# CA SYSVIEW® Performance Management

**User Guide** 

Release 13.9



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## **CA Technologies Product References**

This document references the following CA Technologies products:

- CA Datacom®/DB (CA Datacom/DB)
- CA Easytrieve® Report Generator (CA Easytrieve)
- CA MIA Tape Sharing (CA MIA)
- CA MII Data Sharing (CA MII)
- CA MIM™ Resource Sharing (CA MIM)
- CA OPS/MVS® Event Management and Automation (CA OPS/MVS)
- CA Roscoe® Interactive Environment (CA Roscoe)
- CA Graphical Management Interface (CA GMI)
- CA SYSVIEW® Performance Management (CA SYSVIEW)
- CA SYSVIEW® Performance Management CA Datacom® Option (CA SYSVIEW CA Datacom Option)
- CA SYSVIEW® Performance Management Option for CICS (CA SYSVIEW Option for CICS)
- CA SYSVIEW® Performance Management Option for IMS (CA SYSVIEW Option for IMS)
- CA SYSVIEW® Performance Management Option for TCP/IP (CA SYSVIEW Option for TCP/IP)
- CA SYSVIEW® Performance Management Option for WebSphere MQ (CA SYSVIEW Option for WebSphere MQ)
- CA SYSVIEW® Performance Management for CA Application Performance Management (CA SYSVIEW for CA APM)

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## **Documentation Changes**

The following documentation updates have been made since the last release of this documentation:

- Updated the <u>Primary and Function Commands</u> (see page 50) section.
- Updated the <u>Job Queues Display</u> (see page 106) section.
- Updated the <u>Tasks Performed from the DATACOM System Activity Display</u> (see page 148) section.

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# **Chapter 1: Overview**

This section contains the following topics:

What Is CA SYSVIEW (see page 15)

Performance Monitor (see page 17)

**Command Facility** (see page 18)

Interfaces (see page 19)

**User Interface** (see page 19)

The Options (see page 20)

**Base Components** (see page 20)

Toolkit and Utilities (see page 21)

The Options in More Detail (see page 21)

The Components in More Detail (see page 34)

## What Is CA SYSVIEW

This guide provides basic information for all users who are new to CA SYSVIEW and want to get started using it right away. In addition, the guide provides an overview of basic tasks you perform when you are using the resource displays. Users who work with those resources can perform these basic tasks and apply the knowledge they gain to their everyday work.

CA SYSVIEW is a performance monitoring and management tool for your z/OS system environment. Using the full-screen displays, operators, systems programmers, performance analysts, and end users can monitor and manage the following resources:

#### **Options**

- CA SYSVIEW Option for z/OS (Base)
- CA SYSVIEW Option for CICS
- CA SYSVIEW Option for WebSphere MQ
- CA SYSVIEW Option for IMS
- CA SYSVIEW CA Datacom Option
- CA SYSVIEW Event Capture Option
- CA SYSVIEW for TCP/IP Option
- CA SYSVIEW for CA APM

#### Components

- CA SYSVIEW for CA Insight DPM for DB2 component
- CA MIM component
- CA Roscoe component
- Cross-System component
- System Condition Monitor (SCM) component
- UNIX System Services (USS) component

In addition to its monitoring and analysis tools, CA SYSVIEW allows authorized users to dynamically change the system to avoid costly outages and unscheduled IPLs.

**Note:** References to the MVS and z/OS operating systems throughout this guide pertain to the supported versions of z/OS operating systems.

## Monitoring and Management for z/OS

#### CA SYSVIEW:

- Combines many displays for system resources with a powerful command facility that lets you take appropriate actions in managing your z/OS environment.
- Enables, from a single session, the monitoring of, but not limited to, the following:
  - Overall z/OS system activity
  - DASD and CPU usage
  - I/O rates and storage usage of a particular address space
  - CICS task and transaction details
  - A selected CA Datacom/DB MUF
  - A WebSphere MQ queue
  - An IMS region
  - TCP/IP configuration, and more.
- Provides the ability to:
  - Fully manage JES2 resources and jobs
  - Show the system configuration and definitions
- Provides the Cross-System Resource Monitoring facility. This facility lets you view, monitor, and manage multiple z/OS images remotely from one interface without using a session manager.

- Provides a System Condition Monitor (SCM), which is a color-coded, high-level summary screen of resources that are currently being monitored. SCM uses intelligent modules (IMODs) written in compiled REXX with additional CA supplied functions, or IMODs, to communicate with monitored subsystems. For more IMOD information, see the Administration Guide.
- Provides a System Overview menu, which lets you display an overview of the current z/OS system status. This component enhances the monitoring of all CA SYSVIEW commands and functions

## **Customize and Secure the Displays and Commands**

In addition to its vast monitoring capabilities, you can:

- Dynamically change your systems and environments.
  - Using CA SYSVIEW commands, you can initiate actions such as altering, deleting, or canceling system resources.
- Visualize key resources using graphical displays.
  - Graphical displays show resource usage and let you visualize key resources. You can select or sort data based on real-time values in each column.
- Obtain information from displays.
  - A batch interface and a REXX API are also provided to make information available programmatically and to assist automation.
  - **Note:** For more information, see the chapters "Using the Batch Interface" and "Using the Application Programming Interface" in the *Administration Guide*.
- Secure your displays and commands.
  - You can fully secure access to the displays and use of the command set.
- Expand the product.
  - You can easily expand CA SYSVIEW to keep current with the ever-changing systems and new environments that you manage. Development of new components never stops.

## **Performance Monitor**

The CA SYSVIEW data collection and monitoring functions let you:

- Customize the data you collect and how often it is collected
- Activate the CA SYSVIEW performance monitoring by setting options in parameter files

## **Threshold-based Alerts**

CA SYSVIEW issues alerts if a resource exceeds a usage limit or is in an undesirable state. You can set the thresholds by assigning values that issues an alert when the following scenarios occur:

- The percentage of CPU usage is greater than 90
- The amount of free common storage is less than 256 KB
- The CICSPROD is in the INACTIVE state
- The WebSphere MQ channel is in the STOPPED state

The THRESH command displays the current z/OS threshold values, which you can modify by overtyping the entry. The ALERTS command displays z/OS system data collection exception alerts for both warning and problem thresholds.

When a threshold value is exceeded, CA SYSVIEW logs the event and issues a warning message. The message could trigger automated operations using REXX programs and CA OPS/MVS, when installed.

## **Command Facility**

The CA SYSVIEW powerful and comprehensive command facility lets you monitor and manage your z/OS environment using over 700 commands. Extensive online help is provided for each command.

The command facility combines with navigational features, including:

- Hierarchical menus
- Fast-path commands
- Drill down using cursor point-and-shoot

## **Interfaces**

CA SYSVIEW comes with many interfaces. You can run and access it from environments including VTAM, TSO, ISPF, CICS, or CA Roscoe.

The following interfaces are provided:

**3270** 

Use the local 3270 device interface to run CA SYSVIEW in a dedicated mode from any locally attached 3270 device. This interface makes it possible for you to use CA SYSVIEW even when TSO, VTAM, and JES2 are not active.

Batch

Run CA SYSVIEW as a batch job.

■ API

Use the application programming interface to obtain information from CA SYSVIEW displays for use in other programs. You access the API using TSO/E REXX.

CA SYSVIEW Option for CICS Monitor Exit Interface

Customize your CICS applications to pass information to CA SYSVIEW.

Console

Execute CA SYSVIEW commands with the output displayed on the console.

■ Terminal Interfaces

Run and access CA SYSVIEW from the following 3270 Terminal Interfaces: VTAM, TSO, ISPF, CICS, and CA Roscoe.

GUI Interfaces

CA SYSVIEW using CA Graphical Management Interface (CA GMI) now provides a GUI interface.

## **User Interface**

CA SYSVIEW provides a flexible and easy-to-use user interface, which makes problem determination intuitive.

Because the displays are menu-driven, they are easy to navigate. You can select a display by name, number, or cursor position.

You are not limited to using menus. You can issue a CA SYSVIEW command by name or by its synonym from the option or command input entry area of any display.

You can customize the format of the displays yourself by setting up a profile.

Online help is available for every display and command. For the displays, the online help is cursor sensitive so that you can easily obtain information for each field. For the commands, the online help provides complete command syntax.

## **The Options**

CA SYSVIEW consists of the following Options:

- CA SYSVIEW Option for z/OS
- CA SYSVIEW Option for CICS
- CA SYSVIEW Option for IMS
- CA SYSVIEW Option for WebSphere MQ
- CA SYSVIEW CA Datacom Option
- CA SYSVIEW Event Capture Option
- CA SYSVIEW Option for TCP/IP
- CA SYSVIEW for CA APM

## **Base Components**

The base CA SYSVIEW product consists of the CA SYSVIEW Option for z/OS, which includes monitoring and management capabilities for the following z/OS environments:

- CA MIM
- JES2 and JES3, which includes the job and output management feature for end users
- Workload Manager
- UNIX System Services
- CA Roscoe
- CA SYSVIEW GUI enabled with CA GMI

The base product also includes the z/OS Toolkit and Utilities, which let you change the z/OS system environment without having to restart or IPL. The Toolkit and Utilities consist of an easy-to-use interface for issuing JES commands.

## **Toolkit and Utilities**

Each component has its own toolkit and utilities. They let you proactively manage your systems by issuing CA SYSVIEW commands to initiate actions such as altering, deleting, or canceling system resources. An interface is also provided to operator commands.

## The Options in More Detail

The following sections explore some of the monitoring and management capabilities within each option.

## Option for z/OS

The CA SYSVIEW Option for z/OS lets you monitor your z/OS system, JES2, Workload Manager, and UNIX System Services resources.

The following system resources are monitored:

- System status, including:
  - Number of active address spaces
  - CPU usage for z/OS, PR/SM, LPARs
  - Enqueue conflicts
  - Exception alerts
  - System console, log, and master trace table
  - Reserved DASD devices
  - Availability of VTAM applications
- Devices, including:
  - Device allocation status
  - Catalogs
  - I/O configurations
  - DASD and tape units
  - Volume information (VTOC and extents)
  - Cache controllers

- Storage, including:
  - Common storage: CSA, ECSA, SQA, ESQA, orphaned
  - Data spaces
  - Expanded storage
  - Page and swap data sets
  - Real storage frames
  - Private storage
- Sysplex, including:
  - Automatic Restart Manager (ARM)
  - Couple data sets
  - Groups and members
  - Paths
  - Pending messages
  - Systems in the sysplex
- Coupling Facility, including:
  - Configuration
  - I/O paths
  - Processors
  - Structures
  - Users
- Address spaces, including:
  - Allocated data sets
  - Allocated devices
  - Loaded modules
  - Storage-common, expanded, private, real, pages
  - Tasks

#### z/OS Toolkit

The z/OS Toolkit and Utilities let you:

- Manage virtual and real storage, including:
  - Display storage by address or symbol
  - Map storage to control block or DSECT
  - Alter storage of any type
- Display and alter DASD records for:
  - Data sets: extents, PDS member, and CSECT name
  - JES spool
  - Volumes: all extents, VTOC, VTOC index, Volume labels

## **System Configuration Toolkit and Utilities**

In addition, you can dynamically modify the following resource definitions using the following System Configuration Toolkit and Utilities actions:

#### APF data sets

You can use add, delete, and verify actions for this resource definition.

#### **Dump data sets**

You can use add, clear, and delete actions for this resource definition.

#### Linklist data sets

You can use add, delete, and rebuild actions for this resource definition.

#### Link pack area

You can use load, delete, enable, and disable actions for this resource definition.

#### SMF data sets

You can use dump and switch actions for this resource definition.

#### **Subsystem entries**

You can use add and delete actions for this resource definition.

#### **SVC** table

You can use add, delete, and replace actions for this resource definition.

## **JES Feature**

The JES feature of the CA SYSVIEW Option for z/OS supports both JES2 and JES3 and is comprised of these features:

- Job Management lets you monitor and manage:
  - Active address spaces
  - Input/output queues
  - Initiators
  - Input job priorities
  - Job classes
- Output Management lets you monitor and manage:
  - Job summary
  - Output files
  - Job classes
  - Output classes
  - Output descriptors
  - Output queues
  - Spool volumes
  - SYSLOG
- Device Management lets you view and control devices specific to JES such as:
  - Internal readers
  - NJE and RJE lines
  - Nodes
  - Offloaders
  - Printers
  - Punches
  - Readers
  - Spool volumes

- Resource Definitions let you view the following information:
  - Resource usage overview, such as JOEs, JQEs, and JES buffers
  - Logon information
  - Network paths
  - Remote devices
  - VTAM sessions

#### **JES Toolkit**

The JES Toolkit lets you manage the following JES resources using the following actions:

#### Jobs

You can use the cancel, force, and release actions for this JES resource.

#### **Initiators**

You can use the start, stop, and halt actions for this JES resource.

## Output

You can use the delete and release actions for this JES resource.

#### **Printers**

You can use the start, stop, and halt actions for this JES resource.

## Reader and punch

You can use the start, stop, and halt actions for this JES resource.

### **Spool volumes**

You can use the cancel and format actions for this JES resource.

## **Option for CICS**

The CA SYSVIEW Option for CICS monitors all supported releases of CICS. The CICS displays show:

- Status information, including:
  - Active and suspended tasks: transactions running on the system
  - Degradation wait analysis: where transactions have been spending most of their time, which provides a bottleneck analysis
  - CICS domains
  - Dump statistics
  - Enqueues and enqueue pools
  - Automatic initiate descriptors (AIDS)
  - Interval control elements (ICE)
- Storage information, including:
  - Dynamic Storage Areas (DSAs)
    - Contains extents, subpools, and elements.
  - Subspace areas
    - Provides transaction isolation. The display shows who is using which subspaces.
  - Temporary storage, such as CSA
    - Is often overlooked after allocation.

- Information about the following CICS resources:
  - Global user exits
  - Files
  - Journals/logs
  - Kernel tasks
  - LSR pools
  - Programs
  - System Initialization Tables
  - MRO/ISC links
  - Transaction classes
  - Transient data
  - Terminals
  - Timers
  - Transactions
  - VSAM files
- Historical data, in the following forms:
  - System interval analysis, which shows the CICS region as a whole
  - Detailed transaction log, which includes each transaction
  - Transaction interval summary
  - Exception log, which shows CICS exceptions and alerts generated by CA SYSVIEW

CA SYSVIEW also logs historical performance records to SMF.

## **Administrative Options**

You can customize how CA SYSVIEW monitors CICS. You can define what and how much data to collect by specifying:

- Configuration options
- Transaction groups
- Threshold definitions
- Transaction definitions

## **Toolkit and Utilities**

## The CICS Toolkit includes:

- Resource management functions
  - Automated Response Time Management (ARTM)
    - You define a target and CA SYSVIEW adjusts the priority of the transaction to meet target response time.
  - Transaction cancellation at shutdown
    - CA SYSVIEW can cancel a transaction automatically and the region shuts down cleanly.
  - CICS dump management
    - CA SYSVIEW extends the normal CICS suppression policies by providing suppression based on transaction name, terminal name, or program name.
  - CICS SMF 110 record suppression
    - CA SYSVIEW lets you suppress records by transaction name.
- Easy interface to operator commands. You can overtype a field to modify a CICS resource, such as:
  - Cancel a CICS transaction
  - Open or close a file
  - Delete temporary storage queues

## **Option for WebSphere MQ**

The CA SYSVIEW Option for WebSphere MQ lets you monitor and manage queue managers, channels, and queues.

## Queue Managers

For queue managers, you can monitor and manage:

- Active threads
- Distributed queue manager
- Exception alerts
- Indoubt threads
- Name lists
- Page sets
- Processes
- Security
- Storage class
- Traces
- Users and connections
- Cluster queue managers

## Channels

For the channels that connect queue managers, you can monitor and manage:

- Channel definitions
- Client connections
- Receiver
- Requester
- Sender
- Server
- Server connections
- Status and resource usage

#### Queues

For queues, you can monitor and manage:

- Alias queue
- Dead letter queue
- Event queue
- Local queue
- Model queue
- Remote queue
- Queue definitions
- Status and resource usage

## **Toolkit and Utilities**

The toolkit and utilities let you issue commands to perform administrative and configuration tasks on the following resources by taking the following actions:

#### **Channels**

You can use the actions start and stop, back out, commit, define, alter, delete, and reset for this resource.

#### Queues

You can use the actions browse, clear, define, delete, purge, edit, alter, import, and export for this resource.

#### **Queue Managers**

You can use the actions start, stop, and alter for this resource.

## **Cluster Queue Managers**

You can use the actions remove, resume, and suspend for this resource.

#### **Processes**

You can use the actions define, alter, and delete for this resource.

#### Name list

You can use the actions define, alter, and delete for this resource.

#### **Storage Classes**

You can use the actions define, alter, and delete for this resource.

#### **Channel Initiator**

You can use the actions start and stop for this resource.

## **Page Sets**

You can use the actions define and alter for this resource.

## **CA Datacom Option**

The CA SYSVIEW CA Datacom Option supports the CA Datacom/DB database product.

CA SYSVIEW makes important metrics available online, eliminating the need to run batch CXX reports. Details are shown on CA SYSVIEW CA Datacom directories and directory areas, elements, fields, keys, and tables.

Three categories of performance statistics are shown:

- CICS Service Facility (CSF) information, which includes statistics on:
  - Users
  - Load modules
  - Trace
  - Return codes
  - Requests
  - URT
  - TCB tasks
  - TCB usage
  - TCB usage
  - TCB start I/O
- Directory information, which includes statistics on:
  - Database
  - Areas
  - Tables
  - Elements
  - Keys
  - Columns
  - Volumes
  - Data sets

- Multi-user facility information, which includes statistics on:
  - Accounting
  - Areas
  - Buffers
  - Databases
  - Logs
  - Options
  - Requests
  - Tables
  - Tasks
  - XCF

## **Toolkit and Utilities**

This toolkit lets you issue commands to cancel CA Datacom tasks.

## **Option for IMS**

The CA SYSVIEW Option for IMS lets you monitor and manage the following resources within IMS control regions:

- Databases
- Output
- IMS nodes
- Programs
- Program Specification Blocks
- IMS control region and its dependent regions
- IMS shared queue
- IMS state definitions
- List of transaction codes
- Pools and Buffers
- VSAM

You can set performance thresholds and display exception alerts.

#### **Toolkit and Utilities**

This toolkit lets you issue IMS commands, the IMSSPOC command, and type two commands to the currently selected IMS control region.

## **Event Capture Option**

The CA SYSVIEW Event Capture Option provides an automated and fully customizable data gathering tool. This option lets you collect and analyze historical and captured event data for problem determination or systems tuning.

The Event Capture Option lets you:

- Capture any CA SYSVIEW command
- Specify the level of data that is collected
- Specify when it is collected
- Specify how long to retain the information
- View or analyze the data on any system at any time

This option enables the SYSVIEW RMF historical displays.

For more information, see the chapter "Event Capture" in the Administration Guide.

## **Option for TCP/IP**

CA SYSVIEW Option for TCP/IP simplifies problem management of existing z/OS console displays of TCP/IP configuration data, which are complex and return large volumes of data. This option helps you manage your TCP/IP configuration definitions through basic discovery and viewing of TCP/IP configuration data.

The Option for TCP/IP provides the following benefits:

- Manages the existing use of TCP/IP for communication
- Provides basic TCP/IP information
- Monitors TCP/IP through a simple interface
- Lets you customize data collection
- Indicates whether a problem resides on the network

## The Components in More Detail

The following sections explore some of the monitoring and management capabilities within each component.

## **CA SYSVIEW for CA Insight DPM for DB2 Component**

The component CA SYSVIEW for CA Insight DPM for DB2 supports displaying DB2 information for DB2 subsystems that CA Insight DPM for DB2 monitors.

## **CA MIM Component**

The CA MIM component provides a set of CA MIM commands that let you capture information from the following three areas of MIM functionality:

- CA MIM data provides information used to manage and tune MIM.
- CA MIA data provides information about tape device status from multiple systems such as online, offline, allocation, and mount pending times.
- CA MII data provides information about the ENQ workload and activity.

## **UNIX System Services Component**

The UNIX System Services (USS) component lets you monitor and manage the following USS resources:

- USS Interprocess Communication (IPC)
  - Message queues
  - Semaphore sets
  - Shared memory
- File Systems
  - USS file and directory names and attributes
  - Open HFS and ZFS files for all USS processes in an address space
  - Mounted USS file systems
- System Information
  - Summary of USS resource monitoring statistics collected by the z/OS data collector
  - USS system configuration options

- Processes
  - Resource information about USS processes
  - z/OS address spaces that contain USS processes
  - Thread information for all active processes
- User and Group Information
  - Contents of the USS group database
  - Contents of the USS user database

## **Toolkit and Utilities**

The USS toolkit and utilities let you take the following actions:

- Terminate a process
- Send a signal to a process
- Browse and edit files

## **Workload Manager Component**

The Workload Manager component lets you monitor and manage the following Workload Manager resources:

- Workload Manager policy and definitions as a graphical tree structure
- Workload activity resource data
- Workload activity delay data by address space
- Graphs of workload activity delay data by address space
- Workload Manager group information and independent and dependent enclave
   CPU usage by address space
- Service class and service class period information
- Workload activity delay data by service class
- Workload activity response time distribution data
- Group definition and group values
- Workload Manager service policy information
- Report class information
- Workload activity response time data
- Resource group definitions

- Subsystem and classification rules
- Summary of the workload activity response time and delay data
- Workload definition information

## **CA Roscoe**

For CA Roscoe, CA SYSVIEW monitors the following:

- User activity
- Buffer usage
- Response times
- Monitor routines
- AWS data sets
- MPL stack usage

#### **MIB Browser**

You can browse or walk a MIB on any operating environment or device from z/OS. This ability requires TCP/IP on z/OS and uses SNMP for communication to IP addresses.

## **System Overview**

The System Overview component lets you display a select group of metrics and conditions as a single package. These metrics display in the information section of a SYSVIEW command or menu display. Each user can control the time and placement of the system overview information about a display.

The information can also be displayed in a cross-system view showing multiple z/OS images by using the SYSTEMS command.

## **System Condition Monitor**

The System Condition Monitor (SCM):

- Provides a color-coded, high-level summary of the resources that are currently being monitored. The SCM tells you at a glance where the problems are, so that you do not have to search multiple areas to find problem sources.
- Lets Helpdesk personnel and operators notify appropriate personnel when a problem exists. System programmers can drill down and find the source of the problem.

- Lists all your subsystems and resources using the primary SCM screen, such as DASD, file systems, CICS regions, and more. Each entry has a color indicator that shows whether a problem exists and, if so, the severity of the problem. For each entry, you can easily drill down to see more detail.
- Clearly describes problems; for example, "WTOs requiring replies is 34." Positive statements about system health are also provided, such as "No TAPE devices require attention."
- Can be used right out-of-the-box. In addition, you can easily customize it to monitor any data that is available on your systems. You can also expand it easily by adding your own data to monitor additional resources.
- Uses intelligent modules written in compiled REXX with additional CA supplied functions, or IMODs, to communicate with the monitored subsystems. You use IMODs to automate system monitoring and regulate resources or to create your own online reports on system activities.

**Important!** When upgrading to a new release of CA SYSVIEW, the new release and the IMOD libraries shipped with the new release match. The new IMOD libraries overlay and therefore replace the IMOD libraries from the previous release. If you decide to modify the IMOD libraries, CA suggests creating a site-specific IMOD library for those locally written IMODs.

# **Chapter 2: Basic Skills**

This section contains the following topics:

Menu Navigation (see page 39)

Learn the Displays (see page 41)

Scroll the Displays (see page 48)

View the PF Key Settings (see page 49)

<u>How to Enter Commands, Parameters, Subcommands, and Line Commands</u> (see page 49)

Find Information on a Display (see page 56)

Obtaining Help (see page 58)

## **Menu Navigation**

Learning how to use CA SYSVIEW begins with understanding the CA SYSVIEW menu structure. Knowing how menus are set up and how to use them lets you easily learn to access the displays and perform many useful tasks.

## The Primary Option Menu

By default, the first CA SYSVIEW menu you see is the Primary Option Menu. This menu appears when you first log on to CA SYSVIEW. The Primary Option Menu contains a list of other menus you can access to perform tasks. From the Primary Option Menu, you can also select the option MENU HELP to display the online help information menu.

The following is a sample Primary Option Menu:

| SYSVIEW Option ===>  | MENU, Primary Option Menu 15:22:56<br>Scroll *==> PAGE<br>Lvl 1 Row 1-18/18                      |
|--|--|
| Option Command  _ 1 MENU OVERVIEW  _ 2 MENU MVS  _ 3 MENU JES  _ 4 MENU CICS  _ 5 MENU DATACOM  _ 6 MENU IMS  _ 7 MENU MQ  _ 8 MENU NETWORK  _ 9 MENU USS  _ 10 MENU CAPTURE | Description<br>System overview<br>MVS displays<br>JES job and output management<br>CICS displays |
| _ 11 MENU SCM<br>_ 12 MENU ADMIN<br>_ 13 MENU PRODUCTS   | System condition monitor SYSVIEW administration Product integration menu                         |
| _ 14 MENU HELP<br>_ 15 END   | Online help information  Terminate SYSVIEW session   |

### The Menu Command

If you are viewing a CA SYSVIEW display and type the MENU command without parameters at the command line, the Primary Option Menu appears. However, you can also access other CA SYSVIEW menus by specifying a menu name as a parameter on the MENU command. To see a list of CA SYSVIEW menus that you can access using the MENU command, type HELP MENU on the command line.

Not all menus may be available at your site. If you are not authorized to use a menu, you cannot display it. If you would like to know more about the menus that you have access to, contact your system administrator.

## Select an Option on a Menu

You can select an option on a menu in one of three ways.

#### To select a menu option

- 1. Use one of the following methods to select an option from the Primary Option Menu. In this case we are choosing option 3, the MENU JES command:
  - Enter 3, the number of the option, in the command input field and press Enter.
  - Place the cursor in the input field to the left of the number 3 option, MENU OPERATOR, and press Enter.
  - Type the command name, MENU JES, in the command input field and press Enter.

The JES Menu displays.

2. Select a command from the JES Menu the same way you chose the menu from the Primary Options Menu and press enter.

The new menu that you drilled down to displays.

**Note:** Option numbers can be different for different users, depending on which commands the user is authorized to use.

## **Learn the Displays**

When you select a command from one of the CA SYSVIEW menus, you access a display. Use the display to look at data and perform tasks the command is designed for.

CA SYSVIEW is distributed with a default display format. The following description of a display format is based on this default format. Your displays can be different from this default display when your security administrator has changed your profile.

You can change your display to make it more convenient for you to perform your work tasks. For example, you can change the location of different fields on the screen or the color of the screen fields. To perform some tasks to change your default display, see the chapter "Basic Tasks" (see page 77)."

## **System Activity Display**

The following screen is an example of the System Activity Display that provides a good sample of a screen in default format.

| SYSVIEW ACTIVITY System Activity 10:25:20 |            |                 |         |         |     |         |         |         |         |      |
|---|------------|-----------------|---------|---------|-----|---------|---------|---------|---------|------|
| Command ====                              |            |                 |         |         |     |         |         |         | l *===> |      |
|   |            |                 |         |         |     |         |         |         |         |      |
| (r) CP% IF                                | A% Pct%    | 50100           | -Conc   | lition- | -   | Read    | y       | Paging- | Stor    | age- |
| CPU 35%                                   | 0% 28%     |                 | ENC     | ) NoSMI | F.  | ASIDs   | 3 Sl    | ots 41  | % ECSA  | 87%  |
| LCPU 35%                                  | 0% 28%     |                 | RES     | NoWT(   | )   | Tasks   | 3 Ra    | te :    | 3 ESQA  | 95%  |
|   |            |                 | NoDMF   | P TAI   | Р   | I/O     | AF      | QA 1064 | 9 SQA   | 97%  |
| Spool                                     | 51%        |                 |         |         |     | Rate 2  | 7113 UI | CA 254  | 0 CSA   | 64%  |
|   |            |                 |         |         |     |         |         |         |         |      |
| Formats DEFA                              | ULT CPU CF | PU1 PERF 9      | STORAGE | •       |     |         |         |         |         |      |
| Status SORT                               |            |                 |         |         |     |         |         |         |         |      |
| XSStat Data                               | NO Group   | ALL Ms          | gLvl EF | RROR I  | Lim | it NONE | RemDup  | NO Ty   | pe SYST |      |
|   |            |                 |         |         |     |         |         |         |         |      |
| *   |            |                 | ALL     |         |     | ALL     |         |         |         |      |
| Cmd Jobname                               | Stepname   | Procstep        | Type    | Jobnr   | Jc  | Status  | CPU-Tim | e Limit | Clockti | me   |
| BLADA08                                   | CATS0      | A55TG129        | TSU     | 62337   | @   | LSW     | 8.98512 | 8 3600  | 01:04:  | 18   |
| BLX1PROC                                  | BLX1PR0C   | BLXSPCAS        | STC     | 17660   | \$  | NS      | 0.10945 | 2 86400 | 85:03:  | 33   |
| BPXAS                                     | BPXAS      | IEFPROC         | INIT    | 62799   | \$  | LSW     | 0.00546 | 4       |         |      |
| BPX0INIT                                  | BPX0INIT   | <b>BPX0INIT</b> | SYS     |         |     | IN      | 12.8712 | 6 86400 | 85:03:  | 28   |
| BRAMA15                                   | CATS0      | A55TU051        | TSU     | 61449   | @   | LSW     | 1.63479 | 4 3600  | 02:00:  | 27   |
| BRESMA1                                   | CATS0      | A55TG050        | TSU     | 61350   | @   | LSW     | 1.05915 | 3 3600  | 02:07:  | 10   |
| BRESM01                                   | CATS0      | A55TG083        | TSU     | 61358   | @   | LSW     | 4.79893 | 4 3600  | 02:06:  | 18   |
| BRORI09                                   | CATS0      | A55TG084        | TSU     | 61384   | @   | LSW     | 2.86338 | 8 3600  | 02:04:  | 19   |
| BUILD                                     | STEP1      |                 | 0TX     | 31918   | \$  | LSW     | 1.35730 | 2 1048  | 41:43:  | 00   |
|   |            |                 |         |         |     |         |         |         |         |      |

The sections that follow describe the areas on the display in the default format.

