a | REM | Remove a CICSplex definition from the data repository. Note: When you remove a CICSplex definition, all of its topology, workload management, real-time analysis, resource monitoring, and business application services definitions are also removed. When multiple CMASs are involved in managing the CICSplex, these definitions are removed from the data repository associated with each CMAS. |
| n/a | UPD | Update a CICSplex definition in the data repository. The format of the resulting panel is identical to the panel shown in Figure 33 on page 73. You can modify the contents of any field in the panel except the CICSplex definition name. |

Hyperlink fields: Table 18 shows the hyperlink field on the CPLEXDEF view.

Table 18. CPLEXDEF view hyperlink field

| Hyperlink field | View displayed | Description |
|-----------------|----------------|--|
| Name | CPLXCMAS | Information about the CMASs linked to the specified CICSplex |

Creating a CICSplex definition: Figure 33 shows the format of the panel produced when you use the create primary (CREate) or line (CRE) action command from the CPLEXDEF view.

Provide the following information described in “Creating a CICSplex definition” on

```

----- Create CICSplex for EYUCMS1A -----
COMMAND  ===>

CICSplex name      ===>
Description        ===>

Monitor Interval   ===> 480    Performance interval duration (15-1440 min)
Daylight Savings Time ===> NO    YES or NO
Time Zone          ===> B      Time zone for interval (B-Z)
Time Zone Adjustment ===> 0      Offset from time zone (0-59)
Resource Status    ===>        Operational status for resource
    Facility       ===> NO      status facility (NO, YES)
CICS Command Checking ===> NO    Simulated CICS Command Checks
CICS Resource Checking ===> NO    Simulated CICS Resource Checks
Exemption Checking  ===> YES     Check for Exempt Users

Press ENTER to create CICSplex.
Type END or CANCEL to cancel without creating.
```

Figure 33. Creating a CICSplex definition

page 70. For more information about the time zone attributes and how to use them, see “CICSplex SM time zone attributes” on page 91. Press Enter to add this definition to the data repository.

There is no restriction on the number of CICSplexes that you can associate with a single CMAS.

The CICSplex becomes available as soon as its definition is added to the data repository for the local CMAS.

Adding a CMAS to a CICSplex: When a CICSplex is to be managed by multiple CMASs, the CMAS in effect when you create the CICSplex becomes the maintenance point CMAS for that CICSplex. There is no restriction on the number of CMASs that can be involved in the management of a single CICSplex.

Figure 34 on page 74 illustrates the panel produced when you use the add (ADD) line action command from the CPLEXDEF view.


```
----- Add CMAS to CICSplex for EYUCMS1A -----
COMMAND  ===>

CICSplex name      EYUPLX01
Description        Starter Set Plex 1 on System A

CMAS Name          ===>          Name of CMAS or Generic

Press Enter to add CMAS to CICSplex.
Type END or CANCEL to cancel without adding.
```

Figure 34. Adding a CMAS to a CICSplex

Specify the 1- to 8-character name of the CMAS that is to be associated with the designated CICSplex. Press Enter to add this information to the data repository.

CPLXCMAS (CMASs associated with a CICSplex)

To display information about CMASs associated with a CICSplex, where the local CMAS must be the maintenance point for that CICSplex, issue the command:

```
CPLXCMAS [cicsplex]
```

where cicsplex is specific or generic name of a CICSplex known to the local CMAS. If this parameter is omitted, the view, illustrated in Figure 35, includes information about all CICSplexes that are associated with that CMAS. You can use the CICSplex view, as indicated in Table 4 on page 16, to display

```
27FEB2005 18:22:17 ----- INFORMATION DISPLAY -----
COMMAND  ===>                                     SCROLL ===> PAGE
CURR WIN ===> 1          ALT WIN ===>
W1 =CPLXCMAS=====EYUCMS1A=EYUCMS1A=27FEB2005==18:22:17=CPSM=====2===
CMD CICSplex CMAS
--- Name---- Name---- MP  State---
EYUPLX01 EYUCMS1A YES  NORMAL
EYUPLX01 EYUCMS1B NO   NORMAL
```

Figure 35. The CPLXCMAS view

status information about CMASs associated with a CICSplex, where the local CMAS need not be the maintenance point for the CICSplex.

Action commands

Table 19 summarizes the action commands you can use with the CPLXCMAS view.

Table 19. CPLXCMAS view action commands

| Primary command | Line command | Description |
|-----------------|--------------|---|
| n/a | BRO | Browse the definition of the association between a CICSplex and the maintenance point CMAS in the data repository. Figure 36 on page 75 illustrates the panel produced when you issue the BROWse command from the CPLXCMAS view. |
| n/a | FOR | Force an inaccessible CMAS associated with a CICSplex to be removed. |
| n/a | REM | Remove a CMAS associated with a CICSplex. |


```

----- Browse CPLXCMAS for CMAS EYUCMS1B -----
COMMAND  ==>

CICSplex name      EYUPLX01
CMAS Name          EYUCMS1B
Maintenance Point   YES
State              NORMAL

Type END or CANCEL to cancel browse.

```

Figure 36. The BROWse panel for CPLXCMAS

When you remove a CMAS from a CICSplex definition, the action command you use depends on whether the CMAS to be removed is currently accessible to the local CMAS.

- Use REM when the CMAS is currently accessible, or will be accessible, to the local CMAS.

This command causes the name of the designated CMAS to be immediately removed from the CICSplex definition in the data repository for the local CMAS. Then, if the designated CMAS is currently accessible, its data repository is updated to reflect this change; otherwise, the action is placed in a pending status until the CMAS becomes accessible.

- Use FOR when the CMAS is not currently accessible and will never be accessible to the local CMAS.

This command causes the name of the designated CMAS to be removed from the CICSplex definition in the data repository for the local CMAS. Because the two CMASs are not accessible, the data repository for the designated CMAS is not altered to reflect this change.

In most cases, you should use the REM action command because the CMAS normally is or will become accessible to the local CMAS.

Note: You cannot remove the association between a CICSplex and its maintenance point CMAS. If you determine that a different CMAS should be the maintenance point for a CICSplex, you need to perform the following steps:

1. With the context set to the maintenance point CMAS, use the CPLXCMAS view to remove any nonmaintenance point CMASs from the CICSplex, as described on page 74.
2. With the context still set to the maintenance point CMAS, use the CPLEXDEF view to remove the CICSplex, as described on page 72.
3. Change the context to the appropriate CMAS.
4. Redefine the CICSplex to the new maintenance point CMAS, as described on page 73.
5. Add other CMASs to the CICSplex, as described on page 73.

Hyperlink fields

Table 20 shows the hyperlink field on the CPLXCMAS view.

Table 20. CPLXCMAS view hyperlink field

| Hyperlink field | View displayed | Description |
|-----------------|----------------|---|
| CICSplex Name | CPLEXDEF | Information about the specified CICSplex. |

Managing a CMAS configuration

This section describes how you can obtain information about:

- CICSplexes associated with a CICSplex SM address space (CMAS)
- CMASs known to the local CMAS
- MASs known to the local CMAS

In the Web User Interface you access this information by clicking **CICSplex SM operations views—>CMASs known to local CMAS**. This menu contains links to views allowing you to perform the tasks listed in Table 21.

Table 21. CMAS configuration tasks

| Web User Interface view | End-user interface view (and resource table) | Task |
|---|--|---|
| CMASs known to local CMAS (EYUSTARTCMASLIST) | CMAS | <ul style="list-style-type: none"> • Display information about the CMASs known to the local CMAS. • Shut down a CMAS. • Purge in-storage external security manager (ESM) profiles. • Rebuild ESM profiles for a CMAS. |
| CICSplexes managed by CMAS (EYUSTARTCMASPLEX) | CMASPLEX | Display information about the CICSplexes being managed by the local CMAS |
| CMASs managing CICSplex (EYUSTARTCICSPLEX) | CICSPLEX | Display information about the CMASs associated with a CICSplex known to the local CMAS. |
| CMAS to CMAS links (EYUSTARTCMTMMLNK) | CMTMMLNK | <ul style="list-style-type: none"> • Display information about the links between the local CMAS and one or more other CMASs. • Discard an installed CMAS link. |
| CMAS to MAS links (EYUSTARTCMTMMLNK) | CMTMMLNK | <ul style="list-style-type: none"> • Display information about the physical connections between the local CMAS and the MASs to which it is linked. |

End-user interface CMAS configuration views

CICSPLEX

The CICSPLEX view shows information about all CMASs associated with a CICSplex, whether or not the local CMAS is the maintenance point for the CICSplex.

Issue command:

CICSPLEX cicsplex

cicsplex is the name of a CICSplex that is known to the local CMAS.

Select:

CICSPLEX from a menu of CONFIG views, being sure to specify the required parameters.

Hyperlink from:

the CICSplex field on the CMASPLEX view.

Figure 37 is an example of the CICSPLEX view.

```

27FEB2005 17:06:00 ----- INFORMATION DISPLAY -----
COMMAND ==>                                SCROLL ==> PAGE
CURR WIN ==> 1          ALT WIN ==>
W1 =CICSPLEX=====EYUCMS1A=EYUCMS1A=27FEB2005==17:06:00=CPSM=====2==
CMD CICSplex CMAS      Status  MP  Access  Transit  Transit
--- -----
EYUPLX01 EYUCMS1A ACTIVE  YES  LOCAL           0
EYUPLX01 EYUCMS1B INACTIVE NO   N/A           0

```

Figure 37. The CICSPLEX view

Action commands: None.

Hyperlinks: None.

CMAS

The CMAS view shows information about the CMASs known to the local CMAS.

Issue command:

CMAS [cmas]

cmas is the specific or generic name of a CMAS known to the local CMAS. If you omit this parameter, the view includes information about all CMASs known to the local CMAS.

Select:

CMAS from a menu of CONFIG views.

Figure 38 is an example of the CMAS view.

```

27FEB2005 14:46:30 ----- INFORMATION DISPLAY -----
COMMAND ==> SCROLL ==> PAGE
CURR WIN ==> 1 ALT WIN ==>
W1 =CMAS=====EYUCMS1A=EYUCMS1A=27FEB2005==14:46:30=CPSM=====2==
CMD Name      Status  Sysid Access  Transit  Transit
-----
EYUCMS1A ACTIVE  CM1A  LOCAL      0
EYUCMS1B ACTIVE  CM1B  ADJACENT   0

```

Figure 38. The CMAS view

The local CMAS knows about other CMASs that are:

Adjacent

There is a CMAS-to-CMAS link between the local CMAS and the other CMAS.

Indirect

The local CMAS knows about a CMAS through direct links with intermediary, or transit, CMASs.

The information in the view identifies all CMASs known to the local CMAS since it started.

Action commands: Table 22 shows the action commands you can issue from the CMAS view.

Table 22. CMAS view action commands

| Primary command | Line command | Description |
|-----------------|--------------|--|
| PURge cmas | PUR | Purges any in-storage copies of security profiles that have been inherited from other CMASs. |
| SECurity cmas | SEC | Rebuilds the in-storage external security manager (ESM) profiles for a CMAS, provided they reside in local storage. Note: The SEC command cannot rebuild ESM profiles that reside in global storage. You must use the facilities provided by your ESM to refresh those profiles. |
| SHUtdown cmas | SHU | Shut down a CMAS normally. |
| TRAcce cmas | TRA | Alter the level of CMAS component tracing that is to occur, as described in Tracing CMAS components. |

Where::

cmas is the name of a CMAS.

Hyperlinks: Table 23 shows the hyperlink field on the CMAS view.

Table 23. CMAS view hyperlink field

| Hyperlink field | View displayed | Description |
|-----------------|----------------|--|
| Name | CMASD | Detailed information about the specified CMAS. |

Tracing CMAS components

CMAS component tracing is provided for the use of IBM service personnel. CMAS trace settings are normally not active. Activating tracing may have an adverse effect on performance.

Figure 39 illustrates the panel produced when you want to change trace settings. It identifies the current trace settings for each component comprising the specified CMAS. Tracing is active when the setting is Y; it is not active when the setting is N.

```

----- Component Trace Levels for EYUCMS01 -----
COMMAND  ==>

      Overstrike the level number with a Y or N to alter the trace level

      Level
      1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2
Component -----
KNL      N N N N N N N N N N N N N N N N N N N N N N N N N N N N N
TRC      N N N N N N N N N N N N N N N N N N N N N N N N N N N N N
MSG      N N N N N N N N N N N N N N N N N N N N N N N N N N N N N
SRV      N N N N N N N N N N N N N N N N N N N N N N N N N N N N N
CHE      N N N N N N N N N N N N N N N N N N N N N N N N N N N N N
QUE      N N N N N N N N N N N N N N N N N N N N N N N N N N N N N
DAT      N N N N N N N N N N N N N N N N N N N N N N N N N N N N N
COM      N N N N N N N N N N N N N N N N N N N N N N N N N N N N N
TOP      N N N N N N N N N N N N N N N N N N N N N N N N N N N N N
MON      N N N N N N N N N N N N N N N N N N N N N N N N N N N N N
RTA      N N N N N N N N N N N N N N N N N N N N N N N N N N N N N
WLM      N N N N N N N N N N N N N N N N N N N N N N N N N N N N N
BAS      N N N N N N N N N N N N N N N N N N N N N N N N N N N N N
Press Enter to change Trace Flags.
Type END to cancel without changing.

```

Figure 39. Tracing a CMAS

To change a trace setting for a component, first move the cursor to the code for the appropriate component and then move the cursor to the right until you reach the appropriate level. Upon reaching the appropriate level, overtype the current setting with either a Y (to activate tracing) or N (to deactivate tracing).

To apply the changes to the active CMAS, press Enter. The changes take effect immediately and remain in effect until you change them or the CMAS stops.

CMASD

The CMASD view shows information about a CMAS known to the local CMAS.

Issue command:

CMASD cmas

cmas is the name of a CMAS known to the local CMAS.

Select:

CMASD from a menu of CONFIG views, being sure to specify the required parameters.

Hyperlink from:

the Name field on the CMAS view.

Figure 40 is an example of a CMASD view.

```

27FEB2005 14:46:44 ----- INFORMATION DISPLAY -----
COMMAND ==>
CURR WIN ==> 1      ALT WIN ==>
W1 =CMASD=====EYUCMS1A=EYUCMS1A=27FEB2005==14:46:44=CPSM=====
CMAS Name..... EYUCMS1A Start Date.... 27FEB2005 EYUDREP State      OPEN
JOB Name..... EYUJCM1A Start Time.... 13:22:04 IRC Status...      CLOSED
Applid..... EYUCMS1A Time Zone..... Z VTAM ACB..... OPEN
Location..... EC2L Time Offset... 0 CAS Connect.. ACTIVE
Sysid..... CM1A Daylight Time. NO CAS Id..... EYUA
Act Maxtasks.. 100 Total CPU..... 24.2 System Trace. SYSTEMOFF
Maxtasks..... 120 Total Page In. 158 User Trace... USERON
Current Tasks. 29 Total Page Out 0 GTF Trace.... GTFSTOP
Peak Amaxtask. 12 Total Real Stg 4388 AUX Trace... AUXSTART
Total Tasks... 63 CPSM Version.. 110 AUX Switch... NOSWITCH
Times at MAXT. 0 Free OSSB Cnt. 16 Max STCB..... 1
SDUMP always NO Used Free OSSB 0 NetView PPI.. NO
Getmain OSSB.. 0 NMVTS Sent... 0
Res Stat Name

Pending Queues
Connections... 0 Programs..... 0 Trans. Data.. 0
Files..... 0 Terminals..... 0 System..... 0
Journals..... 0 Transactions.. 0

```

Figure 40. The CMASD view

Action commands: Table 24 shows the action commands you can issue from the CMASD view. The overtype fields are shown in Table 25 on page 82.

Table 24. CMASD view action commands

| Primary command | Line command | Description |
|-----------------|--------------|--|
| PURge | PUR | Purges any in-storage copies of security profiles that have been inherited from other CMASs. |
| SECurity | SEC | Rebuilds the in-storage external security manager (ESM) profiles for a CMAS, provided they reside in local storage. Note: The SEC command cannot rebuild ESM profiles that reside in global storage. You must use the facilities provided by your ESM to refresh those profiles. |
| SHUtdown | SHU | Shuts down a CMAS normally. |

Table 24. CMASD view action commands (continued)

| Primary command | Line command | Description |
|-----------------|--------------|--|
| n/a | SET | Changes a CMAS attribute according to the new value you specify in an oertype field (see Table 25). Note: The value you specified in the Require Set field on the CICSplex System Manager entry panel determines whether or not you must use the SET command when you oertype a field. |
| TRAcE | TRA | Alters the level of CMAS component tracing that is to occur, as described on page 80. |

Table 25. CMASD view oertype fields

| Field name | Values |
|---------------|---|
| Act Maxtasks | 60–999 |
| Maxtasks | 60–999 |
| SDUMP Always | YES NO |
| Time Zone | B–Z |
| Time Offset | 0–59 |
| Daylight Time | YES NO |
| IRC Status | OPEN CLOSED IMMCLOSE |
| VTAM ACB | OPEN CLOSED IMMCLOSE FORCECLOSE |
| System Trace | SYSTEMON SYSTEMOFF |
| User Trace | USERON USEROFF |
| GTF Trace | GTFSTART GTFSTOP |
| AUX Trace | AUXSTART AUXSTOP AUXPAUSE AUXSWITCH |
| AUX Switch | SWITCHNEXT SWITCHALL NOSWITCH |
| NetView® PPI | YES NO |

For more information about the Time Zone, Time Zone Offset, and Daylight Time fields and their use, see the description of CICSplex SM time zone attributes in “CICSplex SM time zone attributes” on page 91.

Hyperlinks: None.

CMASPLEX

The CMASPLEX view shows information about the CICSplexes being managed by the local CMAS.

Issue command:

CMASPLEX

Select:

CMASPLEX from a menu of CONFIG views.

Figure 41 is an example of a CMASPLEX view.

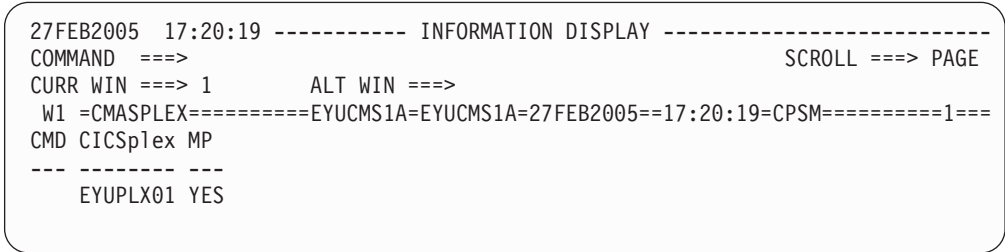


Figure 41. The CMASPLEX view

You can also use the CMASPLEX view to determine whether the local CMAS is the maintenance point (MP), for a CICSplex.

Action commands: None.

Hyperlinks: Table 26 shows the hyperlink field on the CMASPLEX view.

Table 26. CMASPLEX view hyperlink field

| Hyperlink field | View displayed | Description |
|-----------------|----------------|--|
| CICSplex | CICSPLEX | Detailed information about all CMASs associated with the specified CICSplex. |

CMTCMLND

The CMTCMLND view shows information about the link between a CMAS and the local CMAS.

The information provided by CMTCMLND view is primarily for the use of IBM service personnel; it includes diagnostic data that can be used to resolve communications-related problems.

Note: Detailed information can be displayed about any CMAS linked to the local CMAS. However, the information is current only when the connection between the CMASs is active and available for use. (When the Status field on either this view or the CMTCMLNK view contains the value CONACT, the connection state is active.)

Issue command:

```
CMTCMLND cmas
```

cmas Is the name of a CMAS linked to the local CMAS.

Select:

CMTCMLND from a menu of CONFIG views, being sure to specify the required parameters.

Hyperlink from:

the Target CMAS field of the CMTCMLNK view.

Figure 42 is an example of the CMTCMLND view.

```

27FEB2005 18:07:28 ----- INFORMATION DISPLAY -----
COMMAND ==> SCROLL ==> PAGE
CURR WIN ==> 1 ALT WIN ==>
W1 =CMTCMLNK=CMTCMLND=EYUCMS1A=EYUCMS1A=27FEB2005==18:07:13=CPSM=====1==
Target CMAS. EYUCMS1B
Sysid..... CM1B Msgs Sent..... 0 Msgs Recv.... 0
Type..... LU62 Packets Sent... 0 Packets Recv. 0
Applid..... EYUCMS1B Transit Sent... 0 Transit Recv. 0
Status..... RESET Bytes Xmit..... 0 Bytes Recv... 0
Conn Status. ACQUIRED Bytes Output... 0 Bytes Input.. 0
Serv Status. INSERVICE Schedule Time.. 0:00:00 Execute Time. 0:00:00
Transmit Time.. 0:00:00 Receive Time. 0:00:00

```

Figure 42. The CMTCMLND view

Action commands: Table 27 shows the action command you can issue from the CMTCMLND view.

Table 27. CMTCMLND view action commands

| Primary command | Line command | Description |
|-----------------|--------------|----------------------|
| DiSCard | DSC | Discard a CMAS link. |

When you discard a link between the local CMAS and another CMAS, the local CMAS is prevented from communicating with the other CMAS for as long as the local CMAS is running. (The link definition is not removed from the data repository.) You can reactivate a link by restarting the CMAS.

I

Hyperlinks: None.

CMTCMLNK

The CMTCMLNK view shows information about the links that exist between the local CMAS and one or more other CMASs.

Issue command:

CMTCMLNK [cmas]

cmas Is the specific or generic name of a CMAS linked to the local CMAS. If you omit this parameter, the view includes information about all CMASs defined to the local CMAS.

Select:

CMTCMLNK from a menu of CONFIG views.

