CICS® Transaction Server for OS/390®

CICSPlex® SM Web User Interface Guide

Release 3

CICS® Transaction Server for OS/390®

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Release 3

First Edition, November 1999

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Preface

This book describes the CICSPlex® SM Web User Interface as follows:

- "Chapter 1. An overview of the CICSPlex SM Web User Interface" on page 1 provides an introduction to the CICSPlex SM Web User Interface.
- "Chapter 2. The main components of the CICSPlex SM Web User Interface" on page 5 describes the features of the CICSPlex SM Web User Interface.
- "Chapter 3. Setting up a CICSPlex SM Web User Interface server" on page 19 describes how to set up the CICSPlex SM Web User Interface server.
- "Chapter 4. Using the CICSPlex SM Web User Interface" on page 35 describes how to use the CICSPlex SM Web User Interface.
- "Chapter 5. Administration" on page 57 describes how to administor the CICSPlex SM Web User Interface.
- "Chapter 6. Customizing the Web User Interface" on page 73 describes how to customize the CICSPlex SM Web User Interface using the View Editor.
- "Chapter 7. Problem determination" on page 97 provides guidance on problem solving.
- "Chapter 8. Messages" on page 105 contains a list of CICSPlex SM messages and their meanings, that can be issued by the Web User Interface.

Who this book is for

This book is intended for anyone who needs an introduction to the CICSPlex SM Web User Interface, for system designers and programmers or the people responsible for setting up and administering the interface, for the person responsible for customizing the interface to meet the needs of your enterprise, for operators who want to use the interface, and for anyone responsible for problem solving.

What you need to know

This book assumes that you are familiar with the CICSPlex SM element of CICS® Transaction Server for OS/390. A knowledge of the CICSPlex SM operations views and resource tables is an advantage. In addition, it assumes that operators are familiar with CICS operations, administrators are familiar with CICSPlex SM, CICS, and TCP/IP administration, and end-users are familiar with web browsers.

CICS system connectivity

This release of CICSPlex SM may be used to control CICS systems that are directly connected to it, and indirectly connected through a previous release of CICSPlex SM.

For this release of CICSPlex SM, the directly-connectable CICS systems are:
- CICS Transaction Server for OS/390 1.3
- CICS Transaction Server for OS/390 1.2
- CICS Transaction Server for OS/390 1.1
- CICS for MVS/ESA 4.1
- CICS Transaction Server for VSE/ESA Release 1
- CICS Transaction Server for OS/2 Warp 4.1
- Transaction Server for OS/2 Warp 4.0

CICS systems that are not directly connectable to this release of CICSPlex SM are:
- CICS for MVS/ESA 3.3
- CICS for MVS 2.1.2
- CICS for VSE/ESA 2.3
- CICS for VSE/ESA 2.2
- CICS for OS/2 2.0.1

Note: IBM Service no longer supports these CICS release levels.

You can use this release of CICSPlex SM to control CICS systems 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 OS/390 Migration Guide* for information on how to do this.

Table 1 shows which CICS systems may 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 1.3	CICSPlex SM 1.3	CICSPlex SM 1.2
CICS TS for OS/390 1.3	Yes	No	No
CICS TS for OS/390 1.2	Yes	Yes	No
CICS TS for OS/390 1.1	Yes	Yes	Yes
CICS for MVS/ESA 4.1	Yes	Yes	Yes
CICS for MVS/ESA 3.3	No	Yes	Yes
CICS for MVS 2.1.2	No	Yes	Yes
CICS TS for VSE/ESA Rel 1	Yes	No	No
CICS for VSE/ESA 2.3	No	Yes	Yes
CICS for VSE/ESA 2.2	No	Yes	Yes
CICS TS for OS/2 4.1	Yes	No	No
TS for OS/2 4.0	Yes	Yes	Yes
CICS for OS/2 2.0.1	No	Yes	Yes

The CICSPlex SM Web User Interface web browsers

The CICSPlex SM Web User Interface has been tested with Netscape Navigator V4.5, Netscape Communicator 4.61, and Microsoft Internet Explorer Version 5.0.

HTML 3.2 or later and HTTP 1.0 or 1.1 with cookies are required. Your browser must support frames and tables. For more functionality it is recommended that your browser supports Java and Javascript 1.1 and above, and multiple windows.

Additional CICSPlex SM information

Additional information about CICSPlex SM is available on the World Wide Web at:

`http://www.ibm.com/software/cicsplex/`

Bibliography

CICS Transaction Server for OS/390

CICS Transaction Server for OS/390: Planning for Installation	GC33-1789
CICS Transaction Server for OS/390 Release Guide	GC34-5352
CICS Transaction Server for OS/390 Migration Guide	GC34-5353
CICS Transaction Server for OS/390 Installation Guide	GC33-1681
CICS Transaction Server for OS/390 Program Directory	GI10-2506
CICS Transaction Server for OS/390 Licensed Program Specification	GC33-1707

CICS books for CICS Transaction Server for OS/390

General

CICS Master Index	SC33-1704
CICS User's Handbook	SX33-6104
CICS Transaction Server for OS/390 Glossary (softcopy only)	GC33-1705

Administration

CICS System Definition Guide	SC33-1682
CICS Customization Guide	SC33-1683
CICS Resource Definition Guide	SC33-1684
CICS Operations and Utilities Guide	SC33-1685
CICS Supplied Transactions	SC33-1686

Programming

CICS Application Programming Guide	SC33-1687
CICS Application Programming Reference	SC33-1688
CICS System Programming Reference	SC33-1689
CICS Front End Programming Interface User's Guide	SC33-1692
CICS C++ OO Class Libraries	SC34-5455
CICS Distributed Transaction Programming Guide	SC33-1691
CICS Business Transaction Services	SC34-5268

Diagnosis

CICS Problem Determination Guide	GC33-1693
CICS Messages and Codes	GC33-1694
CICS Diagnosis Reference	LY33-6088
CICS Data Areas	LY33-6089
CICS Trace Entries	SC34-5446
CICS Supplementary Data Areas	LY33-6090

Communication

CICS Intercommunication Guide	SC33-1695
CICS Family: Interproduct Communication	SC33-0824
CICS Family: Communicating from CICS on System/390	SC33-1697
CICS External Interfaces Guide	SC33-1944
CICS Internet Guide	SC34-5445

Special topics

CICS Recovery and Restart Guide	SC33-1698
CICS Performance Guide	SC33-1699
CICS IMS Database Control Guide	SC33-1700
CICS RACF Security Guide	SC33-1701
CICS Shared Data Tables Guide	SC33-1702
CICS Transaction Affinities Utility Guide	SC33-1777
CICS DB2 Guide	SC33-1939

CICSPlex SM books for CICS Transaction Server for OS/390

General

CICSPlex SM Master Index	SC33-1812
CICSPlex SM Concepts and Planning	GC33-0786
CICSPlex SM User Interface Guide	SC33-0788
CICSPlex SM View Commands Reference Summary	SX33-6099

Administration and Management

CICSPlex SM Administration	SC34-5401
CICSPlex SM Operations Views Reference	SC33-0789
CICSPlex SM Monitor Views Reference	SC34-5402
CICSPlex SM Managing Workloads	SC33-1807
CICSPlex SM Managing Resource Usage	SC33-1808
CICSPlex SM Managing Business Applications	SC33-1809

Programming

CICSPlex SM Application Programming Guide	SC34-5457
CICSPlex SM Application Programming Reference	SC34-5458

Diagnosis

CICSPlex SM Resource Tables Reference	SC33-1220
CICSPlex SM Messages and Codes	GC33-0790
CICSPlex SM Problem Determination	GC33-0791

Other CICS books

CICS Application Programming Primer (VS COBOL II)	SC33-0674
CICS Application Migration Aid Guide	SC33-0768
CICS Family: API Structure	SC33-1007
CICS Family: Client/Server Programming	SC33-1435
CICS Family: General Information	GC33-0155
CICS 4.1 Sample Applications Guide	SC33-1173
CICS/ESA 3.3 XRF Guide	SC33-0661

If you have any questions about the CICS Transaction Server for OS/390 library, see *CICS Transaction Server for OS/390: Planning for Installation* which discusses both hardcopy and softcopy books and the ways that the books can be ordered.

Chapter 1. An overview of the CICSPlex SM Web User Interface

The CICSPlex SM Web User Interface has been developed as an alternative to the CICSPlex SM ISPF End User Interface (EUI). The Web User Interface presents a platform-independent interface that allows you to customize your user interface to your individual business requirements. It is designed for use in operations and help desk environments, specifically for the management of CICS resources and the review of CICSPlex SM resources.

What does the Web User Interface offer?

The CICSPlex SM Web User Interface offers an easy-to-use interface that can be customized to reflect your business procedures and to suit the needs of individual users. You can, in effect, use the Web User Interface menu and view facilities to create an on-line procedures manual.

You can create clear, uncluttered displays, called *views*, that present only the information that you wish the user to see. The types of view are:
- *Tabular*, containing data from multiple records.
- *Detail*, containing data from one record.
- *Confirmation panel*, requesting confirmation of an action.

You can link to the Web User Interface from any location that can launch a Web browser, for example, from your Web-based procedures manual.

The CICSPlex SM Web User Interface allows you to:
- Structure your data in a task-oriented way. You can:
  - Organize the user interface by resource category, by user task, or by application.
  - Define the links between views.
  - Define the buttons that will appear on a display and what they will do.
- Customize the layout of data. You can:
  - Have as many views of the same object as you like, each one showing a different selection of data depending on the user task.
  - If you have a Java-enabled browser, you can use graphical presentations of your data: you can have either a bar gauge that shows, for example, the number of tasks active in a CICS region, or a warning light that can be configured to change color or flash, depending on the threshold values you define for the field.
- Customize the panels to your business needs. You can:
  - Use terminology appropriate to your business.
  - Use your national language for annotations and customized help.
  - Limit the data that is displayed using filters, so that users see only the data relevant to their task.
  - Include information for the user's guidance, for example, contact names and telephone numbers.
  - Define text that is written on action buttons.

- For each menu choice, add explanatory text to help the user in the task.
  - For each view, provide buttons that accomplish the task, for example, a shutdown button on a CICS regions view.
- Present the data the users want to see in order to complete a task. You can:
  - Display only the information you want the user to see.
  - Control what information can be amended, and where and how these amendments are made. For example, you can make sure that the user has to confirm that an operation is required, or that data has to be changed. You can restrict entry fields to display-only or to preset values.
  - Add safety by providing a confirmation panel asking the user to confirm that an action is to be performed.
- Develop menus that guide the user through a task. For each of the tasks being performed in your enterprise, you know which CICSPlex SM objects are involved in the task, and so you can create a menu for the task that contains those objects. In this way, you can create menus that reflect your business procedures.
- Provide your own customized help information for each view and menu in your national language. For example, you could describe the task to be performed, or provide contact names and telephone numbers that are specific to your location. The help documents may be located on the CICS system that you have selected to act as your Web User Interface server, or each menu and view could be linked to an existing Web-based procedures manual on an external server.

Web User Interface View Editor

The customization of the Web User Interface is achieved using the Web User Interface View Editor. The View Editor is an on-line, Web-based tool that leads you step-by-step through the process of creating your views and menus. You can display previews of your views. The use of the View Editor can be restricted to nominated users. You need no knowledge of HTML to use the View Editor.

Web User Interface help facilities

Help is provided as part of the Web User Interface:
- On-line help explaining the Web User Interface and how to use it
- Message help explaining messages issued by the Web User Interface

You can use the Web User Interface to provide customized help for individual views and menus. This help can be served by the Web User Interface server or by an external server.

National Language Support

The CICSPlex SM Web User Interface provides national language support for the following languages:
- Japanese
- Simplified Chinese
- US English

Example interactive procedure

An example of an interactive procedure may consist of a menu that contains the steps in the procedure to shutdown a target region in an active workload:
1. View the active target region for a workload.

From this view, select a target region and quiesce it.

2. View affinities for the selected workload.

   Check that there are no active affinities that will be affected by shutting down the target region.

3. View active tasks in the region.

   Check active tasks in the target region.

4. View CICS target regions.

   Shutdown the target region.

System overview

The Web User Interface is accessed using standard web browser software that contacts a Web User Interface server, which is a dedicated CICS region. You can have more than one Web User Interface server active; for example, you may have a requirement for different languages to be used or different systems available to different servers. The web browser client contacts the web server by an HTTP request via the CICS Web Interface.

The Web User Interface server runs as a CICSPlex SM local MAS and communicates with the managed resources via the CMAS to which it is connected.

All the menu and view definitions are stored on a server repository. There is one repository for each Web User Interface server. The menu and view definitions can be exported for backup purposes, for distributing definitions to other servers, and for migrating menus and views between product releases.

Controlling the Web User Interface

You should consider the following when deciding on how to control the Web User Interface:

- Administration
- Security
- Creating your customized Web User Interface

Administration

The Web User Interface provides an administration transaction COVC that allows you to:

- Start and shutdown the Web User Interface server
- View the server status
- View current user activity and terminate active user sessions
- Import and export repository definitions
- Set trace flags

Security

The Web User Interface uses your existing RACF® (or other External Security Manager) security profiles for CICSPlex SM. Access to the Web User Interface is controlled by user ID and password at sign on time. The only additional security requirement is a new profile for users of the View Editor.

Optionally, if you are running CICS Transaction Server for OS/390 Release 3 or later, you can use the Secure Sockets Layer (SSL) support to provide encryption on the connection.

Creating your customized Web User Interface

The creation of your customized interface covers:

- Analysis of your business tasks and the relationships between the tasks.
- Tailoring the menus and views, and adding any additional documentation.

As the Web User Interface is designed to accompany your existing procedures, the main task in the creation of your interface is the tailoring of the menus and views, and adding any additional documentation you require. To help in this task, a starter set of menus and views is provided.

Summary — what are the benefits?

The Web User Interface offers:

- An easy-to-use interface for operations and help desk user environments.
- Customized task menus that reflect the procedures carried out in your enterprise.
- The ability to provide additional help text and view annotations in a supported national language.
- Low additional overhead for installation and set up.
- The ability to restrict data for clearer displays.
- The ability to add levels of confirmation for additional protection.
- The possibility of multiple servers active at any one time, supporting different languages and providing availability should a problem render one of the servers inaccessible.

Chapter 2. The main components of the CICSPlex SM Web User Interface

This chapter provides a brief overview of the main components of the CICSPlex Web User Interface. These are the:

- "The CICSPlex SM Web User Interface frames"
- "View sets and views" on page 8
- "Menus" on page 14
- "Context, CMAS context and scope" on page 16
- "Customizable view and menu help" on page 16
- "The View Editor" on page 17

The CICSPlex SM Web User Interface frames

The CICSPlex SM Web User Interface exploits a frame-based interface as demonstrated in Figure 1.
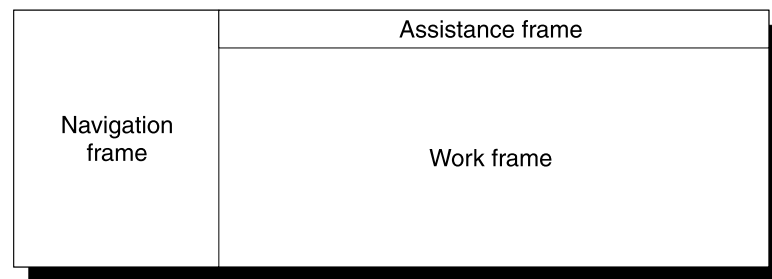
Figure 1. Frame-based display used by the CICSPlex SM Web User Interface

The CICSPlex SM Web User Interface display consists of three frames:

- The Navigation Frame
- The Work Frame
- The Assistance Frame

The CICSPlex Web User Interface frames may contain **icons** and **links** to allow you to navigate around the Web User Interface, access Web User Interface facilities such as Help, and manage Web User Interface sessions.

Icons

Icons may be:

- Graphic symbols that a user can point to with a device such as a mouse, to select a particular function. Clicking on a graphic symbol icon results in an action being performed. For example, clicking on the Go back icon results in the previous menu or view being displayed. The icons shown in Table 2 on page 6 are examples of graphic symbols.
- Graphical representations of an object (for example, a file) that consists of an image. Clicking on this type of icon has no effect.

The Web User Interface uses the following icons:

Table 2. Graphic symbol icons and their descriptions

Icons	Description	Meaning
	Go back to start	Return to the first page you saw in this window
	Go back to last menu	Return to the last menu that was displayed in this window
	Go back	Return to the previous menu or view
	Sort ascending	Sort the data in the column in ascending order
	Sort descending	Sort the data in the column in descending order
	Summarize	Summarize the data in the view based on the selected column
	Print preview	Display a printable version of the view in a new window
	Expand	Expand a group on the navigation frame
	Collapse	Collapse a group on the navigation frame
	Help	From the assistance frame, the Help icon opens the Web User Interface Help Contents Page. From the message area in the work frame, the Help icon opens the Web User Interface Message Help for the displayed message

Links

A link allows you to navigate between different menus and views. The style of a link depends on the browser you are using, but it is usually indicated by words that are highlighted in some way, possibly by a different color and underlined. For information about using links, see "Using links" on page 45.

The navigation frame

The navigation frame appears on the left of the display and contains items that allow you to display a menu or view or to perform an action. The items that are displayed depend on your configuration and authority. For example, if you do not have authority to customize the display, you will not have a link to the View Editor. For information about the View Editor, see "The View Editor" on page 17.

The types of links in the navigation frame are:

Menus and views
Links that when selected can set the contents of the work frame to another menu or view.

External links
Links to external URLs that launch a new web browser instance.

Standard links
These appear automatically and cannot be customized.

Open links

Home
Opens your home menu using the current context and scope. You may return to the current display using the Go back icon.

Repeat Last Menu
Open the last menu that was displayed using the current context and scope. You may return to the current display using the Go back icon.

Special links

View Editor link
Open a new window containing the Web User Interface customization tool, the View Editor. This is available only to users with the appropriate authority.

New Window link
Open a new web browser window containing an independent Web User Interface display of the current view or menu using the current selection criteria.

Close Window link
Close a web browser window. You normally have a Close Window link only if your web browser is not Java-enabled.

Sign off link
Sign off your Web User Interface session.

Some items in the navigation frame may be in groups, that can be expanded or collapsed independently of other groups, using the expand and collapse icons shown in Table 2 on page 6.

The work frame

The work frame is the area in which data is presented to the user for interaction.

The work frame can display:
- A title for the information being displayed.
- A link to your customizable view and menu help for the display.
- A message area, containing one or more messages and links to the explanation of the message or messages being displayed.
- A selection criteria and refresh area that allows you to set the context, scope and filters and refresh the menu or view currently being displayed.
- The results of your work requests, in one of the following formats:
  - Menu, that is, a list of related topics from which you can select one or more links.
  - Tabular view, showing formatted information about multiple records for a resource type.
  - Detail view, showing information about a single resource instance.
  - Confirmation panel, allowing the option of committing or cancelling an action, or providing additional input.
  - A signon panel, that is, an interactive panel asking you for your signon information.

– A simple message display that contains a title and an information message, with no additional data.

The assistance frame

The assistance frame contains the product name, an icon linking to the Web User Interface Help, and the IBM® logo.

View sets and views

A **view set** is a number of related views that are used together to manage the same managed object.

A **view** is a display format that is used to interact in a particular way with the specified managed object. A view exists within a view set.

The different types of views are:
- Tabular
- Detail
- Confirmation panel

A view may consist of a number of components:
- Title
- Message Area
- Selection Criteria and Refresh Area
- Form
- Links
- Annotation
- Action and confirm buttons
- Help link

Title

This is displayed at the top of the page and is the title of the view. This area includes the link to the customizable help if available, print preview icon, and a resource icon.

This area is always present.

Message area

This area displays messages and contains a help icon to the right of the area that links you to the explanation of the message being displayed.

This area appears automatically when required.

Selection criteria and refresh area

This area allows you to set the context and scope and refresh the view currently displayed. You can refresh views in two ways:
- Refresh on demand
- Automatic refresh

For information about setting the selection criteria, see "Selection criteria" on page 39.

This area appears automatically, as applicable, but the contents may be customized using the View Editor. For information about the View Editor, see "Chapter 6. Customizing the Web User Interface" on page 73.

Refresh on demand
You can refresh the view displayed at any time by clicking the Refresh button in the selection criteria and refresh area, when available.

Automatic Refresh
The automatic refresh function is available only if you are using a Javascript-enabled browser. The automatic refresh function allows you to control how frequently the data in a view is updated. For information about automatic refresh, see "Refreshing views" on page 51.

Form

This is the information that is displayed in the work frame. A form is always present if there is data.

The contents of the form depends on the type of view being displayed:

Tabular

A display that shows selected attributes from multiple instances of the resource type, or summarized records. The view may consist of a number of pages. 'Next' and 'Previous' links indicate if there are more pages to display. In a tabular display, each attribute is displayed in a separate column.

The check boxes in the first column allow you select a record or records for an action. The check box in the title box of the first column, the 'All' check box, if available, allows you to select all of the records that matched your selection criteria, for an action. The number in the title box of the first column is the total number of records that matched your selection criteria.

On a summarized display, which is a special form of the tabular view, the number next to the check box in the first column indicates the number of records combined into the single line of summary information. The title field above the check box column shows the total number of records in the summary. You can perform actions on all the items in a summary line by clicking the check box in the left-hand column.

The up and down arrow icons (see Table 2 on page 6) in a column title box indicate that the contents of the columns can be sorted in either ascending or descending order. For information about sorting a tabular view, see "Sorting a view" on page 49.

The summarize icon (see Table 2 on page 6) in a column title box indicates that the column can be used to summarize the data in the view.

The fields to be used for sorting and summarizing a tabular view are defined when the view is created using the Web User Interface View Editor. See "Summarizing a view" on page 49 for details.

Some attribute values may appear as links to other views. Clicking a link displays related information.
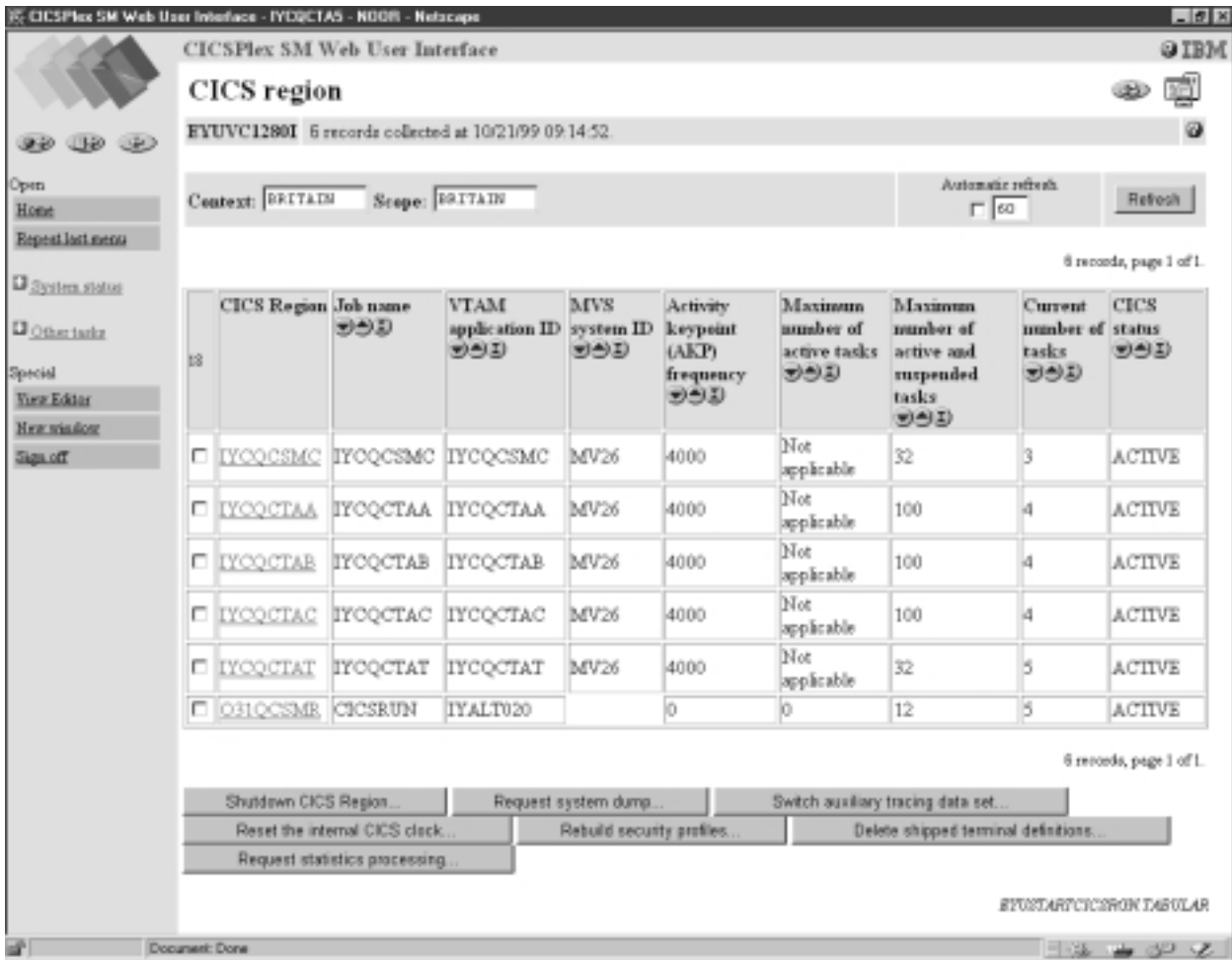
Figure 2. A tabular view

Detail A display showing a selection of detailed attribute information for a particular instance of a resource, with optional annotation for each attribute. Attributes may be displayed in input fields so that the fields can be altered. In a detail display the information is shown in three columns; attribute label, attribute value, and optional annotation.

Attribute labels can be links to other views.

Attribute values can be modifiable to allow you to enter your own values.

See Figure 3 on page 11 for an example of a detail view.

Figure 3. A detail view

Confirmation Panel

This display is similar to a detail display and asks you to confirm that you want the action you requested to be applied to the selected resources.

The confirmation panel may contain the following buttons:

Table 3. Confirmation panel buttons

Button	Meaning
Yes to all	Perform the action for this and all the remaining resources in the selection list
Yes	Perform the action for this resource only and display the details of the next resource in the selection list
No to all	Cancel the operation for this and for all remaining resources in the selection list
No	Do not perform the action for this resource and display the details of the next resource in the selection list

A confirmation panel may include parameters for some actions. It may be possible to select check boxes or radio buttons, or type a value into an input field to specify parameters for an action. Figure 4 on page 12 shows an example of a confirmation panel.
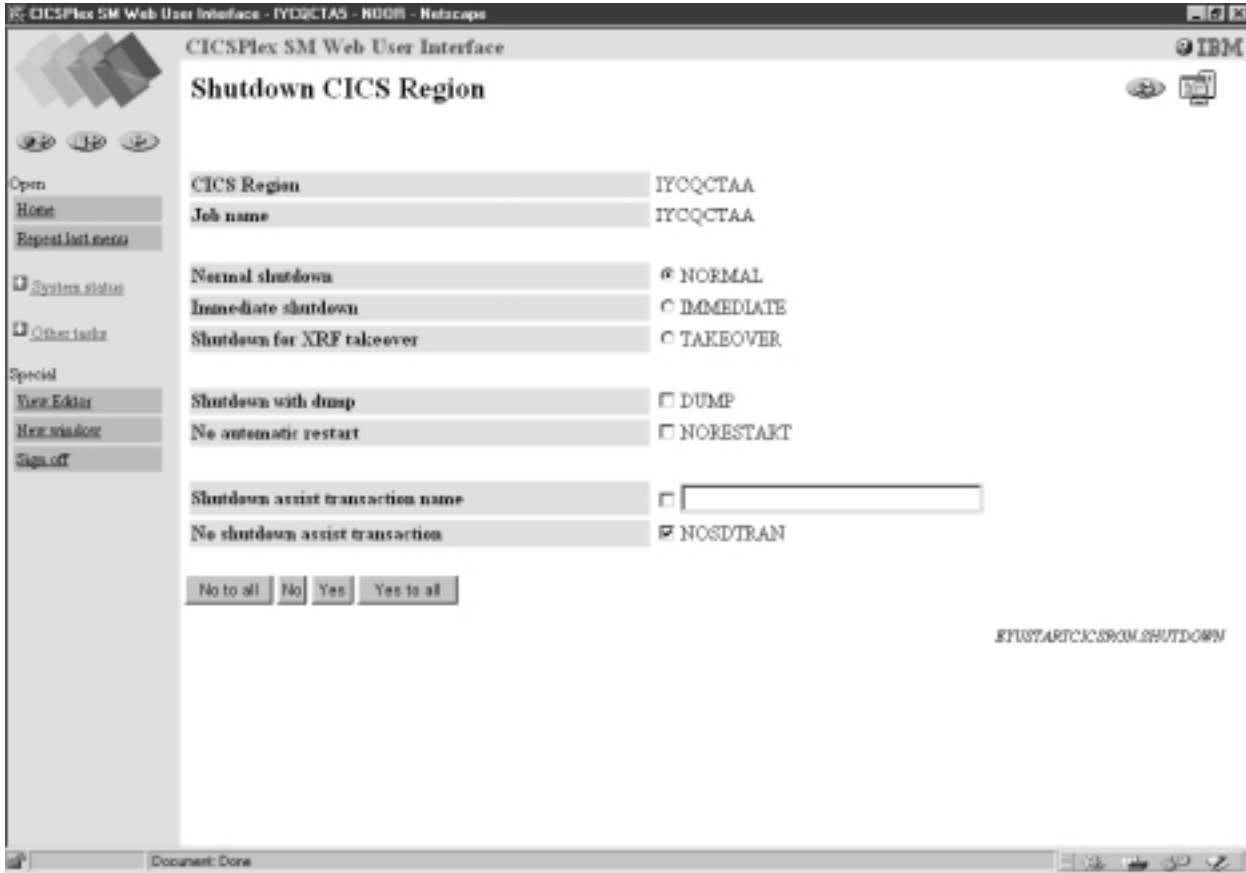
Figure 4. A confirmation panel

Attributes

The various types of forms may contain *attributes* that appear mainly as a simple textual representation of the information contained in an instance of a CICSPlex SM resource. Attributes may also appear as graphical presentations, for example, as warning lights or bar gauges.

All the attributes on tabular displays are display only, but detail forms can contain interactive controls that allow you to enter your own values.

For example, you may want to change the priority of a local transaction. You could click the transaction name from your view of local transactions. This may take you to the detail view of the transaction. You can now enter the priority in the Priority entry field if available, click the check box next to the entry field, then click the Set button or the button that you use to apply your changes, to change the value.

For more information see "Modifying attributes and entering parameters" on page 54.

Parameters

Parameters may appear only on confirmation panels and may be specified for an action. For example, on a CICS region shutdown confirmation panel, see Figure 4, you may have the opportunity to specify the normal, immediate or takeover parameters for the shutdown action. For more information see "Modifying attributes and entering parameters" on page 54.

Selection lists and entry fields

Attribute and parameter values are entered on views using selection lists and entry fields as follows:

Selection lists
Selection lists contain a complete list of values available to the user for a given attribute or parameter, on a view. A selection list enables you to select the appropriate attribute or parameter value from a list.

Entry fields
Entry fields allow the user to type in an attribute or parameter value.

Links

A link allows you to connect a field in one view with related information in another view. Links can originate from the following locations:

- Attribute values on tabular form displays
- Attribute labels on detail form displays

There are two types of links:

- Links to alternative details for a specific resource within the same view set. The data displayed is not updated.
- Links to related resources, for example, from task to transaction, in another view set. These result in new data being collected.

Link fields are highlighted in the normal manner for your web browser.

Annotation

At various places on a display, extra information can be shown in the form of a fixed annotation. Annotations may be used to show any brief notes you require.

View and menu annotations
These are applicable on any view or menu and appear below the data display for views or above the items of a menu.

For example, in the menu shown in Figure 5 on page 16 the menu annotation is, 'Welcome to your Home menu. Please select a task from the following list. Use the 'Help' link for further information.'.

Attribute annotation
On detail views and confirm panels there may be a brief note about each individual attribute or parameter. The attribute annotation appears to the right of the attribute concerned.

Menu choice annotation
A menu choice annotation appears below the menu choice.

For example, in the menu shown in Figure 5 on page 16 the sentence 'Display list of active CICS regions.' under menu choice 'CICS regions', is the menu choice annotation.

Action and confirm buttons

Action buttons may appear on views at the bottom of the work area. Buttons that appear in this area include:

- Buttons to perform actions on resources, such as 'Disable'. These appear on both detail and tabular forms.

- Buttons to confirm or cancel the completion of a task (for example, 'No to all', 'No', 'Yes', and 'Yes to all'). These are confirm buttons and appear on confirmation panels.

Action buttons

Action buttons can either:

- Issue an appropriate command and redisplay the view. This is in the case of a direct action which requires no confirmation, or
- Display a panel to confirm the action, with perhaps fields for further input. These action buttons automatically have an ellipsis (...) appended to the end of their label.

For detail views, the action is performed on the resource displayed on the view. However, for tabular views, you can mark multiple records for an action, by clicking on the check boxes displayed in the first column. If you prefer to perform the action on all the records, you can click the 'All' check box, if available, which is on the column title line of the display. The number next to the 'All' check box is the total number of records that matched your selection criteria. On a summarized display, the number next to the check box in the left-hand column indicates the number of records combined into the single line of summary information, and the number in the column title line of the check box column indicates the total number of records in the summary. If you mark more than one record for an action, the behavior depends on the type of action as follows:

Direct action requiring no confirmation
> The action is carried out for all marked records. When the operation is complete, the view is redisplayed with all the check marks reset.

Actions requiring confirmation panel
> The confirmation panel is displayed for the first marked record, containing at least one of the 'Yes', 'No', 'Yes to all', and 'No to all' buttons. If the 'Yes' or 'No' buttons are selected the action is performed or not, as appropriate, and the confirmation panel is displayed for the next marked record, and so on. If the 'Yes to all' action is selected the action is carried out for all remaining marked records.

> When the operation is complete, all check marks are reset.

Help link

This is a link to special on-line help documents and is optional. This help is called the customizable view and menu help. For information about the customizable view and menu help see "Customizable view and menu help" on page 16.

Menus

A menu is a list of related topics from which you can select an item.

Items can be optionally organized into groups. For an example of a menu see Figure 5 on page 16.

A menu may consist of a number of components:

Title

This is displayed at the top of the page and is the title of the menu. This area includes a link to the customizable view and menu help, if available.

This area is always present.

Message area

This area displays messages and contains a link to the explanation of the message being displayed.

This area appears automatically as required.

Selection criteria area

This area allows you to set the context and scope to be used when you navigate from the current menu.

This area appears automatically, as applicable, but the contents may be customized.

Annotations

If defined, this area may contain instructions on how to use the menu and comments explaining the menu.

Menu group titles

Group titles can be used to organize the choices in a menu into separate groups.

Menu choices

The different types of choices are:
- **Menu links**

  These are links to other menus.
- **View links**

  These are links to views of data, possibly setting specific selection criteria.
- **External links**

  These are links to pages served by an external web server (the contents of which are displayed in a separate browser window).

In addition to the type and destination of a link, there may also be selection criteria defined. For example, you could:
- Build a menu of CICSplexes (each item going to the same menu but with a different hard-coded context).
- Build a menu of applications (again, each item going to the same menu but with different logical scopes).
- Build a link to an active target region view for a specific workload.

For an example of a menu, see Figure 5 on page 16.

Figure 5. A menu

Context, CMAS context and scope

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. Either the context or the CMAS context is used for all operations. Context, CMAS context and scope are:

- **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.

Customizable view and menu help

The Web User Interface allows a site to provide its own customized help information for each view and menu. The help documents may be located on the CICS system that you have selected to act as your Web User Interface server, or each menu and view could be linked to an existing Web-based procedures manual on an external server.

If served by the Web User Interface, the customizable view and menu help consists of a set of arbitrary HTML pages stored as members in a partitioned data set. The CICS Web Interface template manager is used to serve members of this partitioned data set for delivery to the browser.

For more information about the customizable view and menu help, see "Customizable view and menu help" on page 81.

The View Editor

The CICSPlex SM Web User Interface View Editor allows you to create customized views and menus. You can create your own version using a supplied view or menu as a model, or you can start anew. For example, you might want to create views that apply to a specific task or set of data.

If your Web User Interface server is running with security active, the View Editor can be restricted to nominated users. You only see the link to the View Editor in the Navigation Frame if you have the relevant authority.

Each view that you create has to be based on a single CICSPlex SM managed object. You can choose which attributes you want to display, and the format in which they are to be displayed.

The CICSPlex SM Web User Interface includes a starter set of views that you can use either as supplied or as the basis from which to create your own customized views.

For more information about the View Editor, see "Chapter 6. Customizing the Web User Interface" on page 73.

Chapter 3. Setting up a CICSPlex SM Web User Interface server

This chapter describes the steps you must perform to use the CICSPlex SM Web User Interface. These steps consist of:

- "Preparing a CICS system to act as the Web User Interface server"
- "Configure the CICS Web Interface" on page 20
- "Review CICS system initialization parameters" on page 22
- "Specify language and codepage" on page 22
- "Prepare codepage conversion table" on page 23
- "Generate the Program Load Table (PLT)" on page 24
- "Create the Web User Interface server repository (EYUWREP)" on page 24
- "Generate the JCT (for CICS/ESA 4.1 systems only)" on page 25
- "Specify the customizable view and menu help data set" on page 25
- "Specify the Web User Interface server initialization parameters" on page 26
- "Update CICS CSD definitions" on page 29
- "Specify the JCL DD statements" on page 31
- "Security considerations" on page 32
- "Additional tasks" on page 33

Preparing a CICS system to act as the Web User Interface server

You should consider the following before you set up your CICS system to act as your Web User Interface server:

- The CICS system that you select to act as your Web User Interface server must be a CICSPlex SM local MAS connected to a CMAS running in the CICSPlex SM component of CICS Transaction Server for OS/390 version 1.3. For information about how to set up a local MAS, see the *CICS Transaction Server for OS/390 Installation Guide*.
- The CICS system that you use as your Web User Interface server must be dedicated to act as your Web User Interface server.
- Although you can use a CICS for MVS/ESA 4.1 or later CICS system to act as your CICSPlex SM Web User Interface server, we recommend that you use a CICS Transaction Server for OS/390 version 1.3 CICS system.
- Decide how many Web User Interface servers you need. For example:
  - If you intend to support more than one national language you need a Web User Interface server for every language you want to support.
  - You may want to have Web User Interface servers on multiple MVS images.
  - You may want to have more than one Web User Interface server for availability reasons.