## **Display Areas**

The following figure labels the areas of the default format display. These areas are described in the following sections. After you read the description, see the screen for examples of the particular areas. You may want to come back to this screen later on when you change your display format. For ways you can do this, see the chapter "Basic Tasks (see page 77)."

|               | SYSVIEW ACTIVITY 10:27:02   |
|---------------|---|
|               | Command ====> Scroll *==> HALF  |
| Divider       | Lvl 2 Row 757-762/762 Col 1-79/484  |
| Overview Menu | (r) CP% IFA% Pct%50100 -ConditionReadyPagingStorage-  |
| Overview Menu | CPU 100% 0% 80% ENQ NoSMF ASIDS 6 Slots 41% ECSA 87%  |
| Overview Menu | LCPU 90% 0% 72% NORES NOWTO Tasks 6 Rate 14 ESQA 95%  |
| Overview Menu | NoDMP TAPI/O AFQA 14418 SQA 98%   |
| Overview Menu | Spool 51% Rate 30706 UICA 2540 CSA 64%  |
| Divider       |   |
| Formats       | Formats DEFAULT CPU CPU1 PERF STORAGE   |
| Status        | Status SORT   |
| XSStatus      | XSStat Data NO Group ALL MsgLvl ERROR Limit NONE RemDup NO Type SYST  |
| Divider       | Actual State in Cloudy in Constitution of the |
| Parameter     | * ALL ALL   |
| Header        | Cmd Jobname Stepname Procstep Type Jobnr Jc Status CPU-Time Limit Clocktime   |
| Data          | YUACH01 CATSO   |
|               | YUASDRAS \$\$\$\$\$@ JOB 29025 C NS 0.107233 86400 48:45:50   |
|               | YUA3DRAS \$\$\$\$\$\$@ JOB 29027 C NS 0.125544 86400 48:45:43   |
|               | ZARMA01 CATSO A55TG012 TSU 61798 @ LSW 0.124484 3600 01:32:16   |
| •             | ZELJOB2 CATSO A55TG005 TSU 60365 @ LSW 9.217070 3600 04:04:23   |
| •             | ZEMKE01 CATSO   |
| End-Of-Data   | ZLMKL01 CA130 A3310003 130 02400 @ L3W 2.004201 3000 01.00.23   |
|               | Eliu Ol Data  |
| PF Message    | 1=HELP 2=SPLIT 3=RETURN 4=TOP 5=FIND 6=DUMP 7=UP 8=DOWN 9=SWAP 10=LEFT 11=RIGHT   |

#### **Title Line**

The first line on the display is the title line. The title line identifies the display and shows, in the following order, these items:

- Product name
- Product release number (not shown in the example)
- The system name where CA SYSVIEW is executing (not shown in the example)
- Name of the display
- Current date (not shown in the example)
- Current time (not shown in the example)

#### **Command Line**

The command line contains two fields:

- The command input field, where you enter a command to the right of the prompt (Command ===>).
- The Scroll field, which displays the current scroll value when you scroll up, down, left, or right.

#### More information:

Scroll the Displays (see page 48)

#### **Divider Line**

The divider line separates the title and the command areas from the remainder of the display. Messages issued by CA SYSVIEW overlay the divider line.

The divider line has the following fields:

■ HOP Count (not shown)

Indicates the number of cross-system connections deep you are from the original local system when you are connected to a remote system through a cross-system connection.

Level Number

Indicates how many levels deep you are from the Primary Option Menu.

■ Row

Displays information to help you determine which rows of data in the data area are currently displayed.

The Row field shows row information in the following format:

```
first-last/ [total]
```

first

Indicates the number of the first row displayed.

last

Indicates the number of the last row displayed.

total

Indicates the total number of rows. This number is not displayed when the total number of rows is not yet known.

#### Column

Displays information to help you determine which columns of data in the data area are currently displayed.

The Column field is shown in this format:

[1 -lastncol&] firstscol-lastscol/totalcols

#### 1-lastncol&

Indicates the number of the nonscrollable columns displayed. This information is shown only when there are nonscrollable and scrollable columns, and you have scrolled the display to the right. Nonscrollable columns always start in column 1, and they end in *lastncol*.

#### firstscol

Indicates the number of the first scrollable column displayed.

#### lastscol

Indicates the number of the last scrollable column displayed.

#### totalcols

Indicates the total number of columns.

#### **Format**

The format line displays when the following are in effect and you have at least one profile format defined:

- SET FORMATLINE YES
- SET FORMATLINE COND

The format line shows the DEFAULT format name with the names of any formats you have defined. The format currently in use is highlighted. You can switch to another format by placing your cursor a format name that is not highlighted and hitting the ENTER key.

#### **Status Line**

The status line is displayed only when requested and describes particular status information regarding the display.

#### **Divider Line**

A status divider line can be shown after the status line and is included only if a status line is present. (It is not shown on the sample screen.)

#### **Information Area**

The information area is present on some of the CA SYSVIEW displays and contains information unique to the command. The information area length is from 1 to 16 lines.

#### **Divider Line**

A divider line separates the information area from the remainder of the display and is included only if an information area is present.

#### **Parameter Line**

The parameter line is present on some of the CA SYSVIEW displays. This line contains the current parameter settings for the display. The parameters appear above their associated field headings. The parameter area is redisplayed when you scroll up and down, but it scrolls with the display when you scroll left and right.

#### **Header Line**

The header line identifies the fields (columns) in the display. Field names are redisplayed when you scroll up and down, but they scroll with the display when you scroll left and right.

When you scroll left and right, a break character marks the first scrollable column, and this gives a reference point when you scroll. For example, if you scroll to the right in the partial display shown in the first screen, you will get the result shown in the second example.

### **Example 1**

```
SYSVIEW ACTIVITY ----- System Activity ----- 10:25:20
                                                           Scroll *==> HALF
Command ====>
------ Lvl 2 Row 69-77/762 Col 1-79/484
(r) CP% IFA% Pct% ...50..100 -Condition- ---Ready--- ---Paging-- -Storage-CPU 35% 0% 28%
CPU 35% 0% 28% ENQ NoSMF ASIDs 3 Slots 41% LCPU 35% 0% 28% RES NoWTO Tasks 3 Rate 3
                                                               3 FS0A 95%
                            NoDMP TAP ----I/0---- AFQA 10649
                                                                  SOA 97%
               51%
                                          Rate 27113 UICA 2540
                                                                  CSA 64%
Spool
Formats DEFAULT CPU CPU1 PERF STORAGE
Status SORT
XSStat Data NO Group ALL MsgLvl ERROR Limit NONE RemDup NO Type SYST
                             ALL
                                           ALL
....+....10...+....20...+....30...+....40...+....50...+....60...+....70...+.
Cmd Jobname Stepname Procstep Type Jobnr Jc Status CPU-Time Limit Clocktime
   BLADA08 CATSO A55TG129 TSU 62337 @ LSW BLX1PROC BLX1PROC BLXSPCAS STC 17660 $ NS
                                                  8.985128 3600 01:04:18
                                                  0.109452 86400 85:03:33
```

#### Example 2

```
SYSVIEW ACTIVITY ------ System Activity ------ 10:25:20
                                                         Scroll *==> HALF
Command ====>
                     ----- Lvl 2 Row 69-77/762 Col 1-13&80-145/348
(r)
     CP% IFA% Pct% ...50..100 -Condition-
                                         ---Ready--- --Paging--
CPU
     35%
          0% 28%
                               ENO NoSMF
                                         ASIDs
                                                  3 Slots 41%
                                                                FCSA 87%
LCPU 35%
           0%
              28%
                               RES NoWTO
                                         Tasks
                                                  3 Rate
                                                                 ESQA
                                                                      95%
                                         ----I/0---- AFQA 10649
                             NoDMP
                                   TAP
                                                                 SQA 97%
Spool
              51%
                                         Rate 27113 UICA 2540
                                                                 CSA 64%
Formats DEFAULT CPU CPU1 PERF STORAGE
Status SORT
XSStat Data NO Group ALL MsqLvl ERROR Limit NONE RemDup NO Type SYST
                            ALL
                                          ALL
   .+...10.|80...+....90...+....100..+....110..+....120..+....130..+....140..+
Cmd Jobname | SRB-Time I/O-Count R-Stg Dp Pgn Dmn ASID -CPU%- Paging IO/Sec
   BLADA08
              4.505
                         19320
                                    FF 12
                                            8 005F
                                                    0.00
                                                                 0.00
   BLX1PR0C
              0.026
                          271
                                    FF
                                        2
                                            4 0060
                                                    0.00
                                                                 0.00
```

## **Separator Line**

The separator line, not shown in the sample screen, follows the header line to separate it from the data area. If present, this line is blank or contains the column ruler.

#### **Data Area**

The data area of the display contains the data fields for a display that you have accessed by issuing one of the CA SYSVIEW commands. The data area is most often composed of rows and columns. Some columns scroll and some do not. The information in a column is referred to as a field.

The first data line in the display (regardless of which line it is) is known as the current line.

#### **End of Data Line**

The end of data line indicates the end of data for the display. A few displays (DUMP, for example) do not contain an end of data line. If the display does not contain any data, the line says "No Data Available" instead of "End of Data."

#### Filler Area

The filler area is blank space used to fill out the display.

#### PF Message Area

The PF message area displays one to four lines of information. You specify what you want displayed in this area. By default, the PF keys are displayed, and they are shown in this area.

**Note:** For information about specifying what is displayed in this area, see the chapter "Basic Tasks (see page 77)" or the PROFILE command online help.

## **Scroll the Displays**

Use the following commands to scroll the CA SYSVIEW displays:

- LEFT
- RIGHT
- UP
- DOWN

You can also issue the TOP and BOTTOM commands to go to the top and the bottom of the display, respectively.

If a display contains more data than can fit on one screen, you can view the additional data by scrolling right. To return to your original position, scroll left.

You can use PF keys or function commands to scroll as follows:

Using PF keys

By default, your PF keys for scrolling commands (LEFT, RIGHT, UP, and DOWN) have been set for how much data to scroll at one time. You can change these settings using the SET SCROLLVALUE command.

For values you can specify for SCROLLVALUE, see the SET command online help.

For more information about how to use the SET command, see <u>SET Command--Change Your Profile</u> (see page 68) in the chapter "Basic Tasks."

Issuing function commands

To scroll a display using a function command, type the scrolling command at the command line. If you want, you can add parameters to the command. For example, if you would like to scroll down eight lines, you would specify the following command at the command line:

DOWN 8

To learn about the parameters for scrolling commands, look up the command in the CA SYSVIEW online help. For more information about using online help, see <a href="Obtaining Help">Obtaining Help</a> (see page 58) in this chapter.

## View the PF Key Settings

By default, your PF key settings are displayed at the bottom of your screen. If for some reason they are not, you can set them to be displayed.

When you are using a display, you can display the PF key settings by specifying the following command in the command input area:

PFSHOW ON

To display PF key settings for all displays, specify the following command:

PFSHOW ON ALL

## **Default PK Key Settings**

The PF key definitions distributed on the installation tape are the default definitions. The PF keys are initially the same on every display.

CA SYSVIEW provides the following default PF key settings:

- PF1/PF13 HELP
- PF3/PF15 RETURN
- PF5/PF17 FIND
- PF7/PF19 UP
- PF8/PF20 DOWN
- PF10/PF22 LEFT
- PF11/PF23 RIGHT
- PF12/PF24 RECALL

For information about how to change your PF key settings, see the chapter "Basic Tasks (see page 77)."

# How to Enter Commands, Parameters, Subcommands, and Line Commands

The CA SYSVIEW commands can have parameters and subcommands. You can also use line commands on a command display. The following sections describe how to enter commands, parameters, subcommands, and line commands.

## **Primary and Function Commands**

The COMMANDS command distinguishes the type of command to use. It has PRI, FUNC, or SUB for Primary, Function and Subcommand.

#### PRI

The primary command returns a display.

#### **FUNC**

The function command takes an action and returns a message on the current display.

### **Parameter Conventions**

Knowing how to enter parameters for a command is essential. Properly entering parameters lets you access the display you want.

Use the following conventions to enter parameters:

- When you enter a parameter, separate the command from the parameters with a space.
- When you enter more than one parameter, separate the individual parameters with a comma or a space.

#### **Example: Add Parameters to a Command**

This example adds parameters to the ACTIVITY command.

ACTIVITY [jobname][,type][,status]

#### Mark an Omitted Parameter Position

A *positional parameter* must be placed in a specific position among the parameters you enter. Positional parameters are interpreted based on their order in a series of parameters. You account for any omitted positional parameter by entering a comma in its place. Except, however, if the omitted parameters are to the right of the last parameter you entered. Then you do not need to enter commas to show where they would be placed.

The following examples show parameters entered on the ACTIVITY command. When the *jobname* and *type* parameters are not specified, commas are inserted in their places.

#### **ACTIVITY ABC**

This example uses the *jobname* parameter.

#### **ACTIVITY**,TSU

This example omits the *jobname* parameter, but uses the *type* parameter. The comma before the TSU represents the omitted *jobname*.

#### **ACTIVITY** "OUT

This example omits both the *jobname* and *type* parameters, and uses the status parameter OUT. The two commas preceding OUT represent the omitted *jobname* and *type*.

#### **ACTIVITY ABC22, NOI, ALL**

This example shows how you can enter all three parameters. Commas separate the parameters. You can use spaces to separate the parameters instead of commas.

#### **Parameter Masks**

You can use *masks* to enter some command parameter values. A mask is a partial or generic parameter name. For instance, you could use masking characters to indicate a partial (or masked) job name as a value for the ACTIVITY *jobname* parameter.

Default masking characters are the asterisk (\*) and the equal sign (=). The asterisk replaces any single character, and the equal sign replaces any number of characters in the name being masked.

#### **Change Masking Characters**

You can change these masking characters to other characters.

To change masking characters, go to the Input character options area in the Miscellaneous Section of your general profile and change the following values:

- Fixed length masking character (default \*)
- Variable-length masking character (default =)

Your default masking characters are changed.

You can also use the SET command to change these characters. For full instructions on how to perform this task, see the chapter "Basic Tasks" (see page 77)."

#### **Examples: Using Masking Characters**

The following examples show how to use masking characters to mask a *jobname* parameter. These examples reflect the use of default characters.

=

Matches all characters of a job name.

#### ABC=

Matches job names starting with ABC and ending in any other characters.

#### A=C

Matches job names that begin with A and end with C.

#### \*\*ABC=

Matches job names with ABC as their third, fourth, and fifth characters, any specific first or second characters, and any remaining characters after the fifth (C).

#### \*ABC

Matches job names with ABC as their second, third, and last characters.

### AB\*\*\*\*

Matches job names with AB as their first two characters, and four remaining characters in their names.

#### **Enter Parameters with PF Keys**

When you want to include a parameter with a command for which you have defined a PF key, do the following:

- 1. First, type the parameter on the command line.
- 2. Press the PF key.

For information about how to define default parameters for a command, see the topic <u>Initialization Command Options in the Profile</u> (see page 77) in the chapter "Basic Tasks."

### **Enter Subcommands**

Some commands have subcommands you can use when you are on the display of that command. These subcommands provide additional functionality that let you perform the following tasks:

- Access more specific displays
- Locate information that is on a display
- Refresh a display
- Add or replace information that is on a display

You enter subcommands on the command line in much the same way you enter commands. Also, subcommands can have parameters, and if they have multiple parameters, those parameters are treated as positional parameters.

#### **Enter Line Commands**

Line commands are commands that you issue on many displays to affect a line on a display. You can use the abbreviated uppercase part of a line command to issue the command.

#### Follow these steps:

- 1. Tab to the input area under the Cmd heading to the left of the line on the display for the job you want affect.
- 2. Type the line command (cancel) or the abbreviated part of the line command (C), and press Enter.
  - The command is processed, in this case the job is canceled, and a refresh of the screen displays.
- 3. Display a list of available line commands for the display, place the cursor on the line command field and press the HELP PF key.
  - The available line commands are displayed.
- 4. Type the line command and press Enter.
  - The command is processed.

You have entered both a specific line command and a line command that you selected from the Help.

Block commands are available for use with line commands, and for other purposes. For more information about entering block commands, see the online help Topics.

#### **Create External Line Commands**

You can externally define your own line commands for any given display. This ability lets you drill down or initiate an action to satisfy your own requests. The parmlib member LINECMDS contains example definitions. Using these example definitions, you can define your own set of external line commands specific to your needs.

#### Follow these steps:

1. Access user definitions from the following location:

user.sysview.parmlib(LINECMDS)

The LINECMDS parmlib member displays.

2. Code your own external line commands in this member using the example definitions provided in this member as a template and save your changes.

Your line commands are defined.

#### **Information about Commands**

The following list provides miscellaneous information about CA SYSVIEW commands.

Commands Executed in the Current ASID

When commands are executed for CA SYSVIEW, the current address space ID is used. To change the address space ID when appropriate, you can use either the ASID function command or an ASID parameter of a command.

Dynamic Changes Not Saved at Next IPL

Some changes that you can make when you issue CA SYSVIEW commands are only in effect until the next system IPL.

For example, use the ADD subcommand to add a data set to the LINKLIST. That data set addition is in effect only until the next IPL of your system. To see if this restriction applies to a particular command, see the online help for that command.

■ Save time with the RECALL and REVIEW Commands

The RECALL and REVIEW commands help you save time when you are issuing commands.

- RECALL Command

The *RECALL command* displays, on the command line of the current display, the last command that you executed. This recall helps you to remember previously executed commands so that you can issue them again without having to type them in. When the command you issued has been recalled, you can issue it again by pressing Enter.

**Note:** You cannot recall scrolling commands (unless they contain a parameter) or the REFRESH command. You can recall only one copy of a command that you have entered several times in succession.

REVIEW Command

The *REVIEW command* displays the contents of the command input stack. The commands you have previously issued are shown and you can optionally modify them and issue them again.

**Note:** For specific details on using these commands, see online help.

## Find Information on a Display

Use the FIND command to locate information that is on a display. The FIND command searches the display data for a specified character string.

**Note:** The DUMP command has its own FIND subcommand. For information about issuing FIND from the DUMP display, see the DUMP command in online help.

The FIND command has the following format:

#### string

This required parameter specifies the string you want to find. If a string contains embedded blanks or commands, it must be contained in character delimiters. The default character delimiter is the apostrophe ('). You can change this default in your profile.

The following formats qualify a string:

- C'string' indicates a character string
- T'string' indicates a text string
- X'string' indicates a hex string
- P'string' indicates a picture string

**Example:** The following command finds the string JOB1:

FIND JOB1

The *string* parameter must be specified before you can specify any of the other parameters.

#### keyword1

Finds multiple occurrences of the string. Values of keyword1 are NEXT, PREV, FIRST, LAST, and ALL.

**Example:** Find a previous occurrence of the string JOB1, specify the following:

FIND JOB1 PREV

When you use the value ALL for keyword1, the command does the following:

- 1. Searches for all occurrences of the string
- 2. Positions the display at the first occurrence

To see the remaining occurrences, repeat the FIND command (without any parameters). By default, you can use the FIND PF key to repeat the find.

#### keyword2

Finds all occurrences of a string according to its position in a word. Values of keyword2 are CHARs (ignores the position), PREfix (beginning of a word), SUFfix (end of a word), INFIX (middle of a word).

Some examples of the previous keywords follow. The capitalized characters indicate the strings that are found.

```
FIND 'DO' CHAR DO DONT aDO aDOPT 'DO' +aDO (DONT) aDO-
FIND 'DO' PRE do DONT ado adopt 'do' +ado (DONT) ado-
FIND 'DO' SUF do dont aDO adopt 'do' +aDO (dont) ado-
FIND 'DO' WORD DO dont ado adopt 'DO' +ado (dont) ado-
FIND 'DO' INFIX do dont ado aDOPT 'do' +ado (dont) ado-
```

#### col1 and col2

Finds a string in a column defined by these column numbers.

**Note:** To see column numbers on your display, specify SET COLS ON at the command line.

To find the string 3658 between columns 42 and 48, specify the following:

```
FIND 3658 42 48
```

#### fieldname

Finds a string in a column defined by a field on the display.

To find the string 3658 in the Johnr field, specify the following:

FIND 3658 Jobnr

## Use the FIND PF Key

The default setting for the FIND command issued without parameters is FIND NEXT. Unless you or your system administrator has changed the setting of your PF 5 key, it is by default set to FIND. Use your default FIND NEXT PF key to find other occurrences of a string you located by issuing the FIND command at the command line.

For example, type the following on the command line:

```
FIND jobname
```

After the FIND command locates an instance of the job name you are searching for, use your PF 5 key to find other occurrences.

### **Number of Lines Searched**

The Find limit option setting determines the maximum number of lines searched by the FIND command. This setting is in the Command options area of the general profile Miscellaneous section.

## **Obtaining Help**

You can obtain online help for using CA SYSVIEW in the following ways:

- Use the Help commands, the online reference materials in the CA SYSVIEW Online
  Help Information Menu, or both. You can access the Online Help Information Menu
  either through the Primary Option Menu or issue the MENU HELP command.
- Use the CA SYSVIEW guides, which are available in PDF and HTML formats.

Note: For more information about accessing the guides, see the *Installation Guide*.

## **Access Online Help**

CA SYSVIEW provides online help for all commands and messages. You can access CA SYSVIEW online help in several different ways.

From a Display

If you are on a command display, you can obtain help for that command by any of the following methods:

- Press the default PF key for online help (F1).
- Type the HELP command at the command line.

By default, if you issue the HELP command with no parameters, and your cursor is on a field for which online help has been defined, help information displays for that particular field within the online help panel.

#### From Anywhere

On any display, to obtain online help for any command or message ID, do the following:

- Type the HELP command at the command line
- Include the appropriate parameters

To obtain online help for a command and the display you receive when you issue the command, use the following format:

HELP cmdname

For example, if you would like to see online help for the ACTIVITY command, type the following at the command line:

HELP ACTIVITY

To obtain online help for a message you have received, use the following format:

HELP msgid

For example, to obtain online help for message GSVX537A, specify the following at the command line:

HELP GSVX537A

#### For a Message

Issue the HELP command with the message displayed on the screen. By default, you can see help for a message, if online help is defined for that message.

### ■ From the Main Menu

The Online Help Information Menu is organized to let you quickly access the following information:

- Changes in this release
- List of commands and subcommands
- Help information
- Chicago Soft's MVS/QuickRef
- Online reference materials

## Access Online Help from the Main Menu

Choose the MENU HELP option from the Primary Option Menu or issue the MENU HELP command from any menu to access the following OnLine Help Information Menu:

```
SYSVIEW MENU ----- OnLine Help Information Menu ----- 10:35:33
                                                      Scroll *==> HALF
Option ===>
------ Lvl 2 Row 1-20/23
Option Command Parameters
                                       Description
   1 CHANGES
                                       What's new in this release?
   2 COMMANDS
                                       List commands and subcommands
   3 FIELDS ALL
                                       List command display fields
   4 FINDHELP
                                        Search online help topics
                                       MVS/QuickRef from Chicago-Soft
   5 QUICKREF
   6 SUPPORT
                                        SYSVIEW support diagnostics
     TOPICS
                                        Online reference topics
Option Online Reference Materials
   8 Glossary of Terminology
   9 How to topics
  10 Online command reference
  11 Online message reference
  12 CA DATACOM online reference
  13 CICS online reference
  14 IMS online reference
  15 UNIX System Services online reference
  16 WebSphere for MQ online reference
  17 Work Load Manager online Reference
  18 Print command reference manual
  19 Print information and how-to topics
  20 Print all help topics
```

#### Search the Online Help

You can search the online help system for a specified text string by:

- Using the FINDHELP option on Online Help Information Menu
- Issuing the FINDHELP command from any menu

The search is performed against a list of predefined online help topics. Each topic corresponds to a HELPLIB member.

The following functions can be performed:

- Locate all online help information located on selected topics.
- Ask for the commands that provide information about a desired topic. For example: "What commands display alert information?"
- Create user-customized search lists.

#### **Use FINDHELP**

To find information on alerts, issue the following command:

#### FINDHELP alert

To find information on alerts using the Online Help Information Menu, enter **alert** in the parameters column next to the FINDHELP option as follows:

```
SYSVIEW ----- MENU, Online Help Information Menu ---
Option ====>
                                                     Scroll *==> PAGE
             ----- Lvl 2 Row 1-15/15 Col 1-79/79
Option Command Parameters
                                     Description
  1 CHANGES
                                    What's new in this release?
    COMMANDS
                                    List commands and subcommands
                                     Search online help topics
  3 FINDHELP alert
  4 QUICKREF
                                     MVS/QuickRef from Chicago-Soft
  5
    TOPICS
                                     Online reference topics
```

The following help screen is displayed:

```
SYSVIEW FINDHELP ------ Search Online Help Topics -----
                                                         Scroll *==> PAGE
Command ====>
----- Lvl 3 Row 1-16/30 Col 1-79/158
        TOPICS Topics 679 Lines 113016 Hits 39
List
Options ALL CHARS
                              Section
String alert
              ....+....1....+....2....+....3....+....4....+....5....+....6....
Cmd Help
____ ALERTS
               ALERTs
                               <Normal>
              ALERTS Command
              The ALERTS command displays z/OS system data collection excepti
              Data collection values will be displayed by the ALERTS command
                                  displayed alert.
                             GSVXEXTR OPTIONS ALERTS. EXTRACT is only val
              Alert status is only displayed if the "CURRENT" interval is
    DASDRESP
    IMSALERT
                                  displayed alert.
              IMSALERT Command
              The IMSALERT command displays IMS data collection exception
              alerts. Data collection values will be displayed by the
              IMSALERT command if the current value exceeds a threshold defin
                IMSALERT
                               <Normal>
    IMSSTATE
                                  displayed alert from the IMSALERT command.
                                  displayed alert from the IMSALERT command.
    IMSTHRSH
    LISTCONS |
                Alrt
                               Messages queued alert percent. Valid only for
```

#### **Online Reference Topics**

You can display the Help Topics screen by:

- Choosing the TOPICS option on the Online Help Information Menu
- Issuing the TOPICS command from any menu

The topics are listed in categories. Press Enter beside the help topic you would like to see displayed.

The following is a sample Help Topics screen:

#### **Online Reference Materials**

The Online Help Information Menu lets you display the list of Commands and Messages. This menu also includes their explanations and reference information for the following options and components:

- CA SYSVIEW CA Datacom Option
- CA SYSVIEW Option for CICS
- CA SYSVIEW Option for IMS
- UNIX System Services (USS) Component
- CA SYSVIEW Option for WebSphere MQ
- Workload Manager Component

The following is a sample of the CICS online reference:

```
SYSVIEW ----- TOPICS, Help Topics -----
                                                           Scroll *==> PAGE
Command ====>
                ----- Lvl 3 Row 1-14/81 Col 1-79/87
Member TOPICS
Cmd Class Description
___ HOWTO
            Displaying currently active CICS address spaces
___ INSTALL CA DATACOM CICS Service Facility data collection
___ CICS Automatic initiate descriptors - AIDS
            Auxiliary temporary storage
            Common storage area
            Configuration options
            Global commands
            REGION= parameter
            System and transaction variables
            System variables
            Temporary storage
            Transaction variables
COMMANDS CAIDS - CICS auto initiate descriptors
CARTM - CICS auto response time mgmt
1=HELP 2=SPLIT 3=RETURN 4=ASDF 5=FIND 7=UP 8=DOWN 9=SWAP 10=LEFT 11=RIGHT
12=RECALL
```

## **Print Online Help Topics**

You can use the PRINT command to print all or part of a command display. The printed output can be placed in a system output unit or disk data set.

#### To print online help topics

- Execute the PRINT command with no parameters prints the entire current display to the current print data set.
- Execute the PRINT command with parameters prints the specified lines to the specified print data set.

## Obtain Help within a Help Topic

Within the online help panel for a command, sections of information are labeled according to content. One or more of these labels are used in the online help panel of each command. You can use a label as a parameter on the LOCATE command to find specific information. When you do so, you need only use the uppercased portion of the label as the parameter.

This command has the following format:

Locate L

The following labels can be used within the online help panel of a command:

#### Command

Displays the command name, which is located at the top of the online help panel.

#### **Datafields**

Displays the data fields on the display.

#### **Format**

Displays the command format.

#### **Infofields**

Displays the information fields on the display.

#### Linecommands

Displays the line commands you can use on this display.

#### Messages

Displays messages you could receive when issuing the command.

#### Notes

Displays usage notes for the command.

#### **Parameters**

Displays command parameters and their explanations.

#### Relatedinfo

Displays information that is related to the command.

#### **Subcommands**

Displays the subcommands you can use on the display.