Figure 43 is an example of the CMTCMLNK view.

```

27FEB2005 18:07:15 ----- INFORMATION DISPLAY -----
COMMAND ==>                                     SCROLL ==> PAGE
CURR WIN ==> 1          ALT WIN ==>
W1 =CMTCMLNK=====EYUCMS1A=EYUCMS1A=27FEB2005==18:07:13=CPSM=====1==
CMD Target  Sys  Type Applid  Status  Messages  Messages
--- CMAS--- ID-- ----- Sent----- Received--
EYUCMS1B CM1B LU62 EYUCMS1B RESET          0          0

```

Figure 43. The CMTCMLNK view

Action commands: Table 28 shows the action command you can issue from the CMTCMLNK view.

Table 28. CMTCMLNK view action commands

| Primary command | Line command | Description |
|-----------------|--------------|----------------------|
| DiSCard cmas | DSC | Discard a CMAS link. |

Where::

cmas Is the name of a CMAS linked to the local CMAS.

When you discard a link between the local CMAS and another CMAS, the local CMAS is prevented from communicating with the other CMAS for as long as the local CMAS is running. (The link definition is not removed from the data repository.) You can reactivate a link by restarting the CMAS.

Hyperlinks: Table 29 shows the hyperlink field on the CMTCMLNK view.

Table 29. CMTCMLNK view hyperlink field

| Hyperlink field | View displayed | Description |
|-----------------|----------------|--|
| Target CMAS | CMTCMLND | Detailed information about the link that exists between the specified CMAS and the local CMAS. |

CMLPMLND

The CMLPMLND view shows information about the physical connection that exists between the local CMAS and a specific local MAS.

The information provided by the CMLPMLND view is primarily for the use of IBM service personnel; it includes diagnostic data that can be used to resolve communications-related problems.

Note: Detailed information can be displayed about any MAS linked to the local CMAS. However, the information is current only when the connection between a MAS and its local CMAS is active and available for use. (When the Status field on either this view or the CMLPMLNK view contains the value CONACT, the connection state is active.)

Issue command:

CMLPMLND mas

mas Is the name of a MAS linked to the local CMAS.

Select:

CMLPMLND from a menu of CONFIG views, being sure to specify the required parameters.

Hyperlink from:

the MAS field of the CMLPMLNK view.

Figure 44 is an example of a CMLPMLND view.

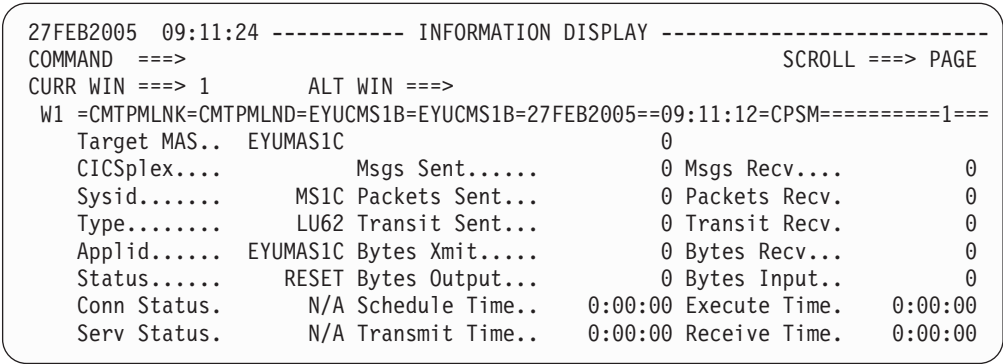


Figure 44. The CMLPMLND view

Action commands:

Hyperlinks: None.

CMLPMLNK

The CMLPMLNK view shows information about the physical connections that exist between the local CMAS and the local MASs to which it is linked.

Issue command:

CMLPMLNK [mas]

mas is the specific or generic name of a MAS linked to the local CMAS. If you omit this parameter, the view includes information about all MASs defined to the local CMAS.

Select:

CMLPMLNK from a menu of CONFIG views.

Figure 45 is an example of the CMLPMLNK view.

```

27FEB2005 18:08:43 ----- INFORMATION DISPLAY -----
COMMAND ==>
CURR WIN ==> 1      ALT WIN ==>
W1 =CMLPMLNK=====EYUCMS1B=EYUCMS1B=27FEB2005==18:08:43=CPSM=====2==
CMD Target  Sys  Type Applid  Status  CICSplex Messages  Messages
--- MAS---  ID--  -----  -----  ----- Sent----- Received--
      EYUMAS1B MS1B ESSS EYUMAS1B CONACT  EYUPLX01      6567      11
      EYUMAS1C MS1C LU62 EYUMAS1C CONACT  EYUPLX02       55      517

```

Figure 45. The CMLPMLNK view

Action commands:

Hyperlinks: Table 30 shows the hyperlink field on the CMLPMLNK view.

Table 30. CMLPMLNK view hyperlink field

| Hyperlink field | View displayed | Description |
|-----------------|----------------|---|
| MAS | CMLPMLND | Detailed information about the link that exists between the specified MAS and its CMAS. |

Chapter 6. Establishing the topology of a CICSplex

This chapter describes the topology definitions that CICSplex SM uses when constructing a single-system image of the CICS systems comprising a CICSplex. These definitions associate CICS systems with a CICSplex and, optionally, identify subsets of those systems as CICS system groups within the CICSplex.

Sections in this chapter describe:

- “Preparing to define the topology of a CICSplex”
- “CICSplex SM time zone attributes” on page 91
- “Topology definitions” on page 96
- “Managing topology definitions using the Web User Interface” on page 97
- “Managing topology definitions using the end user interface” on page 106
- “Working with MAS topology definitions using the Web User Interface” on page 135
- “Working with MAS topology definitions using the end user interface” on page 140.

Preparing to define the topology of a CICSplex

Topology definitions enable you to establish logical associations of CICS systems within your enterprise.

This means that you can combine one or more related CICS systems to form a CICSplex and, within each CICSplex, combine one or more subsets of the CICS systems to form CICS system groups.

Establishing a CICSplex

A CICSplex is identified to CICSplex SM via the **CICSplex definition** view (CPLEXDEF in the end user interface). To access this from the WUI main menu, click **Administration views—>CMAS configuration administration views—>CICSplex definition**. Once a CICSplex exists, you can assign an unlimited number CICS systems and CICS system groups to it.

The names of the CICS systems and CICS system groups associated with each CICSplex must be unique and must not exceed eight characters in length. The names can match any name that is not assigned by CICSplex SM, such as VTAM APPLIDs.

The JCL used to start the CICS systems within a CICSplex must include the EYUPARM parameters as described in the *CICS Transaction Server for z/OS Installation Guide* manual.

Combining CICS systems and CICS system groups

Although you can define a CICS system to only one CICSplex, you can assign a CICS system to multiple CICS system groups within the CICSplex. You can also assign the CICS system group to any number of other CICS system groups.

If you do not plan on using workload management facilities, there are no restrictions on how you combine CICS systems and CICS system groups to form a CICSplex. For example, you might associate CICS systems by:

- Geographic area within the CICSplex.

preparing to define the topology of a CICSplex

- Function, such as all CICS systems that are application-owning regions (AORs), file-owning regions (FORs), or terminal-owning regions (TORs).
- Application, such as the CICS systems serving as AORs, FORs, and TORs that are used by a specific application or group of applications.
- Time period, such as all CICS systems that are normally active during specific hours of the day or night.

If you do plan to use workload management facilities, you need to be aware that each CICS region may act as one or more of the following:

requesting region

The CICS region in which the work request originates.

routing region

The CICS region in which the decision is taken on where the work will run.

target region

The CICS region where the request is actioned.

For *dynamic transaction routing*, the requesting region and the routing region are typically TORs, and the target region is typically an AOR.

For *inbound DPL client requests*, the requesting region and the routing region are typically TORs, and the target region is typically an AOR.

For *EXEC CICS START commands associated with a terminal*, the requesting region is typically an AOR, the routing region is typically a TOR, and the target region is typically an AOR.

For *peer-to-peer DPL requests*, the requesting region, routing region, and target region are typically AORs.

For *enterprise bean invocations*, the requesting region is the client code that invokes the enterprise bean, the routing region is typically a CICS listener region, and the target region is typically an AOR.

You must ensure that:

- Each CICS system that is to act as a target region for specific workload processing must be in the same CICSplex as the CICS systems acting as routing regions. (The routing regions associated with a CICSplex can be in the same or different MVS images.)
- CICS systems acting as the routing regions must be at CICS/ESA Version 3 Release 3 or above and must be locally attached to a CMAS.
- For enterprise bean invocations, the routing regions and target regions must be running CICS Transaction Server Version 2 Release 1.

Components of a CICS system definition

When you define a CICS system to a CICSplex, you need to provide the following types of information:

- General

Identifying a CICS system includes such information as whether security checking is to occur and the time zone in which CICS system is located, as described on page 114.

- Workload management

For workload management to occur, you must ensure that:

- Workload management is turned on and the CICS system is identified as a routing region or target region, or both as described on page 117.
- The CICS system or its CICS system group is associated with a workload specification. To check this from the WUI main menu click **Administration views—>Workload manager administration views—>Workload specifications** (or use the EUI view WLMSPEC). This is described in the discussion of the **Workload specifications** view in *CICSplex System Manager Managing Workloads*.
- Real-time analysis
For real-time analysis to occur, you must ensure that:
 - Real-time analysis is turned on. You can also indicate whether you want to override certain values specified with the analysis specification to which this CICS system is associated.
 - The CICS system or its CICS system group is associated with an analysis specification. To check this from the WUI main menu click **Administration views—>System availability monitoring administration views—>Analysis specifications** (or use the EUI view RTASPEC). This is described in the discussion of the **Analysis specifications** view in *CICSplex System Manager Managing Resource Usage*.
The CICS system or its CICS system group can also, or instead, be associated with an analysis point specification, also described in the discussion of the **Analysis specifications** view in *CICSplex System Manager Managing Resource Usage*.
- Resource monitoring
For resource monitoring to occur, you must ensure that:
 - Resource monitoring is turned on, as described on page 121. You can also indicate whether you want to override certain values specified with the monitor specification to which this CICS system is associated.
 - The CICS system or its CICS system group is associated with a monitor specification. To check this from the WUI main menu click **Administration views—>Monitor administration views—>Monitor specifications** (or use the EUI view MONSPEC). This is described in the discussion of the **Monitor specifications** view in *CICSplex System Manager Managing Resource Usage*.
- Business application services
Identifying a CICS system to business application services includes such information as whether resource definitions should be automatically installed when the MAS connects to the CMAS, and what action should be taken if automatic installation errors occur, as described on page 123.

CICSplex SM time zone attributes

CICSplex SM uses three attributes to facilitate timing services. These attributes and their available values are:

Time Zone

B through Z

Time Zone Offset

0 through 59 minutes

Daylight Savings in effect

YES or NO

These attributes are used to help CICSplex SM:

- Standardize relative time values within a CICSplex

CICSplex SM time zone attributes

- Control CICSplex SM monitor intervals
- Schedule time-started monitor definitions, analysis definitions, and status definitions
- Schedule the time during which System Availability Monitoring (SAM) is active.

These attributes are specified for the following CICSplex SM definitions:

CMAS Using the CICSplex SM EYU9XDUT utility (as described in the *CICS Transaction Server for z/OS Installation Guide* manual).

CICSplex

Using the **CICSplex definition** view (as described in “Managing CICSplex definitions using the Web User Interface” on page 69)

CICS system

Using the CICS SYS (as described in “CICS system definitions” on page 111) or MAS views

Time period

Using the **Time period definition** view (as described in “Managing time period definitions using the Web User Interface” on page 104)

Attribute definitions

The three attributes that facilitate timing services are defined as follows:

Time Zone

CICSplex SM uses the international standard for time zones. This consists of 24 zones around the world, separated in time by 60 minutes each. The standard for these zones is the prime meridian, and time at the prime meridian is referred to as Greenwich Mean Time (GMT).

The area having Greenwich Mean Time is referred to as time zone Z. The next time zone to the east, where time is 60 minutes (one hour) *ahead of* GMT, is time zone B. When GMT is 12:00 noon, the time in time-zone B is 13:00. The next time zone to the east, 120 minutes (two hours) ahead of GMT, is time zone C. For each time zone to the east, time advances one hour, until time zone M, where local time is 12 hours ahead of GMT. Time zone M is at the international date line.

The next time zone east, time zone N, is (like time zone M) separated from GMT by 12 hours. However, because it is considered to be on the opposite side of the international date line from time zone M, it is 12 hours *behind* GMT. Similarly, the next time zone east, time zone O, is 11 hours behind GMT. When GMT is 12:00 noon, the time in time zone O is 01:00. For each time zone to the east, one hour is subtracted, until time zone Y, which is one hour behind GMT.

Note that there is no time zone A.

Time Zone Adjustment

Some locations around the world have implemented times that are different from GMT by times that are not 60 minute multiples. For situations such as these, CICSplex SM uses a time zone adjustment. To define the time zone of such a location to CICSplex SM, the time zone of the next lowest 60 minute multiple is used, and the difference, in minutes, between the 60 minute multiple and the location's time is entered as the Time Zone Adjustment. For example, when the time is 13:00 in London, England (this is GMT, or time zone Z), it is 22:00 in Tokyo, Japan (time zone J), and 22:30 in Adelaide, Australia. To define Adelaide's location to CICSplex SM,

the time zone is specified as time zone J, and the time zone adjustment is specified as 30 (to indicate that the time in Adelaide has 30 minutes *added* to the time in the adjacent time zone to the west).

Daylight Savings

Some locations around the world modify their time offset from GMT twice a year. Usually, the first change occurs in March or April, when local standard time (LST) is moved *ahead* by one hour, creating local daylight savings time (LDST). For locations in time zones Z through M, LDST is one hour farther ahead of GMT. For locations in time zones N through Y, LDST is one hour closer to GMT. In October or November, locations that use LDST usually change back to LST. Time in these locations then reverts to the standard difference from GMT.

For operation of CICSplex SM, sites in locations that make use of LDST *must* modify the appropriate CICSplex SM definition twice a year. This means indicating YES to daylight savings when LDST is in effect, and NO when LST is in effect. When the daylight savings indicator is NO, CICSplex SM considers an entity in that time zone to be the normal number of hours from GMT. When the daylight savings indicator is YES, CICSplex SM considers that entity to be one hour further ahead of GMT (than during standard time) for time zones Z through M, and one hour closer to GMT for time zones N through Y.

Note: After changing the system time to adjust for LDST, you need to use the PERFORM RESETTIME command in the CMAS.

Attribute usage

You make use of the three attributes that facilitate timing services when you specify the following definitions:

CMAS In order to ensure consistent timing services, CICSplex SM requires that the attribute settings within a CMAS accurately reflect the time in effect for the location in which that CMAS executes.

There are three uses for these attributes in a CMAS:

- To coordinate time services throughout a CICSplex, CICSplex SM bases all of its timing on GMT. When a CMAS is started, CICSplex SM calculates how a standard hardware clock must be modified to achieve GMT. This is done in one of two ways, depending upon the setting of the MVS CVT data field CVTTZ:
 - **When the CVTTZ data field is non-zero, CICSplex SM assumes that the hardware clock value is GMT, and does not modify it.**
 - **When the CVTTZ data field is zero, CICSplex SM uses the time zone, time zone adjustment, and daylight savings indicator in the CMAS to calculate the value needed to modify the hardware clock.**

Note that the contents of the CVTTZ data field are based upon the SYS1.PARMLIB(CLOCKxx) member:

- If the CLOCKxx member indicates that the Sysplex Timer is in use, the CVTTZ data field is set based upon the contents of the Sysplex Timer.
- If the CLOCKxx member indicates that the Sysplex Timer is not in use, the CVTTZ data field is set based upon the contents of the CLOCKxx member TIMEZONE operand.

- When an analysis definition or status definition is installed within an analysis point specification that is controlled by the CMAS, and the definition is scheduled for a timed install (because the definition is associated with a period definition), then the time zone, time zone adjustment and daylight savings indicator of the CMAS determine when the definition is installed, provided that the period definition indicates that the install time should be local time.
- When a CICS system is defined to CICSplex SM, the time zone, time zone adjustment and daylight savings indicator can be explicitly set, or they can be inherited from the CMAS to which the CICS system connects.

CICSplex

Because a CICSplex may encompass many different time zones, and in order to ensure consistency within the CICSplex, it is required that a single set of attributes be chosen to represent the CICSplex. It is not necessary that the attributes chosen match the attributes of the maintenance point CMAS of the CICSplex, or any other CMAS.

There is one use for the time zone attributes in a CICSplex:

- When a CICSplex becomes active, and monitoring will be active, a monitor interval is determined based upon the setting in the CICSplex definition. This monitor interval is used to reset monitor data collected from CICS system. Because each CMAS in the CICSplex stores the monitor data for the CICS systems connected to it, in order for all monitor data within the CICSplex to be consistent the reset takes place at all CMASs at exactly the same real time, regardless of the locations of the CMASs. To compute the time for the reset, the time zone attributes of the CICSplex are used.

CICS system

Unlike the attribute requirements for a CMAS, the time zone attributes for a CICS system can be set to reflect a location different from that where the CICS system actually executes. For example, if the system executes in one time zone, but is primarily used by operators in another time zone, you may prefer to set the attributes to match the time zone of the operators, instead of matching the time zone where the system executes. CICSplex SM supports either actual or logical attributes for CICS systems.

There are three uses for these attributes in a CICS system:

- When a monitor definition is installed within a monitor specification within the CICS system, and the monitor definition is scheduled for a timed install (because the monitor definition is associated with a period definition), the time zone, time zone adjustment and daylight savings indicator of the CICS system are used to determine when to install the definition, provided that the period definition indicates that the install time should be local time.
- When an analysis definition or status definition is installed within an analysis specification within the CICS system, and the analysis definition is scheduled for a timed install (because the definition is associated with a period definition), the time zone, time zone adjustment, and daylight savings indicator of the CICS system are used to determine when to install the definition, provided that the period definition indicates that the install time should be local time.
- When a CICS system has System Availability Monitoring (SAM) active (the CICS system definition contains both a primary CMAS and an active period), the time zone, time zone adjustment, and daylight savings

indicator of the CICS system are used to determine when the system should be active, provided that the period definition indicates that the time period should be local time.

Period definition

Period definitions are used by CICSplex SM to schedule timed events. A period definition is defined as a starting time, an ending time, and time zone attributes. Period definitions use only two of the time zone attributes: the time zone and the time zone adjustment.

There are three uses of period definitions:

- For System Availability Monitoring (SAM). This occurs when both a primary CMAS and a period definition are associated with a CICS system definition.

Note: If no **Period definition name** is specified in the **Administration views**—>**System availability monitoring administration views**—>**CICS system definition** detail view (CICSSYS in the end user interface), SAM is not activated for that CICS system.

- For timed install of monitor definitions. This occurs when a period definition is associated with a monitor definition when the monitor definition is added to a monitor group, and the monitor group is installed into a CICS system.
- For timed install of analysis definitions and status definitions. This occurs when a period definition is associated with an analysis definition or a status definition when the definition is added to an analysis group, and the analysis group is installed into a CICS system or an analysis point specification.

For a period definition, there are two differences from other uses of the time zone attributes:

- Time zone A is accepted by a period definition. Use of time zone A indicates that the time associated with the period definition reflects the local time of the entity (CMAS or CICS system).
- When a period definition is defined with a time zone of A, the time zone adjustment specified in the period definition is ignored.

When a period definition is for time zone A, all events controlled by that period definition become active at the same *clock* time, based upon the start time specified in the period definition, and the time zone, time zone adjustment, and daylight saving indicator within the entity (CMAS or CICS system). Similarly, events become inactive at the same *clock* time, based upon the end time specified in the period definition, and the time zone, time zone adjustment, and daylight saving indicator within the entity (CMAS or CICS system).

When a period definition is for a time zone other than time zone A, all events controlled by that period definition become active at exactly the same *real* time, regardless of the time zone in which the events are occurring. The activation time is based upon the period definition's start time, time zone, and time zone adjustment. Similarly, events controlled by that period definition become inactive at the same *real* time, based upon the period definition's ending time, time zone, and time zone adjustment. For both activation and deactivation, the time zone specified refers to the standard time for that time zone (LST), regardless of whether daylight saving time is in effect.

Topology definitions

Figure 46 illustrates the relationship between the topology definitions establishing a CICSplex and the views used to create and maintain those definitions. Notice that the definitions are stored in the data repositories of all CMASs participating in the management of the CICSplex. (For additional information about the data repository, see the description on page 58.)