To set up your CICS system you should:

1. Create the CICS system and confirm that it is operational using the CICS-supplied installation verification procedures (IVPs). For information about the CICS IVPs, see the *CICS Transaction Server for OS/390 Installation Guide*.

   "Typical end-user problems" on page 102 offers possible solutions to some typical problems that you may encounter.

2. Configure CICSplexes for your Web User Interface servers. We suggest that you configure a separate CICSplex for your Web User Interface servers. For information, see the *CICS Transaction Server for OS/390 Installation Guide.*

3. Ensure that the CMAS to which the Web User Interface connects is managing all CICSplexes that the Web User Interface server needs access to. This is because the Web User Interface server acts as an API application. However, it is not necessary for the CMAS, to which the Web User Interface connects, to be managing any of the MASs in these CICSplexes. For information, see the *CICS Transaction Server for OS/390 Installation Guide.*

   If there is more than one CMAS on the MVS image, that the Web User Interface server will run on, you need to consider which CMAS the Web User Interface should connect to depending on which CICSplexes the CMAS is managing. To control this connection you can either:

   - Ensure the CICSplex to which the Web User Interface server local MAS belongs is only managed by the CMAS or CMASs that the Web User Interface should connect to, or
   - Ensure that the Web User Interface server connects to a specific CMAS by specifying the CMASSYSID EYUPARM for the server local MAS.

4. Define the Web User Interface server CICS system to CICSPlex SM as a local MAS (for information, see the *CICS Transaction Server for OS/390 Installation Guide*) and ensure that the CICS system has been set up correctly using the CICSPlex SM installation verification procedures (IVPs).

   "Typical end-user problems" on page 102 offers possible solutions to some typical problems that you may encounter.

5. Consider basic monitoring of your Web User Interface servers. You can use standard CICSPlex SM monitoring because the Web User Interface server is defined as a local MAS.

Configure the CICS Web Interface

The way in which you configure the CICS Web Interface depends upon the CICS system release that you are using for your Web User Interface server.

CICS Transaction Server for OS/390 version 1.3

If you are using a CICS Transaction Server for OS/390 version 1.3 CICS system to act as your Web User Interface server, you should:

- Include the CICS resource definition group, DFHWEB, in the group list referenced by the GRPLIST system initialization parameter of your CICS system.
- Run the CICS Web Interface IVP to ensure that the CICS Web Interface has been set up correctly.

  "Typical end-user problems" on page 102 offers possible solutions to some typical problems that you may encounter.

For more information about specifying CICS system initialization parameters and defining resources to CICS for the CICS Web Interface, see the *CICS Internet Guide.*

If you wish to use the secure sockets layer (SSL) you should also:

- Create a key database containing a certificate
- Specify the appropriate system initialization parameters
- Install the appropriate resource definitions

For more information about SSL, see the *CICS Internet Guide.*

Notes:

1. You do not need to write your own Analyzer or Converter programs as these are provided with the Web User Interface.
2. On the Web User Interface initialization the TCPIPSERVICE is created and opened for you by the Web User Interface. You do, however, need to create a temporary TCPIPSERVICE definition to run the CICS Web Interface IVP.
3. The Web User Interface can either use the default certificate in the key database or a named certificate. However, it can only use a named certificate provided that the label contains only alphanumeric characters and is a maximum of 32 characters.

Pre-CICS Transaction Server for OS/390 version 1.3

If you are using a pre-CICS Transaction Server for OS/390 version 1.3 CICS system you should:

- Set up the CICS Web Interface allocating the resources required and installing the CICS resource definitions as described in the *CICS Internet and External Interfaces Guide* or equivalent manual for your release of CICS.
- Run the CICS Web Interface IVP to ensure that the CICS Web Interface has been set up correctly.

  "Typical end-user problems" on page 102 offers possible solutions to some typical problems that you may encounter.
- Reconfigure the CICS Web Interface for the Web User Interface as follows:

  Run the CWBC transaction, select the 'View or modify the Web Interface data set' option, and fill in the fields as described in Table 4. For an example of the CWBC transaction, see Figure 6 on page 22.

Table 4. Values for the CWBC transaction

Field	Value
CWBM userid	CICS Web Interface userid (see "Security considerations" on page 32)
Analyzer Program	EYU9VWAN
Automatic Enable	YES
Port Number	The TCP/IP port that you have allocated for the Web User Interface. You should also specify this number on the TCPIPPORT Web User Interface server initialization parameter
Backlog	00100
Unescape	NO

```
 ┌─────────────────────────────────────────────────────────────────────────┐
 │ CWBC                    CICS Web Interface Update Data Set        DFHWB12 │
 │                                                                          │
 │ Overtype to Modify                                                       │
 │                                    Choice      Possible Options          │
 │                                                                          │
 │ CWBM Userid              ===>   CWI5NWW                                   │
 │                                                                          │
 │ Analyzer Program         ===>   EYU9VWAN                                  │
 │                                                                          │
 │ Automatic Enable         ===>   YES         Yes | No                     │
 │                                                                          │
 │ Port Number              ===>   10000       1 - 32767                    │
 │                                                                          │
 │ Backlog                  ===>   00100       1 - 32767                    │
 │                                                                          │
 │ Unescape                 ===>   NO          Yes | No                     │
 │                                                                          │
 │                                                                          │
 │ Current Status: Enabled                                                  │
 │                                                                          │
 │                                             SYSID= CICS  APPLID= IYKV6AC1 │
 │ PF1=Help   PF3=Exit   PF9=Messages   PF12=Return                         │
 └─────────────────────────────────────────────────────────────────────────┘
```

Figure 6. Configuring the CICS Web Interface for the Web User Interface

Note: You do not need to write your own Analyzer or Converter programs as these are provided with the Web User Interface.

Review CICS system initialization parameters

You need to specify the storage key for the CICS common work area (CWA), and the amount of storage required for the CWA on the CWAKEY and WRKAREA CICS system initialization parameters as follows:

```
CWAKEY=CICS
WRKAREA=1024
```

To ensure that Web User Interface exception trace entries are written to the CICS auxtrace data set, as required to achieve first failure data capture, you should specify the USERTR, SYSTR, and AUXTR CICS system initialization parameters as follows:

```
USERTR=ON
SYSTR=OFF
AUXTR=ON
```

For information about these parameters see the *CICS System Definition Guide.*

Specify language and codepage

In addition to specifying CICS system initialization parameters for the CICS Web Interface and CICSPlex SM local MAS execution, the Web User Interface requires an INITPARM system initialization parameter to specify the server language and the client codepage. You need to code EYU9VKEC to represent the language of the Web User Interface server and EYU9VWAN to represent the codepage of the client on the INITPARM parameter.

You can select the server language and the client codepage from Table 5 on page 23 and specify them on the INITPARM parameter as follows:

```
INITPARM=(EYU9VKEC='xxx',EYU9VWAN='yyyy')
```

where xxx is the language identifier of the Web User Interface server and yyyy is the codepage identifier of the client.

Table 5. Language and codepage identifiers for INITPARM

Language	Language identifier (EYU9VKEC)	Client codepage	Default client codepage identifier (EYU9VWAN)
US English	ENU	ISO-8859-1 (819)	ENU1
Japanese	JPN	Shift-JIS (943)	JPN1
Simplified Chinese	CHS	GB2312 (1381)	CHS1

For example, if your chosen language was English you would code the INITPARM parameter as follows:

```
INITPARM=(EYU9VKEC='ENU',EYU9VWAN='ENU1')
```

Notes:

1. The codepage identifier can be overridden for individual user requests by placing it in the URL used to access the Web User Interface. For example:

   ```
   http://hostname:port/CICSPlexSM/codepage
   ```

   where *hostname* is the name specified on the TCPIPHOSTNAME Web User Interface server initialization parameter and *port* is the value specified on the TCPIPPORT Web User Interface server initialization parameter. For information about the Web User Interface server initialization parameters see "Specify the Web User Interface server initialization parameters" on page 26.

2. If the INITPARM system initialization parameter is not specified or if a value is not specified for EYU9VKEC or EYU9VWAN, the default values will be ENU for the language and ENU1 for the codepage. However, operator messages are issued every time default values are used.

Prepare codepage conversion table

You need to create or modify the DFHCNV table for data conversion to allow the Web User Interface to deal with incoming requests.

A sample copybook is provided in CICSTS13.CPSM.SEYUSAMP called EYU$CNV1. This contains an entry for every language and client codepage combination that is supported as follows:

EYUENU1
> Entry for English

EYUJPN1
> Entry for Japanese

EYUCHS1
> Entry for Simplified Chinese

You should include a copy statement for EYU$CNV1 in the DFHCNV source, for example, the CICS Web Interface sample, DFHCNVW$. For information about the definitions required for the CICS Web Interface, see the *CICS Internet Guide*.

Once you have updated your DFHCNV load module, you should assemble and link-edit it using the CICS procedures for maintaining resource definition table load modules.

The process used to assemble and link-edit the CICS resource definition table load modules must have library CICSTS13.CPSM.SEYUSAMP in the SYSLIB concatenation of the assembler step, or the copy book member must be inserted into the table source member in place of the COPY statement.

Generate the Program Load Table (PLT)

The Web User Interface requires an entry in the Program Load Table for Post Initialization (PLTPI), to initialize the Web User Interface server, and the Program List Table for ShutDown (PLTSD), to terminate the Web User Interface server.

Both initialization and termination functions are provided by the Web User Interface initialization and termination module, EYU9VKIT.

You need to update your PLT CICS resource definition table to reference the copy book, EYU$PLT4, that contains an entry for EYU9VKIT. When you have updated your PLT, assemble and link-edit it using the CICS procedures for maintaining resource definition table load modules.

The process used to assemble and link-edit the PLT load modules must have libraries CICSTS13.CPSM.SEYUSAMP and CICSTS13.CPSM.SEYUMAC in the SYSLIB concatenation of the assembler step, or the copy book member must be inserted into the table source member in place of the COPY statement.

A sample PLTPI is provided called EYUPLT1$. EYUPLT1$ contains the copy book EYU$PLT1, which has an entry for EYU9NXLM. EYUPLT1$ also contains the copy book EYU$PLT4, which has an entry for EYU9VKIT, the Web User Interface initialization and termination module.

EYU9VKIT must be invoked during the second phase of PLTPI execution, that is after the PROGRAM=DFHDELIM entry, for Web User Interface initialization. For example:

```
DFHPLT TYPE=ENTRY,
       PROGRAM=DFHDELIM

|

COPY   EYU$PLT4
```

A sample PLTSD is provided called EYUPLT2$. EYUPLT2$ contains the copy book EYU$PLT4, which has an entry for EYU9VKIT, the Web User Interface initialization and termination module. EYU9VKIT must be invoked during the first phase of PLTSD execution, that is before the PROGRAM=DFHDELIM entry, for Web User Interface termination.

Create the Web User Interface server repository (EYUWREP)

The Web User Interface server repository (EYUWREP) contains the Web User Interface server's view and menu definitions. You can use the IDCAMS utility to create a VSAM file for these definitions as follows:

```
DEFINE CLUSTER (                                    -
              NAME( dsname )                        -
              VOLUMES( dsvol )
              RECORDS( 5000 5000 )
              RECORDSIZE( 8192 32000 )              -
              CONTROLINTERVALSIZE( 8192 )           -
              SPANNED                               -
              INDEXED
              KEYS( 20 20 )
              SHAREOPTIONS( 2 )                     -
              )
```

Figure 7. Sample definition to create Web User Interface repository

Each Web User Interface server must have its own Web User Interface server
repository that cannot be shared with any other Web User Interface server.

You can copy the Web User Interface server repository from one Web User
Interface server to another using IDCAMS, DFSMSdss or equivalent utility. For
example, you may wish to copy the Web User Interface server repository from
your test system to your production system.

You should migrate definitions using the import and export functions. For
information, see "Chapter 5. Administration" on page 57.

It is recommend that you back up the Web User Interface server repository data as
the repository is updated whenever changes are made using the View Editor or
when definitions are imported using the COVC transaction. You can back up the
Web User Interface repository by using IDCAMS, DFSMSdss or equivalent utility.

Sample JCL to create the Web User Interface repository is provided, called
EYUJWREP, in SEYUINST.

Generate the JCT (for CICS/ESA 4.1 systems only)

If you are using a CICS for MVS/ESA 4.1 CICS system to act as your Web User
Interface server you need to generate a journal control table (JCT).

A sample JCT, called EYU$JCT4, is provided in CICSTS13.CPSM.SEYUSAMP.

You need to update your JCT CICS resource definition table to reference the copy
book, EYU$JCT4. When you have updated your JCT, assemble and link-edit it
using the CICS procedures for maintaining resource definition table load modules.

The process used to assemble and link-edit the CICS resource definition table load
modules must have library CICSTS13.CPSM.SEYUSAMP in the SYSLIB
concatenation of the assembler step, or the copy book member must be inserted
into the table source member in place of the COPY statement.

Specify the customizable view and menu help data set

The Web User Interface allows a site to provide customized help for individual
views and menus. This help takes the form of HTML documents that can be
served by the Web User Interface server or by an external server. If the Web User
Interface is to serve the HTML documents, you must provide a partitioned data set
to contain the HTML documents.

You can use the View Editor to customize your views and menus to include a link to the customizable view and menu help data set. The View Editor gives you the option of specifying:

- No help to be available for this view or menu
- Member name of a help page to be served by the Web User Interface from DFHHTML
- URL of an external help page to be served by another HTTP server

For information about the View Editor, see "Chapter 6. Customizing the Web User Interface" on page 73.

The Web User Interface server uses the CICS Web Interface template manager to serve the customized view and menu help. For more information, see the *CICS Internet Guide*.

Note: The customizable view and menu help data set (DFHHTML) must be a single data set and should not be concatenated with any other data set.

Specify the Web User Interface server initialization parameters

You can specify the Web User Interface server initialization parameters in the start-up job or in a fixed block 80 data set. See "Specify the JCL DD statements" on page 31 for the DDname. All of these parameters are subject to the following conditions unless otherwise stated:

- Lines with an asterisk in column 1 are comments and are ignored
- Values must be specified in parenthesis immediately following the parameter
- Values must not be greater than 32 characters

For example:

```
* An EYUWUI parameter data set
DEFAULTMENU(OURHOME)
TCPIPHOSTNAME(mvsxx.company.com)
TCPIPPORT(4445)
```

A description of the Web User Interface server initialization parameters follows with default values for the parameters underlined.

Required parameters

The Web User Interface server has some required initialization parameters. If you do not specify a required parameter the Web User Interface server initialization fails. The Web User Interface server initialization also fails if any of the specified parameters are invalid.

The required Web User Interface server initialization parameters are:

TCPIPHOSTNAME(name)
Specify the TCP/IP hostname by which the web browser contacts the Web User Interface and which will be used by the Web User Interface to construct the URLs. This is normally the host and domain name of the MVS system.

The Web User Interface does not support names longer than 32 characters. If required, you may use the address of the server using the dotted decimal notation. For example, '127.0.0.1'.

TCPIPPORT(value)
Specify the TCP/IP port number of the port that you have allocated for the Web User Interface to run on.

The value specified in this parameter must correspond to the port number given on the CWBC transaction, if you are using a pre-CICS Transaction for OS/390 version 1.3 CICS system. See "Pre-CICS Transaction Server for OS/390 version 1.3" on page 21 for information.

Optional Parameters

You may also want to consider the following Web User Interface server initialization parameters:

Additional TCP/IP parameters
You can specify the following TCP/IP parameters only if you are using a CICS Transaction Server for OS/390 version 1.3 CICS system.

TCPIPSSL(YES | <u>NO</u>)
Indicate whether you require data encryption between your Web User Interface server and web browser. If you select YES, you must have specified the appropriate system initialization parameters to enable SSL support in the CICS Web Interface. For information see the *CICS Internet Guide*.

TCPIPSSLCERT(name)
Specify the label for the certificate that is to be used for the connection between the Web User Interface and the web browser. If you specify an explicit certificate, the label must be no longer than 32 characters.

The default is the default certificate in the key database.

Data formatting options
These options determine how data will appear on Web User Interface displays.

CVDASTYLE(<u>MIXED</u> | UPPER)
Indicate whether the CVDAs, EYUDAs, and so on should be displayed in upper case or mixed case characters.

<u>MIXED</u>
Mixed case text, that is, the first character upper case and the rest lower case, for example, 'Enabled'.

UPPER
Text is displayed in upper case only.

DATEFORMAT (format)
Specify the format to be used to display the date on Web User Interface displays as follows:

YYMMDD

DDMMYY

<u>MMDDYY</u>

YYYYMMDD

DDMMYYYY

MMDDYYYY

where:

DD   is the day.

MM   is the month.

YY and YYYY are the year in two-digit or four-digit format, respectively.

DATESEPARATOR(character | /)
> Specify the character to be used to separate the date elements on Web User Interface displays.

DECIMALSEPARATOR(character | .)
> Specify the character to be used to denote the decimal point on Web User Interface displays.

MSGCASE (MIXED | UPPER)
> Indicate whether messages destined for the operator or EYULOGs should be displayed in mixed case or upper case characters.
>
> **MIXED**
>> Mixed case text is displayed.
>>
>> If you specify MIXED, output may be displayed incorrectly on Katakana display terminals, where lower case characters are displayed as Katakana symbols.
>
> **UPPER**
>> Text is displayed in upper case only.

TIMESEPARATOR(character | :)
> Specify the character to be used to separate hours, minutes, and seconds on Web User Interface displays.

Environment options
These specify the context and scope values, and the home menu and navigation frame, used by the Web User Interface unless overridden.

DEFAULTCMASCTXT(name | EYUCMS1A)
> Specify the CMAS context that is set when the user signs onto the Web User Interface.

DEFAULTCONTEXT(name | EYUPLX01)
> Specify the context that is set when the user signs onto the Web User Interface.

DEFAULTMENU(name | EYUSTARTMENU)
> Specify the name of the menu that is be presented to users after sign onto the Web User Interface.

DEFAULTNAVIGATE(name | EYUSTARTMENU)
> Specify the name of the navigation frame that is presented to users after sign onto the Web User Interface.

DEFAULTSCOPE(name | EYUPLX01)
> Specify the scope that is set when the user signs onto the Web User Interface.

Operation options
These options name the default view set to be used if the Web User Interface receives an external request that does not specify a view set name but specifies an object name. The view sets that you name in these options must represent the objects that may be specified. For more information see "Access to the Web User Interface" on page 67.

These parameters can be ignored if you do not intend to launch Web User Interface displays in this manner.

DEFAULTCICSRGN(name | <u>EYUSTARTCICSRGN</u>)
Specify the name of the default CICS region view set.

DEFAULTCONNECT(name | <u>EYUSTARTCONNECT</u>)
Specify the name of the default connection view set.

DEFAULTEVENT(name | <u>EYUSTARTEVENT</u>)
Specify the name of the default event view set.

DEFAULTLOCFILE(name | <u>EYUSTARTLOCFILE</u>)
Specify the name of the default local file view set.

DEFAULTLOCTRAN(name | <u>EYUSTARTLOCTRAN</u>)
Specify the name of the default local transaction view set.

DEFAULTPROGRAM(name | <u>EYUSTARTPROGRAM</u>)
Specify the name of the default program view set.

DEFAULTREMFILE(name | <u>EYUSTARTREMFILE</u>)
Specify the name of the default remote file view set.

DEFAULTREMTRAN(name | <u>EYUSTARTREMTRAN</u>)
Specify the name of the default remote transaction view set.

DEFAULTTASK(name | <u>EYUSTARTTASK</u>)
Specify the name of the default task view set.

User options

INACTIVETIMEOUT(value | <u>30</u>)
Specify the period, in minutes, after which inactive user sessions are
terminated. The maximum period allowed is 10080 minutes (7 days).

MAXUSERS(value | <u>20</u>)
Specify the maximum number of concurrent users of the Web User Interface.
The maximum number of concurrent users allowed is 50.

Problem determination option

WUITRACE(trace levels)
Specifies the level of tracing for the Web User Interface server.

The trace levels that you specify must be separated by a comma. For example:
```
WUITRACE(8,11,13,15,18)
```

You can define a range of trace levels, for example:
```
WUITRACE(1:5) will activate trace levels 1 through 5
WUITRACE(1:5,13,28:31) will activate trace levels 1 through 5, 13, and 28 through 31
```

**Attention: It is recommended that you only activate trace at the request of
IBM Support Center personnel.**

Update CICS CSD definitions

The resource definitions that you must add to the CSD file for the Web User
Interface are distributed in CSD upgrade load modules in
CICSTS13.CPSM.SEYULOAD.

The names of the load modules are EYU9nnGW, where nn represents the CICS
level (for example, 41 refers to CICS for MVS/ESA 4.1, and 53 refers to the CICS

element of CICS Transaction Server for OS/390 version 1.3). The name of the resource group (created using the definitions the load modules contain) is EYU140GW.

You can use the sample JCL shown in Figure 8 to:
- Define a group of resource definitions to the appropriate CSD file
- Add the group name to the CSD list referenced by the CICS system initialization parameter GRPLIST

Modify the sample JCL to provide the following information:

```
//CSDUP    EXEC PGM=DFHCSDUP
//STEPLIB  DD DSN=cics.index.SDFHLOAD,DISP=SHR
//         DD DSN=cpsm.index.SEYULOAD,DISP=SHR
//DFHCSD   DD DSN=cics.dfhcsd,DISP=SHR
//SYSPRINT DD SYSOUT=*
//SYSIN DD *
 UPGRADE USING(group_load_module)
 ADD GROUP(EYU140GW) LIST(list_name)
/*
```

Figure 8. Sample JCL to upgrade CSD to include Web User Interface group

cics.index.SDFHLOAD
>Is the CICS load library that contains the DFHCSDUP module.

cpsm.index.SEYULOAD
>Is the CICSPlex SM load library that contains the group definition modules EYU9nnGW.

cics.dfhcsd
>Is the CICS CSD file that is to be updated.

group_load_module
>Is the load module, EYU9nnGW, that contains the resource definition group, EYU140GW, appropriate for the level of CICS being used.

list_name
>Is the group list that is used to start the Web User Interface server.

Transient data queue definitions

You need definitions for the following transient data queues (TDQs):

COVP The Web User Interface server initialization parameters data set, EYUWUI. This is a fixed block 80 input data set.

COLG The CICSPlex SM output log, EYULOG. This is a fixed block 80 output data set.

COVI Sample definition for the Web User Interface import data set, EYUCOVI. This is a variable length input data set.

COVE Sample definition for the Web User Interface export data set, EYUCOVE. This is a variable length output data set.

CICS Transaction Server for OS/390 definitions
If you are using the CICS element of CICS Transaction Server for OS/390, the transient data queue (TDQ) definitions are provided in resource group EYU140GW.

COVI and COVE are provided as samples that can be used to create additional queues.

CICS for MVS/ESA 4.1 definitions

If you are using a CICS for MVS/ESA 4.1 CICS system to act as your Web User
Interface server you need to generate a destination control table (DCT) containing
entries for the transient data queues.

If you want additional import and export queues, add entries for the required
number of copies of the COVI and COVE queues, in the DCT.

A sample DCT, called EYU$DCT4, is provided in CICSTS13.CPSM.SEYUSAMP.

You need to update your DCT CICS resource definition table to reference the copy
book, EYU$DCT4. When you have updated your DCT assemble and link-edit it
using the CICS procedures for maintaining resource definition table load modules.

The process used to assemble and link-edit the CICS resource definition table load
modules must have library CICSTS13.CPSM.SEYUSAMP in the SYSLIB
concatenation of the assembler step, or the copy book member must be inserted
into the table source member in place of the COPY statement.

Specify the JCL DD statements

Additional DD statements should be added to the Web User Interface server for
the following data sets:

EYUWUI
> The Web User Interface server initialization parameters data set. See
> "Specify the Web User Interface server initialization parameters" on
> page 26 .

EYUWREP
> The Web User Interface server repository data set. See "Create the Web
> User Interface server repository (EYUWREP)" on page 24.

EYULOG
> The CICSPlex SM output log.

DFHHTML
> The customizable view and menu help data set. See "Specify the
> customizable view and menu help data set" on page 25. This is optional.

EYUCOVI
> The Web User Interface server import data set. See "Transient data queue
> definitions" on page 30. This is optional.

EYUCOVE
> The Web User Interface server export data set. See "Transient data queue
> definitions" on page 30. This is optional.

For example,

```
//*
//DFHHTML  DD DISP=SHR,DSN=data set name
//EYUWREP  DD DISP=SHR,DSN=data set name
//EYUCOVI  DD DISP=SHR,DSN=CICSTS13.CPSM.SEYUVIEW(EYUEVX01)
//EYULOG   DD SYSOUT=*
//EYUWUI   DD *
DEFAULTMENU(OURHOME)
TCPIPHOSTNAME(mvsxx.company.com)
TCPIPPORT(4445)
/*
```

Security considerations

This section describes the Web User Interface security requirements for CICS security, Secure Sockets Layer (SSL) support, and access to MVS data sets.

CICS security considerations

If your Web User Interface server region is running with CICS security active, you need to define the security access required:

- For the CICS Web Interface
- By the administrator
- By the end-user and users of the View Editor

Table 6 on page 33 summarizes the access required by the various userids.

You may wish to use CICS transaction security (see the *CICS RACF Security Guide*) to limit the users who are allowed to control the Web User Interface server via the COVC transaction.

See "Security Considerations" on page 70 for information about how to control users of the Web User Interface and to limit what resources they are allowed to access.

Security access for the CICS Web Interface

If CICS transaction security is in use the CICS DFLTUSER (for a CICS Transaction Server for OS/390 version 1.3) or the CWBM transaction userid (for a pre-CICS Transaction Server for OS/390 version 1.3 system) must be given access to the COVP, COVU, and COVE transactions.

Security access for the administrator

The userid that starts the Web User Interface (terminal user of COVC or PLTPIUSR, if started automatically via PLTPI) must have access to the COVC and COVG transactions.

If CICS surrogate user security checking is active in the Web User Interface server region, the userid that started the Web User Interface (terminal user of COVC or PLTPIUSR, if started automatically via PLTPI) must have READ access to wui-userid.DFHSTART in the SURROGAT class for all Web User Interface users.

Security access for the end-user and users of the View Editor

The Web User Interface end-user needs access to the COVA transaction and CICSPlex SM.

Users of the View Editor need access to the COVA transaction, CICSPlex SM and the View Editor profile. For more information about access to the View Editor, see "Controlling View Editor Access" on page 71.

All users who are successfully signed onto the Web User Interface have access to all of the customizable view and menu help pages, if the customizable view and menu help is served by the Web User Interface.

Summary

Table 6 on page 33 summarizes the security accesses required by users of the Web User Interface.

Table 6. Security accesses required by users of the Web User Interface

User Roles	CICS Web Interface	Administrator	End-user	View Editor
Transactions	COVP COVE COVU	COVG COVC	COVA	COVA
CICS surrogate user security		Yes		
View Editor profile				Yes
CICSPlex SM and CICS security			As appropriate for individual users	As appropriate for individual users

Secure Sockets Layer support

If you are using a CICS Transaction Server for OS/390 version 1.3 system, you can provide secure connections by using the Secure Sockets Layer (SSL) support to provide encryption on the connection. For information about SSL support, see the *CICS Internet Guide.* Also, see "Specify the Web User Interface server initialization parameters" on page 26 for information about the TCPIPSSL and TCPIPSSLCERT, Web User Interface server initialization parameters, that you need to specify for SSL support.

Note: Web User Interface SSL support uses server authentication only. User authentication is by the external security manager (ESM) user ID and password.

Authorizing access to MVS data sets

In addition to standard CICS and CICSPlex SM requirements, the CICS region userid must have the authority to access the data sets associated with the DDnames described in Table 7.

Table 7. Security access required for MVS data sets

DDnames	Access required
EYUWUI	READ
DFHHTML	READ
EYUCOVI (and clones)	READ
EYUWREP	UPDATE
EYULOG	UPDATE
EYUCOVE (and clones)	UPDATE

Additional tasks

After you have set up the Web User Interface you need to:

Submit start-up JCL

You should submit the start-up JCL for the Web User Interface server to start it for the first time. To confirm that the Web User Interface server has started successfully, you should ensure that the following messages are displayed on the job log:

```
08.52.29 JOB03331  +EYUVS0950I IYCQCTA5 WEB USER INTERFACE SERVER PLT START
08.52.33 JOB03331  +EYUVS0001I IYCQCTA5 CICSPlex SM Web User Interface
                                initialization started.
08.52.37 JOB03331  +EYUVS0002I IYCQCTA5 CICSPlex SM Web User Interface
                                initialization complete.
```

If you chose not to start the Web User Interface server during PLTPI processing, you can start it using the COVC transaction Start command.

Check browser connection

You should check the connection between the Web User Interface and the web browser by typing in the following URL:

`http://`*hostname:port*`/CICSPlexSM`

where *hostname* is the name specified on the TCPIPHOSTNAME Web User Interface server initialization parameter and *port* is the value specified on the TCPIPPORT Web User Interface server initialization parameter. For information about the Web User Interface server initialization parameters see "Specify the Web User Interface server initialization parameters" on page 26. You should be presented with the Web User Interface server Welcome panel containing a Begin Signon button.

Import view and menu definitions

Once the Web User Interface has been started, you should obtain some view and menu definitions. You can do this by either:
* Logging onto the CICS terminal and running the COVC transaction. The Import option of the COVC transaction enables you to import the starter set views and menus. The starter set views and menus are provided in CICSTS13.CPSM.SEYUVIEW. For information about the COVC transaction, see "The CICSPlex SM Web User Interface transaction (COVC)" on page 57.
* Using the View Editor. For information about the View Editor see "Chapter 6. Customizing the Web User Interface" on page 73.

Shutdown the Web User Interface server

You can shutdown the Web User Interface server by:
* Shutting down the CICS system in which the Web User Interface server is running.
* Using the COVC transaction. For more information about the COVC transaction see "The CICSPlex SM Web User Interface transaction (COVC)" on page 57.

Chapter 4. Using the CICSPlex SM Web User Interface

This chapter describes how to use the CICSPlex SM Web User Interface. It presents the following topics:

- "Accessing the CICSPlex SM Web User Interface"
- "Getting help"
- "Signing On" on page 36
- "Example home menu" on page 38
- "Entering Data" on page 38
- "Selection criteria" on page 39
- "Finding your way around the CICSPlex SM Web User Interface" on page 43

Accessing the CICSPlex SM Web User Interface

In order to access the CICSPlex SM Web User Interface, you must supply a valid URL on your browser. This is supplied by your system administrator.

All URLs accessing the Web User Interface server begin with one of two formats:

- http://*hostname:port*/CICSPlexSM
- https://*hostname:port*/CICSPlexSM

  if you are using SSL (Secure Sockets Layer)

where *hostname* and *port* represent the IP address of the CICS Web Interface listener or the secure server.

Note that your system administrator may provide you with a URL that looks different.

If you entered a valid URL you should now be presented with the Welcome panel containing a Begin Signon button. At this point, you may want to bookmark the URL to prevent you from having to type in the URL every time you want to access the Web User Interface server.

Getting help

The Web User Interface provides help as follows:

- Web User Interface Help
- Web User Interface Message Help

Web User Interface Help

You can access the Web User Interface Help by clicking the help icon in the assistance frame to open the Web User Interface Help Contents Page. The Web User Interface Help explains the Web User Interface and how to use it.

Web User Interface Message Help

The Web User Interface Message Help explains messages issued by the Web User Interface. You can obtain help with messages in two ways:

- When a message appears on a Web User Interface view, click the Help icon, see Table 2 on page 6 for a picture of the Help icon, to the right of the message in the work frame to see the explanation of the displayed message in the Web User Interface Message Help

- Access the contents page of the Web User Interface Message Help and select the group of messages that you are interested in by clicking the appropriate link. You can access the Web User Interface Message Help Contents Page by clicking the Message link in the Web User Interface Help or by clicking the Messages Contents Page link at the bottom of a Web User Interface messages group.

Signing On

By clicking the Begin Signon button in the Welcome panel you are presented with the Signon panel as shown in Figure 9.
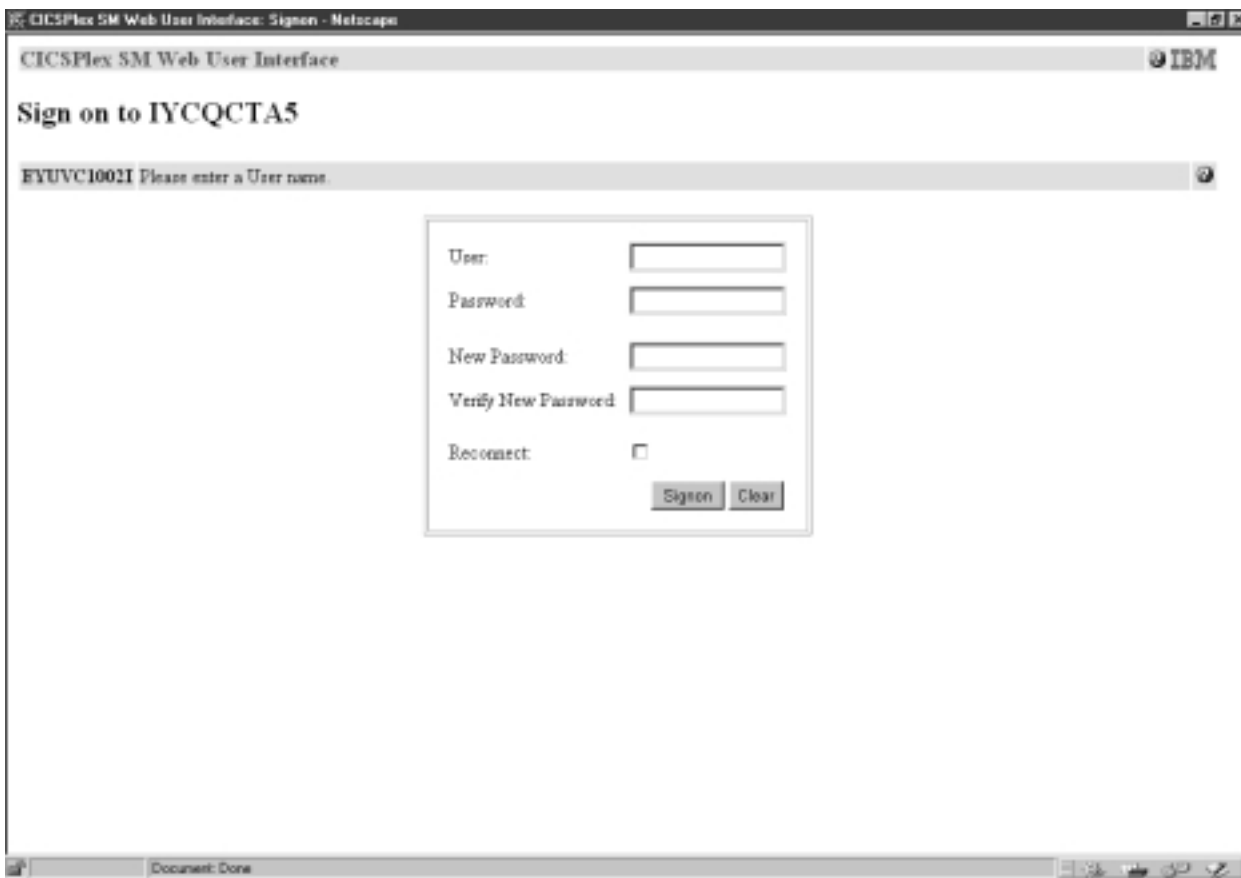If your web browser supports multiple windows, the Signon panel is displayed in

Figure 9. Signon panel

a new window. The Signon panel contains the following fields:

- User:

  Type in your userid in this field as supplied by the system administrator. If you also use the CICSPlex SM TSO EUI, this will normally be the same user name.

- Password:

  Type in your password, if required. Note your password is not displayed. This field is only displayed if your Web User Interface is secured by an external security manager.
- New Password:

  Type in your new password here when changing your password. Note your password is not displayed. This field is only displayed if your Web User Interface is secured by an external security manager.
- Verify New Password:

  Type in your new password again when changing your password. Note your password is not displayed. This field is only displayed if your Web User Interface is secured by an external security manager.
- Reconnect:

  Click the check box if you already have an active session running on this server but wish to terminate the existing session and sign on again.
- Signon button

  Click this button when you have filled in the appropriate fields to sign on.
- Clear button

  Click this button to clear all the fields on the signon panel.

If you click on the signon button and you:
- Do not have an active session running on this server, your requested display (normally your home menu), showing all the links for which you are authorized, is displayed.
- Are already signed onto this server from the same browser instance but have not clicked the Reconnect box, your requested display (normally your home menu), showing all the links for which you are authorized, is displayed.
- Are already signed onto this server from a different browser instance but have not clicked the Reconnect box, the signon process will fail with a message warning you that you are already signed on. The Signon panel is redisplayed for you to try again.
- Have an active session running on this server and have clicked the Reconnect box, the active session is destroyed and a new session is created. Your requested display (normally your home menu), showing all the links for which you are authorized, is displayed.