#### **Example: Locate linecommands**

Suppose you are looking at the online help for the SCMSYS command and want to see what line commands are valid for SCMSYS. At the command line of the SCMSYS online help panel, issue this command:

LOCATE linecommands

## **Chapter 3: Basic Tasks**

This section contains the following topics:

Overview of Your Profile (see page 67)

How to Change Your Display Format (see page 71)

How to Change PF Key Definitions (see page 75)

Initialization Command Options in the Profile (see page 77)

**Change the Masking Characters** (see page 77)

How to Work with Data on a Display (see page 78)

Customize Your Display (see page 88)

Print a Display (see page 89)

## **Overview of Your Profile**

As a CA SYSVIEW user, you have a profile that determines how you can use the product and what you see on your screen. Your system administrator could have defined or altered a profile for you, or you could be using a default profile. However, you can change your profile in ways that can help you use CA SYSVIEW to meet your own needs and the needs of your site. Knowing how to change your profile is basic to begin using CA SYSVIEW.

## **Use the PROFILE Command**

Using displays for the PROFILE command, you can define synonyms for commands, values for PF keys, and formats for command displays. The PROFILE command displays let you change your general profile for all displays, or change only specific command displays.

Another task you can perform using PROFILE is switching to the profile of another user. This switch means that you can acquire the settings from the profile of that user for your own. You can switch to the profile of another user by issuing this command:

PROFILE SWITCH, userid

userid

Specifies any CA SYSVIEW user ID.

**Note:** Switching to the profile of another user does not give you the command authority of that user. The security administrator sets the ability to use particular commands. Also, when you use the PROFILE command after switching profiles, the profile values of the profile you switched to will be displayed.

To see all the options you can set using the PROFILE command, see the PROFILE online help. Later in this chapter, you learn more about PROFILE displays and how to perform some representative tasks.

Keep in mind that changes you make to your profile using the PROFILE command are permanent.

## **SET Command—Change Your Profile**

You can also use the SET command to change your profile. Issue the SET command at the command line with parameters to make one change at a time.

For example, if you are using the ACTIVITY command display, and want to set the PF6 key for that display so that it issues the CONSOLE command, type the following on the command line:

SET PF6 CONSOLE

As with the PROFILE command, you can use the SET command both for the general profile (all displays) and for specific command profiles. To do so, you use the GENERAL or *command* parameter, respectively.

Most of the parameters defined in the profile can be changed with the SET command.

## **Access the PROFILE Command Displays**

Use the PROFILE commands to access profile displays.

The following is a list of commands and a description of what they display:

#### **PROFILE**

Specify this command from a menu to see the Command Selection Display, which shows all profile sections.

Specify this command on a CA SYSVIEW display to see the profile section for the active display command.

#### **PROFILE SELECT**

Displays the Command Selection display, which shows all of the profile sections.

#### PROFILE SELECT GENERAL or PROFILE GENERAL

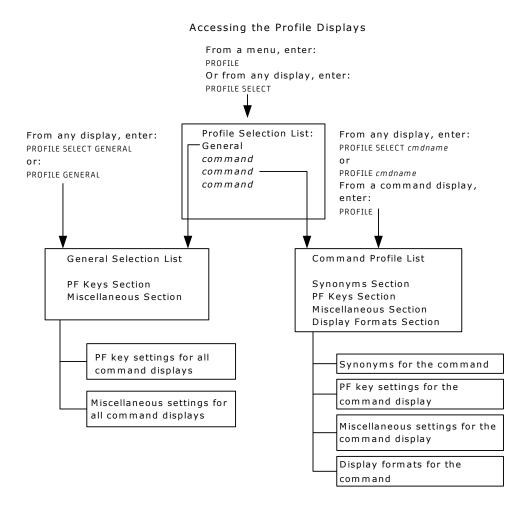
Displays a selection menu showing only the general profile sections.

#### **PROFILE SELECT** *cmdname*

Displays a selection menu showing the profile sections for the command you specify.

## **How You Access Profile Displays**

The following illustration shows how you can access PROFILE displays and how you can use them to change a profile.



## **Change Your Options Using the PROFILE Displays**

The following is a representative list of options you can change using the PROFILE displays.

#### ■ General Profile

For all displays, you can set or change the following:

- Default PF key designations for all commands
- Initialization and termination options
- Printing and copying options
- Special command and line command characters
- Display options

### ■ Command Profile

In most command profiles, you can set or change the following:

- Alternate names (synonyms) for issuing the command
- PF key designations for the command (these override the GENERAL profile settings)
- PF key messages
- Default parameters for a command
- Command display format
- Date and time display options
- Whether the command line prompt is displayed
- Initial sort parameters

### **Become Familiar with the PROFILE Sections**

To learn about specific items you can set or change, do the following:

- 1. Issue the PROFILE SELECT command at the command line.
- 2. Browse through the fields in the General and *command* profile sections.

To look at the items listed in a section, type an **S** to the left of the item and press Enter. For explanations of the different options, use the PROFILE command online help.

## **Update Your Profile**

To add a value for a field in a profile section, type it in. To change an item in the profile section list, type over the present value.

By default, your user profile is not updated until you terminate your CA SYSVIEW session or switch to the profile of another user. However, you can save the change immediately by issuing the PROFILE SAVE command.

**Note:** You can override the default value and specify that your changes can only be saved when you issue the PROFILE SAVE command. To do so, specify the following command at the command line:

SET PROFILESAVE COMMAND

On some profile displays, the CANCEL command can be used to cancel any changes made to the current profile display.

## How to Change Your Display Format

This section provides instructions on performing several representative tasks that change your display format.

You can change your display format by using either of the following methods:

- The PROFILE displays
- The SET command

You can use these tasks as a guide for changing other items in your profile. The procedure is similar.

For details on the default display format and the names used for parts of the display, see the chapter "Basic Skills (see page 39)."

## **Change the Initial Display Format Name**

The ability to customize how data is displayed makes a command easier and quicker to use and lets you tailor it for specific tasks.

#### To change the name of the initial display format, do one of the following:

- Go to the Formats section of the command PROFILE you want to change and specify the name of the format in the Format field.
- Specify the following command at the command line while you are on the display that you want to change:

SET FORMAT formatname

#### formatname

Specify either of the following:

- The name of a format that you have created in your profile (a one- to eight-character name)
- DEFAULT to use the default format for the display

For information about creating display formats, see <u>Change the Data Display Format</u> (see page 78) in this chapter.

The initial display format name is changed to the name you want to be used for a command display when the command is first entered.

#### **Define Command Line Placement**

To define whether the command line appears at the top or bottom of your CA SYSVIEW displays, do one of the following:

■ Go to the Display options area of the Miscellaneous Section of the General profile and type TOP or BOTTOM in the command line placement field.

or

Specify one of the following commands at the command line:

```
SET CMDLINE TOP
SET CMDLINE BOTTOM
```

**Note:** The display is changed in several ways when you move the command line to the bottom of the display. For example, the messages issued by CA SYSVIEW and the Row/Col field also move to different areas on the screen.

### **Change the Divider Lines Character**

You can change the character used in the divider lines on your screen. The default character is the dash (-), but many characters are valid.

#### Follow these steps:

■ Go to the Display character options area of the Miscellaneous Section of the General profile and place *x* in the Divider line character field.

or

Specify the following command on the command line:

```
SET DIVCHAR x
```

The divider line character is changed to an x.

For more information about valid divider line characters, see the DIVCHAR character in the online help for the SET command.

### Change the Row/Col Field Display

A number of settings affect the display of row and column numbers in the Row/Col field. You can elect to always display or never display the row and column counts, or you can make the display of the counts conditional. The conditional Row/Col field is on when at least one row or column is not visible on the display; otherwise, the field is off. Some commands internally suppress the display of the row and column counts (DUMP, for example), and there is no way to override this setting.

#### To change the Row/Col field settings, do one of the following

- Go to the Display options area in the Miscellaneous Section of the general profile and change the Display row counts and Display column counts fields to either ON, OFF, or COND.
- Use one of the following SET commands:

```
SET ROWCOUNT ON (or OFF or COND)
SET COLCOUNT ON (or OFF or COND)
```

### **Change the Separator Area**

A number of settings affect the display in the separator area, the area that separates the header area on your display from the data area. The default is no separator area. You can change the separator to display a line.

#### Follow these steps:

Column Ruler Line

If the column ruler line is on, a horizontal column ruler is displayed. To display the column ruler line, use one of the following commands:

SET COLS ON COLS ON

To turn off the column ruler line, use one of these commands.

SET COLS OFF COLS OFF

You can also set the column ruler line on or off in some command displays. Specify ON or OFF for Column line field in the Display options area of the *command* profile Miscellaneous Section.

Separator Line

To specify whether the separator line is displayed, use one of the following commands:

SET SEPLINE ON SET SEPLINE OFF

You can also set the separator line on or off in some command displays. Specify ON or OFF for Separator line field in the Display options area of the *command* profile Miscellaneous Section.

■ Separator Character

To change the character used for the separator line (by default, it is a blank), use the following command:

SET SEPCHAR x

X

A variable representing a valid separator line character.

For more information about valid separator line characters, see the SET SEPCHAR command explanation in the online help.

You can also change the value in the Separator line character in the Miscellaneous Section of your General profile under Display character options.

### Change the PF Message Area

You can determine what is displayed in the PF message area using the PF Keys Section of your General profile. You can specify what you want displayed in two message lines. If the PF key settings are set to show, they overlay this area.

### Display the PF Key Settings

You can set up CA SYSVIEW to list the settings of your PF keys on a command display.

#### Follow these steps:

- 1. Define the Message fields in the PF Keys Section of your general profile.
- 2. Specify YES in the PF message lines field under Display options of the Miscellaneous Section of the *command* profile.

When you are using a display, you can use the PFSHOW command to display the PF key settings.

#### More information

View the PF Key Settings (see page 49)

# **How to Change PF Key Definitions**

This section provides instructions on performing several representative tasks that change your PF key definitions.

Change the setting for a PF key using either of the following methods:

- Change the value for the key in the Profile General PF Keys Section of your profile
- Use the SET command

For example, to change the setting of the PF2 key from SPLIT to RECALL, you would issue the following command:

SET PF2 RECALL

### **Change ISPF PF Keys**

You can change your current PF key settings in your CA SYSVIEW profile without affecting the KEYS command.

#### Follow these steps:

- 1. Issue the CA SYSVIEW KEYS command.
  - The ISPF KEYS command is invoked and displays the PF Key Definitions and Labels panel.
- 2. Assign PF keys to the ISPF commands and optionally assign labels to the function key definitions.

For more information about the ISPF KEYS command, see your IBM ISPF documentation.

### Change the PF Key Values for Different Displays

You can specify different PF key definitions for each CA SYSVIEW display. For example, you can change your PF7 key to issue the ACTIVITY command from the CONSOLE display, and to issue the CONSOLE command from the ACTIVITY display.

#### Follow these steps:

- 1. Access the PF Keys Section of your profile.
- 2. Change the PF7 key definition to include the ACTIVITY and CONSOLE commands.

Your PF7 key definition has been changed for the ACTIVITY and CONSOLE commands.

# **Initialization Command Options in the Profile**

Specifying values for initialization options makes a command easier and quicker to use and lets you tailor it for specific tasks.

The following describes the options in the Miscellaneous Section of the *command* PROFILE under Initialization options:

#### **Default Parameters**

Controls the parameters that are used with the command by default. The default parameters for the command are used whenever the command is entered without parameters. Parameters entered with the command override the default parameters. If you want a parameter used with a command when you issue it, specify that parameter here.

#### Link to command

Specifies whether to invoke implicitly the command with the LINK command. Values are YES and NO.

The LINK command saves the current command environment, while passing control to another command. Therefore, specifying YES on this option in your profile for the ACTIVITY command, the current environment is saved when you issue the ACTIVITY command.

# **Change the Masking Characters**

You can use masking characters when entering some values on some command parameters. The default masking characters are:

- An asterisk (\*) for the fixed length masking character
- An equal sign (=) for the variable-length masking character

You can change the default masking characters.

#### Follow these steps:

1. Issue the PROFILE GENERAL command.

The default profile displays.

2. Select the Miscellaneous Section.

The General Section - Miscellaneous Section is displayed.

3. Find the Input character options and type in new values for the fixed length masking character and the variable-length masking character.

Press PF3 to save your changes and start using the new masking characters.

You can also use the SET command to change these variables. For example, to change the fixed length masking character or variable-length masking character, you would specify the following:

SET FLM|VLM value

#### value

Specifies the new masking character.

For more information about using masking characters when entering parameters on commands, see the chapter "Basic Skills." For values you can use for the FLM and VLM parameters, see the SET command online help.

# How to Work with Data on a Display

You can change how data appears on your screen so that it meets your work needs. One way is by changing your data display format in your profile. However, there are other ways to affect how data is displayed without using the PROFILE or SET command.

Methods for changing the way that data appears on your displays are described in the following sections.

### **Change the Data Display Format**

You or your security administrator can change CA SYSVIEW displays by updating the Formats Section of the *command* profile. You name these formats and use them to make your displays easy to use.

#### Follow these steps:

1. Issue the following command:

PROFILE command

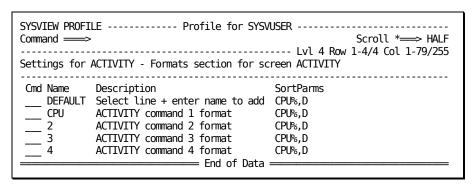
The display shows the profile sections for that command.

2. Select the Formats Section as shown on the following display for the ACTIVITY command and press enter.

The following screen displays showing that the ACTIVITY command has one screen named ACTIVITY and the default format is CPU:

- 3. Change the default format used for a screen using either of the following methods:
  - Enter the name in the Format field
  - Create a format for a screen by entering an S in the Cmd field next to the screen and press Enter.

A screen similar to the following displays:



This screen shows that the System Activity display already has five formats defined for it.

4. Change a format that is already defined by selecting that format with an **S** in the Cmd field and press Enter.

- 5. Add a new format as follows:
  - a. Place an S in the Cmd field next to DEFAULT.
  - b. Overtype DEFAULT with the name for the new format you are adding; then press Enter.

The data display format is changed or a new format is added when the screen refreshes.

**Note:** You can also specify SORT and SELECT parameters for formats on this display.

### Change the Order of Fields and Exclude Fields

When you have finished changing the data display format, you can do the following:

- Change the order of the fields on the display.
- Exclude the fields from the display.

When you press Enter from the System Activity display, you access a display similar to the following one. This display shows the profile for the ACTIVITY command in the format CPU.

| SYSVIEW PROFILE Profile for SYSVUSER   |               |  |   |   |        |             |  |  |  |  |
|--|---------------|--|---|---|--------|-------------|--|--|--|--|
| Cmd FieldName  Cmd Jobname Stepname Procstep Type Jobnr Jc Status CPU-Time CPU% Paging Limit Clocktime SRB-Time I/O-Count IO/Sec | AlternateName | Length Do 4 9 9 9 5 7 3 8 10 7 8 6 10 9 11 7 | efLng Da<br>4<br>9<br>9<br>5<br>7<br>3<br>8<br>10<br>7<br>8<br>6<br>10<br>9 | 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 | 1<br>5 | Scroll XSys |  |  |  |  |

On this display, place the following values in the Cmd field to help change the order of fields or exclude them from a display.

M

Place an M next to the field to moved.

Α

Place an A next to the field after which the field marked with an M is to move.

В

Place a B next to the field before which the field marked with an M is to move.

D

Exclude this field from the display. Excluded fields appear at the bottom of the list. You can use M to move them, at which point they are "included" again.

S

Scrolling right begins with this field. The starting column of the field must be less than the terminal line size.

#### Provide an Alternate Name for a Field

To provide an alternate name for a field, type it in the Alternate Name field next to the field name.

#### Use a Format for a Display

When your new display format is created, you can implement it.

#### Follow these steps:

1. Issue the command and, on the command line of the *command* display, type the following command:

SET FORMAT formatname

#### formatname

Specifies the name of the format you created.

2. To change the format name back to the default, issue this command:

SET FORMAT DEFAULT

You can also specify the format name for a display on the first Formats Section display that lists the screens for a command.

#### More information:

**Change the Data Display Format** (see page 78)

### **Change Parameter Values Using the Parameter Area**

You can change parameters for several of the CA SYSVIEW displays by using the parameter area above the heading lines of displays.

#### Follow these steps:

- Type over the current value with a new value and press Enter.
   The data is redisplayed so that it reflects the new parameter value.
- 2. Change the value of the existing Type value by typing over the SYS value in the parameter area with another value such as ALL, and press Enter.

The new display reflects this change.

#### **Example: Activity Display**

The following shows an ACTIVITY display with the Type value SYS shown in the parameter area.

|   | SYSVIEW ACTIVITY  |                                  |     |               |  |        |   |                |  |  |
|---|---|----------------------------------|-----|---------------|--|--------|---|----------------|--|--|
|   | Status: NOSORT NOSELECT NODEST NOPREFIX NOOWNER NOUPDATE CPU 100% LCPU 42% Paging 0 SIO 198 UIC 300 AFC 21639 |                                  |     |               |  |        |   |                |  |  |
| *   |   |                                  | SYS |               |  | ALL    |   |                |  |  |
| Cmd Jobname  *MASTER* PCAUTH RASP TRACE DUMPSRV GRS SMXC SYSBMAS CONSOLE WLM IEFSCHAS IXGLOGR SMF TNF | PCAUTH RASP TRACE DUMPSRV GRS SMXC SYSBMAS CONSOLE WLM IEFSCHAS IXGLOGR SMF TNF                               | DUMPSRV  IEFPROC IEFPROC IEFPROC |     | Jobnr<br>3242 |  | Status | CPU-Time<br>00:57:36<br>0.021<br>0.008<br>0.007<br>00:01:38<br>01:10:01<br>00:07:54<br>50.963<br>01:42:36<br>00:52:30<br>0.007<br>0.585<br>5.318<br>0.008 | 86400<br>86400 | 5.42DAYS<br>5.42DAYS<br>5.42DAYS<br>5.42DAYS |  |

### **Change the Data Fields**

You can type over some data fields on the CA SYSVIEW displays to change the information that is on the display and refresh the screen. The fields that you can overtype are identified in the field descriptions for each display.

In general, if you can tab to a data field, you can type over it. When you press Enter, commands execute and the change is made. The display is refreshed.

For more information about fields that you can overtype, or how to define which data fields you can overtype, contact your security administrator.

### Change the Order of Data on a Display

You can use the SORT command to change the order of data as it appears in columns on your screen. The SORT command helps you to view data in the order that is most useful to you, such as the following:

According to Field

One useful way to sort data is under a column heading (field) in either ascending or descending order. The following is a sample ACTIVITY display.

|     | /IEW AC | ===>               |     |                    |          |     |             |          |                |                    | ·> HALF<br>· 1-79/342 |
|-----|---------|--------------------|-----|--------------------|----------|-----|-------------|----------|----------------|--------------------|-----------------------|
| CPU | 100%    | LCPU               | 359 | % Pagin            | g 0      | SI0 | 76          | UIC 30   | 00 AFC         | 21639              | 1 73/342              |
| Cmd | Johnr   | *<br>Jobname       |     | Stepname           | Procstep | Jc  | ALL<br>Type |          | CPU%           | CPU-Time           | Clocktime             |
|     |         | *MASTER*           |     | 5 t op             | 000 10p  |     | SYS         | NS       | 0.63           | 00:27:22           | 81:21:25              |
|     |         | PCAUTH             |     | PCAUTH             |          |     | SYS         | NS       | 0.00           | 0.021              | 81:21:25              |
|     |         | RASP<br>TRACE      |     | rasp<br>Trace      |          |     | SYS<br>SYS  | NS<br>NS | 0.00<br>0.00   | 0.009<br>0.007     | 81:21:25<br>81:21:25  |
|     |         | DUMPSRV            |     | DUMPSRV            | DUMPSRV  |     | SYS         | NS       | 0.00           | 00:01:39           | 81:21:21              |
|     |         | XCFAS              |     | XCFAS              | IEFPROC  |     | STC         | NS       | 0.44           | 00:49:48           | 81:21:16              |
|     |         | GRS                |     | GRS                |          |     | SYS         | NS       | 0.87           | 00:16:12           | 81:21:25              |
|     |         | SMXC               |     | SMXC               |          |     | SYS         | NS       | 0.04           | 00:04:34           | 81:21:25              |
|     |         | SYSBMAS<br>CONSOLE |     | SYSBMAS<br>CONSOLE |          |     | SYS<br>SYS  | NS<br>NS | 0.00<br>1.33   | 28.487<br>00:49:08 | 81:21:25<br>81:21:25  |
|     |         | WLM                |     | WLM                | IEFPROC  |     | SYS         | NS       | 0.62           | 00:49:00           | 81:21:22              |
|     |         | ANTMAIN            |     | ANTMAIN            | IEFPROC  |     | STC         | NS       | 0.00           | 0.067              | 81:21:17              |
|     |         | ANTAS000           |     | ANTAS000           |          |     | STC         | NS       | 0.00           | 0.227              | 81:21:11              |
|     |         | OMVS               |     | OMVS               | OMVS     |     | STC         | NS       | 0.00           | 40.916             | 81:21:13              |
|     |         | IEFSCHAS<br>JESXCF |     | IEFSCHAS<br>JESXCF | IEFPROC  |     | SYS<br>STC  | NS<br>NS | $0.00 \\ 0.00$ | 0.008<br>00:01:45  | 81:21:25<br>81:21:13  |
|     |         | ALLOCAS            |     | ALLOCAS            | TELLUC   |     | SYS         | NS<br>NS | 0.00           | 0.010              | 81:21:25              |

To put the data in the field CPU% on this display in descending order, you would specify the following on the command line:

SORT CPU% D

This command displays a screen like the following one. The D parameter caused the values in the CPU% field to be listed in descending order. Specifying A (ascending) lists the values in ascending order.

| Comm | and ==       |                      |                     | •                |          |             | •         |               |                      | ===> HALF            |
|------|--------------|----------------------|---------------------|------------------|----------|-------------|-----------|---------------|----------------------|----------------------|
|      |              | LCPU 3               |                     |                  |          |             |           |               | C 21639              | . 1-79/342           |
| Cmd  | Jobnr        | *<br>Jobname         | Stepname            | Procstep         | Jc       | ALL<br>Type |           | CPU%          | CPU-Time             | Clocktime            |
|      | 2423         | CICSPROD             | CICSPROD            | CICS             | \$       | STC         | NS        | 21.55         | 03:10:51             | 81:17:59             |
|      | 1136<br>2333 | IXRASUBS<br>NET      | IXRASUBS<br>NET     | IEFPROC<br>A44X  | \$<br>\$ | STC<br>STC  | NS<br>NS  | 11.05<br>7.88 | 00:18:41<br>05:34:28 | 14:45:25<br>81:19:29 |
|      | 2334         | RMF                  | RMF                 | IEFPROC          | \$       | STC         | NS        | 4.08          | 00:35:23             | 81:19:29             |
|      | 2586<br>1562 | KNUJ001              | CCITCPGW<br>CATSO   | A55TG013         |          | STC<br>TSU  | NS<br>LSW | 3.18<br>2.30  | 00:33:56<br>6.346    | 81:17:07<br>01:27:48 |
|      | 2362         | TCPIP44<br>JES       | TCPIP44<br>JES      | TCPIP<br>IEFPROC | \$       | STC<br>STC  | NS<br>NS  | 2.18<br>2.01  | 00:40:23<br>00:48:19 | 81:18:54<br>81:20:26 |
|      | 2615         | CONSOLE              | CONSOLE             | 12111100         | _        | SYS         | NS        | 1.33          | 00:49:08             | 81:21:25             |
|      | 2615<br>1281 | SYSQA02<br>ROSCOE    | SYSQA02<br>ROSCOE   | ROSCOE           | I<br>\$  | JOB<br>STC  | NS<br>NS  | 1.13<br>0.96  | 00:07:10<br>36.883   | 17:50:14<br>07:03:28 |
|      | 2398         | ENF<br>GRS           | ENF<br>GRS          | ENF              | \$       | STC<br>SYS  | NS<br>NS  | 0.94<br>0.87  | 00:21:23<br>00:16:12 | 81:18:05<br>81:21:25 |
|      | 1300         | SYSTEM23             | SYSTEM23            | \$\$\$@NX@       | \$       | STC         | NS        | 0.80          | 40.133               | 06:13:40             |
|      | 3938<br>9073 | SUP\$TE10<br>SYSQA03 | TECHDC10<br>SYSOA03 |                  | I<br>T   | JOB<br>JOB  | NS<br>NS  | 0.78<br>0.67  | 00:05:36<br>00:07:50 | 45:21:14<br>22:02:58 |
|      | 1307         | •                    | SYSTEM47            | \$\$\$@NX@       | \$       | STC         | NS        | 0.66          | 41.750               | 06:12:48             |

#### ■ Start and End Columns

You can also sort data using start and end column numbers to define a range of data within a display field. This data can also be put in ascending or descending order.

To sort the data between two columns on the ACTIVITY display in ascending order, specify the following on the command line and press enter:

#### SORT 11 18 A

**Note:** If you do not have the column ruler showing on your screen, specify SET COLS ON to find out the column numbers where the data begins and ends (in this example, 11 and 18).

This command displays a screen like the following one. The parameter caused the values beginning in column 11 and ending in column 18 to be listed in ascending order.

```
SYSVIEW ACTIVITY ------ System Activity -----
Command ====>
                                                        Scroll *==> HALF
------ Lvl 2 Row 1-15/399 Col 1-79/342
Status: SORT NOSELECT NODEST NOPREFIX NOOWNER NOUPDATE
CPU 100% LCPU 45% Paging 0
                              SIO 230
                                            UIC 300
                                                    AFC 21639
                                   ALL ALL
....+....10...+....20...+....30...+....40...+....50...+....60...+....70...+...
Cmd Jobnr Jobname Stepname Procstep Jc Type Status
                                                CPU% CPU-Time Clocktime
         *LOGON*
                         A01TD015
                                    TSU OUT TI
                                                0.00
                                                        0.014
                                                0.00
        *LOGON*
                         A55TG034
                                   TSU OUT TI
                                                        0.012
         *LOGON*
                         A55TG036
                                    TSU
                                        OUT TI
                                                0.00
                                                        0.012
    3242 *MASTER*
                                   SYS
                                        NS
                                                 4.48 00:57:39
                                                              5.42DAYS
    3931 ADAMPM1 ADADB01 $$$$$@ 3 JOB
                                        NS
                                                0.00
                                                       12.799
                                                              21:50:22
        ALLOCAS ALLOCAS
                                    SYS
                                        NS
                                                0.00
                                                        0.010
                                                              5.42DAYS
    5318 ANDNI02
                 CATS0
                         A01TD003 @
                                   TSU
                                        OUT TI
                                                0.00
                                                       17.392 06:21:28
        ANTAS000 ANTAS000 IEFPROC
                                    STC
                                        NS
                                                0.00
                                                        0.278
                                                              5.42DAYS
        ANTMAIN ANTMAIN IEFPROC
                                    STC
                                        NS
                                                0.00
                                                        0.067
                                                              5.42DAYS
        APPC
                 APPC
                         APPC
                                    STC NS
                                                0.00
                                                        1.852 5.42DAYS
        ASCH
                 ASCH
                         ASCH
                                                0.00 00:01:03 5.42DAYS
                                    STC
                                       NS
                                    INIT OUT LW
    3269 ASCHINT
                 ASCHINT
                         IEFPROC $
                                                        0.004
    3270 ASCHINT ASCHINT IEFPROC
                                    INIT OUT LW
                                                        0.004
                                 $
    3271 ASCHINT ASCHINT
                         IEFPROC
                                    INIT OUT LW
                                                        0.004
                                 $
                                                        0.004
    3272 ASCHINT ASCHINT IEFPROC $
                                   INIT OUT LW
```

#### Special sort options

You can specify special options on the SORT command to either:

- Return the data to the order created by the original command
- Request that data be sorted as specified in the command profile Formats
   Section

For more on how you can change your user profile, see the sections in this chapter on the PROFILE command.

You can also specify the current SORT parameters on the command line and overtype them. For details about using the SORT command and its parameters, see the SORT command online help.

### **Select Particular Rows of Data to Display**

Use the SELECT command to display particular rows of data. You can select the rows according to the values that appear under the column headings. That is, you can display all rows that have a particular field value.