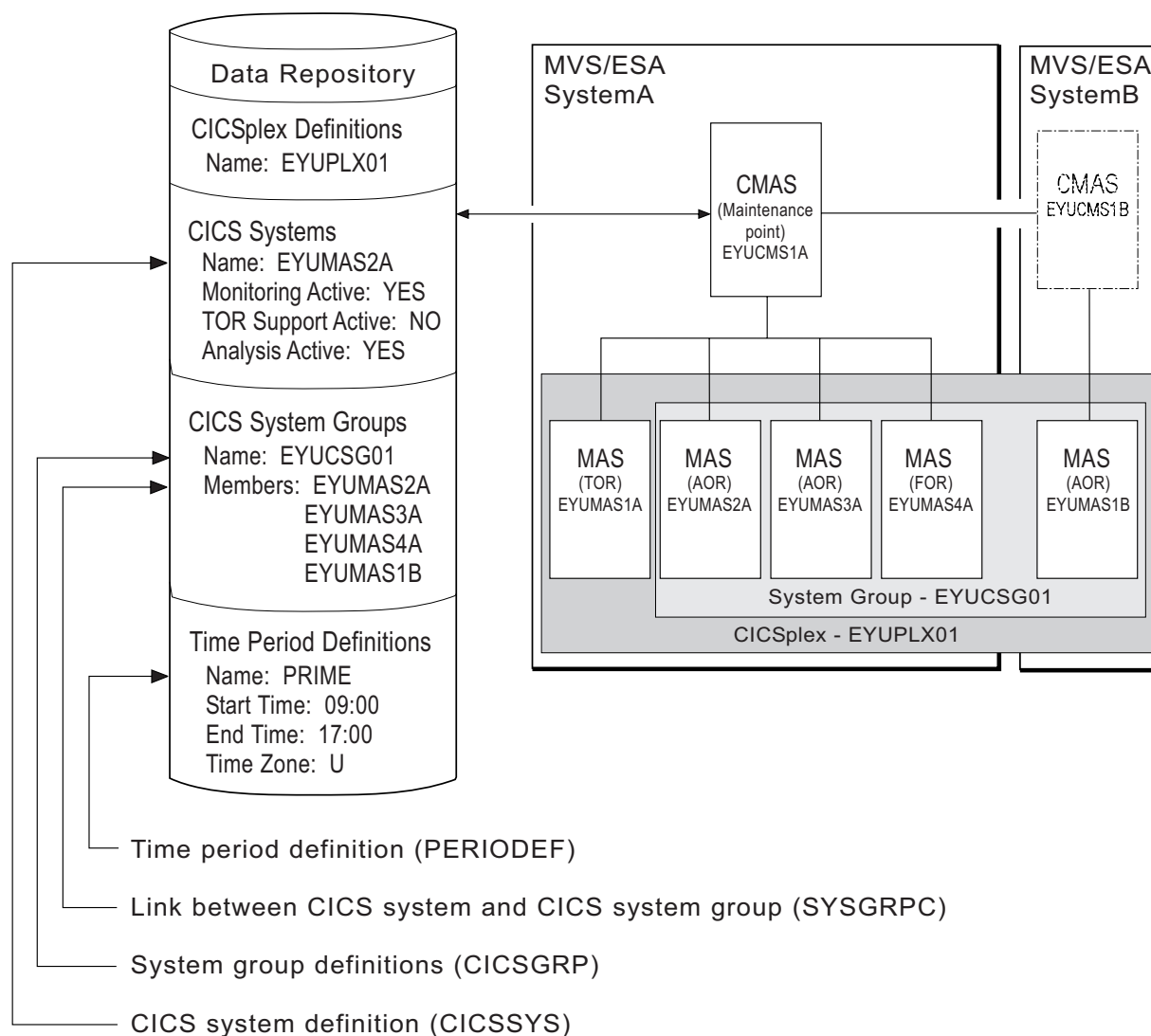


Figure 46. The relationship between CICSplex components and the topology views

In addition, you can use the **CICSplex SM operations views**—>**Runtime MAS display** view (EUI view MAS) to manage an active CICS system as indicated in Table 4 on page 16, and described in “Working with MAS topology definitions using the Web User Interface” on page 135.

Note: Using the **Administration views**—>**System availability monitoring administration views**—>**CICS system definition** and **Administration views**—>**System availability monitoring administration views**—>**Time period definition** views to update definitions affects both a currently running

system and the definitions in the data repository. Updates made using the **Runtime MAS display** (MAS) view, however, are not included in the data repository.

Managing topology definitions using the Web User Interface

You can manage topology definitions in the WUI using a series of views accessed by clicking **Administration views—>Topology administration views**. Table 31 summarizes the topology management tasks you can carry out using these views:

Table 31. Web User Interface topology management tasks

| Web User Interface view | Resource name | Task |
|--|---------------|---|
| CICS system definition | CYSDEF | <ul style="list-style-type: none"> Create, update or remove CICS system. definitions. Add CICS systems to a CICS system group definition. |
| System group definition | CYSGRP | <ul style="list-style-type: none"> Create, update or remove CICS system group definitions. Add CICS systems or system groups to a CICS system group definition. |
| CICS system group to CICS system group link | CSGLCGCG | Create or remove CICS system group to CICS system group links. |
| Link between CICS system and CICS system group | CSGLCGCS | Create or remove CICS system to CICS system group links. |
| Time period definition | PERIODEF | Create, update or remove a time period definition |

Reminder: Unless noted otherwise, only the context setting is recognized when you are creating and maintaining topology definitions.

The remainder of this section describes how to use the WUI to perform some typical topology tasks.

Managing CICS system group definitions using the Web User Interface

A CICS system group identifies a subset of the CICS systems comprising a CICSplex. Each subset can consist of one or more CICS systems, CICS system groups, or both. They are referred to as the *members* of a CICS system group.

The remainder of this section describes a typical CICS system group definition task using the Web User Interface.

Creating a CICS system group definition using the Web User Interface

Follow this procedure to create a CICS system group definition and add it to the data repository.

1. Click **Topology administration views—>CICS system group definitions** to open the **System group definition** tabular view .

CICS system group definitions

This view displays a summary any CICS system groups already defined to the CICSplex.

2. If you want to use some of the information from an existing definition in the creation of your new definition, select an existing definition by selecting a check box in the **Record** column
3. Click the **Create** action button.
This opens the **System group definition** create panel.
4. Provide the following information.

System group name

Specify a 1- to 8-character name for the CICS system group. The name can contain alphabetic, numeric, or national characters. However, the first character must be alphabetic.

Note: The name of a CICS system group must be unique within the CICSplex identified as the context; it should not be the same as the name of another CICS system group, a CICS system, or the CICSplex itself.

Description

(Optional.) Specify a 1- to 30-character description of the CICS system group.

5. Click **Yes** to add the CICS system group definition to the data repository.

There is no limit to the number of CICS system groups you can associate with a CICSplex.

Working with CICS system definitions

In order to be managed by CICSplex SM, a CICS system must be associated with a CICSplex that is defined to CICSplex SM. The definition establishing this association also contains information about how the CICS system is to use the workload management, real-time analysis, resource monitoring, and business application services components of CICSplex SM.

To display information about CICS systems defined to a CICSplex, use the **CICS system definition** view, which is accessed from the **Topology administration views** menu.

The remainder of this section consists of some typical CICS system definition tasks using the Web User Interface.

Creating a CICS system definition using the Web User Interface

Follow this procedure to create a CICS system definition and add it to the data repository.

1. Click **Topology administration views—>CICS system definitions** to open the **CICS system definition** tabular view.

This view displays a summary any CICS systems already defined to the CICSplex.

2. If you want to use some of the information from an existing definition in the creation of your new definition, select an existing definition by selecting a check box in the **Record** column
3. Click the **Create** button.

This opens the **CICS system definition** create panel. This is a large panel with attributes divided into groups.

4. Type in the following general information.

CICS system definition name

Specify a 1- to 8-character name for the CICS system to be associated with the CICSplex identified as the context. The name can contain alphabetic, numeric, or national characters. However, the first character must be alphabetic.

Note: The name of a CICS system must be unique within the CICSplex; it should not be the same as the name of another CICS system, a CICS system group, or the CICSplex itself.

Make sure that the name you specify here matches the name you specify with the EYUPARM parameter NAME in the start up JCL for the CICS system. (See the *CICS Transaction Server for z/OS Installation Guide* manual for additional information.)

Description

(Optional.) Specify a 1- to 30-character description of the CICS system.

Primary CMAS name

(Required only for system availability monitoring, as described in *CICSplex System Manager Managing Resource Usage*) Specify the name of the CMAS that should be assigned the task of monitoring the availability of this CICS system.

When the CICS system is part of a CICSplex that is managed by a single CMAS, specify the name of that CMAS.

When multiple CMASs are involved in managing the CICSplex, identify the CMAS to which the CICS system normally connects. Naming a CMAS does not prevent the CICS system from connecting to another CMAS when, for example, the primary CMAS is not available.

If the designated CMAS is not available and:

- It is the only CMAS managing the CICSplex with which the CICS system is associated, the CICS system is not known to CICSplex SM.
- There are multiple CMASs involved in managing the CICSplex, the secondary CMAS, as specified in the APCMAS view, takes over availability monitoring.

For an active system, data entered in this field takes effect when you press Enter.

Period definition name

(Required only for system availability monitoring, as described in *CICSplex System Manager Managing Resource Usage*) Specify the name of the period definition that identifies the hours during which this CICS system is to be running. (You can use the **Time period definition** view, as described in Table 4 on page 16, to display a list of existing time period definitions.) You can specify any appropriate name. If the name you specify does not belong to an existing period definition, you can create that period definition later.

This name plus the Primary CMAS name are used by system availability monitoring (SAM) to generate external notifications when the CICS system is not active during its defined hours of operation.

For an active system, data entered in this field takes effect when you press Enter.

CICS VTAM application ID

Specify the VTAM application ID of the CICS system.

Note: See *CICSplex System Manager Managing Business Applications* for information on changing this value and the impacts on SYSLINKs.

System ID

Specify the 4-character system ID of the CICS system. The value specified must match the CICS SYSIDNT SIT operand or override. If the SYSIDNT value used by the MAS does not match the CICSSYS definition, the topology connect of CICS will fail.

Note: See *CICSplex System Manager Managing Business Applications* for information on changing this value and the impacts on SYSLINKs.

5. Type in the following security information.

Simulated CICS command security checking

Indicate whether CICSplex SM security checking is to simulate CICS command checking for this CICS system. Specify:

YES Simulate CICS security checking for this CICS system.

NO Do not simulate CICS security checking for this CICS system.

* Use the value assigned to the CICSplex with which this CICS system is associated.

Simulated CICS resource security checking

Indicate whether CICSplex SM security checking is to simulate CICS resource checking for this CICS system. Specify:

YES Simulate CICS resource checking for this CICS system.

NO Do not simulate CICS resource checking for this CICS system.

* Use the value assigned to the CICSplex with which this CICS system is associated.

Exemption from simulated security checks

Indicate whether all simulated CICS security checking is to be bypassed for this CICS system. Specify:

YES Bypass all simulated CICS security checking for this CICS system.

NO Do not bypass simulated CICS security checking for this CICS system.

* Use the value assigned to the CICSplex with which this CICS system is associated.

6. Type in the following time zone information.

Time zone

Identify the time zone in which this CICS system is located by specifying:

- A code in the range B through Z. (See Table 32 on page 105 for a description of these codes.)
- * (asterisk), to inherit the time zone offset assigned to the CMAS to which this CICS system is connected, or the primary CMAS, if the CICS system is inactive.

Note: If you specify * (asterisk) for any one of the time fields, you must specify asterisk for all three time fields.

For an active system, data entered in this field takes effect when you press Enter.

Time zone offset

Indicate the adjustment value that is to be applied to the computed time. This value is used to resolve time references in areas that do not use a standard zone. Specify:

- A value between 0 and 59 to identify the number of minutes to be added to the time for that time zone (for areas that do not use a standard time zone).
- * (asterisk), to inherit the time zone offset assigned to the CMAS to which this CICS system is connected, or the primary CMAS, if the CICS system is inactive.

Daylight savings in effect

Indicate whether you are currently recognizing daylight saving time. Specify:

YES Recognize daylight saving time.

NO Do not recognize daylight saving time.

* Use the value assigned to the daylight time indicator assigned to the CMAS to which this CICS system is connected, or the primary CMAS, if the CICS system is inactive.

7. Type in the following workload management information.

Workload manager status

Indicate whether or not workload management is to be used.

AOR dynamic routing mode

Indicate whether or not this region can act as a routing region when CICS is started. Specify:

YES Workload management is to be active.

The CICS system is assumed to be a routing region that is associated with an appropriate workload specification.

NO Workload management is not to be active.

8. Provide the following real time analysis (RTA) information.

Real time analysis status

Indicate whether or not the system availability monitoring (SAM) and MAS resource monitoring (MRM) components of real-time analysis are to be active when this CICS system is started. Specify:

Actions for system monitoring events

For each event type identify the action definition to be used when generating notification about the designated predefined condition. Specify:

name The specific or generic name of an existing action definition.

inherit

The action definition is inherited from the analysis specification.

Severities for monitoring events

For each event type indicate how the predefined condition is to be handled. Specify:

level The severity level that is to be associated with the designated condition. The severity levels are:

N_a Exclude this condition from monitoring

Inherit

Severity level is inherited from the analysis specification

Vls Very low severity

Ls Low severity

Lw Low warning

Nm Normal warning

Hw High warning

Hs High severity

Vhs Very high severity

9. Provide the following monitoring information.

Monitoring active

Indicate whether resource monitoring is to be active when this CICS system is started. Specify:

YES Resource monitoring is to be active.

For this to occur, the CICS system must be associated with a monitor specification.

NO Resource monitoring is not to be active.

***** Resource monitoring activity depends on the value specified with the monitor specification to which this CICS system is associated.

Specify YES or NO to override the value in the comparable field of the monitor specification associated with this CICS system. Specify * (asterisk) when the value specified with the monitor specification is to be used.

Time data is kept after monitoring stops

Specify the number of minutes collected data is to be kept after resource monitoring stops. (Resource monitoring stops when the CICS system stops or when the MAS view command is used to stop resource monitoring for the CICS system.)

The retention period can be:

1 - 1440

Collected data is to be kept the specified number of minutes.

0 Collected data is not to be kept.

blank The CICS system is to use the value specified with its associated monitor specification.

Sample intervals for resource types

For each type of resource you want to monitor, specify how long, in seconds, CICSplex SM is to wait between the collection of sample data. You can specify a sample interval for:

- CICS Region, Global, or DB2 resources, which do not require a monitor definition. These types provide monitoring of the following resources:

CICS Region

CICS regions and dynamic storage areas

Global

Transient data queue usage, temporary storage queue usage, LSR pools, transaction classes, and FEPI connections

DB2 DB2 threads

- Resource types for which you created a monitor definition (such as connections or files)

The sample interval can be:

1 - 86400

A value evenly divisible into the monitor interval value, when converted to seconds. If you specify a value that is not evenly divisible, you are prompted for one that is.

Note: The lower you set the sampling interval, the greater the impact on processing overhead.

0 No resource monitoring is to occur.

blank The CICS system is to use the value specified with its associated monitor specification.

10. Provide the following Business Application Services (BAS) information.

Install BAS resources option

Indicate whether resources associated with the system through a resource description should be automatically installed when the MAS connects to the CMAS. Specify:

Always

Install resources every time the MAS connects after a CICS startup.

Coldonly

Install resources only when the MAS connects after a CICS INITIAL or COLD start.

Never Resources should never be automatically installed in this CICS system.

Warmonly

Install resources only when the MAS connects after a CICS warm start or emergency restart (AUTO).

Notes:

- a. You can also control the automatic installation of specific resources using the Auto Install field on a resource description.
- b. System links (SYSLINKs) are not controlled by resource descriptions. Therefore, either all SYSLINKs for a given CICS system are automatically installed or none are, depending on the Install Resources value for that system.

BAS install failure action

Indicate what action should be taken when automatic resource installation errors occur. Specify:

Continue

Continue installing other resource definitions. A CICSplex SM message is issued to the console and CMAS EYULOG.

Immediate

Shut down the CICS system immediately. A CICSplex SM message is issued to the console and CMAS EYULOG.

Normal

Shut down the CICS system normally. A CICSplex SM message is issued to the console and CMAS EYULOG.

Prompt

Prompt the operator console for an action. The resource installation process is suspended, but all other MAS processing continues. A CICSplex SM message is issued to the console and CMAS EYULOG.

Terminate

Terminate the resource installation process. A CICSplex SM message is issued to the console and CMAS EYULOG. No more resource definitions are processed. Any resource definitions that were successfully installed are not removed.

11. Click **Yes**.

The CICS system definition is added to the data repository and the **CICS system definition** tabular view is redisplayed.

Adding a CICS system to a CICS system group using the Web User Interface

Follow this procedure to add a CICS system definition to an existing CICS system group in the data repository.

CICS system definitions

1. Click **Topology administration views**—>**CICS system definitions** to open the **CICS system definition** tabular view.
This view displays a summary of any CICS systems already defined to the CICSplex.
2. Select one of the listed CICS system definitions and click **Add to CICS system group**.
This opens a new panel.
3. Specify the name of an existing CICS system group to which the CICS system is to be associated and click **Yes**.
The CICS system is added to the specified CICS system group and the **CICS system definition** panel is redisplayed.

Note: If you are using the Business Application Services component, adding a CICS system to a CICS system group could result in inconsistent resource set or inconsistent scope errors. For information about this type of problem and how to resolve it, see the *CICSplex System Manager Managing Business Applications* manual.

Managing time period definitions using the Web User Interface

A time period definition identifies a specific range of hours and minutes. These definitions are used with resource monitoring and real-time analysis to designate when specific actions are to start and stop.

Creating a time period definition

Follow this procedure to create a time period definition in the data repository.

1. Click **Administration views**—>**Topology administration views**—>**Time period definitions**.
This opens the **Time period definition** tabular view, which displays a summary any time period definitions already defined.
2. If you want to use some of the information from an existing definition in the creation of your new definition, select an existing definition by selecting a check box in the **Record** column.
3. Click the **Create** action button.
This opens the **Time period definition** create panel.
4. Provide the following information, as appropriate:

Definition name

Specify a 1- to 8-character name for the time period definition. The name can contain alphabetic, numeric, or national characters. However, the first character must be alphabetic.

Description

Specify a 1- to 30-character description of the time period.

Start time

Specify the hour and minute at which the time period is to start.

End time

Specify the hour and minute at which the time period is to end.

Time zone

Specify one of the codes shown in Table 32 on page 105 to identify the time zone to which the period definition is to apply.

Zone adjustment

Specify a value between 0 and 59 to identify the number of minutes to be added to the time for that time zone (for areas that do not use a standard time zone).

5. Click **Yes**.

The new time period definition is added to the data repository and the **Time period definition** panel is redisplayed.

Time zone codes: Table 32 identifies the time zone codes that you can use in a time period definition. The codes represent the single-character Greenwich time zone codes and are based on the 24 standard international time zones. Each code indicates the time zone's relationship to Greenwich Mean Time (GMT).

Time zone setting in a period definition: When a period definition is for time zone A, all events controlled by that period definition become active at the same *clock* time, based upon the start time specified in the period definition, and the time zone, time zone adjustment, and daylight saving indicator within the entity (CMAS or CICS system). Similarly, events become inactive at the same *clock* time, based upon the end time specified in the period definition, and the time zone, time zone adjustment, and daylight saving indicator within the entity (CMAS, or CICS system).

When a period definition is for a time zone other than time zone A, all events controlled by that period definition become active at exactly the same *real time*, regardless of the time zone in which the events are occurring. The activation time is based upon the period definition's start time, time zone, and time zone adjustment. Similarly, events controlled by that period definition become inactive at the same *real time*, based upon the period definition's ending time, time zone, and time zone adjustment. For both activation and deactivation, the time zone specified refers to the standard time for that time zone, regardless of whether daylight saving time is in effect.

For more information about the time zone attributes and their use, see "CICSplex SM time zone attributes" on page 91.

Table 32. Timezone codes

| Code | GMT offset | Description | Code | GMT offset | Description |
|------|------------|-----------------------|------|------------|---------------------------------|
| A | n/a | Current local time* | N | -12 | (West of date line) |
| B | +1 | Central European time | O | -11 | Bering standard time |
| C | +2 | Eastern Europe | P | -10 | Hawaii and Alaska standard time |
| D | +3 | Arabia | Q | -9 | Yukon standard time |
| E | +4 | Pakistan | R | -8 | Pacific standard time |
| F | +5 | Bay of Bengal | S | -7 | Mountain standard time |
| G | +6 | Thailand | T | -6 | Central standard time |
| H | +7 | Philippines | U | -5 | Eastern standard time |
| I | +8 | Australia | V | -4 | Atlantic standard time |
| J | +9 | Japan | W | -3 | Greenland |
| K | +10 | New Caledonia | X | -2 | Azores |
| L | +11 | New Zealand | Y | -1 | Iceland |
| M | +12 | (East of date line) | Z | 0 | Greenwich mean time (GMT) |

***Note:** Time zone A can be specified only in a period definition

Managing topology definitions using the end user interface

You can access a topology view by doing any of the following:

- For all topology views, issuing the MENU ADMTOPOL command and selecting the view from the menu that is displayed. (The menu is shown in Figure 47.)
- Issuing the appropriate topology view command.
- Initiating a hyperlink from one view to another by placing the cursor on a hyperlink field and pressing Enter.

```

27FEB2005 19:34:08 ----- INFORMATION DISPLAY -----
COMMAND ===>                                SCROLL ===> PAGE
CURR WIN ===> 1          ALT WIN ===>
W1 =MENU=====EYUPLX01=EYUPLX01=27FEB2005==19:34:08=CPSM=====6===
CMD Name          Description
-----
ADMTOPOL          Topology Administration Views
CICSSYS           CICS System Definitions
CICSGRP           CICS System Group Definitions
SYSGRPC           Members of CICS System Groups
PERIODEF          Time Period Definitions

```

Figure 47. The ADMTOPOL menu

For additional information about accessing views, see page 3.

Reminder: Unless noted otherwise, only the context setting is recognized when you are creating and maintaining topology definitions. For additional information about setting the context to a CICSplex, see *CICSplex System Manager User Interface Guide*.

The remainder of this chapter contains detailed descriptions of the topology views.

CICS system group definitions

A CICS system group identifies a subset of the CICS systems comprising a CICSplex. Each subset can consist of one or more CICS systems, CICS system groups, or both. They are referred to as the *members* of a CICS system group.

Managing CICS system group definitions using the end user interface

To display information about existing CICS system groups, issue the command:

```
CICSGRP [sysgroup]
```

where *sysgroup* is the specific or generic name of a CICS system group known to the CICSplex identified as the context. If this parameter is omitted, the view, illustrated in Figure 48 on page 107, includes information about all existing CICS system groups associated with the CICSplex identified as the context.


```

27FEB2005 17:05:25 ----- INFORMATION DISPLAY -----
COMMAND ==>                                SCROLL ==> PAGE
CURR WIN ==> 1          ALT WIN ==>
W1 =CICSGRP=====EYUPLX01=EYUPLX01=27FEB2005==17:05:25=CPSM=====4===
CMD System      Description
--- Group      -----
EYUCSG01 SSet - AORs/FORs on EYUPLX01
EYUCSG03 SSet - All AORs in EYUPLX01
EYUCSG04 SSet - EYUA AORs in EYUPLX01
EYUCSG05 SSet - EYUB AORs in EYUPLX01

```

Figure 48. The CICSGRP view

Action commands and oertype fields: Table 33 summarizes the action commands you can use with the CICSGRP view. Table 34 on page 108 identifies the oertype field you can modify when you use the SET action command.