If your Web User Interface is not secured by an external security manager, the Password, New Password, and Verify New Password fields are not displayed on the signon panel.

Changing your Password

You can change your password when you sign onto the Web User Interface. You can only change your password if your Web User Interface is secured using an external security manager, such as RACF.

If you change your password through the Web User Interface, it is changed for all your other host accesses such as TSO, CICS, and CICSPlex SM, that share the same external security manager userid.

To change your password when you sign on:
- Type in your userid.

- Type in your current password.
- Type in your new password in the New Password field.
- Type in your new password again in the Verify New Password field.
- If you already have a session running on this Web User Interface server, click the Reconnect check box.
- Click the Signon button.

Example home menu

On successfully signing on you are presented with your requested display, normally your home menu and navigation frame containing all available links. Your home menu displays the selection criteria and refresh area that allows you to set the CMAS context, context and scope, if applicable, and it may contain links to other menus, views, and even external web pages.

An example of a home menu is shown in Figure 10.

Figure 10. Example home menu

Entering Data

When you enter data you can:

- Choose an item from a selection list. For example you could select ENABLED or DISABLED from a selection list of file status values.
- Type a value into an entry box.

When you are modifying attributes or filtering data, you should be aware of the following conventions governing the entry of data into a Web User Interface field.

Character values

A character value is represented directly but you should note the following points:

- Some fields are case sensitive, and therefore the values for these fields are also case sensitive. For example, transaction IDs PAY1, Pay1, and pay1 all represent different transactions.
- You may use generic characters in filters. See "Selection criteria".
- Special characters, that is quotes and non-printable characters, should be handled as follows:
  - If the character string includes a single quote, you should enclose the string in single quotes and repeat the character like this:

    ```
    'Transaction for ''Payroll'' Application'
    ```
  - Character fields containing non-printable characters should be typed in using hexadecimal notation enclosed in single quotes and followed by the character X. For example:

    ```
    'DDFF0400DDFF0400DDFF0400'X
    ```
- Trailing spaces are removed. If the string starts or ends with a significant space, you should enclose the string in single quotes.

CVDA or EYUDA values

Type in the value. These values are not case sensitive and can be typed in any combination of upper and lower case.

Numbers

Type in the required number.

Decimal separators

You can use either a period (.) or a comma (,) as a decimal separator. You should use the separator configured for your server.

Note: A comma or period can only be used as decimal separators. For example '10,000.1' is not a valid number, it should be '10000.1'.

Hexadecimal fields

If the field is always displayed in hexadecimal format, for example, a unit of work ID, type in the value in hexadecimal. The field is displayed as a string of hexadecimal characters, for example:

```
DDFF0400DDFF0400DDFF0400
```

Selection criteria

The CICSPlex SM Web User Interface selection criteria appear in the selection criteria and refresh area of a view and the selection criteria area of a menu. The selection criteria are used to specify the objects against which a query operates. These criteria are:

- **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.

* **Parameter filters**

  Parameter filters are only required for some resources. For each parameter you define a value. For example, you need to enter a workload name in order to access a view for the WLMAWTOR object.

* **Attribute filters**

  Attribute filters are optional for all resources. Attribute filters enable a comparison between a single attribute and a single value (or a pattern, if the attribute is a character string). Relational operators, such as equality or inequality can be used.

Either the context or CMAS context is used for all operations.

Selection criteria may be specified at a number of levels. As you navigate around the views and menus, the selection criteria are defined at each level and will be propagated down, if appropriate. Additionally, some views and menus allow you to dynamically change the selection criteria for the current display.

Note that changing the selection criteria (either explicitly or implicitly through a link) affects only the current view or menu and any subsequent views or menus. If you go back to a previous view or menu the selection criteria are restored.

Context and Scope

The CMAS context, context, and scope fields allow you to define the limits of the data to be displayed in any particular view.

The Web User Interface selects the appropriate context for the type of data being displayed in each view. You can use the View Editor to choose whether to display the CICSplex name, the CMAS name, or both, on a view.

You use the View Editor (see "Chapter 6. Customizing the Web User Interface" on page 73 for information about the View Editor) to define whether the context and scope fields are to be display only, modifiable, or hidden. For example you might have:

* Only the CMAS context field on configuration views.
* Both the Context and Scope fields in operations views.
* The CMAS context, Context and Scope fields on a top-level view to allow you to set initial values.

An example of the context and scope fields is shown in Figure 11 on page 41.

You can change the context and scope on any views that allow it. To change the context and scope:

1. Type in the new context and scope values. You do not have to change both values.
2. Click the Refresh or Set button to enter the new values.

You cannot clear context and scope fields; if present they must always contain a value.

The context and scope settings are inherited by default but may be overridden by the link to a menu or view. The values, once set, are used by all subsequent views

or menus until you change them. Changed context and scope settings apply only to the current view and all subsequent views. If you go back to a previous view or menu, the context and scope values are restored.

Figure 11. Starter set home menu

Filtering data

A request for CICSPlex SM managed object data can produce a large number of managed object records. Without filters, the Web User Interface returns all of the managed object records that exist within the current context and scope. You can use a filter to limit the number of resources retrieved by a request.

You use the View Editor (see "Chapter 6. Customizing the Web User Interface" on page 73 for information about the View Editor) to choose the filters that will be available on a view, and to determine the order in which the filters appear.

There are two types of filter:
- Parameters. For each parameter, you define a value.
- Attributes. For each attribute, you define two fields: a relational operator and a value.

Relational operators

A relational operator is specified only for attributes. Relational operators are shown in Table 8 on page 42.

Table 8. Relational operators

Operator	Meaning
=	Equal to
<>	Not equal to
>	Greater than
<	Less than
>=	Greater than or equal to
<=	Less than or equal to

Values

A value may be specified for both parameters and attributes. There are two types of values:

- Values that you choose from a selection list
- Values that you type into an entry field

Selection list values
> You can choose a parameter or attribute value from a selection list. For example, an Enable status field may offer a choice of ENABLED or DISABLED.

Entry box values
> You can type a parameter or attribute value into an entry box. A value typed into an entry box may be:
>
> - A character string
>   - Note that for character attributes that allow mixed case values, for example, transaction IDs, the filter character values are case sensitive.
>   - Special characters, that is quotes and non-printable characters, may be used as described in "Entering Data" on page 38.
>   - You can use generic characters, if necessary. The conventions for using generic characters in filters are:
>   - An asterisk (*) represents any number of characters, including zero. It must be the last or only character in the string. For example:
>   - ABC* means all values beginning with the characters ABC
>   - * means all values
>   - A plus sign (+) represents a single character and may occupy any position. For example:
>   - TERM0+ means all six-character values beginning with TERM0
>   - A+BC+DE means all seven-character values with any character in the second and fifth positions, A in the first position, B in the third, C in the fourth, D in the sixth, and E in the seventh position
> - A non-character string. For non-character fields, follow the rules in "Entering Data" on page 38.

Note: If the combination of relational operators and generic characters is meaningless, you get an error. Generic characters only have meaning when used with the ″=″ and ″<>″ relational operators for character attributes. They cannot be used for parameters or numeric values.

To apply a filter, click the Refresh button.

To clear a filter, delete the contents of the field or select the blank option from a selection list and press the Refresh button.

Once the selection criteria have been set you are presented with an appropriate menu or the appropriate data in a view.

Finding your way around the CICSPlex SM Web User Interface

This section describes how to find your way around the CICSPlex SM Web User Interface.

Returning to a previous display

Three icons at the top of the navigation frame allow you to return to previous displays as follows:

Table 9. Previous display icons

Icons	Description	Meaning
	Go back to start	Return to the first page you saw in this window
	Go back to last menu	Return to the last menu, if any, that was displayed in this window
	Go back	Return to the previous menu or view

Open links

Open links appear in the navigation frame as follows:

Home Opens your home menu using the current context and scope. You may return to the current display using the Go back icon.

Repeat Last Menu
Open the last menu that was displayed using the current context and scope. You may return to the current display using the Go back icon.

Expanding and collapsing the items of a navigation frame

Some of the menu choices in the navigation frame may be organized into groups and displayed as a single item with a title (collapsed) in the navigation frame. The expand icon, as shown in Table 2 on page 6, is displayed next to the title. If you click the expand icon or the title of a group the menu choices within that group will be expanded and the expand icon will be replaced with the collapse icon, shown in Table 2 on page 6. An example of this is shown in Figure 11 on page 41. Clicking the collapse icon or the title of the group collapses the list of menu choices again.

You organize menu choices into groups using the View Editor. For information about the View Editor see "Chapter 6. Customizing the Web User Interface" on page 73.

Accessing the View Editor

You can access the View Editor by clicking the View Editor link in the navigation frame.

Note: The View Editor link appears in the navigation frame only if you have the authority to customize Web User Interface views and menus.

For details about the View Editor see "Chapter 6. Customizing the Web User Interface" on page 73.

Opening a new window

You can click the New Window link in the navigation frame to open a new window.

If your web browser allows you to have more than one window open at any one time, a new window is opened showing a new instance of the data in your work frame. The two instances of the data are independent of each other; any operation you perform in one of the windows does not affect the data displayed in the other window, until you refresh the data.

The number of windows that a user can have open at any one time is limited to 63.

If your web browser does not support multiple windows, a new window is opened but the existing window is hidden.

Closing a window

You can close a window in your normal way, for example, by clicking the close box on the title bar of the window, if available.

If your web browser is not Java-enabled, you have a Close window link in the navigation frame.

To avoid exceeding the limit on the number of windows you are allowed to have open at any one time:
1. If your web browser is not Java-enabled, click the Close window link. A message is issued indicating the window is closed.
2. Close the window in your normal way, for example, by clicking the close box on the title bar of the window, if available.

If your web browser is Java-enabled, the Web User Interface recognizes when you have closed a window, therefore you will not see a Close window link.

Signing off

You can sign off from the Web User Interface by:
1. Clicking the Sign off link in the navigation frame of one of your windows, then
2. Closing all windows in the normal way or exiting the web browser

Using links

Links are displayed in the normal style for your web browser. A link connects a field in one display with related information in another display, and may be:

- A link from a menu choice to another menu.
- A link from a menu choice to a view.
- A link to alternative details for a specific resource within the same view set.
- A link to related resources, for example, from task to transaction in another view set.
- A link displaying data from another web server in a new window.

Link fields are defined using the View editor. For details about the View Editor, see "Chapter 6. Customizing the Web User Interface" on page 73.

Links are displayed and actioned in the normal way for your web browser.

Selecting a View or a Menu

You can select a view or a menu by clicking a link in either the navigation frame or the work frame. You may need to select choices from more than one menu before reaching the view or the menu that you are interested in.

For example, if you are using the supplied starter set and you are interested in looking at the status of your journals. By clicking the Operations views link in the work frame shown in Figure 11 on page 41, you will be presented with another menu as illustrated in Figure 12 on page 46.

Figure 12. Example operations menu

From here you could click the Journal Views link and be presented with the menu shown in Figure 13 on page 47.

Figure 13. Example Journal view

Now you could select the Journal Names link and be presented with the tabular view shown in Figure 14 on page 48 that you are interested in.

CICSPlex SM Web User Interface

Journal name

EYUVC1280I 32 records collected at 10/21/99 10:10:53.

Context: BRITAIN Scope: BRITAIN
Journal name: [= ▼] [   ]

Automatic refresh
☐ 60   [Refresh]

32 records, page 1 of 2. <Previous|Next>

32	CICS system name	Journal name	Journal status	Log stream type	MVS log stream name	Number of journal writes	Total number of bytes written	Number of buffer flush requests
☐	IYCQCSMC	DFHLOG	ENABLED	MVS	CTS.V130.IYCQCSMC.DFHLOG	0	0	0
☐	IYCQCSMC	DFHSHUNT	ENABLED	MVS	CTS.V130.IYCQCSMC.DFHSHUNT	0	0	0
☐	IYCQCTAA	DFHLOG	ENABLED	MVS	CTS.V130.IYCQCTAA.DFHLOG	0	0	0
☐	IYCQCTAA	DFHSHUNT	ENABLED	MVS	CTS.V130.IYCQCTAA.DFHSHUNT	0	0	0
☐	IYCQCTAB	DFHLOG	ENABLED	MVS	CTS.V130.IYCQCTAB.DFHLOG	0	0	0
☐	IYCQCTAB	DFHSHUNT	ENABLED	MVS	CTS.V130.IYCQCTAB.DFHSHUNT	0	0	0
☐	IYCQCTAC	DFHLOG	ENABLED	MVS	CTS.V130.IYCQCTAC.DFHLOG	0	0	0
☐	IYCQCTAC	DFHSHUNT	ENABLED	MVS	CTS.V130.IYCQCTAC.DFHSHUNT	0	0	0
☐	IYCQCTAT	DFHLOG	ENABLED	MVS	CTS.V130.IYCQCTAT.DFHLOG	0	0	0
☐	IYCQCTAT	DFHSHUNT	ENABLED	MVS	CTS.V130.IYCQCTAT.DFHSHUNT	0	0	0
☐	IYCQCTA2	DFHLOG	ENABLED	MVS	CTS.V130.IYCQCTA2.DFHLOG	0	0	0
☐	IYCQCTA2	DFHSHUNT	ENABLED	MVS	CTS.V130.IYCQCTA2.DFHSHUNT	0	0	0

32 records, page 1 of 2. <Previous|Next>

[Flush...] [Reset...] [Discard...]

EYUSTARTJRNLNAME TABULAR

Figure 14. Example tabular view of journals

You can also select a view by clicking a link in a view. For example, to look at a detail view of one of the DFHLOG journals, you could click the appropriate DFHLOG link shown in Figure 14 and be presented with the detail view shown in Figure 15 on page 49.

Figure 15. Example detail view of DFHLOG journal

Sorting a view

The data in a column of a tabular view may be sorted in either ascending or descending order. Whether or not the data may be sorted is determined by the creator of the view using the View Editor. For information about the View Editor, see "Chapter 6. Customizing the Web User Interface" on page 73. If the data may be sorted, the column title field contains a sort ascending icon and a sort descending icon.

- To sort the data in ascending order, click the sort ascending icon. See Table 2 on page 6 for a picture of the sort ascending icon.
- To sort the data in descending order, click the sort descending icon. See Table 2 on page 6 for a picture of the sort descending icon.

See Figure 14 on page 48 for an example of the sort ascending and descending icons.

Summarizing a view

Sometimes, data requests can result in many lines of information, possibly spreading over a number of display pages. The amount of data displayed can be summarized using any field that has been defined as a summarizing field. Summarizing fields are defined when the view is created using the View Editor.

For information about the View Editor, see "Chapter 6. Customizing the Web User Interface" on page 73. There is no limit to the number of fields you can specify for summarizing the data in a view.

Fields that can be used for summarizing data have a Summarize icon at the top of the column (see Table 2 on page 6). Click the icon and the information for each item is amalgamated and a summarized view is displayed. A summarized view is a special form of the tabular view, comprising one line for each discrete value in the result set.

The way the information is summarized depends upon the type of data in each column:

- For character fields, the summarized data provides those characters that are common to all underlying records and displays an asterisk (*) for those that are not common. For example, a character field such as the transaction id field on the summary view for LOCTRAN objects might contain summarized values C*, DS*, ABCD, or ****.
- For CVDA and EYUDA values, the value is displayed, if there is a common value for all the records making up the summarized line. Otherwise, N_A or N_a is displayed. In a summary view N_A and N_a mean that the values were different so could not be summarized.
- For numeric and hexadecimal fields, the data is handled as specified for the field in the *CICSPlex SM Resource Tables Reference.*

Next to the check box in the left-hand column is a number indicating the number of records combined into the single line of summary information. The title field above the check box column shows the total number of records in the summary. You can perform actions on all the items in a summary line by clicking the check box in the left-hand column.

You can use only one field at a time to summarize data. To summarize the same data using another field, click the Go Back icon to return to the current tabular display then click the Summarize icon for the other field.

For example, say you are interested in the number of buffer flush requests all the DFHLOG and DFHSHUNT journals have had issued against them. Using Figure 14 on page 48, you could click the summarize icon in the Journal name column and be presented with a display similar to Figure 16 on page 51.

Figure 16. Summary information

Figure 16 shows that there were zero flush requests issued against the 16 DFHLOG journals (the number next to the check box) and the 16 DFHSHUNT journals. You can also see that this summary information is based on 32 journals as shown in the title box of the check box column.

Refreshing views

There are two ways in which you can refresh views:
- Refresh on demand
- Automatic refresh

Refresh on demand

You can refresh the data displayed at any one time by clicking the Refresh button in the selection criteria and refresh area, when available.

The Refresh button is not available for a view of the data collected for a previous view. For example, to refresh the data for a detail view opened for one record shown on a tabular view:
- Click the Go Back icon to return to the original tabular view
- Click the Refresh button

Note: The Refresh button is never available on menus and confirmation panels.

Automatic Refresh

The automatic refresh function is available only if you are using a
Javascript-enabled browser. The automatic refresh function allows you to update
the display automatically and control how frequently the data in a view is
updated. The automatic refresh function is defined as either available with a
default value, or not available for a view, using the View Editor. If automatic
refresh is available, an entry field and a check box appear in the selection criteria
and refresh area. You can:

- Turn on automatic refresh by clicking the check box to insert a check mark.
- Turn off automatic refresh by clicking the check box to remove the check mark.
- Change the refresh interval for a display:
    1. Type a new value, in seconds, into the entry field.
    2. Make sure that the check box contains a check mark.
    3. Click Refresh.

Operating on resources

With a detail view, you can perform an operation on one resource only. With a
tabular view, you can perform an operation on one or more resources by selecting
the relevant resources. You can select resources by clicking the check boxes beside
the required resources. If a check box is available in the title box of the check box
column, you can click this check box to select all the resources that matched your
selection criteria. After selecting the resource or resources click the appropriate
action button to perform the operation.

For some operations, for example, opening a file, the action is performed
immediately for all the selected resources. For operations that may have a
significant impact on users of the system, such as flushing a journal or shutting
down a CICS region, a confirmation panel may be displayed.

To use a confirmation panel:

- You see a detail display for the first resource in your selection with a panel
  asking you to confirm the requested action. Check that you have the required
  resource. You might also be able to make parameter changes.
- Confirm or cancel the required action by clicking the appropriate button, which
  typically might be:

Table 10. Confirmation panel buttons

Button	Meaning
Yes to all	Perform the action for this and all the remaining resources in the selection list
Yes	Perform the action for this resource only and display the next resource in the selection list
No to all	Cancel the operation for this and for all remaining resources in the selection list
No	Do not perform the action for this resource and display the details of the next resource in the selection list
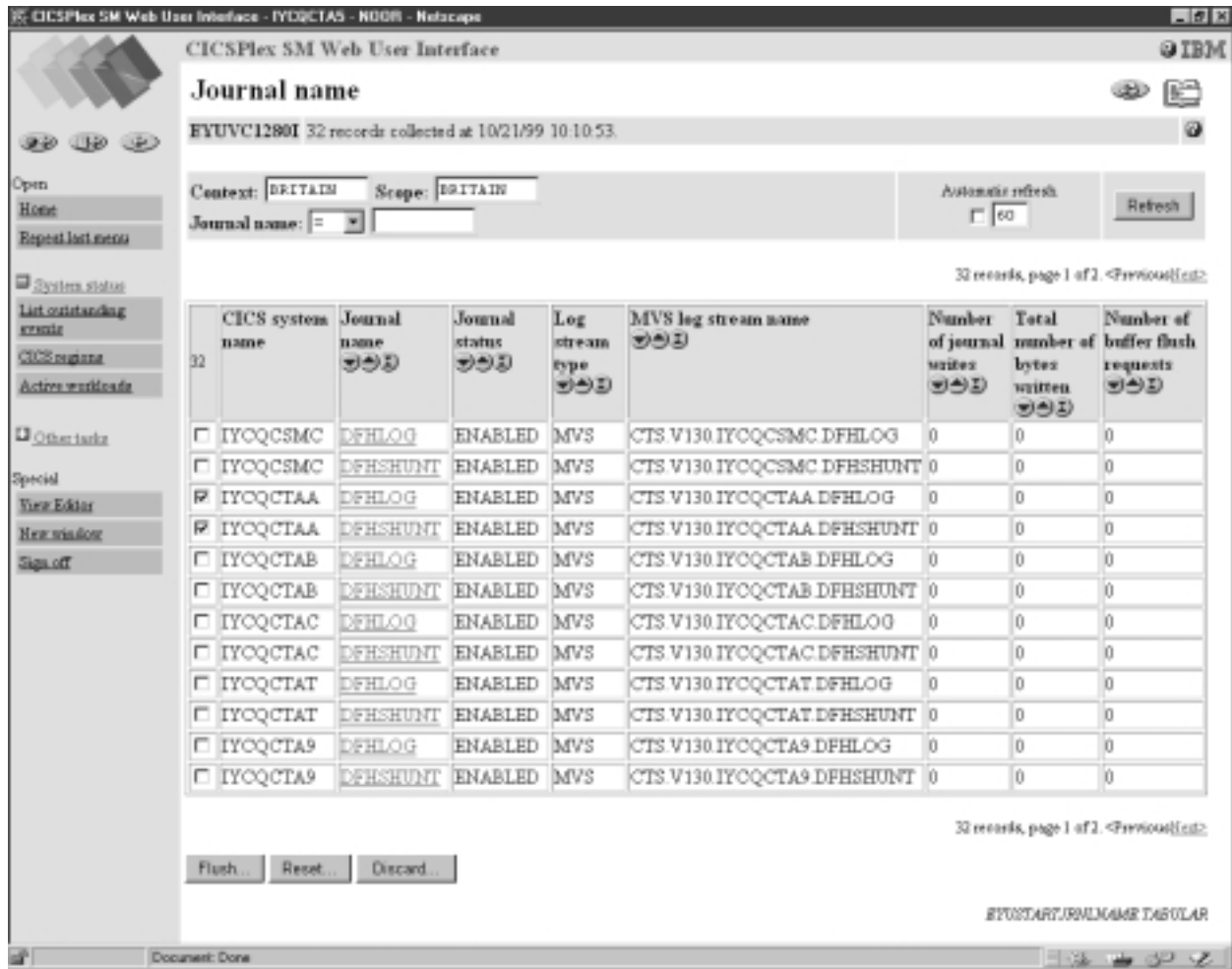
Figure 17. Selecting resources

For example, say you want to flush journals DFHLOG (with an MVS log stream name of CTS.V130.IYCQCTAA.DFHLOG) and DFHSHUNT (with an MVS log stream name of CTS.V130.IYCQCTAA.DFHSHUNT) as shown in Figure 14 on page 48. First of all, you would click the check boxes beside both journals as shown in Figure 17, then click the Flush action button.

You may first see the confirmation panel for the DFHLOG journal, as shown in Figure 18 on page 54, on clicking the 'Yes' confirm button, you may be presented with the confirmation panel for the DFHSHUNT journal. Alternatively, you click the 'Yes to all' confirm button on the DFHLOG confirmation panel, in which case you are not be presented with the DFHSHUNT confirmation panel.

Figure 18. Confirmation panel for flushing the DFHLOG journal

Alternatively, you could work with a single resource at a time from its detail view. For example, you could first flush journal DFHLOG that has an MVS log stream name of CTS.V130.IYCQCTAA.DFHLOG by displaying its detail view as shown in Figure 15 on page 49. You could then click the Flush button and be presented with the confirmation panel shown in Figure 18. Here you could click the Yes button. Similarly for the appropriate DFHSHUNT journal.

Modifying attributes and entering parameters

On some detail views and confirmation panels, you are given the opportunity to change attributes or specify parameters for an action. The style of the attribute and parameter fields is defined using the View Editor. For information about the View Editor, see"Chapter 6. Customizing the Web User Interface" on page 73.

It is possible to change attribute values for a resource as follows:

- If you have a selection box, select the attribute value from the pull down list. If necessary, click the check box beside the attribute to insert the check mark. If you are using a Javascript-enabled web browser, the check mark is set automatically in the check box. If you decide after selecting the attribute value that you do not want to change it, simply click the check box to remove the check mark.
- If you have a data entry field, type in the attribute value, using the rules in "Entering Data" on page 38. If necessary, click the check box beside the attribute to insert the check mark. If you are using a Javascript-enabled web browser, the check mark is set automatically in the check box when you click outside the

field. If you decide after typing in the attribute value that you do not want to change it, simply click the check box to remove the check mark.
- Click the appropriate action button to perform the operation.

It is possible to specify or change a parameter value as follows:
- If you have a selection box, select the parameter value from the pull down list. If necessary, click the check box beside the parameter to insert the check mark. If you are using a Javascript-enabled web browser, the check mark is set automatically in the check box when you change the attribute value. If you decide after selecting the parameter value that you do not want to supply it, simply click the check box to remove the check mark.
- If you have a data entry field, type in the parameter value, using the rules in "Entering Data" on page 38. If necessary, click the check box beside the parameter to insert the check mark. If you are using a Javascript-enabled web browser, the check mark is set automatically in the check box when you click outside the field. If you decide after typing in the parameter value that you do not want to supply it, simply click the check box to remove the check mark.
- If you have radio buttons, click to select the required value. You must select one.
- If you have check boxes, click to insert a check mark or to remove a check mark.
- Click the appropriate action button to perform the operation.

Figure 15 on page 49 shows an example of a selection box which may allow you to Enable or Disable this DFHLOG journal.

Printing a view

The recommended procedure for printing a view is:
- Click the Print preview icon, see Table 2 on page 6 for a picture of the Print preview icon. A new window is opened showing a printable version of your display.
- Print the window contents using your normal web browser print facility.

  Note: All the records matching the selection criteria are printed, not just the current page showing on your screen.
- Close the print preview window.

If you use the original window before you close the print preview window, a message indicating that data is no longer available in the print preview window may be issued.

Accessing the customizable view and menu help

To access your customized help information, if available, click the Help link in the work frame. The contents and organization of the customizable view and menu help is site specific.

Chapter 5. Administration

This chapter presents the following topics:
- "The CICSPlex SM Web User Interface transaction (COVC)"
- "Web User Interface Server Repository" on page 64
- "The output log (EYULOG)" on page 66
- "Customizable view and menu help" on page 66
- "Integrating the Web User Interface with other web-based tools" on page 66
- "Security Considerations" on page 70

The CICSPlex SM Web User Interface transaction (COVC)

A CICSPlex SM Web User Interface server controller transaction (COVC) is supplied for use by an administrator with a terminal connected to the Web User Interface server CICS region.

The functions of this transaction are:
- To start up and shutdown the Web User Interface environment
- To display a summary of Web User Interface status information
- To display details of active user sessions and allow termination of individual sessions
- To Import and Export view set and menu definitions from the Web User Interface repository
- To dynamically set trace flags

If you run the COVC transaction, with no further input, that is by typing COVC followed by no other command, you are presented with the CICSPlex SM Web User Interface control panel, as shown in Figure 19 on page 58.

```
COVC                   CICSPlex SM Web User Interface Control              EYUVCTR

                              Select one of the following:

                                   1. Start Server
                                   2. Stop Server

                                   3. Status Details

                                   4. User Sessions
                                   5. Import
                                   6. Export

                                   7. Trace Flags


    Current Status : Ready                                        Time : 14:03:58
    Applid         : IYCQCTA5                                     Date : 10/21/99




    PF   1 Help     3 Exit                                        12 Return
```

Figure 19. CICSPlex Web User Interface control panel

Starting and stopping the Web User Interface server

If the Web User Interface server has not already been started during PLT
processing you can start it by selecting the Start Server option from the control
panel. Message EYUVS0900I is issued on the control panel indicating that the Web
User Interface server Start has been requested.

To stop the Web User Interface server select the Stop Server option from the
control panel. Message EYUVS0901I is issued on the control panel indicating that
the Web User Interface server Stop has been requested.

Note: Stopping the Web User Interface server using the COVC transaction shuts
down the CICS system acting as the Web User Interface server on
completion of the COVC transaction.

You can also start the Web User Interface server by issuing the following
command:
COVC START

and stop the Web User Interface server by issuing:
COVC STOP

You can issue the COVC START and COVC STOP commands from the CICS
terminal or from the console using the MVS Modify command.

If you attempt to start the Web User Interface server when it has already started,
message EYUVS0902W is issued indicating that the Web User Interface server is
currently active. Similarly, if you attempt to stop the Web User Interface server
when it has already stopped, message EYUVS0903W is issued indicating that the
Web User Interface server is currently inactive.

Displaying status details

To display the Web User Interface server status details, select the Status Details option from the control panel. You are presented with the Status Details panel, as shown in Figure 20.

```
COVC                    CICSPlex SM Web User Interface Control          EYUVCTS

                               Status Details

           CMAS Sysid           : YCQX
           Server Sysid         : YCA5
           CICSPlex SM Release   : 0140

           Secure Sockets       : No
           Port                 : 01306
           Hostname             : mvsxx.company.com

           TCP/IP Service Name   : EYUWUI
           TCP/IP Service Status : Open


Current Status : Ready                                        Time : 14:06:13
Applid         : IYCQCTA5                                      Date : 10/21/99




PF   1 Help    3 Exit                                         12 Return
```

Figure 20. Status Details panel

An explanation of some of the fields shown in Figure 20 follows:

- CMAS Sysid

  This is the sysid of the CMAS to which the Web User Interface server is connected.

- Secure Sockets

  This tells you if your Web User Interface server is using the secure sockets layer (SSL), as defined by the TCPIPSSL Web User Interface server initialization parameter.

- Port

  This is the TCP/IP port number specified on the TCPIPPORT Web User Interface server initialization parameter.

- Hostname

  This is the TCP/IP host name specified on the TCPIPHOSTNAME Web User Interface server initialization parameter.

- TCP/IP Service Name

  This is the name of TCPIPSERVICE being used by the Web User Interface, if you are using CICS Transaction Server for OS/390 version 1.3.

- TCP/IP Service Status

  This is the status of TCPIPSERVICE being used by the Web User Interface, if you are using CICS Transaction Server for OS/390 version 1.3.

If you press PF12 to return to the control panel, message EYUVS0906I is issued on the control panel indicating that the operation is complete.

Viewing user sessions

To view information about user sessions, select the User Sessions option from the control panel. You are presented with the User Sessions panel, as shown in Figure 21.

```
  COVC                   CICSPlex SM Web User Interface Control              EYUVCTU

                               User Sessions                  Page  1 of  1

  Current No. of Users :   3                   Inactive Timeout :    30 (mins)
  Maximum No. of Users :  20

     Userid     Time inactive  Time logged    Number of  Client IP
                (mins)         on (hrs:mins)  Windows    Address
     NOOR           0          2:02           1               9.20.45.51
     PRESTON        0          1:22           3               9.20.45.51
     SMITH          0          1:01           3               9.20.45.51
     RUSHALL        0          0:59           1               9.20.45.51


  Current Status : Ready                                      Time : 14:13:58
  Applid        : IYCQCTA5                                    Date : 10/21/99



  PF   1 Help     3 Exit                  7 Up       8 Down     12 Return
```

Figure 21. User sessions panel

An explanation of some of the fields shown in Figure 21 follows:

- Maximum No. of Users

  This is the maximum number of concurrent users allowed and is the value specified for the MAXUSERS initialization parameter.

- Inactive Timeout

  This is the period after which inactive user sessions are terminated and is the value specified for the INACTIVETIMEOUT initialization parameter. When Inactive Timeout is reached the user session is terminated.

- Userid

  This is the userid of the user signed onto the Web User Interface.

- Time Inactive

  This is the period that this user session has been inactive on the Web User Interface.

- Time logged on

  This is the period that this user has been logged onto the Web User Interface.

- Number of Windows

  This is the number of windows that this user session currently has opened. This number is incremented every time this user clicks the New window button in the navigation frame, the View Editor button in the navigation frame, The New Editor window button in the View Editor, or the New Home window button in the View Editor.

  Note: This number is not necessarily decremented when the user closes a window. Closed windows remain active until the resources are reclaimed.

- Client IP Address

  This is the client browser or proxy TCP/IP address.

If you press PF12 to return to the control panel, message EYUVS0906I is issued.

Terminating a user session

You can terminate a user session from the User Sessions panel by typing P for purge, or F for force purge, against the userid then pressing enter. Message EYUVS0912I is issued on the User Sessions panel indicating that the purge request was successful. A message is also written to the EYULOG when the user session is terminated.

Note: Terminating a user using the force purge command results in an AEXY abend and may also result in some resources not being reclaimed.

Importing view set or menu definitions

To import some view set or menu definitions into the Web User Interface repository, select the Import option from the control panel. You are presented with the Import panel, as shown in Figure 22.

```
COVC              CICSPlex SM Web User Interface Control           EYUVCTI

                              Import


      Input TDQ Name  :               Name of extrapartition TDQ for import

      Type            : MENU       Menu │ Viewset

      Duplicate Names : SKIP       Skip │ Overwrite




 Current Status : Ready                               Time : 14:17:57
 Applid         : IYCQCTA5                             Date : 10/21/99



 PF   1 Help      3 Exit                                 12 Return
```

Figure 22. Import panel

You are then required to fill in the blank fields.

An explanation of the fields that you need to fill in follows:
- The Input TDQ Name is the name of the extrapartition transient data queue where the definitions are currently held, for example COVI. See "Transient data queue definitions" on page 30 for more information.
- The Type is the type of definition you want to import, VIEWSET or MENU.
- The Duplicate Names field is used to specify whether you want existing definitions to be preserved or overwritten if a duplicate definition is found in the input data set.

SKIP		If you specify SKIP, only definitions for view sets or menus that do not already exist in the input data set are imported.
OVERWRITE		If you specify OVERWRITE, definitions for any view sets or menus that already exist in the input data set are overwritten.

Note: You can have a view set and menu with the same name.

After all the fields have been filled in press Enter to import the view set or menu definitions.

Message EYUVS0916I is issued on the Import panel indicating that the import was successful. If the import fails, complete view set and menu definitions that have already been read successfully will remain in the repository but the failing definition and any that follow will not be imported. Message EYUVS0917E is issued indicating that the import has failed and a message is written to the EYULOG of the Web User Interface server or the operator log.

For more information about importing see "Importing and exporting" on page 64.

If you press PF12 to return to the control panel, message EYUVS0906I is issued.

Exporting view set or menu definitions

To export view set or menu definitions from the Web User Interface repository select the Export option from the control panel. You are presented with the Export panel, as shown in Figure 23.

```
 COVC               CICSPlex SM Web User Interface Control           EYUVCTE

                                  Export


   Output TDQ Name :                    Name of extrapartition TDQ for export

   Type            : MENU               Menu | Viewset

   Name            : *                  Specific or generic name of a
                                        definition to export




 Current Status : Ready                                 Time : 14:23:32
 Applid         : IYCQCTA5                               Date : 10/21/99



 PF   1 Help     3 Exit                                        12 Return
```

Figure 23. Export panel

You are then be required to fill in the blank fields.

An explanation of the fields that you need to fill in follows:

- The Output TDQ Name is the name of the extrapartition transient data queue where the definitions should be exported to, for example, COVE. See "Transient data queue definitions" on page 30 for more information.
- The Type is the type of definition you want to export, VIEWSET or MENU.
- The Name is the specific or generic name of the object that is to be exported. The convention for using generic names, when exporting, is:
  - An asterisk (*) represents any number of characters. It must be the last or only character in the string. For example:
    - EYU* means all definitions that have a name beginning with the characters EYU
    - * means all definitions

After all the fields have been filled in press Enter to export the view or menu definitions.

Note: If the same TDQ is used for export more than once, for example, to export menus then views, the second export overwrites the first or is appended to it, depending on how the TDQ is defined.

Message EYUVS0919I is issued on the Export panel indicating that the export was successful and how many objects were written across. If the export fails, the data in the TDQ that you were writing to is incomplete so should be discarded. Message EYUVS0920E is issued indicating that it has failed and a message is written to the EYULOG of the Web User Interface server.

For more information about exporting see "Importing and exporting" on page 64.

If you press PF12 to return to the control panel, message EYUVS0906I is issued.

Setting trace flags

Attention: It is recommended that you only activate trace at the request of IBM Support Center personnel.

To set trace flags dynamically, select the Trace Flags option from the control panel. You are presented with the Trace Flags panel, as shown in Figure 24 on page 64.

```
COVC                    CICSPlex SM Web User Interface Control              EYUVCTT

                                    Trace Flags

Overtype the trace, enter to update.

                                    1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 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
Trace Flags : Y Y N N N N Y N N N Y N Y N Y N N N N N N N N N N N N N N N N Y




Aux. Trace Status : Started

Current Status : Ready                                        Time : 08:26:46
Applid         : IYCQCTA5                                      Date : 10/29/99




PF   1 Help     3 Exit                                        12 Return
```

Figure 24. Trace flags panel

You can control the amount of trace information produced by setting any of the
appropriate trace flags. Thirty one independent trace flags are provided and you
can overtype any of the flags, with Y or N, and press enter to change the settings.

Web User Interface Server Repository

The Web User Interface server repository contains the Web User Interface server's
view and menu definitions, that is, it contains all the recoverable resources
maintained by the Web User Interface server.

The Web User Interface server repository consists of a variable length record, key
sequenced VSAM file created before using the Web User Interface. You must have
one repository, which cannot be shared, for each Web User Interface server.

The DDname of the Web User Interface server repository must be included in the
start-up JCL for the Web User Interface server.

For information about creating the Web User Interface server repository see
"Create the Web User Interface server repository (EYUWREP)" on page 24.

Importing and exporting

Definitions from the repository can be imported and exported to a TDQ so that
you can back up menu and view definitions, distribute definitions to other Web
User Interface servers, and migrate menus and view sets to other releases.