The following is a sample ACTIVITY display.

| Command ====>    | SYSVIEW ACTIVITY System Activity                         |             |     |     |      |          |           |  |  |  |
|------------------|--|-------------|-----|-----|------|----------|-----------|--|--|--|
| Status: NOSORT   | Status: NOSORT NOSELECT NODEST NOPREFIX NOOWNER NOUPDATE |             |     |     |      |          |           |  |  |  |
| *                |  |             | ALL | ΔΙΙ |      |          |           |  |  |  |
| Cmd Jobnr Jobnam | e Stepname   | Procstep Jo |     |     | CPU% | CPU-Time | Clocktime |  |  |  |
| 3242 *MASTE      | •  | •           | SYS |     | 2.00 | 00:57:42 | 5.42DAYS  |  |  |  |
| PCAUTH           |  | ,           | SYS | NS  | 0.00 | 0.021    | 5.42DAYS  |  |  |  |
| RASP             | RASP   |             | SYS | NS  | 0.00 |          | 5.42DAYS  |  |  |  |
| TRACE            | TRACE  |             | SYS | NS  | 0.00 | 0.007    | 5.42DAYS  |  |  |  |
| DUMPSR           | / DUMPSRV  | DUMPSRV     | SYS | NS  | 0.00 | 00:01:38 | 5.42DAYS  |  |  |  |
| XCFAS            | XCFAS  | IEFPROC     | STC | NS  | 0.14 | 01:18:40 | 5.42DAYS  |  |  |  |
| GRS              | GRS  |             | SYS | NS  | 0.18 | 01:10:02 | 5.42DAYS  |  |  |  |
| SMXC             | SMXC   |             | SYS | NS  | 0.11 | 00:07:55 | 5.42DAYS  |  |  |  |
| SYSBMA           | S SYSBMAS  |             | SYS | NS  | 0.00 | 51.094   | 5.42DAYS  |  |  |  |
| CONSOL           | E CONSOLE  |             | SYS | NS  | 0.14 | 01:42:47 | 5.42DAYS  |  |  |  |
| WLM              | WLM  | IEFPROC     | SYS | NS  | 0.20 | 00:52:36 | 5.42DAYS  |  |  |  |
| ANTMAI           | N ANTMAIN  | IEFPROC     | STC | NS  | 0.00 | 0.067    | 5.42DAYS  |  |  |  |
| ANTASO           | 90 ANTAS000  | IEFPROC     | STC | NS  | 0.00 | 0.278    | 5.42DAYS  |  |  |  |
| OMVS             | OMVS   | OMVS        | STC | NS  | 0.04 | 58.781   | 5.42DAYS  |  |  |  |
| IEFSCH           | AS IEFSCHAS  |             | SYS | NS  | 0.00 | 0.007    | 5.42DAYS  |  |  |  |
| JESXCF           | JESXCF   | IEFPROC     | STC | NS  | 0.00 | 00:03:14 | 5.42DAYS  |  |  |  |

To filter the display so that it shows only entries with a value greater than two in the CPU field, specify the following on the command line:

SELECT CPU% > 2

When you press Enter, you would see the following display.

```
SYSVIEW ACTIVITY ------ System Activity ------
                                                  Scroll *==> HALF
Command ====>
 ------ Lvl 2 Row 1-5/5 Col 1-79/342
Status: NOSORT SELECT NODEST NOPREFIX NOOWNER NOUPDATE
CPU 99% LCPU 54% Paging 13 SIO 165 UIC 300 AFC 21639
                                 ALL ALL
Cmd Jobnr Jobname Stepname Procstep Jc Type Status CPU% CPU-Time Clocktime
    3258 NET
               NET.
                       A44X
                              $ STC NS
                                            4.68 08:23:00 5.42DAYS
    3339 CSQ1MSTR CSQ1MSTR $ STC NS
                                            7.58 02:30:08 5.42DAYS
    3340 CSQ2MSTR CSQ2MSTR $ STC NS
                                            3.94 01:46:34
                                                         5.42DAYS
                       A55TG012 @ TSU IN
   5727 OLEJU01 CATSO
                                            6.36
                                                   25.152 00:17:42
                          = End of Data =
```

#### Methods for Specifying Options on a Command

You can display specific values on a display using the following methods:

#### Operators

In the example, you used the greater than symbol (>) to associate the field with the value and determine that those rows should be displayed. You can use many operators in addition to greater than (> or GR), such as equal to (EQ or =), and greater than or equal to (GE or >=). You can also use operators such as B for blank or NB. In which case you would not specify a value after the field and the operator.

#### COND Keyword

You can use the CONDition keyword in place of a field name to specify selection for all fields defined as status fields on the current screen, without your having to name them individually. Several requirements exist for specifying this keyword. To learn more about this option, see the SELECT command online help.

#### Multiple Fields

You can select data to display according to more than one field by specifying parameters on the SELECT command using the *conn* parameter.

#### Special Options

As with the SORT command, you can specify special options on the SELECT command to either:

- Return the data to the order created by the original command
- Request that data be sorted as specified in the profile Formats Section

You can also specify the current SELECT parameters on the command line and overtype them. See the SELECT command online help.

# **Customize Your Display**

You can customize your display by choosing the color of the fields on your display, or whether to highlight them. You can also modify the field according to its type-input or output.

#### Follow these steps:

1. Use the SCREEN command to modify the attributes of the fields that appear on your displays.

The following sample screen displays when you issue the SCREEN command:

| Command ===  | SYSVIEW SCREEN Screen Field Attributes                                       |  |   |  |   |  |  |  |  |  |
|--|--|--|---|--|---|--|--|--|--|--|
| Dev color  | YES D  | ev hilit   | e YES U   | se color CO  | ND Use hilite COND  |  |  |  |  |  |
| Name ARrow BARGRAPHHI BARNormal BARProblem BARWarning COLumns CONDHi CONDNormal CONDProblm CONDWarnng DAta DATAHi DIvider DUmmy DUMMYHi Eodata | OUTPUT<br>OUTPUT<br>OUTPUT<br>OUTPUT<br>OUTPUT<br>OUTPUT<br>OUTPUT<br>OUTPUT | LOW<br>HIGH<br>LOW<br>HIGH<br>LOW<br>HIGH<br>LOW<br>HIGH<br>LOW<br>LOW<br>HIGH | Color<br>GREEN<br>BLUE<br>YELLOW<br>GREEN<br>RED<br>YELLOW<br>BLUE<br>TURQUOISE<br>GREEN<br>YELLOW<br>GREEN<br>TURQUOISE<br>GREEN<br>YELLOW<br>TURQUOISE<br>GREEN | None<br>Reverse<br>Reverse<br>Reverse<br>Reverse<br>None<br>None<br>None | Description Arrow prompts for input fields Bar graph Hilited bar graph Normal condition bar graph Problem condition bar graph Warning condition bar graph Column ruler line Hilited condition status field Normal condition status field Problem condition status field Problem condition status field Warning condition status field Data lines Data lines Data line hilited fields Divider lines Dummy data input fields Hilited dummy data input fields End of data line |  |  |  |  |  |

The Fields are listed in the first column.

- 2. Change the attributes of the field using one of the following methods:
  - Overtype the attribute values for them.
  - Specify the SCREEN command with parameters, indicating the field and how you would like it to be changed.

For example, to make all input fields on your displays white, either overtype the value for the field in the Color column, or specify the following:

SCREEN INPUT WHITE

For attribute values you can specify for the field, and for other details about the SCREEN command, see the SCREEN command online help.

# **Print a Display**

You can print a display using the PRINT command. The printed output for the display can be sent to a printer or placed in a data set.

#### Follow these steps:

■ To print the whole display, issue the following command:

PRINT ALL

■ To print what is currently on the screen, issue the following command:

PRINT SCREEN

■ To print specified lines on the display. For example, to print lines 5 through 20 on a display, issue the following command:

PRINT FROM 5 TO 20

Once you issue a PRINT command, all output from subsequent PRINT commands goes to the same file until you issue a PRINT CLOSE command.

**Note:** For other printing options you can use, see the online help for information about the PRINT command.

# **Chapter 4: MVS Displays**

This section contains the following topics:

About the MVS Displays (see page 91)

**DASD Units Display** (see page 91)

MVS Exception Alerts Display (see page 93)

Console Display (see page 95)

<u>Processor Information Display</u> (see page 96)

Access the APF List Display (see page 97)

Access the LINKLIST Libraries Display (see page 98)

Subsystem Detail Display (see page 100)

# **About the MVS Displays**

This chapter describes some representative MVS resource displays and some tasks you can perform on them.

In addition to the displays described in this chapter, you can use many other displays to view MVS resource displays. To see menus of the commands you can use, specify MENU MVS on the command line. This menu contains other menus that let you view different types of information, such as status, storage, devices, data sets, and so on.

# **DASD Units Display**

You can use the DASD Units display to view the status of DASD devices in the system. This display shows you information about a device, limited by volume, unit type, usage type, and current status.

To access the DASD Units display, issue the DASD command.

### The following is a sample DASD Units display:

| Command ====> Scroll *==> HALF<br>Lvl 2 Row 1-17/1097 Col 1-79/252 |        |      |        |         |     |                 |         |           |  |
|--|--------|------|--------|---------|-----|-----------------|---------|-----------|--|
| Interval 2.1   |        |      |        |         |     |                 |         |           |  |
| *  | ONLINE | *    | *      | ALL     |     |                 |         |           |  |
| Cmd Volser   | Status | Devn | Unit   | Usage   | Shr | Jobname         | ASID AM | IORt IOCt |  |
| ACFQA1   | ONLINE | 2E26 | 3390-3 | PRIVATE | SHR |                 |         | 939       |  |
| ACF001   | ALL0C  | 054F | 3390-3 | PRIVATE | SHR | JAC\$1215       | 0091    | 1432      |  |
| ACUT05   | ALL0C  | 2E40 | 3390-3 | PRIVATE | SHR | <b>IXRASUBS</b> | 0197    | 9613      |  |
| ACUT06   | ALL0C  | 2E45 | 3390-3 | PRIVATE | SHR | ASTEX           | 022D    | 30112     |  |
| ACUT07   | ALL0C  | 2120 | 3390-3 | PRIVATE | SHR | ASTEX           | 022D    | 38187     |  |
| ADBA01   | ALL0C  | 2D20 | 3390-3 | PRIVATE | SHR | WILDI04S        | 016A    | 50231     |  |
| ADBA02   | ALL0C  | 2D21 | 3390-3 | PRIVATE | SHR | STAD00NL        | 0085    | 52931     |  |
| ADBA03   | ALL0C  | 2D22 | 3390-3 | PRIVATE | SHR | WILDI04S        | 016A    | 6407      |  |
| ADBA04   | ALL0C  | 2D23 | 3390-3 | PRIVATE | SHR | ASTEX           | 022D    | 57649     |  |
| ADBA05   | ALL0C  | 2D24 | 3390-3 | PRIVATE | SHR | WILDI04S        | 016A    | 26237     |  |
| ADBA06   | ALL0C  | 2D25 | 3390-3 | PRIVATE | SHR | WILDI04S        | 016A    | 25392     |  |
| ADBA07   | ALL0C  | 2D26 | 3390-3 | PRIVATE | SHR | ASTEX           | 022D    | 63687     |  |
| ADBA08   | ALL0C  | 2D27 | 3390-3 | PRIVATE | SHR | WILDI04S        | 016A    | 41642     |  |
| ADBA09   | ALL0C  | 2D28 | 3390-3 | PRIVATE | SHR | WILDI04S        | 016A    | 1205      |  |
| ADBA10   | ALL0C  | 2D29 | 3390-3 | PRIVATE | SHR | INIT            | 00EE    | 40368     |  |
| ADBA11   | ALL0C  | 2D2A | 3390-3 | PRIVATE | SHR | WILDI04S        | 016A    | 40306     |  |
| ADBA12   | ALL0C  | 2D2B | 3390-3 | PRIVATE | SHR | STAD002P        | 001E    | 30384     |  |

### Tasks Performed from the DASD Units Display

You can perform the following line commands from this display. You only need to specify the uppercase portion of the line command.

To issue these commands, place your cursor in the Cmd input area to the left of the variable you would like to affect.

#### **Space**

Display allocated free DASD space for the selected volser.

Link-to Command: SPACE

#### Vtoc

Display data sets for the selected volser.

Link-to Command: VTOC

#### **DSinfo**

Display information about the DASD volume.

Link-to Command: DSINFO VTOC

#### **OUtput**

Display the output of the job that last allocated the unit.

Link-to Command: OUTPUT

#### Plot, PLt

Display a plot selection list for the selected volser.

Link-to Command: PLOTLIST DEVICE

# **MVS Exception Alerts Display**

To access the MVS Exception Alerts display, issue the ALERTS command.

You can use this display to view exception alerts for thresholds that have been defined to the MVS data collector. If the current value exceeds a threshold definition, the data collection value is displayed. You can display alerts for both problem and warning thresholds.

**Note:** Use the THRESH command to see thresholds that have been defined.

SYSVIEW ALERTS ----- MVS Exception Alerts -----Command ====> Scroll \*==> HALF ------ Lvl 2 Row 1-15/15 Col 1-79/211 Cmd Name Argument Alias Value Status Description CPU% ALL 100% PROBLEM CPU usage percentage 0000 100% PROBLEM CPU usage percentage 0001 100% PROBLEM CPU usage percentage 0002 100% PROBLEM CPU usage percentage 0003 100% PROBLEM CPU usage percentage **JOBECSA** NET 0032 5.22M PROBLEM E-CSA storage allocated **JOBRSTG** \*MASTER\* 0001 56.4M PROBLEM Real storage E-SQA storage allocated pct STGESQA% 110% PROBLEM 48.2K PROBLEM E-SQA storage free **STGESQAF STGSQAF** 355K WARNING SQA storage free D51IMSTR INACTIVE Job required to be active J0B 0 D51JMSTR INACTIVE Job required to be active INACTIVE 0 NETVIEW Job required to be active **NETVWSSI** 0 INACTIVE Job required to be active INACTIVE SYSVCPAS 0 Job required to be active = End of Data =

The following is a sample MVS Exception Alerts display:

### Tasks Performed from the MVS Exception Alerts Display

You can perform the following line commands from this display. You only need to specify the uppercase portion of the line command.

To issue these commands, place your cursor in the Cmd input area to the left of the variable you would like to affect.

#### Select

Dynamically provide more information about the selected data element using the PLOT or CLIST command. If a member for this variable has been defined in the CLISTLIB, the CLIST command is executed. If a member name does not exist, the PLOT command is executed.

Link-to Command: PLOT or CLIST

#### **Plot**

Display a graph of performance data for the selected data element.

Link-to Command: PLOT

#### **CList**

Issue the CLIST command for the selected data element.

The following CLIST command is issued:

CLIST member ,, argument alias

*member* - Variable name. If the variable name contains the percent character (%), this character will translate to the letter "P" to generate a valid member name.

argument - Passed as parameter 1

alias - Passed as parameter 2

#### **Thresh**

Display threshold information for the selected variable name.

Link-to Command: THRESH

#### Variable

Display a variable definition for the selected variable name.

Link-to Command: VARS

# **Console Display**

To access the Console display, issue the CONSOLE command.

This display lets you view messages currently displayed on any active console. You can use the facilities provided by a console without having to go to the computer room.

To view messages for a console, specify the console ID on the CONSOLE command. The default ID is the ID of the master console.

**Note:** Another console command is the XCONSOLE command, which establishes an MVS extended console session, where the user can both issue commands and receive responses. For more information, see the XCONSOLE command online help.

The following is a sample Console display:

```
SYSVIEW CONSOLE ------ Console -----
Command ====>
                                                       Scroll *==> HALF
               ----- Lvl 2 Row 21-39/39 Col 1-79/191
Id=20 Devn=0902 Mode=R Backlog=1 Name=ALT1XE44 Sys=XE44 Cmdsys=XE44
 - 09.25.33 JOB00485 $HASP375 DOROL01D ESTIMATE EXCEEDED BY
                                                                  260,
   000 LINES 1 % SPOOL
   09.25.36 J0B01504 $HASP308 G325EXEC ESTIMATED TIME EXCEEDED BY 110
    MINUTES
   09.25.37 STC03697 CAS9899E - Error: Invalid CTH header received
   09.25.37 STC03697 CAS9890E - Vers: 6 Cpu: 7
  *09.25.38
                   *$HASP050 JES RESOURCE SHORTAGE OF TGS - 85%
  * UTILIZATION REACHED
   09.25.39
                    $HASP893 VOLUME(SPL04A)
                                                                     C
   $HASP893 VOLUME(SPL04A) STATUS=ACTIVE, TGNUM=16500,
   $HASP893
                          TGINUSE=14044, TRKPERTGB=3, PERCENT=85
                    $HASP646 85.1151 PERCENT SPOOL UTILIZATION
   09.25.39
   09.25.40 JOB01523 $HASP308 PC3AEXEC ESTIMATED TIME EXCEEDED BY 100
    MINUTES
   09.25.40 J0B01697 $HASP100 DBDRIUTL ON INTRDR
    FROM STC01281 ROSCOE
   09.25.40 J0B01503 $HASP308 G315EXEC ESTIMATED TIME EXCEEDED BY 110
    MINUTES
   09.25.40 JOB01697 TSS7053I Default ACID <BATCHDEF> Assigned
```

### Tasks Performed from the Console Display

You can perform the following line command from this display. You only need to specify the uppercase portion of the line command.

To issue these commands, place your cursor in the Cmd input area to the left of the variable you would like to affect.

#### Delete

Delete the message from the MVS console screen. The message is marked as a candidate for deletion. When space is required on the screen, the message is physically deleted.

# **Processor Information Display**

To access the Processor Information display, issue the CPU command.

This display lets you view information about processors. You can view the busy percentage, mode, job name, and ASID.

# Tasks Performed from the Processor Information Display

You can perform the following line commands from this display. You only need to specify the uppercase portion of the line command.

To issue these commands, place your cursor in the Cmd input area to the left of the variable you would like to affect.

#### Select

Display job output for the job active on the selected processor.

Link-to Command: OUTPUT

Plot

Display a plot of the CPU busy percentage for the selected processor.

Link-to Command: PLOT

# Access the APF List Display

To access the APF List display, issue the APFLIST command. This display shows you data set information in the authorized program facility (APF) list. Use line commands and subcommands to alter dynamically this list.

The following is a sample APF List display:

| SYSVIEW APFLIST APF Lis Command ====> Status: SORT NOSELECT NODEST NOPREFIX N APFLIST format is DYNAMIC  | Scroll *==⇒ HALF<br>Lvl 2 Row 1-17/451   |
|--|--|
| Cmd Dataset-Name ADD.APFLIST.DATASET.NAME ANF.SANFLOAD AOP.SAOPLOAD APC.DEVCA7.CL233.LOADLIB APC.DEVCA7.L230.CALLIB APC.DEVCA7.SECLIB APC.DEVCA7.TSO4.LOADLIB APC.DEVCA7.TSO4.TESTLIB APC.DEVCA7.TSO4.TESTLIB APC.DEVCA7.TSO4.TESTLIB APC.DEVL232.CAILIB APC.DEVL232.CAILIB APC.LV1CA7.L29302.LOADLIB APC.LV1JT.V3R3.P9504.TRACLINK APC.LV2CA7.TEST.CAILIB APC.LV2CA7.TEST.CAILIB APC.LV2CA7.TEST.CAILIB APCDAL.L233X.CAILIB APCMTL.CU1B.CHQA.SESFLNK APCMTL.DS60P.DS9710.CAILIB | Volser Status ADDVOL MVR25A MVR25A APCD06 APCD98 APCD06 APCD98 APCD98 APCD98 APCD98 APCD98 APCD10 APCD98 APCD10 APCD08 APCD08 APCD10 APCD08 APCD00 APCD09 APCD08 APCD06 APCM07 |

### Tasks Performed from the APF List Display

Use the VERIFY subcommand on the APF List command to verify that the data sets listed exist on the specified volumes.

The following is an example of an APF List display after the VERIFY subcommand has been issued.

```
SYSVIEW APFLIST ----- APF List -----
Command ====>
                                                        Scroll *===> HALF
APFL004I VERIFY complete - 82 errors detected ----- Lvl 2 Row 1-17/451
          SORT NOSELECT NODEST NOPREFIX NOOWNER NOUPDATE
Status:
APFLIST format is DYNAMIC
Cmd Dataset-Name
                                              Volser Status
___ ADD.APFLIST.DATASET.NAME
                                              ADDVOL
    ANF.SANFLOAD
                                              MVR25A FOUND
___ AOP.SAOPLOAD
                                              MVR25A FOUND
  _ APC.DEVCA7.CL233.LOADLIB
                                              APCD06 FOUND
___ APC.DEVCA7.L230.CALLIB
                                              APCD98
                                                     FOUND
    APC.DEVCA7.SECLIB
                                              APCD06 FOUND
___ APC.DEVCA7.TS04.LOADLIB
                                              APCD98 FOUND
___ APC.DEVCA7.TS04.TESTLIB
                                              APCD98 FOUND
    APC.DEVCA7.TS044.CAILIB
                                              APCD98 FOUND
    APC.DEVL232.CAILIB
                                              APCD10
                                                     FOUND
    APC.LV1CA7.L29302.L0ADLIB
                                              APCD98
                                                     NOT FOUND
    APC.LV1JT.V3R3.P9504.TRACLINK
                                              APCD10 NOT FOUND
    APC.LV2CA7.TEST.CAILIB
                                              APCD09
                                                     NOT_FOUND
    APC.LV2CA7.TEST4.CAILIB
                                              APCD08
                                                     NOT FOUND
                                              APCD06 FOUND
    APCDAL.L233X.CAILIB
    APCMTL.CU1B.CHQA.SESFLNK
                                              APCM06 FOUND
```

# **Access the LINKLIST Libraries Display**

The LINKLIST Libraries display shows you the linklisted data sets. Use this information to:

- Identify linklist data sets that have gone into additional extents after the last IPL.
- Identify which linklist data sets are APF-authorized.
- Identify which linklist data sets contain a specific load module.
- Display all members duplicated in more than one linklist data set by using the DUPLICAT command.

To access the LINKLIST Libraries display, issue the LINKLIST command.

The following is a sample LINKLIST Libraries display:

```
SYSVIEW LINKLIST ------ LINKLIST Libraries -----
Command ====>
                                                           Scroll *===> HALF
----- Lvl 2 Row 1-15/73
Jobname SYSVIEW ASID 007B Jobid STC02423
Setname LNKLST00 Status CURRENT IPL CHK Allocations ACTIVE LLA search available Extents 168
Libraries 73 Alloc 0 Open 0
                                               Xtn Volser APF
Cmd Dataset-Name
    SYS1.LINKLIB
                                                  6 MVR25A APF
___ SYS1.MIGLIB
                                                  5 MVR25A APF
SYS1.CSSLIB
SYS1.CSSLIB
SYS2.XE44.LINK250
SYS2.COMMON.LINK250
                                                  1 MVR25A APF
                                                  1 MVCA44 APF
                                                  1 MVSPP2 APF
___ SYS2.XE44.LINKLIB
                                                 1 MVCA44 APF
ISP.SISPLOAD
                                                  1 MVR25A APF
    ISF.SISFLOAD
                                                 12 MVR25A APF
    SYS1.CMDLIB
                                                  3 MVR25A APF
___ SYS1.V2R5M0.SHASLINK
                                                  9 MVR25A APF
___ SYS1.V2R5M0.SHASMIG
                                                  2 MVR25A APF
    NETVIEW.V3R1M0.CNMLINK
                                                  3 MVR25A APF
    SYS2.0PERA30.P9602
                                                  1 MVSPP1 APF
    SYS2.0PS42.P9808B
                                                  5 MVSPP2 APF
    SYS2.TSS50.P9808D.XE44
                                                  1 MVCA44 APF
```

### Tasks Performed from the LINKLIST Libraries Display

You can perform the following subcommands from this display. Use of these commands could have dependencies on LLA.

#### ADD

Add a data set to LINKLIST.

#### **DELETE**

Delete a data set from LINKLIST.

#### **REBUILD**

Rebuild the linklist DEB (data extended block).

#### WHERE

Search for a module in the LINKLIST libraries.

#### **Examples: ADD and WHERE Subcommands**

1. ADD subcommand

To add a cataloged data set to the end of the list of LINKLIST data sets, issue this subcommand:

ADD dsname

#### dsname

Specifies the name of the data set.

2. WHERE subcommand

To locate all instances of a module on the Linklist Libraries display, issue the following command:

WHERE modulename

#### modulename

Specifies the name of the module to locate.

# **Subsystem Detail Display**

To access the Subsystem display, issue the SUBSYS command. You can specify a summary display or a detail display.

Use this display to view information about subsystems. You can use this display to determine which subsystems handle certain functions and the entry point address of the module that handles that function.

The following is a sample Subsystem Detail display:

```
SYSVIEW SUBSYS ----- Subsystem Detail -----
                                                     Scroll *==> HALF
Command ====>
              ----- Lvl 2 Row 477-493/538 Col 1-79/112
Status: SORT NOSELECT NODEST NOPREFIX NOOWNER NOUPDATE
Subsystems Defined 161 Actual 161
           SSVT User-1 User-2 Code EPAddr Region Module Offset
Name SSCT
***NA***
                                                      ***NA***
                                     8 892780F0 E-CSA
                                                      ***NA***
                                     9 88A23028 E-CSA
                                    10 89026038 E-CSA
                                                      ***NA***
                                                      ***NA***
                                     50 89684078 E-CSA
                                    58 89A9C768 E-CSA
                                                       ***NA***
SMS 00C491B0 00C48048 00000000 00000000
                                     8 842E2248 E-PLPA
                                                       CMPSTSGI 075248
                                     15 842E2248 E-PLPA
                                                       CMPSTSGI 075248
                                     16 84444D58 E-PLPA
                                                      IGGS00PN 00AD58
                                     17 84441700 E-PLPA
                                                      IGGS00PN 007700
                                     55 842E2248 E-PLPA
                                                      CMPSTSGI 075248
SPVT 00C495F8 00000000 00000000 000000000
SSTB 00A76178 00000000 09DF7160 00000000
STRB 00C35028 0868F340 0868F000 000000000
SVDM 00C445E4 00000000 00ADA520 00000000
SVPM 00C4462C 00000000 00ADA020 00000000
SYST 00C4459C 00000000 00FA3480 00000000
```

### Tasks Performed from the Subsystem Display

You can perform the following subcommands from this display. For detailed information about parameters, see the online help.

#### **ADD**

Add a subsystem entry to z/OS.

#### **DELETE**

Delete a subsystem entry from z/OS.

#### **Example: Add a Subsystem Entry**

To add a subsystem entry, issue the following subcommand:

ADD name

#### name

Specifies the subsystem name.

# **Chapter 5: Job and Output Management**

This section contains the following topics:

About the Job and Output Management Displays (see page 103)

System Activity Display (see page 103)

Job Summary Display (see page 105)

Job Queues Display (see page 106)

Printers Display (see page 108)

System Log Display (see page 109)

# **About the Job and Output Management Displays**

This chapter describes some tasks you can perform using CA SYSVIEW job and output management displays.

In addition to the displays described in this chapter, you can use many others to do the following:

- View information about jobs
- Perform job management tasks
- Perform output-related tasks

To see a menu of the commands you can use, specify MENU JES on the command line.

**Note:** You can use CA SYSVIEW line commands to perform many tasks on these displays. To see the valid line commands for a display, place your cursor in the line command input area and press the Help PF key.

# **System Activity Display**

To access the System Activity display, issue the ACTIVITY command.

Use this display to obtain status information about jobs executing on the system. The jobs you display can be started tasks, TSO users, or batch jobs. The information displayed lets you determine the following:

- Whether a job is swapped out and why
- The amount of real storage the job is using

- The dispatching priority of a job relative to other jobs
- Whether a job is in a loop

The following is a sample System Activity display:

```
SYSVIEW ACTIVITY ----- System Activity ----- 10:25:20
                                                                  Scroll *==> HALF
Command ====>
                      ----- Lvl 2 Row 69-77/762 Col 1-79/484
(r) CP% IFA% Pct% ...50..100 -Condition- ---Ready--- --Paging-- -Storage- CPU 35% 0% 28% ENQ NoSMF ASIDs 3 Slots 41% ECSA 87% LCPU 35% 0% 28% RES NoWTO Tasks 3 Rate 3 ESQA 95% NASMP TABLE T/O AFOA 10640 SQA 95%
                                NoDMP TAP ----I/0---- AFQA 10649
                                                                          SOA 97%
                51%
Spool
                                               Rate 27113 UICA 2540
                                                                           CSA 64%
Formats DEFAULT CPU CPU1 PERF STORAGE
Status SORT
XSStat Data NO Group ALL MsgLvl ERROR Limit NONE RemDup NO Type SYST
                                ALL
                                                 ALL
Cmd Jobname Stepname Procstep Type Jobnr Jc Status CPU-Time Limit Clocktime
    BLADA08 CATSO
                     A55TG129 TSU 62337 @ LSW
                                                        8.985128 3600 01:04:18
    BLX1PROC BLX1PROC BLXSPCAS STC 17660 $ NS
                                                        0.109452 86400 85:03:33
```

### Tasks Performed from the System Activity Display

To perform line commands from the System Activity Display, place your cursor in the command input area to the left of the variable.

The following line commands are valid:

```
C Cancel a job.

S Display the job output.
Link-to Command: OUTPUT

L List the job output files.
Link-to Command: LISTFILE

T Display tasks for the job.
Link-to Command: TASK

M
Invoke the MENU ADDRSP command.
```

Link-to Command: MENU

# **Job Summary Display**

To access the Job Summary display, issue the JOBSUM command.

Use the Job Summary display to obtain a summary of information about jobs on the JES job queues. This display tells you the type, queue, status, job input class, and spool volume.

The following is a sample Job Summary display:

| Command ====>  | SYSVIEW JOBSUM Job Summary   |   |  |   |  |  |   |   |  |  |
|--|--|---|--|---|--|--|---|---|--|--|
| Status: SORT NOSELECT NODEST NOPREFIX NOOWNER NOUPDATE Spool space used - 62.95% Maximum jobs allowed - 5000   |  |   |  |   |  |  |   |   |  |  |
| * A Cmd Jobname T CHH\$IPC9 J SYSTEM74 J QA90MUF4 J GLOED02F J NETSPY52 J ONETH01E J FONCR01C J A021BKWD J QADRAS60 J SYSTEM11 S SYSTEM11 S SYSTEM11 S SYSTEM11 S NETSPY52 J | 00B 2475<br>10B 4137<br>10B 3673<br>10B 4663<br>10B 5712<br>10B 5406<br>10B 588<br>10B 4643<br>10B 2133<br>17C 3741<br>17C 120<br>17C 5025<br>17C 2990 | Queue OUTP OUTP OUTP OUTP OUTP OUTP OUTP OUTP | Stat<br>HLDC<br>HLDC<br>HLDC<br>HLDC<br>HLDC<br>HLDC<br>HLDC<br>HLDC | Jobc<br>M<br>I<br>D<br>A<br>M<br>B<br>A<br>Y<br>3<br>\$<br>\$<br>\$<br>\$<br>\$<br>\$<br>\$<br>\$<br>\$<br>\$<br>\$<br>\$<br>\$<br>\$<br>\$<br>\$<br>\$<br>\$ | 1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1 | 2.37<br>2.21<br>2.19<br>2.18<br>2.13<br>2.12<br>1.69<br>1.64<br>1.42<br>1.33<br>1.19<br>1.17 | 1456782<br>847380<br>905079<br>811295<br>858767<br>793355<br>629805<br>778816<br>541641<br>501196<br>446748<br>513076<br>423551 | 0<br>U3334<br>0<br>16<br>S222<br>16<br>S222<br>S222<br>S222<br>S222<br>S978<br>S978<br>S978<br>S222<br>S978 |  |  |
| NETSPY52 J SYSTEM11 S  |  |   | HLDC   | M<br>\$   | 1<br>1   | 1.05<br>1.03   |   |   |  |  |

# Tasks Performed from the Job Summary Display

To perform line commands from this display, place your cursor in the command input area to the left of the variable.