Table 33. CICSGRP view action commands

| Primary command | Line command | Description |
|-----------------|--------------|--|
| n/a | ADD | Add a CICS system or CICS system group to a CICS system group definition, as described on page 109. |
| n/a | BAS | Display a visual map of business application services definitions using the specified group as a starting point. |
| n/a | BRO | Browse a CICS system group definition in the data repository. |
| CREate | CRE | The format of the resulting panels is identical to that shown in Figure 49 on page 108. All of the fields are nonmodifiable. Create a CICS system group definition and add it to the data repository, as described on page 108. |
| n/a | MAP | Display a visual map of CICSplex SM definitions, using the specified group as a starting point. You are prompted to specify the type of definitions you want to map: business application services (BAS), resource monitoring (MON), real-time analysis (RTA), or workload management (WLM). |
| n/a | MON | Display a visual map of resource monitoring definitions using the specified group as a starting point. |
| n/a | REM | Remove a CICS system group definition from the data repository, as described on page 110. |
| n/a | RTA | Display a visual map of real-time analysis definitions using the specified group as a starting point. |
| n/a | SET | Change a CICS system group definition description using an oertype field. Note: The value you specified in the Require Set field on the CICSplex SM entry panel determines whether or not you must use the SET command when you oertype a field. |
| TEMPMP cmas | n/a | Change the temporary maintenance point CMAS to a specific CMAS or display a selection list based on a generic CMAS ID. |

Table 33. CICSGRP view action commands (continued)

| Primary command | Line command | Description |
|-----------------|--------------|---|
| n/a | UPD | Update a CICS system group definition in the data repository. |
| n/a | WLM | The format of the resulting panels is similar to that shown in Figure 49. Most of the fields in the panel are modifiable. Display a visual map of workload management definitions using the specified group as a starting point. |

Table 34. CICSGRP view oertype field

| Field name | Value |
|-------------|--|
| Description | 1- to 30-character description of the CICS system group. |

Hyperlink fields: Table 35 shows the hyperlink field on the CICSGRP view.

Table 35. CICSGRP view hyperlink fields

| Hyperlink field | View displayed | Description |
|-----------------|----------------|--|
| System Group | SYSGRPC | Identifies the members of the specified CICS system group. |

Creating a CICS system group definition: Figure 49 shows the format of the panel produced when you use the create primary (CREate) or line (CRE) action command from the CICSGRP view.

```

----- Create System Group for EYUPLX01 -----
COMMAND  ===>

System Group name  ===> EYUCSG01
Description        ===> Starter Set System Group 1

Press Enter to Create the System Group.
Type END or CANCEL to cancel without creating.
```

Figure 49. Creating a CICS system group definition.

Provide the following information, as appropriate:

System Group

Specify a 1- to 8-character name for the CICS system group. The name can contain alphabetic, numeric, or national characters. However, the first character must be alphabetic.

Note: The name of a CICS system group must be unique within the CICSplex identified as the context; it should not be the same as the name of another CICS system group, a CICS system, or the CICSplex itself.

Description

(Optional.) Specify a 1- to 30-character description of the CICS system group.

Press Enter to add the CICS system group definition to the data repository.

There is no limit to the number of CICS system groups you can associate with a CICSplex.

Adding a member to a CICS system group: Figure 50 illustrates the panel produced when you use the add (ADD) line action command from the CICSGRP view.

```

----- Add Member to System Group for EYUPLX01 -----
COMMAND  ==>

System Group Name  EYUCSG02
Description        Starter Set System Group 2

Member            ==>                                CICS System, Group or Generic

Component Spec      Inherit

MON               EYUMOS01 NULL
WLM               EYUWMS01 NULL
RTA               EYURTS01 NULL

Press Enter to add Member to System Group.
Type END or CANCEL to cancel without adding.

```

Figure 50. Adding a member to a CICS system group

Provide the following information, as appropriate:

Member

Specify the name of an existing CICS system or CICS system group that is to be associated with the CICSplex identified as the context.

Inherit

(Required when adding a CICS system to a CICS system group.) Indicate whether the CICS system is to inherit the resource monitor (MON), real-time analysis (RTA), or workload management (WLM) specification from the CICS system group to which you are associating it. Specify:

KEEP The CICS system is to keep the specification currently associated with it. No action is taken if the CICS system is not currently associated with a specification.

FORCE

The CICS system is to inherit the specification associated with the CICS system group. When a CICS system is currently associated with a specification, but the CICS system group is not associated with any specification, the CICS system retains the current specification.

NULL The CICS system is to inherit the specification associated with the CICS system group only if the CICS system is not currently associated with a specification. If the CICS system is already associated with a specification, it is to retain that specification.

The Spec field contains the name of the specification, if any, for a CICSplex SM component that is currently associated with the CICS system group.

A CICS system in a CICS system group cannot inherit a specification from another CICS system group.

Press Enter to add this association to the data repository.

There is no limit to the number of members you can associate with a CICS system group.

Note: If you are using the Business Application Services component, adding a CICS system to a CICS system group could result in inconsistent resource set or inconsistent scope errors. For information about this type of problem and how to resolve it, see the *CICSplex System Manager Managing Business Applications* manual.

Removing a CICS system group: Figure 51 illustrates the panel produced when you use the remove (REM) line action command from the CICSGRP view.

The line containing MON, RTA, or WLM component information is included in the panel only if the CICS system group has a specification associated with it.

```

----- Remove System Group for EYUPLX01 -----
COMMAND  ==>

System Group Name  EYUCSG01
Description

Component Spec    Action
MON             SPEC1  KEEP
WLM             SPEC2

Press ENTER to remove the System Group.
Type END or CANCEL to cancel without removing.

```

Figure 51. Removing a CICS system group

Provide the following information:

Action

Indicate how the CICS systems comprising the CICS system group are to use any specifications associated with the CICS system group. Specify:

KEEP Those CICS systems that inherited a specification from the CICS system group are explicitly assigned the specification.

DROP Those CICS systems that inherited a specification from the CICS system group are not to use that specification.

If a specification is associated with a CICS system group, DROP is the default value that appears in the Action field when this panel is displayed.

Press Enter to remove the CICS system group definition from the data repository.

Associations between the CICS system group and its members are removed when the CICS system group is removed.

CICS system definitions

In order to be managed by CICSplex SM, a CICS system must be associated with a CICSplex that is defined to CICSplex SM. The definition establishing this association also contains information about how the CICS system is to use the workload management, real-time analysis, resource monitoring, and business application services components of CICSplex SM.

To display information about CICS systems defined to a CICSplex, issue the command:

```
CICSSYS [sysname]
```

where sysname is the specific or generic name of a CICS system known to the CICSplex identified as the context. If this parameter is omitted, the view, illustrated in Figure 52, includes information about all CICS systems associated with the CICSplex identified as the context.

```
27FEB2005 11:30:30 ----- INFORMATION DISPLAY -----
COMMAND ===>
CURR WIN ===> 1          ALT WIN ===>
W1 =CICSSYS=====EYUPLX01=EYUCSG01=27FEB2005==11:30:30=CPSM=====4===
CMD  CICS      Description                                Model
---  System---  -----
      EYUMAS1A   Starter Set TOR 1 on System A
      EYUMAS1B   Starter Set AOR 3 on System B
      EYUMAS3A   Starter Set AOR 2 on System A
      EYUMAS4A   Starter Set FOR 1 on System A
```

Figure 52. The CICSSYS view

Action commands

Table 36 summarizes the action commands you can use with the CICSSYS view. Table 37 on page 113 identifies the overtype field you can use with the CON action command.

Table 36. CICSSYS view action commands

| Primary command | Line command | Description |
|-----------------|--------------|--|
| n/a | BAS | Display a visual map of business application services definitions using the specified system as a starting point. |
| n/a | BRO | Browse a CICS system definition in the data repository. |
| n/a | CON | <p>The format of the resulting panels is similar to that shown in Figure 53 on page 114 through Figure 57 on page 123. All of the fields in the panels are nonmodifiable.</p> <p>Create system link (SYSLINK) definitions using the existing system links of a specified CICS system as a model, as described in <i>CICSplex System Manager Managing Business Applications</i>.</p> <p>When you issue the CON command, you must enter a CICS system name in the Model field.</p> |

Table 36. *CICSSYS* view action commands (continued)

| Primary command | Line command | Description |
|-----------------|--------------|---|
| CREate | CRE | Create a CICS system definition and add it to the data repository, as described on page 113. When you use the primary command CREate, some fields in the new view may contain values supplied by CICSplex SM; you may change these values. When you enter the line command CRE next to the name of a CICS system definition, fields in the new view contain values to be modeled (from the existing CICS system definition). |
| n/a | GEN | Create system link (SYSLINK) definitions based upon the existing connections of the active CICS system, as described in <i>CICSplex System Manager Managing Business Applications</i> . |
| n/a | GRP | Add a CICS system to a CICS system group definition, as described on page 124. |
| n/a | MAP | Display a visual map of CICSplex SM definitions, using the specified definition as a starting point. You are prompted to specify the type of definitions you want to map: business application services (BAS), resource monitoring (MON), real-time analysis (RTA), or workload management (WLM). |
| n/a | MON | Display a visual map of resource monitoring definitions using the specified system as a starting point. |
| n/a | REM | Remove a CICS system definition from the data repository. (When you remove a CICS system definition, associations between the CICS system and any CICS system groups or component specifications are also removed.) |
| n/a | RTA | Display a visual map of real-time analysis definitions using the specified system as a starting point. |
| TEMPMP cmas | n/a | Change the temporary maintenance point CMAS to a specific CMAS or display a selection list based on a generic CMAS ID. For more information about temporary maintenance point CMASs, see “Working with maintenance point CMASs” on page 58. |

Table 36. CICSSYS view action commands (continued)

| Primary command | Line command | Description |
|-----------------|--------------|---|
| n/a | UPD | <p>Update a CICS system definition in the data repository.</p> <p>The format of the resulting panels is similar to that shown in Figure 53 on page 114 through Figure 57 on page 123. Most of the fields in the panels are modifiable. (A difference is that when resource monitoring, real-time analysis, and workload management are active, the appropriate specification names and types of links to those specifications are shown.)</p> <p>For an active system, any changes you make via this view take effect immediately and are permanent. Refer to the panel descriptions in “Creating a CICS system definition” for field-specific information on whether an update is effective immediately or at the next CICS system restart. You can use the MAS view, as indicated in Table 4 on page 16, to temporarily change the definitions of an active CICS system.</p> <p>In order to activate a component, an appropriate specification (workload, real-time analysis, or monitor) must be associated with the CICS system.</p> <p>Note: Using the CICSSYS view to update definitions affects both a currently running system and the definitions in the data repository.</p> |
| n/a | WLM | <p>Display a visual map of workload management definitions using the specified system as a starting point.</p> |

Table 37. CICSSYS view oertype field

| Field name | Value |
|------------|---|
| Model | Name of a CICS system whose system links are to be used as a model. |

Note: To use the system links of another CICS system as a model, type the CON action command in the line command field next to the name of the CICS system and enter a CICS system name in the Model field.

Hyperlink fields

Table 38 shows the hyperlink field on the CICSSYS view.

Table 38. CICSSYS view hyperlink field

| Hyperlink field | View displayed | Description |
|-----------------|----------------|--|
| CICS System | SYSGRPC | Identifies the CICS system group to which the CICS system belongs. |

Creating a CICS system definition

When you use the create primary (CREate) or line (CRE) action command from the CICSSYS view, a series of input panels is produced.

In the descriptions of the panels, you are informed about fields for which input for an active system takes immediate effect when you press Enter to issue the UPDate action command. For all other fields, UPDate input does not take effect until the CICS system is restarted.

- Figure 53 shows the format of the first panel produced when you want to create a CICS system definition.

```

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

System Name ==>
Description ==>

Primary CMAS          ==> EYUCMS01   RTA System Availability Monitoring CMAS
Active Period         ==> PRIME      Hours of Operation
APPLID                ==>           VTAM application ID
SYSIDNT               ==>           System communication ID

                                SECURITY
CICS Command Checking ==> *          Simulated CICS Cmd Checks
CICS Resource Checking ==> *         Simulated CICS Res Checks
Exemption Checking    ==> *          Check for Exempt Users

                                TIME
Time Zone              ==> *          Time Zone for System
Time Zone Offset       ==> *          Time Zone Offset for System
Daylight Savings Time  ==> *          Daylight Savings for System

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

```

Figure 53. Creating a CICS system definition - general attributes

Provide the following information, as appropriate:

System Name

Specify a 1- to 8-character name for the CICS system to be associated with the CICSplex identified as the context. The name can contain alphabetic, numeric, or national characters. However, the first character must be alphabetic.

Note: The name of a CICS system must be unique within the CICSplex; it should not be the same as the name of another CICS system, a CICS system group, or the CICSplex itself.

Make sure that the name you specify here matches the name you specify with the EYUPARM parameter NAME in the start up JCL for the CICS system. (See the *CICS Transaction Server for z/OS Installation Guide* manual for additional information.)

Description

(Optional.) Specify a 1- to 30-character description of the CICS system.

Primary CMAS

(Required only for system availability monitoring, as described in *CICSplex System Manager Managing Resource Usage*) Specify the name of the CMAS that should be assigned the task of monitoring the availability of this CICS system.

When the CICS system is part of a CICSplex that is managed by a single CMAS, specify the name of that CMAS.

When multiple CMASs are involved in managing the CICSplex, identify the CMAS to which the CICS system normally connects. Naming a CMAS does not prevent the CICS system from connecting to another CMAS when, for example, the primary CMAS is not available.

If the designated CMAS is not available and:

- It is the only CMAS managing the CICSplex with which the CICS system is associated, the CICS system is not known to CICSplex SM.
- There are multiple CMASs involved in managing the CICSplex, the secondary CMAS, as specified in the APCMAS view, takes over availability monitoring.

For an active system, data entered in this field takes effect when you press Enter.

Active Period

(Required only for system availability monitoring, as described in *CICSplex System Manager Managing Resource Usage*) Specify the name of the period definition that identifies the hours during which this CICS system is to be running. (You can use the PERIODEF view, as described in Table 4 on page 16, to display a list of existing time period definitions.) You can specify any appropriate name. If the name you specify does not belong to an existing period definition, you can create that period definition later.

This name plus the Primary CMAS name are used by system availability monitoring (SAM) to generate external notifications when the CICS system is not active during its defined hours of operation.

For an active system, data entered in this field takes effect when you press Enter.

APPLID

Specify the VTAM application ID of the CICS system.

Note: See *CICSplex System Manager Managing Business Applications* for information on changing this value and the impacts on SYSLINKs.

SYSIDNT

Specify the 4-character system ID of the CICS system. The value specified must match the CICS SYSIDNT SIT operand or override. If the SYSIDNT value used by the MAS does not match the CICSSYS definition, the topology connect of CICS will fail.

Note: See *CICSplex System Manager Managing Business Applications* for information on changing this value and the impacts on SYSLINKs.

CICS Command Checking

Indicate whether CICSplex SM security checking is to simulate CICS command checking for this CICS system. Specify:

- YES** Simulate CICS security checking for this CICS system.
- NO** Do not simulate CICS security checking for this CICS system.
- *** Use the value assigned to the CICSplex with which this CICS system is associated.

For an active system, data entered in this field takes effect when you press Enter.

CICS Resource Checking

Indicate whether CICSplex SM security checking is to simulate CICS resource checking for this CICS system. Specify:

- YES** Simulate CICS resource checking for this CICS system.
- NO** Do not simulate CICS resource checking for this CICS system.
- *** Use the value assigned to the CICSplex with which this CICS system is associated.

For an active system, data entered in this field takes effect when you press Enter.

Exemption Checking

Indicate whether all simulated CICS security checking is to be bypassed for this CICS system. Specify:

- YES** Bypass all simulated CICS security checking for this CICS system.
- NO** Do not bypass simulated CICS security checking for this CICS system.
- *** Use the value assigned to the CICSplex with which this CICS system is associated.

For an active system, data entered in this field takes effect when you press Enter.

Time Zone

Identify the time zone in which this CICS system is located by specifying:

- A code in the range B through Z. (See Table 32 on page 105 for a description of these codes.)
- * (asterisk), to inherit the time zone offset assigned to the CMAS to which this CICS system is connected, or the primary CMAS, if the CICS system is inactive.

Note: If you specify * (asterisk) for any one of the time fields, you must specify asterisk for all three time fields.

For an active system, data entered in this field takes effect when you press Enter.

Time Zone Offset

Indicate the adjustment value that is to be applied to the computed time. This value is used to resolve time references in areas that do not use a standard zone. Specify:

- A value between 0 and 59 to identify the number of minutes to be added to the time for that time zone (for areas that do not use a standard time zone).
- * (asterisk), to inherit the time zone offset assigned to the CMAS to which this CICS system is connected, or the primary CMAS, if the CICS system is inactive.

For an active system, data entered in this field takes effect when you press Enter.

Daylight Savings Time

Indicate whether you are currently recognizing daylight saving time. Specify:

YES Recognize daylight saving time.

NO Do not recognize daylight saving time.

* Use the value assigned to the daylight time indicator assigned to the CMAS to which this CICS system is connected, or the primary CMAS, if the CICS system is inactive.

For an active system, data entered in this field takes effect when you press Enter.

For more information about the time zone attributes and their use, see “CICSplex SM time zone attributes” on page 91.

If the CICS system definition is complete, press Enter. If other attributes must be specified, issue the DOWN command.

2. Figure 54 shows the format of the panel produced the first time you issue the DOWN command.
Provide the following information about workload management. Note that the

```

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

System Name      EYUMAS1A
Description      Starter Set TOR 1 on System A

Routing Support active    ==> NO      Routing support to be activated

Target routing at startup ==> YES

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

```

Figure 54. Creating a CICS system definition - workload attributes

CICS system can act as one or more of the following:

- A requesting region, that is a CICS region in which a work request is made
- A routing region, that is a CICS region in which a routing decision is made
- A target region, that is, a CICS region in which a work request is executed

See “Combining CICS systems and CICS system groups” on page 89 for more information about the roles of CICS regions in dynamic routing. For more information about workload management, see *CICSplex System Manager Managing Workloads*.

Routing support active

Indicate whether this region can act as a routing region when CICS is started. Specify:

YES Workload management is to be active.

The CICS system is assumed to be a routing region that is associated with an appropriate workload specification.

NO Workload management is not to be active.

Workload specification

BROWse and UPDate operations only. For workload management to occur, the CICS system must be associated with workload specification. If it is, the specification name is shown.

Specification source

BROWse and UPDate operations only. The type of link between the CICS system and the workload specification is displayed.

System group name

BROWse and UPDate operations only. If the specification is inherited from a CICS system group, the group name is displayed.

If the CICS system is not a routing region, or is not associated with a specification, no workload management occurs.

Target routing at startup

Indicate whether the CICS system is a potential target for workload routing at startup. Specify:

YES The CICS system is to be included in dynamic routing when the CICS system becomes active.

NO The CICS system is to be excluded from dynamic routing when the CICS system becomes active.

Note: To have a CICS system included in dynamic routing after it becomes active, use the WLMWAOR view, as described in Table 4 on page 16.

If the CICS system definition is complete, press Enter. If other attributes must be specified, issue the DOWN command.

- Figure 55 shows the format of the panel produced the second time you issue the DOWN command.

```

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

System Name      EYUMAS1A
Description      Starter Set TOR 1 on System A

Analysis active      ==> YES          Activate at RTA at startup

System availability management:
      Action or      Action      Severity      Severity
      Generic      Inherit      Inherit
SAM      ==>      ==> NO      ==>      ==> NO
SOS      ==>      ==> NO      ==>      ==> NO
SYSDUMP  ==>      ==> NO      ==>      ==> NO
TRANDUMP ==>      ==> NO      ==>      ==> NO
MAXTASK  ==>      ==> NO      ==>      ==> NO
STALL    ==>      ==> NO      ==>      ==> NO

Type DOWN or UP to view other System Screens.
Press ENTER to Create the System.
Type END or CANCEL to cancel without creating.

```

Figure 55. Creating a CICS system definition - real-time analysis attributes

Provide the following information about real-time analysis. Any value you specify in an action or severity field will override the corresponding value in the analysis specification to which this CICS system will be associated. (For additional information about real-time analysis, see the *CICSplex System Manager Managing Resource Usage* manual.).

Analysis active

Indicate whether the system availability monitoring (SAM) and MAS resource monitoring (MRM) components of real-time analysis are to be active when this CICS system is started. Specify:

- YES** System availability monitoring and MAS resource monitoring are to be active.
- NO** System availability monitoring and MAS resource monitoring are not to be active.
- SAM** Only system availability monitoring is to be active.
- MRM** Only MAS resource monitoring is to be active.

Analysis specification

BROWse and UPDate operations only. For RTA to occur, the CICS system must be associated with a real-time analysis specification. If it is, the specification name is shown.

Specification source

BROWse and UPDate operations only. The type of link between the CICS system and the real-time analysis specification is displayed.

System group name

BROWse and UPDate operations only. If the specification is inherited from a CICS system group, the group name is displayed.

If the CICS system is not a routing region, or is not associated with a specification, no workload management occurs.

Notes:

- a. For MAS resource monitoring to occur, the CICS system must be associated with an analysis specification; if it is not, no MAS resource monitoring occurs.
- b. If a new analysis specification is associated with the CICS system while it is active, you must stop and restart MAS resource monitoring for the specification to take effect. First use the UPD action command to specify NO in this field and press Enter to turn MAS resource monitoring off. Then use the UPD action command again and specify either YES or MRM. MAS resource monitoring will become active using the new analysis specification.

For an active system, data entered in this field takes effect when you press Enter.

Action

Identify the action definition to be used when generating notification about the designated predefined condition. Specify:

name The specific or generic name of an existing action definition.

If you leave this field blank and specify NO in the Action Inherit field, the default action definition is used.

For an active system, data entered in this field takes effect when you press Enter.

Action Inherit

Indicate whether or not the action definition is to be inherited from the analysis specification. Specify:

- YES** The action definition is to be inherited from the specification.