The COVC import and export functions use transient data queues that have certain
properties. COVI and COVE are examples of these TDQs. You can copy COVI and
COVE to create more TDQs. See "Transient data queue definitions" on page 30 for
more information about the COVI and COVE TDQs.

You can import and export to and from any suitable named TDQ.

Import

You can import either view sets or menus in one operation but not both. If a TDQ contains definitions for both view sets and menus, you need to import one and then the other.

If you do not specify OVERWRITE on the COVC import panel, only definitions for view sets or menus that do not already exist in the input data set are imported. Definitions for view sets or menus that already exist are ignored.

If there is a failure during import, complete menu and view set definitions that have already been read successfully remain in the repository but the failing definition and any that follow are not imported. In the case of failure, a message is written to the EYULOG or operator log.

Export

You can export either view sets or menus in one operation but not both. If the same TDQ is used for export more than once, for example, to export menus then view sets, the second export either overwrites the first or is appended to it, depending on how the TDQ is defined.

If there is a failure during export, the data in the TDQ that you were writing to is incomplete so should be discarded. In the case of failure a message is written to the EYULOG or the operator log.

The starter set of view set and menu definitions

The starter set of view set and menu definitions is supplied in CICSTS13.CPSM.SEYUVIEW. It is available in languages denoted by EYUnVX01, where n is the language letter. These starter set names match the 3 letter language identifiers that you specified on the INITPARM CICS system initialization parameter, described in "Specify language and codepage" on page 22. For a list of supported languages see Table 11.

Table 11. Supported languages for the starter set

Language	Language identifier	Starter set name
US English	ENU	EYUEVX01
Japanese	JPN	EYUKVX01
Simplified Chinese	CHS	EYUSVX01

The starter set naming convention

The naming convention for the starter set view set, view and menu definitions is as follows:

View sets
     EYUSTARTobjectname

     where objectname is the name of a resource.

Views
- TABULAR

     This displays a tabular view.
- DETAILED

This displays a detail view. In some cases, detail views are named DETAIL1, DETAIL2, and so on, when applicable.

- Name of an action

This displays a confirmation panel for that action

Menus

EYUSTARTmenuname

where menuname is the name of a menu. For example, EYUSTARTMENU displays the starter set's home menu and navigation frame.

The output log (EYULOG)

The Web User Interface uses the CICSPlex SM EYULOG of the Web User Interface server (and not of the CMAS) to record most of its operator messages. Other messages are written to the operator log.

Customizable view and menu help

The customizable view and menu help is help that you can write if you wish to provide additional help for your views and menus. The customizable view and menu help can be served in two ways:

- By the Web User Interface server. If served by the Web User Interface the customizable view and menu help consists of a set of arbitrary HTML members stored as members in a partitioned data set. The CICS Web Interface template manager is used to serve members of this partitioned data set for delivery to the browser. For information about the CICS Web Interface template manager see the *CICS Internet Guide*.
- By an arbitrary external web server.

The DDname of the partitioned data set must have been specified in the start-up JCL for the Web User Interface server. See "Specify the JCL DD statements" on page 31 for an example and "Specify the customizable view and menu help data set" on page 25 for more information.

Integrating the Web User Interface with other web-based tools

The Web User Interface interacts with other web-based tools as follows:

- Access from the Web User Interface to an external web server
- Access to the Web User Interface

Access from the Web User Interface to an external server

The Web User Interface can access other web-based tools by:

- Linking to the customizable view and menu help served by an external web server
- A menu choice link to pages served by an external web server

See "Chapter 6. Customizing the Web User Interface" on page 73 for more information.

Access to the Web User Interface

The Web User Interface is accessed using standard web browser software. Every time you access the Web User Interface, a new window is opened showing a new instance of the data. The different instances of the data are independent of each other. See "Opening a new window" on page 44 for information about the maximum number of windows you can have open at any one time. You can link to the Web User Interface from any location that can launch a web browser by supplying a valid URL. The URL must be correctly formatted for a HTTP or HTTPS request using escaping for reserved and unsafe characters with standard HTTP '%nn' notation, where nn is the hexadecimal representation of a character from the ISO–8859–1 codepage. For example, '%7E' represents the tilda ('˜') character. Except for the 'http' or 'https' prefix, the URL, in general, is not case sensitive unless the value of any query variables is case sensitive.

For information about the HTTP standard refer to RFC2068 - Hypertext Transfer Protocol - HTTP/1.1.

The URL is constructed as follows:

`prefix:path?selection criteria`

Note: The path and the selection criteria, which are specified as HTTP query variables, are separated by a question mark (?). If selection criteria are not present, the '?' should not be specified.

Prefix

The prefix may be one of the following depending on the server configuration:
* http
* https, if SSL is in use

Path

The path may be one of the following:
* *//hostname:port/*CICSPlexSM

  This takes you to the Welcome panel that contains a Begin Signon button.
* *//hostname:port/*CICSPlexSM*/codepage*

  This takes you to the Welcome panel that contains a Begin Signon button. The codepage that you specify here overrides the codepage specified on the INITPARM system initialization parameter in the start-up JCL of the Web User Interface server. For a list of valid codepages and corresponding codepage identifiers, see "Specify language and codepage" on page 22.

  You can specify the default codepage by leaving *codepage* blank. For example:

  *//hostname:port/*CICSPlexSM*//*
* *//hostname:port/*CICSPlexSM*/codepage/userid*

  This takes you directly to your home menu (which is the menu specified on the DEFAULTMENU system initialization parameter), if you are already signed on in the current browser session.

  If you are not signed on in the current browser session you will be taken through the signon process described in "Signing On" on page 36.
* *//hostname:port/*CICSPlexSM*/codepage/userid/*MENU*/menuname*

  This takes you directly to the menu called *menuname*, if you are already signed on in the current browser session.

If you are not signed on in the current browser session you will be taken through the signon process described in "Signing On" on page 36, before the menu specified in the URL is displayed.

- //*hostname:port*/CICSPlexSM/*codepage*/*userid*/VIEW/*viewsetname*

  This takes you directly to the default view within the view set called *viewsetname*, if you are already signed on in the current browser session.

  If you are not signed on in the current browser session, you will be taken through the signon process described in "Signing On" on page 36, before the default view within the viewset specified in the URL is displayed.

- //*hostname:port*/CICSPlexSM/*codepage*/*userid*/VIEW/*viewsetname.viewname*

  This takes you directly to the view called *viewname* contained within the view set called *viewsetname*, if you are already signed on in the current browser session.

  If you are not signed on in the current browser session you will be taken through the signon process described in "Signing On" on page 36, before the view specified in the URL is displayed.

- //*hostname:port*/CICSPlexSM/*codepage*/*userid*/OBJECT/*objectname*

  This takes you directly to the default view set for object *objectname*, if you are already signed on in the current browser session.

  If you are not signed on in the current browser session you will be taken through the signon process described in "Signing On" on page 36, before the default view for the object specified in the URL is displayed.

  See "Operation options" on page 28 for the list of parameters used to specify default view sets.

Notes:

1. The *hostname* and *port* represent the IP address of the CICS Web Interface listener or the secure server, and are specified on the TCPIPHOSTNAME and TCPIPPORT Web User Interface server initialization parameters, respectively. See "Specify the Web User Interface server initialization parameters" on page 26 for information about these parameters.

2. You need to specify *codepage* only if you wish to override the codepage specified on the INITPARM system initialization parameter.

Selection criteria

In URLs, the selection criteria are specified as HTTP query variables. Each query variable is specified as a variable name followed by '=' then a value. The variable names and values must be escaped using the HTTP standard notation, where necessary. Multiple query variables should be separated by an ampersand (&) character.

The Web User Interface supports query variables as follows:
- Query variables that can be used for menus and views
- Query variables that can be used for views only

Query variables that can be used for menus and views: The following query variables can be used for both menus and views:
- CONTEXT

  This is the CICSplex name.
- CMASCONTEXT

  This is the CMAS name.

- SCOPE

  This is the CICSplex, CICS group, MAS or logical scope name.

Query variables that can be used for views only: These additional query variables can be used for views only:

- A_attrname, where attrname is the name of an attribute.

  This is an attribute filter. You can specify any number of attributes on a URL. You can specify characters, numbers, CVDA or EYUDA values. The default operator for an attribute filter is equality (=). If you wish to use a different operator you can specify the operator value on the O_attrname query variable. See Table 12 for a list of operators and their values.

  For information about attributes see the *CICSPlex SM Resource Tables Reference.*

- P_parmname, where parmname is the name of a parameter.

  This is a parameter filter, as used for a CICSPlex SM API GET command.

  For information about parameters see the *CICSPlex SM Resource Tables Reference.*

- O_attrname, where attrname is the name of an attribute.

  This is specified with the A_attrname query variable to change the equality (=) default operator. For a list of operator values that you can specify on the O_attrname query variable see Table 12.

  Note: When using generic values only the equal to (=) and not equal to (<>) operators are valid.

Table 12. Operator values for the O_attrname query variable

Operator value	Operator	Meaning
1	=	Equal to
2	<>	Not equal to
3	>	Greater than
4	<	Less than
5	>=	Greater than or equal to
6	<=	Less than or equal to

Specifying object names

If you do not specify a view set name but specify an object name, the view set named on the Web User Interface server initialization operation options parameter, that represents the specified object, is opened.

If a view set has not been named to represent the specified object, the default view set, EYUSTARTobjectname is opened.

For a list of Web User Interface server initialization operation options parameters see "Operation options" on page 28.

Examples

The following examples show valid URL formats:

1.

   ```
   http://mvsxx.company.com:04445/CICSPLEXSM//JSMITH/MENU/OURHOME?
          CONTEXT=FRED&SCOPE=FRED
   ```

   This is a request for a user to be directly presented with a home menu called OURHOME using context FRED and scope FRED.

2.

```
http://mvsxx.company.com:04445/CICSPLEXSM//JSMITH/VIEW/OURLOCTRAN?
        CONTEXT=FRED&SCOPE=FRED&A_TRANID=PAY*
```

This is a request for a user to be directly presented with the default view, in
view set OURLOCTRAN, displaying all the local transactions with a TRANID
beginning with the characters PAY, using context FRED and scope FRED.

3.
```
http://mvsxx.company.com:04445/CICSPLEXSM//JSMITH/VIEW/OURWLMAWAOR.TABLE1?
        P_WORKLOAD=WLDPAY01
```

This is a request for a user to be directly presented with the TABLE1 view, in
view set OURWLMAWAOR, displaying active workload information about
workload WLDPAY01, using the default context as specified in the
DEFAULTCONTEXT Web User Interface server initialization parameter.

4.
```
http://mvsxx.company.com:04445/CICSPLEXSM//JSMITH/VIEW/OURLOCTRAN?
        A_TRANID=P*&O_TRANID=2
```

This is a request for a user to be directly presented with the default view, in
view set OURLOCTRAN, displaying all the local transactions with a TRANID
that does not begin with the character P.

5.
```
http://mvsxx.company.com:04445/CICSPLEXSM//JSMITH/VIEW/OURTASK?
        A_PRIORITY=200&O_PRIORITY=3
```

This is a request for a user to be directly presented with the default view, in
view set OURTASK, displaying all the tasks with a PRIORITY greater than 200.

Security Considerations

User authentication and authorization to browse and manipulate individual host
resources is controlled by an existing external security manager (ESM), such as
RACF.

"Security considerations" on page 32 provides more information about the security
accesses required by the various user IDs.

Running your Web User Interface server with security active

If the Web User Interface server is running with the CICS system initialization
parameter SEC=YES, you can control who can access the Web User Interface, what
resources they can see, what actions they can perform, and the use of the View
Editor. If you have already set up CICSPlex SM security for use with the TSO EUI
and CICSPlex SM API, users have the same level of access via the Web User
Interface as through the EUI and API.

When you attempt to connect to a Web User Interface server, the CICSPlex SM
Web User Interface Signon Panel is displayed. The userid and password entered in
this panel are passed to the Web User Interface server, in plain text over the
TCP/IP connection unless you are using SSL support, and then verified by the
external security manager.

All users who are successfully signed onto the Web User Interface have access to
all of the customizable view and menu help pages, if the customizable view and
menu help is served by the Web User Interface.

To control who is allowed to sign onto the Web User Interface server, you can protect the Web User Interface CICS applid via RACF APPL checking. See *CICS RACF Security Guide* for details.

Access to managed resources uses standard CICSPlex SM security using profiles in the CPSMOBJ class (see the *CICS RACF Security Guide*). For example, to see a CICS region view, the Web User Interface user needs READ authority via the CPSMOBJ class profile OPERATE.REGION.context.scope.

Access to CICS resources and actions upon resources within a view uses CICSPlex SM's simulated CICS security checking (see the *CICS RACF Security Guide*) which uses the normal CICS RACF resource and command security profiles. For example, to issue the shutdown action against a CICS region, the Web User Interface user would need UPDATE authority to the SHUTDOWN command in the CCICSCMD class, if command security is active in the target CICS region.

Controlling View Editor Access

If you wish to restrict access to the View Editor you must create a profile in the FACILITY class called EYUWUI.wui_server_applid.EDITOR (where wui_server_applid is the CICS APPLID of the server) and give authorized users of the View Editor UPDATE authority.

If you do not define a profile, all users who are successfully signed onto the Web User Interface have access to the View Editor.

Examples

The following examples use the RACF TSO command syntax and assume that the default CICS RACF classes and no security prefixing is in use. Note that this is not the only way that suitable profiles can be defined. These examples can be adapted to suit the installations requirements and standards.

In the examples, lower case strings should be replaced with the appropriate userid or resource.

- Example 1

  Create Web User Interface user groups:

  ```
  ADDGROUP (WUISERV,WUIADM,WUIUSER,WUIEDIT)
  ```

- Example 2

  Define profiles to protect Web User Interface transactions:

  ```
  RDEFINE GCICSTRN WUISYS UACC(NONE) ADDMEM(COVP,COVU,COVE)
  RDEFINE GCICSTRN WUIADMIN UACC(NONE) ADDMEM(COVG,COVC)
  RDEFINE TCICSTRN COVA UACC(NONE)
  ```

- Example 3

  Authorize user groups to appropriate profiles:

  ```
  PERMIT WUISYS CLASS(GCICSTRN) ID(WUISERV) ACCESS(READ)
  PERMIT WUIADMIN CLASS(GCICSTRN) ID(WUIADMIN) ACCESS(READ)
  PERMIT COVA CLASS(TCICSTRN) ID(WUIUSER,WUIEDIT) ACCESS(READ)
  ```

- Example 4

  Refresh transaction security profiles:

  ```
  SETROPTS RACLIST(TCICSTRN) REFRESH
  ```

- Example 5

  Define View Editor profile and give user group appropriate access:

  ```
  RDEFINE FACILITY wui_server_applid.WUI.EDITOR UACC(NONE)
  PERMIT wui_server_applid.WUI.EDITOR CLASS(FACILITY) ID(WUIEDIT) ACCESS(UPDATE)
  ```

- Example 6

  Connect users to appropriate Web User Interface groups:

  ```
  CONNECT wui_server_dfltuser GROUP(WUISYS)
  CONNECT (wui_server_pltpiusr,wui_administrator) GROUP(WUIADM)
  CONNECT (wui_administrator,wui_view_designer) GROUP(WUIEDIT)
  CONNECT (wui_operator1,wui_operator2...) GROUP(WUIUSER)
  ```

- Example 7

  If CICS surrogate user security is active in the Web User Interface region, definitions similar to the following are required:

  ```
  DEFINE SURROGAT wui_administrator.DFHSTART UACC(NONE)
  PERMIT wui_administrator.DFHSTART CLASS(SURROGAT) ID(WUIADM) ACCESS(READ)
  DEFINE SURROGAT wui_view_designer.DFHSTART UACC(NONE)
  PERMIT wui_view_designer.DFHSTART CLASS(SURROGAT) ID(WUIADM) ACCESS(READ)
  DEFINE SURROGAT wui_operator1.DFHSTART UACC(NONE)
  PERMIT wui_operator1.DFHSTART CLASS(SURROGAT) ID(WUIADM) ACCESS(READ)
  DEFINE SURROGAT wui_operator2.DFHSTART UACC(NONE)
  PERMIT wui_operator2.DFHSTART CLASS(SURROGAT) ID(WUIADM) ACCESS(READ)

  SETROPTS RACLIST(SURROGAT) REFRESH
  ```

Running your Web User Interface server with security not active

If the Web User Interface server is running with the CICS system initialization parameter SEC=NO, users of the Web User Interface must provide a user ID which is used to identify 'sessions' in the COVC transaction, but are not required to provide a password. The user ID does not need to be defined to the ESM. Access checking of access to views, and CICS resources are based on the DFLTUSER for the Web User Interface server CICS region. All Web User Interface users have access to the View Editor.

Chapter 6. Customizing the Web User Interface

You should be familiar with the operation of the Web User Interface menus and views before customizing the menus and views. For information see "Chapter 2. The main components of the CICSPlex SM Web User Interface" on page 5 and "Chapter 4. Using the CICSPlex SM Web User Interface" on page 35.

This chapter describes the customization facilities offered by the CICSPlex SM Web User Interface. It covers the following topics:

- "Customizing menus and views"
- "Customizable view and menu help" on page 81
- "Using the View Editor" on page 82
- "Applying or rejecting updates" on page 91
- "Example tasks" on page 92

Customizing menus and views

This section describes the components of the Web User Interface menus and views that you can customize to create your working environment. You use the CICSPlex SM Web User Interface View Editor to customize the menus and views. How to use the View Editor is described in "Using the View Editor" on page 82.

The CICSPlex SM Web User Interface includes a starter set of views and menus (see "The Web User Interface starter set" on page 83) that you can use either as supplied or as the basis from which to create your own customized views or menus. For example, you might want to create views that apply to a specific task or set of data.

You can create your own version using a starter set menu or view as a model, or you can start from an empty menu or view.

Views and view sets

A view set is a number of related views that are used together to manage the same managed object, that is, a CICS or a CICSPlex SM resource represented by a resource table. You can create as many view sets for a particular managed object as you like.

A view is a display that is used to interact in a particular way with the managed object. Each view is contained within a view set, and is always displayed in the work frame of the Web User Interface display. There are three types of view:

- Tabular view, see "Tabular views" on page 74.
- Detail view, see "Detail views" on page 74.
- Confirmation panel, see "Confirmation panels" on page 75.

View sets and views are identified by names of up to 16 alphanumeric characters. View set names must be unique within the server repository. View names are unique within a view set. It is recommended that you adopt a naming convention for the naming of view sets and views.

The Web User Interface includes a starter set of view sets that you can use either as supplied or as the basis from which to create your own customized views.

Tabular views

You use a tabular view to display:
- Selected attributes from multiple instances of a managed object.
- Summarized records based on one selected attribute of the managed object.

When you create a tabular display, you first select the managed object and then the attributes you want to display. The View Editor offers you the choice of all the attributes available for that managed object. You can create one or more tabular views for each managed object, each tabular view containing attributes that are relevant to a specific task.

Fields in a tabular display can be defined as text or graphical representations. They are display only and cannot be modified. You can specify whether the data for that attribute can be sorted in ascending and descending order, and whether the attribute can be used as the basis for a summarized view.

You can link from a tabular view to one or more tabular and detail views, depending on the task you want the user to perform. For example, from a tabular view of task resources, you could link to detail views showing clock settings, terminal details, and so on. See "Components of a view" on page 76 for details of how you might do this.

You can add buttons to a tabular view that perform an action immediately, or you can choose to display a confirmation panel. See "Confirmation panels" on page 75 for details.

You can control the display options available to each tabular view. These display options allow you to:
- Make this tabular view the default view for the view set. If you select this option, this view will be used for view links that do not target a specific view within the view set. See "Default views" on page 76 for information about default views.
- Choose whether the automatic refresh option will be available for this view.
- Choose whether all object instances on this view can be selected with one click of a button so that an action can be performed against them all, or if each object instance should be selected in turn.
- Select the maximum number of rows that should be displayed on a single page of this view.

The summarized view is a special case of the tabular view. When you create a tabular view, you specify which of the attributes in the view may be used as the basis of the summary view. You can select as many attributes as you like, or none at all. When a tabular view is summarized, the same view is used to display the summarized data.

Detail views

You use a detail view to display a selection of attribute information for a particular instance of a resource and also to allow the user to change attribute values. The information is displayed in three columns: the attribute name, the attribute value, and an optional annotation. You can define an attribute value field to be:

- A read-only, textual representation of the attribute value.
- A modifiable field, so that the user can enter another value.
- A graphical representation of the attribute value.

The optional annotation text appears to the right of the attribute value and can be used to provide additional information, such as names, valid values, and warnings.

It is advisable to keep the annotation text short, otherwise the contents of the detail view may become less clear.

You can include white space (blank lines) in a detail view to separate groups of attributes. You may also include static text that can be used to provide titles for groups of related attribute fields, or to form explicitly labeled links to other views.

A detail view can be used simply to provide information for the user, but you can also use a detail view to implement a SET action, allowing the user to change one or more attributes for the selected instance of the managed object.

You can link from a detail view to one or more detail or tabular views, depending on the task you want the user to perform. For example, from a detail view of a task resource, you could link to other detail views showing clock settings, terminal details, and so on. See "Components of a view" on page 76 for details of how you might do this.

You can add buttons to a detail view that perform an action immediately, or you can choose to display a confirmation panel. See "Confirmation panels" for details.

You can control the display options available to each detail view. These display options allow you to:
- Make this detail view the default view for the view set. If you select this option, this view will be used for view links that do not target a specific view within the view set. See "Default views" on page 76 for information about default views.
- Choose whether the automatic refresh option will be available for this view.

Confirmation panels

Confirmation panels have a similar appearance to detail views and are used to:
- Confirm the action that has been selected on the previous view, or
- Provide any parameter values, or
- Create panels that allow one or more attributes to be SET on many instances of a resource.

The 'No to all', 'Yes', and 'No' action buttons are added automatically by the View Editor, and you can add a 'Yes to all' button if you wish. You can also include a list of parameters for an action on a confirmation panel.

For example, since shutting down a CICS region may have a significant impact on users of the system, you may decide to have a tabular view from which the user can select a CICS region for shutdown. Also on the tabular view you could have an action button labeled Shutdown that links to a confirmation panel. On the confirmation panel you could list the parameters, such as IMMEDIATE and NORMAL, for the shutdown action.

Default views

A default view is a view that is displayed when a view set is opened and no specific view has been named on the link. You can nominate one view within a view set to be the default view.

The default view is normally a tabular view, but can be a detail view, if you wish. When you build a link from menus to view sets, or from one view set to another, you can specify that the default view is displayed. If you do not name an explicit view on the link, because you have chosen to display the default view set, you could change or replace the default view without having to amend all of the links to the view set.

The default view set is used for external requests that specify an object name but do not specify a view set name. The default view set is named on the Web User Interface server initialization operation options parameter, that represents the specified object. See "Operation options" on page 28 for information about the operation options parameters, and "Access to the Web User Interface" on page 67 for information about constructing URLs to access default views and view sets.

Components of a view

You can define some or all of the following components of a view:

Contents of the view
> The columns or items of data that are to be displayed in the view.

Title The title of the view is displayed at the top of the page.

View annotation
> You can add text as an annotation to any view. It will appear below the data display. An annotation can be any text and may be in your national language. You could, for instance, provide guidance for the user on what to do next, if the view forms part of a procedure.

Action buttons
> You can add as many action buttons as you wish to a view. You select the action you want to perform, and the text that you wish to appear on the button. See "Action buttons" on page 81 for more information.

Link to customizable view and menu help
> This link, if defined, is located alongside the view title. For more details about the customizable view and menu help, see "Customizable view and menu help" on page 81.

Selection criteria
> Selection criteria are the context and scope settings and any filters available to the user. You can define whether the context and scope fields are to be hidden, read-only, or modifiable by the user.
>
> You can also specify any attributes or parameters that will always be available to the user as filters.

Automatic refresh
> Users with Javascript-enabled browsers can update views periodically. If automatic refresh is defined as available, an entry field and a check box appear in the Selection criteria and refresh area. The user is then able to turn the automatic refresh facility on or off, and change the refresh interval.

Links Links connect a field in one view with related information in another view, which may or may not be in the same view set.

Link to a view in the same view set

You can create a link from a specific attribute, such as a transaction name, to a detail view in the same view set. As the views are in the same view set the details displayed will reflect the status of the transaction at the time the original view was created. That is, the data is not refreshed.

Link to a view in another view set

You can create a link to related resources, for example, from a task to a transaction, in another view set. In this case, new data is collected, and filters can be defined on the link. For example, you can set the scope for the target view.

Conditional links

You can specify whether a link is always to be available on a view or, is conditional based on an attribute value at the source of the link. The conditions that the attribute value can be tested against are:

- If the attribute is valid at this release of CICS, and the attribute value is equal to the specified value.
- If the attribute is valid at this release of CICS, and the attribute value is not equal to the specified value.
- If the attribute is valid at this release of CICS.

You can specify only one condition for each link but you can define many links.

For an example of setting up a conditional link, see "Using view links and attribute filters" on page 92.

Menus

A menu is a list of related topics from which the user can select one or more items.

Menus are identified by names of up to 16 alphanumeric characters. Menu names must be unique within the server repository, but a menu may have the same name as a view set. It is recommended that you adopt a naming convention for the naming of menus.

Components of a menu

You can define the following components for a work frame menu, but some components are not used when the menu is a navigation frame:

Title The title to be displayed at the top of the menu. This component is not used for a navigation frame menu.

Link to customizable view and menu help

This link, if defined, is located alongside the menu title. For more details about the customizable view and menu help, see "Customizable view and menu help" on page 81. This component is not used for a navigation frame menu.

Context and scope

You can define whether the context and scope fields are to be hidden, read-only, or modifiable by the user. This component is not used for a navigation frame menu.

Menu group titles

You can group the menu choices by providing a group title for each group.

Menu choices

Each menu choice is a link and may be:

- A link to another menu, possibly setting context and scope.
- A link to a view, possibly setting selection criteria, including context and scope.
- An external link to a location served by an external web server. The contents of an external location are displayed in a separate browser window.

In addition to the type and destination of a link, you can define context and scope settings for each menu choice, so that you can build, for example:

- A menu of CICSplex names. Each CICSplex name linking to the same menu but with a different context.
- A menu of application names. Each application goes to the same menu but with a different logical scope.

You can define other selection criteria for each menu choice, so that you can display, for example:

- An active workload view for a specific workload
- A view of terminals matching a generic name

Menu annotation

You can add general annotations to a menu. The menu annotation, that appears above the menu contents, may be used to provide, for example, instructions on how to use the menu or comments explaining the menu. For example, in Figure 25 on page 79, the sentences 'Welcome to your Home menu. Please select a task from the following list. Use the 'Help' link for further information', is a menu annotation.

Menu choice annotation

You can add annotations to individual menu choices. Menu choice annotation appear below the menu choice and may be used for explaining the menu choice or the effect of selecting it. For example, in Figure 25 on page 79, under the menu choice 'CICS regions', the sentence 'Display list of active CICS regions' is the menu choice annotation.
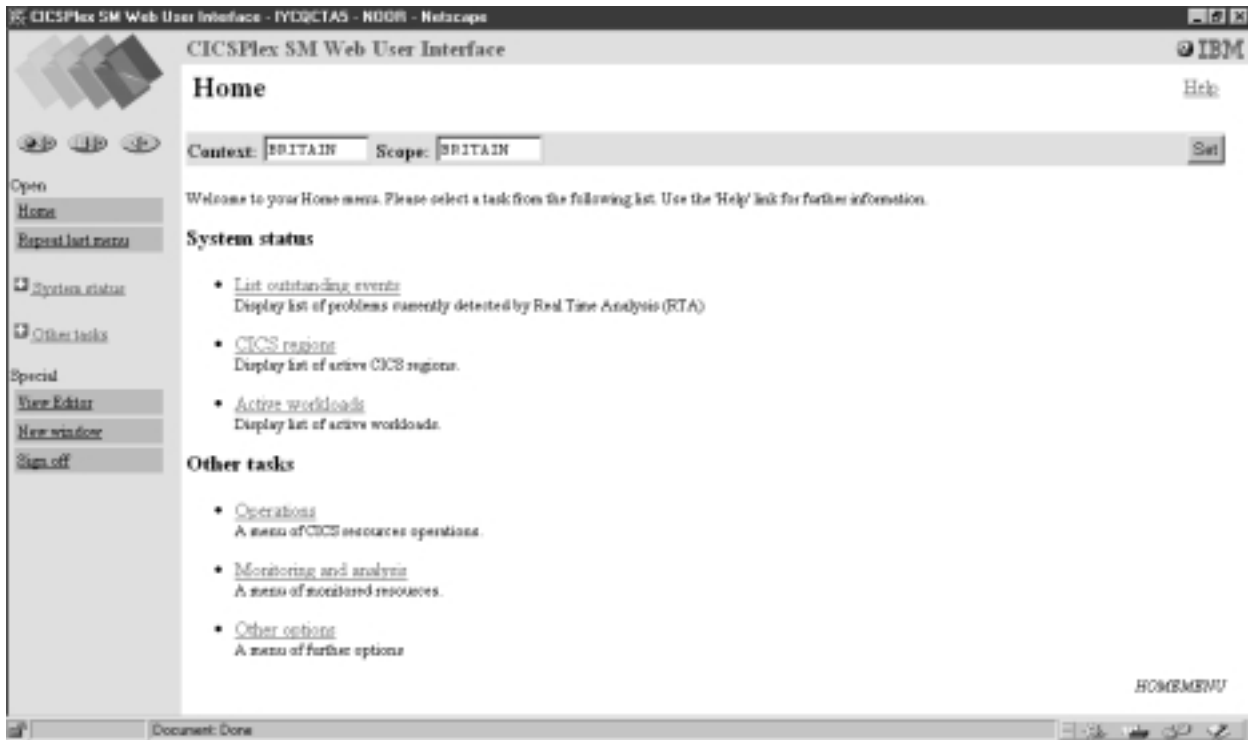
Figure 25. A menu

Navigation frame

Usually menus are displayed in the work frame, but you can select one menu to be displayed in the navigation frame. This menu is the same for all users so you can group the menu choices to reflect different user roles or tasks. You can group the menu choices by providing a group title for each group. The groups are automatically displayed as expandable and collapsible groups. The menu to be displayed in the navigation frame is named on the DEFAULTNAVIGATE Web User Interface server initialization environment options parameter. For information about the Web User Interface server initialization parameters, see "Specify the Web User Interface server initialization parameters" on page 26.

Presenting data

In many cases, you can control the way that data is presented, changed, and selected on views.

Display-only fields
> Data can be presented as a display-only field that cannot be changed.

Entry fields
> Entry boxes allow the user to enter an attribute or parameter value.

Selection lists
> Selection lists contain all the values available to the user for a given attribute or parameter, on this view. Where the user is asked to enter a value you can create a selection list of appropriate values. Creating selection lists can make a view easier to use and provides an additional level of confirmation of the data by offering a choice of acceptable values to the user.

Graphical presentations

You can often choose to display your data graphically either as *warning lights* or as *bar gauges.*

Warning lights

You can use different colored warning lights to indicate the value of the attribute. You can set *presentation thresholds* (a single value or a range of values), and have a different color for each one. You can also have a flashing warning light as an extra alert for the user. Optionally, you can also display the value of the attribute next to the warning light.

For example, you could indicate the severity of system availability monitoring events in your CICS regions by using flashing red for Very High Severe and Very Low Severe, orange for High Severe and Low Severe, and yellow for the lowest level of severity, High Warning and Low Warning. For an example of how to do this, see "Using warning lights" on page 94.

Bar gauges

You can use numbers only on bar gauges. A bar gauge is a horizontal bar that represents the value of the attribute. You can also display the numerical value of the attribute, or the size of the bar gauge as a percentage of the full range, or both.

You specify values for the upper and lower limits of the range, which may be either a specified fixed value or the value of the attribute. For example, you can display the load in a CICS region as a bar gauge, by comparing current task with maximum tasks.

Within the range, you can specify threshold values and allocate display colors in the same manner as for warning lights.

Attributes

The attributes available for each managed object are listed in the *CICSPlex SM Resource Tables Reference.*

Attribute fields

You can use an attribute field to contain the attribute value of an object instance.

When you create a view, you can:

*   Create an empty view and add individually selected attributes later.
*   Initialize the view with the key attributes. Later, you can add extra attributes and delete the ones that you do not need.
*   Initialize the view with all available attributes and delete the attributes that you do not need later.

For some types of attribute, there may be different display formats available. For example, for a time field you may be able to choose between:

*   Hours and minutes
*   Hours, minutes, and seconds
*   Hours, minutes, seconds, and sub-seconds

When you add an attribute to a view, attributes with multiple display formats available appear multiple times in the list of available attributes. You can, therefore, select the attribute and format.

Attribute filters
You use attribute filters to select the records displayed in a view. The filter for an attribute may be either an entry field or a selection list of possible attribute values. You can edit the selection list to suit the circumstances under which the view will be used. These attribute filters will always be available to users of this view.

Parameters

The parameters available for each managed object are listed in the *CICSPlex SM Resource Tables Reference.*

Action parameter fields
You can include action parameters on a confirmation panel and ask the user to select one before the action is implemented.

Parameter filters
Parameter filters are available only for certain resource types and are listed in the *CICSPlex SM Resource Tables Reference* as parameters to the CICSPlex SM API GET command. You use parameter filters to select the records that are displayed in a view. You can display the parameter filter as either an entry field, into which the user can type a value, or a selection list, from which the user selects a value. These parameter filters will always be available to users of this view.

Action buttons

Action buttons allow you to operate on resources and are available on tabular views and detail views. On a tabular view, the action affects one or more objects selected by the user. For example, on a CICS region view, selecting one or more CICS regions for shutdown and clicking the Shutdown action button would shutdown all of the selected regions. On a detail view, the action affects only the managed object displayed in the view. For example, to allow the user to enable or disable a file resource, you could create a detail view with the file attribute FILESTATUS, and the attribute CVDA values of ENABLED and DISABLED displayed in a selection list. The user could select the value required, and click a SET action button. The action button is labeled Set, by default, but you can customize the label to display any text, possibly in your national language.

Action buttons can either:

- Issue an appropriate command and redisplay the view. This is in the case of a direct action which requires no confirmation, or
- Display a panel to confirm the action, with perhaps fields for further input. These action buttons automatically have an ellipsis appended to the end of their label.

Customizable view and menu help

In addition to the Web User Interface help provided with the CICSPlex SM Web User Interface, you can create help that is tailored to your customized views and menus, and that provides information relevant to your business procedures. The help text may be in your national language and might include, for example, site-specific contact names and telephone numbers, or special procedures. You can create your customizable view and menu help in a number of ways. For example:

- You can edit HTML using a text editor or an HTML editor.

- You can export it from a wordprocessor.
- You can link to a server that provides access to a database via a web browser, for example, Lotus Domino.

The help pages can be served either by the Web User Interface server or by an external server. For more information see "Integrating the Web User Interface with other web-based tools" on page 66.

You can use the View Editor to include a link to the customizable view and menu help when you create a view. The options are:
- No help to be available for this view.
- Member name of a help page to be served by the Web User Interface from DFHHTML.
- URL of an external help page to be served by another HTTP server. The external help page should not target the Web User Interface server.

Considerations when creating pages to be served by the Web User Interface server

When creating your help pages to be served by the Web User Interface server, you should consider the following:
- The names of the help pages must be no more than 8 characters and consist of uppercase letters and numerical digits.
- When developing the help pages on a workstation, name the files with one of the following extensions as appropriate for your platform:
  - .htm
  - .html
  - .HTM
  - .HTML
- When uploading the help pages to the DFHHTML data set, use the 8–character page name (with the extension removed) as the member name.

You may link between your help pages if you wish, perhaps to create a contents page. To do this, you must specify the page name (including the extension) without any path. For example,

```
<A HREF="PAGE2.HTM">Another Page</A>
```

This allows you to test your help pages and the links between them before you upload the pages to the DFHHTML data set.

When uploading the help pages to the DFHHTML data set, you do not need to change any of the links as the Web User Interface server will recognize the page regardless of the extension you used.

Using the View Editor

The CICSPlex SM Web User Interface View Editor is the tool for customizing your menus and views. A link to the View Editor is provided in the navigation frame of the Web User Interface display. However, note that, if your Web User Interface server is running with security active, the View Editor is restricted to nominated users. You will not see the link to the View Editor unless you have the relevant authority.

You should leave the View Editor by returning to the CICSPlex SM Web User Interface Editor panel or by signing off.

Notes:

1. If your browser session times out, because the INACTIVETIMOUT period is reached, any changes not saved prior to the session being timed out are lost. For information about the INACTIVETIMEOUT Web User Interface server initialization parameter, see "Specify the Web User Interface server initialization parameters" on page 26.

2. Throughout this section, for the purpose of providing examples to show how the View Editor can be used to edit views, the starter set views have been used. However, you cannot save changes to the supplied starter set views and menus. You must copy the required starter set view set and edit your copy. See "Example tasks" on page 92.

3. A view set or menu is locked whenever it is opened for edit. Changes are not commited until the view set or menu is finally saved or the edit is abandoned. While locked other users cannot edit the same view set or menu. Users may continue to use the view set or menu whilst it is being edited, in which case the original version of the view set or menu will be used until it is opened after the changes have been committed.

Accessing the View Editor

To access the View Editor, click the View Editor link in the navigation frame. A View Editor session is opened in a new window and you are presented with the View Editor panel. You can have more than one View Editor session running at any one time.

The Web User Interface starter set

The CICSPlex SM Web User Interface includes a starter set that you can use either as supplied or as the basis from which to create your own customized views and menus. When you work with either menus or views, the starter set menus and views are listed in a selection box. You can select the one that you want to base your customized view on.

Note: You cannot save changes to the supplied starter set view sets and menus. You must copy the required starter set view set or menu then edit your copy.