The following line commands are valid:

D

Delete a job.

S

Display the job output.

Link-to Command: OUTPUT

SS

Display information about steps for a job.

Link-to Command: STEPSUM

R

Release a job.

Н

Hold a job.

## **Job Queues Display**

To access the Job Queues display, issue the JJOBQUE command.

Use this display to obtain information about jobs on the JES job queues.

This display is probably the most comprehensive CA SYSVIEW display for jobs on job queues. The Output Queue display and the Held Output Queue display are less comprehensive, but useful. These displays are, basically, subsets of the Job Queues display. Issue the JOUTQUE and JHELDQUE commands, respectively, to access these displays.

The following is a sample Job Queues display:

```
SYSVIEW JJOBQUE ----- Job Queues -----
Command ====>
                                                          Scroll *===> HALF
------ Lvl 2 Row 12-27/2190 Col 1-79/413
Status: SORT NOSELECT NODEST NOPREFIX NOOWNER NOUPDATE
Total Lines 20,440,040
                           Total Pages 0
                                   ALL
                                        ALL ALL
                                                                 ALL
Cmd St-Date
             St-Time Jobnr Jobname Queue Type Jobc Prty Tot-Lines Outc Opri
    11Mar2008 15:36:27 4709 ACOBA01S OUTP
                                                             1967 X
                                          JOB A
                                                                        144
                                                       1
    11Mar2008 13:50:25 4356 ACOBA01S OUTP
                                                             1981 X
    11Mar2008 13:22:07 4255 ACOBA01S OUTP
                                                             1970 X
                                          .10B A
                                                                        144
                                                      1
    11Mar2008 11:10:11
                       3931 ADAMPM1 EXEC
                                          J0B
                                                      11
    11Mar2008 10:22:36
                       3665 AJNL0027 OUTP
                                                              145 Y
                                                                        144
                                          .10B
                                                      1
    10Mar2008 19:44:57
                       1154 AJNL0074 OUTP
                                                              133 X
                                                                        144
    09Mar2008 10:45:06
                        738 AJNL0105 OUTP
                                          J0B
                                                              157 A
                                                                        144
                                                       1
    09Mar2008 10:15:01
                        654 AJNL0105 OUTP
                                          J0B
                                                       1
                                                              158 A
                                                                        144
                       2207 ALEDA01B INP
                                          J0B
                                               Х
                                                      11
    12Mar2008 02:39:04
                       5318 ANDNI02
                                    EXEC
                                          TSU
                                                      15
    12Mar2008 02:39:04
                                                      15
                                                            40279 D
                                                                         96
                       5318
                                     OUTP
                                          TSII
    11Mar2008 16:28:30
                       4884 ANDNIO2D OUTP
                                          J0B
                                               Α
                                                      1
                                                               76 X
                                                                        144
                                                                3 Y
    11Mar2008 16:28:30
                       4884
                                     OUTP
                                          J0B
                                               Α
                                                                        144
    11Mar2008 16:05:52
                       4816 ANDNIO2D OUTP
                                          J0B
                                                               76 X
                                                                        144
                                               Α
                                                       1
                       4816 .
                                                                3 Y
    11Mar2008 16:05:52
                                     OUTP
                                          J0B
                                               Α
                                                       1
                                                                        144
                                                                        144
    11Mar2008 15:23:00
                       4668 ANDNIO2D OUTP
                                          J0B
                                                               76 X
```

### Tasks Performed from the Job Queues Display

To perform line commands from this display, place your cursor in the command input area to the left of the variable.

The following line commands are valid:

D

Delete output.

S

Display output.

Link-to Command: OUTPUT

L

List output files.

Link-to Command: LISTFILE

R

Release output or a job.

# **Printers Display**

To access the Printers display, issue the PRINTER command.

Use this display to view the status of local and remote JES printers. If a job is printing, the Printers display also shows information about the job.

The following is a sample Printers display:

```
SYSVIEW PRINTER ------ Printers -----
Command ====>
                                                      Scroll *==> HALF
               ----- Lvl 2 Row 1-17/20 Col 1-79/577
Status: SORT NOSELECT NODEST NOPREFIX NOOWNER NOUPDATE
             ALL
Cmd Device
             Status
                    Devn Jobname Jobnr Programmer Lines-Prt Tot-Lines Fcnt
     PRT1
             DRAINED 001E
     PRT10
             DRAINED FSS
     PRT2
             DRAINED FSS
     PRT33
             DRAINED FSS
     PRT66
             DRAINED
                    FSS
     PRT67
             DRAINED
                    FSS
     PRT76
             DRAINED
     PRT77
             DRAINED
     PRT88
             DRAINED
             DRAINED
                    FSS
     PRT90
     PRT91
             DRAINED FSS
     PRT92
             DRAINED FSS
     PRT93
             DRAINED
                    FSS
     PRT94
             DRAINED
                    FSS
     PRT95
             DRAINED
                    FSS
             DRAINED
                    FSS
     PRT96
     PRT97
             DRAINED FSS
```

## Tasks Performed from the Printers Display

To perform line commands from this display, place your cursor in the command input area to the left of the variable.

The following line commands are valid:

С

Cancel the output.

S

Start the printer.

Ρ

Stop the printer.

## System Log Display

To access the System Log display, issue the SYSLOG command.

Use this display to view the MVS system log data set. This display takes all SYSLOG output files on the JES spool and logically combines them. To view a system log, specify the JES system ID of the SYSLOG you want to display on the SYSLOG command. By default, the current system log is displayed.

The following is a sample System Log display:

```
SYSVIEW SYSLOG ------ System Log for XE44 ------
                                                           Scroll *==> HALF
Command ====>
------Lvl 2 Row 76234-76252/76289 Col 37-115/126
Date 12Mar2008 Time 09:12:49
         00000214 IEA989I SLIP TRAP ID=X33E MATCHED. JOBNAME=*UNAVAIL, ASID=
         00000010 TSS7100E 009 J=HARCA06 A=HARCA06 T=A01TD023 F=TS0 - Incorre
STC05315 00000010 ROS120I: LINE 015 ONCHI01
                                                          A55TG010 <SIGN0FF>
STC05315 00000010 RCS012I: ROSC0E /A55TG010: SUCCESSFUL DISCONNECT <VTAM>
 TSU05502 00000210 IEA630I OPERATOR SOUAY01 NOW ACTIVE,
                                                          SYSTEM=XE44
SOUAY01 00000210 $T0J5744,0UTGRP=1.1.1,C=6683,T=GT15
JOB00922 00000010 SHASP308 CICS4IDS ESTIMATED TIME EXCEEDED BY 2280 MINUTES
JOB05744 00000010 $HASP686 OUTPUT(SOUAY01B) 992
     992 00000010 $HASP686 OUTPUT(SOUAY01B) OUTGRP=1.1.1,BURST=NO,FCB=6683,
                                             FLASH=****, FORMS=STD, HOLD=(NONE)
     992 00000010
                   $HASP686
     992 00000010
                  $HASP686
                                             OUTDISP=WRITE, PRIORITY=128,
     992 00000010
                   $HASP686
                                             PRMODE=LINE, QUEUE=A,
                                             RECORDS=(2866 OF 2866)
     992 00000010
                  $HASP686
     992 00000010
                   $HASP686
                                             ROUTECDE=LOCAL, SECLABEL=, TSOAVAI
     992 00000010
                  $HASP686
                                             UCS=GT15,USERID=S0UAY01,WRITER=
STC03491 00000010 CAS9899W - USILEP05 (141.202.133.43:1721) not available...w
J0B05781 00000010 @48 REPLY WITH REQUEST TO IDMS V74
J0B00789 00000010 *42 REPLY WITH REQUEST TO DS60 V1
J0B05728 00000010 @41 REPLY WITH REQUEST TO IDMS V71
```

### Tasks Performed from the System Log Display

The System Log display lets you locate a time, date, or both in the log. To do so, issue the LOCATE subcommand in the following format:

LOCATE [hh:mm:ss] [,<date>]

#### hh:mm:ss

Specifies the time to locate in *hh:mm:ss* format. *hh* values are 00-23, *mm* values are 00-59, and *ss* values are 00-59. The default is 00:00:00. The *mm* and *ss* values are optional. (You can use a period instead of a colon to separate the *hh*, *mm*, and *ss* values.)

#### <date>

Specifies the date to locate in the user date format. The default is the current displayed date. Because the user date format can vary widely, the full date must be entered.

For example, to locate ten a.m. on March 17 2010, and the user date format is set to mm/dd/yy, issue the following command:

LOCATE 10 03/18/10

# **Chapter 6: System Overview Displays**

This section contains the following topics:

<u>About the System Overview Displays</u> (see page 111) <u>Accessing and Controlling the Displays</u> (see page 111) <u>System Overview Data</u> (see page 116)

## **About the System Overview Displays**

This chapter describes some representative displays for the System Overview component. The information section of a CA SYSVIEW command or menu can display an overview of a select group of metrics and conditions of your system.

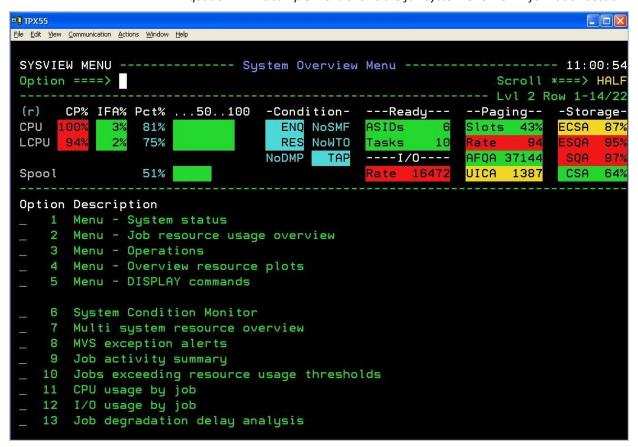
## **Accessing and Controlling the Displays**

You can access the System Overview Menu from the Primary Option Menu or by typing the command Menu Overview from any SYSVIEW menu or command.

### **System Overview Menu**

The following sample menu demonstrates the information section in full format displaying real-time data and a few available options:

Equation 1: This sample menu shows the full System Overview information section.



### **Displaying the Information Lines**

Using the commands PROFILE or SET, users can control the following System Overview options and characteristics for each command:

- Whether the information area is displayed
- Whether the format of the information area is displayed in a full or short format
- Whether the type of information is real time or interval

#### **SET Keywords**

The following available SET keywords let you control the display of the information lines:

#### **OVERView**

Controls the display of the system overview information lines. Valid values are YES or ON and NO or OFF. For example:

set overview yes

If you turn the SET command parameter IMPLICITSET to yes, you can switch the OVERVIEW between yes and no.

set implicitset yes
Default: NO or OFF

#### **OVERVIEWFmt or OVERFmt**

Controls the format of the system overview information lines when the Overview option is set to Yes. Valid values are LONG or SHORT. FULL can also be specified and is a synonym for LONG.

Default: LONG

rault. LONG

#### **OVERVIEWType or OVERType**

Controls the type of data displayed in the system overview information lines when the Overview option is set to Yes. Valid values are REALTIME or INTERVAL.

**Default: REALTIME** 

OVERVIEWDivl or OVERDivline

Controls the display of a divider line following the system overview information lines when the Overview option is set to Yes. Valid values are Yes or On and No or Off.

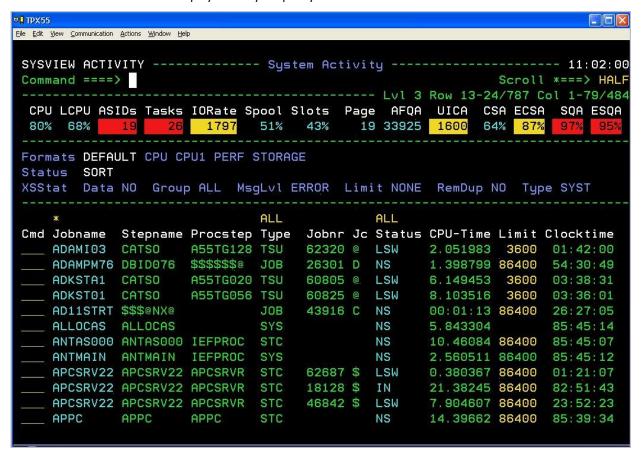
Default: Yes

### Sample Displays

The following screens show the information area displayed in both the long format and the short format of the Activity command display.

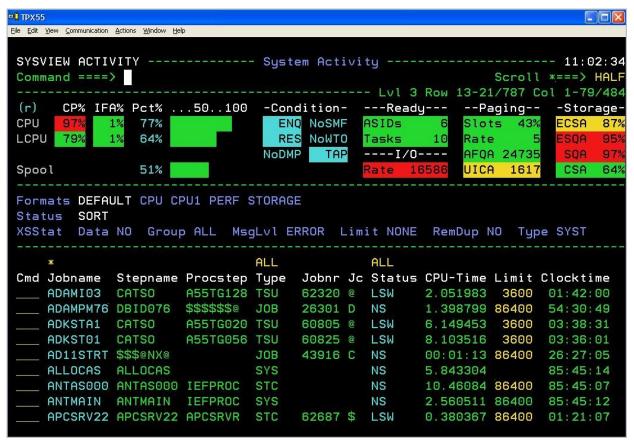
■ Short Format

The following sample display shows the short format of the information area, which displays when you specify SET OVERVIEWFMT SHORT:



#### Long Format

The following sample display shows the information area set back to the long format, which displays when you specify SET OVERVIEWFMT LONG:



#### Screen Attributes

Users can define and control their screen color, reverse video, highlighting, and so on. Use the SCREEN command to display and set these screen attributes. The following are the areas of the screen attribute used by the OVERVIEW information section:

#### Headers

The screen attribute name is HEADER.

#### **Text**

The screen attribute name is INFO.

#### **Conditions**

Specifies the screen attribute based on the status of the condition, as follows:

- Condition is false INFO
- Condition is true CONDHI

#### Bar graphs

Specifies an attribute based on the threshold definition (if any), as follows:

- BARGRAPH No threshold defined
- BARNORMAL Evaluated status NORMAL
- BARWARNING Evaluated status WARNING
- BARPROBLEM Evaluated status PROBLEM

#### **Metrics and Values**

Specifies the metric and value attributes based on the threshold definition (if any), as follows:

- INFO No threshold defined
- CONDNORMAL Evaluated status NORMAL
- CONDWARNING Evaluated status WARNING
- CONDPROBLEM Evaluated status PROBLEM

## **System Overview Data**

The System Overview data is displayed in fields that are associated with the following information areas:

- Graph
- Condition
- Ready
- I/O
- Paging
- Common

These information areas and their fields are described in the following sections.

### **Graph Fields**

The following fields show the usage percentage of your system:

(r)

Indicates the information is being displayed in real-time mode.

(i)

Indicates the information is being displayed using collected interval data.

#### **CPU**

Specifies the processor busy percentage from the operating system point of view.

#### **LCPU**

Specifies the processor busy percentage from the LPAR point of view.

#### Spool

Indicates the percentage of spool space used. This percentage is in relation to the total number of spool track groups defined to JES.

### **Condition Fields**

The following fields display the condition of your system:

#### **ENQ | NoENQ**

Indicates whether enqueue conflicts currently exist.

#### **RES | NoRES**

Indicates whether enqueue reserves currently exist.

#### DMP | NoDMP

Indicates whether a dump data set is in use.

#### SMF|NoSMF

Indicates whether a potential problem with SMF exists, such as:

- SMF not active
- SMF data lost
- SMF buffering records
- Dump required for one or more SMF data sets

#### WTO | NoWTO

Indicates whether a potential WTO problem exists, such as:

- Message backlog exists
- WTO buffer shortage

#### TAP | NoTAP

Indicates whether a tape mount is pending.

### **Ready Fields**

The following fields display the number of jobs that are ready to be dispatched:

#### **ASIDs**

Specifies the number of address spaces that have one or more tasks ready to be dispatched.

#### **Tasks**

Specifies the number of tasks ready to be dispatched.

#### I/O Fields

This field displays the I/O rates:

#### Rate

Specifies the overall start I/O rate for the system, expressed as the number of start I/Os per second.

### **Paging Fields**

The following fields display the paging information:

#### Slots

Specifies the percent of local page data set slots in use.

#### Rate

Specifies the overall paging rate for the system, expressed as the number of pages per second.

#### **AFQA**

Specifies the available frame queue average.

#### **UICA**

Specifies the unreferenced interval count average.

### **Common Fields**

The following fields display the percentage of used common storage and queue areas:

#### **ECSA**

Displays the percentage of the Extended Common Storage Area that is currently used.

#### **ESQA**

Displays the percentage of the Extended System Queue Area that is currently used.

#### **SQA**

Displays the percentage of the System Queue Area that is currently used.

#### CSA

Displays the percentage of the Common Storage Area that is currently used.

# **Chapter 7: UNIX System Services Displays**

This section contains the following topics:

About the USS Displays (see page 121)

USS Address Space List Display (see page 121)

USS Mounted File Systems Display (see page 123)

System Configuration Options Display (see page 124)

## **About the USS Displays**

This chapter describes representative UNIX System Services displays and some tasks you can perform on them.

In addition to the displays described in this chapter, there are many other USS resource displays. To see a menu of the commands you can use, specify MENU USS on the command line. You can use these commands to monitor and manage USS resources.

**Note:** You can use CA SYSVIEW line commands to perform many tasks on these displays. To see the valid line commands for a display, place your cursor in the line command input area and press the Help PF key.

## **USS Address Space List Display**

To access the USS Address Space List display, issue the USSLIST command.

This display shows you information about address spaces that contain USS processes.

The following display is a sample USS Address Space List.

| SYSVIEW USSLIST Command ====> |                      |   | •                             |      |                   |                | S                    | cro                  | ll *===             | <br>⇒ HALF<br>-79/219 |  |
|-------------------------------|----------------------|---|-------------------------------|------|-------------------|----------------|----------------------|----------------------|---------------------|-----------------------|--|
| Jobname SYSVIEW               |                      |   |                               |      |                   | now            | 1-10,                |                      |                     | - 79/ 219             |  |
| Cmd                           | 1270<br>1279<br>1271 | Jobname<br>AOPD<br>FTPD441<br>INETD8<br>OPSUSS<br>OPSUSS<br>OPSUSS1 | STEP1<br>0PSP002B<br>0PSP002C | OPSP | OTX<br>OTX<br>OTX | \$<br>\$<br>\$ | NS<br>OUT I<br>OUT I | DW<br>DW<br>DW<br>DW | PrcCt 1 1 1 1 1 1 1 | 5                     |  |

This second screen shows the fields that you see when you scroll to the right:

| SYSVIEW USSLIST Command ===> Jobname SYSVIEW |      |                  |                | Lvl 3 Rov      |                | Scr    | oll *==   | ==> HALF |
|--|------|------------------|----------------|----------------|----------------|--------|-----------|----------|
| Cmd  |      |                  | UserTime       |                |                |        |           | FilWr    |
|  |      | AOPD<br>FTPD441  | 0.200<br>0.220 | 0.060<br>0.070 |                |        | 446<br>12 | 1        |
|  |      | INETD8           | 0.020          | 0.000          | 0.200          | 28     | 4         | 1        |
|  |      | OPSUSS<br>OPSUSS | 0.030<br>0.030 | 0.010<br>0.010 | 0.040<br>0.040 | 8<br>8 |           |          |
|  | 1269 | OPSUSS1          | 0.030          | 0.010          | 0.040          | 16     | 31        |          |

### Tasks Performed from the USS Address Space List Display

To perform line commands from this display, place your cursor in the command input area to the left of the variable.

The following line commands are valid, only the uppercase portion of the line command is necessary for you to specify:

#### Select

Switch to the selected ASID.

Link-to Command: USS

#### **Process or UProcess**

Display the processes for the selected address space.

Link-to Command: UPROCESS

#### **Threads or UThreads**

Display the threads for the selected address space.

Link-to Command: UTHREADS

#### **Files or UFiles**

Display the open USS files for the selected address space.

Link-to Command: UFILES

## **USS Mounted File Systems Display**

The USS Mounted File System display shows you information about mounted USS file systems.

To access this display, Issue the UFILESYS command.

The following is a sample USS Mounted File Systems display:

| command | / 12.0b CA31                  |                |        | ,    |       |         |     |         | S         | croll *===> PAG |
|---------|-------------------------------|----------------|--------|------|-------|---------|-----|---------|-----------|-----------------|
| Formats | DEFAULT ZFS                   |                |        |      |       |         | LVI | 3 KOW . | 1-4/4 (01 | 1-340100-170/30 |
|         |                               | PD NoPRT NoCAI | Р      |      |       |         |     |         |           |                 |
|         | A                             | LT             | C+-+   |      |       | D-C I   |     | DN      | D1l       |                 |
| Cmd     | AggregateName                 | Type           | Status | Mode | 15010 | BpSec I |     | Devin   |           |                 |
|         | OMVS.OMLVL2.CA31.ZFS          | ZFS            | ACTIVE | R/W  | 0     | 0       | 35  | 8       | 3600      | 33%             |
|         | OMVSSYS.WAS61.CONFIG.B61A.ZFS | ZFS            | ACTIVE | R/W  | 0     | Θ       | 121 | 7       | 302400    | 48%             |
|         | OMVSSYS.WAS61.CONFIG.B61B.ZFS | ZFS            | ACTIVE | R/W  | 0     | 0       | 119 | 7       | 302400    | 47%             |
|         |                               | ZFS            | ACTIVE | R/W  | Θ     | Θ       | 124 | 7       | 328320    | 48%             |

### Tasks Performed from the USS Mounted File Systems Display

To perform line commands from this display, place your cursor in the command input area to the left of the variable.

The following line commands are valid, only the uppercase portion of the line command is necessary for you to specify:

#### Select

Select the file system detail display.

#### ULISTDir, ULS, Ls, or Ld

List the mount point directory of the file system.

Link-to Command: ULISTDIR

#### UDIRTree, DIRTree, or DT

Display the mount point of the selected file system using the FILESYS keyword.

Link-to Command: UDIRTREE

#### **Dsinfo or Info**

Display the file system name. **Link-to Command:** DSINFO

LISTCat or LCat

Display the file system name. **Link-to Command:** LISTCAT

# **System Configuration Options Display**

To access the System Configuration Options display, issue the USYSCONF command.

The following sample System Configuration Options display shows you USS system configuration options:

| SYSVIEW USYSCONF USS System Configuration Options |              |          |                   |  |  |  |  |  |
|---|--------------|----------|-------------------|--|--|--|--|--|
| Parmlib member BPXPRM00                           |              |          | LVC 5 NOW 1-10/29 |  |  |  |  |  |
| Description                                       | Parameter    | Value    |                   |  |  |  |  |  |
| Storage copy option on fork call                  |              |          |                   |  |  |  |  |  |
|   | IPCMSGNIDS   |          |                   |  |  |  |  |  |
| Max message queue bytes                           |              |          |                   |  |  |  |  |  |
| Max messages per queue                            |              |          |                   |  |  |  |  |  |
| Max semaphore sets                                | IPCSEMNIDS   |          |                   |  |  |  |  |  |
| Max operations per semaphore cal                  |              |          |                   |  |  |  |  |  |
| Max semaphores per semaphore set                  |              | 25       |                   |  |  |  |  |  |
| Max pages for one shared mem seg                  |              |          |                   |  |  |  |  |  |
| Max shared memory segments                        |              | 500      |                   |  |  |  |  |  |
| Max shared mem seg per addrspc                    | IPCSHMNSEGS  | 10       |                   |  |  |  |  |  |
| Max pages for all shared mem seg                  | IPCSHMSPAGES | 262144   |                   |  |  |  |  |  |
| Max address space region size                     | MAXASSIZE    | 41943040 |                   |  |  |  |  |  |
| Max core dump file size                           | MAXCORESIZE  | 4194304  |                   |  |  |  |  |  |
| Max cpu time in seconds                           | MAXCPUTIME   | 1000     |                   |  |  |  |  |  |
| Max files per process                             | MAXFILEPROC  | 256      |                   |  |  |  |  |  |
| Max file size                                     | MAXFILESIZE  | NOLIMIT  |                   |  |  |  |  |  |
| Max memory mapped file pages                      | MAXMMAPAREA  | 4096     |                   |  |  |  |  |  |
| Max processes in the system                       | MAXPROCSYS   | 125      |                   |  |  |  |  |  |

# **Chapter 8: CICS Displays**

This section contains the following topics:

About the CICS Displays (see page 125)

CICS System Activity Display (see page 125)

CICS Active Tasks Display (see page 127)

CICS Dynamic Storage Areas Display (see page 128)

Transaction Log Display (see page 130)

CICS Degradation Analysis Display (see page 131)

## **About the CICS Displays**

This chapter describes some representative CICS resource displays and some tasks you can perform on them.

In addition to the displays described in this chapter, you can use many others to view CICS resource displays. To see menus of the commands you can use, specify MENU CICS on the command line. This menu contains other menus that let you view different types of information, such as:

- Status
- Storage
- Subsystems
- Transactions
- Domains
- Journals

## **CICS System Activity Display**

To access the CICS System Activity display, issue the CICSLIST command.

This display shows you information about CICS address spaces that are currently being monitored. You also see CICS address spaces that are currently inactive but have been monitored during the current IPL.

The following is a sample CICS System Activity display:

| SYSVIEW<br>Command ====>                             |                            | •                          | ,  | •   |  |  | Scroll *=                                 | ===> PAGE                                   |
|--|----------------------------|----------------------------|--|---|--|--|---|---|
| Jobname SYSVIE                                       |                            |                            |  |   |  |  |   | 1-79/192                                    |
| Cmd Name CACTUSA CICSPMP6 CICSPMP9 CICSPQA5 PAQMC520 | ACTIVE<br>ACTIVE<br>ACTIVE | NS<br>IN<br>IN<br>IN<br>IN | Job-CPU<br>00:14:49<br>00:38:16<br>00:37:35<br>00:09:44<br>00:03:01<br>== End of | 1.51M<br>11.5M<br>14.8M<br>2.74M<br>2.14M | 4094<br>23646<br>11919<br>7586<br>8480 | 58261<br>143k<br>71772<br>30704<br>89475 | 0.055<br>0.001<br>0.001<br>0.001<br>0.006 | 0.611<br>3.481<br>15.740<br>10.619<br>0.050 |

### Tasks Performed from the CICS System Activity Display

To perform line commands from this display, place your cursor in the command input area to the left of the variable.

The following line commands are valid, only the uppercase portion of the line command is necessary for you to specify:

#### **DSAs**

Display a list of the Dynamic Storage Areas in use.

Link-to Command: CDSAS

#### LISTFILE and LF

List spool files for the selected CICS job name.

Link-to Command: LISTFILE

#### LOgs

List history data collection logs for the selected job name and SSID.

Link-to Command: LGLOGS

#### **REView**

Display an hourly breakdown of transaction activity.

Link-to Command: CREVIEW

#### Select

Select the CICS address space for future use in displays. The currently selected address space is displayed in the information section.

#### Example:

Jobname CICSPROD ASID 0039

Link-to Command: ASID

#### Tasks

List the active and suspended transactions.

Link-to Command: CTASKS

## **CICS Active Tasks Display**

To access the CICS Active Tasks display, issue the CTASKS command.

This display provides information about CICS active and suspended tasks, for the current address space or for all CICS address spaces currently being monitored.

The following is a sample CICS Active Tasks display:

| SYSVIEW CTASKS  |                     |  |  |   | ll *===> HALF  |
|---|---------------------|--|--|---|--|
| Jobname SYSVC530 /  | ASID 01A0 Job:      | id STC0421   | L5 CICS TS   | 3.2 Mode LOCAL                            | _ SSID GSVX  |
| Max Tasks   | 4 4                 |  | 0 Job 6  | CPU Paging IOF<br>0.13% 0.133 3<br>11% 19 | .067 1.433   |
| CSHQ 22 CSSY 6 CSTP 8 CSOL 3 CSNE 23 CEMT 222 SYSY 375 CEBR 225 XPFI 25 CFQR 20 CSNC 21 | DFHSHSY<br>DFHAPATT | SHSYSTEM ICEXPIRY TCP_NORM SODOMAIN ZC ZCIOWAIT EKCWAIT ZCIOWAIT XPFC FCCFQR | DFHAPTIX<br>DFHZDSP<br>SO_NOWORK<br>DFHZNAC1<br>DFHZARQ1<br>SINGLE | 2.148<br>0.018<br>0.007                   | 0<br>1<br>3<br>3<br>7<br>00:05:34<br>L 0.003<br>00:05:27 |

### Tasks Performed from the CICS Active Tasks Display

To perform line commands from this display, place your cursor in the command input area to the left of the variable.

The following line commands are valid, only the uppercase portion of the line command is necessary for you to specify:

#### Cancel

Cancels the selected transaction.

#### **Enqueue and NQ**

Displays enqueues that the selected transaction owns or is currently waiting on.

Link-to Command: CENQUEUE

Kill

Kills (cancels) the selected looping transaction.

#### Select

Displays detailed transaction information.

#### **SUbpools**

Displays the CSUBPOOL command. The subpools owned by the selected task are displayed.