When you specify YES, you cannot specify the name of an action definition in the Action field. If you specify YES and enter the name of an action definition in the Action field, the following message is displayed:

Data not allowed with Inherit.

and the cursor is moved to the Action or Generic column.

NO The action definition is not to be inherited from the analysis specification.

If you specify NO and leave the Action field blank, the default action definition is used.

The default Action Inherit value is NO.

For an active system, data entered in this field takes effect when you press Enter.

Severity

Indicate how the predefined condition is to be handled. Specify:

* List of severities.

level The severity level that is to be associated with the designated condition. The severity levels are:

VHS Very high severe
HS High severe
HW High warning
LW Low warning
LS Low severe
VLS Very low severe

NO Exclude this condition from monitoring.

If you leave this field blank and specify NO in the Severity Inherit field, the default severity level is used.

For an active system, data entered in this field takes effect when you press Enter.

Severity Inherit

Indicate whether or not the severity level is to be inherited from the analysis specification. Specify:

YES The severity level is to be inherited from the specification. When you specify YES, you cannot specify a severity level in the Severity field. If you specify YES and enter a severity level in the Severity field, the following message is displayed:

Data not allowed with Inherit.

and the cursor is moved to the Severity column.

NO The severity level is not to be inherited from the analysis specification.

If you specify NO and leave the Severity field blank, the default severity level is used.

The default Severity Inherit value is NO.

For an active system, data entered in this field takes effect when you press Enter.

If the CICS system definition is complete, press Enter. If other attributes must be specified, issue the DOWN command.

4. Figure 56 shows the format of the panel produced the third time you issue the DOWN command.

```

----- Create System - Monitor Attributes - for EYUPLX01 -----
COMMAND ==>

System name      EYUMAS4A
Description      Starter Set FOR 1 on System A

Monitoring active    ==> *          Activate at monitoring at startup
Data retention period ==>          Data retained after termination n

Resource Sample Rates:
CICS Region        ==>
Global              ==>
DB2                 ==>
Connections         ==>
Files                ==>
Journals             ==>
Programs             ==>
Terminals            ==>
Transactions         ==>
TD Queues            ==>

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

```

Figure 56. Creating a CICS system definition - resource monitoring attributes

Provide the following information about resource monitoring. Any data retention period or sample interval values you specify here will override the corresponding values in the monitor specification to which this CICS system will be associated. (For additional information about resource monitoring, see *CICSplex System Manager Managing Resource Usage*.)

Monitoring active

Indicate whether resource monitoring is to be active when this CICS system is started. Specify:

YES Resource monitoring is to be active.

For this to occur, the CICS system must be associated with a monitor specification.

NO Resource monitoring is not to be active.

***** Resource monitoring activity depends on the value specified with the monitor specification to which this CICS system is associated.

Specify YES or NO to override the value in the comparable field of the monitor specification associated with this CICS system. Specify * (asterisk) when the value specified with the monitor specification is to be used.

Monitor specification

BROWse and UPDate operations only. For resource monitoring to occur, the CICS system must be associated with a monitor specification. If it is, the specification name are shown.

Specification source

BROWse and UPDate operations only. The type of link between the CICS system and the monitor specification is displayed.

System group name

BROWse and UPDate operations only. If the specification is inherited from a CICS system group, the group name is displayed.

Data retention period

Specify the number of minutes collected data is to be kept after resource monitoring stops. (Resource monitoring stops when the CICS system stops or when the MAS view command is used to stop resource monitoring for the CICS system.)

The retention period can be:

1 - 1440

Collected data is to be kept the specified number of minutes.

0

Collected data is not to be kept.

blank The CICS system is to use the value specified with its associated monitor specification.

For an active system, data entered in this field takes effect when you press Enter.

Resource sample intervals

For each type of resource you want to monitor, specify how long, in seconds, CICSplex SM is to wait between the collection of sample data. You can specify a sample interval for:

- Resource types for which you created a monitor definition (such as connections or files)
- CICS Region, Global, or DB2 resources, which do not require a monitor definition. These types provide monitoring of the following resources:

CICS Region

CICS regions and dynamic storage areas

Global

Transient data queue usage, temporary storage queue usage, LSR pools, transaction classes, and FEPI connections

DB2 DB2 threads

The sample interval can be:

1 - 86400

A value evenly divisible into the monitor interval value, when converted to seconds. If you specify a value that is not evenly divisible, you are prompted for one that is.

Note: The lower you set the sampling interval, the greater the impact on processing overhead.

0

No resource monitoring is to occur.

blank The CICS system is to use the value specified with its associated monitor specification.

If the CICS system definition is complete, press Enter. If other attributes must be specified, issue the DOWN command.

5. Figure 57 shows the format of the panel produced the fourth time you issue the DOWN command.

```

COMMAND ==>

System Name      EYUMAS1A
Description      Starter Set TOR 1 on System A

Install Resources ==> NEVER      (NEVER, ALWAYS, COLDONLY, WARMONLY)

Recovery Action  ==> CONTINUE   (CONTINUE,PROMPT,TERMINATE,IMMEDIATE,NORMAL)

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

```

Figure 57. Creating a CICS system definition - business application services attributes

Provide the following information, as appropriate:

Install Resources

For CICS systems running CICS/ESA 4.1 or later, indicate whether resources associated with the system through a resource description should be automatically installed when the MAS connects to the CMAS. Specify:

ALWAYS

Install resources every time the MAS connects after a CICS startup.

COLDONLY

Install resources only when the MAS connects after a CICS INITIAL or COLD start.

NEVER

Resources should never be automatically installed in this CICS system.

WARMONLY

Install resources only when the MAS connects after a CICS warm start or emergency restart (AUTO).

Notes:

- You can also control the automatic installation of specific resources using the Auto Install field on a resource description.
- System links (SYSLINKs) are not controlled by resource descriptions. Therefore, either all SYSLINKs for a given CICS system are automatically installed or none are, depending on the Install Resources value for that system.
- Automatic installation of resources is not supported for systems running any version of CICS other than CICS/ESA 4.1 or later. In those systems, this field is checked for syntax, but its value has no meaning.

Recovery Action

Indicate what action should be taken when automatic resource installation errors occur. Specify:

CONTINUE

Continue installing other resource definitions. A CICSplex SM message is issued to the console and CMAS EYULOG.

IMMEDIATE

Shut down the CICS system immediately. A CICSplex SM message is issued to the console and CMAS EYULOG.

NORMAL

Shut down the CICS system normally. A CICSplex SM message is issued to the console and CMAS EYULOG.

PROMPT

Prompt the operator console for an action. The resource installation process is suspended, but all other MAS processing continues. A CICSplex SM message is issued to the console and CMAS EYULOG.

TERMINATE

Terminate the resource installation process. A CICSplex SM message is issued to the console and CMAS EYULOG. No more resource definitions are processed. Any resource definitions that were successfully installed are not removed.

To add the CICS system definition to the data repository, press Enter.

Adding a CICS system to a CICS system group

Figure 58 illustrates the panel produced when you use the group (GRP) line action command from the CICSSYS view.

```

----- Add System to System Group for EYUPLX01 -----
COMMAND  ==>

System Name      EYUMAS1A

Scope           ==>  PRODGRP           System Group Name or Generic

Current
Component Spec  Source  Group  Inherit Spec
MON        SPEC1  INHERIT  OTHERGRP  NO
RTA        SPEC1  INHERIT  OTHERGRP  YES
WLM        SPEC2  EXPLICIT  OTHERGRP  NO

Press Enter to Add System to System Group.
Type END or CANCEL to cancel without adding.

```

Figure 58. Adding a CICS system to a CICS system group

Provide the following information, as appropriate:

Scope

Specify the name of an existing CICS system group to which the CICS system is to be associated.

If the appropriate CICS system group does not currently exist, create it, as described on page 108, and then add the CICS system to the group, using either this view or the view described on page “Adding a member to a CICS system group” on page 109.

Inherit Spec

Indicate whether the CICS system is to inherit the specification for a CICSplex SM component from the CICS system group to which you are associating it. Specify:

YES The CICS system is to inherit the specification associated with the CICS system group. (If there is no association between a CICS system group and a specification, the CICS system inherits no specification.)

NO The CICS system is not to inherit the specification associated with the CICS system group.

When you specify NO and you want one or more of the components to be active, you must associate the CICS system with the appropriate specification.

To add this association to the data repository, press Enter.

Note: If you are using the Business Application Services component, adding a CICS system to a CICS system group could result in inconsistent resource set or inconsistent scope errors. For information about this type of problem and how to resolve it, see the *CICSplex System Manager Managing Business Applications* manual.

When a specification for a CICSplex SM component is associated with a CICS system:

- The Current Spec field contains the specification name.
- The Source field indicates the type of association, where:
 - EXPLICIT means that the CICS system is directly associated with the specification.
 - INHERIT means that the CICS system acquired the specification through a CICS system group with which it is associated.
- The Group field contains the name of a CICS system group when INHERIT appears in the Source field.

When this panel is initially displayed, the Inherit Spec field is set to:

- YES when the Current Spec field is blank. This means that the CICS system is to inherit the specification from the CICS system group with which you are currently associating it.
- NO when the Current Spec field contains a name. This means that the CICS system is not to inherit the specification from the CICS system group with which you are currently associating it.

To remove a CICS system from a CICS system group, use the SYSGRPC view, as described on page 135.

Creating system link definitions

You can use either the CON action command or the GEN action command to create system link definitions from the CICSSYS view:

CON Is useful when you have created a new CICS system and you want to model its system links on the links defined for another system. Neither the CICS system nor the model system have to be active when you issue the CON action command.

Note: Using the CON action command has the same effect as specifying a Model System when the CICS system is created or updated.

GEN Is useful when you are migrating existing system link definitions for a CICS system from RDO to the CICSplex SM data repository. The CICS system and all the systems for which you want to create system link definitions must be active when you issue the GEN action command.

The CON and GEN action commands both create balanced, bidirectional system link definitions for the CICS systems you select. The new system links maintain the same relationships that exist either for the model system or in the CSD (as far as which system is considered the primary and which is the secondary). The system IDs of the primary and secondary CICS systems form the name of the new system link.

The system link definitions that are created by CON and GEN are added to the data repository. The actual system links become active when they are installed. System links can be installed:

- Automatically when the CICS systems are started, provided both systems allow CICSplex SM to install resources at initialization (as specified in the Install Resources field of Figure 57 on page 123).

Note: Particularly in the case of the GEN command, if the existing RDO definitions are still being called at CICS initialization, errors may occur when CICSplex SM attempts to install its system link definitions.

- Dynamically by using the INStall action command from the SYSLINK view, as described in

Note: You can also use the SYSLINK view to create individual system link definitions and remove existing system link definitions. See *CICSplex System Manager Managing Business Applications*.

Using the CON action command: With the CON action command, you can model the system links for a new CICS system after an existing CICS system whose links are already defined to CICSplex SM.

Figure 59 illustrates the panel produced when you use the connect (CON) line action command from the CICSSYS view.

COMMAND ==>

Primary CICS System EYUMAS1A

ConnDef Name ==>

Version ==>

SessDef Name ==>

Version ==>

| Sel | System | Id | Applid | Dir | Description | Result |
|-----|----------|------|----------|-----|-------------|--------|
| - | EYUMAS1B | A003 | EYUMAS1B | TO | | |
| | EYUMAS3A | A002 | EYUMAS3A | TO | | |
| | EYUMAS4A | F001 | EYUMAS4A | FRO | | |

Figure 59. Creating system link definitions from a model

Provide the following information, as appropriate:

ConnDef Name

Specify the 1- to 4-character name of a connection definition that is known to CICSplex SM. The connection definition is used, together with the sessions definition, to construct the system link definitions.

SessDef Name

Specify the 1- to 8-character name of a sessions definition that is known to CICSplex SM. The sessions definition is used, together with the connection definition, to construct the system link definitions.

Version

Indicate what version of the specified connection and sessions definitions should be used in constructing the system link definitions.

Following these fields is a list of CICS systems that have a system link to the model CICS system, but do not currently have a link to the primary system (that is, the CICS system for which the CON action was issued). For each CICS system, the following information is provided:

System

The name of the CICS system.

Id

The system ID of the CICS system.

Applid

The application ID of the CICS system.

Dir

The direction of the link that exists for the CICS system, as:

TO The link originated with the primary system. That is, a link was defined to the specified system.

FRO The link originated with the specified system. That is, a link was defined from the specified system.

Description

A 1- to 30- character description of the CICS system, if one was supplied when it was created.

Result

Indicates the result of CICSplex SM's attempt to define each system link. For a description of the Result values, see "How system link requests are processed" on page 129.

To define a system link to one or more of the specified CICS systems, type an S (for select) to the left of the CICS system name. You can use the UP and DOWN commands to scroll the list of CICS system names.

When you finish making your selections, press Enter to define the system links. To cancel the request without defining any system links, issue the END command.

Using the GEN action command: With the GEN action command, you can use the active connections of a CICS system to define corresponding system links to CICSplex SM.

Figure 60 on page 128 illustrates the panel produced when you use the generate (GEN) line action command from the CICSSYS view.

COMMAND ===>

Primary CICS System EYUMAS1A

```

ConnDef Name LU61      ===>      Version  ===>
SessDef Name LU61      ===>      Version  ===>
ConnDef Name LU62      ===>      Version  ===>
SessDef Name LU62      ===>      Version  ===>
ConnDef Name MRO       ===>      Version  ===>
SessDef Name MRO       ===>      Version  ===>
ConnDef Name INDIRECT  ===>      Version  ===>
SessDef Name INDIRECT  ===>      Version  ===>

```

| Sel | System | Id | Applid | Type | Description | Result |
|-----|--------|----|--------|------|-------------|--------|
|-----|--------|----|--------|------|-------------|--------|

| | | | | | | |
|---|----------|------|----------|------|--|--|
| - | EYUMAS1B | A003 | EYUMAS1B | LU62 | | |
| | EYUMAS3A | A002 | EYUMAS3A | MRO | | |
| | EYUMAS4A | F001 | EYUMAS4A | MRO | | |

Figure 60. Creating system link definitions from existing connections

Note: Both CICS systems must be active for a system link definition to be created by the GEN action command.

Provide the following information, as appropriate:

ConnDef Name LU61

Specify the 1- to 4-character name of a connection definition to be used for LU 6.1 links.

SessDef Name LU61

Specify the 1- to 8-character name of a sessions definition to be used for LU 6.1 links.

ConnDef Name LU62

Specify the 1- to 4-character name of a connection definition to be used for LU 6.2 links.

SessDef Name LU62

Specify the 1- to 8-character name of a sessions definition to be used for LU 6.2 links.

ConnDef Name MRO

Specify the 1- to 4-character name of a connection definition to be used for MRO links.

SessDef Name MRO

Specify the 1- to 8-character name of a sessions definition to be used for MRO links.

ConnDef Name INDIRECT

Specify the 1- to 4-character name of a connection definition to be used for indirect links.

SessDef Name INDIRECT

Specify the 1- to 8-character name of a sessions definition to be used for indirect links.

Version

Indicate what version of the specified connection and sessions definitions should be used in constructing the system link definitions.

Following these fields is a list of active CICS systems that have connections to the source system (that is, the CICS system for which the GEN action was issued). However, these connections are not currently defined as system links in the CICSplex SM data repository. For each CICS system, the following information is provided:

System

The name of the CICS system.

Id

The system ID of the CICS system.

Applid

The application ID of the CICS system.

Type

The type of link that exists between the specified CICS system and the source system.

Description

A 1- to 30- character description of the CICS system, if one was supplied when it was created.

Result

Indicates the result of CICSplex SM's attempt to define each system link. For a description of the Result values, see "How system link requests are processed."

To define a system link to one or more of the specified CICS systems, type an S (for select) to the left of the CICS system name. You can use the UP and DOWN commands to scroll the list of CICS system names.

When you finish making your selections, press Enter to define the system links. To cancel the request without defining any system links, issue the END command.

How system link requests are processed: The CON or GEN input panel remains displayed while CICSplex SM attempts to create the system link definitions. If links to all of the selected systems are successfully defined, the CICSSYS view is redisplayed.

If CICSplex SM detects any errors while creating the system link definitions, the input panel is redisplayed. The Result field indicates the status of the definition for each selected system:

Logical Duplicate

A CICS system link has already been defined between the two systems. The selected system was previously identified as the primary system in a system link definition. Because CICSplex SM creates bidirectional system links, another definition is not required.

No Primary Sysid

The definition of the primary system in the CICSplex SM data repository does not include a CICS system ID. Make sure the SYSIDNT field in the CICSSYS definition contains a system ID.

No Secondary Sysid

The definition of the selected (or secondary) system in the CICSplex SM data repository does not include a CICS system ID. Make sure the SYSIDNT field in the CICSSYS definition contains a system ID.

Processed

A system link was successfully defined between this CICS system and the selected system.

Record Exists

A CICS system link has already been defined between the primary system and the selected system.

Same Sysids

A system link definition could not be created because the primary system and the selected system have the same CICS system ID. Make sure the CICS system IDs for both systems have been correctly defined to CICSplex SM using the SYSIDNT field in the CICSSYS definition.

Severe Error

A system link definition could not be created between the primary system and the selected system because of an unexpected error condition. When you issue the END command to exit from the input panel, EYUEInnnn messages are displayed that describe the error condition.

PERIODEF (Time period definitions)

A time *period definition* identifies a specific range of hours and minutes. These definitions are used with resource monitoring and real-time analysis to designate when specific actions are to start and stop.

To display information about existing time period definitions, issue the command:

```
PERIODEF [periodef]
```

where periodef is the specific or generic name of an existing time period definition. If this parameter is omitted, the view, illustrated in Figure 61, includes information about all time period definitions known to the CICSplex identified as the context.

```
27FEB2005 19:48:16 ----- INFORMATION DISPLAY -----
COMMAND ==>
CURR WIN ==> 1      ALT WIN ==>
W1 =PERIODEF=====EYUPLX01=EYUPLX01=27FEB2005==19:48:16=CPSM=====4==
CMD Period  Start End   Time Zone Time
--- Name---- Time- Time- Zone Adj- Description-----
EYUPDF01 08:00 21:00 Z      0 SSet - Normal day
EYUPDF02 17:01 21:00 Z      0 SSet - Batch time
EYUPDF03 11:45 13:15 Z      0 SSet - Peak usage
EYUPDF04 07:59 08:00 Z      0 SSet - Files required
```

Figure 61. The PERIODEF view

Action commands

Table 39 summarizes the action commands you can use with the PERIODEF view. Table 40 on page 132 identifies the oertype fields that you can modify when you use the SET action command.

Table 39. PERIODEF view action commands

| Primary command | Line command | Description |
|-----------------|--------------|---|
| n/a | BRO | Browse a period definition in the data repository. |
| CREate | CRE | Create a period definition, as described in “Creating a period definition” on page 132. |

Table 39. PERIODEF view action commands (continued)

| Primary command | Line command | Description |
|-----------------|--------------|--|
| n/a | MAP | Display a visual map of CICSplex SM definitions, using the specified definition as a starting point. You are prompted to specify the type of definitions you want to map: resource monitoring (MON) or real-time analysis (RTA). |
| n/a | MON | Display a visual map of resource monitoring definitions using the specified definition as a starting point. |
| n/a | REM | Remove a period definition. Note: Removing a period definition may adversely affect any CICSplex SM function that is currently active and using the designated definition. Period definitions are needed for the following views: <ul style="list-style-type: none"> • CICSSYS • MONDEF • MONINGRP • RTADEF • RTAINGRP • STATDEF. |
| n/a | RTA | Display a visual map of real-time analysis definitions using the specified definition as a starting point. |
| n/a | SET | Change an existing period definition using overwrite fields. Changes take effect immediately. Users are notified of any changes that alter the current status of a CICSplex SM component using the definition. That is, users are informed when a change causes a currently active component to become inactive, or an inactive component to become active. Note: The value you specified in the Require Set field on the CICSplex SM entry panel determines whether you must use the SET command when you overwrite a field. |
| TEMPMP cmas | n/a | Change the temporary maintenance point CMAS to a specific CMAS or display a selection list based on a generic CMAS ID. |
| n/a | UPDate | Update a period definition in the data repository. The format of the resulting panels is identical to that shown in Figure 62 on page 132. Most of the fields in the panel are modifiable. Note: Using the PERIODEF view to update definitions affects both a currently running system and the definitions in the data repository. |

Table 40. PERIODEF view oertype fields

| Field name | Value |
|-----------------|--|
| Start Time | The time at which the period is to start, specified in hours and minutes. You can use any of the following values: HH:MM Specify two numeric characters each, separated by a colon, for both hours and minutes. HH: Specify only the two numeric characters for hours, followed by the colon. H:MM Specify only one numeric character for hours, followed by a colon then two numeric characters for minutes. :MM Specify the colon, followed by two numeric characters for minutes. H: Specify only one numeric character for hours, followed by the colon. : Specify only the colon, to indicate two zeros each for both hours and minutes. |
| End Time | The time at which the period is to stop, specified in hours and minutes. The values can be the same as for Start Time. |
| Time Zone | A single-character code, shown in Table 32 on page 105, identifying the time zone to which the start and end times apply. |
| Zone Adjustment | Adjustment factor to be applied to the computed time. |
| Description | 1- to 30-character description of the period. Note: To change a period definition, type the SET action command in the line command field next to the name of the period to be affected and oertype the current contents of the appropriate fields. |

The value you specified in the Require Set field on the CICSplex SM entry panel determines whether or not you must use the SET command when you oertype a field.

Hyperlink fields

There are no hyperlink fields in the PERIODEF view.

Creating a period definition

Figure 62 shows the format of the panel produced when you use the create primary (CREate) or line (CRE) action command from the PERIODEF view.

```

----- Create Time Period Def for EYUPLX01 -----
COMMAND  ===>

Definition Name ===> prime
Description    ===>

Time Period Definition:
Start Time     ===>          (HH:MM)
End Time       ===>          (HH:MM)
Time Zone      ===>
Zone Adjustment ===> 0

Press Enter to Create Time Period Definition.
Type END or CANCEL to cancel without creating.