Editor Panels

The View Editor is made up of a number of panels that lead you through the process of creating, editing, copying, and deleting view sets and menus, by asking questions and offering choices. The panels fall into different types, as can be seen in examples throughout the rest of this section.

Working with menus

If you elect to work with menus, you click the Menus option from the CICSPlex SM Web User Interface Editor panel. You have the options of creating a new menu, editing an existing menu, copying an existing menu, or deleting a menu.

Working with view sets

If you elect to work with views you click the View sets option from the CICSPlex SM Web User Interface Editor panel. You are presented with the View Set Editor panel, as shown in Figure 26. You have the options of creating a new view set, editing an existing view set, copying an existing view set, or deleting a view set.

Figure 26. View Set Editor panel

Each view set that you create is based on a single managed object, such as an operations view, or a resource type. When you have created a view set, you can create one or more views based on the selected object.

To edit an existing view set click the Edit link on the View Set Editor panel. You are presented with the Open View Set panel as shown in Figure 27 on page 85.
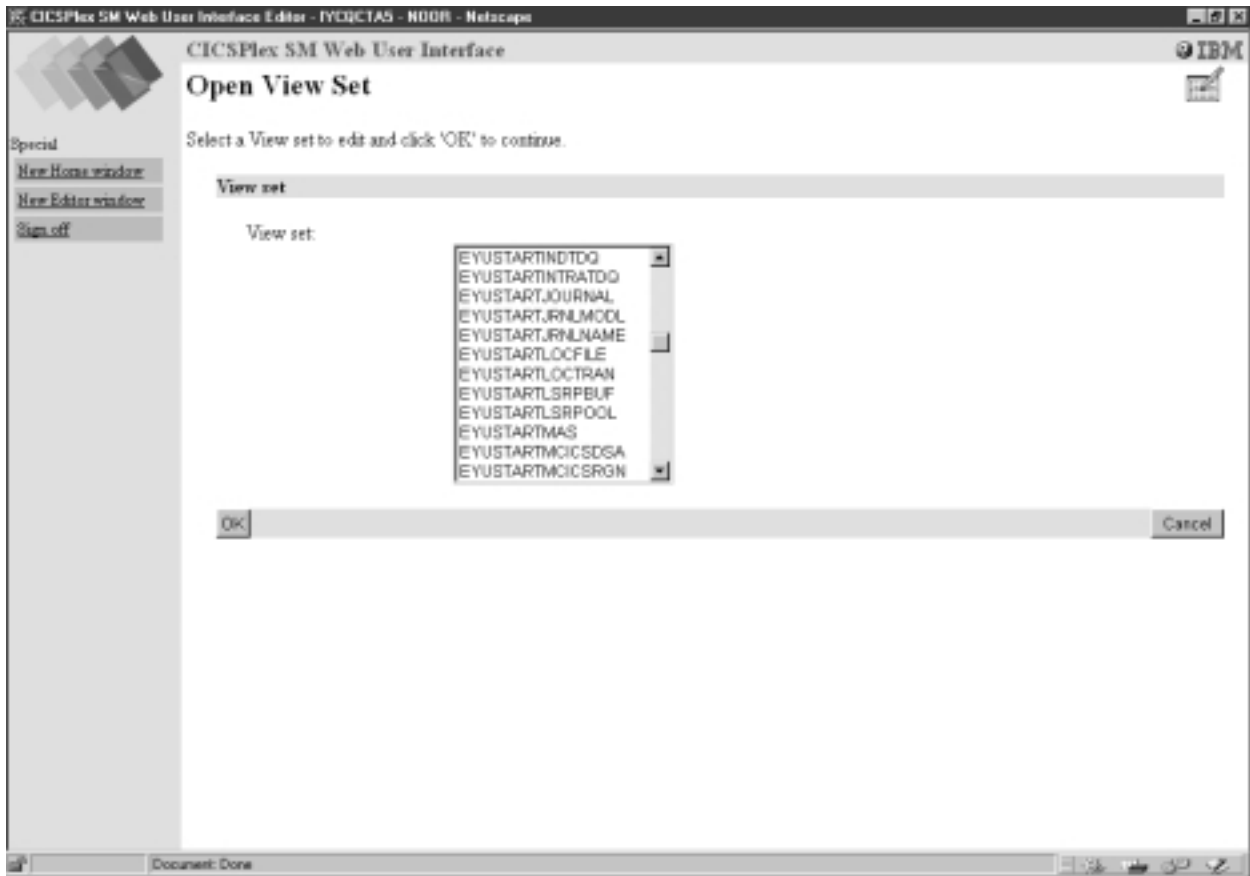
Figure 27. Open View Set panel

From the Open View Set panel you can select the view set that you want to edit. For example, EYUSTARTJRNLNAME. By selecting EYUSTARTJRNLNAME, you may be presented with the View Set Contents panel as shown in Figure 28 on page 86. This panel shows that the EYUSTARTJRNLNAME view set contains a tabular view, a detail view, and three confirmation panels called Flush, Reset, and Discard.
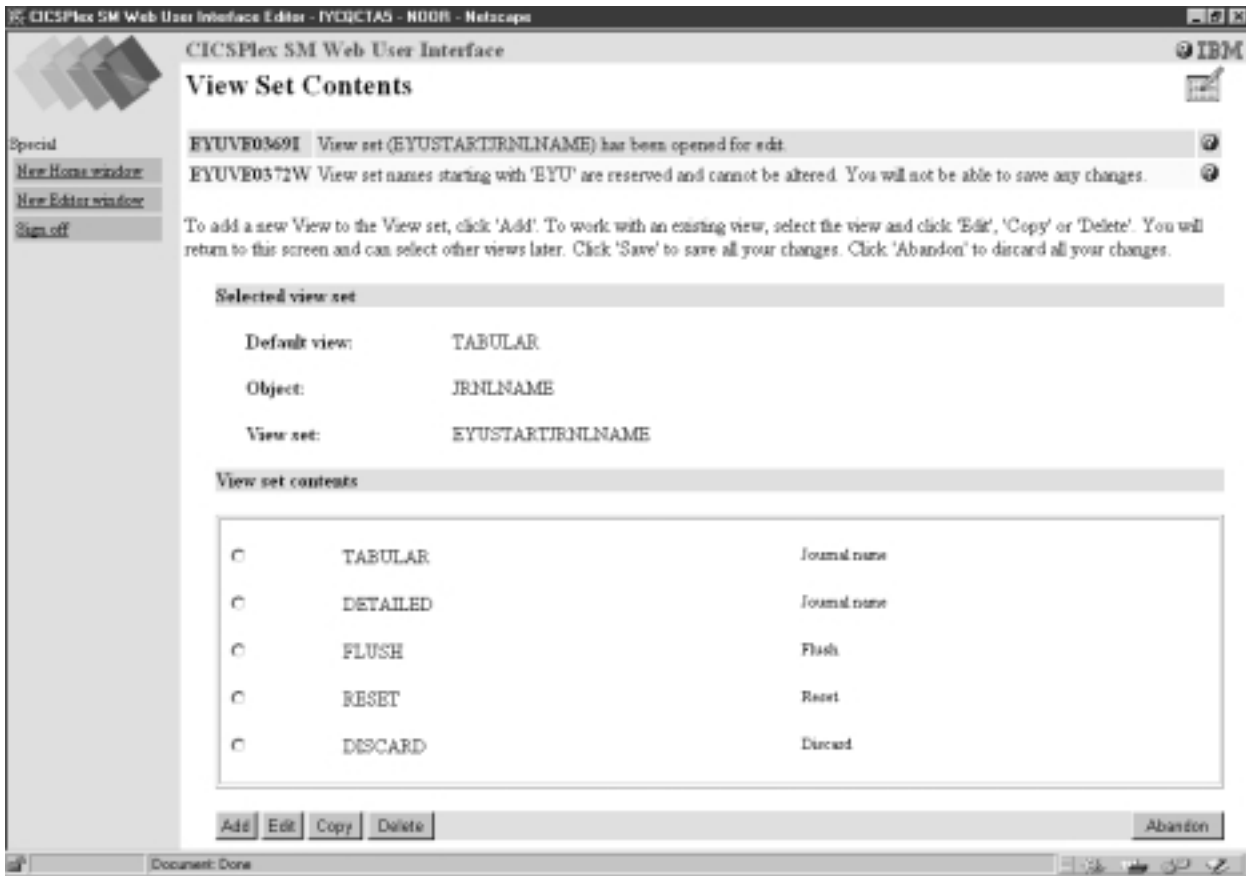
Figure 28. View Set Contents panel

From the View Set Contents panel, you can add a new view, edit, copy, or delete an existing view from the view set that you are working with.

Working with views

To edit an existing view you select the view from the View Set Contents panel by clicking the radio button against the view followed by the Edit button. You can select one view to edit at a time. The View Set Contents panel is redisplayed after editing a view allowing you to select another view to edit, if required.

For example, by selecting the Tabular view from the View Set Contents panel, you will be presented with the Tabular View Components panel shown in Figure 29 on page 87.
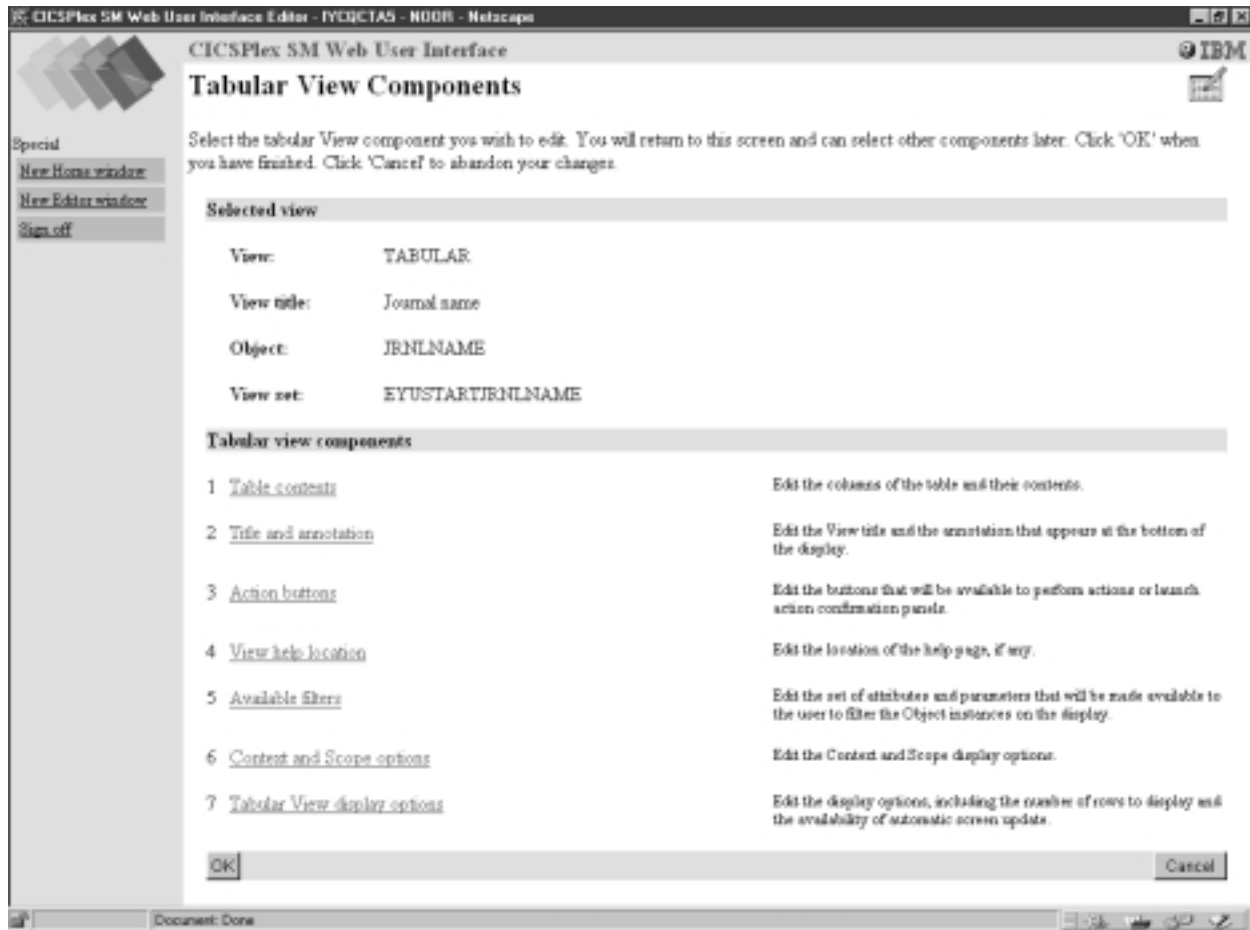
Figure 29. Tabular View Components panel

Working with view components

From the Tabular View Components panel you select the component that you want to edit and a new panel is displayed. When you have finished editing your selection you are returned to the Tabular View Components panel, from where you can select another component to edit, click OK to return to the View Set Contents panel, or click Cancel to lose all the changes that you have made to this view and return to the View Set Contents panel.

For example, to edit the columns and contents of the Journal Name tabular view, select the Table contents component. This displays the Table Contents panel shown in Figure 30 on page 88.
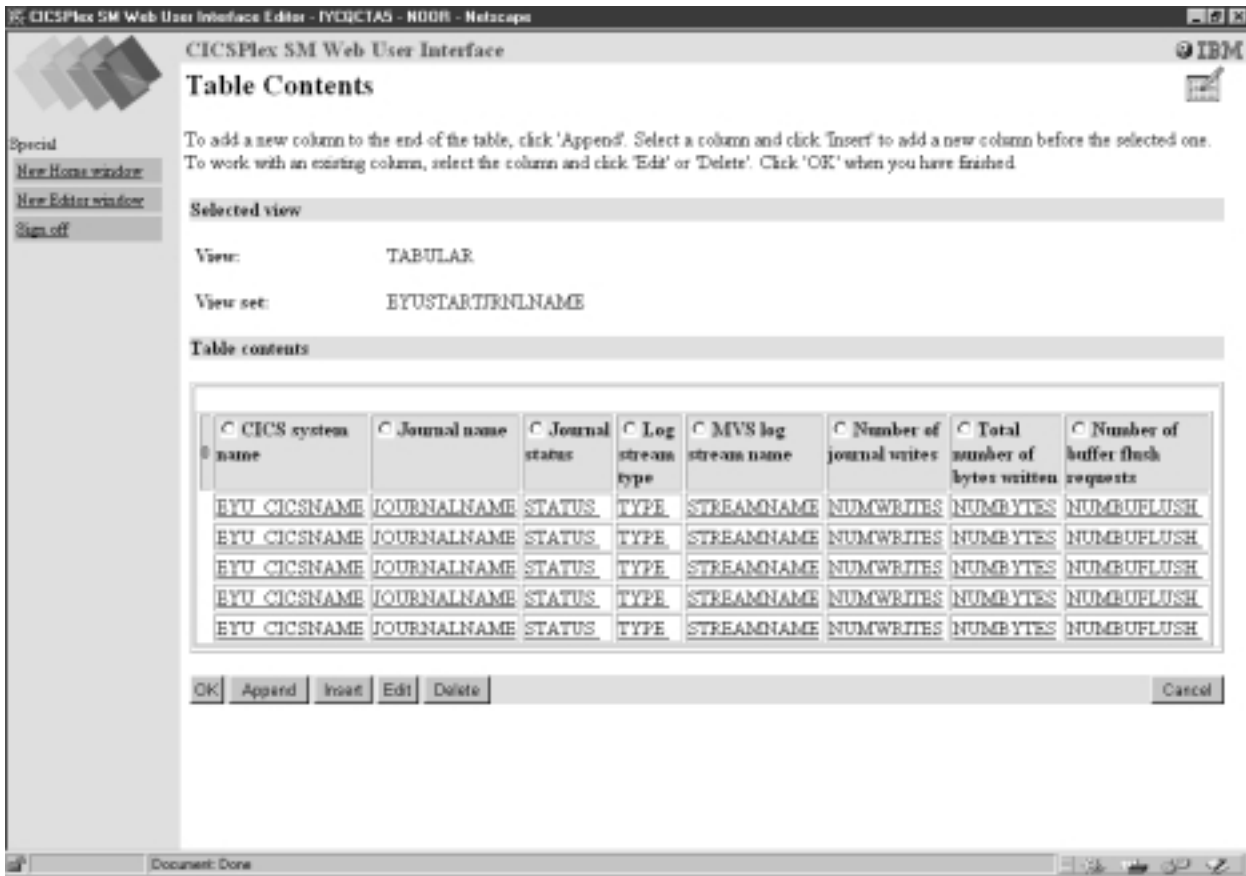
Figure 30. Table Contents panel

From the Table Contents panel you can:

- Click Append to add a new column to the end of the table, even if a column has been selected.
- Select a column and click Insert to add a new column before the one that you have selected.
- Select a column and click Edit to edit the contents of the column.
- Select a column and click Delete to delete the column.

A column is selected by clicking the radio button in the title box of the column.

When you have finished editing the Table Contents panel, click OK to return to the Tabular View Components panel from where you may decide to work with the action buttons that will be available on the Journal Name view.

To edit the action buttons that are available on the Journal Name view you select the Action buttons component by clicking it. This displays the View Buttons panel shown in Figure 31 on page 89.
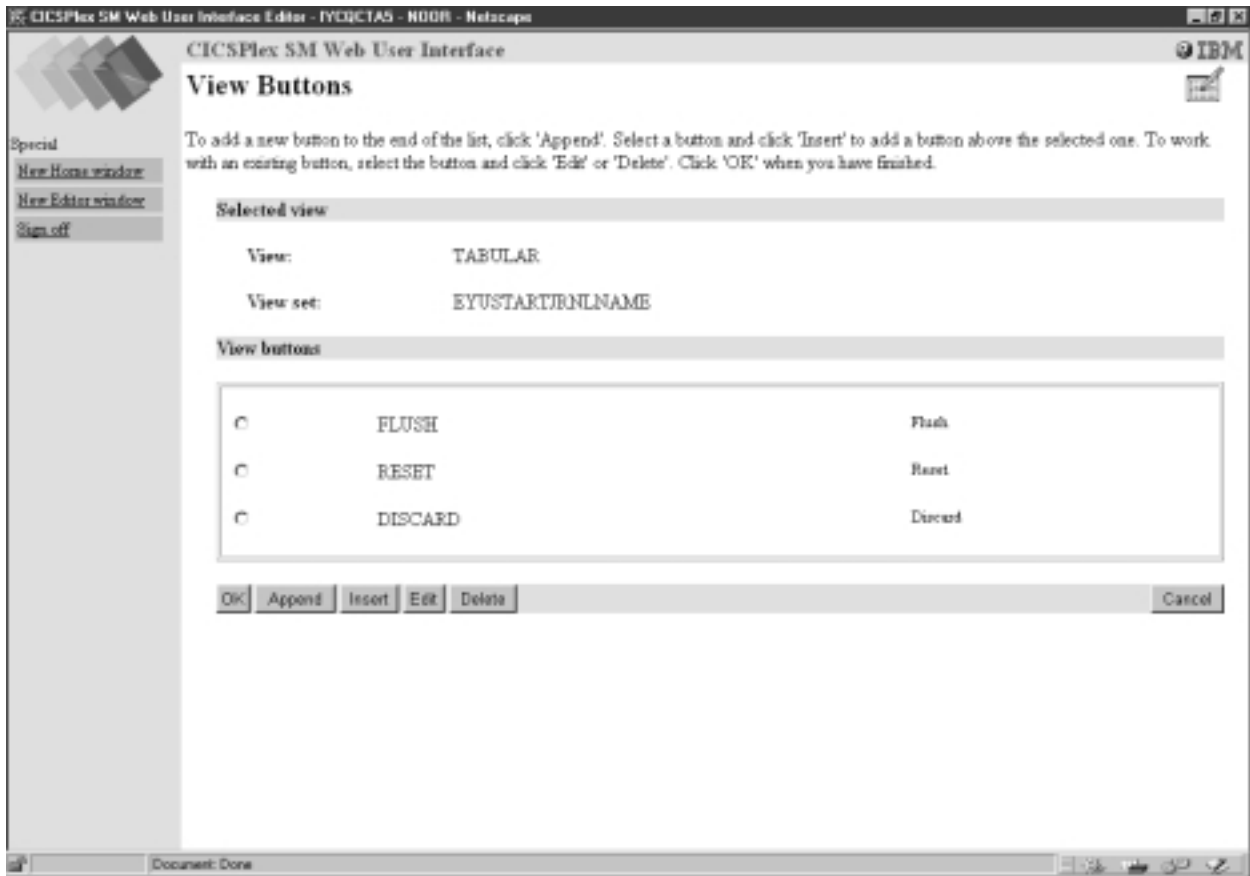
Figure 31. View Buttons panel

From the View Buttons panel you may wish to add a new button. You click the Append button, as instructed on this panel, and are presented with the New View Button panel shown in Figure 32 on page 90.
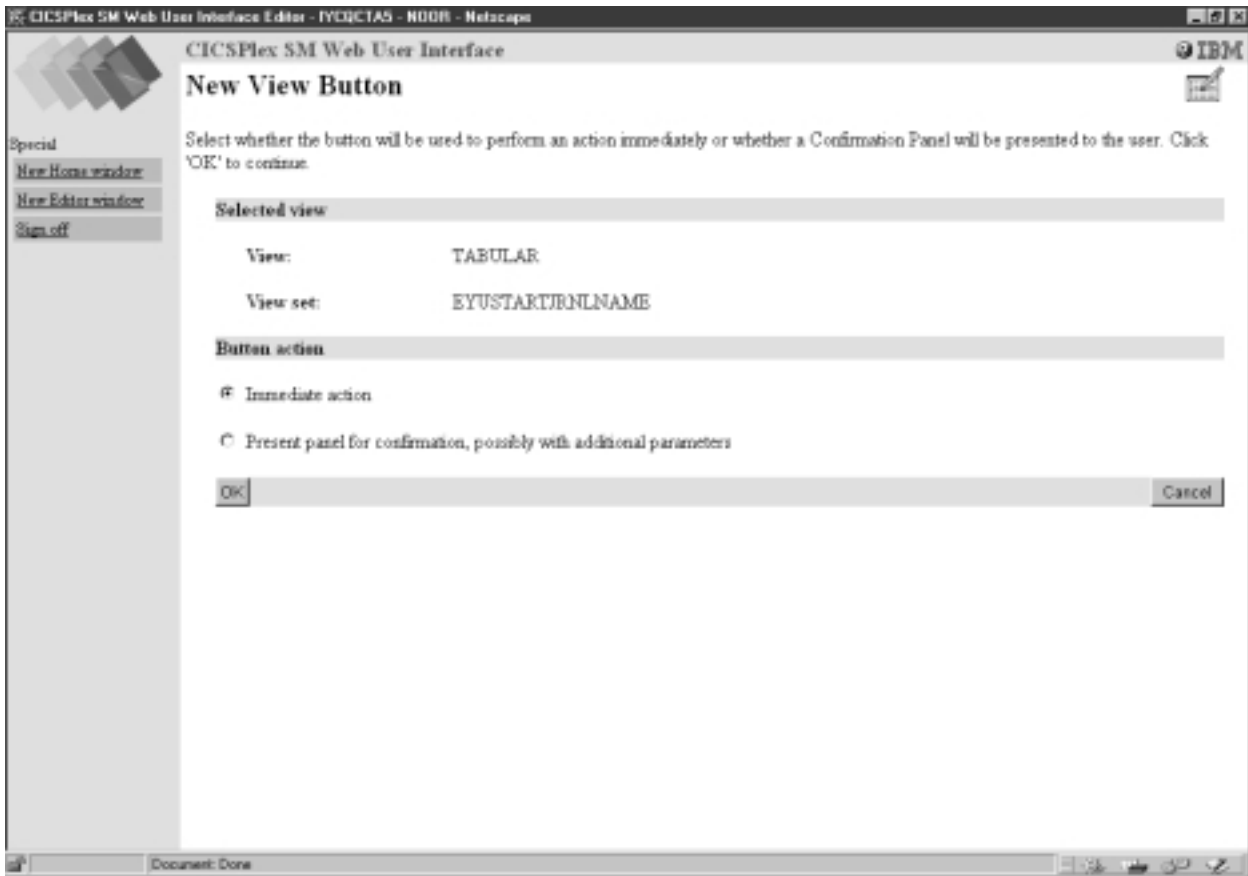
Figure 32. NewView Button panel

From the New View Button panel you can select whether clicking the new button should result in an action being performed immediately or a confirmation panel being displayed for the user to confirm the request.

If you select the confirmation panel option you will be presented with the View Button With Confirmation Panel shown in Figure 33 on page 91.
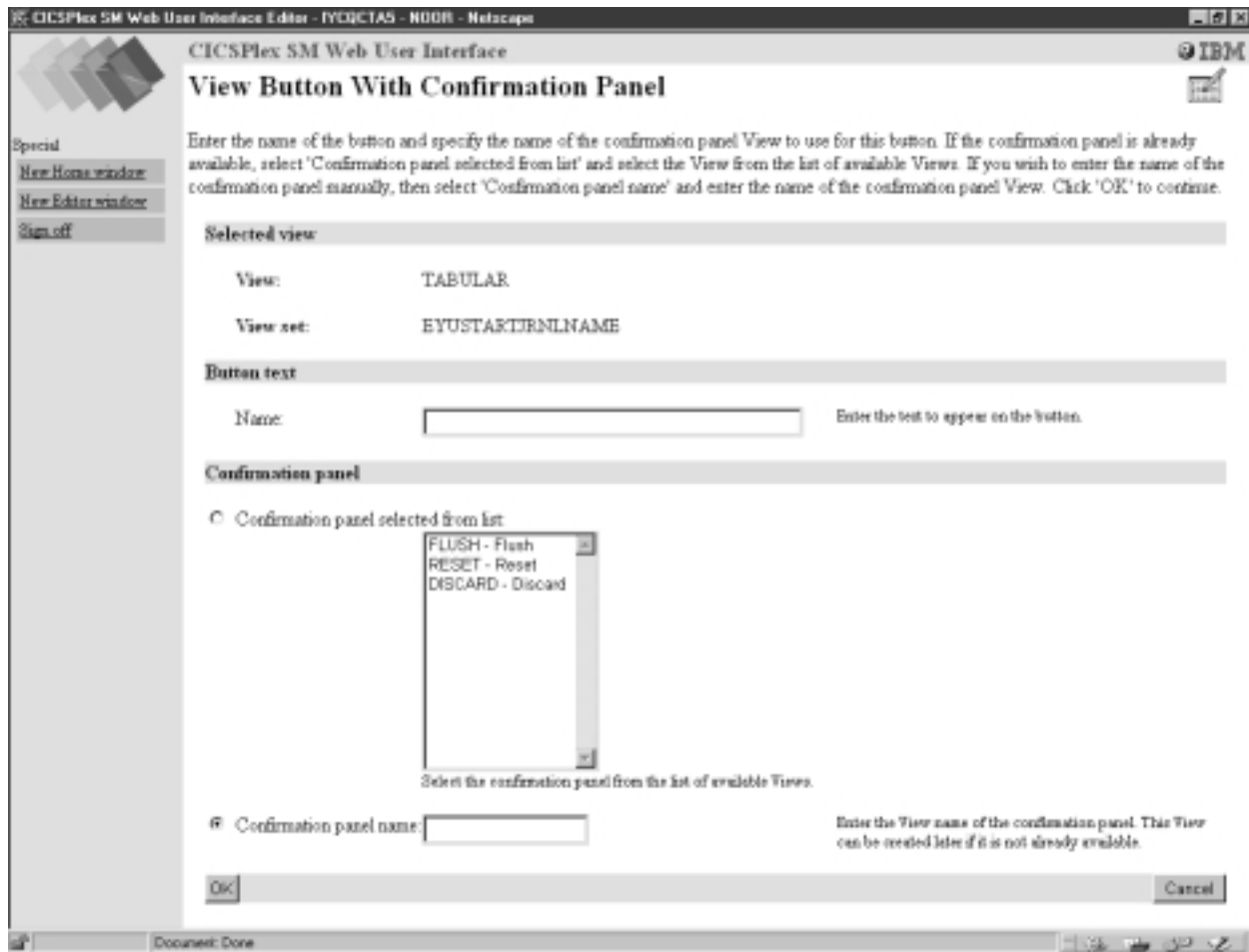
Figure 33. View Button With Confirmation Panel

From the View Button With Confirmation Panel you specify the name of the button, and either select an existing confirmation panel from the list of available views or enter a new confirmation panel name, as instructed on the View Button With Confirmation Panel. If the new confirmation panel does not exist it can be created later.

Once you have edited the tabular view you click the OK button on the Tabular View Components panel shown in Figure 29 on page 87 and the View Set Contents panel shown in Figure 28 on page 86 is redisplayed where you can save your changes to the tabular view or work with another view in the view set.

Applying or rejecting updates

The View Editor provides buttons that allow you to commit or cancel updates as follows:

Cancel
Cancel the operation represented by the panel and any changes previously made as part of the operation.

OK Submit the changes and continue.

Finish Return to the previous panel.

Save   Save the changes associated with a view set or menu in the Web User Interface server repository.

Abandon
Do not save the changes associated with a view set or menu in the Web User Interface server repository.

The Cancel and OK buttons appear together, as do the Save and Abandon buttons, on View Editor panels.

Note: If your browser session times out, because the INACTIVETIMOUT period is reached, any changes not saved prior to the session being timed out are lost. For information about the INACTIVETIMEOUT Web User Interface server initialization parameter, see "Specify the Web User Interface server initialization parameters" on page 26.

Example tasks

This section describes two typical tasks that illustrate some of the customization facilities offered by the Web User Interface View Editor. In both cases, the starting point is a view set provided in the starter set. The View Editor guides you with additional on-screen instructions.

Using view links and attribute filters

This sample task describes how to link from a tabular view of task resources to a detail view displaying terminal information, when the principal facility is a terminal. The task involves editing a copy of the supplied starter set view to add a new column for the FACILITY attribute, setting up a conditional link and supplying an attribute filter.

The FACILITY attribute column will be defined to link to a view for the TERMNL resource when the attribute contains a terminal ID. This is achieved by making the link conditional on the value of the FACILITYTYPE attribute and using an attribute filter to specify that the TERMID of the target resource is equal to the FACILITY of the source.

For information on the attributes, see *CICSPlex System Manager Resource Tables Reference.*

1. **Prepare the view set**
    a. Copy the starter set view set EYUSTARTTASK with the new name TASKVIEWSET (This name is an example only).
    b. On the View Set Editor panel, select Edit and, from the Open View Set panel, select TASKVIEWSET from the list.
    c. On the View Set Contents panel, select the view called TABULAR and click the Edit button.
2. **Add a column**
    a. On the Tabular View Components panel, select Table contents. The table layout is displayed.
    b. Select the User ID column by clicking the radio button in the column heading. Click the Insert button. This will insert the new column before the User ID column.
    c. On the New Table Column Attribute panel, select FACILITY from the Attribute list and click the OK button.
3. **Create a conditional link**

a. On the Table Column Components panel, select View links.

b. On the View Links panel, select Append.

c. On the New View Link Type panel, click the View set radio button to link to a view within another view set. Click the OK button.

d. On the View Link Condition panel, the View link conditional on Attribute check box is selected by default. Select FACILITYTYPE and click the OK button.

e. On the View Link Components panel, select Condition test.

f. On the View Link Condition panel, select the condition attribute test radio button Is valid and equal to and select TERM in the selection list. Click the OK button.

4. **Specify the target view set and view**

a. On the View Link Components panel, select Target.

b. On the Local Target Link panel, the Target View set selected from list radio button is selected by default. Select the name of the starter set view EYUSTARTTERMNL from the selection list. Click the OK button.

c. On the Confirm Object for View Set panel, confirm that the object type TERMNL is already highlighted. Click the OK button.

d. From the Target View panel, click the Target view selected from list radio button and select the view called DETAILED. Click the OK button.

5. **Specify target selection criteria**

a. On the View Link Components panel, select Context and Scope.

b. On the View Link Context and Scope Settings panel, retain the context and CMAS context defaults. Change the scope setting by clicking the Set to fixed value radio button and type in the entry field the name of the CICS system running the task. Click the OK button.

c. On the View Link Components panel, select Filter attributes and parameters.

d. On the View Link Filters panel, click the Append button. On the View Link Filter Type panel, the Attribute filter radio button is selected by default. Click the OK button.

e. On the View Link Filter panel, select the TERMID filter attribute and click the OK button.

f. On the View Link Filter Settings panel, the equals operator is selected by default. If the FACILITYTYPE field contains the value TERM, the FACILITY field contains a terminal ID. Click the Value of attribute radio button and select filter value FACILITY from the selection list. (The FACILITY field contains a terminal id if the FACILITYTYPE field contains TERM.) Click the OK button.

6. **Save your changes**

a. Return to the View Set Contents panel by clicking on the appropriate buttons on the panels to save your changes. The buttons have different names depending on the function, and may be labeled OK or Finish.

b. On the View Set Contents panel, you have the choice of saving or abandoning your changes.

You can test your view by creating a link from a menu, or see "Access to the Web User Interface" on page 67 for information on how to display your view directly.

Using warning lights

This sample task describes how you can replace the textual representation of event severity data in a tabular view with warning lights. Figure 34 shows the view as provided by the starter set, which is used as the basis for this sample. This sample task sets a flashing red warning light for the Very High Severity level. You can make your own choice for the other event severity levels.

Figure 34. View with text representation of event severity levels

Figure 35. View with warning light representation of event severity levels

1. **Prepare the view set**
   a. Copy the starter set view set EYUSTARTEVENT with the new name EVENTVIEWSET.
   b. On the View Set Editor panel, select Edit, and on the Open View Set panel, select EVENTVIEWSET from the View set list.
   c. On the View Set Contents panel, select the view called TABULAR and click the Edit button. On the Tabular View Components panel, select Table contents. The table layout is displayed.

2. **Add warning lights to the Event Severity column**
   a. Select the Event Severity column by clicking the radio button in the column heading. Click the Edit button.
   b. On the Table Column Components panel, select Presentation options.
   c. On the Presentation type panel, select the Warning lights radio button and click the OK button.
   d. On the Presentation Options panel, click the Show value radio button. It is good practice to have the value displayed as well as the colored lights. Click the OK button

3. **Set the color thresholds**

a. On the Presentation thresholds panel, click the Append button, and on the Presentation Threshold Components panel, select Threshold range.

b. On the Presentation Threshold Range panel, the Equal to field is selected by default. In the entry field, type the attribute value VHS. This is the value that will cause this color. Click the OK button.

c. On the Presentation Thresholds Components panel, select Threshold color.

d. On the Presentation Threshold Color panel, select the color RED. Click the Flashing check box. Click the OK button.

e. On the Presentation Thresholds Components panel, click the Finish button to return to the Presentation Thresholds panel.

f. Repeat these steps for each value that you wish to define a color for, selecting the color required. When you have created all your presentation thresholds, click the OK button on the Presentation Thresholds panel.

   When no color is specified for a particular value, the color on the display will be grey.

4. **Save your changes**

a. Return to the View Set Contents panel by clicking on the appropriate buttons on the panels to save your changes. The buttons have different names depending on the function, and may be labeled OK or Finish.

b. On the View Set Contents panel, you have the choice of saving or abandoning your changes.

You can test your view by creating a link from a menu, or see "Access to the Web User Interface" on page 67 for information on how to display your view directly. Your view might look like the example in Figure 35 on page 95.

Chapter 7. Problem determination

This chapter is organized as follows:
- "Using trace"
- "Using dumps" on page 99
- "Server and browser messages" on page 100
- "COVC status panel" on page 100
- "COVC debugging commands" on page 101
- "Typical end-user problems" on page 102

Using trace

Attention: It is recommended that you only activate trace at the request of IBM Support Center personnel.

The CICSPlex SM Web User Interface provides a trace service to help diagnose any problems encountered whilst using the interface.

You should ensure that you have specified the USERTR, SYSTR, and AUXTR CICS system initialization parameters in your Web User Interface server start-up job, as described in "Review CICS system initialization parameters" on page 22.

Trace records are written to the local AUXTRACE only and are not sent to the CMAS. These trace records can be formatted by the standard CICSPlex SM trace formatter, EYU9XZUT.