Link-to Command: CSUBPOOL

## **CICS Dynamic Storage Areas Display**

To access the CICS Dynamic Storage Areas display, issue the CDSAS command.

This display shows you information about each Dynamic Storage Area defined by CICS.

The following is a sample CICS Dynamic Storage Areas display:

| SYSVIEW CDSAS Command ====> Jobname PAQMC Storage prote | 520 ASID 00                              | <br>DE Jo                                 |  |                  | Lvl                 | 2 Row              | Scro | ll *===> PA | GE. |
|---|--|---|--|------------------|---------------------|--------------------|------|-------------|-----|
| Region Use<br>DSA<br>EDSA<br>PVT 5.36<br>E-PVT 23.4     | r Sys Allo<br>820<br>6.64<br>M 400K 5.75 | oc Fre<br>OK 716<br>AM 2.36<br>SM 720     | K 53<br>M 74<br>K 64                     | 8% 1.5M<br>1% 9M | 16%<br>33%<br>88% ( | 5M<br>20M<br>5.06M | 1.ŠM | S0S         |     |
| UDSA<br>CDSA<br>SDSA<br>RDSA                            | 512K 488K                                | 256K<br>24K<br>240K<br>196K<br>820K<br>1M | 256K<br>8K<br>240K<br>124K<br>788K<br>1M | •                |                     | 20 .               | 40   | .60801      | 90  |

### Tasks Performed from the CICS Dynamic Storage Areas Display

To perform line commands from this display, place your cursor in the command input area to the left of the variable.

The following line commands are valid, only the uppercase portion of the line command is necessary for you to specify:

#### **Elements**

Display a list of allocated storage blocks.

Link-to Command: CELEMENT

#### Plot

Display the DSA percentage full.

Link-to Command: PLOT

#### **PRograms**

Display a list of programs loaded in the selected DSA.

Link-to Command: CPROGRAM

#### Subpools

Display a list of allocated subpools.

Link-to Command: CSUBPOOL

#### **Xtents**

Display the Dynamic Storage Area Extents.

Link-to Command: CDSAX

## **Transaction Log Display**

To access the Transaction Log display, issue the CTRANLOG command.

This display shows you CICS transaction records.

The following is a sample Transaction Log display:

```
SYSVIEW CA31 ----- CTRANLOG, Transaction Log ----- 03/20/08 15:22:32
                                                         Scroll *==> PAGE
 ----- Lvl 2 Row 4987-4999/5000 Col 1-79/226
Status NoSRT NoLIM NoSEL NoDST NoPFX NoOWN NoUPD NoPRT NoCAP
LogStream SYSVIEW.CICSLOGR.TRAN.XX99
                                     Retention 2 days
Available 22:21:02 01/06/08
                                   to 15:09:19 03/20/08
Displayed 12:09:47 02/27/08
                                   to 15:09:19 03/20/08
                  Time Tran Task# Term Userid Lifetime CPUTime
Cmd Jobname Date
    A44ICCS8 03/20/08 11:42:18 CWBG
                                             CICSUSER 0.893456 0.000576
                                       68
    A44ICB18 03/20/08 12:00:34 CSOL
                                              CICSUSER 00:31:27 0.000720
                                       3
74
                                             CICSUSER 00:31:27 0.000480
    A44ICB18 03/20/08 12:32:01 CSOL
    A44ICB18 03/20/08 12:42:18 CWBG
                                              CICSUSER 0.960104 0.000672
                                       69
                                              CICSUSER 0.986021 0.000688
    A44ICCS8 03/20/08 12:42:20 CWBG
    A44ICB18 03/20/08 13:03:29 CSOL
                                             CICSUSER 00:31:27 0.000720
                                        3
    A44ICB18 03/20/08 13:34:56 CSOL
                                              CICSUSER 00:31:27 0.000624
    A44ICB18 03/20/08 13:42:19 CWBG
                                       75
                                              CICSUSER 0.789768 0.000624
                                       70
    A44ICCS8 03/20/08 13:42:20 CWBG
                                              CICSUSER 0.865847 0.000624
    A44ICB18 03/20/08 14:06:24 CSOL
                                              CICSUSER 00:31:27 0.000432
    A44ICB18 03/20/08 14:37:51 CSOL
                                        3
                                              CICSUSER 00:31:27 0.000624
    A44ICB18 03/20/08 14:42:20 CWBG
                                       76
                                               CICSUSER 0.806204 0.000624
    A44ICCS8 03/20/08 14:42:22 CWBG
                                               CICSUSER 0.852687 0.000624
```

### Tasks Performed from the Transaction Log Display

To perform line commands from this display, place your cursor in the command input area to the left of the variable.

The following line commands are valid, only the uppercase portion of the line command is necessary for you to specify:

#### Select

Display the detail screen for a record.

## **CICS Degradation Analysis Display**

To access the CICS Degradation Analysis display, issue the CWAITS command.

This display shows you a degradation analysis graph that summarizes the time spent by CICS on various resources.

The following is a sample CICS Degradation Analysis display:

```
SYSVIEW CWAITS ----- CICS Degradation Analysis -----
Command ====>
                                             Scroll *==> PAGE
------ Lvl 2 Row 1-11/11
Jobname PAQMC520 ASID 00DE Jobid J0B06244 CICS TS3.2
     CPU Paging IORate TranRate Transactions
    0.03%
             0.533 0.067
Job
            2 1350
MVS 94%
Total Average Pct% ...20...40...60...80..100
                     50.364
                              0.006 12% ***
CPU time
Program control load wait
                       1.470
                                   <1%
            00:05:38
                              0.040 79% *************
Suspend time
                                    2% *
Dispatch delay
                      10.160
                              0.001
Dispatch delay
File control wait
                              0.038 76% ************
                     00:05:26
Lock manager delay time
                       0.888
                                   <1%
Syncpoint time
                       1.998
                                   <1%
                              0.010 20% *****
Waiting to run
                     00:01:27
I/O count
                       87875
                                10
```

# **Chapter 9: WebSphere MQ Displays**

This section contains the following topics:

About the MQ Displays (see page 133)

MQ Subsystem List Display (see page 133)

MQ Exception Alerts Display (see page 135)

MQ Channel Status Display (see page 136)

MQ Local Queues Display (see page 137)

MQ Queue Manager Display (see page 139)

## **About the MQ Displays**

This chapter describes some representative WebSphere MQ resource displays and some tasks you can perform on them.

In addition to the displays described in this chapter, there are many other MQ resource displays. To see menus of the commands you can use, specify MENU MQSERIES on the command line. This menu contains other menus that let you view different types of information, such as:

- MQ queue managers
- Queues
- Channels
- Processes
- Page sets

## **MQ Subsystem List Display**

To access the MQ Subsystem List display, issue the MQLIST command.

This display shows you information about defined MQ subsystems.

The following is a sample MQ Subsystem List display:

| SYSVIEW            |  |        |       | Ly  | /l 2 Row       | Scrol <sup>3</sup><br>1-3/3 ( | l *===> PAGE                                  |
|--------------------|--|--------|-------|---|----------------|-------------------------------|---|
| Jubilalie Cagarath | . ASID 0204  | 31CC   | J1076 |   | Qiligi (       |                               |   |
| Cmd                | Qmgr Status<br>CSQ3 ACTIVE<br>CSQ4 ACTIVE<br>CSQ5 ACTIVE | ACTIVE |       | Job-CPU<br>2.533079<br>1.692717<br>5.068565 | 45.6M<br>14.9M | 2712<br>1605                  | Clocktime<br>00:02:27<br>00:02:44<br>05:08:20 |

### Tasks Performed from the MQ Subsystem List Display

To perform line commands from this display, place your cursor in the command input area to the left of the variable.

The following line commands are valid, only the uppercase portion of the line command is necessary for you to specify:

#### Output

Displays the output for the selected queue manager.

Link-to Command: OUTPUT

#### Select

Sets the selected queue manager as target MQ queue manager.

Link-to Command: MQSERIES

#### STArt kwd

Issues the START command indicated by the keyword specified. Valid keywords are:

Chinit - Issues the START CHINIT command

If the keyword is omitted, a START QMGR command is issued.

#### STOp kwd

Issues the STOP command indicated by the keyword specified. Valid keywords are:

Quiesce - Issues the STOP QMGR MODE(QUIESCE) command

Force - Issues the STOP QMGR MODE(FORCE) command

Restart - Issues the STOP QMGR MODE(RESTART) command

Chinit - Issues the STOP CHINIT command

If the keyword is omitted, a STOP QMGR command is issued.

## **MQ Exception Alerts Display**

To access the MQ Exception Alerts display, issue the MQALERTS command.

This display shows you information about MQ data collection exception alerts. If the current value exceeds a threshold definition, the data collection value is displayed. You can display alerts for both problem and warning thresholds.

The following is a sample MQ Exception Alerts display:

```
SYSVIEW MOALERTS ------ MO Exception Alerts -----
Command ====>
                                                   Scroll *===> HALF
          ----- Lvl 2 Row 1-5/5 Col 1-79/252
Cmd Name QMgr Argument
                                             Value Status
 _ MQQDEPTH CSQ1 CSQ1.GSVSMQSR.B1F406759B47D800
                                              2403 PROBLEM
          CSQ1 CSQ1.GSVSMQSR.B1F414871FA9DA00
                                              1528 PROBLEM
          CS01 SYSTEM.ADMIN.OMGR.FWD
                                               344 PROBLEM
          CSQ2 SYSTEM.ADMIN.CHANNEL.FWD
                                               295 PROBLEM
          CSQ2 SYSTEM.ADMIN.QMGR.FWD
                                               373 PROBLEM
```

### Tasks Performed from the MQ Exception Alerts Display

To perform line commands from this display, place your cursor in the command input area to the left of the variable.

The following line commands are valid, only the uppercase portion of the line command is necessary for you to specify:

#### Select

Dynamically provide more information about the selected data element using the PLOT or CLIST command. If a member for this variable has been defined in the CLISTLIB, the CLIST command is executed. If a member name does not exist, the PLOT command is executed.

Link-to Command: PLOT or CLIST

#### Plot

Display a graph of performance data for the selected data element.

Link-to Command: PLOT

#### **CList**

Issue the CLIST command for the selected data element.

Link-to Command: CLIST

#### **Thresh**

Display threshold information for the selected variable name.

Link-to Command: MQTHRESH

#### Variable

Display a variable definition for the selected variable name.

Link-to Command: MQVARS

## **MQ Channel Status Display**

To access the MQ Channel Status display, issue the MQCHSTAT command.

This display provides you with the status of MQ channels.

The following is a sample MQ Channel Status display:

| Command<br>Formats | DEFAULT COMMON COMPRESC CSQ5MSTR ASID 0284 | SS CONNEC  | T MONITOR   | Lvl 2 Row 17-<br>SSL STATUS | Scroll *==> PAGE<br>33/33 Col 1-79/767 |
|--------------------|--|--|---|-----------------------------|--|
| Cmd                | •    | SDR<br>SDR<br>RCVR<br>RCVR<br>SVRCONN<br>RCVR<br>SVRCONN<br>CLUSRCVR<br>CLUSSDR<br>RCVR<br>RQSTR | INACTIVE INACTIVE INACTIVE INACTIVE INACTIVE INACTIVE INACTIVE INACTIVE | SubState                    |  |
|                    | T0.CSQ3.CLUSTERS<br>T0.CSQ5.CLUSTERS       | CLUSSDR  | RETRYING<br>RUNNING   | OTHER<br>RECEIVE            | •                                      |

### Tasks Performed from the MQ Channel Status Display

To perform line commands from this display, place your cursor in the command input area to the left of the variable.

The following line commands are valid, only the uppercase portion of the line command is necessary for you to specify:

#### List

Invoke the appropriate MQCHxxxx command to list the details of all channels of the selected channel type.

Link-to Command: MQCHxxxx

#### **RESet**

Issue a RESET CHANNEL command for the channel.

#### Select or Alter

Invoke the MQALTER command to display and alter the attributes of the selected channel.

Link-to Command: MQALTER

#### **STArt**

Issue a START CHANNEL command to start the channel.

#### **STOp**

Issue a STOP CHANNEL command to stop the channel.

## **MQ Local Queues Display**

To access the MQ Local Queues display, issue the MQQLOCAL command.

This display shows you information about MQ local queues.

The following is a sample MQ Local Queues display:

| SYSVIEW MQQLOCAL, MQ Locommand ====> SET\$009I MQQLOCAL FORMATLINE set to NO Jobname CSQ5MSTR ASID 0284 Jobid STC616 Interval 53.0  | Scroll *==> PAGE Lvl 2 Row 1-15/15 Col 1-79/849 |
|---|---|
| Cmd Queue AMQ.C0634EF6AD4CDFEB CSQ5.GSVSMQSR.C0635C8468ED38CB IMSS.OTMA.QUEUE SYSTEM.ADMIN.CHANNEL.EVENT SYSTEM.ADMIN.CONFIG.EVENT SYSTEM.ADMIN.PERFM.EVENT SYSTEM.ADMIN.QMGR.EVENT SYSTEM.CHANNEL.INITQ SYSTEM.CHANNEL.SYNCQ SYSTEM.CLUSTER.COMMAND.QUEUE SYSTEM.CLUSTER.REPOSITORY.QUEUE SYSTEM.CLUSTER.TRANSMIT.QUEUE SYSTEM.CUSTER.TRANSMIT.QUEUE SYSTEM.COMMAND.INPUT SYSTEM.PENDING.DATA.QUEUE TPTPTP.GSVSMQSR.C0635CC6B8D8EE0C | 1 1<br>1 3<br>1                                 |

### Tasks Performed from the MQ Local Queues Display

To perform line commands from this display, place your cursor in the command input area to the left of the variable.

The following line commands are valid, only the uppercase portion of the line command is necessary for you to specify:

#### **DELete**

Issue a DELETE QLOCAL for the queue.

#### **PLot**

Invoke a PLOTLIST MQQUEUE command to display a plot selection list for the selected local queue.

**PLOTLIST MQQUEUE** 

#### **Select or Alter**

Invoke the MQALTER command to display and alter the attributes of the selected queue.

Link-to Command: MQALTER

## **MQ Queue Manager Display**

To access the MQ Queue Manager display, issue the MQMGR command.

This display shows you information about the currently selected target MQ queue manager. For information about displaying potential target MQ queue managers, see the online help for the MQLIST command. For information about setting the target MQ queue manager, see the online help for the MQSERIES command.

The following is a sample MQ Queue Manager display:

```
SYSVIEW ------ MQMGR, MQ Queue Manager -----
Command ====>
                                                                                   Scroll *===> PAGE
 ------ Lvl 2 Row 1-18/79 Col 1-79/100
Jobname CSQ5MSTR ASID 0284 Jobid STC61678 MQ 6.0 Qmgr CSQ5
Description Field Value Queue manager QMName CSQ5 Queue manager id QMId CSQ5.0 Description Descr CSQ5,
                                             CSQ5.C044F70A629CA54B
                                             CSQ5, IBM WebSphere MQ for z/OS V6.0.0
Accounting for queues AcctQ
                                             OFF
Accounting for queues
Active channels
Activity reports
Adoption check
Adoption MCA restart
AdoptMCA NO
Alteration date
Alteration time
Alteration time
Alteration time
Altorevents
Bridge events
Coded char set id
Channel auto-def evit
ActivRec MSG
AdoptChk ALL
AdoptMCA NO
AltDate 04/02/07
AltTime 09:27:51
Authority DISABLED
Bridgevents
CCSId 500
CCSId
Channel auto-def exit
Channel init adart
                                 ChADExit
Channel init adaptors ChIAdaps 8
Channel init dispatchers ChIDisps 5
Channel events
                                  ChlEv
                                              DISABLED
```

# **Chapter 10: IMS Displays**

This section contains the following topics:

About IMS Displays (see page 141)

**IMS Subsystem List Display** (see page 141)

IMS Exception Alerts Display (see page 142)

**IMS Pools Display** (see page 143)

IMS Dependent Region List Display (see page 144)

IMS Common Queue Subtask (see page 144)

### **About IMS Displays**

This chapter describes some representative IMS displays and some tasks you can perform on them.

In addition to the displays described in this chapter, there are many other IMS resource displays. To see menus and commands you can use, specify MENU IMS on the command line.

**Note:** You can use CA SYSVIEW line commands to perform many tasks on these displays. To see the valid line commands for a display, place your cursor in the line command input area and press the Help PF key.

### **IMS Subsystem List Display**

The IMS Subsystem List display shows you information about IMS control regions. Both active and inactive control regions are displayed. To access the IMS Subsystem List display, issue the IMSLIST command.

The following screen is a sample IMS Subsystem List display.

```
SYSVIEW IMSLIST ----- IMS Subsystem List -----
Command ====>
                                                      Scroll *==> PAGE
             ----- Lvl 3 Row 1-6/6 Col 1-79/146
Jobname SVD61IM1 ASID 0081 Jobid STC01952 IMS 10.0 Id SVP1
Cmd Jobname Status
                        Id Region Job-CPU R-Stg I/O-Req Clocktime Xrf
     SVD51IMS INACTIVE
                        IMSV
     OPS51IMS INACTIVE
                        IMS1
     OPS69IMS INACTIVE
                        IMS9
                        SVP1 DB/DC
     SVD61IM1 ACTIVE
                                     51.185 876K
                                                   2524 26:07:29 XRF
     SVD61IM2 INACTIVE
                        SVP2
     SVD61IM3 ACTIVE
                        SVP3 DB/DC
                                     28.735 816K
                                                   2292 26:06:30
```

This second screen displays the fields you see when you scroll to the right:

| SYSVIEW IMSLIST IMS Subsystem List Command ====> Lvl 3 Row 1-6/ Jobname SVD61IM1 ASID 0081 Jobid STC01952 IMS 10.0 Id S   | Scroll *==> PAGE<br>6 Col 1-18&81-141/146    |
|---|--|
| Cmd Jobname  Jobnr ASID Type Description SVD71IMS SYSVIEW DB/DC Test Region OPS71IMS OPS/MVS DB/DC Test Region OPS69IMS OPS/MVS DBCTL Coldstart 1 SVD61IM1 1952 0081 STC SYSVIEW DB/DC XRF IRLM SVD61IM2 SYSVIEW DB/DC XRF IRLM SVD61IM3 1958 0086 STC SYSVIEW DB/DC IRLM | CC Ver SCD<br>10.0 00C7AEE8<br>10.0 00B3AEE8 |

### Tasks Performed from the IMS Subsystem List Display

To perform line commands from this display, place your cursor in the command input area to the left of the variable.

The following line commands are valid, only the uppercase portion of the line command is necessary for you to specify:

#### Select

Select the active IMS control region for subsequent commands.

#### **CHEckpt**

Issue the IMS command CHE to take a simple checkpoint for the control region.

#### **COLDSYS**

Issue the IMS command ERE COLDBASE OVERRIDE to perform a cold start on both the database and communications components.

#### **DUMPQ**

Issue the IMS command CHE DUMPQ. This command causes IMS to take a DUMPQ checkpoint and shut down the control region.

#### **EREstart**

Issue the IMS command ERE. This command causes an emergency restart for the control region.

## **IMS Exception Alerts Display**

To access the IMS Exception Alerts display, issue the IMSALERT command. This display shows you information about IMS data collection exception alerts. Data collection values are displayed if the current value exceeds a threshold definition.

| The following is a sample IMS Exception Alerts display: |
|---|
|   |
|   |

|      | SYSVIEW IMSALERT IMS Exception Alerts |             |          |          |          |                             |  |  |
|------|---------------------------------------|-------------|----------|----------|----------|-----------------------------|--|--|
| Comr | Command ====> Scroll *==> PAGE        |             |          |          |          |                             |  |  |
|      |                                       |             |          |          | Lvl      | 3 Row 20-32/32 Col 1-79/226 |  |  |
| Cmd  | Name                                  | ID          | Argument | Value    | Status   | Description                 |  |  |
|      | <b>IMPLSIZE</b>                       |             |          | 256K     | PR0BLEM  | Current pool size           |  |  |
|      | <b>IMPLMAX</b>                        | SVP1        | BXQE     | 96K      | WARNING  | Maximum pool size           |  |  |
|      | IMPLMAX                               | SVP1        | LGWA     | 116K     | WARNING  | Maximum pool size           |  |  |
|      | IMPLMAX                               | SVP3        | BX0E     | 96K      | WARNING  | Maximum pool size           |  |  |
|      | IMPLMAX                               | SVP3        | LGWA     | 116K     | WARNING  | Maximum pool size           |  |  |
|      | IMPLSIZE                              | SVP1        | STTR     | 56K      | WARNING  | Current pool size           |  |  |
|      | IMPLSIZE                              | SVP1        | XMCI     | 56K      | WARNING  | Current pool size           |  |  |
|      | IMPLSIZE                              | SVP3        | STTR     | 56K      | WARNING  | Current pool size           |  |  |
|      | IMPLSIZE                              | SVP3        | XMCI     | 52K      | WARNING  | Current pool size           |  |  |
|      | IMSSTAT                               | <b>IMSV</b> |          | INACTIVE | INACTIVE | IMS ID status               |  |  |
|      |                                       | IMS1        |          | INACTIVE | INACTIVE | IMS ID status               |  |  |
|      |                                       | IMS9        |          | INACTIVE | INACTIVE | IMS ID status               |  |  |
|      | IMSSTAT                               | SVP2        |          | INACTIVE | INACTIVE | IMS ID status               |  |  |

## **IMS Pools Display**

To access the IMS Pools display, issue the IMSPOOLS command. This display shows you a list of CBT pools that have been defined to the IMS control region. Current storage information for each pool is also available.

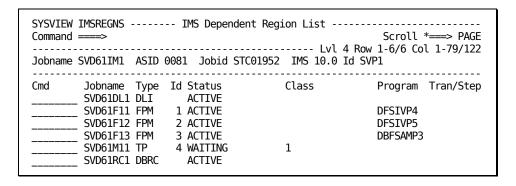
The following is a sample IMS Pools display:

| SYSVIEW<br>Command |             | DLS - |                     |         | IMS F | Pools - |       |            | Scroll *===> HA        |         |
|--------------------|-------------|-------|---------------------|---------|-------|---------|-------|------------|------------------------|---------|
|                    |             |       | ASID 008<br>al 496K | 1 Jobid | STC01 | 1952    | EMS : | L0.0 Id SV | Lvl 4 Row 1-17/1<br>P1 | L20<br> |
| Cmd                | Pool        | SP    | Current             | Maximum | Gets  | Frees   | CSA   | Pct%2      | 55075100               |         |
|                    | LSAV        | 0     | 160K                | 164K    | 40    | 1       |       | 32%        |                        |         |
|                    | TTAB        | 231   | 256K                | 256K    | 64    |         | CSA   | 21%        |                        |         |
|                    | LQMW        | 0     | 92K                 | 92K     |       |         |       | 19%        |                        |         |
|                    | LCLL        | 0     | 88K                 | 88K     | 22    |         |       | 18%        |                        |         |
|                    | LGWA        | 231   | 112K                | 116K    | 42    | 14      | CSA   | 9%         |                        |         |
|                    | BXQE        | 231   | 96K                 | 96K     | 12    |         | CSA   | 8%         |                        |         |
|                    | CLLE        | 231   | 80K                 | 80K     | 20    |         | CSA   | 7%         |                        |         |
|                    | PST         | 231   | 76K                 | 80K     | 33    | 14      | CSA   | 6%         |                        |         |
|                    | SVPL        | 0     | 32K                 | 32K     | 8     |         |       | 6%         |                        |         |
|                    | TIB         | 251   | 28K                 | 28K     | 1     |         |       | 6%         |                        |         |
|                    | STTR        | 231   | 56K                 | 60K     | 28    | 14      | CSA   | 5%         |                        |         |
|                    | XMCI        | 241   | 56K                 | 56K     | 14    |         | CSA   | 5%         |                        |         |
|                    | RECA        | 0     | 21.2K               | 21.2K   | 1     |         |       | 4%         |                        |         |
|                    | DMHR        | 228   | 32K                 | 32K     | 8     |         | CSA   | 3%         |                        |         |
|                    | <b>EPST</b> | 231   | 36K                 | 40K     | 10    | 1       | CSA   | 3%         |                        |         |
|                    | <b>GQMW</b> | 231   |                     | 36K     |       |         | CSA   |            |                        |         |
|                    | IRLM        |       |                     | 32K     | 8     |         | CSA   | 3%         |                        |         |
|                    |             |       |                     |         |       |         |       |            |                        |         |

## **IMS Dependent Region List Display**

To access the IMS Dependent Region List display, issue the IMSREGNS command. This display shows you information about dependent regions for the active IMS control region.

The following is a sample IMS Dependent Region List Display:



## **IMS Common Queue Subtask**

The IMS Common Queue Server subtask (IMSCQS) is the interface between the z/OS Common Queue Server and CA SYSVIEW.

### **Display IMS Subsystem Shared Queues Group Information**

You can obtain information about the IMS subsystems that participate in a shared queues group.

#### Follow these steps:

1. Issue the IMSLIST command.

The IMS Control Regions display shows the shared Q group name, CQS SSN, and the primary overflow message structure names.

2. Issue the IMSQTRAN, IMSQSTAT, or the IMSTRANS command.

IMSQTRAN shows the message counts for transactions queued to various queue types in the shared message queue.

IMSQSTAT shows the status of the CQS address space and the Coupling Facility structures that support the shared messaging environment used by the target IMS subsystem.

#### Use the IMS SPOC to Issue IMS Commands

You can use the CA SYSVIEW IMS single point of control (SPOC) to issue IMS type 1 and type 2 commands in an IMSplex. Type 1 commands must be preceded with a forward slash (/) character.

To use the SYSVIEW IMS SPOC, be sure the following are configured and implemented:

- CA SYSVIEW Option for IMS
- An IMSPlex
- IMS Common Services Layer
- IMS Structured Call Interface
- IMS Operations Manager

#### To issue IMS commands

1. Issue the IMSSPOC command

The IMS SPOC screen displays as a console interface, which lets CA SYSVIEW communicate with the IMS subsystems participating in the IMSplex.

- 2. Change the IMSplex and Route fields using either of the following methods:
  - Overtype the data in the information area of the display
  - Specify the IMSplex and Route parameters on the command line

#### **IMSplex**

Provides the current target IMSplex name.

#### Route

Provides the current route options that specify which IMSplex members the command is routed to. Asterisk (\*) routes the command to all members.

The screen refreshes and displays the new data.

# Chapter 11: CA Datacom Displays

This section contains the following topics:

About the DATACOM Displays (see page 147)

**DATACOM System Activity Display** (see page 147)

**DATACOM Directory Areas Display** (see page 148)

**DATACOM Directory Databases Display** (see page 150)

**DATACOM MUF Identity Display** (see page 151)

**DATACOM MUF Active Tasks Display** (see page 151)

# **About the DATACOM Displays**

This chapter describes some representative CA Datacom resource displays and some tasks you can perform on them.

In addition to the displays described in this chapter, there are many other CA Datacom resource displays. To see menus of the commands you can use, specify MENU DATACOM on the command line.

This menu contains other menus that let you view different types of information, such as: CA Datacom directories, elements, keys, and so on, and CA Datacom MUF displays.

# **DATACOM System Activity Display**

To access the DATACOM System Activity display, issue the DCLIST command.

This display shows you information about CA Datacom address spaces. The PARMLIB member DATACOM defines the list of job names to monitor; however, this information can also be obtained dynamically. For more on defining this list, see the *Administration Guide*.

| SYSVIEW DCLIST, DATACOM System Activity  Command ===> Scroll *==> PAGE |          |          |           |        |              |       |           |            |
|--|----------|----------|-----------|--------|--------------|-------|-----------|------------|
| Jobname SYSV   |          |          |           |        |              |       | 13/13 (0) | 1-79/104   |
| Jobilalie 313V   | J101 AJ1 | D 0030 S | JODIU JOI |        | DATACON III  | a     |           |            |
| Cmd Name   | JobStat  | Job-CPU  | RealSta   | I0Reas | Clocktime    | Jobnr | Stepname  | Procname   |
| DBDVM631   |          |          | 1.13M     |        |              |       |           |            |
| EDBC10MF   | LSW      | 1.824    | 20M       | 1648   | 23:38:45     | 19383 | DB10STRT  | DBMUF      |
| I0D0STRT   | NS       | 1.494    | 15.8M     | 1634   | 15:37:01     | 27261 | AD10STRT  | DBMUF      |
| MMIMDB31   | IN       | 1.286    | 10.7M     | 2163   | 01:19:22     | 2363  | DB11STRT  | DBMUF      |
| QAMUF11G   | NS       | 7.366    | 1.84M     | 3120   | 23:08:11     | 20095 | QAMUF11G  | \$\$\$@NX@ |
| QAMUF11M   | NS       | 10.112   | 7.13M     | 5934   | 23:08:36     | 20076 | QAMUF11M  | \$\$\$@NX@ |
| QAMUF11W   | NS       | 1.737    | 2.24M     | 1786   | 23:08:24     | 20087 | QAMUF11W  | \$\$\$@NX@ |
| QAMUF11Z   | NS       | 2.174    | 28M       | 2164   | 23:08:05     | 20099 | QAMUF11Z  | \$\$\$@NX@ |
| QAMUF111   | NS       | 2.700    | 3.47M     | 2151   | 23:08:26     | 20085 | QAMUF111  | \$\$\$@NX@ |
| SCDP1MUF   | NS       | 4.487    | 544K      | 1340   | 23:39:21     | 19266 | SCDP1MUF  | DBMUF      |
| SCHDMUF  | NS       | 4.233    | 588K      | 653    | 23:40:21     | 19152 | SCHDMUF   | DBMUF      |
| SQL2MUFA   |          |          |           |        |              |       |           |            |
| SOL 2MLIFR   | I SW     | 0 973    | 14 3M     | 1749   | 10 • 41 • 14 | 24871 | DRMLIF    |            |

The following is a sample DATACOM System Activity display:

## Tasks Performed from the DATACOM System Activity Display

To perform line commands from this display, place your cursor in the command input area to the left of the variable.