```

Figure 62. Creating a time period definition

Provide the following information, as appropriate:

Definition Name

Specify a 1- to 8-character name for the time period definition. The name can contain alphabetic, numeric, or national characters. However, the first character must be alphabetic.

Description

Specify a 1- to 30-character description of the time period.

Start Time

Specify the hour and minute at which the time period is to start.

End Time

Specify the hour and minute at which the time period is to end.

Time Zone

Specify one of the codes shown in Table 32 on page 105 to identify the time zone to which the period definition is to apply.

Zone Adjustment

Specify a value between 0 and 59 to identify the number of minutes to be added to the time for that time zone (for areas that do not use a standard time zone).

Press Enter to save this definition.

SYSGRPC (Members in CICS system groups)

To display information about the CICS system groups, and the CICS systems associated with them, that are known to the CICSplex identified as the context, issue the command:

```
SYSGRPC [sysgroup [sysname [CICSSYS|SYSGROUP]]]
```

where:

sysgroup

Is the specific or generic name of a CICS system group, or * (asterisk) for all CICS system groups.

sysname

Is the specific or generic name of a CICS system or * (asterisk) for all CICS systems.

CICSSYS|SYSGROUP

Limits the view to those members that are defined as a CICS system or CICS system group. If this parameter is omitted, the view includes information about all members comprising the designated CICS system groups known to the CICSplex identified as the context.

If no parameter is specified, the view, illustrated in Figure 63 on page 134, includes information about all members comprising the CICS system groups associated with the CICSplex identified as the context.

```

27FEB2005 21:16:27 ----- INFORMATION DISPLAY -----
COMMAND ==>
CURR WIN ==> 1      ALT WIN ==>
W1 =SYSGRPC=====EYUPLX01=EYUPLX01=27FEB2005==21:16:27=CPSM=====10===
CMD Group  Member  Member
--- Name----- Name----- Type-----
EYUCSG01 EYUMAS1B CICSSYS
EYUCSG01 EYUMAS2A CICSSYS
EYUCSG01 EYUMAS3A CICSSYS
EYUCSG01 EYUMAS4A CICSSYS
EYUCSG02 EYUMAS2A CICSSYS
EYUCSG03 EYUCSG04 SYSGROUP
EYUCSG03 EYUCSG05 SYSGROUP
EYUCSG04 EYUMAS2A CICSSYS
EYUCSG04 EYUMAS3A CICSSYS
EYUCSG05 EYUMAS1B CICSSYS

```

Figure 63. The SYSGRPC view

Action commands

Table 41 summarizes the action commands you can use with the SYSGRPC view.

Table 41. SYSGRPC view action commands

| Primary command | Line command | Description |
|-----------------|--------------|--|
| n/a | BAS | Display a visual map of business application services definitions using the specified group as a starting point. |
| n/a | MAP | Display a visual map of CICSplex SM definitions, using the specified group as a starting point. You are prompted to specify the type of definitions you want to map: business application services (BAS), resource monitoring (MON), real-time analysis (RTA), or workload management (WLM). |
| n/a | MON | Display a visual map of resource monitoring definitions using the specified group as a starting point. |
| n/a | REM | Remove a member from a CICS system group, as described in Removing a member from a CICS system group. |
| n/a | RTA | Display a visual map of real-time analysis definitions using the specified group as a starting point. |
| TEMPMP cmas | n/a | Change the temporary maintenance point CMAS to a specific CMAS or display a selection list based on a generic CMAS ID. |
| n/a | WLM | Display a visual map of workload management definitions using the specified group as a starting point. |

Hyperlink fields

There are no hyperlink fields in the SYSGRPC view.

Removing a member from a CICS system group

Figure 64 illustrates the panel produced when you use the remove (REM) line action command from the SYSGRPC view to remove a CICS system or a CICS system group from a CICS system group.

The line containing MON, RTA, or WLM component information is included in the panel only when you are removing a CICS system and that CICS system inherited the specification from the CICS system group.

Provide the following information, as appropriate:

```

----- Remove System from System Group for EYUPLX01 -----
COMMAND  ===>

System Name  CICSPROD

Scope        GROUP1                System Group Name

Component Spec  Source  Action
MON           SPEC1  INHERIT  DROP

Press Enter to remove the System from the System Group.
Type END or CANCEL to cancel without removing.

```

Figure 64. Removing a member from a CICS system group

Action

(Required when removing a CICS system group.) Indicate how the CICS systems comprising the CICS system group are to use any specifications associated with the CICS system group. Specify:

KEEP Those CICS systems that inherited a specification from the CICS system group are explicitly assigned that specification.

DROP Those CICS systems that inherited a specification from the CICS system group are not to use that specification.

If a specification is associated with a CICS system group, DROP is the default value that appears in the Action field when this panel is displayed.

To remove the member from the CICS system group definition in the data repository, press Enter.

Working with MAS topology definitions using the Web User Interface

This section describes how you can obtain information about active CICS systems using the **Runtime MAS display** tabular WUI view.

Stopping an active MAS

To stop MAS agent code within an active CICS system:

1. Click **CICSplex SM operations view—>Status of MASs known to CICSplex**. This opens the **Runtime MAS display** tabular view, which displays information about CICS systems that are known to the CICSplex identified as the context.
2. Select one or more of the listed CICS systems.
3. Click **Stop** and confirm the action by clicking **Yes** on the confirmation screen.

Note: When the **Workload manager status** field for a CICS system contains **YES**, you may not be able to stop the MAS agent code. If the CICS system is acting as a requesting region, or, for enterprise beans, a routing region, with a dynamic routing program of EYU9XLOP, you cannot stop the MAS agent code. (To determine which CICS systems are acting as either requesting regions or, for enterprise beans, routing regions click **Active workload views**—>**Target regions in an active workload**.)

If you want to stop the MAS agent code in a CICS system of this type, you must first change the dynamic routing program to something other than EYU9XLOP. (You can use the **CICS regions** view to change the dynamic routing program.)

Updating an active MAS

Any changes that you make to a CICS system definition take effect immediately. They remain in effect as long as the CICS system is active or until you change them again.

Note: If you turn on workload management, real-time analysis, or resource monitoring from these panels, their status will not be shown as active until the component is fully initialized.

Follow this procedure to update an active MAS:

1. Click **CICSplex SM operations view**—>**Status of MASs known to CICSplex**. This opens the **Runtime MAS display** tabular view, which displays information about CICS systems that are known to the CICSplex identified as the context.
2. Click on one of the listed CICS systems to open the **Runtime MAS display** detail view. This opens the first of three detail panels. The first panel allows you to change general attributes. From this panel you can open **Real time analysis** and **Monitoring details** views.
3. On the first detail view, change the following information, as appropriate:

Monitoring status

Indicate whether resource monitoring is to be active. Specify:

YES To start resource monitoring.

For this to occur, the CICS system must be associated with a monitor specification. If it is not, no resource monitoring occurs.

NO To stop resource monitoring. If real-time analysis requires resource monitoring to remain active, use the **FORCE** option.

FORCE

To stop resource monitoring even if it is being used by real-time analysis. All resource monitoring will stop. If an evaluation definition names a monitor table resource, that evaluation definition becomes inactive.

Real time analysis status

Indicate whether the system availability monitoring (SAM) and MAS resource monitoring (MRM) components of real-time analysis are to be active. Specify one of the following:

YES To start system availability monitoring and MAS resource monitoring.

NO To stop system availability monitoring and MAS resource monitoring.

SAM To start system availability monitoring.

MRM To start MAS resource monitoring.

Notes:

- a. For MAS resource monitoring to occur, the CICS system must be associated with an analysis specification; if it is not, no MAS resource monitoring occurs.
- b. If a new analysis specification is associated with the CICS system while it is active, you must stop and restart MAS resource monitoring for the specification to take effect. First specify NO in this field and press Enter to turn MAS resource monitoring off. Then use the UPD action command again and specify either YES or MRM. MAS resource monitoring becomes active using the new analysis specification.

Workload manager status

Specify YES to start managing workloads for this CICS system. (You cannot stop workload management once it is started, so the only valid value is YES.)

The CICS system is assumed to be a requesting region that is associated with the appropriate workload specification. If the CICS system is not a requesting region or is not associated with a workload specification, no workload management occurs.

If workload management cannot be activated, messages are written to:

- The window, when the CICS system is not associated with a workload specification or when the contents of the input panel cannot be successfully processed.
- The console log, when any other condition occurs.

Note: If you update the MON Active, RTA Active, or WLM Active fields to YES, the change will not be reflected on the MAS view until the component is fully initialized.

Time Zone

Identify the time zone in which this CICS system is located by specifying one of the following codes:

Table 42. Timezone codes

| Code | GMT offset | Description | Code | GMT offset | Description |
|------|------------|-----------------------|------|------------|---------------------------------|
| B | +1 | Central European time | O | -11 | Bering standard time |
| C | +2 | Eastern Europe | P | -10 | Hawaii and Alaska standard time |
| D | +3 | Arabia | Q | -9 | Yukon standard time |
| E | +4 | Pakistan | R | -8 | Pacific standard time |
| F | +5 | Bay of Bengal | S | -7 | Mountain standard time |
| G | +6 | Thailand | T | -6 | Central standard time |
| H | +7 | Philippines | U | -5 | Eastern standard time |
| J | +8 | Japan | V | -4 | Atlantic standard time |
| I | +9 | Australia | W | -3 | Greenland |
| K | +10 | New Caledonia | X | -2 | Azores |
| L | +11 | New Zealand | Y | -1 | Iceland |
| M | +12 | (West of date line) | Z | 0 | Greenwich mean time (GMT) |
| N | -12 | (East of date line) | | | |

Time zone offset

Specify a number of minutes, between 0 and 59, that are to be added to the specified time zone. This adjustment is used to resolve time references in areas that do not use a standard zone.

Daylight savings in effect

Specify YES or NO to indicate whether the specified time zone is currently recognizing daylight saving time.

This value must be changed twice a year; once when daylight saving time begins and again when it ends.

Simulated security command check

Specify YES or NO to indicate whether you want CICSplex SM to simulate CICS command checking for this CICS system.

Simulated security resource Check

Specify YES or NO to indicate whether you want CICSplex SM to simulate CICS resource checking for this CICS system.

Simulated security exemption Check

Specify YES or NO to indicate whether you want to bypass all simulated CICS security checking for this CICS system.

For more information about the Time Zone, Time Zone Offset, and Daylight Time attributes, see the description of CICSplex SM time zone attributes in “CICSplex SM time zone attributes” on page 91.

4. If you want to update real time analysis attributes, click **Real time analysis details**. This opens a new details panel allowing you to change the following attributes:

Real time analysis status

Indicates whether the system availability monitoring (SAM) and MAS resource monitoring (MRM) components of real-time analysis are to be active. Specify one of the following:

- YES** To start system availability monitoring and MAS resource monitoring.
- NO** To stop system availability monitoring and MAS resource monitoring.

SAM To start system availability monitoring.
MRM To start MAS resource monitoring.

Actions for system availability events

For each event type, supply a specific or generic name of an action definition to be used when generating notification about the designated condition.

Severities for system availability events

For each event type, specify the severity level to be associated with the designated condition, or **N_A** to exclude the condition from monitoring.

The severity levels are:

VHS Very high severity
HS High severity
HW High warning
LW Low warning
LS Low severity
VLS Very low severity

Note: The default action and severity level for system availability monitoring (SAM) cannot be updated while the CICS system is active. The values shown in the SAM field are for reference only.

5. If you want to update monitoring attributes, click **Monitoring details**. This opens a new details panel allowing you to change the following attributes:

Monitoring status

Indicates whether resource monitoring is to be active. Specify:

YES To start resource monitoring.

For this to occur, the CICS system must be associated with a monitor specification. If it is not, no resource monitoring occurs.

NO To stop resource monitoring. If real-time analysis requires resource monitoring to remain active, use the **FORCE** option.

FORCE

To stop resource monitoring even if it is being used by real-time analysis. All resource monitoring will stop. If an evaluation definition names a monitor table resource, that evaluation definition becomes inactive.

Monitoring data retention period

Specify the number of minutes collected data is to be kept after resource monitoring stops. (Resource monitoring stops when the CICS system stops or when you use the UPD action command and this panel to stop it.) The value may be:

- Between 1 and 1440, when collected data is to be retained
- 0, when collected data is not to be retained

Resource sample intervals

Specify the duration, in seconds, between the collection of monitor data for each resource type. The value may be:

- Between 1 and 86400 and evenly divisible into the monitor interval value, when converted to seconds. If you specify a value that is not evenly divisible, you are prompted for one that is.

CAUTION:

The lower you set the sample interval, the greater the impact on both CPU and teleprocessing overhead.

MAS topology definitions

- 0, when no monitoring is to occur for a resource type.
- Omitted, when the CICS system is to use the value set with its associated monitor specification.

Notes:

- a. If you change a sample interval from 0 to a value, use the MONACTV view command to find out whether the appropriate monitor definitions are active. If they are not, those monitor definitions must be installed for the change to take effect.
 - b. The sample interval for a resource may be locked by RTA.
6. To apply the changes you have made to the active CICS system, click **Apply changes**. The changes take effect immediately and remain in effect until you change them or the CICS system stops.

Working with MAS topology definitions using the end user interface

This section describes how you can obtain information about active CICS systems using the MAS view.

MAS

The MAS view shows information about CICS systems that are known to the CICSplex identified as the context.

Issue command:

MAS [cmas]

cmas Is the specific or generic name of a CMAS involved in managing the CICSplex. If you omit this parameter, the view includes information about all CICS systems known to the CICSplex.

Select:

MAS from a menu of TOPOLOGY views.

Figure 65 is an example of the MAS view.

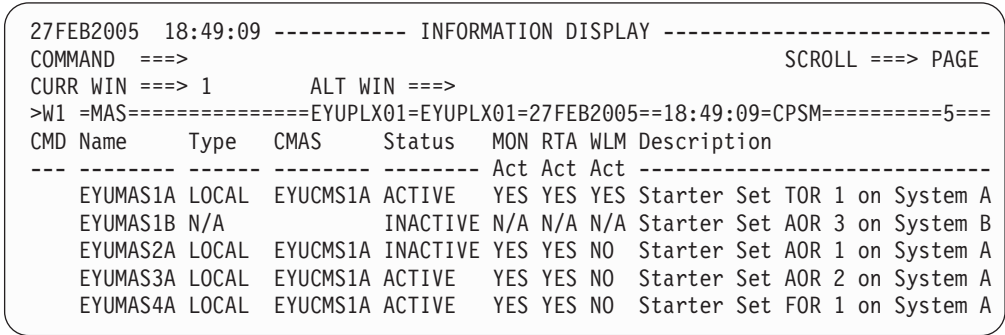


Figure 65. The MAS view

Action commands

Table 43 shows the action commands you can issue from the MAS view when a CICS system is active.

Table 43. MAS view action commands

| Primary command | Line command | Description |
|-----------------|--------------|--|
| n/a | BRO | Browse the attributes of an active CICS system. The format of the resulting panels is similar to that shown in the panels beginning on page 136. None of the fields in these panels are modifiable. |

Table 43. MAS view action commands (continued)

| Primary command | Line command | Description |
|-----------------|--------------|---|
| n/a | STO | <p>Stop MAS agent code within an active CICS system.</p> <p>To restart the MAS agent code in a currently running CICS system, issue the CICS transaction:</p> <ul style="list-style-type: none">• COLM - for a local MAS <p>Note: When the WLM Act field for a CICS system contains YES, you may not be able to stop the MAS agent code. If the CICS system is acting as a requesting region, or, for enterprise beans, a routing region, with a dynamic routing program of EYU9XLOP, you cannot stop the MAS agent code. (You can use the WLMAWTOR view to determine which CICS systems are acting as either requesting regions or, for enterprise beans, routing regions.)</p> <p>If you want to stop the MAS agent code in a CICS system of this type, you must first change the dynamic routing program to something other than EYU9XLOP. (You can use the CICSRGND view to change the dynamic routing program.)</p> |
| n/a | UPD | <p>Temporarily change the attributes of an active CICS system, as described in Updating an active MAS.</p> <p>Note: These action commands are not valid when a CICS system is inactive, as indicated by the Status field.</p> |

Hyperlinks

None.

Updating an active MAS

Any changes that you make to a CICS system definition take effect immediately. They remain in effect as long as the CICS system is active or until you change them again.

Note: If you turn on workload management, real-time analysis, or resource monitoring from these panels, their status will not be shown as active until the component is fully initialized.

After entering the update action command, the first of four panels is displayed.

- Figure 66 illustrates the first panel produced when you use the update action command. You can use this panel to change general MAS attributes. Change the following information, as appropriate:

```

----- Control MAS for EYUPLX01 -----
COMMAND  ==>

MAS      EYUMAS1A  Description  Starter Set TOR 1 on System A

      Attributes                                Time
Type          LOCAL          Time Zone          ==> R
CMAS          EYUCMS1A       Time Zone Offset  ==> 00
Status        ACTIVE        Daylight Savings  ==> NO

      Activity                                Security
MON Active ==> YES          Command Check    ==> NO
RTA Active ==> NO          Resource Check   ==> NO
WLM Active ==> NO          Exemption Check ==> NO

Enter DOWN or UP to view other MAS screens.
Press Enter to change the MAS.
Type END or CANCEL to cancel without changing.

```

Figure 66. Updating an active CICS system - general MAS attributes

Time Zone

Identify the time zone in which this CICS system is located by specifying one of the following codes:

Table 44. Timezone codes

| Code | GMT offset | Description | Code | GMT offset | Description |
|------|------------|-----------------------|------|------------|---------------------------------|
| B | +1 | Central European time | O | –11 | Bering standard time |
| C | +2 | Eastern Europe | P | –10 | Hawaii and Alaska standard time |
| D | +3 | Arabia | Q | –9 | Yukon standard time |
| E | +4 | Pakistan | R | –8 | Pacific standard time |
| F | +5 | Bay of Bengal | S | –7 | Mountain standard time |
| G | +6 | Thailand | T | –6 | Central standard time |
| H | +7 | Philippines | U | –5 | Eastern standard time |
| J | +8 | Japan | V | –4 | Atlantic standard time |
| I | +9 | Australia | W | –3 | Greenland |
| K | +10 | New Caledonia | X | –2 | Azores |
| L | +11 | New Zealand | Y | –1 | Iceland |
| M | +12 | (West of date line) | Z | 0 | Greenwich mean time (GMT) |
| N | –12 | (East of date line) | | | |

Time Zone Offset

Specify a number of minutes, between 0 and 59, that are to be added to the specified time zone. This adjustment is used to resolve time references in areas that do not use a standard zone.

Daylight Savings

Specify YES or NO to indicate whether the specified time zone is currently recognizing daylight saving time.

This value must be changed twice a year; once when daylight saving time begins and again when it ends.

For more information about the Time Zone, Time Zone Offset, and Daylight Time attributes, see the description of CICSplex SM time zone attributes in “CICSplex SM time zone attributes” on page 91.

MON Active

Indicate whether resource monitoring is to be active. Specify:

YES To start resource monitoring.

For this to occur, the CICS system must be associated with a monitor specification. If it is not, no resource monitoring occurs.

NO To stop resource monitoring. If real-time analysis requires resource monitoring to remain active, use the FORCE option.

FORCE

To stop resource monitoring even if it is being used by real-time analysis. All resource monitoring will stop. If an evaluation definition names a monitor table resource, that evaluation definition becomes inactive.

RTA Active

Indicate whether the system availability monitoring (SAM) and MAS resource monitoring (MRM) components of real-time analysis are to be active. Specify one of the following:

YES To start system availability monitoring and MAS resource monitoring.

NO To stop system availability monitoring and MAS resource monitoring.

SAM To start system availability monitoring.

MRM To start MAS resource monitoring.

Notes:

- a. For MAS resource monitoring to occur, the CICS system must be associated with an analysis specification; if it is not, no MAS resource monitoring occurs.
- b. If a new analysis specification is associated with the CICS system while it is active, you must stop and restart MAS resource monitoring for the specification to take effect. First specify NO in this field and press Enter to turn MAS resource monitoring off. Then use the UPD action command again and specify either YES or MRM. MAS resource monitoring becomes active using the new analysis specification.

WLM Active

Specify YES to start managing workloads for this CICS system. (You cannot stop workload management once it is started, so the only valid value is YES.)

The CICS system is assumed to be a requesting region that is associated with the appropriate workload specification. If the CICS system is not a requesting region or is not associated with a workload specification, no workload management occurs.

If workload management cannot be activated, messages are written to:

- The window, when the CICS system is not associated with a workload specification or when the contents of the input panel cannot be successfully processed.
- The console log, when any other condition occurs.

Note: If you update the MON Active, RTA Active, or WLM Active fields to YES, the change will not be reflected on the MAS view until the component is fully initialized.

Command Check

Specify YES or NO to indicate whether you want CICSplex SM to simulate CICS command checking for this CICS system.

Resource Check

Specify YES or NO to indicate whether you want CICSplex SM to simulate CICS resource checking for this CICS system.

Exemption Check

Specify YES or NO to indicate whether you want to bypass all simulated CICS security checking for this CICS system.

To apply the changes to the active CICS system, press Enter. The changes take effect immediately and remain in effect until you change them or the CICS system stops.

2. Figure 67 on page 146 illustrates the panel produced the first time you issue the DOWN command. You can use this panel to change real-time analysis attributes.

```

----- Control Analysis for EYUPLX01 -----
COMMAND ==>

MAS      EYUMAS1A  RTA Active ==> NO    (YES, NO, SAM, MRM)

Primary CMAS          CMAS1C2  CMAS Name or Generic
Active Period         PRIME     Period Def or Generic

System availability management:

          Action or Generic  Severity
SAM
SOS      ==>                ==>
SYSDUMP  ==>                ==>
TRANDUMP ==>                ==>
MAXTASK  ==>                ==>
STALL    ==>                ==>

Type DOWN or UP to view other MAS screens.
Press ENTER to change Analysis.
Type END to cancel without changing.