You can control the amount of trace information produced by the Web User Interface by setting appropriate trace flags. Thirty one independent trace flags are provided and these can be enabled by:
- Using the WUITRACE Web User Interface system initialization parameter in the Web User Interface server start-up job
- From the COVC transaction

For more information about using trace and the EYU9XZUT utility, see the*CICSPlex SM Problem Determination.*

Setting trace flags using the WUITRACE parameter

You specify the WUITRACE parameter as described in "Specify the Web User Interface server initialization parameters" on page 26. For example, to activate trace levels 13,15, and 31 when the Web User Interface is started, specify the WUITRACE parameter as follows:

```
WUITRACE(13,15,31)
```

Setting trace flags through COVC

If you run the COVC transaction and select Trace Flags, you are presented with Figure 36 on page 98.

```
 COVC                   CICSPlex SM Web User Interface Control           EYUVCTT

                                   Trace Flags

 Overtype the trace, enter to update.

                                 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 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
 Trace Flags : Y Y N N N N Y N N N Y N Y N Y N N N N N N N N N N N N N N N N Y




 Aux. Trace Status : Started

 Current Status : Ready                                          Time : 14:24:36
 Applid        : IYCQCTA5                                        Date : 10/21/99




 PF   1 Help     3 Exit                                          12 Return
```
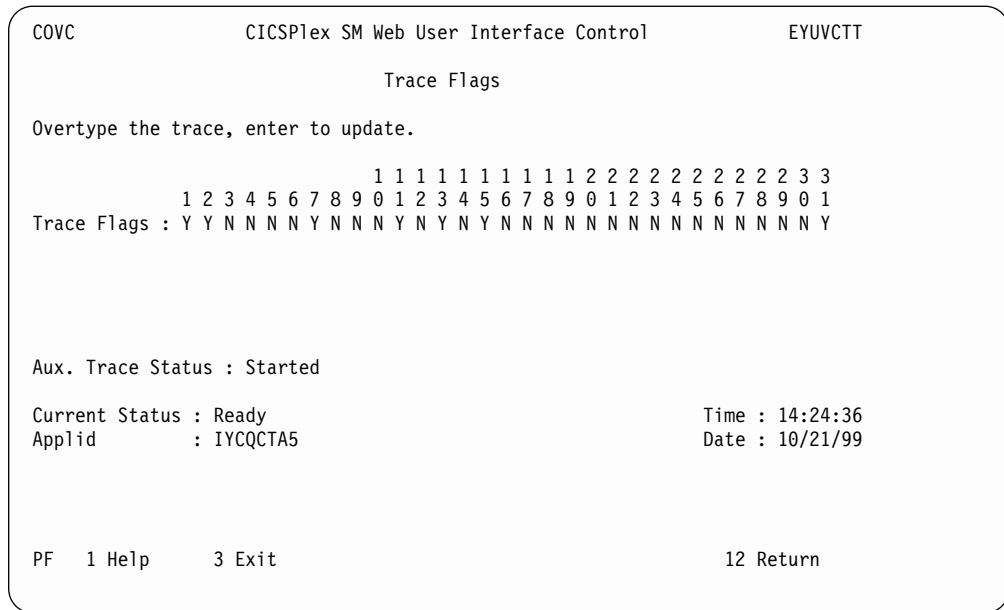
Figure 36. Trace flags

Figure 36 shows that trace levels 1,2, 7, 11, 13,15, and 31 are active. You can overtype any of the trace flags with Y or N to change the default settings.

Note: If you change any of the settings using the COVC transaction then restart the Web User Interface, the trace levels will be reset according to the levels specified on the WUITRACE parameter.

The available trace flags

Table 13 shows a list of some of the available trace levels and their usage.

Table 13. Web User Interface trace levels

Level	Usage
1	Method entry and exit (summary)
2	Method entry and exit (detail)
3	Method entry and exit (special)
7	Stack management
8	Storage management
9	Service queue processing
10	Service event processing
11	View Editor
12	Resource catalogue
13	Stub management
14	View cache
15	HTTP requests and responses
18	API command
31	Soft exceptions

Exception traces

Exception tracing is always performed by the Web User Interface server when it detects an exceptional condition. The goal of this type of trace is first failure data capture, to capture data that might be relevant to the exception as soon as possible after it has been detected.

Exception tracing cannot be disabled and all exception trace points are always active.

First-failure data capture is provided in two ways, as follows:
- Unexpected CICS and CICSPlex SM responses and other detectable error conditions will result in non-maskable trace records being written.
- Errors such as program checks and abends will also result in a system dump and abend operator messages.

Using dumps

Attention: The Web User Interface server controller transaction COVC, should be used for debugging only at the request of IBM Customer Support Personnel. You must take steps to ensure that this transaction may be used only by authorized personnel because of the extent of the access to system control areas that it provides. Improper or unauthorized use of COVC may have serious consequences, including without limitation loss of data or system outage. Customer shall be solely responsible for such misuse.

The CICSPlex SM Web User Interface produces system dumps for all undetectable error conditions, including ASRA and AICA abends, but not transaction dumps.

For more information about using dumps see the *CICSPlex SM Problem Determination*.

The available dump codes

The Web User Interface uses the dump codes described in Table 14:

Table 14. Web User Interface dump codes

Dump code	Description
EYU0VWAN	Unexpected abend in Web User Interface CICS Web Interface analyzer program (EYU9VWAN)
EYU0VWCV	Unexpected abend in Web User Interface CICS Web Interface converter program (EYU9VWCV)
WUIABEND	Unexpected abend in Web User Interface server program (EYU9VKEC)
WUITRACE	Dump requested by Web User Interface server trace point in program (EYU9VKEC)

Server and browser messages

During the operation of the Web User Interface, messages are written to the following destinations:
- EYULOG
- Console
- Browser

Server messages

The Web User Interface server messages are mainly written to the CICSPlex SM EYULOG of the Web User Interface server (and not of the CMAS). Some messages are also written to the console. The Web User Interface server messages are explained in the Web User Interface Message Help and in "Chapter 8. Messages" on page 105. For information about how to access the Web User Interface Message Help see "Web User Interface Message Help" on page 36.

Browser messages

The following types of Web User Interface messages are written to the browser:
- Client

  These messages reflect status during the operation of the Web User Interface.
- Editor

  These messages reflect status during the operation of the View Editor.
- HTTP

  These messages reflect the HTTP response codes. HTTP messages can sometimes be hidden with substitute messages being issued by the browser. For example, you may receive Internet Explorer 'friendly HTTP messages' in place of Web User Interface HTTP messages.

You can obtain help for the client and editor messages by clicking the Help icon to the right of the message or by accessing the contents page of the Web User Interface Message Help. You can obtain help for HTTP messages by accessing the contents page of the Web User Interface Message Help. For information about how to access the Web User Interface Message Help see "Web User Interface Message Help" on page 36. Client, editor, and HTTP messages are also explained in "Chapter 8. Messages" on page 105.

COVC status panel

The COVC status panel returns status information about the Web User Interface server as shown in Figure 37 on page 101.

```
COVC                 CICSPlex SM Web User Interface Control            EYUVCTS

                              Status Details

             CMAS Sysid          : YCQX
             Server Sysid        : YCA5
             CICSPlex SM Release  : 0140

             Secure Sockets      : No
             Port                : 01306
             Hostname            : mvsxx.company.com

             TCP/IP Service Name  : EYUWUI
             TCP/IP Service Status : Open


 Current Status : Ready                                 Time : 14:06:13
 Applid        : IYCQCTA5                               Date : 10/21/99




 PF   1 Help     3 Exit                                 12 Return
```

Figure 37. COVC status panel

The Status Details panel is described in "Displaying status details" on page 59.

COVC debugging commands

The COVC transaction provides access to the Web User Interface run-time environment. It can be used to format and manipulate the internal data structures of the Web User Interface.

Running the COVC transaction for debugging

To run the COVC transaction, log onto the Web User Interface server and enter the COVC transaction ID, together with one of the following debugging commands:

- STARt

  This starts the Web User Interface server if not already started during PLTPI processing.

- STOp

  This shuts down the Web User Interface server.

- TRace

  This displays the COVC trace flags panel, as shown in Figure 36 on page 98, giving you the opportunity to set appropriate trace levels.

- Dump

  This displays the Web User Interface control blocks using the CODB memory display (for information about the CODB transaction see the *CICSPlex SM Problem Determination*). You can display a control block directly by specifying the control block on the COVC DUMP command, for example 'COVC DUMP ANCHOR' displays the global anchor block. The control blocks that you can display are listed in Table 15.

Table 15. Dump control blocks

Dump control blocks	Meaning

Table 15. Dump control blocks (continued)

Anchor	Global anchor block
Gslrt	Global task block
Res	NLS resource block
Mos	Managed object block
View	View cache block
Cwi	Web interface block
Tasks	User tasks block

Note: In both the COVC commands and the COVC DUMP commands listed in
Table 15 on page 101, the characters written in uppercase are the minimum
number of characters you need to type to issue the command.

Typical end-user problems

Table 16 describes some typical end-user problems that you may encounter and
offers possible solutions.

Table 16. Typical end-user problems

Problems	Possible solutions
User unable to sign on, even when specifying reconnect	Check HTTP cookie support is enabled in the user's browser.
Apparently random characters displayed on browser	Ensure correct codepage translation table (DFHCNV) is in use. See "Prepare codepage conversion table" on page 23 for information.
Can't see graphical attribute presentations	Check that you are using a Java-enabled browser and that it is enabled..
Message EYUVC1200E displayed	Ensure that the user's browser has HTML frame support and that it is enabled.
Message EYUVH0400E displayed (or HTTP 400 message)	Ensure that the HTTP request is set up correctly: • Check 'Unescape' option of the CICS Web Interface is set to 'No', if you are using a pre-CICS Transaction Server for OS/390 version 1.3 CICS system • Check that your browser is using HTTP 1.0 or 1.1 • Check your browser service level is appropriate
Message EYUVH0503E displayed (or HTTP 503 message) or no response from server	Check that your Web User Interface server is active and the CICS Web Interface operational.
Message EYUVH404E displayed (or HTTP 404 message)	Check that the URL being used to access the server was entered correctly and valid. If accessing a help page ensure that the help page exists.

For further information about the messages, see "Chapter 8. Messages" on page 105
or access the contents page of the Web User Interface Message Help. For
information about how to access the contents page of the Web User Interface
Message Help, see "Web User Interface Message Help" on page 36. For the client

message you can also obtain help by clicking the Help icon to the right of the message. See Table 2 on page 6 for a picture of the help icon.

Chapter 8. Messages

This chapter contains the Web User Interface messages:

- For client messages, see "Client messages".
- For editor messages, see "Editor messages" on page 125.
- For HTTP messages, see "HTTP messages" on page 137.
- For server messages, see "Server messages" on page 139.

Client messages

Client messages are messages reflecting status during operation of the interface, written to the user's browser.

EYUVC1000I

Signon by User **userid** successful. Last access at **time** on **date**. Your password will expire in *nn* days.

Explanation

The named user signed on successfully on the date and time indicated.

System Action

The session continues.

User Response

None.

Administrator Action

None.

Destination

Browser.

EYUVC1001I

Signon by User **userid** successful. Last access at **time** on **date**.

Explanation

The named user signed on successfully on the date and time indicated.

System Action

The session continues.

User Response

None.

Administrator Action

None.

Destination

Browser.

EYUVC1002I

Please enter a User name.

Explanation

A user name is required for signon.

System Action
> Signon is suspended. An input form is presented to the user.

User Response
> Enter your user name into the form, and press "Sign on".

Administrator Action
> None.

Destination
> Browser.

EYUVC1003I
> Please enter a password.

Explanation
> A password is required for signon.

System Action
> Signon is suspended. An input form is presented to the user.

User Response
> Enter your password into the form and press "Sign on".

Administrator Action
> None.

Destination
> Browser.

EYUVC1004E
> Invalid User name. Please try again.

Explanation
> An invalid user name has been entered into the signon form.

System Action
> Signon is suspended. An input form is presented to the user.

User Response
> Enter the correct user name into the form and press "Sign on".

Administrator Action
> None.

Destination
> Browser.

EYUVC1005E
> Invalid password. Please try again.

Explanation
> An invalid password has been entered into the signon form.

System Action
> Signon is suspended. An input form is presented to the user.

User Response
> Enter the correct password into the form and press "Sign on".

Administrator Action
> None.

Destination
> Browser.

EYUVC1006E

Signon failed because the User name is revoked.

Explanation

You have attempted to sign on using a user ID which has been revoked by external security manager.

System Action

Signon is suspended. An input form is presented to the user.

User Response

Contact your system administrator.

Administrator Action

Investigate the status of the user ID in the external security manager, and reinstate if required.

Destination

Browser.

EYUVC1007E

The password has expired. Please re-enter the password, enter a new password, and verify the new password.

Explanation

Your password has been expired by external security manager.

System Action

Signon is suspended. An input form is presented to the user.

User Response

Re-enter your password, enter a new password into both the New Password and Verify New Password fields, then press "Sign on".

Administrator Action

None.

Destination

Browser.

EYUVC1008E

The New Password and Verify New Password fields do not match. Please try again.

Explanation

You have attempted to change your password, but did not enter the same password in both the New Password and Verify New Password fields.

System Action

Signon is suspended. An input form is presented to the user.

User Response

Re-enter your old password, enter a new password into both the New Password and Verify New Password fields, then press "Sign on".

Administrator Action

None.

Destination

Browser.

EYUVC1009E

Signon for User (**userid**) failed. (CICS information: RESP(**response1**),

RESP2(**response2**), EIBFN(**eibfn**))(External security manager information: ESMRESP(**esmresp**), ESMREASON(**esmreason**))

Explanation

The signon process has failed for an unusual reason.

System Action

Signon terminates.

User Response

Contact your system administrator.

Administrator Action

Review EIBFN value and consult the documentation for CICS and the external security manager. Collect AUXTRACE and console log and contact IBM service if the problem cannot be resolved.

Destination

Browser.

EYUVC1010E

The new password was not acceptable. Please try again.

Explanation

You attempted to change the password to a value that was rejected by external security manager.

System Action

Signon is suspended. An input form is presented to the user.

User Response

Re-enter your password, enter a new password into both the New Password and Verify New Password fields, then press "Sign on". Your new password must conform to the external security manager rules.

Administrator Action

None.

Destination

Browser.

EYUVC1011E

Unable to create User environment. User already signed on.

Explanation

You attempted to sign on, but a session was already active for the user ID.

System Action

Signon is suspended. An input form is presented to the user.

User Response

Either go back to the browser on which you are currently signed on, or sign on again specifying the "Reconnect" option.

Administrator Action

None.

Destination

Browser.

EYUVC1012E

Unable to create User environment. Maximum user limit reached.

Explanation

You attempted to sign on, but the server already has the maximum number of users signed on.

System Action

Signon is suspended. An input form is presented to the user.

User Response

Contact your system administrator.

Administrator Action

Actions to consider include:

- Persuading someone to log off.
- Purging users with COVC if necessary.
- Increasing the value of the MAXUSERS parameter, and restarting the server.

Destination

Browser.

EYUVC1013E

Unable to create User environment. Failed to start user task.

Explanation

The signon process has failed.

System Action

Signon terminates.

User Response

Contact your system administrator.

Administrator Action

Refer to associated messages that will have been written in EYULOG.

Destination

Browser.

EYUVC1014E

Unable to create User environment. Failure during user task creation.

Explanation

The signon process has failed.

System Action

Signon terminates.

User Response

Contact your system administrator.

Administrator Action

Refer to associated messages that will have been written in EYULOG.

Destination

Browser.

EYUVC1015I

Signon complete for User (**userid**).

Explanation

The named user has successfully signed on.

System Action
The session continues.

User Response
None.

Administrator Action
None.

Destination
Browser.

EYUVC1016I
Please confirm User name.

Explanation
Signon was started with a user name specified in the URL. This name must now be confirmed.

System Action
Signon is suspended. An input form is presented to the user.

User Response
Check (and correct, if required) the user name in the form and press "Sign on".

Administrator Action
None.

Destination
Browser.

EYUVC1017E
User task failed to connect to CICSPlex SM.

Explanation
The signon process has failed because a connection could not be made to CICSPlex SM for the user name specified.

System Action
Signon terminates.

User Response
Contact your system administrator.

Administrator Action
Refer to associated messages that will have been written in EYULOG.

Destination
Browser.

EYUVC1100I
Signoff request accepted.

Explanation
You have requested to terminate the session by clicking the "Sign off" link.

System Action
The user session will be terminated as soon as possible.

User Response
Close the browser window.

Administrator Action
>
> None.

Destination
>
> Browser.

EYUVC1101I
>
> Signoff request failed.

Explanation
>
> You have requested to terminate the session by clicking the "Sign off" link, but your request could not be processed correctly.

System Action
>
> User session is terminated.

User Response
>
> Contact your system administrator.

Administrator Action
>
> Collect AUXTRACE, console log, and dump information, and contact IBM service.

Destination
>
> Browser.

EYUVC1102I
>
> Press button to begin signon.

Explanation
>
> A request has been made to the Web User Interface server but the user has not yet been authenticated.

System Action
>
> A page containing a single button is presented to the user.

User Response
>
> Press the button presented and then sign on using the form that appears.

Administrator Action
>
> None.

Destination
>
> Browser.

EYUVC1190W
>
> CMAS currently unavailable.

Explanation
>
> The CICSPlex SM CMAS address space does not appear to be available to the interface. Attempts to sign on may fail.

System Action
>
> A signon form is presented to the user.

User Response
>
> Attempt to sign on. If signon attempts continue to fail, contact your system administrator.

Administrator Action
>
> Ensure that the CMAS is active and the LMAS component of the Web User Interface server is connected to it.

Destination

Browser.

EYUVC1200E

Frame-enabled browser required.

Explanation

You have attempted to sign on to the Web User Interface using a
browser that does not support frames.

System Action

User session has been established but will remain inactive until the
user reconnects with a Web browser with frame support or the
session is destroyed by the inactivity time out.

User Response

Use a Web browser that supports frames or review your Web
browser settings to ensure frame support has not been disabled.

Administrator Action

None.

Destination

Browser.

EYUVC1210E

Requested View-set (**viewsetname**) not available.

Explanation

The named view-set was referenced, but was not present in the
repository.

System Action

The view is not displayed.

User Response

Contact your system adminstrator. Press the Back icon to continue.

Administrator Action

If the view-set name is incorrect, use the editor to correct the view
or menu link that caused the error, or correct the DEFAULTxxxxxx
server parameter, as appropriate. If the view-set name is correct,
then use the editor to create the view-set, or use the COVC
transaction to import from an export file.

Destination

Browser.

EYUVC1211E

Requested Menu (**menuname**) not available.

Explanation

The named menu was referenced, but was not present in the
repository.

System Action

The menu is not displayed.

User Response

Contact your system adminstrator. Press the Back icon to continue.

Administrator Action

If the menu name is incorrect, use the editor to correct the menu
link that caused the error, or correct the DEFAULTxxxxxx server

parameter, as appropriate. If the menu name is correct, then use the editor to create the menu, or use the COVC transaction to import from an export file.

Destination
Browser.

EYUVC1212E
A navigation error has occurred. Please use the following link to go back to your current position.

Explanation
You have requested a page out of sequence, perhaps by using the browser's Back button.

System Action
A link is provided to go back to the current page.

User Response
Select the link to return to the current page.

Administrator Action
None.

Destination
Browser.

EYUVC1213E
No more windows available. Please close some windows and try again.

Explanation
You have attempted to open more windows than are permitted in a single session.

System Action
The session continues.

User Response
Use a window that is already open, or close one and try again. If you no longer have the windows open, sign off, then sign on again.

Administrator Action
None.

Destination
Browser.

EYUVC1214E
Window closed.

Explanation
The interface has closed the window for which the message is displayed.

System Action
The session continues.

User Response
Close the browser window.

Administrator Action
None.

Destination
Browser.

EYUVC1215E
The data required for this print operation is no longer available.

Explanation
The data used to generate a 'print preview' window is no longer available because the window from which the request was generated has been used subsequently.

System Action
The request is ignored and the session continues.

User Response
Close the browser window containing the message. If a printed display is required, open a new 'print preview' for your required display and use the browser to print the page before using the window from which the request is generated.

Administrator Action
None.

Destination
Browser.

EYUVC1220E
CICSPlex SM API command (**commname**) failed. (**apiresponse**, **apireason**)

Explanation
The interface experienced an unexpected response from a CICSPlex SM API command.

System Action
The session continues.

User Response
Contact your system administrator.

Administrator Action
Review the CICSPlex SM API response and reason codes and any associated messages in the EYULOG to determine the cause of the problem. Collect AUXTRACE, console log, and dump information, and contact IBM service if the problem is not resolved.

Destination
Browser.

EYUVC1221E
CICSPlex SM not available because the CMAS has disconnected.

Explanation
The interface has lost contact with the CMAS.

System Action
The session continues but will be terminated shortly.

User Response
Sign off from the interface and sign on when the CMAS becomes available again.

Administrator Action
None.

Destination

Browser.

EYUVC1222E

Possible navigation error. Parent stub invalid.

Explanation

The interface detected a problem in internal integrity.

System Action

The session continues but may continue to have problems.

User Response

Contact your system adminstrator. Sign off from the interface and
try again.

Administrator Action

Collect AUXTRACE, console log, and dump information, and
contact IBM service.

Destination

Browser.

EYUVC1223E

Unable to start Editor. User not authorized.

Explanation

You attempted to access the View Editor, but your user ID was
rejected by the external security manager.

System Action

The session continues but View Editor access is denied.

User Response

Contact your sustem adminstrator.

Administrator Action

Add the user into the View Editor external security manager
profile if the user is to be given access to the View Editor.

Destination

Browser.

EYUVC1230I

'**externact**' (**apiact**) request completed successfully.

Explanation

The request to perform an action on managed resources completed
successfully.

System Action

The session continues.

User Response

None.

Administrator Action

None.

Destination

Browser.

EYUVC1231E

'**externact**' (**apiact**) request failed. (**apiresponse**, **apireason**)

Explanation

The request to perform an action on managed resources failed.

System Action

Additional messages may follow with more information. The session continues, but an action may be partially complete.

User Response

Use the following messages to determine the nature of the problem. Contact the system administrator if the problem cannot be resolved.

Administrator Action

Consult the CICSPlex SM Application Programming Reference book for a description of the API response and reason codes.

Destination

Browser.

EYUVC1232E

Please select one or more objects to change before pressing the '**externact**' button.

Explanation

An action button was pressed with no objects selected.

System Action

The action is not performed and the session continues.

User Response

If you wish to perform the action, select one or more objects before pressing the button again.

Administrator Action

None.

Destination

Browser.

EYUVC1233E

Attribute (**attrname**) not valid for Object (**objname**)

Explanation

A view definition named an invalid attribute for the object in this release of CICSPlex SM.

System Action

The action is not performed and the session continues.

User Response

Contact your system administrator.

Administrator Action

Use the View Editor to correct the view definition.

Destination

Browser.

EYUVC1234E

Attribute (**attrname**) cannot be altered for Object (**objname**).

Explanation

A view definition named an attribute which cannot be set for this release of CICSPlex SM.

> **System Action**
>> The action is not performed and the session continues.
>
> **User Response**
>> Contact your system administrator.
>
> **Administrator Action**
>> Use the View Editor to correct the view definition.
>
> **Destination**
>> Browser.

EYUVC1235E
>> Parameter (**parmname**) is not valid for Action (**action**) of Object (**objname**).
>
> **Explanation**
>> A view definition named a parameter which does not exist for this release of CICSPlex SM.
>
> **System Action**
>> The action is not performed and the session continues.
>
> **User Response**
>> Contact your system administrator.
>
> **Administrator Action**
>> Use the View Editor to correct the view definition.
>
> **Destination**
>> Browser.

EYUVC1236E
>> Parameter (**parmname**) has unrecognized type for Action (**action**) of Object (**objname**).
>
> **Explanation**
>> A view definition named a parameter which has an invalid specification.
>
> **System Action**
>> The action is not performed and the session continues.
>
> **User Response**
>> Contact your system administrator.
>
> **Administrator Action**
>> Use the View Editor to remove the parameter from the view definition. Contact IBM service.
>
> **Destination**
>> Browser.

EYUVC1237E
>> Parameter (**parmname**) is not valid for Action (**action**) of Object (**objname**).
>
> **Explanation**
>> A view definition named a parameter which does not exist for this release of CICSPlex SM.
>
> **System Action**
>> The action is not performed and the session continues.
>
> **User Response**
>> Contact your system administrator.

Administrator Action
Use the View Editor to correct the view definition.

Destination
Browser.

EYUVC1238E
Parameter (**parmname**) has unrecognized type for Action (**action**) of Object (**objname**).

Explanation
A view definition named a parameter which has an invalid specification.

System Action
The action is not performed and the session continues.

User Response
Contact your system administrator.

Administrator Action
Use the View Editor to remove the parameter from the view definition. Contact IBM service.

Destination
Browser.

EYUVC1239E
No Attribute values altered. Action (**action**) not performed.

Explanation
You attempted to update an object but no attributes were selected for update.

System Action
The action is not performed and the session continues.

User Response
Select attributes for update before retrying the action.

Administrator Action
None.

Destination
Browser.

EYUVC1250E
Attributes cannot be altered for this Object (**objname**).

Explanation
You attempted to update attributes for an object which does not support the SET action for this release of CICSPlex SM.

System Action
The action is not performed and the session continues.

User Response
Contact your system administrator.

Administrator Action
Use the View Editor to remove the offending action button from the view definition.

Destination
Browser.

EYUVC1251E

Object (**objname**) is not recognized in this release of CICSPlex SM.

Explanation

You attempted to perform an action for an object which is not present in this release of CICSPlex SM.

System Action

The action is not performed and the session continues.

User Response

Contact your system administrator.

Administrator Action

Use the View Editor to correct the view.

Destination

Browser.

EYUVC1252E

Invalid Action name specified on View.

Explanation

The name of the action which you attempted to perform is not valid in CICSPlex SM.

System Action

The action is not performed and the session continues.

User Response

Contact your system administrator.

Administrator Action

Use the View Editor to review the view definition.

Destination

Browser.

EYUVC1253E

Action (**action**) not available for Object (**objname**).

Explanation

You attempted to perform an action which is not supported by the object in this release of CICSPlex SM.

System Action

The action is not performed and the session continues.

User Response

Contact your system administrator.

Administrator Action

Use the View Editor to review the view definition.

Destination

Browser.

EYUVC1254I

Operation canceled for remaining selections.

Explanation

You selected ″No to all″ on the confirmation panel.

System Action

The action is not performed for the remaining selected objects, and the session continues.

User Response
None.

Administrator Action
None.

Destination
Browser.

EYUVC1255I
Operation not performed for previous selection.

Explanation
You selected "No" on the confirmation panel.

System Action
The action has not been performed for the previous selected object. The confirmation panel is presented again for any remaining selected objects. The session continues.

User Response
None.

Administrator Action
None.

Destination
Browser.

EYUVC1260E
Internal comparison operator value (**opervalue**) invalid.

Explanation
A request for a filtered view specified an internal operator which is not supported for this release of CICSPlex SM.

System Action
The request is canceled but the session continues.

User Response
Contact your system administrator.

Administrator Action
Use the View Editor to review the definition of the hyperlink that caused the error.

Destination
Browser.

EYUVC1261E
Attribute (**attrname**) not found for Object (**objname**).

Explanation
A request for a filtered view specified an attribute name which is not present in the object in this release of CICSPlex SM.

System Action
The request is canceled but the session continues.

User Response
Contact your system administrator.

Administrator Action
Use the View Editor to review the definition of the hyperlink that caused the error.

> **Destination**
>> Browser.

EYUVC1262E
> Parameter (**parmname**) not valid for Object (**objname**).

> **Explanation**
>> A request for a filtered view specified a parameter which is not supported by the object in this release of CICSPlex SM.

> **System Action**
>> The request is canceled but the session continues.

> **User Response**
>> Contact your system administrator.

> **Administrator Action**
>> Use the View Editor to review the definition of the hyperlink that caused the error.

> **Destination**
>> Browser.

EYUVC1270I
> Action (**action**) failed for '**objname**' in '**cicsregion**'. **Expln** (CICS information: RESP(**response1**) RESP2(**response2**) EIBFN(**eibfn**))

> **Explanation**
>> This message provides additional information following message EYUVC1231E. It is issued for each object for which CICS reported a failure. The **Expln** field describes the response reported by CICS. This can be one of the following:
>> - Invalid request.
>> - Failure.
>> - Data set name not found.
>> - Duplicate record.
>> - 'END' condition not handled.
>> - File not found.
>> - Illegal login condition not handled.
>> - I/O error on output data set.
>> - Journal ID error.
>> - Length error.
>> - Model ID error.
>> - No temporary storage available.
>> - No storage available.
>> - Not authorized.
>> - Not found.
>> - Partner ID error.
>> - Program ID error.
>> - Queue ID error.
>> - System busy.
>> - System ID error.
>> - Task ID error.
>> - Task class ID error.

- Terminal ID error.
- Transaction ID error.
- User ID error.
- Volume ID error.
- Invalid exit request.

System Action
The session continues.

User Response
None.

Administrator Action
None.

Destination
Browser.

EYUVC1271I
Attribute(**attrname**) Offset(**xx**) DataType(**datatype**) Relative ID(**relid**) Length(**yy**).

Explanation
This message provides additional information following message EYUVC1231E. It is issued for each Attribute which contributed to the failure.

System Action
The session continues.

User Response
None.

Administrator Action
None.

Destination
Browser.

EYUVC1272I
Error code **errcode** for Object **objname**.

Explanation
This message provides additional information following message EYUVC1231E. It is issued for each individual failure.

System Action
The session continues.

User Response
None.

Administrator Action
None.

Destination
Browser.

EYUVC1280I
count records collected at **time**.

Explanation
The data displayed was collected at the time indicated.

System Action

The session continues.

User Response

None.

Administrator Action

None.

Destination

Browser.

EYUVC1281W

The specified CMAS context (**CMAScontext**) is not available.

Explanation

The requested resource could not be displayed as the specified CMAS context is not available to this Web User Interface server.

System Action

The requested display is presented to the user with no data records.

User Response

Review the CMAS context and, if the input field is available, correct as necessary. See the Web User Interface help page *Filtering Data Using Selection Criteria* for more information. If the problem cannot be resolved, contact your system administrator. Press the Back icon to continue.

Administrator Action

If the CMAS context is incorrect, use the editor to correct the value in link used, or correct the DEFAULTCMASCTXT server parameter, as appropriate. If the CMAS context is correct, ensure that the specified CMAS context is available to the CICSPlex SM API from Web User Interface server.

Destination

Browser.

EYUVC1282W

The specified Context (**context**) is not available.

Explanation

The requested resource could not be displayed as the specified Context is not available to this Web User Interface server.

System Action

The requested display is presented to the user with no data records.

User Response

Review the Context and, if the input field is available, correct as necessary. See the Web User Interface help page *Filtering Data Using Selection Criteria* for more information. If the problem cannot be resolved, contact your system administrator. Press the Back icon to continue.

Administrator Action

If the Context is incorrect, use the editor to correct the value in link used, or correct the DEFAULTCONTEXT server parameter, as

appropriate. If the Context is correct, ensure that the specified Context is available to the CICSPlex SM API from Web User Interface server.

Destination
Browser.

EYUVC1283W
The specified Scope (**scope**) is not available for this Context (**context**).

Explanation
The requested resource could not be displayed as the specified Scope is not available within the specified Context.

System Action
The requested display is presented to the user with no data records.

User Response
Review the Context and Scope and, if the input fields are available, correct as necessary. See the Web User Interface help page *Filtering Data Using Selection Criteria* for more information. If the problem cannot be resolved, contact your system administrator. Press the Back icon to continue.

Administrator Action
If the Context or Scope are incorrect, use the editor to correct the value in link used, or correct the DEFAULTCONTEXT and DEFAULTSCOPE server parameters, as appropriate. If the Context and Scope are correct, ensure that the specified Scope is defined to the specified Context.

Destination
Browser.

EYUVC1284E
The specified Attribute filter is invalid.

Explanation
The requested resource could not be displayed as a specified filter was invalid.

System Action
The requested display is presented to the user with no data records.

User Response
Review the filter values and correct as necessary. See the Web User Interface help page *Filtering Data Using Selection Criteria* for more information. If the problem cannot be resolved, contact your system administrator.

Administrator Action
Use the editor to review the filters specified on the link used and correct if necessary.

Destination
Browser.

EYUVC1285E
The specified Parameter filter is invalid.

Explanation

The requested resource could not be displayed as a specified filter was invalid.

System Action

The requested display is presented to the user with no data records.

User Response

Review the filter values and correct as necessary. See the Web User Interface help page *Filtering Data Using Selection Criteria* for more information. If the problem cannot be resolved, contact your system administrator.

Administrator Action

Use the editor to review the filters specified on the link used and correct if necessary.

Destination

Browser.

Editor messages

Editor messages reflect the status within the View and Menu editor, written to the user's browser.

EYUVE

message text

Explanation

An editor request has been attempted with the described result.

System Action

As described in the message.

User Response

Follow any instructions contained in the message.

Administrator Action

None.

Destination

Browser.

The Editor messages:

EYUVE1001E

An unrecoverable editor error has occured (Screen number **screennumber**).

EYUVE1002E

Invalid editor request (Screen number **screennumber**).

EYUVE1003E

Repository not available or not authorized for User.

EYUVE0011E

New Menu contains invalid characters. Please enter a new Menu name.

EYUVE0012E

Menu (**menuname**) already exists. Please enter a new Menu name.

EYUVE0014I

The Menu (**menuname**) has been created.

EYUVE0015E

No Menu name specified. Please enter a new Menu name.

EYUVE0016E

Menu names starting with 'EYU' are reserved and cannot be created.

EYUVE0021E

New Menu name contains invalid characters. Please enter a new Menu name.

EYUVE0022E

Menu (**menuname**) already exists. Please enter a new Menu name.

EYUVE0024E

Source Menu (**sourcemenuname**) not found. Please select a source Menu name.

EYUVE0025I

Menu (**sourcemenuname**) has been copied as new Menu (**targetmenuname**).

EYUVE0026E

No source Menu selected. Please select a source Menu name.

EYUVE0027E

No Menu name specified. Please enter a new Menu name.

EYUVE0028E

Menu names starting with 'EYU' are reserved and cannot be created.

EYUVE0033E

No Menu selected. Please select a Menu name.

EYUVE0034E

Menu names starting with 'EYU' are reserved and may not be deleted.

EYUVE0040E

Menu (**menuname**) not found. Please select a Menu name for deletion.

EYUVE0041I

Menu (**menuname**) has been deleted.

EYUVE0042E

Unable to delete Menu (**menuname**) as it is being updated. Please select a Menu name for deletion.

EYUVE0048E

No Menu selected. Please select a Menu name.

EYUVE0050I

Menu (**menuname**) has been opened for edit.

EYUVE0051E

Unable to edit Menu (**menuname**) as it is already being updated. Please select a Menu name for edit.

EYUVE0052W

Menu names starting with 'EYU' are reserved and cannot be altered. You will not be able to save any changes.

EYUVE0060E

Save of Menu (**menuname**) failed. Updates have been lost.

EYUVE0061I

Menu (**menuname**) updates saved successfully.

EYUVE0067I

Menu title and annotation have been edited.

EYUVE0073I

Context and Scope options have been edited.

EYUVE0101E

Help location invalid or contains invalid characters. Please enter a valid help location.

EYUVE0102E

Help location not specified. Please select, and enter a help location.

EYUVE0103I

Help location has been edited.

EYUVE0109I

Menu contents have been edited.

EYUVE0110E

Menu item not specified. Please select a Menu item.

EYUVE0116E

Menu item type not specified. Please select a Menu item type.

EYUVE0122I

Menu group title has been edited.

EYUVE0128I

Menu choice title and annotation have been edited.

EYUVE0134I

Menu choice components have been edited.

EYUVE0141I

Menu item, '**menuitemname**', has been deleted.

EYUVE0147E

Menu choice type not specified. Please select a Menu choice type.

EYUVE0148I

Link to Menu created.

EYUVE0149I

Link to external URL created.

EYUVE0150I

Link to View created.

EYUVE0156I

External URL has been edited.

EYUVE0157E

No external URL specified. Please enter an external URL.

EYUVE0162I

Menu link components have been edited.

EYUVE0201E

Menu name contains invalid characters. Please enter a valid Menu name.

EYUVE0202I

Menu link target edited.

EYUVE0203E

No Menu selected. Please select a Menu.

EYUVE0204E

No Menu name entered. Please enter a Menu name.

EYUVE0205E

No Menu selection method indicated. Please indicate method of Menu selection.

EYUVE0211I

Context and Scope settings have been edited.

EYUVE0212E

No Context option specified. Please select a Context option.

EYUVE0213E

No Scope option specified. Please select a Scope option.

EYUVE0214E

No CMAS context option specified. Please select a CMAS context option.

EYUVE0215E

No fixed Context specified. Please enter a fixed Context name.

EYUVE0216E

No fixed Scope specified. Please enter a fixed Scope name.

EYUVE0217E

No fixed CMAS context specified. Please enter a fixed CMAS context name.

EYUVE0223E

View set name contains invalid characters. Please enter a new View set name.

EYUVE0224E

No View set named. Please indicate method of View set selection and select or enter a View set name.

EYUVE0225I

View link target edited.

EYUVE0231E

No Object selected. Please select an Object.

EYUVE0232I

Object for View selected.

EYUVE0238I

View link components edited.

EYUVE0239E

View link cannot be edited. Target View set represents an Object that is not available in this release of CICSPlex SM.

EYUVE0244E

CMAS context specification incomplete. Please complete the specification.

EYUVE0245E

Context specification incomplete. Please complete the specification.

EYUVE0246E

Invalid fixed value entered. Please enter a valid fixed value.

EYUVE0247E

Scope specification incomplete. Please complete the specification.

EYUVE0248I

      View link Context and Scope settings have been set.

EYUVE0254E

      No filter selected. Please select a View link filter.

EYUVE0255I

      View link filters have been edited

EYUVE0262I

      View link filter, '**filtername**', deleted.

EYUVE0268E

      No filter attribute selected. Please select a filter attribute.

EYUVE0269E

      No filter parameter selected. Please select a filter parameter.

EYUVE0270I

      View link filter attribute selected.

EYUVE0271I

      View link filter parameter selected.

EYUVE0277I

      View link filter settings edited.

EYUVE0278E

      Incomplete filter value specification. Please select a filter value from the list.

EYUVE0280E

      No attribute filter operator specified. Please select an attribute filter operator.

EYUVE0281E

      Incomplete filter value specification. Please indicate whether the filter value is fixed or variable.

EYUVE0282E

      Please select a variable filter source attribute

EYUVE0283E

      Incomplete filter value specification. Please enter a filter value.

EYUVE0284E

      Invalid filter value specified. Please enter a valid value for filter type, '**filtertypedescription**'.

EYUVE0285E

      Filter value too long. Please enter a valid value for filter type, '**filtertypedescription**'.

EYUVE0301E

      View name contains invalid characters. Please enter a View name.

EYUVE0302E

      No View named. Please indicate method of View selection and select or enter a View name, if applicable.

EYUVE0303I

      View link target edited.

EYUVE0309E

      No filter type specified. Please select a filter type.