The following line commands are valid, only the uppercase portion of the line command is necessary for you to specify:

#### **JJobque**

Lists jobs for a selected job name.

Link-to Command: JJOBQUE

#### Select

Selects the address space to use in future displays. The currently selected address space is displayed in the information section.

#### **Example:**

Jobname DATACOM ASID 0039

Link-to Command: ASID

# **DATACOM Directory Areas Display**

To access the DATACOM Directory Areas display, issue the DCAREAS command.

This display shows you an entry for each area in the Directory (CXX).

The following is a sample DATACOM Directory Areas display:

| SYSVIEW DCAREAS DATACOM Directory Areas                         |  |                |  |  |        |  |   |
|---|--|----------------|--|--|--------|--|---|
|   |  | Jobid STC03610 |  | NOW 1  | -10/33 | COC 1-                                 | 9, 177                                      |
| . PAY . PMF . 2 AGR ALS ARA ATZ BAS DVW ELM FLD HSD JOB KEY KWC | DEMO-DEM PAYROLL PERSONNEL AGGREGATE ALIAS AREA AUTHORIZATION DATABASE DATAVIEW ELEMENT FILE FIELD |                |  | 17<br>200<br>200<br>225<br>1032<br>71<br>8<br>16<br>37<br>381<br>80<br>8550<br>344 | 163    | 10<br>10<br>10<br>10<br>10<br>10<br>10 | Slack 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 |
| MEM   | MEMBER   |                |  |  |        | 10                                     | 0   |

## Tasks Performed from the DATACOM Directory Areas Display

To perform line commands from this display, place your cursor in the command input area to the left of the variable.

The following line commands are valid, only the uppercase portion of the line command is necessary for you to specify:

#### Select

Displays information for every table in the current area.

Link-to Command: DCTABLES

#### **DSets**

Displays information about the data set in the current area.

Link-to Command: DCDSETS

10

Displays read and write statistics for the current area.

Link-to Command: DCAREAIO

#### **Tables**

Displays information for every table in the current area.

Link-to Command: DCTABLES

# **DATACOM Directory Databases Display**

To access the DATACOM Directory Databases display, issue the DCDBASES command.

This display shows you one entry for each database in the directory.

The following is a sample DATACOM Directory Databases display:

| SYSVIEW DCDBASES DA Command ====> Jobname SYSVDCOM ASID 017E   | Scroll *==> PAGE Lvl 2 Row 1-11/11 Col 1-79/172   |
|--|---|
| Cmd DBID Occurrence  1 HUMAN-RESOURCE 2 DATA-DICT 4 PRM-ACT-DB 5 SAMP-ACT-DB 6 CBS-DB 10 ORDER-ENTRY 15 DDD-DATABASE 16 CASQLDEFAULT 17 TTM-DATABASE 400 B400-DATABASE 1000 CASYSTEMTABLES | Tracks Index Part Extend Read Rep SQL  15 1 EXTEND 20 2 EXTEND 5 1 EXTEND READ 20 1 EXTEND 1 20 1 EXTEND 1 20 1 EXTEND 1 1 1 1 1 READ |

## Tasks Performed from the DATACOM Directory Databases Display

To perform line commands from this display, place your cursor in the command input area to the left of the variable.

The following line commands are valid, only the uppercase portion of the line command is necessary for you to specify:

#### **Select or Areas**

Displays areas for the selected database.

Link-to Command: DCAREAS

#### **DSets**

Displays data sets for the selected database.

Link-to Command: DCDSETS

10

Displays read and write statistics for the selected database.

Link-to Command: DCAREAIO

#### **Tables**

Displays tables for the selected database.

Link-to Command: DCTABLES

# **DATACOM MUF Identity Display**

To access the DATACOM MUF Identity display, issue the DCMUFS command.

This display shows you multi-user facility system information for CA Datacom address spaces.

The following is a sample DATACOM MUF Identity display:

# **DATACOM MUF Active Tasks Display**

To access the DATACOM MUF Active Tasks display, issue the DCTASKS command.

This display shows information about CA Datacom tasks.

The following is a sample DATACOM MUF Active Tasks display:

```
SYSVIEW DCTASKS ----- DATACOM MUF Active Tasks -----
                                             Scroll *==> PAGE
Command ====>
----- Lvl 2 Row 1-4/4 Col 1-79/142
Jobname QA90MUF1 ASID 00A7 Jobid J0B01430
Cmd Jobname Task# Owner Excps RunUnit SeqNum Command Status
                                                  Duration
 000:00
           13
14
  G315EXEC
                       48594 128781 UPDAT NOT ACTIVE
                                                  000:00
  H316EXEC
                       48595 128778 ADDIT
                                      NOT ACTIVE
                                                   000:00
                       48581 128782 ADDIT NOT ACTIVE
___ I317EXEC
                                                   000:00
```

# Chapter 12: TCP/IP Displays

This section contains the following topics:

About the TCP/IP Displays (see page 153)

Access the TCP/IP Stacks Display (see page 153)

Access the IP Users Display (see page 155)

Access the TCP/IP Connections Display (see page 156)

Access the IP Devices Display (see page 158)

# About the TCP/IP Displays

This chapter describes some representative TCP/IP resource displays and some tasks you can perform on them.

To see menus of the commands you can use, specify MENU TCP on the command line. This menu contains other menus that let you view different types of information, such as:

- Configuration
- Statistics
- UDP connections

# Access the TCP/IP Stacks Display

This display provides information about active or stopped TCP/IP stacks. Use these steps to access and use the TCP/IP Stacks display.

#### Follow these steps:

- Issue the TCPLIST command
   The TCP/IP Stacks display is accessed.
- 2. Enter the appropriate line command against the stack you are working with.

The following is a sample TCP/IP Stacks display:

## Tasks Performed from the TCP/IP Stacks Display

To perform line commands from this display, place your cursor in the command input area to the left of the variable.

The following line commands are valid, only the uppercase portion of the line command is necessary for you to specify:

#### Activity

Display the system activity for the selected TCP/IP stack jobname.

Link-to Command: ACTIVITY

#### Ping

Ping the hostname for the TCP/IP stack.

Link-to Command: PING

#### Mib2

Browse the MIB2 MIB for the TCP/IP stack.

Link-to Command: MIBBROWS

#### Select

Set the selected TCP/IP stack as the target stack.

Link-to Command: TCPOPTS

# **Access the IP Users Display**

The IP users display provides information about the jobs that use the selected TCP stack.

#### Follow these steps:

- 1. Issue the IPUSERS command to access the display.
- 2. Enter the appropriate line command against the jobs you are working with.

The following is a sample IP Users display:

| SYSVIEW<br>Command ====>   |       |          |          |     | PUSERS, IP         |           |       | Scr   | oll *== | <br>=> PAGE<br>1-14/14 |
|----------------------------|-------|----------|----------|-----|--------------------|-----------|-------|-------|---------|------------------------|
| TCP Jobname TC Interval 2. | PIP31 |          | AULT     |     |                    |           |       |       |         |                        |
| Cmd Jobname<br>AW31RSTR    |       | TCP<br>1 | UDP<br>2 | Lsn | InBytes<br>1036691 |           | InD   | OutD  | InR     | 0utR                   |
| CCISSLGW                   | 00AD  | 38       |          | 1   | 254448500          | 206748814 | 45301 | 27864 | 22651   | 13932                  |
| CCITCPG2                   | 00AB  | 13       |          | 1   | 45272259           | 73088976  | 1494  | 1235  | 747.0   | 617.5                  |
| CSQ5CHIN                   |       | 2        |          | 1   | 4373020            | 16574571  |       |       |         |                        |
| DENMX2JV                   |       | 1        |          | 1   | 3837337            | 183287    |       |       |         |                        |
| DENMX3JV                   | 01CC  | 1        |          | 1   | 447155             | 20667     |       |       |         |                        |
| DENMX5JV                   | 01D1  | 1        |          | 1   | 3353301            | 158976    |       |       |         |                        |
| DFSKERN                    | 011D  |          | 2        | 1   | 445416             | 1170114   |       |       |         |                        |
| D81ADIST                   | 0140  | 39       |          | 2   | 20257129           | 21561306  | 2188  | 3321  | 1094    | 1661                   |
| MVSNFSC                    | 001E  | 3        | 7        |     | 246202332          | 116054888 | 2440  | 1256  | 1220    | 628.0                  |
| OSNMPD                     | 0138  |          | 1        | 1   | 45941137           | 48208110  |       |       |         |                        |
| SYSQA09                    | 007D  | 3        |          | 3   | 442352444          | 442352696 |       |       |         |                        |
| SYSQA10                    | 0082  | 3        |          | 2   | 442351720          | 442352444 |       |       |         |                        |
| TCPIP31                    | 00E7  | 13       |          | 6   | 3045080            | 34987667  | 86    | 1634  | 43.00   | 817.0                  |

## Tasks Performed from the IP Users Display

To perform line commands from this display, place your cursor in the command input area to the left of the variable.

The following line commands are valid, only the uppercase portion of the line command is necessary for you to specify:

#### Lsn

Drill down to show details about each listener socket the job has opened.

Link-to Command: IPLISTEN

#### Tcp

Drill down to show details about each TCP socket the job has opened.

Link-to Command: IPTCONN

#### Udp

Drill down to show details about each UDP socket the job has opened.

Link-to Command: IPUCONN

# Access the TCP/IP Connections Display

The TCP/IP connections display provides information about each TCP socket connection for each job using the TCP stack.

#### Follow these steps:

1. Issue the IPTCONN command

The TCP/IP Connections display is accessed.

2. Enter the appropriate line command against the connection you are working with.

You can now use the TCP/IP Connections display.

The following is a sample TCP/IP Connections display:

```
SYSVIEW ----- IPTCONN, TCP/IP Connections -----
Command ====>
                                                           Scroll *==> CSR
                               ----- Lvl 3 Row 129-144/189 Col 1-79/615
Formats DEFAULT PERFORM SECURITY SOCKOPTS STATE TEST
TCP Jobname TCPIP31 (DEFAULT)
Interval TOTAL
Cmd Jobname ASID Subtask State
                                     Port PortName
                                                          RAddr
    D81ADIST 0140 007B1CF0 ESTABLSHED 5141
                                                           192.168.31.215
                          ESTABLSHED
                                                           192.168.31.88
    EDCQAM01 0099 007F90C8 ESTABLSHED
                                     3011
                                                           192.168.65.31
                  007A1378 ESTABLSHED
                                                          192.168.65.31
    JCKTE#G2 0192 007CAD90 ESTABLSHED
                                                          ::FFFF:192.168.65
                                     3689
                  00000000 ESTABLSHED 24233
                                                           ::FFFF:192.168.65
    LABD0023 0205 007FF708 ESTABLSHED 1831
                                                           192.168.201.201
    LABD0024 01F2 007FF210 ESTABLSHED 1832
                                                           192.168.201.201
    LABD0025 020F 007FF708 ESTABLSHED
                                     1830
                                                           192.168.201.201
    LABD0028 0234 007FF290 ESTABLSHED
                                                           192.168.27.141
                                      3608
    MVSNFSC 001E 007C8718 ESTABLSHED
                                                           ::FFFF:192.168.27
                                     1753
                  007C8400 ESTABLSHED 1975
                                                           ::FFFF:192.168.27
                  007C8268 ESTABLSHED
                                                           ::FFFF:192.168.27
                                      3321
    M81ADIST 00F3 007B0658 ESTABLSHED
                                                           192.168.10.26
```

#### Tasks Performed from the TCP/IP Connections Display

To perform line commands from this display, place your cursor in the command input area to the left of the variable.

The following line commands are valid, only the uppercase portion of the line command is necessary for you to specify:

#### **DROP**

Issue the following command for the selected connection:

VARY TCPIP, , DROP

Link-to Command: XMVS

#### Intf

Drill down to show details about the device and interface used by the connection.

Link-to Command: IPDEVICE

#### Ping

Ping the remote address for the connection.

Link-to Command: PING

# **Access the IP Devices Display**

The IP Devices display provides information about the devices, links, and interfaces defined for the TCP/IP stack.

#### Follow these steps:

1. Issue the IPDEVICE command.

The IP Devices display is accessed.

2. Enter the appropriate line command against the device, link, or interface you are working with.

The following is a sample IP Devices display:

| SYSVIEW I Command ====> TCP Jobname TCPIP31 | •   |   | _inks/Interfaces  | Scroll *:  | ===> PAGE  |
|---|---|---|---|--|--|
| Cmd DevName L00PBACK OSD12 IUTIQDFF OSD53   | DevType<br>LOOPBACK<br>MPCIPA<br>MPCIPA<br>MPCIPA | DevStatus<br>READY<br>READY<br>READY<br>READY | Name<br>LOOPBACK<br>LOOPBACK6<br>OSA<br>HIPERLFF<br>OSA53LNK<br>OSAQDIO26 | Type<br>LOOPBACK<br>LOOPBACK6<br>IPAQENET<br>IPAQIDIO<br>IPAQENET<br>IPAQENET6 | Status<br>READY<br>READY<br>READY<br>READY<br>READY<br>READY |

## Tasks Performed from the IP Devices Display

To perform line commands from this display, place your cursor in the command input area to the left of the variable.

The following line commands are valid, only the uppercase portion of the line command is necessary for you to specify:

#### Ping

Ping the device address.

Link-to Command: PING

#### Select

Display detail information about the device and link or interface.

Link-to Command: XTSO

#### STArt

Issue the following command for the device or interface:

VARY TCPIP, START

**Link-to Command:** XMVS

#### STOp

Issue the following command for the device or interface:

VARY TCPIP, STOP

**Link-to Command:** XMVS

# Chapter 13: System Condition Monitor Displays

This section contains the following topics:

How the System Condition Monitor Works (see page 161)

# **How the System Condition Monitor Works**

The System Condition Monitor (SCM) displays tell you at a glance where the problems are. This display eliminates the need to search multiple areas to find the problem sources.

The SCM provides a color-coded, high-level summary of resources that are currently being monitored.

## **Access the SCM Display**

The SCM display lets you obtain threshold information, as follows:

- According to the type of data, including MVS, CICS, USS, IMS, TCP/IP, or WebSphere MQ system entries
- According to the system name of the desired MVS system
- Data for all connected systems or only the current system

#### Follow these steps:

1. Issue the SCMSYS command

The following is a sample System Condition Monitor display:

| SYSVIEW SCMSYS, System Cond<br>Command ===>  | lition MonitorScroll *⇒ PAGE<br>Lvl 2 Row 1-17/22 Col 1-79/126   |
|--|--|
| (r)         Pct%255075.100         -Condition-           CPU         100%         ENQ NoSMF           LCPU         45%         RES NoWTO   |  |
| Jobname GREZZ99 ASID 02E8 Jobid TSU293<br>ISERVE ISRV Name * Type *  | 48   |
| Cmd Name Description FILESYS USS File systems JOBS Job resource alerts WLM Workload Manager STORAGE Common storage usage OPERATOR Operations overview JES2OUT JES2 output PAGING Paging alerts and datasets DEVICES Devices and connections ENQUEUES Enqueue Conflicts PRINTERS Printer devices SMS SMS storage groups | Norm Warn Prob         Status         System           11         16         PROBLEM         ZZ99           3         13         PROBLEM         .           11         2         PROBLEM         .           25         5         ACTION         .           20         1         WARNING         .           2         1         WARNING         .           3         NORMAL         .           1         NORMAL         .           1         NORMAL         .           NORMAL         .         . |

2. Place an S in the command area to the left of the OPERATOR entry.

The resulting detailed display for the OPERATOR entry would look like the following:

| SYSVIEW SCMENTRY System Condition Monitor Detail   | *==> HALF<br>col 1-79/186   |
|--|---|
| Cmd Description Intervention required on 2 TAPE devices. WTOs requiring replies is 42 Enqueue conflicts are causing 1 jobs to wait. The JES2 input queue has 3 jobs held due to duplicate jobnames. There are 4 jobs waiting for classes X,S. WTO buffers are queued on 6 EXTENDED CONSOLES. No PRINT devices require attention. Spool volume SPL44A extension 0 is 54.4% full. Spool volume SPL44B extension 1 is 52.6% full. SMF recording 35% used. Dsn=SYS1.MAN1 | Status ACTION ACTION WARNING WARNING WARNING WARNING NORMAL NORMAL NORMAL |

# Chapter 14: Cross-System Resource Monitoring Displays

This section contains the following topics:

Cross-System Resource Monitoring (see page 165)

# **Cross-System Resource Monitoring**

The Cross-System Resource Monitoring feature lets you remotely display, monitor, and manage information from:

- A current system
- All connected systems
- A subset of connected systems

You perform these tasks from one interface without using a session manager. This feature uses the CA Common Communications Interface (CAICCI) component of CA Common Services (CCS) to implement the cross-system communication.

When the available sessions that are cross-system capable are displayed, you can use the screens to do the following:

- Jump to any of those active sessions, including sessions that are running under different CA SYSVIEW releases, and monitor the information.
- Use the cross-system mode of multiple systems. This mode lets you gather and display data from all of the active cross-system capable sessions running under the same CA SYSVIEW release.

**Note:** The cross-system mode of multiple systems cannot gather data from sessions that are running under different releases of CA SYSVIEW.

### **Display the Cross-System Connections**

The following two sample displays show the cross-system servers and statistics.

#### Follow these steps:

1. Issue the XSLIST command.

Displays the XSystem Servers panel containing a list of available cross-system connections.

From this panel, you can select and switch to a remote system using the XSCONN command or by selecting a system from the menu.

For information about these commands or any other CA SYSVIEW commands, select the Menu Help option on the Primary Option Menu and review the materials.

| SYSVIEW<br>Command |   |  |  | XSystem Servers  | Scroll *⇒⇒ HALF<br>2 Row 1-13/13 Col 1-79/377  |
|--------------------|---|--|--|--|--|
| Cmd                | System DEVA . DEVB DEVC MAINTA MAINTB PROD . SYSTEM1 SYSTEM2 . TEST | Status<br>ACTIVE<br>ACTIVE<br>INACTIVE<br>INACTIVE<br>INACTIVE<br>ACTIVE<br>ACTIVE<br>INACTIVE | Type<br>DATA<br>SESS<br>DATA<br>SESS<br>DATA<br>SESS | Description Development system A . Development system B Development system C Maintenance system A Maintenance system B Production system . Production system 1 Production system 2 . Test system | GSVX SYSVIEW |

2. Select the PROD system from the menu.

The XSYS PROD displays. The interface type of XSYS on the title line indicates you are viewing statistics from a cross-system session. PROD indicates the system activity statistics are from the production system.

```
      SYSVIEW XSYS PROD
      ACTIVITY, System Activity

      Command
      Scroll *⇒ PAGE

      Hop 1 Lvl 3 Row 1-14/435 Col 1-79/439

      CPU 17% LCPU 17% Paging 3 SIO 972 UIC 2540 AFC 1857

      ALL
      ALL

      Cmd Jobname Stepname Procstep Type Jobnr Jc Status CPU-Time Limit Clocktime

      *MASTER*
      SYS 1234 $ NS 00:04:47 86400 59:51:59
```

Selected product commands can display data gathered from remote systems. Gathering data from a remote system requires:

- An active product data server on the remote system
- The system must be reachable through the CAICCI communication network

### Control the Display of Cross-System Data

The following summarizes the SET keywords used to control the display of cross-system data. These keywords only apply to commands that are defined as cross-system data capable. For a list of commands that have this attribute, issue the XSCMDS command.

#### **XSData**

Controls whether the cross-system data is gathered and displayed. The values are YES and NO.

Default: NO

#### **XSGroup**

Controls which system gathers and displays the cross-system data. Values are the keywords:

- ALL
- NONE
- Group name (as defined by the GROUPS PARMLIB member or the GROUPS command) or a specific system name or alias

The group must be defined as type XSSYSTEM and the members are the names of the systems from which data is displayed. The group member names cannot be aliases.

Default: ALL

**Note:** The XSGROUP NONE is not the same as XSDATA NO. With XSGROUP NONE and XSDATA YES, the screen displays the xsystem-only fields but does not display data from any remote systems.

#### **XSLimit**

Sets a limit on the number of command data records that are returned from a remote system. The value must be a number from 0 to 99999 or the keyword NONE. A value of 0, or the equivalent NONE keyword means that there is no limit on the number of records returned from a remote system.

Default: NONE (or 0)

#### XSMsglvl

Controls the display of data lines for systems from which data could not be obtained. The message data line displays the system name and message in a field named XSMsg.

The values are NONE, INFO, WARN, and ERROR.

**Default: ERROR** 

#### **XSRemdup**

Controls the removal of duplicate systems from any hardware, sysplex, or node base cross-system data. The values are:

#### NO

No duplicate systems are removed from any hardware, sysplex, or node base cross-system data.

**AUTO** 

Duplicate systems are automatically removed from any hardware, sysplex, or node base cross-system data. Only the first system (taken in alphabetical order) within like-named hardware, sysplex, or node (JES MAS) configurations are displayed.

#### **PREF**

Duplicate systems are removed using a system preference order defined by a group name the same as the hardware, sysplex, or node configuration with a group type of XSHDWR, XSPLEX or XSNODE. The order of the group members (system names) in the group defines the preferred order. The first available system, if any, is used. If no matching system names are found, then the systems are considered in alphabetical order (the same as AUTO).

Default: NO

The AUTO and PREF options only apply when the XSGROUP name is ALL and only when cross-system data type is HARDWARE, SYSPLEX, or NODE. In all other cases, AUTO and PREF are ignored.

Duplicate data resulting from more than one cross-system data server active on a system is automatically removed.

#### **XSStatusline**

Controls the display of the xsystem status line in the screen info line area. The values are:

#### YES

Always display the xsystem status line.

#### NO

Never display the xsystem status line.

#### COND

Only display the xsystem status line when XSDATA is YES.

Default: NO

## **XSCMDS Command Display**

The XSCMDS command displays all cross-system capable commands and the set status for each command. This display lets you easily control the cross-system data displayed for a command by simply changing the command values in the data fields.

The following example XSCMDS command display shows a few cross-system capable commands and their default values. It also shows the changed default ACTIVITY data field values for Data, Limit, and Stat.

| Command : | ====>    |                             |      |       |         |       | Scro   | ll *===: | > PAGE   |
|-----------|----------|-----------------------------|------|-------|---------|-------|--------|----------|----------|
|           |          |                             |      | -     | - Lvl 3 | Row 1 | -17/19 | 9 Col 1  | -79/98   |
| Cmd       | Name     | Description                 | Data | Group | MsgLvl  | Limit | Stat   | RemDup   | Туре     |
|           | ACTIVITY | System activity             | YES  | ALL   | ERR0R   | 500   | YES    | NO       | System   |
|           | ALERTs   | MVS exception alerts        | NO   | ALL   | ERR0R   | NONE  | NO     | NO       | System   |
|           |          | ,                           |      |       |         |       |        |          |          |
|           |          | ,                           |      |       |         |       |        |          |          |
|           |          | ,                           |      |       |         |       |        |          |          |
|           | PARTinfo | Partition information       | NO   | ALL   | ERR0R   | NONE  | NO     | NO       | HARDWARE |
|           | PLEXSys  | Sysplex systems             | NO   | ALL   | ERR0R   | NONE  | NO     | NO       | SYSPLEX  |
|           | WT0R     | WTO reply required messages | NO   | ALL   | ERR0R   | NONE  | NO     | NO       | SYSPLEX  |

# Chapter 15: Using SDSFMIGRATE to Migrate from SDSF

This section contains the following topics:

<u>How to Activate the SDSFMIGRATE Option</u> (see page 171)

Masking Characters for the SDSFMIGRATE Option (see page 172)

# How to Activate the SDSFMIGRATE Option

CA SYSVIEW provides the SDSFMIGRATE option to help you migrate from the IBM SDSF product to CA SYSVIEW.

The SDSFMIGRATE option lets you do following:

- Work in an environment similar to SDSF while becoming accustomed to the CA SYSVIEW environment and command structure
- Enter most SDSF primary commands
- Enter most SDSF line commands

To activate and use this option, do the following:

1. Enter the SET SDSFMIGRATE ON command or have the CA SYSVIEW administrator change the DEFAULT profile when the product is first installed.

**Note:** For more information about the DEFAULT profile, see the *Administration Guide*.

2. Compare the SDSF commands with the CA SYSVIEW commands by entering the following command:

MENU SDSF

3. After you become used to CA SYSVIEW and want to experience the full potential and flexibility of its environment, issue the following SET command:

SET SDSFMIGRATE OFF

The option is turned off.

# **Masking Characters for the SDSFMIGRATE Option**

When the SDSFMIGRATE option is turned on:

- The fixed-length masking character is set to a percent sign (%)
- The variable-length masking character is set to an asterisk (\*).

When you turn the option off, these settings remain the same; they are not reset to the CA SYSVIEW defaults.

# Chapter 16: Create Reports Using the CA Easytrieve Reporting Service

This section contains the following topics:

About CA Easytrieve (see page 173)

Planning Reports (see page 173)

Generating Canned Reports (see page 174)

Sample Output from Canned Reports (see page 176)

Report Structure (see page 192)

Macros (see page 193)

SMF Record Descriptions (see page 200)

# **About CA Easytrieve**

This chapter explains how to use CA Easytrieve Common Reporting Service (CA Easytrieve) to create CA SYSVIEW historical reports.

CA Easytrieve is an information retrieval and data management language that produces tabular reports by retrieving data from:

- SMF records produced by CA SYSVIEW
- Various MVS and RMF components

**Note:** CA Easytrieve Common Reporting Service is a subset of CA Easytrieve. If you already have CA Easytrieve installed at your site, you can use its full reporting capability. For a detailed description of the CA Easytrieve language, see the *CA Easytrieve Report Generator Reference Guide* available on CA Support Online at <a href="https://support.ca.com">https://support.ca.com</a>.

# **Planning Reports**

With CA Easytrieve, you can follow these basic steps when programming reports:

- Define the files and working storage variables
- Extract a subset of records from an input file
- Order the records by some key; for example, by timestamp and data set name
- Accumulate counters and calculate averages, rates, and so on
- Format the output report

# **Generating Canned Reports**

A canned report is a report for which commands are already written for you. All of the canned reports shipped with CA SYSVIEW are distributed as CA Easytrieve macros in the sysview.CNM4ZMAC data set. These macros simplify common actions, such as selection by time, record type, and so on.

## Sample JCL

Use the following sample JCL as a guide for writing your own reports:

```
JOBCARD
// SET PROGRAM=GSVUEZTR
// SET EZTLOAD= dsname for Easytrieve program library
// SET EZTMAC=
                     dsname for Sysview Easytrieve macros
// SET SYSVLOAD=
                     dsname for Sysview program library
// SET SMFIN=
                     dsname for input SMF data
// SET WRKSPACE=20
                     space, in cylinders, for temporary work files
// SET WRKUNIT=VIO
                     unit name for temporary workfiles
//EXECEZTR EXEC PGM=&PROGRAM
//STEPLIB DD DSN=&EZTLOAD,DISP=SHR
//
          DD DSN=&SYSVLOAD, DISP=SHR
//PANDD DD DSN=&EZTMAC,DISP=SHR
//SYSPRINT DD SYSOUT=*
//SYSUDUMP DD SYSOUT=*
//SYSOUT DD SYSOUT=*
//SMFIN
         DD DISP=SHR, DSN=&SMFIN
//EZTVFM DD UNIT=&WRKUNIT,SPACE=(CYL,(&WRKSPACE,&WRKSPACE))
//ERRORS DD SYSOUT=*
//REPORTS DD SYSOUT=*
//SYSIN
LIST ON NOMACRO
%DISKSTAT TOP 20
```

#### **Canned Report Keywords**

All canned reports shipped with CA SYSVIEW support the following keyword parameters:

#### **EACH**

Determines the length of each reporting interval, which can be one of the following:

- n DAY determines that the reporting interval is n days.
- MONTH determines that the reporting interval is 1 month.
- n HOUR determines that the reporting interval is n hours.
- $\blacksquare$  *n* MIN determines that the reporting interval is *n* minutes.
- RECORD determines that the TSTAMP value for each SMF record should be set to the actual timestamp, without adjustment.

**Default: DAY** 

#### **FROM**

Determines the starting timestamp for SMF record selection. The SELECT-PROC subroutine uses FROM to exclude SMF records that have timestamps earlier than the provided value. The timestamp is specified as YYYY/MM/DD-HH:MM.

Default: ALL, which allows all records to be selected.

#### **SHIFT**

Determines the time range for selecting data. The SELECT-PROC subroutine uses this range to exclude SMF records which do not fall within the specified time range. The range is specified as h1:m1 h2:m2.

- h1:m1 specifies the starting time for the shift
- h2:m2 specifies the ending time for the shift

If h1:m1 is greater than h2:m2, then two time ranges are assumed: h2:m2 24:00 and 00:00 h1:m1.

Default: 00:00 24:00

#### то

Determines the ending timestamp for SMF record selection. The SELECT-PROC subroutine uses TO to exclude SMF records that have timestamps later than the provided value. The timestamp is specified as YYYY/MM/DD-HH:MM.

**Default**: ALL, which allows all records to be selected.

# **Sample Output from Canned Reports**

The CICS, MVS, and WebSphere MQ sample canned reports that are discussed in this section are shipped with CA SYSVIEW.

## **CICS Canned Reports**

This section shows the CICS sample reports and the code used to produce them.