```

Figure 67. Updating an active CICS system - MAS real-time analysis attributes

Change the following information about real-time analysis, as appropriate:

RTA Active

Indicate whether the system availability monitoring (SAM) and MAS resource monitoring (MRM) components of real-time analysis are to be active. Specify one of the following:

- YES** To start system availability monitoring and MAS resource monitoring.
- NO** To stop system availability monitoring and MAS resource monitoring.
- SAM** To start system availability monitoring.
- MRM** To start MAS resource monitoring.

Action

Supply a specific or generic name of an action definition to be used when generating notification about the designated condition.

Severity

Specify the severity level to be associated with the designated condition, or NO to exclude the condition from monitoring. The severity levels are:

- VHS** Very high severe
- HS** High severe
- HW** High warn
- LW** Low warn
- LS** Low severe
- VLS** Very low severe

Note: The default action and severity level for system availability monitoring (SAM) cannot be updated while the CICS system is active. The values shown in the SAM field are for reference only. To apply the changes to the active CICS system, press Enter. The changes take effect immediately and remain in effect until you change them or the CICS system stops.

3. Figure 68 on page 147 illustrates the panel produced the second time you issue the DOWN command. You can use this panel to change resource monitoring

attributes.

Change the following information about resource monitoring, as appropriate:

```

----- Control Monitor for EYUPLX01 -----
COMMAND  ===>

MAS      EYUMAS1A  MON Active ===> YES

Retention period ===> 0

Resource Sample Intervals:
CICS Region      ===> 900      Connections      ===> 900
Global           ===> 900      Files            ===> 900
DB2              ===> 0        Journals         ===> 900
                                   Programs          ===> 900
                                   Terminals        ===> 900
                                   Transactions      ===> 900
                                   TD Queues         ===> 900

Enter DOWN or UP to view other MAS screens.
Press Enter to change Monitor.
Type END or CANCEL to cancel without changing.

```

Figure 68. Updating an active CICS system - MAS resource monitoring attributes

MON Active

Indicate whether resource monitoring is to be active. Specify:

YES To start resource monitoring.

For this to occur, the CICS system must be associated with a monitor specification. If it is not, no resource monitoring occurs.

NO To stop resource monitoring. If real-time analysis requires resource monitoring to remain active, use the FORCE option.

FORCE

To stop resource monitoring even if it is being used by real-time analysis. All resource monitoring will stop. If an evaluation definition names a monitor table resource, that evaluation definition becomes inactive.

Retention period

Specify the number of minutes collected data is to be kept after resource monitoring stops. (Resource monitoring stops when the CICS system stops or when you use the UPD action command and this panel to stop it.) The value may be:

- Between 1 and 1440, when collected data is to be retained
- 0, when collected data is not to be retained

Resource Sample Intervals

Specify the duration, in seconds, between the collection of monitor data for each resource type. The value may be:

- Between 1 and 86400 and evenly divisible into the monitor interval value, when converted to seconds. If you specify a value that is not evenly divisible, you are prompted for one that is.

CAUTION:

The lower you set the sample interval, the greater the impact on both CPU and teleprocessing overhead.

- 0, when no monitoring is to occur for a resource type.

- Omitted, when the CICS system is to use the value set with its associated monitor specification.

Notes:

- If you change a sample interval from 0 to a value, use the MONACTV view command to find out whether the appropriate monitor definitions are active. If they are not, those monitor definitions must be installed for the change to take effect.
- The sample interval for a resource may be locked by RTA.

To apply the changes to the active CICS system, press Enter. The changes take effect immediately and remain in effect until you change them or the CICS system stops.

- Figure 69 illustrates the panel produced the third time you issue the DOWN command. You can use this panel to change MAS trace table settings. (If you issue DOWN again, the first panel in this series is redisplayed.)
You can control the trace settings for each component comprising the specified

```

----- Control MAS trace for EUPLX01 -----
COMMAND  ===>

MAS      EYUMAS1A  Description  Starter Set TOR 1 on System A

      Number                1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 3 3 3
      1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2
Component -----
KNL      N N N N N N N N N N N N N N N N N N N N N N N N N N N N
TRC      N N N N N N N N N N N N N N N N N N N N N N N N N N N N
MSG      N N N N N N N N N N N N N N N N N N N N N N N N N N N N
SRV      N N N N N N N N N N N N N N N N N N N N N N N N N N N N
CHE      N N N N N N N N N N N N N N N N N N N N N N N N N N N N
QUE      N N N N N N N N N N N N N N N N N N N N N N N N N N N N
COM      N N N N N N N N N N N N N N N N N N N N N N N N N N N N
MAS      N N N N N N N N N N N N N N N N N N N N N N N N N N N N
WLM      N N N N N N N N N N N N N N N N N N N N N N N N N N N N
TOP      N N N N N N N N N N N N N N N N N N N N N N N N N N N N
RTA      N N N N N N N N N N N N N N N N N N N N N N N N N N N N

Enter DOWN or UP to view other MAS screens.
Press Enter to change the MAS.
Type END or CANCEL to cancel without changing.

```

Figure 69. Updating an active CICS system - MAS trace attributes

MAS. To do this:

- Move the cursor to a component code (such as KNL) and then move the cursor to the right until you reach the appropriate level.
- When you reach the appropriate level, overwrite the current setting with either Y (to activate tracing) or N (to deactivate tracing).

Note: Component tracing is provided primarily for the use of IBM service personnel. MAS component trace settings are normally not active. Activating tracing may have an adverse effect on performance.

To apply the changes to the active CICS system, press Enter. The changes take effect immediately and remain in effect until you change them or the CICS system stops.

Chapter 7. Example tasks: configuration and topology

This section includes examples of some typical setup-related tasks.

- “Establishing CMAS to CMAS connections” shows how to create links between CMASs on different MVS images but involved in managing the same CICSplexes.
- “Creating time period definitions” on page 150 shows how to create and maintain some standard time period definitions that can be used any number of times within the CICSplex.
- “Organizing CICS systems into groups” on page 151 shows how to create a CICS system group and how to add CICS systems to, and remove them from, that group.
- “Enabling a CMAS to send generic alerts to NetView” on page 152 shows how to update the CICSplex SM definition of a CMAS in support of some of the real-time analysis functions.

Establishing CMAS to CMAS connections

If more than one CMAS is to be involved in the management of a CICSplex, you are recommended to create links between those CMASs. In this example, you will see how to define links between two CMASs, CMSSYS1 and CMSSYS2, which will both be involved in managing the CICSplex PLXPROD1.

Note that you must define the CMAS to CMAS links *before* defining CICSplex PLXPROD1 to the CMASs. If you define PLXPROD1 to the CMASs before creating the CMAS to CMAS links, a duplicate maintenance point condition is raised and the CMAS to CMAS connection is terminated.

The CMASs are running on separate MVS images, and their CASs (CASSYS1 and CASSYS2) are already connected. You have to create two links, one from CMSSYS1 to CMSSYS2, and one from CMSSYS2 back to CMSSYS1. Both CMASs should be running while you define these links.

1. Display any existing CMAS to CMAS links defined from CMSSYS1.
 - a. From the main menu click **Administration views —> CMAS configuration administration views —> CMAS to CMAS link definitions** to open the **CMAS to CMAS link definition** tabular view.
 - b. The context, which is displayed near the top of the tabular view, must be the CMAS for any configuration task. Start with CMSSYS1, if the context is not CMSSYS1, specify CMSSYS1 in the **CMAS context** field and click **Refresh**. The context is then fixed for all subsequent views and menus until changed.
2. Create a new CMAS to CMAS link.
 - a. Click **Create** to open the **CMAS to CMAS link definition** create view.
 - b. Provide the following information:
Target CMAS name
CMSSY2
Description
Link to CMSSYS2 on system 2
Target CMAS VTAM application ID
CMSSYS2
Target CMAS system ID
CM2B

Link protocol
 LU62
Send buffer size
 4060
Receive buffer size
 4060
Type of attach-time security to be used
 LOCAL

Other fields can remain blank.

- c. Click **Yes** to confirm.

The **CMAS to CMAS link definition** view is redisplayed, and includes an entry for the link you have just created. This confirms that the link from CMSSYS1 to CMSSYS2 has been defined in the data repository of CMSSYS1. Now you have to create the corresponding link from CMSSYS2 to CMSSYS1.

3. Change the context.¹

From the **CMAS to CMAS link definition** view, type CMSSYS2 into the **CMAS context** field and click **Refresh**. (Remember that you need to store this definition in CMSSYS2's data repository, and so CMSSYS2 must be the context.)

The **CMAS to CMAS link definition** view is refreshed to show any CMAS to CMAS links that have already been defined to CMSSYS2.

4. Repeat step 2, using appropriate data for a link from CMSSYS2 to CMSSYS1.

A two-way link has now been created between CMSSYS1 and CMSSYS2. The link is available immediately; you do not have to restart the CMASs first. When the CMASs are restarted the required definitions are created automatically during the CMAS startup.

Note: With MRO connections, this can result in a transient error (message DFHIR3788, return code X'68') if the connection has not yet been created on the remote CMAS. The error should resolve itself automatically once the connection has been created.

Creating time period definitions

Some CICSplex SM functions can be activated and deactivated automatically at specific times. For example, you can tell CICSplex SM to install a particular monitor definition at 10:45 and remove it at 15.00. You define these from-and-to times to CICSplex SM via time period definitions. It is a good idea to create some standard time period definitions when you first define your CICSplex configuration to CICSplex SM.

In this example, you will see how to create typical time period definitions for the prime shift, for the lunch period, and for the evening hours.

1. Display any time period definitions already defined for PLXPROD1.
 - a. From the main menu click **Administration views** → **Monitor administration views** → **Time period definitions** to open the **Time period definition** tabular view.

1. You can change the context only if the CASs CASSYS1 and CASSYS2 are connected. If they are not, you must start a second CICSplex SM session via CASSYS2.

- b. If the context is not PLXPROD1, specify PLXPROD1 in the **Context** field and click **Refresh**. The context is then fixed for all subsequent views and menus until changed.
 2. Create a new time period definition.
 - a. Click **Create** to open the **Time Period Definition** create view.
 - b. Provide the following information:

| | |
|------------------------------------|-------------|
| Time period definition name | PDFPRIME |
| Description | Prime shift |
| Start time | 08:30 |
| End time | 18:00 |
| Time zone | R |
| Time zone adjustment factor | 0 |
 - c. Click **Yes** to confirm. The **Time period definition** tabular view is redisplayed showing an entry for PDFPRIME.
 3. Create a second time period definition.
 - a. Select the entry for PDFPRIME in the **Time period definition** view, and click **Create**. The create time period definition panel is displayed, showing values from the PDFPRIME time period definition.
 - b. Type PDFLUNCH in the **Period definition name** field, 12:00 in the **Start time** field, 14:30 in the **End time** field, and "Lunch time" in the **Description** field. The two time zone fields are as they were for PDFPRIME.
 - c. Click **Yes** to confirm. The **Time period definition** view is redisplayed.
 4. Repeat step 3 to create a time period definition called PDFEVENG, with a Start Time of 17:30 and an End Time of 23:59.
 5. Update a time period definition.

Suppose that now you want to alter the PDFPRIME definition to change the end time to 17:30. On the **Time period definition** view, select the entry for PDFPRIME and click **Update**. Overtyping the **End time** value with 17:30 and clicking **Yes**. The change takes effect immediately, and the **Time period definition** view is redisplayed showing the updated definition.

Organizing CICS systems into groups

CICS system groups are a basic building block of the CICSplex SM configuration. You are recommended to create some standard groups, such as all AORs in a CICSplex and all CICS systems in a CICSplex, when you first configure your CICSplex SM environment. In this example, you will create a CICS system group, CSGAORS1, in CICSplex PLXPROD1, and add CICS systems CICSPA01, CICSPA02, and CICSPA03 to that group.

1. Display any CICS system groups already defined in the CICSplex PLXPROD1.
 - a. From the main menu click **CICSplex SM operations views** —> **System group definitions** to open the **System group definition** tabular view.

- b. If the context is not PLXPROD1, specify PLXPROD1 in the **Context** field and click **Refresh**. The context is then fixed for all subsequent views and menus until changed.
 2. Create a new CICS system group.
 - a. Click **Create** to open the **System group definition** create view.
 - b. Provide the following information:

| | |
|--------------------------|-----------------------|
| System group name | CSGAORS1 |
| Description | AORs PA01, PA02, PA03 |
 - c. Click **Yes**. The **System group definition** tabular view is redisplayed showing an entry for the new group.
 3. Add CICS systems to the new CICS system group.
 - a. From the **CICSplex SM operations views** menu open the **CICS system definition** tabular view.
 - b. Select the entry for CICSPA0 and click **Add to CICS system group**.
 - c. In the **Group which member will join** field type in CICSPA01 and click **Yes**. The CICS system CICSPA01 is added to the CSGAORS1 group and the **CICS system definition** tabular view is redisplayed .

You have two more systems (CICSPA02 and CICSPA03) to add to the group, so need to repeat this step (step 3) twice more.
 4. If you want to check when you have finished that CICSGRP contains the correct systems, open the **System group definition** tabular view and double click on CICSGRP in the **System group name** field. The **System group definition** detailed view is displayed. Select **CICS systems in this system group** to open the **Link between CICS system and CICS system group** view.
 5. Update the CICS system group.

Assume that you want to remove CICS system CICSPA02 from the group. Open the **Link between CICS system and CICS system group** view and select the entry for CICSPA02. Click **Remove**. The **Remove** confirmation panel is displayed. Click **Yes** to confirm the operation.

The **Link between CICS system and CICS system group** view is redisplayed, showing CICS systems that are still defined as members of CSGAORS1. The list does not include CICSPA02.

Enabling a CMAS to send generic alerts to NetView

This example task is part of a larger, real-time analysis task that requires you to update a CMAS definition. This example illustrates only the CMAS-related part of the task.

If you want CICSplex SM to send SNA generic alerts to NetView, the NetView program to program interface (PPI) must be activated in the relevant CMAS. (This is the CMAS on the same MVS image as the NetView instance.) This example shows how to activate the NetView PPI in a given CMAS, CMSSYS1.

1. First, check that the context is correct (CMSSYS1 in this example). If it is not, change the context field to CMSSYS1 in the current view and click **Set**. The context is then fixed for all subsequent views and menus until changed.
2. Display the CMAS definition.
 - a. From the main menu click **CICSplex SM operations views —> CMASs known to local CMAS** to open the **Known CMAS instances** tabular view.

b. If the context is not CMSSYS1, specify CMSSYS1 in the **Context** field and click **Refresh**. The context is then fixed for all subsequent views and menus until changed.

c. Locate the entry for CMSSYS1 and click **Local** in the **Type of access that CMAS has to local CMAS** field to open the **CMAS detail** view.

See CICSplex SM Resource Tables Reference manual for information about the associated resource named CMAS.

3. Update the CMAS definition.

On the **CMAS detail** view locate the **Netview PPI to be used** field and change the entry from **No** to **Yes**. Scroll to the bottom of the view and click **Apply changes**. The view is redisplayed, showing the updated value. The NetView PPI interface is now activated.

Chapter 8. Starting to use CICSplex SM

When you have performed all of the appropriate installation and customization tasks, your CICSplex SM environment is complete and ready to be used.

Before you begin the operations tasks, be sure you have:

- Set up your CICSplex SM environment; see:
CICS Transaction Server for z/OS Installation Guide
CICS Transaction Server for z/OS Installation Guide
CICS Transaction Server for z/OS Installation Guide.
- Established security in accordance with your external security manager (ESM); see *CICS RACF Security Guide*.
- Defined CICS systems to the CMAS; see Chapter 6, “Establishing the topology of a CICSplex,” on page 89.
- Defined CICSplexes to the CMAS; see “Preparing to configure a CMAS” on page 55.
- Established cross-system communications; see “Creating system link definitions” on page 125.
- Defined links between CMASs and MASs; see “Establishing communication links between a CMAS and a MAS” on page 57.
- Established associations between CICS systems; see “Adding a CICS system to a CICS system group” on page 124.

As soon as these tasks are done, you can begin to use CICSplex SM to manage CICS resources. Use operations views to:

- Enable and disable resources
- Open and close resources
- Acquire and release resources
- Place resources in or out of service
- Purge tasks or transactions associated with a resource
- Change various resource attributes
- Shut down a CICS system
- Obtain CICS COLLECT STATISTICS data for resources being monitored
- Obtain CICSplex SM derived values for resources being monitored
- Display the effects of CICSplex SM definitions on active CICS systems.

For information on creating and maintaining CICSplex SM definitions, refer to the following books:

- *CICSplex System Manager Managing Business Applications.*
- *CICSplex System Manager Managing Resource Usage.*
- *CICSplex System Manager Managing Workloads.*

Bibliography

The CICS Transaction Server for z/OS library

The published information for CICS Transaction Server for z/OS is delivered in the following forms:

The CICS Transaction Server for z/OS Information Center

The CICS Transaction Server for z/OS Information Center is the primary source of user information for CICS Transaction Server. The Information Center contains:

- Information for CICS Transaction Server in HTML format.
- Licensed and unlicensed CICS Transaction Server books provided as Adobe Portable Document Format (PDF) files. You can use these files to print hardcopy of the books. For more information, see “PDF-only books.”
- Information for related products in HTML format and PDF files.

One copy of the CICS Information Center, on a CD-ROM, is provided automatically with the product. Further copies can be ordered, at no additional charge, by specifying the Information Center feature number, 7014.

Licensed documentation is available only to licensees of the product. A version of the Information Center that contains only unlicensed information is available through the publications ordering system, order number SK3T-6945.

Entitlement hardcopy books

The following essential publications, in hardcopy form, are provided automatically with the product. For more information, see “The entitlement set.”

The entitlement set

The entitlement set comprises the following hardcopy books, which are provided automatically when you order CICS Transaction Server for z/OS, Version 3 Release 1:

Memo to Licensees, GI10-2559
CICS Transaction Server for z/OS Program Directory, GI10-2586
CICS Transaction Server for z/OS Release Guide, GC34-6421
CICS Transaction Server for z/OS Installation Guide, GC34-6426
CICS Transaction Server for z/OS Licensed Program Specification, GC34-6608

You can order further copies of the following books in the entitlement set, using the order number quoted above:

CICS Transaction Server for z/OS Release Guide
CICS Transaction Server for z/OS Installation Guide
CICS Transaction Server for z/OS Licensed Program Specification

PDF-only books

The following books are available in the CICS Information Center as Adobe Portable Document Format (PDF) files:

CICS books for CICS Transaction Server for z/OS

General

CICS Transaction Server for z/OS Program Directory, GI10-2586
CICS Transaction Server for z/OS Release Guide, GC34-6421
CICS Transaction Server for z/OS Migration from CICS TS Version 2.3, GC34-6425

CICS Transaction Server for z/OS Migration from CICS TS Version 1.3,
GC34-6423

CICS Transaction Server for z/OS Migration from CICS TS Version 2.2,
GC34-6424

CICS Transaction Server for z/OS Installation Guide, GC34-6426

Administration

CICS System Definition Guide, SC34-6428

CICS Customization Guide, SC34-6429

CICS Resource Definition Guide, SC34-6430

CICS Operations and Utilities Guide, SC34-6431

CICS Supplied Transactions, SC34-6432

Programming

CICS Application Programming Guide, SC34-6433

CICS Application Programming Reference, SC34-6434

CICS System Programming Reference, SC34-6435

CICS Front End Programming Interface User's Guide, SC34-6436

CICS C++ OO Class Libraries, SC34-6437

CICS Distributed Transaction Programming Guide, SC34-6438

CICS Business Transaction Services, SC34-6439

Java Applications in CICS, SC34-6440

JCICS Class Reference, SC34-6001

Diagnosis

CICS Problem Determination Guide, SC34-6441

CICS Messages and Codes, GC34-6442

CICS Diagnosis Reference, GC34-6899

CICS Data Areas, GC34-6902

CICS Trace Entries, SC34-6443

CICS Supplementary Data Areas, GC34-6905

Communication

CICS Intercommunication Guide, SC34-6448

CICS External Interfaces Guide, SC34-6449

CICS Internet Guide, SC34-6450

Special topics

CICS Recovery and Restart Guide, SC34-6451

CICS Performance Guide, SC34-6452

CICS IMS Database Control Guide, SC34-6453

CICS RACF Security Guide, SC34-6454

CICS Shared Data Tables Guide, SC34-6455

CICS DB2 Guide, SC34-6457

CICS Debugging Tools Interfaces Reference, GC34-6908

CICSplex SM books for CICS Transaction Server for z/OS

General

CICSplex SM Concepts and Planning, SC34-6459

CICSplex SM User Interface Guide, SC34-6460

CICSplex SM Web User Interface Guide, SC34-6461

Administration and Management

CICSplex SM Administration, SC34-6462

CICSplex SM Operations Views Reference, SC34-6463

CICSplex SM Monitor Views Reference, SC34-6464

CICSplex SM Managing Workloads, SC34-6465

CICSplex SM Managing Resource Usage, SC34-6466

CICSplex SM Managing Business Applications, SC34-6467

Programming

CICSplex SM Application Programming Guide, SC34-6468

CICSplex SM Application Programming Reference, SC34-6469

Diagnosis

CICSplex SM Resource Tables Reference, SC34-6470
CICSplex SM Messages and Codes, GC34-6471
CICSplex SM Problem Determination, GC34-6472

CICS family books

Communication

CICS Family: Interproduct Communication, SC34-6473
CICS Family: Communicating from CICS on System/390, SC34-6474

Licensed publications

The following licensed publications are not included in the unlicensed version of the Information Center:

CICS Diagnosis Reference, GC34-6899
CICS Data Areas, GC34-6902
CICS Supplementary Data Areas, GC34-6905
CICS Debugging Tools Interfaces Reference, GC34-6908

Other CICS books

The following publications contain further information about CICS, but are not provided as part of CICS Transaction Server for z/OS, Version 3 Release 1.

| | |
|---|-----------|
| <i>Designing and Programming CICS Applications</i> | SR23-9692 |
| <i>CICS Application Migration Aid Guide</i> | SC33-0768 |
| <i>CICS Family: API Structure</i> | SC33-1007 |
| <i>CICS Family: Client/Server Programming</i> | SC33-1435 |
| <i>CICS Transaction Gateway for z/OS Administration</i> | SC34-5528 |
| <i>CICS Family: General Information</i> | GC33-0155 |
| <i>CICS 4.1 Sample Applications Guide</i> | SC33-1173 |
| <i>CICS/ESA 3.3 XRF Guide</i> | SC33-0661 |

Determining if a publication is current

IBM regularly updates its publications with new and changed information. When first published, both hardcopy and BookManager® softcopy versions of a publication are usually in step. However, due to the time required to print and distribute hardcopy books, the BookManager version is more likely to have had last-minute changes made to it before publication.