EYUVE0310I
> View link filter type selected.

EYUVE0316E
> Incomplete link condition attribute specification. Please select an attribute from the list.

EYUVE0317E
> No link condition selected. Please select a link condition.

EYUVE0318I
> View link condition type selected.

EYUVE0329E
> New View set name contains invalid characters. Please enter a new View set name.

EYUVE0330E
> View set (**viewsetname**) already exists. Please enter a new View set name.

EYUVE0332I
> The View set (**viewsetname**) has been created.

EYUVE0333E
> No Object specified. Please select an Object.

EYUVE0334E
> No View set name specified. Please enter a new View set name.

EYUVE0335E
> View set names starting with 'EYU' are reserved and cannot be created.

EYUVE0340E
> New View set name contains invalid characters. Please enter a new View set name.

EYUVE0341E
> View set (**viewsetname**) already exists. Please enter a new View set name.

EYUVE0343E
> Source View set (**sourceviewsetname**) not found. Please select a source View set name.

EYUVE0344I
> View set (**sourceviewsetname**) has been copied as new View set (**targetviewsetname**).

EYUVE0345E
> No source View set selected. Please select a source View set name.

EYUVE0346E
> No View set name specified. Please enter a new View set name.

EYUVE0347E
> View set names starting with 'EYU' are reserved and cannot be created.

EYUVE0352E
> No View set selected. Please select a View set name.

EYUVE0353E
> View set names starting with 'EYU' are reserved and cannot be deleted.

EYUVE0359E
> View set (**viewsetname**) not found. Please select a View set name for deletion.

EYUVE0360I

>   View set (**viewsetname**) has been deleted.

EYUVE0361E

>   Unable to delete View set (**viewsetname**) as it is being updated. Please
>   select a View set name for deletion.

EYUVE0367E

>   No View set selected. Please select a View set name.

EYUVE0369I

>   View set (**viewsetname**) has been opened for edit.

EYUVE0370E

>   Unable to edit View set (**viewsetname**) as it is already being updated.
>   Please select a View set name for edit.

EYUVE0371E

>   View set (**viewsetname**) cannot be edited because it represents an Object
>   that is not available in this release of CICSPlex SM.

EYUVE0372W

>   View set names starting with 'EYU' are reserved and cannot be altered.
>   You will not be able to save any changes.

EYUVE0377E

>   No View selected. Please select a View for this operation.

EYUVE0378E

>   Save of View set (**viewsetname**) failed. Updates have been lost.

EYUVE0379I

>   View set (**viewsetname**) updates saved successfully.

EYUVE0401E

>   New View name contains invalid characters. Please enter a new View
>   name.

EYUVE0403I

>   View (**sourceviewname**) has been copied as new View (**targetviewname**).

EYUVE0404E

>   No View name specified. Please enter a new View name.

EYUVE0405E

>   View name already exists in View set. Please enter an new View name.

EYUVE0411I

>   View (**viewname**) has been deleted.

EYUVE0417E

>   No pre-fill option specified. Please select a pre-fill option.

EYUVE0418E

>   View name already exists in View set. Please enter an new View name.

EYUVE0419E

>   No View name specified. Please enter a View name.

EYUVE0420E

>   No View type specified. Please select a View type.

EYUVE0421I

>   View (**viewname**) has been added to the View set.

EYUVE0422E

New View contains invalid characters. Please enter a new View name.

EYUVE0428I

View (**viewname**) edited and will be saved when the View set is saved.

EYUVE0434E

Invalid automatic refresh time. Please enter a new automatic refresh time.

EYUVE0435E

Invalid maximum number of rows. Please enter a new maximum number of rows.

EYUVE0436E

No automatic refresh option selected. Please select an automatic refresh option.

EYUVE0437E

No automatic refresh time entered. Please enter an automatic refresh time.

EYUVE0438E

No maximum number of rows entered. Please enter a maximum number of rows.

EYUVE0439I

View display options edited.

EYUVE0449I

View title and annotation edited.

EYUVE0455E

No button selected. Please select a button for this operation.

EYUVE0456I

View buttons have been edited.

EYUVE0463I

View button, '**buttonname**', deleted.

EYUVE0469E

No button action specified. Please select a button action.

EYUVE0475E

No action specified. Please select an action for this View button.

EYUVE0501E

No confirmation panel selected. Please indicate method of confirmation panel selection and select or enter a confirmation panel name.

EYUVE0502E

No confirmation panel named. Please indicate method of confirmation panel selection and select or enter a confirmation panel name.

EYUVE0503E

Incomplete confirmation panel specification. Please indicate method of confirmation panel selection and select or enter a confirmation panel name.

EYUVE0504E

Confirmation panel name contains invalid characters. Please enter a new confirmation panel name.

EYUVE0509E

Table column not specified. Please select a table column.

EYUVE0510I

 Table contents have been edited.

EYUVE0517I

 Table column, '**tablecolumnname**', has been deleted.

EYUVE0523E

 Attribute not selected. Please select an attribute from the list.

EYUVE0524I

 Attribute for table column selected.

EYUVE0530I

 Table column has been edited.

EYUVE0531E

 Table column cannot be edited. The column represents an Attribute that is
 not available in this release of CICSPlex SM.

EYUVE0536I

 Table column title and options have been edited.

EYUVE0542E

 No View link specified. Please select a View link.

EYUVE0543I

 View links have been edited.

EYUVE0550I

 View link, '**viewlinkname**', has been deleted.

EYUVE0556I

 Local view link selected.

EYUVE0557I

 View set link selected.

EYUVE0558E

 No link type specified. Please select a link type

EYUVE0564I

 View link components edited.

EYUVE0565E

 View link cannot be edited. The link represents an Object that is not
 available in this release of CICSPlex SM.

EYUVE0601E

 Incomplete condition test specification. Please select condition test.

EYUVE0602E

 Invalid condition value specified. Please enter a valid value for Attribute
 type, '**attributetypedescription**'.

EYUVE0603E

 Condition value too long. Please enter a valid value for Attribute type,
 '**attributetypedescription**'.

EYUVE0604I

 View link condition test edited.

EYUVE0608E

 View name contains invalid characters. Please enter a View name.

EYUVE0609E

No View named. Please indicate method of View selection and select or enter a View name, if applicable.

EYUVE0610I

View link target edited.

EYUVE0616E

No filter specified. Please select a filter.

EYUVE0617I

Available filters have been edited.

EYUVE0624I

View filter, '**filtername**', deleted.

EYUVE0630E

No filter type specified. Please select a filter type.

EYUVE0631I

Attribute filter specified.

EYUVE0632I

Parameter filter specified.

EYUVE0638E

No Attribute specified. Please select an Attribute.

EYUVE0639E

No entry mechanism specified. Please select an entry mechanism for the filter.

EYUVE0640I

Attribute filter has been edited.

EYUVE0641I

Automatic generation of selection list not possible as selected attribute type does not have defined values. Please edit selection list values manually.

EYUVE0646E

No Parameter specified. Please select a Parameter.

EYUVE0647E

No entry mechanism specified. Please select an entry mechanism for the filter.

EYUVE0648I

Parameter filter has been edited.

EYUVE0649I

Selection list values invalidated and have been discarded.

EYUVE0654E

No value specified. Please select a value.

EYUVE0655I

Selection list values have been edited.

EYUVE0661I

Selection list value, '**selectionlistvalue**', added.

EYUVE0662I

Selection list value, '**selectionlistvalue**', edited.

EYUVE0663E

No value specified. Please enter a value.

EYUVE0664E

Value specified is invalid for CVDA types. Please enter a new value.

EYUVE0669I

Selection list value, '**selectionlistvalue**', has been deleted.

EYUVE0701E

No presentation type selected. Please select a presentation type.

EYUVE0702I

Presentation type selected.

EYUVE0708E

No threshold selected. Please select a threshold.

EYUVE0709I

Presentation thresholds edited.

EYUVE0715E

Threshold value invalid. Please enter a new threshold value.

EYUVE0716E

No threshold range specified. Please select the type and enter the value for the threshold range.

EYUVE0717I

Presentation threshold range edited.

EYUVE0718E

Invalid percentage value specified. Please enter a number between 0 and 100.

EYUVE0719E

Invalid range specified. Please enter a new threshold range.

EYUVE0725I

Presentation threshold, '**presentationthresholdvalue**', deleted.

EYUVE0731E

Invalid number specified. Please enter a valid numerical value.

EYUVE0732E

Upper limit not specified. Please select a type and value for the upper limit of the bar gauge.

EYUVE0733E

Lower limit not specified. Please select a type and value for the lower limit of the bar gauge.

EYUVE0734I

Presentation options edited.

EYUVE0740I

View (**viewname**) edited and will be saved when the View set is saved.

EYUVE0746I

View (**viewname**) edited and will be saved when the View set is saved.

EYUVE0747E

View (**viewname**) cannot be edited because it represents an Action that is not available in this release of CICSPlex SM.

EYUVE0752E

No Action specified. Please select an Action for the confirmation panel.

EYUVE0754I

Confirmation panel Action selected.

EYUVE0758E

No item selected. Please select a form item for this operation.

EYUVE0759I

Form contents edited.

EYUVE0760I

Edit operation ignored. White space items have no editable options.

EYUVE0765E

No form item type specified. Please select a form item type.

EYUVE0766I

Form item type selected.

EYUVE0801I

Form item has been edited.

EYUVE0802E

Form item, '**formitemname**', cannot be edited as it references an Attribute that is not available in this release of CICSPlex SM.

EYUVE0803E

Form item, '**formitemname**', cannot be edited as it references a Parameter that is not available in this release of CICSPlex SM.

EYUVE0807I

Form item title and annotation have been edited.

EYUVE0812I

Form item display options have been edited.

EYUVE0813E

No display option specified. Please select a display option.

EYUVE0814I

Automatic generation of selection list not possible as selected attribute type does not have defined values. Please edit selection list values manually.

EYUVE0820I

Form item, '**formitemname**', deleted.

EYUVE0825I

Attribute for form item specified.

EYUVE0826I

Parameter for form item specified.

EYUVE0827E

No Attribute specified. Please select an Attribute to be represented by this form item.

EYUVE0828E

No Parameter specified. Please select a Parameter to be represented by this form item.

EYUVE0833I

Form item default Parameter value has been edited.

EYUVE0838I

Presentation threshold components have been edited.

EYUVE0843E

No color selected. Please select a color for the presentation threshold.

EYUVE0844I

Presentation threshold color specified.

HTTP messages

HTTP messages reflect the HTTP response codes, written to the user's browser.

EYUVH0400E

Bad HTTP request.

Explanation

The request was incorrectly formatted by the browser.

System Action

The request is ignored.

User Response

If you are using a different browser from the one normally used to access the server, try the usual one. Contact your system administrator if problem is not resolved.

Administrator Action

Check the service levels of the CICS Web Interface and the CICSPlex SM Web User Interface features. Collect the AUXTRACE and contact IBM if the problem is not resolved.

Destination

Browser.

EYUVH0403E

Request forbidden.

Explanation

The user must be signed on to access this resource.

System Action

The request is ignored.

User Response

Sign on to the Web User Interface server and try again. Contact your system administrator if the problem is not resolved.

Administrator Action

Collect the AUXTRACE and contact IBM.

Destination

Browser.

EYUVH0404E

Request not found.

Explanation

The requested resource was not recognized by the server.

System Action

The request is ignored.

User Response

If you entered the address manually, ensure that the address was entered correctly. Contact your system administrator if the problem is not resolved.

Administrator Action
Check that the URL entered by the user is valid. If the request is
for a customized help page then use the View Editor to ensure that
the associated view or menu definition specifies the correct
member name, and that the member is contained in the
DFHHTML dataset. Collect the AUXTRACE and contact IBM if
you cannot resolve the problem.

Destination
Browser.

EYUVH0500E
Internal server error.

Explanation
The server experienced an unexpected internal error.

System Action
The response is cancelled but the action requested may have
completed.

User Response
Contact your system administrator.

Administrator Action
Collect the AUXTRACE and any dumps and contact IBM.

Destination
Browser.

EYUVH0501E
HTTP request method not supported.

Explanation
The browser sent a request using an invalid or unsupported HTTP
request method.

System Action
The request is ignored.

User Response
If you are using a different browser from the one normally used to
access the server, try the usual one. Contact your system
administrator if the problem is not resolved.

Administrator Action
Collect the AUXTRACE and any dumps and contact IBM.

Destination
Browser.

EYUVH0503E
Service temporarily unavailable.

Explanation
The server is not currently available for connections.

System Action
The request is ignored.

User Response
Try again later. Contact your system administrator if the problem is
not resolved.

Administrator Action
> Review the status of the CICSPlex SM Web User Interface server and restart if necessary.

Destination
> Browser.

Server messages

Server messages reflect the status of the interface server, written to the EYULOG, administrator terminal and console.

EYUVS0001I
> CICSPlex SM Web User Interface initialization started.

> **Explanation**
> > The Web User Interface server initialization sequence has begun.

> **System Action**
> > Initialization sequence continues.

> **Administrator Action**
> > None.

> **Destination**
> > EYULOG, Console.

EYUVS0002I
> CICSPlex SM Web User Interface initialization complete.

> **Explanation**
> > The Web User Interface server initialization sequence has completed successfully.

> **System Action**
> > Ready for browser requests.

> **Administrator Action**
> > None.

> **Destination**
> > EYULOG, Console.

EYUVS0003I
> CICSPlex SM Web User Interface termination started.

> **Explanation**
> > The Web User Interface server termination sequence has begun.

> **System Action**
> > Termination sequence continues. Further browser requests will be rejected.

> **Administrator Action**
> > None.

> **Destination**
> > EYULOG, Console.

EYUVS0004I
> CICSPlex SM Web User Interface termination complete.

Explanation
The Web User Interface server termination sequence has completed successfully.

System Action
The server terminates.

Administrator Action
None.

Destination
EYULOG, Console.

EYUVS0005S
CICSPlex SM Web User Interface initialization failed. (**reasontext**)

Explanation
The Web User Interface server initialization sequence has failed. Diagnostic messages will have been written to the EYULOG.

System Action
The server terminates.

Administrator Action
Review EYULOG for server address space.

Destination
EYULOG, Console.

EYUVS0010I
Server connected to CMAS, SYSID(**sysid**).

Explanation
The connection to the CMAS is available. Users may now sign on to the Web User Interface server.

System Action
Processing continues.

Administrator Action
None.

Destination
EYULOG.

EYUVS0011W
Server connection to CMAS unavailable.

Explanation
The connection to the CMAS is unavailable. User sessions will be signed off and Web User Interface server will remain unavailable until CMAS connection is established.

System Action
User sessions are be terminated and processing continues.

Administrator Action
Re-establish CMAS connectivity, if appropriate.

Destination
EYULOG.

EYUVS0020I
Task initialization complete for User (**username**).

Explanation

A User task has been successfully created for the named user as a result of a signon request.

System Action

Processing continues.

Administrator Action

None.

Destination

EYULOG.

EYUVS0021I

Task termination complete for User (**username**). **reasontext**.

Explanation

A User task has terminated and the associated session was closed.

System Action

Processing continues.

Administrator Action

None.

Destination

EYULOG.

EYUVS0022E

Task for User (**username**) failed.

Explanation

An internal error was encountered when attempting to create a User session.

System Action

User signon is cancelled.

Administrator Action

Review any preceeding messages associated with the problem. If there are no associated messages, collect AUXTRACE, console log, and dump information, and contact IBM service.

Destination

EYULOG.

EYUVS0023E

Task failed to connect to CICSPlex SM for User (**username**). (**conncode**, **connreason**)

Explanation

A new user session failed to connect to CICSPlex SM for the named user.

System Action

User signon is cancelled.

Administrator Action

Review the CMAS status and access authorities for the user ID. Note that the message includes the Response and Reason values from the EXEC CPSM CONNECT command.

Destination

EYULOG.

EYUVS0030E

Signon rejected. Maximum user limit (**maxusers**) reached.

Explanation

A user attempted to sign on to the Web User Interface server but the maximum number of concurrent sessions, as defined by the MAXUSERS parameter, had already been reached.

System Action

Processing continues.

Administrator Action

If this message occurs frequently, consider increasing the MAXUSERS parameter, reducing the INACTIVETIMEOUT parameter, or introducing additional Web User Interface servers. If the problem must be resolved immediately, use the administration transaction (COVC) to purge a redundant user session.

Destination

EYULOG.

EYUVS0031E

Signon failed. Unable to start task for User (**username**). (CICS information: RESP(**response1**) RESP2(**response2**))

Explanation

A new user session failed to start for the named user, because the user task transaction (COVA) could not be started.

System Action

User signon is cancelled.

Administrator Action

Review the health of your WUI server and access authorities for the named user ID, and the user ID associated with the COVG transaction. Note that the message includes the RESP and RESP2 values from the EXEC CICS START command.

Destination

EYULOG.

EYUVS0101I

Parameter service initialization complete.

Explanation

Server parameters were read successfully during the initialization sequence and have been made available to other server components.

System Action

Initialization sequence continues.

Administrator Action

None.

Destination

EYULOG.

EYUVS0102I

Parameter service terminated.

Explanation

Server parameters have been discarded during the termination sequence.

System Action
> Termination sequence continues.

Administrator Action
> None.

Destination
> EYULOG.

EYUVS0103E
> Parameter service failed.

Explanation
> The server was unable to read server parameters during the initialization sequence.

System Action
> The initialization sequence is abended, and the server terminates.

Administrator Action
> Review previous messages to determine the cause of failure.

Destination
> EYULOG.

EYUVS0104E
> Parameter (**parmname**) invalid.

Explanation
> The value supplied for the named server parameter in the parameter data set was either badly formatted or out of range.

System Action
> Initialization fails.

Administrator Action
> Review the value of the named parameter before attempting to restart the server.

Destination
> EYULOG.

EYUVS0105E
> Invalid record in parameter data set.

Explanation
> The Web User Interface server found a badly formatted line in the server parameters.

System Action
> Initialization fails.

Administrator Action
> Review the contents of the server parameter data set before attempting to restart the server.

Destination
> EYULOG.

EYUVS0106W
> Over-length record in parameter data set ignored.

Explanation
> A record in the server parameter data set was too long to process and has been ignored.

> **System Action**
>> Initialization continues.
>
> **Administrator Action**
>> Review the contents of the server parameter data set before attempting to restart the server.
>
> **Destination**
>> EYULOG.

EYUVS0107I
> Reading startup parameters.
>
> **Explanation**
>> The Web User Interface is reading the server parameters.
>
> **System Action**
>> Processing continues.
>
> **Administrator Action**
>> None.
>
> **Destination**
>> EYULOG.

EYUVS0108I
> Startup parameters read.
>
> **Explanation**
>> The Web User Interface has read the server parameters.
>
> **System Action**
>> Processing continues.
>
> **Administrator Action**
>> None.
>
> **Destination**
>> EYULOG.

EYUVS0109I
> **parmname**(**parmvalue**)
>
> **Explanation**
>> The named server parameter has been read and found to contain the given value.
>
> **System Action**
>> Processing continues.
>
> **Administrator Action**
>> None.
>
> **Destination**
>> EYULOG.

EYUVS0110E
> Required parameter (**parmname**) not specified.
>
> **Explanation**
>> The Web User Interface server has read all the parameters supplied but failed to find a value for a required parameter.
>
> **System Action**
>> Initialization fails.

> **Administrator Action**
>> Supply the named parameter before attempting to restart the server.
>
> **Destination**
>> EYULOG.

EYUVS0111E
> Trace flag specification invalid.
>
> **Explanation**
>> The WUITRACE parameter was specified, but was formatted incorrectly.
>
> **System Action**
>> Initialization fails.
>
> **Administrator Action**
>> Review value of WUITRACE parameter before attempting to restart the server.
>
> **Destination**
>> EYULOG.

EYUVS0112E
> Unable to open parameter TDQ (**TDQname**).
>
> **Explanation**
>> The Web User Interface was unable to open the data set containing the server parameters.
>
> **System Action**
>> Initialization fails.
>
> **Administrator Action**
>> Check the status of the data set named in the EYUWUI DD card of the server JCL, and ensure it is of the correct record format and is readable.
>
> **Destination**
>> EYULOG.

EYUVS0120E
> Unable to load resource table (**restable**).
>
> **Explanation**
>> The server was unable to load the named module from the SEYULOAD data set.
>
> **System Action**
>> Initialization fails.
>
> **Administrator Action**
>> Contact IBM.
>
> **Destination**
>> EYULOG.

EYUVS0121W
> National language specification invalid. Using ″ENU″.
>
> **Explanation**
>> The EYU9VKEC INITPARM was either missing or did not contain a valid national language specification. This message is issued each time the server attempts to use the INITPARM value.

System Action
> 'ENU' is used as the default national language and processing continues.

Administrator Action
> Review the language specification supplied as EYU9VKEC INITPARM.

Destination
> Console.

EYUVS0122W

Default codepage specification invalid. Using ″ENU1″.

Explanation
> The EYU9VWAN INITPARM was either missing or did not contain a valid codepage specification. This message is issued each time the server attempts to use the INITPARM value, that is, each time a browser request is received with an invalid or missing codepage specification.

System Action
> 'ENU1' is used as the default codepage specification and processing continues.

Administrator Action
> Review the language specification supplied as EYU9VWAN INITPARM.

Destination
> Console.

EYUVS0150E

Message **messageNum** could not be written to EYULOG.

Explanation
> The specified message could not be written to the EYULOG.

System Action
> Processing continues.

Administrator Action
> Review the status of the EYULOG destination. Collect AUXTRACE and contact IBM if the problem cannot be resolved.

Destination
> Console.

EYUVS0200I

Starting CICS Web Interface.

Explanation
> The Web User Interface server is attempting to open the CICS Web Interface for incoming requests from the browser.

System Action
> Initialization continues.

Administrator Action
> None.

Destination
> EYULOG.

EYUVS0201I

Start of CICS Web Interface transaction (**transname**) successful.

Explanation

When running on systems prior to CICS Transaction Server V1.3, the server requested the initialization of the CICS Web Interface.

System Action

Initialization continues.

Administrator Action

None.

Destination

EYULOG.

EYUVS0202E

Start of CICS Web Interface transaction (**transname**) failed.

Explanation

When running on systems prior to CICS Transaction Server V1.3, an attempt to start the CICS Web Interface failed.

System Action

Initialization fails.

Administrator Action

Ensure the CICS Web Interface has been configured correctly.

Destination

EYULOG.

EYUVS0203I

Discarding previously installed TCP/IP service (**tcpipname**).

Explanation

When running on CICS Transaction Server V1.3 or later, the named TCP/IP service was already present and is being discarded.

System Action

Initialization continues.

Administrator Action

None.

Destination

EYULOG.

EYUVS0204I

TCP/IP service (**tcpipname**) installed successfully.

Explanation

When running on CICS Transaction Server V1.3 or later, the named TCP/IP service has been installed for CICS Web Interface requests.

System Action

Initialization continues.

Administrator Action

None.

Destination

EYULOG.

EYUVS0205E

Failed to install TCP/IP service (**tcpipname**).

> **Explanation**
>> When running on CICS Transaction Server V1.3 or later, an attempt to create the named TCP/IP service failed.
>
> **System Action**
>> Initialization fails.
>
> **Administrator Action**
>> Ensure that the CICS Web Interface has been configured correctly, that the port number specified by the TCPIPPORT server parameter is not already in use, and that the related TCP/IP server parameters have valid values.
>
> **Destination**
>> EYULOG.

>EYUVS0206I
> CICS Web Interface enabled on port number **portnum**.
>
> **Explanation**
>> When running on CICS Transaction Server V1.3 or later, a TCP/IP service has been successfully opened on the given port number.
>
> **System Action**
>> Initialization continues.
>
> **Administrator Action**
>> None.
>
> **Destination**
>> EYULOG.

EYUVS0207E
> Failed to enable CICS Web Interface on port number **portnum**.
>
> **Explanation**
>> When running on CICS Transaction Server V1.3 or later, a TCP/IP service has not been successfully opened for the given port number.
>
> **System Action**
>> Initialization fails.
>
> **Administrator Action**
>> Ensure that the CICS Web Interface has been configured correctly, that the port number specified by the TCPIPPORT server parameter is not already in use, and that the related TCP/IP server parameters have valid values.
>
> **Destination**
>> EYULOG.

EYUVS0208E
> SSL support not available in this release of CICS.
>
> **Explanation**
>> The TCPIPSSL server parameter requested secure socket layer support on a release of CICS on which it is not supported.
>
> **System Action**
>> Initialization fails.

Administrator Action

Use unsecure sockets (by removing the TCPIPSSL server parameter) or upgrade the server CICS to an appropriate release.

Destination

EYULOG.

EYUVS0900I

SSL support not available in this release of CICS.

Explanation

Web User Interface server initialization has been requested using the COVC transaction.

System Action

Initialization sequence is started.

Administrator Action

None.

Destination

Console, Terminal, EYULOG.

EYUVS0901I

Web User Interface server stop requested from terminal.

Explanation

Web User Interface server termination has been requested using the COVC transaction.

System Action

Termination sequence is started.

Administrator Action

None.

Destination

Console, Terminal, EYULOG.

EYUVS0902W

Web User Interface server is currently active.

Explanation

Web User Interface server initialization has been requested using the COVC transaction but the server is already active.

System Action

The request is ignored.

Administrator Action

None.

Destination

Terminal.

EYUVS0903W

Web User Interface server is currently inactive.

Explanation

Web User Interface server termination has been requested using the COVC transaction but the server is already inactive.

System Action

The request is ignored.

Administrator Action
None.

Destination
Console, Terminal.

>**EYUVS0904E**
Web User Interface control transaction command invalid.

Explanation
The specified operation was not understood by the Web User
Interface control transaction (COVC).

System Action
The request is ignored.

Administrator Action
Retry the operation ensuring that the specification is correct.

Destination
Terminal.

EYUVS0905E
Web User Interface control transaction failed.

Explanation
The Web User Interface control transaction suffered an internal
error.

System Action
The request is ignored.

Administrator Action
Collect any abend information, AUXTRACE and dumps, and
contact IBM service.

Destination
Terminal.

EYUVS0906I
Web User Interface control transaction operation complete.

Explanation
The specified operation was carried out successfully.

System Action
Processing continues.

Administrator Action
None.

Destination
Terminal.

EYUVS0907E
Invalid entry. Enter Y or N.

Explanation
An invalid character has been entered as a flag on the Web User
Interface control transaction trace settings panel.

System Action
The request is ignored.

Administrator Action
Correct the field that is in error.

Destination
Terminal.

EYUVS0908E
Web User Interface control transaction requires 3270 terminal for specified display.

Explanation
The requested operation requires a full screen map which is not supported by the current device.

System Action
The request is ignored.

Administrator Action
Retry the operation from a suitable terminal.

Destination
Terminal.

EYUVS0909I
Purge of User (**username1**) requested by User (**username2**).

Explanation
The named user has purged the Web User Interface session for the named user.

System Action
The purged user session will be terminated as soon as possible.

Administrator Action
None.

Destination
EYULOG.

EYUVS0910E
Purge request failed. User (**username**) not found.

Explanation
An attempt to terminate the active Web User Interface session for the named user failed as the user was not signed on.

System Action
The request is ignored.

Administrator Action
None.

Destination
EYULOG.

>EYUVS0911E
Purge request of user (**username**) failed.

Explanation
An attempt to terminate the active Web User Interface session for the named user failed due to an internal error.

System Action
The request is abended.

Administrator Action
Collect any abend information, AUXTRACE and dumps, and contact IBM service.

> **Destination**
> > EYULOG.

EYUVS0912I
> Purge request successful.

> **Explanation**
> > The request to terminate active Web User Interface sessions has been accepted.

> **System Action**
> > The purged user sessions will be terminated as soon as possible.

> **Administrator Action**
> > None.

> **Destination**
> > Terminal.

EYUVS0913E
> Purge request failed.

> **Explanation**
> > The request to terminate an active Web User Interface session failed.

> **System Action**
> > The request may not have been completed.

> **Administrator Action**
> > See associated messages in EYULOG.

> **Destination**
> > Terminal.

EYUVS0914E
> Purge already requested.

> **Explanation**
> > A request to terminate an active user session has been ignored as the session is already terminating.

> **System Action**
> > The request is ignored.

> **Administrator Action**
> > None.

> **Destination**
> > Terminal.

EYUVS0915E
> Purge already requested for user (**username**).

> **Explanation**
> > A request to terminate an active user session has been ignored as the session is already terminating.

> **System Action**
> > The request is ignored.

> **Administrator Action**
> > None.

> **Destination**
> > EYULOG.

EYUVS0916E

Import completed successfully. **nn** objects read.

Explanation

The request to import menu or view set definitions has been successful.

System Action

Processing continues.

Administrator Action

None.

Destination

Terminal.

EYUVS0917E

Import failed.

Explanation

The request to import menu or view set definitions has failed.

System Action

Menu or view set definitions that were successfully completed before the definition in error are retained. The menu or view set definition that contained the error is not imported. Further menu or view set definitions in the data set are ignored.

Administrator Action

See associated messages in EYULOG.

Destination

Terminal.

EYUVS0918E

Invalid TDQ name.

Explanation

The request to import or export menu or view set definitions specified an invalid TDQ name.

System Action

The request is not performed.

Administrator Action

Review status of TDQ and correct as necessary.

Destination

Terminal.

EYUVS0919I

Export completed successfully. **nn** objects written.

Explanation

The request to export menu or view set definitions has been successful.

System Action

Processing continues.

Administrator Action

None.

Destination

Terminal.

EYUVS0920E

Export failed.

Explanation

The request to export menu or view set definitions has failed.

System Action

The output in the export data set is truncated at the point where the error is encountered.

Administrator Action

See associated messages in EYULOG.

Destination

Terminal.

EYUVS0921E

Invalid name pattern.

Explanation

The menu or view set name pattern specified for export was invalid.

System Action

The request is ignored.

Administrator Action

Correct the pattern name before retrying the operation.

Destination

Terminal.

EYUVS0922E

Invalid Object type.

Explanation

The object type specified for export was invalid.

System Action

The request is ignored.

Administrator Action

Correct input before retrying the operation.

Destination

Terminal.

EYUVS0923W

Invalid Object type. ″**objectname**″ is assumed.

Explanation

An invalid object type was specified on the import or export panel.

System Action

The field is set as indicated.

Administrator Action

None.

Destination

Terminal.

EYUVS0924W

Invalid duplicate names field. ″**action**″ is assumed.

Explanation

An invalid duplicate names action was specified on the import panel.

System Action

The field is set as indicated.

Administrator Action

None.

Destination

Terminal.

EYUVS0950I

Web User Interface server PLT start.

Explanation

The Web User Interface PLT start process has been triggered.

System Action

Web User Interface initialization is started.

Administrator Action

None.

Destination

Console.

EYUVS0951I

Web User Interface server PLT shutdown.

Explanation

The Web User Interface PLT shutdown process has been triggered.

System Action

Web User Interface termination is started.

Administrator Action

None.

Destination

Console.

EYUVS0952I

Web User Interface server inactive at PLT shutdown.

Explanation

The Web User Interface PLT shutdown process was triggered but the server was not running.

System Action

None.

Administrator Action

None.

Destination

Console.

EYUVS0953E

Web User Interface server PLT start failed.

Explanation

The Web User Interface PLT start process was unable to start the COVG transaction.

> **System Action**
>> The Web User Interface is not started.
>
> **Administrator Action**
>> Verify Web User Interface installation, including the presence of the CSD resource groups in the group list. Collect AUXTRACE, console log, and any dump information, and contact IBM service if the problem cannot be resolved.
>
> **Destination**
>> Console.

EYUVS0989I
> Dump suppressed.
>
> **Explanation**
>> The abend appears to be a duplicate of a previous abend for which a system dump has already been taken.
>
> **System Action**
>> A system dump is not taken.
>
> **Administrator Action**
>> Collect AUXTRACE, console log, and previous dump information, and contact IBM service.
>
> **Destination**
>> Console.

EYUVS0990I
> **information**
>
> **Explanation**
>> This message contains auxiliary information.
>
> **System Action**
>> None.
>
> **Administrator Action**
>> None.
>
> **Destination**
>> Console.

EYUVS0991S
> Abend recovery failed.
>
> **Explanation**
>> The Web User Interface task was unable to recover from a previous abend.
>
> **System Action**
>> The Web User Interface task terminates.
>
> **Administrator Action**
>> Collect AUXTRACE, console log, and dump information, and contact IBM service.
>
> **Destination**
>> Console.

EYUVS0992S
> Abend **abendCode** in module **moduleName**.

Explanation
>An abend occurred in the specified module.

System Action
>A system dump is taken and the individual user request is abended.

Administrator Action
>Collect AUXTRACE, console log, and dump information, and contact IBM service.

Destination
>Console.

EYUVS0993S
Abend while scanning stack. Stack is probably corrupted.

Explanation
>An error was detected when attempting to collect diagnostic information for a previous abend.

System Action
>The Web User Interface task terminates.

Administrator Action
>Collect AUXTRACE, console log, and dump information, and contact IBM service.

Destination
>Console.

EYUVS0994I
>**dumpTitle**

Explanation
>This message contains the title of a system dump that is about to be taken.

System Action
>A system dump is taken.

Administrator Action
>Collect AUXTRACE, console log, and dump information, and contact IBM service.

Destination
>Console.

EYUVS0995E
System dump request failed.

Explanation
>An attempt to take a system dump to record a previous abend has failed.

System Action
>A dump is not taken and abend processing continues.

Administrator Action
>Collect AUXTRACE, console log, and dump information, and contact IBM service.

Destination
>Console.

EYUVS0996S

Abend **abendCode** System code **systemAbendCode** at Offset **abendOffset**.

Explanation

An abend has occurred during Web User Interface processing.

System Action

Further diagnostic information will follow.

Administrator Action

Collect AUXTRACE, console log, and dump information, and contact IBM service.

Destination

Console.

EYUVS0998I

abendInformation

Explanation

This message contains diagnostic information for a previous abend.

System Action

Abend processing continues.

Administrator Action

Collect AUXTRACE, console log, and dump information, and contact IBM service.

Destination

Console.

EYUVS0999S

WUI failed: **failureString**

Explanation

An internal error occurred during Web User Interface processing.

System Action

Processing will continue, if possible.

Administrator Action

Collect AUXTRACE, console log, and dump information, and contact IBM service.

Destination

Console.

EYUVS1000E

Import encountered unexpected character in record number **nn** of TDQ (**tdqname**).

Explanation

The import process encountered a badly formatted record in the input data set. The exported definitions have probably been corrupted.

System Action

Menu or view set definitions that were successfully completed before the definition in error are retained. The menu or view set definition that contained the error is not imported. Further menu or view set definitions in the data set are ignored.

Administrator Action

Review the import data set to see if it has been damaged. Use

another copy or reexport from source, if available. Collect AUXTRACE, EYULOG and input data set, and contact IBM service.

Destination

EYULOG.

EYUVS1001E

Import string missing from record number **nn** of TDQ (**tdqname**).

Explanation

The import process encountered a badly formatted record in the input data set. The exported definitions have probably been corrupted.

System Action

Menu or view set definitions that were successfully completed before the definition in error are retained. The menu or view set definition that contained the error is not imported. Further menu or view set definitions in the data set are ignored.

Administrator Action

Review the import data set to see if it has been damaged. Use another copy or reexport from source, if available. Collect AUXTRACE, EYULOG and input data set, and contact IBM service.

Destination

EYULOG.

EYUVS1002E

Import unable to obtain version number in record number **nn** of TDQ (**tdqname**).

Explanation

The import process encountered a badly formatted record in the input data set. The exported definitions have probably been corrupted.

System Action

Menu or view set definitions that were successfully completed before the definition in error are retained. The menu or view set definition that contained the error is not imported. Further menu or view set definitions in the data set are ignored.

Administrator Action

Review the import data set to see if it has been damaged. Use another copy or reexport from source, if available. Collect AUXTRACE, EYULOG and input data set, and contact IBM service.

Destination

EYULOG.

EYUVS1003E

Import unable to obtain index number in record number **nn** of TDQ (**tdqname**).

Explanation

The import process encountered a badly formatted record in the input data set. The exported definitions have probably been corrupted.

> **System Action**
>> Menu or view set definitions that were successfully completed before the definition in error are retained. The menu or view set definition that contained the error is not imported. Further menu or view set definitions in the data set are ignored.
>
> **Administrator Action**
>> Review the import data set to see if it has been damaged. Use another copy or reexport from source, if available. Collect AUXTRACE, EYULOG and input data set, and contact IBM service.
>
> **Destination**
>> EYULOG.

EYUVS1004E
> Import found invalid data in record number **nn** of TDQ (**tdqname**).
>
> **Explanation**
>> The import process encountered a badly formatted record in the input data set. The exported definitions have probably been corrupted.
>
> **System Action**
>> Menu or view set definitions that were successfully completed before the definition in error are retained. The menu or view set definition that contained the error is not imported. Further menu or view set definitions in the data set are ignored.
>
> **Administrator Action**
>> Review the import data set to see if it has been damaged. Use another copy or reexport from source, if available. Collect AUXTRACE, EYULOG and input data set, and contact IBM service.
>
> **Destination**
>> EYULOG.

EYUVS1005E
> Import found invalid string in record number **nn** of TDQ (**tdqname**).
>
> **Explanation**
>> The import process encountered a badly formatted record in the input data set. The exported definitions have probably been corrupted.
>
> **System Action**
>> Menu or view set definitions that were successfully completed before the definition in error are retained. The menu or view set definition that contained the error is not imported. Further menu or view set definitions in the data set are ignored.
>
> **Administrator Action**
>> Review the import data set to see if it has been damaged. Use another copy or reexport from source, if available. Collect AUXTRACE, EYULOG and input data set, and contact IBM service.
>
> **Destination**
>> EYULOG.

EYUVS1006E

Import detected missing punctuation in record number **nn** of TDQ
(**tdqname**).

Explanation

The import process encountered a badly formatted record in the
input data set. The exported definitions have probably been
corrupted.

System Action

Menu or view set definitions that were successfully completed
before the definition in error are retained. The menu or view set
definition that contained the error is not imported. Further menu
or view set definitions in the data set are ignored.

Administrator Action

Review the import data set to see if it has been damaged. Use
another copy or reexport from source, if available. Collect
AUXTRACE, EYULOG and input data set, and contact IBM
service.

Destination

EYULOG.

EYUVS1007E

Import found an unknown object type at record number **nn** of TDQ
(**tdqname**).

Explanation

The import process encountered an unknown record identifier in
the input data set. The exported definitions have probably been
corrupted.

System Action

Menu or view set definitions that were successfully completed
before the definition in error are retained. The menu or view set
definition that contained the error is not imported. Further menu
or view set definitions in the data set are ignored.

Administrator Action

Review the import data set to see if it has been damaged. Use
another copy or reexport from source, if available. Collect
AUXTRACE, EYULOG and input data set, and contact IBM
service.

Destination

EYULOG.

EYUVS1008E

Import failed at record number **nn** in TDQ (**tdqname**).

Explanation

The import process has failed due to previously recorded errors.

System Action

Menu or view set definitions that were successfully completed
before the definition in error are retained. The menu or view set
definition that contained the error is not imported. Further menu
or view set definitions in the data set are ignored.

> **Administrator Action**
>> Collect AUXTRACE, EYULOG and input data set, and contact IBM service.
>
> **Destination**
>> EYULOG.

EYUVS1009E
> Import failed at record number **nn** when the end of TDQ (**tdqname**) was unexpectedly encountered.
>
> **Explanation**
>> The import process encountered the end of the input data set before the current menu or view set definition had been completed. The input data set has probably been truncated.
>
> **System Action**
>> Menu or view set definitions that were successfully completed before the definition in error are retained. The menu or view set definition that contained the error is not imported. Further menu or view set definitions in the data set are ignored.
>
> **Administrator Action**
>> Review import data set to see if it has been damaged. Use another copy or reexport from source, if available. Collect AUXTRACE, EYULOG and input data set and contact IBM service.
>
> **Destination**
>> EYULOG.

EYUVS1010E
> Import failed to open TDQ (**tdqname**).
>
> **Explanation**
>> The request to import menu or view set definitions specified an invalid TDQ name, or the specified TDQ could not be opened.
>
> **System Action**
>> The request is not performed.
>
> **Administrator Action**
>> Review the status of the TDQ and correct as necessary.
>
> **Destination**
>> EYULOG.

EYUVS1011E
> Export failed to open TDQ (**tdqname**).
>
> **Explanation**
>> The request to export menu or view set definitions specified an invalid TDQ name, or the specified TDQ could not be opened.
>
> **System Action**
>> The request is not performed.
>
> **Administrator Action**
>> Review the status of the TDQ and correct as necessary.
>
> **Destination**
>> EYULOG.

Glossary

This glossary defines CICSPlex SM terms and abbreviations used in this book with other than their everyday meaning. Terms that are defined in the *IBM Dictionary of Computing*, New York: McGraw-Hill, 1994, are not defined here unless CICSPlex SM usage is different from the meaning given there.

If you cannot find the definition you need, refer to the *Dictionary of Computing* or the *CICSPlex SM Master Index*, SC33-1812.

A

action command. A CICSPlex SM command that affects one or more of the resources represented in a view. Action commands can be issued from either the COMMAND field in the control area of the information display panel or the line command field in a displayed view. Valid action commands are listed with the description of each view. See also *overtype field.*

action definition (ACTNDEF). In real-time analysis, a definition of the type of external notification that is to be issued when the conditions identified in an analysis definition are true.

activity. See *BTS activity.*

adjacent CMAS. A CICSPlex SM address space (CMAS) that is connected to the local CMAS via a direct CMAS-to-CMAS link. Contrast with *indirect CMAS.* See also *local CMAS.*

alter expression. A character string that defines the changes to be made to a resource attribute. An alter expression is made up of one or more attribute expressions.

alternate window. A window to which the results of a hyperlink can be directed. By default, the results of a hyperlink are displayed in the same window from which the hyperlink is initiated. Contrast with *current window.*

alternate window (ALT WIN) field. In the control area of an information display panel, the field in which you can specify an alternate window to receive the results of a hyperlink.

analysis definition. In real-time analysis, a definition of the evaluations to be performed on specified CICS resources, the intervals at which those evaluations are to be performed, and the actions to be taken when a notifiable condition occurs.

analysis group. In real-time analysis, a group of one or more analysis definitions, status definitions, or both. Analysis definitions and status definitions must belong to an analysis group if they are to be installed automatically in a CICS system when that system starts.

analysis point monitoring (APM). In real-time analysis, resource monitoring across multiple CICS systems within a CICSplex that results in a single notification of a condition, rather than one notification for each system. Contrast with *MAS resource monitoring.*

analysis point specification. In real-time analysis, a specification that identifies the CMASs that are to be responsible for analysis point monitoring.

analysis specification. In real-time analysis, a specification that establishes system availability monitoring or MAS resource monitoring within a group of CICS systems.

AOR. Application-owning region.

API. Application programming interface

APM. Analysis point monitoring.

application-owning region (AOR). In a CICSplex configuration, a CICS region devoted to running applications. For dynamic routing, the terms *requesting region, routing region,* and *target region* are used instead of AOR to signify the role of the region in the dynamic routing request.

ARM. Automatic restart manager.

ASU. Automatic screen update.

attribute. See *resource attribute, resource table attribute.*

attribute expression. A reference to a resource table attribute and, in some cases, its value. Attribute expressions are used to build filter expressions, modification expressions, and order expressions.

attribute value. The data currently associated with a resource table attribute. For example, the file attribute OPENSTATUS might have a value of CLOSED.

automatic restart manager (ARM). A recovery function of MVS/ESA 5.2 that provides improved availability for batch jobs and started tasks by restarting them automatically if they end unexpectedly. The affected batch job or started task can be restarted on the same system or on a different one, if the system itself has failed.

automatic screen update (ASU). A CICSPlex SM facility that automatically updates the data in all unlocked windows at user-defined intervals. See also *automatic screen update interval.*

automatic screen update interval. The time interval between one automatic screen update and the next. This interval can be set in the CICSPlex SM user profile or when the ASU facility is turned on. See also *automatic screen update (ASU).*

B

BAS. Business Application Services

batched repository-update facility. A CICSPlex SM facility, invoked from the CICSPlex SM end user interface, for the bulk application of CICSPlex SM definitions to a CMAS data repository.

BTS. CICS business transaction services

BTS activity. One part of a process managed by CICS BTS. Typically, an activity is part of a *business transaction.*

BTS process. A collection of more than one CICS BTS *activities.* Typically, a process is an instance of a *business transaction.*

BTS set. See CICS system group

business application. Any set of CICS resources that represent a meaningful entity to an enterprise or a user (such as, Payroll).

Business Application Services (BAS). The component of CICSPlex SM that provides the ability to define and manage business applications in terms of their CICS resources and associated CICS systems. BAS provides a central definition repository for CICS systems, complete with installation facilities and the ability to restrict a CICSPlex SM request to those resources defined as being part of the business application. See also *business application, scope.*

business transaction. A self-contained business function, for example, the booking of an airline ticket.

C

CAS. Coordinating address space.

CBIPO. Custom-built installation process offering.

CBPDO. Custom-built product delivery offering.

CEDA. A CICS transaction that defines resources online. Using CEDA, you can update both the CICS system definition data set (CSD) and the running CICS system.

CICS Business Transaction Services (BTS). A CICS domain that supports an application programming interface (API) and services that simplify the development of *business transactions.*

CICS system. The entire collection of hardware and software required by CICS. In CICSPlex SM topology, a definition referring to a CICS system that is to be managed by CICSPlex SM. See also *CICSplex, CICS system group.*

CICS system group. A set of CICS systems within a CICSplex that can be managed as a single entity. In CICSPlex SM topology, the user-defined name, description, and content information for a CICS system group. A CICS system group can be made up of CICS systems or other CICS system groups. In CICS business transaction services (BTS), a BTS set, that is the set of CICS regions across which BTS processes and activities may execute. See also *CICSplex, CICS system.*

CICSplex. A CICS complex. A CICSplex consists of two or more CICS regions that are linked using CICS intercommunication facilities. The links can be either intersystem communication (ISC) or interregion communication (IRC) links, but within a CICSplex are more commonly IRC. Typically, a CICSplex has at least one terminal-owning region (TOR), more than one application-owning region (AOR), and may have one or more regions that own the resources being accessed by the AORs. In CICSPlex SM, a management domain. The largest set of CICS regions, or CICS systems, to be manipulated by CICSPlex SM as a single entity. CICS systems in a CICSplex being managed by CICSPlex SM do not need to be connected to each other. See also *CICS system, CICS system group.*

CICSPlex SM. IBM CICSPlex System Manager.

CICSPlex SM address space (CMAS). A CICSPlex SM component that is responsible for managing CICSplexes. A CMAS provides the single-system image for a CICSplex by serving as the interface to other CICSplexes and external programs. There must be at least one CMAS in each MVS image on which you are running CICSPlex SM. A single CMAS can manage CICS systems within one or more CICSplexes. See also *coordinating address space (CAS), managed application system (MAS).*

CICSPlex SM token. Unique, 4-byte values that CICSPlex SM assigns to various elements in the API environment. Token values are used by CICSPlex SM to correlate the results of certain API operations with subsequent requests.

client program. In dynamic routing, the application program, running in the *requesting region*, that issues a remote link request.

CMAS. CICSPlex SM address space.

CMAS link. A communications link between one CICSPlex SM address space (CMAS) and another CMAS or a remote managed application system (remote MAS). CMAS links are defined when CICSPlex SM is configured.

CODB. A CICSPlex SM transaction for interactive, system-level debugging of CMASs and of CICS/ESA, CICS/MVS, and CICS/VSE MASs. CODB must be used only at the request of customer support personnel.

COD0. A CICSPlex SM transaction for interactive, method-level debugging of CMASs and of CICS/ESA, CICS/MVS, CICS/VSE, and CICS for OS/2 MASs. COD0 must be used only at the request of customer support personnel.

COLU. A CICSPlex SM transaction for generating reports about CMAS and local MAS components. COLU must be used only at the request of customer support personnel.

COMMAND field. In the control area of an information display panel, the field that accepts CICSPlex SM, ISPF, and TSO commands. Contrast with *option field*.

command-level interface. A CICSPlex SM API interface that uses the CICS translator to translate EXEC CPSM statements into an appropriate sequence of instructions in the source language.

Common Services. A component of CICSPlex SM that provides commonly requested services (such as GETMAIN, FREEMAIN, POST, and WAIT processing) to other CICSPlex SM components.

communication area (COMMAREA). A CICS area that is used to pass data between tasks that communicate with a given terminal. The area can also be used to pass data between programs within a task.

Communications. A component of CICSPlex SM that provides all services for implementing CMAS-to-CMAS and CMAS-to-MAS communication.

context. A named part of the CICSPlex SM environment that is currently being acted upon by CICSPlex SM. For configuration tasks, the context is a CICSPlex SM address space (CMAS); for all other tasks, it is a CICSplex. See also *scope*.

control area. The top three lines of an information display panel, containing the panel title, the screen update time, the short message area, the COMMAND and SCROLL fields, and the current window (CUR WIN) and alternate window (ALT WIN) fields.

coordinating address space (CAS). An MVS subsystem that provides ISPF end-user access to the CICSplex to be accessed. See also *CICSPlex SM address space, managed application system (MAS)*.

coordinating address space subsystem ID. Identifies the coordinating address space (CAS) which can be up to 4 characters, to be connected to when issuing CICSPlex SM requests. The name of the CAS is installation-dependent, and is defined in the CICSPlex SM user profile.

cross-system coupling facility (XCF). XCF is a component of MVS that provides functions to support cooperation between authorized programs running within a sysplex.

current window. The window to which the results of all commands issued in the COMMAND field are directed, unless otherwise requested. Contrast with *alternate window*.

current window (CUR WIN) field. In the control area of an information display panel, the field that contains the window number of the current window. You can change the number in this field to establish a new current window.

custom-built installation process offering (CBIPO). A product that simplifies the ordering, installation, and service of MVS system control programs and licensed programs by providing them with current updates and corrections to the software that is already integrated.

custom-built product delivery offering (CBPDO). A customized package of both products and service, or of service only, for MVS system control programs and licensed programs.

D

Data Cache Manager. A component of CICSPlex SM that manages logical cache storage for use by other CICSPlex SM components.

data repository. In CICSPlex SM, the VSAM data set that stores administrative data, such as topology and monitor definitions, for a CICSPlex SM address space (CMAS).

Data Repository. A component of CICSPlex SM that provides methods for creating, accessing, updating, and deleting data in the CICSPlex SM data repository. See also *Managed Object Services*.

Database Control (DBCTL). An IMS/ESA facility providing an interface between CICS/ESA and IMS/ESA that allows access to IMS DL/I full-function databases and to data-entry databases (DEDBs) from one or more CICS/ESA systems.

Database 2 (DB2). An IBM licensed program. DB2 is a full-function relational database management system that presents a data structure as a table consisting of a number of rows (or records) and a number of columns.

DBCTL. Database Control.

DB2. Database 2.

derived field. On a monitor view, a field whose value does not come directly from CICS or CICSPlex SM data, but is calculated based on the values in other fields. See also *derived value.*

derived value. A rate, average, or percentage that results from CICSPlex SM processing of CICS statistics.

display area. On an information display panel, the area where windows can be opened to display data. The display area appears below the control area. The bottom two lines of the display area can be used to display the PF key assignments in effect for a CICSPlex SM session.

display attributes. A CICSPlex SM user profile option that controls the appearance of the window information line, field headings, and threshold values in a view.

display command. A CICSPlex SM command that extends the ISPF interface to create and control a multiwindow environment.

distributed program link (DPL). Function of CICS intersystem communication that enables CICS to ship LINK requests between CICS regions.

distributed routing program (DSRTPGM). A CICS-supplied user-replaceable program that can be used to dynamically route:
- CICS BTS processes and activities
- Transactions started by non-terminal related EXEC CICS START commands

DPL. Distributed program link.

DTR. Dynamic transaction routing.

dynamic routing. The automatic routing of a transaction or program, at the time it is initiated, from a requesting region to a suitable target region. Routing terminal data to an alternative transaction at the time the transaction is invoked. To do this, CICS allows the dynamic routing program to intercept the terminal data and redirect it to any system and transaction it chooses. See also dynamic routing program (EYU9XLOP)

dynamic routing program (EYU9XLOP). A user-replaceable CICS program that selects dynamically both the system to which a routing request is to be sent and the transaction's remote name. The alternative to using this program is to make these selections when a remote transaction is defined to CICS (static routing). See also *static routing*

dynamic transaction routing (DTR). The automatic routing of a transaction, at the time it is initiated, from a transaction-owning region (TOR) to a suitable application-owning region (AOR).

E

Environment Services System Services (ESSS). A component of CICSPlex SM that implements the formal MVS/ESA subsystem functions required by the product. ESSS provides cross-memory services, data space management, connection services, and lock management. An ESSS system address space is created at CICSPlex SM initialization and remains in the MVS image for the life of the IPL.

ESSS. Environment Services System Services.

evaluation definition. In real-time analysis, a definition of the resources that are to be sampled. When the result of an evaluation is true, an associated analysis definition is used to determine whether a notifiable condition has occurred.

event. A significant occurrence within the CICSplex or system for which the user has requested notification. For example, the end of processing, a subsystem failure, or any unusual condition in the system could be defined by a user as an event.

event notification. A CICSPlex SM notification of a significant occurrence within a CICSplex or CICS system.

extended diagnostic mode (XDM). A CICSPlex SM online internal diagnostic facility. XDM provides no information about resources managed by CICSPlex SM, and should be turned on only at the request of IBM customer support personnel. XDM can be turned on and off in the CICSPlex SM user profile.

external notification. In RTA, an event notification, generic alert, or operator message issued when a notifiable condition occurs.

F

file-owning region. In a CICSplex configuration, a CICS system devoted to managing CICS file access.

filter expression. A character string that consists of logical expressions to be used in filtering resource table records. A filter expression is made up of one or more attribute expressions.

FOR. File-owning region.

form. The way in which data obtained from a query is presented in a view. See also *query, view*.

G

generic alert. A Systems Network Architecture (SNA) Network Management Vector that enables a product to signal a problem to the network. CICSPlex SM uses generic alerts as part of its interface to NetView.

GMFHS. Graphic Monitor Facility host subsystem.

goal algorithm. In CICSPlex SM's workload balancing, an algorithm used to select an AOR to process a dynamic transaction. Using the goal algorithm, CICSPlex SM selects the AOR that is the least affected by conditions such as short-on-storage, SYSDUMP, and TRANDUMP; is the least likely to cause the transaction to abend; and is most likely to enable the transaction to meet response-time goals set for it using the Workload Manager component of MVS/ESA SP 5.1. Contrast with *queue algorithm*.

Graphic Monitor Facility host subsystem. A NetView feature that manages configuration and status updates for non-SNA resources.

H

hyperlink. A direct connection between the data in one CICSPlex SM view and a view containing related information. For example, from a view that lists multiple CICS resources, there may be a hyperlink to a detailed view for one of the resources. To use a hyperlink, place the cursor in the data portion of a hyperlink field and press Enter.

hyperlink field. On a CICSPlex SM view, a field for which a hyperlink is defined. The headings of hyperlink fields are shown in high intensity or color, depending on the terminal type.

I

IBM CICSPlex System Manager for MVS/ESA (CICSPlex SM). An IBM CICS system-management product that provides a single-system image and a single point of control for one or more CICSplexes that can be installed on heterogeneous operating systems.

indirect CMAS. A CICSPlex SM address space (CMAS) that the local CMAS can communicate with via an adjacent CMAS. There is no direct CMAS-to-CMAS link between the local CMAS and an indirect CMAS. Contrast with *adjacent CMAS*. See also *local CMAS*.

information display panel. The panel that supports the CICSPlex SM window environment. It consists of a control area and a display area. CICSPlex SM views are displayed in windows within the display area of this panel.

information display parameters. A CICSPlex SM user profile option that defines the initial screen configuration, how frequently the screen will be updated by ASU, and how long a window will wait for command processing to complete before timing out.

installation verification procedure (IVP). A procedure distributed with a system that tests the newly

generated system to verify that the basic facilities of the system are functioning correctly.

interregion communication. Synonym for *multiregion operation*.

intersystem communication (ISC). Communication between separate systems by means of SNA networking facilities or by means of the application-to-application facilities of an SNA access method.

intertransaction affinity. A relationship between CICS transactions, usually the result of the ways in which information is passed between those transactions, that requires them to execute in the same CICS region. Intertransaction affinity imposes restrictions on the dynamic routing of transactions.

IRC. Interregion communication.

ISC. Intersystem communication.

IVP. Installation verification procedure.

K

Kernel Linkage. A component of CICSPlex SM that is responsible for building data structures and managing the interfaces between the other CICSPlex SM components. The environment built by Kernel Linkage is known as the method call environment.

L

line command field. In a CICSPlex SM view, the 3 character field, to the left of the data, that accepts action commands.

local CMAS. The CICSPlex SM address space (CMAS) that a user identifies as the current context when performing CMAS configuration tasks.

local MAS. A managed application system (MAS) that resides in the same MVS image as the CICSPlex SM address space (CMAS) that controls it and that uses the Environment Services System Services (ESSS) to communicate with the CMAS.

logical scope. A set of logically related CICS resources that are identified in a CICSPlex SM resource description. A logical scope can be used to qualify the context of a CICSPlex SM request.

M

maintenance point. A CICSPlex SM address space (CMAS) that is responsible for maintaining CICSPlex SM definitions in its data repository and distributing them to other CMASs involved in the management of a CICSplex. See also *data repository*.

Major object descriptor block (MODB). In CICSPlex SM, a control structure built by Kernel Linkage during initialization of a CICSPlex SM component that contains a directory of all methods that make up that component. The structure of the MODB is the same for all components.

Major object environment block (MOEB). In CICSPlex SM, a control structure built by Kernel Linkage during initialization of a CICSPlex SM component and pointed to by the MODB. The MOEB stores information critical to a CICSPlex SM component and anchors data used by the component. The structure of the MOEB is unique to the component it supports.

MAL. Message argument list.

managed application system (MAS). A CICS system that is being managed by CICSPlex SM. See *local MAS, remote MAS.*

managed object. A CICSPlex SM-managed CICS resource or a CICSPlex SM definition represented by a resource table. A view is based on a single managed object.

Managed Object Services. A subcomponent of the Data Repository component of CICSPlex SM that translates a request for data (from real-time analysis, for example) into the method calls required to obtain the data.

MAS. Managed application system.

MAS agent. A CICSPlex SM component that acts within a CICS system to provide monitoring and data collection for the CICSPlex SM address space (CMAS). The level of service provided by a MAS agent depends on the level of CICS the system is running under and whether it is a local or remote MAS. See also *CICSPlex SM address space (CMAS), local MAS, remote MAS.*

MAS resource monitoring (MRM). In real-time analysis, resource monitoring at the CICS system level; it results in one notification of a condition for each system in which it occurs. If the same condition occurs in three CICS systems where MAS resource monitoring is active, three notifications are issued. Contrast with *analysis point monitoring.*

Message argument list (MAL). In CICSPlex SM, a data structure passed between methods using Kernel Linkage method call services.

message line. On an information display panel, the line in the control area where a long message appears when the HELP command is issued in response to a short message. The message line temporarily overlays the CURR WIN and ALT WIN fields.

Message Services. A component of CICSPlex SM that provides services for building and issuing MVS/ESA console messages to other CICSPlex SM components.

meta-data. Internal data that describes the structure and characteristics of CICSPlex SM managed objects.

method. (Action.) An application programming interface (API) instruction that resolves into an EXEC CICS command, issued against one or more resources in one or more CICS systems, within the current context and scope.

method. In CICSPlex SM, one of the programs that make up a CICSPlex SM component. See also *message argument list (MAL).*

mirror transaction. CICS transaction that recreates a request that is function shipped from one system to another, issues the request on the second system, and passes the acquired data back to the first system.

MODB. Major object descriptor block.

modification expression. A character string that defines the changes to be made to a resource attribute. A modification expression is made up of one or more attribute expressions.

MOEB. Major object environment block.

monitor definition. A user-defined statement of the specific resource occurrences (such as the program named PAYROLL) to be monitored by CICSPlex SM. A monitor definition can either be linked to a monitor specification as part of a monitor group or be installed directly into an active CICS system. See also *monitor group, monitor specification.*

monitor group. A user-defined set of CICSPlex SM monitor definitions that can either be linked to a monitor specification for automatic installation or be installed directly into an active CICS system. See also *monitor definition, monitor specification.*

monitor interval. The number of minutes that are to elapse before the statistics counters containing accumulated resource monitoring data are automatically reset. This value is part of a CICSplex definition and affects all of the CICS systems and CICS system groups associated with that CICSplex. See also *period definition, sample interval.*

monitor specification. A user-defined statement of the types of resources (such as programs) to be monitored by CICSPlex SM and how often data should be collected. A monitor specification is associated with a CICS system and is automatically installed each time the CICS system starts up. See also *monitor definition, monitor group.*

Monitoring Services. A component of CICSPlex SM that is responsible for monitoring resources within a

CICS system and making the collected data available to other CICSPlex SM components.

MRM.   MAS resource monitoring.

MRO.   Multiregion operation.

MSM.   MultiSystem Manager.

multiregion operation (MRO).   Communication between CICS systems without the use of SNA network facilities. Synonymous with *interregion communication.*

MultiSystem Manager.   An object-oriented, graphical systems management application that runs under NetView for MVS.

MVS image.   A single instance of the MVS operating system.

MVS system.   An MVS image together with its associated hardware.

N

NetView.   An IBM network management product that can provide rapid notification of events and automated operations. CICSPlex SM can be set up to send generic alerts to NetView as part of its event processing capabilities.

NetView Graphic Monitor Facility (NGMF).   A function of the NetView program that provides the network operator with a graphic topological presentation of a network controlled by the NetView program and that allows the operator to manage the network interactively.

NetView program.   An IBM licensed program used to monitor and manage a network and to diagnose network problems.

NGMF.   NetView Graphic Monitor Facility.

notification.   A message that is generated asynchronously by a CICSPlex SM managed object to describe an event related to the object.

O

option field.   On a CICSPlex SM menu, the field in which you can specify an option number or letter. Contrast with *command field.*

order expression.   A character string that defines either the attributes to be used in sorting resource table records, or the attributes to be included in a resource table view. An order expression is made up of one or more attribute expressions.

override expression.   A character string that defines the changes to be made to a resource attribute. An override expression is made up of one or more attribute expressions.

overtype field.   On a CICSPlex SM view, a field containing a value that can be changed by typing a new value directly into the field. Values that can be overtyped are shown in high intensity or color, depending on the terminal type. Acceptable values for overtype fields are listed with the description of each view. See also *action command.*

P

parameter expression.   A character string that defines the parameters required for an action to complete or a definition to be processed.

parameter repository.   In CICSPlex SM, a data set that stores cross-system communication definitions that allow one coordinating address space (CAS) to communicate with other CASs.

period definition.   A user-defined range of hours and minutes and the time zone to which that range applies. A period definition is used to indicate when an action, such as resource monitoring, is to occur. See also *monitor interval, sample interval.*

PlexManager.   A service utility that can be used to manage the communication connections between multiple coordinating address spaces (CASs) and between a CAS and its associated CICSPlex SM address spaces (CMASs) and CICSplexes.

process.   See *BTS process*

processing thread.   A connection between an application program and the CICSPlex SM API. A program can establish multiple processing threads, but each one is considered a unique API user; no resources can be shared across the boundary of a thread.

pseudoconversation.   A CICS application designed to appear to the user as a continuous conversation, but that consists internally of multiple separate tasks.

Q

query.   A request for specific data that is generated by a view command. See also *form, view.*

queue algorithm.   In CICSPlex SM's workload balancing, an algorithm used to select an AOR to process a dynamic transaction. Using the queue algorithm, CICSPlex SM selects the AOR that has the shortest queue of transactions (normalized to MAXTASKs) waiting to be processed; is the least affected by conditions such as short-on-storage,

SYSDUMP, and TRANDUMP; and is the least likely to cause the transaction to abend. Contrast with *goal algorithm*.

Queue Manager. A component of CICSPlex SM that creates and manages queues of data in a cache that is shared by a CMAS and its local MASs.

R

RACF. Resource Access Control Facility.

real-time analysis (RTA). A component of CICSPlex SM that is responsible for monitoring the status of a CICS system or resource against its desired status, and issuing one or more external notifications when deviations occur.

record pointer. An internal indicator of the next resource table record to be processed in a result set.

related scope. A CICS system where resources defined to CICSPlex SM as remote should be assigned and, optionally, installed as local resources. See also *target scope*.

remote MAS. A managed application system (MAS) that uses MRO or LU 6.2 to communicate with the CICSPlex SM address space (CMAS) that controls it. A remote MAS may or may not reside in the same MVS image as the CMAS that controls it.

requesting region. The region in which a dynamic routing request originates. For dynamic transaction routing and inbound client dynamic program link requests, this is typically a TOR; for dynamic START requests and peer-to-peer dynamic program link requests, this is typically an AOR.

resource. Any physical or logical item in a CICS system, such as a transient data queue, a buffer pool, a file, a program, or a transaction.

Resource Access Control Facility (RACF). An IBM licensed program that provides for access control by identifying and verifying the users to the system, authorizing access to protected resources, logging any detected unauthorized attempts to enter the system, and logging the detected accesses to protected resources.

resource assignment. A user-defined statement that selects resource definitions to be assigned to CICS systems and, optionally, specifies resource attributes to override those definitions. A resource assignment applies to a single resource type and must be associated with a resource description. See also *resource definition, resource description*.

resource attribute. A characteristic of a CICS resource, such as the size of a buffer pool.

resource definition. In CICSPlex SM, a user-defined statement of the physical and operational characteristics of a CICS resource. Resource definitions can be associated with resource descriptions as part of a resource group. See also *resource description, resource group*.

resource description. A user-defined set of CICSPlex SM resource definitions that can be automatically installed in CICS systems and named as a logical scope for CICSPlex SM requests. Resource descriptions represent the largest set of CICS resources that can be managed by CICSPlex SM as a single entity. A resource description can be associated with one or more resource assignments. See also *logical scope, resource assignment, resource definition*.

resource group. A user-defined set of CICSPlex SM resource definitions. A resource group can be associated with resource descriptions either directly or by means of resource assignments. See also *resource assignment, resource definition, resource description*.

Resource Object Data Manager (RODM). A component of the NetView program that operates as a cache manager and that supports automation applications. RODM provides an in-memory cache for maintaining real-time data in an address space that is accessible by multiple applications.

resource table. The external representation of a CICSPlex SM managed object. A resource table defines all the attributes, or characteristics, of a managed object.

resource table attribute. A characteristic of a CICSPlex SM managed object, as represented by a field in a resource table.

resource type. A group of related resources, such as files.

result set. A logical group of resource table records that can be accessed, reviewed, and manipulated by an API program.

retention period. For a monitored CICS system, the period of time for which monitor data is retained after the system becomes inactive. If a system is being monitored, becomes inactive, and remains inactive beyond the specified retention period, the monitor data is discarded. If the system becomes active before the retention period expires, the monitor data gathered before the system became inactive is retained, and monitoring continues.

RODM. Resource Object Data Manager.

routing region. The region in which the decision is made as to which is the most suitable target region for a dynamic routing request. For dynamic transaction routing, dynamic terminal-related START requests, and inbound client dynamic program link requests, this is

typically a TOR; for non-terminal-related START requests, dynamic peer-to-peer program link requests, and CICS BTS activities, this is typically an AOR.

RTA.   real-time analysis.

run-time Interface.   A CICSPlex SM API interface that accepts commands in the form of text strings and generates the appropriate API calls. The run-time interface supports programs written as REXX EXECs.

S

SAM.   System availability monitoring.

sample interval.   The duration, in seconds, between occurrences of data collection for a specific resource type. See also *monitor interval, period definition, resource type.*

scope.   A named part of the CICSPlex SM environment that qualifies the context of a CICSPlex SM request. The scope can be the CICSplex itself, a CICS system, a CICS system group, or any set of CICS resources that are defined as a logical scope in a CICSPlex SM resource description. For configuration tasks, where the context is a CICSPlex SM address space (CMAS), the scope is ignored. When you are applying security, scope must be a single CICS system or CICSplex. It cannot be a CICS system group or any combination of individual CICSplexes or CICS systems. See also *context, logical scope.*

screen configuration.   A user-defined, named layout of windows and the context, scope, view, and sort order associated with each. The initial configuration to be displayed when CICSPlex SM is accessed can be identified on the user profile.

screen repository.   In CICSPlex SM, a data set that stores screen configuration definitions created by the SAVESCR display command. See also *screen configuration.*

selection list.   In CICSPlex SM, a data set that stores cross-system communication definitions that allow one coordinating address space (CAS) to communicate with other CASs.

selection list.   A list of named items, such as views or screen configurations, from which one can be selected.

server program.   In dynamic routing, the application program specified on the link request, and which is executed in the *target region.*

service point.   One of the combinations of products and contexts that is known to the coordinating address space (CAS) to which you are connected. See also *context.*

session control parameters.   A CICSPlex SM user profile option that sets the coordinating address space

(CAS) subsystem ID used for accessing CICSPlex SM views and controls the extended diagnostic mode (XDM).

short message area.   In the control area of an information display panel, that part of the title line that displays short messages.

single point of control.   The ability to access and manage all CICS systems and their resources in a CICSplex from a single terminal or user session.

single system image.   The collection and presentation of data about multiple CICS systems as though they were a single CICS system. In CICSPlex SM, the single-system image is provided by the CICSPlex SM address space (CMAS).

specification.   See *analysis specification, monitor specification, workload specification.*

Starter Set.   A part of CICSPlex SM comprising sample CICSPlex SM definitions and sample JCL. The Starter Set samples may be used as supplied for educational purposes. They may also be copied and adapted for the customer environment.

static routing.   Non-dynamic routing. The routing request is routed to a predetermined system. Static transaction routing occurs when NO is specified is the Dynamic field in either the transaction definition or the progam definition. In both cases, the request is routed to the system named in the Remote Sysid field.

status definition.   In real-time analysis, a definition of a user-written program to be invoked at specified intervals to evaluate the status of a non-CICS resource.

summarized result set.   A special type of result set that is produced by grouping, or summarizing, the resource table records in a result set. See also *result set.*

summary expression.   A character string that consists of one or more summary options and the resource table attributes to which they apply. See also *summary option.*

summary option.   A value that indicates how the attribute values in a resource table are to be summarized.

sysplex.   A set of MVS systems communicating and cooperating with each other through specific multisystem hardware components and software services to process customer workloads.

system availability monitoring (SAM).   In real-time analysis, the monitoring of CICS systems to determine whether: they are active during their defined hours of operation; they are experiencing a short-on-storage, SYSDUMP, TRANDUMP, MAXTASK, or STALL condition. If a CICS system becomes inactive or one of the specified conditions occurs, an external notification is issued.

system image. The representation of a program and its related data as it exists in main storage.

T

target region. The region selected from a set of target regions as the most suitable region in which to execute the work request. For all dynamic routing requests, this is typically an AOR.

target scope. A CICS system or CICS system group where resources defined to CICSPlex SM should be assigned and, optionally, installed. See also *related scope.*

temporary maintenance point. A CICSPlex SM address space (CMAS) that serves as the maintenance point when the identified maintenance point is unavailable. See also *maintenance point.*

terminal-owning region. In a CICSplex configuration, a CICS region devoted to managing the terminal network. For dynamic routing, the terms *requesting region* and *routing region* are used instead of TOR to signify the role of the region in the dynamic routing request.

thread. See *processing thread.*

time-period definition. A user-defined range of hours and minutes, and the time zone to which that range applies. A time-period definition is used to indicate when an action, such as resource monitoring, is to occur.

token. See *CICSPlex SM token, user token.*

topology. An inventory of CICS and CICSPlex SM resources, and a map of their relationships. CICSPlex SM supports the definition of resource and system topology.

topology definition. A named subset of CICS and CICSPlex SM resources. Topology definitions are user-created and can include CICSplexes, CICS systems, and CICS system groups.

Topology Services. A component of CICSPlex SM that is responsible for maintaining topology information about CICSplexes and resources, and making it available to other CICSPlex SM components.

TOR. Terminal-owning region.

Trace Services. A component of CICSPlex SM that provides other CICSPlex SM components with the ability to write trace records to the CICS trace table and trace data sets. Trace Services also writes trace records created by a MAS to the trace table and data set of the managing CMAS.

transaction group. A user-defined, named set of transactions that determines the scope of workload balancing and the affinity relationships between transactions.

U

user token. Unique, 1- to 4-byte values that an API user can assign to asynchronous requests. User token values are not used by CICSPlex SM; they are simply held until the request is complete and then returned to the user.

V

view. In the CICSPlex SM API, a temporary, customized form of a resource table. A view can consist of some or all of the resource table attributes in any order. In the CICSPlex SM ISPF end-user interface, a formatted display of selected data about CICS resources or CICSPlex SM definitions. The data in a view is obtained from a query and can be presented in one or more forms. The data can be limited to a subset of CICSplex resources or definitions by establishing a context and scope.

view command. A CICSPlex SM command that displays a view in a window of the display area. The name of the view displayed matches the name of the view command. See also *view.*

W

window. In CICSPlex SM, a subdivision of the display area. The results of any CICSPlex SM view or display command are directed to a single window, which is the current window by default. Contrast with *view.* See also *current window, alternate window.*

window identifier. On a window information line, the field that identifies the window. A window identifier consists of a one-character status code and a number in the range 1 through 20.

window information line. The top line of each window in the display area. It includes the window identifier, the name of the view displayed in the window, the context and scope in effect, the date and time when the view was last refreshed, and the product name.

window number. A number assigned by CICSPlex SM to a window when it is opened. The window number is the second part of the window identifier on the window information line.

window status code. A one-character code that indicates whether a window is ready to receive commands, is busy processing commands, is not to be updated, or contains no data. It also indicates when an

error has occurred in a window. The window status code is the first character of the window identifier on the window information line.

WLM. Workload Manager.

workload. The total number of transactions that a given CICSplex is intended to process in a specific period. For example, a workload could be expressed as a number of transactions per hour, or per day. In CICSPlex SM, a named set of transactions and CICS systems, acting as requesting regions, routing regions, and target regions that form a single, dynamic entity.

workload balancing. The technique of balancing a workload across multiple target regions that are capable of processing the work.

workload definition. A user-defined statement of the transaction groups associated with a CICS system that is an AOR. A workload definition can either be linked to a workload specification as part of a workload group or be installed directly into an active workload. See also *workload group, workload specification.*

workload group. A user-defined set of CICSPlex SM workload definitions that can either be linked to a workload specification for automatic installation or be installed directly into an active workload. See also *workload definition, workload specification.*

Workload Manager (WLM). A component of CICSPlex SM that is responsible for managing the transaction workload in a CICSplex through the use of dynamic transaction routing.

workload separation. The technique of separating a workload into discrete parts, and allocating specific transactions to specific AORs.

workload specification. A user-defined statement that identifies a workload and a set of CICS systems acting as AORs. A workload specification also provides default management criteria for transactions that are not defined to CICSPlex SM. It is associated with a CICS system that is a TOR and is automatically installed each time the CICS system starts up. See also *workload definition, workload group.*

X

XCF. Cross-system coupling facility of MVS/ESA.

XDM. Extended diagnostic mode

Index

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