Subsequent updates will probably be available in softcopy before they are available in hardcopy. This means that at any time from the availability of a release, softcopy versions should be regarded as the most up-to-date.

For CICS Transaction Server books, these softcopy updates appear regularly on the *Transaction Processing and Data Collection Kit* CD-ROM, SK2T-0730-xx. Each reissue of the collection kit is indicated by an updated order number suffix (the -xx part). For example, collection kit SK2T-0730-06 is more up-to-date than SK2T-0730-05. The collection kit is also clearly dated on the cover.

Updates to the softcopy are clearly marked by revision codes (usually a # character) to the left of the changes.

Accessibility

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

- accessing views
 - administration 3
 - for PlexManager 39
- action command
 - summary by view
 - BATCHREP 64
 - CASACT 42
 - CASDEF 44
 - CICSGRP 107
 - CICSSYS 111
 - CMTCMDEF 68
 - CPLEXDEF 72
 - CPLXCMAS 74
 - PERIODEF 104, 130
 - PLEX 50
 - PLEXOVER 51
 - SCREENS 52
 - SYSGRPC 134
 - when administering CMASs 6
- activating component tracing
 - in one or more CMASs 80
 - in one or more MASs 148
 - in specific CMAS 81
- activating real-time analysis 101, 119
 - workload management 117, 118
- activating resource monitoring 102, 121, 136, 144
- activating RTA 136, 144
- activating workload management 137, 145
- adjacent CMAS 56
- administering CASs
 - defining cross-system communications 43
 - description of 39
 - monitoring service points 49, 51
- administering CICSplexes
 - managing topology 89
- administering CMASs
 - accessing views 3
 - summary of views 15
- administration menu
 - configuration 63
 - topology 106
- administration views
 - accessing 3
 - to create and maintain definitions 15
 - to manage definitions 16
- assigning a CMAS to a CICSplex definition 71
- associating CICS system with CICS system group 103, 124
- associating CICSplex with local CMAS 73
- associating CMAS with CICSplex 71, 73
- associating member with CICS system group 109
- automatic installation of resources 103, 123

B

- batched repository-update facility
 - creating input 18
 - setting command processing options 23
 - submitting input to 17, 27
 - using 17
 - using OUTPUT command 24
- BATCHREP view 64
- browsing CICS system definition 111
- browsing CICS system group definition 107
- browsing CICSplex and maintenance point association 74
- browsing CICSplex definition 72
- browsing definition in data repository 7
- browsing link definition 68
- browsing period definition 130

C

- CAS (coordinating address space)
 - CMASs and CICSplexes known to 49, 51
 - cross-system communications
 - adding definitions 45
 - deleting definitions 48
 - halting 42
 - installing definitions 48
 - quiescing 42
 - starting 42
 - updating definitions 44
 - service points 49, 51
 - subsystem ID 46
- CASACT view 41
- CASDEF view 43
- CASDEFD view 49
- CICS system
 - as part of CICS system group
 - adding to 103, 109, 124
 - description of 97, 106
 - displaying 133
 - removing from 135
 - as part of CICSplex
 - browsing 86, 111
 - creating 88, 113
 - description of 84, 111
 - displaying 87, 111
 - removing 112
 - updating 112
 - displaying status of 140
 - relationship to CICS system group 89
 - relationship to CICSplex 89
 - rules when creating 89
- CICS system group
 - adding member to 103, 109, 124
 - creating 97, 108
 - displaying
 - known to CICS system group 133
 - known to CICSplex 97, 106

- CICS system group *(continued)*
 - relationship to CICS system and CICSplex 96
 - removing 110
 - removing member from 135
 - updating description of 108
- CICS system link
 - creating
 - from a model 126
 - from existing connections 127
- CICSGRP view 106
- CICSplex
 - all CMASs associated with 77
 - CAS association 49, 51
 - changing definition of 72
 - CMASs associated with
 - adding 71, 73
 - displaying 74
 - removing 75
 - context
 - establishing using PLEX view 50
 - establishing using PLEXOVER view 52
 - creating 73
 - displaying
 - as service point 49, 51
 - associated with local CMAS 69
 - CICS system group s known to 97, 106
 - CICS systems known to 111
 - managing definitions of 69
 - managing topology 89
 - monitor interval 70
 - relationship to CICS system and CICS system group 96
 - removing from data repository 72
 - rules when creating 55
 - service points 49, 51
- CICSplex SM
 - initialization parameters 89
- CICSplex SM address space (CMAS)
 - shutting down
 - specific 81
- CICSPLEX view 77
- CICSplexes managed by CMAS view 76
- CICSSYS view 111
- CMAS
 - discarding a link 76
 - purging and rebuilding ESM profiles 76
- CMAS (CICSplex SM< address space)
 - shutting down
 - specific 81
- CMAS configuration 76
- CMAS detail view 152
- CMAS link
 - creating to
 - another CMAS 68
 - description of
 - to a MAS 57
 - to another CMAS 56, 67
 - discarding for
 - one or more CMASs 86
 - specific CMAS 84

- CMAS link *(continued)*
 - discarding without removing
 - one or more CMASs 68
 - displaying
 - to one or more CMASs 67
 - removing from
 - another CMAS 68
 - service point 49, 51
 - updating description
 - to a CMAS 68
- CMAS to CMAS link definition 64
- CMAS to CMAS link removal 67
- CMAS to CMAS link update 67
- CMAS to CMAS links 64
- CMAS to CMAS links view 76
- CMAS to MAS links 69
- CMAS to MAS links view 76
- CMAS view 78
- CMASD view 81
- CMASPLEX view 83
- CMASs known to local CMAS view 76
- CMASs managing CICSplex view 76
- CMTCMDEF view 67
- CMTCMLND view 84
- CMTCMLNK view 86
- CMTPMLND view 87
- CMTPMLNK view 88
- COLM transaction 142
- communication links
 - CMAS-to-CMAS
 - discarding one or more 86
 - discarding specific 84
 - displaying status of one or more 86
 - displaying status of specific 84
 - CMAS-to-remote MAS
 - displaying status of one or more 88
 - displaying status of specific 87
- communications
 - CAS-to-CAS
 - adding definitions 45
 - deleting definitions 48
 - halting 42
 - installing definitions 48
 - quiescing 42
 - starting 42
 - updating definitions 44
 - CMAS-to-CMAS
 - creating links 68
 - direct 56
 - discarding links 68
 - displaying links 67
 - indirect 56
 - removing links 68
 - updating description of a link 68
 - CMAS-to-remote MAS links
 - description of 57
- configuration and topology
 - creating time period definitions 150
 - enabling CMAS to send generic alerts to NetView 152
 - establishing CMAS-to-CMAS connections 149

- configuration and topology *(continued)*
 - organizing CICS systems into groups 151
- configuration views
 - accessing 63
 - BATCHREP 64
 - CICSPLEX 77
 - CMAS 78
 - CMASD 81
 - CMASPLEX 83
 - CMTCMDEF 67
 - CMTCMLND 84
 - CMTCMLNK 86
 - CMTPMLND 87
 - CMTPMLNK 88
 - CPLEXDEF 72
 - CPLXCMAS 74
 - required context setting 2
- configuring CMASs
 - description of 55
- context
 - establishing using PlexManager 50, 52
 - setting required for
 - CMAS administration views 2
 - PlexManager views 39
- CONTEXT display command
 - with CMAS administration 2
 - with PlexManager 39
- coordinating address space (CAS)
 - CMASs and CICSplexes known to 49, 51
- cross-system communications
 - adding definitions 45
 - deleting definitions 48
 - halting 42
 - installing definitions 48
 - quiescing 42
 - starting 42
 - updating definitions 44
- service points 49, 51
- subsystem ID 46
- CORM transaction 142
- CPLEXDEF view 69
- CPLXCMAS view 74
- creating a CICSplex definition
 - using the Web User Interface 70
- creating CICS system definition 113
 - period definition 132
- creating CICS system group definition 97, 108
- creating CICSplex definition 73
- creating CMAS links to
 - another CMAS 68
- cross-system communications
 - for CAS
 - adding definitions 45
 - deleting definitions 48
 - installing definitions 48
 - updating definitions 44
 - halting CAS 42
 - quiescing CAS 42
 - starting CAS 42

- CSD file requirements
 - when creating links
 - CMAS-to-CMAS 68
 - when removing link
 - CMAS-to-CMAS 75
- CVTTZ MVS CVT data field 93

D

- data repository
 - for each CMAS 58
 - updating 17
- daylight saving time
 - definition of attribute 93
 - for CICS system definition 116
 - for CICSplex definition 71
- defining links between CICS systems 125
- definition views
 - configuration views
 - CICSPLEX 77
 - CMAS 78
 - CMASD 81
 - CMTCMLND 84
 - CMTCMLNK 86
 - CMTPMLND 87
 - CMTPMLNK 88
 - topology view 141
- definitions, mapping
 - action command 8
 - batched repository-update facility 22
- deleting CAS definitions 48
- discarding without removing
 - CMAS-to-CMAS links 67
- displaying CICSplexes
 - associated with local CMAS 69
- CICS system groups
 - known to CICS system group 133
 - known to CICSplex 97, 106
- CICS systems
 - known to CICS system group 133
 - known to CICSplex 111
- CMASs associated with CICSplex
 - determining 74
- link definitions
 - CMAS to CMAS 67
- members of CICS system group 133

E

- end-user interface
 - CMAS configuration 76
- example tasks
 - configuration and topology 149
- EYUPARM parameters
 - topology requirements 89
- EYUSTARTCMASLIST view 57

G

- generating CICS system links 125

Greenwich Mean Time
 and time zone codes 92, 133
 standard for time zones 92

H

halting cross-system communications 42
help, requesting online 14
hyperlink, initiating 5

I

indirect CMAS 56
inheriting specifications
 when adding CICS system 109, 125
 when removing
 CICS system 135
 CICS system group 110
installing CAS definitions 48
installing CICS resources 103, 123
IOAREALEN 65

L

Links

 CMAS to CMAS 64
links, communication
 CMAS-to-CMAS
 discarding one or more 86
 discarding specific 84
 displaying status of one or more 86
 displaying status of specific 84
 CMAS-to-remote MAS
 displaying status of one or more 88
 displaying status of specific 87
 creating
 CMAS-to-CMAS 68
 displaying
 CMAS-to-CMAS 67
 overview
 CMAS-to-CMAS 56
 CMAS-to-MAS 57
 removing
 CMAS-to-CMAS 68
 updating
 CMAS-to-CMAS 68
local CMAS
 defining CICSplex to 73
 displaying CICSplexes associated with 69
 managing CICSplexes associated with 69
local MAS 57, 69
LU 6.2 communication links
 between CMASs
 creating 68
 displaying 67
 removing 68
 updating description of 68
 overview 57

M

maintenance point CMAS
 changing 61
 description of 56
 establishing a different 75
 establishing with CICSplex definition 72
 function 56
 temporary 59
 working with 58
managed application system (MAS)
 controlling in active CICS system
 component tracing 148
 real-time analysis activity 136, 144
 resource monitoring activity 136, 144
 workload management activity 137, 145
 displaying active 140
 links to CMAS
 displaying status of 87, 88
 local 57, 69
 remote 57
 restarting in active CICS system 142
 stopping 135, 142
 updating 136
managing a CMAS configuration 76
MAP action command 8
mapping CICSplex SM definitions
 action command 8
 batched repository-update facility 22
MAS (managed application system)
 controlling in active CICS system
 component tracing 148
 real-time analysis activity 136, 144
 resource monitoring activity 136, 144
 workload management activity 137, 145
 displaying active 140
 links to CMAS
 displaying status of 87, 88
 local 57, 69
 remote 57
 restarting in active CICS system 142
 stopping 135, 142
 updating 136
MAS agent
 restarting in active CICS system 142
 stopping in active CICS system 142
MAS links to CMAS
 description of 57
MAS view 141
menu, administration
 configuration 63
 topology 106
menu, selecting from 4
monitor interval 70
monitoring resources
 activating at CICS system startup 102, 121
 activating when CICSplex active 136, 139, 144, 147
 settings
 monitor interval 70
 retention period 102, 122
 sample interval 102, 122
MRO and CMAS to CMAS link definition 65

- MRO communication links
 - between CMASs
 - creating 68
 - displaying 67
 - removing 68
 - updating description of 68
 - overview 57
- MRO connections
 - transient error message DFHIR3788 150

O

- online help, requesting 14
- OPTION command 23
- OUTPUT command 24
- overtime field, using 13

P

- parameter repository
 - adding CAS definition 45
 - changing CAS definition 44
 - deleting CAS definition 48
- period definition
 - creating 132
 - removing 131
 - time zone attributes used for 95
 - updating 131
 - uses of 95
- PERIODEF view 104, 130
- PLEX view 49
- PlexManager
 - accessing 39
 - description of 39
 - views
 - CASACT 41
 - CASDEF 43
 - CASDEFD 49
 - PLEX 49
 - PLEXOVER 51
- PLEXOVER view 51

Q

- quiesce CAS communications 42

R

- real-time analysis (RTA)
 - activating 136, 139, 144, 147
- RECEIVESIZE values 65
- refreshing CAS definitions 48
- remote MAS
 - description of 57
 - link to CMAS
 - displaying status of 88
- removing
 - CMAS from CICSplex association 75
 - CMAS link to
 - another CMAS 68

- removing (*continued*)
 - cross-system communications definitions 43
 - from data repository
 - CICS system group 110
 - CICSplex 72
 - member from CICS system group 135
 - period definition 131
- removing a CICSplex definition 70
- requesting online help 14
- resource monitoring
 - activating at CICS system startup 102, 121
 - settings
 - monitor interval 70
 - retention period 102, 122
 - sample interval 102, 122
- restarting cross-system communications 42
- restarting MAS agent in active CICS system 142
- retention period 102, 122
- RTA (real-time analysis)
 - activating 136, 139, 144, 147

S

- sample interval 102, 122
 - changing for active CICSplex 139, 147
- scope
 - affecting topology 2
 - assigning CICS system to CICS system group 124
 - setting for
 - CMAS administration views 2
- SCREENS view 52
- selecting from a menu 4
- selection list
 - configuration 63
 - displaying and using 12
 - topology 106
- SENDSIZE values 65
- service point 50, 52
- SET display command
 - with CMAS administration 2
 - with PlexManager 39
- SETD display command
 - with CMAS administration 2
- shutting down
 - cross-system communications 42
- shutting down CMAS
 - one or more 78
 - specific 81
- shutting down resource monitoring 136, 144
- shutting down RTA 136, 144
- specification inheritance
 - when adding CICS system 109, 125
 - when removing
 - CICS system 135
 - CICS system group 110
- starting
 - cross-system communications 42
- stopping
 - cross-system communications 42
- stopping CMAS
 - one or more 78

- stopping CMAS *(continued)*
 - specific 81
- stopping real-time analysis 136, 144
- stopping resource monitoring 136, 144
- subsystem ID, CAS 46
- summary of views
 - for CMAS administration 15
- SYSGRPC view 133
- SYSIDNT system initialization operand 100
- system link
 - creating
 - from a model 126
 - from existing connections 127
- system parameters
 - topology requirements 89

T

- target region
 - activating workload management 118
 - CICSplex requirements 90
- tasks, example
 - configuration and topology 149
- TEMPMP action command 8
- temporary maintenance point 59
- terminal-owning region (TOR)
 - activating for a workload 137, 145
- time zone attributes
 - definitions of 92
 - uses 91
 - in a CICS system 94
 - in a CICSplex 94
 - in a CMAS 93
 - in a period definition 95
 - where specified 92
- time zone codes, table of 133
- time-period definition
 - creating 132
 - removing 131
 - time zone attributes used for 95
 - updating 131
 - uses of 95
- topology
 - MAS view 141
- topology and configuration
 - creating time period definitions 150
 - enabling CMAS to send generic alerts to NetView 152
 - establishing CMAS-to-CMAS connections 149
 - organizing CICS systems into groups 151
- topology definitions 97
 - browsing CICS system known to CICSplex 111
 - creating 80, 81
 - CICS system groups 97, 108
 - CICS systems known to CICSplex 113
 - removing
 - CICS system group 110
 - CICSplex known to CICSplex 112
 - member 135
 - updating
 - CICS system group description 108

- topology definitions *(continued)*
 - updating *(continued)*
 - CICS system known to CICSplex 112
- topology views
 - CICSGRP 106
 - CICSSYS 111
 - relationship to definitions 96
 - SYSGRPC 133
- topology, establishing 89
- TOR (terminal-owning region)
 - activating for a workload 137, 145
- tracing
 - MAS components 148

U

- unassigning a CMAS from a CICSplex definition 70
- updating CICSplex definition 72
 - CICS system 107, 112
 - CICS system group description 108
 - cross-system communications definitions 44
 - link definition
 - CMAS to CMAS 68
 - link description
 - CMAS to CMAS 68
 - period definition
 - definition of 131

V

- view commands, issuing 4
- views, accessing
 - administration 3
 - for PlexManager 39

W

- Web User Interface
 - adding a CICS system to a CICS system group 103
 - assigning a CMAS to CICSplex definition 71
 - CICS system definitions 98
 - CMAS configuration 76
 - creating a CICSplex definition 70
 - creating a CMAS to CMAS link definition 64
 - creating a time period definition 104
 - managing topology definitions 97
 - MAS definitions 135
 - removing a CMAS to CMAS link definition 67
 - setting context and scope 1
 - updating a CMAS to CMAS link definition 67
- workload management
 - activating in routing region 117
 - activating in target region 118
 - CICSplex requirements 90

Notices

This information was developed for products and services offered in the U.S.A. IBM may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not give you any license to these patents. You can send license inquiries, in writing, to:

IBM Director of Licensing
IBM Corporation
North Castle Drive
Armonk, NY 10504-1785
U.S.A.

For license inquiries regarding double-byte (DBCS) information, contact the IBM Intellectual Property Department in your country or send inquiries, in writing, to:

IBM World Trade Asia Corporation
Licensing
2-31 Roppongi 3-chome, Minato-ku
Tokyo 106, Japan

The following paragraph does not apply in the United Kingdom or any other country where such provisions are inconsistent with local law:

INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions, therefore this statement may not apply to you.

This publication could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

Licensees of this program who wish to have information about it for the purpose of enabling: (i) the exchange of information between independently created programs and other programs (including this one) and (ii) the mutual use of the information which has been exchanged, should contact IBM United Kingdom Laboratories, MP151, Hursley Park, Winchester, Hampshire, England, SO21 2JN. Such information may be available, subject to appropriate terms and conditions, including in some cases, payment of a fee.

The licensed program described in this document and all licensed material available for it are provided by IBM under terms of the IBM Customer Agreement, IBM International Programming License Agreement, or any equivalent agreement between us.

Programming interface information

This book is intended to help you set up your IBM CICSplex System Manager (CICSplex SM) system.

This book also documents Product-sensitive Programming Interface and Associated Guidance Information provided by CICSplex SM and CICS/ESA.

Product-sensitive programming interfaces allow the customer installation to perform tasks such as diagnosing, modifying, monitoring, repairing, tailoring, or tuning of CICSplex SM and CICS/ESA. Use of such interfaces creates dependencies on the detailed design or implementation of the IBM software product. Product-sensitive programming interfaces should be used only for these specialized purposes. Because of their dependencies on detailed design and implementation, it is to be expected that programs written to such interfaces may need to be changed in order to run with new product releases or versions, or as a result of service.

Product-sensitive Programming Interface and Associated Guidance Information is identified where it occurs, either by an introductory statement to a chapter or section or by the following marking:

Product-sensitive programming interface

Product-sensitive Programming Interface and Associated Guidance Information...

End of Product-sensitive programming interface

Trademarks

IBM, the IBM logo, and ibm.com are trademarks or registered trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. A current list of IBM trademarks is available on the Web at Copyright and trademark information at www.ibm.com/legal/copytrade.shtml.

Java and all Java-based trademarks and logos are trademarks of Sun Microsystems, Inc. in the United States, other countries, or both.

Microsoft and Windows are trademarks of Microsoft Corporation in the United States, other countries, or both.

UNIX is a registered trademark of The Open Group in the United States and other countries.

Other product and service names might be trademarks of IBM or other companies.

Sending your comments to IBM

If you especially like or dislike anything about this book, please use one of the methods listed below to send your comments to IBM.

Feel free to comment on what you regard as specific errors or omissions, and on the accuracy, organization, subject matter, or completeness of this book.

Please limit your comments to the information in this book and the way in which the information is presented.

To ask questions, make comments about the functions of IBM products or systems, or to request additional publications, contact your IBM representative or your IBM authorized remarketer.

When you send comments to IBM, you grant IBM a nonexclusive right to use or distribute your comments in any way it believes appropriate, without incurring any obligation to you.

You can send your comments to IBM in any of the following ways:

- By mail, to this address:

IBM United Kingdom Limited
User Technologies Department (MP095)
Hursley Park
Winchester
Hampshire
SO21 2JN
United Kingdom

- By fax:
 - From outside the U.K., after your international access code use 44–1962–816151
 - From within the U.K., use 01962–816151
- Electronically, use the appropriate network ID:
 - IBMLink: HURSLEY(IDRCF)
 - Internet: idrcf@hursley.ibm.com

Whichever you use, ensure that you include:

- The publication title and order number
- The topic to which your comment applies
- Your name and address/telephone number/fax number/network ID.



Product Number: 5655-M15

SC34-6462-05



Spine information:



CICS TS for z/OS

CICSplex SM Administration

Version 3
Release 1