**Note:** The CICS canned reports require data collected by the CA SYSVIEW Option for CICS.

#### **ABEND Summary**

This report shows the CICS program ABEND summary. In addition to the standard parameters, the following keyword parameter is supported:

#### **RECTYPE**

Record type containing the SYSVIEW SMF data. The default is 255.

To create a CICS ABEND Summary report, use this ABENDSUM code:

LIST OFF %ABENDSUM

The following is a sample CICS ABEND Summary report:

| From:<br>To: |          | CA SYSVI<br>2008/03/04<br>2008/03/05<br>2008/03/04 | 08:57 E<br>07:32 S | rogram<br>Each:<br>Shift: | ABEND Summary<br>DAY<br>00:00 24:00 |  | PAGE | 1 |
|--------------|----------|--|--------------------|---------------------------|-------------------------------------|--|------|---|
| TRAN         | PROGRAM  | CICS<br>ABEND CODE                                 | COUNT              |                           |                                     |  |      |   |
| CSMI         | DFHMIRS  | ASRA   | 10                 |                           |                                     |  |      |   |
| CSMI         | PGDS     | ASRA   | 10                 |                           |                                     |  |      |   |
|              | DFHWBXN  | AWB2   | 2                  |                           |                                     |  |      |   |
|              | VPEHJE62 | ATNI   | 1                  |                           |                                     |  |      |   |
|              | PR3MAINI | ASRA   | 1                  |                           |                                     |  |      |   |
|              | PR3SREMS | ASRA   | 1                  |                           |                                     |  |      |   |
| TRLC         |          | ASRA   | 1                  |                           |                                     |  |      |   |
| TRLC         |          | CAC1   | 1                  |                           |                                     |  |      |   |
|              | PGME     | ASRA   | 1                  |                           |                                     |  |      |   |
|              | PGB5     | CAC1   | 2                  |                           |                                     |  |      |   |
|              | PGB5     | NPRM   | 2                  |                           |                                     |  |      |   |
|              | PG51     | ASRA   | 1                  |                           |                                     |  |      |   |
|              | PG51     | CAC1   | 1                  |                           |                                     |  |      |   |
| TR80         | PG80     | ????   | 3                  |                           |                                     |  |      |   |
|              | PG80     | ASRA   | 4                  |                           |                                     |  |      |   |
|              | LKMK     | ASRA   | 79                 |                           |                                     |  |      |   |
| TWBA         | LKMX     | ASRA   | 29                 |                           |                                     |  |      |   |

#### **Program Usage Summary**

This report shows the CICS program usage statistics. In addition to standard parameters, the following keyword parameters are supported:

#### **RECTYPE**

Specifies the record type containing the SYSVIEW SMF data.

Default: 255

#### **ORDERBY**

Specifies the variables used to sort for the final report, which can be any combination of PROGRAM, USAGE, PERCENT, AVG\_TIME, and AVG\_CPU.

Default: USAGE D

#### TOP

Restricts the number of lines of output for each time interval.

**Default**: 99999999

#### NAME

Filters by the program name. The default is \* (an asterisk), which selects all program names.

To create the CICS Program Usage Summary report, use this PROGUSE code:

%PR0GUSE

#### The following is a sample CICS Program Usage Summary report:

|          |             |            |            | n Usage Summary |
|----------|-------------|------------|------------|-----------------|
| From:    |             | /03/04 08: |            | DAY             |
| To:      |             | /03/05 07: |            | 00:00 24:00     |
| Interval | Start: 2008 | /03/04 00: | 00 Order i | DY: USAGE D     |
| Name     | Use Count   | % of All   | AVG Time   | AVG CPU         |
| XMLD0C   | 271,528     | 59.1       | 0.116      | 0.000           |
| SQLDYN   | 41,175      | 9.0        | 3.232      | 0.227           |
| @IAESYNC | 38,927      | 8.5        | 3.301      | 0.129           |
| IN25TDAT | 16,013      | 3.5        | 0.059      | 0.000           |
| DFHCCNV  | 10,158      | 2.2        | 443.281    | 0.121           |
| IN25SGET | 9,211       | 2.0        | 6.450      | 1.191           |
| IN25MSGS | 7,703       | 1.7        | 0.095      | 0.000           |
| IN25PGMS | 6,116       | 1.3        | 1104.373   | 0.712           |
| VPEHJE62 | 5,680       | 1.2        | 174.713    | 11.013          |
| DFHUCNV  | 5,274       | 1.1        | 0.038      | 0.000           |
| IN25LGET | 4,169       | 0.9        | 7.852      | 1.365           |
| SC00DISP | 4,152       | 0.9        | 1.008      | 1.250           |
| IN25MSGP | 3,616       | 0.8        | 0.297      | 0.000           |
| IN25AKRE | 3,368       | 0.7        | 0.136      | 0.000           |
| DFHMIRS  | 2,663       | 0.6        | 2.576      | 1.067           |
| PR3MAINI | 2,061       | 0.4        | 3.795      | 4.936           |
| MP3SMGRI | 1,964       | 0.4        | 72.566     | 10.444          |
| IN25SER1 | 1,812       | 0.4        | 63.625     | 0.669           |
| IN25AKC0 | 1,684       | 0.4        | 283.718    | 24.308          |
| IN25AKEP | 1,684       | 0.4        | 0.991      | 0.026           |
| IN25CORE | 1,683       | 0.4        | 2.123      | 1.254           |
| DQONLPR  | 1,380       | 0.3        | 7.620      | 1.091           |
| IN25AKBE | 1,349       | 0.3        | 0.149      | 0.000           |
| SP0LFAX  | 1,091       | 0.2        | 0.847      | 0.097           |
| DFHWBA   | 1,080       | 0.2        | 60.095     | 37.901          |
| DFHWBBLI | 1,080       | 0.2        | 4.968      | 0.124           |
| DFHWBXN  | 946         | 0.2        | 16.214     | 0.263           |

## **Statistics Summary**

This report shows the CICS Statistics. In addition to standard parameters, the following keyword parameters are supported:

#### **RECTYPE**

The record type containing the SYSVIEW SMF data.

Default: 255

#### **ORDERBY**

The variables used to sort for the final report, which can be any combination of JOBNAME, TRANUSE, TRANTIME, TRANRATE, TRANCPU, and TRANIO.

**Default:** TRANUSE D

#### TOP

Used to restrict the number of lines of output for each time interval.

**Default:** 99999999

To create the CICS Statistics Summary report, use this CICSSTAT code:

LIST OFF %CICSSTAT

The following is a sample CICS Statistics Summary report:

| , ,     |           |           |       | S Statistic | -           |       |         |          | PAGE | 1 |
|---------|-----------|-----------|-------|-------------|-------------|-------|---------|----------|------|---|
| rom:    |           | 908/03/04 |       |             | DAY         |       |         |          |      |   |
| o:      |           | 908/03/05 |       |             | 00:00 24:00 |       |         |          |      |   |
| nterval | Start: 20 | 908/03/04 | 00:00 | Order by:   | TRANUSE D   |       |         |          |      |   |
| CICS    | TRAN      | TRAN      | TRAN  | TRAN        | TRAN        | TRAN  | FILE    | FILE     |      |   |
| OBNAME  | USE       | TIME      | RATE  | MAX TIME    | CPU         | I/0   | USE     | I/O TIME |      |   |
| OPCDEVL | 4772      | 8.274     | 0.05  | 2087.73     | 0.027       | 0.034 | 155,665 | 0.034    |      |   |
| 92ICSTT | 4739      | 5.343     | 0.05  | 1887.50     | 0.014       | 0.045 | 117,779 | 0.045    |      |   |
| OPCQAQA | 4727      | 6.677     | 0.05  | 1962.96     | 0.015       | 0.017 | 70,086  | 0.017    |      |   |
| OPCDEV3 | 2391      | 11.962    | 0.02  | 1887.44     | 0.020       | 0.114 | 166,995 | 0.114    |      |   |
| ACTAPG  | 1243      | 19.909    | 0.01  | 1887.47     | 0.014       | 0.005 | 4,022   | 0.005    |      |   |
| 92ICST2 | 1100      | 23.588    | 0.01  | 1887.44     | 0.200       | 0.059 | 34,529  | 0.059    |      |   |
| ACTUSA  | 1042      | 23.675    | 0.01  | 1887.54     | 0.016       | 0.002 | 1,610   | 0.002    |      |   |
| OPSTEST | 329       | 75.068    | 0.00  | 1887.44     | 0.007       | 0.000 | Θ       | 0.000    |      |   |
| OPCMIN  | 146       | 168.606   | 0.00  | 1887.45     | 0.007       | 0.000 | Θ       | 0.000    |      |   |
| 92ICST3 | 64        | 383.456   | 0.00  | 1887.44     | 0.013       | 0.000 | Θ       | 0.000    |      |   |
| OPCDEM  | 43        | 570.890   | 0.00  | 1887.47     | 0.006       | 0.000 | Θ       | 0.000    |      |   |
| ACTUSA2 | 33        | 744.517   | 0.00  | 1887.61     | 0.016       | 0.003 | 6       | 0.003    |      |   |
| OPCDEV2 | 33        | 744.228   | 0.00  | 1887.44     | 0.003       | 0.000 | Θ       | 0.000    |      |   |
| OPCDEV4 | 31        | 791.670   | 0.00  | 1887.44     | 0.001       | 0.000 | Θ       | 0.000    |      |   |
| ACMPQA  | 22        | 1115.366  | 0.00  | 1887.54     | 0.000       | 0.000 | 0       | 0.000    |      |   |

#### Statistics Summary of File Usage

This report shows the CICS file usage statistics. In addition to standard parameters, the following keyword parameters are supported:

#### **RECTYPE**

The record type containing the SYSVIEW SMF data.

Default: 255

# ORDERBY

The variables used to sort for the final report, which can be any combination of ID, USE, UPDATES, READNUPD, READUPDT, DELETES, ADDS, BROWSE, SPLITS, and TIME.

Default: USE D

#### TOP

Used to restrict the number of lines of output for each time interval.

**Default:** 99999999

#### **DSNAME**

Used to filter by data set name.

Default: \* (an asterisk), which selects all data sets

To create the CICS Statistics Summary report of file usage, use this FILESTAT code.

%FILESTAT

The following is a sample CICS Statistics Summary report of file usage:

| From:<br>To: | 2008/<br>2008/ | 03/04 08:57<br>03/05 07:32 | Shift: 6    | OAY<br>00:00 24:00 |         |        |        | 17     | AGE 1    | •      |
|--------------|----------------|----------------------------|-------------|--------------------|---------|--------|--------|--------|----------|--------|
| Interval S   | Start: 2008/   | 03/04 00:00                | Order by: l | JSE D              |         |        |        |        |          |        |
| FILE         | FILE           | FILE                       | FILE        | FILE               | FILE    | FILE   | FILE   | FILE   | FILE     |        |
| ID           | USE            | UPDATES                    | READNUPD    | READUPDT           | DELETES | ADDS   | BROWSE | SPLITS | I/O TIME |        |
| PROTSYM      | 392,746        | 0                          | 392,746     | 0                  | 0       | 0      | 0      |        | 9 0.6    | <br>99 |
| IDSTAOBJ     | -              |                            | 55,500      |                    |         | 11,030 |        |        | 9 0.1    | 18     |
| IDSTASRC     | 55,473         |                            |             | 0                  | 0       |        |        | (      | 0.0      |        |
| ADROUT       | 12,964         |                            | 4,855       |                    |         | 8,109  | 0      | (      | 9 0.1    | 13     |
| ADRLIB       | 5,961          |                            | 5,961       |                    | 0       | 0      | Θ      | (      | 9 0.1    | L7     |
| IDDVW        | 4,474          | 0                          | 4,342       | 0                  | Θ       | 132    | 0      |        | 0.3      | 38     |
| IDDAT        | 4,367          | 0                          | 3,514       | 0                  | Θ       | 853    | 0      |        | 0.0      | 91     |
| ENMAP30      | 3,539          | 0                          | 1,010       | 0                  | Θ       | 0      | 509    |        | 0.0      | 92     |
| ADRPNL       | 1,273          | 0                          | 1,273       | 0                  | 0       | Θ      | Θ      | (      | 0.0      | 91     |
| IDSTAPNL     | 1,187          | 0                          | 1,052       | 0                  | 0       | 135    | Θ      | (      | 0.0      | 92     |
| IDSAS0BJ     | 62             | 0                          | 62          | 0                  | 0       | Θ      | Θ      | (      | 0.0      | 94     |
| MP3TMP1      | 55             | 0                          | 3           | 0                  | 42      | 10     | Θ      | (      | 0.0      | 90     |
| IDSASPNL     | 17             | 0                          | 17          | 0                  | Θ       | 0      | Θ      | (      | 9.0      | 92     |
| MP3TMP3      | 13             | 0                          | 0           | 0                  | 12      | 1      | Θ      | (      | 0.0      | 92     |
| MP3TMP2      | 11             | 0                          | 0           | 0                  | 11      | 0      | Θ      |        | 0.0      | 91     |

### **Transaction Range Summary**

This report shows the CICS transaction usage by lifetime. In addition to standard parameters, the following keyword parameter is supported:

#### **RECTYPE**

The record type containing the SYSVIEW SMF data.

Default: 255

To create the CICS Transaction Range report, use this TRANRANG code:

LIST OFF

%TRANRANG EACH HOUR

## The following is a sample CICS Transaction Range report:

| 2008/05/20<br>From: |       | CA SYSVIEW 2008/03/04 08 |         | ch: HOUR   |       | ···· <del>···</del> ·· <i>y</i> |       |          |       |          |       | PAGE     | -     |
|---------------------|-------|--------------------------|---------|------------|-------|---------------------------------|-------|----------|-------|----------|-------|----------|-------|
| To:                 |       | 2008/03/05 07            | :32 Sh: | ift: 00:00 | 24:00 |                                 |       |          |       |          |       |          |       |
|                     |       | TRAN                     | TRAN    | TRAN USE   | % USE | TRAN USE                        | % USE | TRAN USE | % USE | TRAN USE | % USE | TRAN USE | % USE |
| DATE                | TIME  | USE                      | RATE    | 0-1 SEC    | 0-1   | 1-3 SEC                         | 1-3   | 3-5 SEC  | 3-5   | 5-10 SEC | 5-1   | 10+ SEC  | 10+   |
| 2008/03/04          | 09:00 | 136                      | .03     | 100        | 73.5  | 27                              | 19.8  | 0        | 0.0   | 2        | 1.4   | 7        | 5.1   |
| 2008/03/04          | 10:00 | 2,581                    | .71     | 2,217      | 85.8  | 227                             | 8.7   | 37       | 1.4   | 28       | 1.0   | 72       | 2.7   |
| 2008/03/04          | 11:00 | 3,786                    | 1.05    | 3,140      | 82.9  | 383                             | 10.1  | 71       | 1.8   | 59       | 1.5   | 133      | 3.5   |
| 2008/03/04          | 12:00 | 1,720                    | . 47    | 1,479      | 85.9  | 111                             | 6.4   | 30       | 1.7   | 40       | 2.3   | 60       | 3.4   |
| 2008/03/04          | 13:00 | 2,747                    | .76     | 2,316      | 84.3  | 231                             | 8.4   | 58       | 2.1   | 64       | 2.3   | 78       | 2.8   |
| 2008/03/04          | 14:00 | 3,184                    | .88     | 2,898      | 91.0  | 149                             | 4.6   | 25       | 0.7   | 45       | 1.4   | 67       | 2.1   |
| 2008/03/04          | 15:00 | 5,224                    | 1.45    | 4,669      | 89.3  | 271                             | 5.1   | 69       | 1.3   | 101      | 1.9   | 114      | 2.1   |
| 2008/03/04          | 16:00 | 1,337                    | .37     | 1,123      | 83.9  | 143                             | 10.6  | 12       | 0.8   | 19       | 1.4   | 40       | 2.9   |

## **User Summary**

This report shows the CICS user summary report. In addition to standard parameters, the following keyword parameter is supported:

## RECTYPE

The record type containing the SYSVIEW SMF data.

Default: 255

To create the CICS User Summary report, use this USERSTAT code:

LIST OFF %USERSTAT

## The following is a sample CICS User Summary report:

| 2008/05/20<br>rom: |              | 3/04 08 | CICS User Sum<br>:57 Each: |             |         |  | ı |
|--------------------|--------------|---------|----------------------------|-------------|---------|--|---|
| Го:                | 2008/0       |         |                            | 00:00 24:00 |         |  |   |
| Interval S         | tart: 2008/0 |         |                            |             |         |  |   |
| USER               | TRAN         | TRAN    |                            | TRAN        | TRAN    |  |   |
| ID                 | COUNT        | ID      | MAX LIFE                   | AVG LIFE    | AVG CPU |  |   |
| ACCTCONN           | 404          | TWBA    | 1238.391                   | 4.181       | 0.049   |  |   |
|                    | 429          | VTAT    | 0.002                      | 0.000       | 0.000   |  |   |
|                    | 833          |         |                            | 2.028       | 0.024   |  |   |
| ADHPU01            | 1            | IS31    | 0.152                      | 0.152       | 0.015   |  |   |
|                    | 55           | IS91    | 0.331                      | 0.023       | 0.003   |  |   |
|                    | 2            | SCFD    | 0.300                      | 0.151       | 0.010   |  |   |
|                    | 25           | S041    | 0.408                      | 0.046       | 0.004   |  |   |
|                    | 1            | STAR    | 0.872                      | 0.872       | 0.058   |  |   |
|                    | 84           |         |                            | 0.044       | 0.004   |  |   |
| ADROPS             | 1            | IDLX    | 0.136                      | 0.136       | 0.010   |  |   |
|                    | 3            | SCFD    | 0.279                      | 0.137       | 0.018   |  |   |
|                    | 4            |         |                            | 0.137       | 0.016   |  |   |
| ALLTR01            | 1            | CESF    | 0.382                      | 0.382       | 0.002   |  |   |
|                    | 18           | DQIN    | 0.677                      | 0.153       | 0.006   |  |   |
|                    | 1            | DQRY    | 0.119                      | 0.119       | 0.003   |  |   |
|                    | 3            | IDLX    | 1.180                      | 0.464       | 0.021   |  |   |
|                    | 5            | SAST    | 14.347                     | 10.221      | 1.211   |  |   |
|                    | 902          | SCFD    | 3.784                      | 0.043       | 0.004   |  |   |
|                    | 930          |         |                            | 0.101       | 0.011   |  |   |

# **IMS Canned Reports**

This section shows the IMS sample reports and the code used to produce them.

**Note:** The IMS canned reports require data collected by the CA SYSVIEW Option for IMS.

## **Transaction Summary**

This report shows the IMS transaction usage by program. In addition to standard parameters, the following keyword parameter is supported:

#### **IMSID**

The target IMS subsystem.

To create the IMS Transaction Summary report, use this IMSMRA02 code:

LIST OFF %IMSMRA02 IMSID=SVP9

The following is a sample IMS Transaction Summary report:

| REPORT NO. AP2 | 1 E S S A G E |          |             | X - DEPT. OF INFORM<br>ORT BY AD | MATION SERVICES   | P CODE DETA      | PAGE 1   |
|----------------|---------------|----------|-------------|----------------------------------|-------------------|------------------|----------|
|                | ILJJAGE       | TRUCES   |             | FROM 2009/07/31 THE              |                   | K CODE DETA      |          |
|                |               |          | IM          | IS SYSTEM - SVP9                 |                   |                  |          |
| ADMINISTRATOR  | TRANSACTION   | PROGRAM  | TRANSACTION | AVG D.B. CALLS                   | TOTAL TRANSACTION | AVG. MRR SECONDS | AVG. CPU |
| APPLICATION    | CODES         | NAME     | COUNT       | PER TRANSACTION                  | D.B. CALLS        | PER TRANSACTION  | SECONDS  |
| AD             | ADDPART       | DFSSAM04 | 1           | 2                                | 2                 | 0.077733         | 0.002369 |
| AD             | ***           |          | 1           | 2                                | 2                 | 0.077733         | 0.002369 |
| IV             | IVTNV         | DFSIVP2  | 87          |                                  | 83                | 48.550905        | 0.000505 |
| IV             | ***           |          | 87          |                                  | 83                | 48.550905        | 0.000505 |
| PA             | PART          | DFSSAM02 | 11          | 1                                | 13                | 0.261262         | 0.008001 |
| PA             | ***           |          | 11          | 1                                | 13                | 0.261262         | 0.008001 |
|                | TOTAL         |          | 99          |                                  | 98                | 42.695761        | 0.001357 |

# **MVS Reports**

This section shows the MVS sample reports and the code used to produce them.

## **Address Space Statistics**

This report shows the MVS Address Space Performance report. This report requires SMF 70 records.

To create the Address Space Statistics report, use this ASCBSTAT code:

LIST OFF %ASCBSTAT EACH HOUR The following is a sample Address Space Statistics report:

|                  | CA SY<br>2008/03/<br>2008/03/ | 25 06:23     | B Each    | : Н       | atistics<br>OUR<br>0:00 24: |            |             |             |              |            |            |            | PAGE | 1 |
|------------------|-------------------------------|--------------|-----------|-----------|-----------------------------|------------|-------------|-------------|--------------|------------|------------|------------|------|---|
| Interval         | AVG<br>READY                  | MAX<br>READY | AVG<br>IN | MAX<br>IN | AVG<br>OUT                  | MAX<br>OUT | AVG<br>WAIT | MAX<br>WAIT | AVG<br>BATCH | AVG<br>STC | AVG<br>TS0 | MAX<br>TS0 |      |   |
| 2008/03/25 06:00 | 19.1                          | 143          | 253.6     | 267       | 0.0                         | 2          | 38.6        | 41          | 84.1         | 252.2      | 26.1       | 28         |      |   |
| 2008/03/25 07:00 | 36.9                          | 179          | 263.4     | 281       | 0.0                         | 3          | 35.7        | 37          | 89.8         | 248.8      | 32.3       | 36         |      |   |
| 2008/03/29 08:00 | 1.7                           | 18           | 109.7     | 127       | 0.0                         |            | 0.0         |             | 7.4          | 255.6      | 19.9       | 36         |      |   |
| 2008/03/29 09:00 | 1.7                           | 26           | 140.0     | 154       | 0.0                         | 3          | 0.0         |             | 14.6         | 270.3      | 54.0       | 68         |      |   |

## **Device Activity**

This report shows the Device Activity statistics. This report requires SMF 74 records. In addition to standard parameters, the following keyword parameters are supported:

## **ORDERBY**

The variables used to sort for the final report, which can be any combination of DEVNUM, SSCH.

Default: SSCH D

## TOP

Restricts the number of lines of output for each time interval.

**Default:** 99999999

To create the Device Activity report, use this DEVSTAT code:

LIST OFF %DEVSTAT TOP 30

## The following is a sample Device Activity report:

| From:<br>To:<br>Interva | 26             |              | 5 06:23 E<br>9 09:57 S<br>5 00:00 |                   | DAY<br>00:00 24:  | 00             |                 |             |  |  |
|-------------------------|----------------|--------------|-----------------------------------|-------------------|-------------------|----------------|-----------------|-------------|--|--|
| DEVICE<br>ID            | DEVICE<br>SSCH | SSCH<br>RATE | DEVICE<br>SERVTIME                | DEVICE<br>CONNECT | DEVICE<br>PENDING | DEVICE<br>DISC | DEVICE<br>%BUSY | DB<br>DELAY |  |  |
| A010                    | 588,583        | 6.81         | 0.88                              | 0.12              | 0.13              | 0.63           | 0.60            | 0.00        |  |  |
| 2679                    | 567,973        | 6.57         | 1.13                              | 0.65              | 0.45              | 0.03           | 0.75            | 0.00        |  |  |
| 2365                    | 402,651        | 4.66         | 1.52                              | 1.21              | 0.22              | 0.10           | 0.71            | 0.00        |  |  |
| 211A                    | 309,333        | 3.58         | 0.79                              | 0.51              | 0.25              | 0.04           | 0.28            | 0.00        |  |  |
| 2E32                    | 230,613        | 2.67         | 2.27                              | 2.00              | 0.19              | 0.08           | 0.61            | 0.01        |  |  |
| 2136                    | 222,787        | 2.58         | 1.42                              | 1.16              | 0.21              | 0.05           | 0.37            | 0.00        |  |  |
| 23D7                    | 191,446        | 2.22         | 2.27                              | 2.02              | 0.21              | 0.04           | 0.50            | 0.00        |  |  |
| 90D2                    | 108,141        | 1.25         | 49.34                             | 0.02              | 0.51              | 48.80          | 6.18            | 0.00        |  |  |
| 90D3                    | 108,003        | 1.25         | 0.83                              | 0.18              | 0.50              | 0.15           | 0.10            | 0.00        |  |  |
| 9031                    | 88,287         | 1.02         | 1.71                              | 0.26              | 0.48              | 0.97           | 0.18            | 0.00        |  |  |
| 23ED                    | 85,647         | 0.99         | 3.43                              | 3.13              | 0.21              | 0.09           | 0.34            | 0.00        |  |  |
| 2E4F                    | 79,565         | 0.92         | 1.03                              | 0.70              | 0.17              | 0.17           | 0.10            | 0.00        |  |  |
| 2366                    | 77,257         | 0.89         | 1.84                              | 1.56              | 0.20              | 0.08           | 0.16            | 0.00        |  |  |
| 2447                    | 74,320         | 0.86         | 2.44                              | 1.97              | 0.39              | 0.08           | 0.21            | 0.05        |  |  |
| A011                    | 70,286         | 0.81         | 1.88                              | 0.37              | 0.34              | 1.18           | 0.15            | 0.00        |  |  |
| 2E1E                    | 63,606         | 0.74         | 1.90                              | 1.60              | 0.20              | 0.10           | 0.14            | 0.01        |  |  |
| 28C1                    | 44,182         | 0.51         |                                   | 0.70              | 0.27              | 0.85           |                 | 0.00        |  |  |
| 200E                    | 43,367         | 0.50         | 1.21                              | 0.43              | 0.76              | 0.02           | 0.06            | 0.01        |  |  |
| 2E30                    | 35,428         | 0.41         | 0.53                              | 0.26              | 0.23              | 0.04           | 0.02            | 0.03        |  |  |
| 2105                    | 31,546         | 0.37         |                                   | 0.91              | 0.21              | 0.27           |                 | 0.00        |  |  |
| 3400                    | 27,140         | 0.31         |                                   | 0.00              | 0.55              | 0.00           |                 | 0.00        |  |  |
| 3425                    | 27,140         | 0.31         |                                   | 0.00              | 0.49              | 0.00           |                 | 0.00        |  |  |
| 24AC                    | 24,079         | 0.28         | 1.09                              | 0.54              | 0.22              | 0.33           |                 | 0.00        |  |  |
| 26C0                    | 22,031         | 0.25         | 1.57                              | 0.84              | 0.45              | 0.28           |                 | 0.00        |  |  |
| 2D83                    | 21,677         | 0.25         | 0.57                              | 0.29              | 0.26              | 0.03           |                 | 0.00        |  |  |
| 2054                    | 21,616         | 0.25         | 5.05                              | 4.75              | 0.24              | 0.07           |                 | 0.00        |  |  |
| 2363                    | 20,955         | 0.24         | 0.88                              | 0.65              | 0.19              | 0.03           |                 | 0.00        |  |  |
| 2808                    | 19,495         | 0.23         |                                   | 0.76              | 0.26              | 0.27           |                 | 0.00        |  |  |
| 23F6                    | 19,414         | 0.22         |                                   | 5.52              | 0.21              | 0.17           |                 | 0.01        |  |  |
| 2E8D                    | 19,183         | 0.22         | 1.09                              | 0.80              | 0.24              | 0.05           | 0.02            | 0.01        |  |  |

# **Disk Device Activity**

This report shows the disk device activity statistics and requires SMF 74 records. Both standard and the following keyword parameters are supported:

## **ORDERBY**

The variables used to sort for the final report, which can be any combination of VOLSER, SSCH.

Default: SSCH D

TOP

Restricts the number of lines of output for each time interval.

**Default:** 99999999

**VOLSER** 

Filters by volume.

Default: \* (an asterisk), which selects all volumes

To create the Disk Device Activity report, use this DISKSTAT code:

LIST OFF %DISKSTAT TOP 30

The following is a sample Disk Device Activity report:

| From:<br>To:<br>Interva | 20             |              | 5 06:23 E<br>9 09:57 S<br>5 00:00 |                   | DAY<br>00:00 24:  | 00             |                 |             |  |  |
|-------------------------|----------------|--------------|-----------------------------------|-------------------|-------------------|----------------|-----------------|-------------|--|--|
| VOLSER<br>ID            | DEVICE<br>SSCH | SSCH<br>RATE | DEVICE<br>SERVTIME                | DEVICE<br>CONNECT | DEVICE<br>PENDING | DEVICE<br>DISC | DEVICE<br>%BUSY | DB<br>DELAY |  |  |
| DCMQAD                  | 567,973        | 6.57         | 1.13                              | 0.65              | 0.45              | 0.03           | 0.75            | 0.00        |  |  |
| DCMQAA                  | 402,651        | 4.66         | 1.52                              | 1.21              | 0.22              | 0.10           | 0.71            | 0.00        |  |  |
| MVCA44                  | 309,333        | 3.58         | 0.79                              | 0.51              | 0.25              | 0.04           | 0.28            | 0.00        |  |  |
| RTM002                  | 230,613        | 2.67         | 2.27                              | 2.00              | 0.19              | 0.08           | 0.61            | 0.01        |  |  |
| DCMQAC                  | 222,787        | 2.58         | 1.42                              | 1.16              | 0.21              | 0.05           | 0.37            | 0.00        |  |  |
| LOAN02                  | 191,446        | 2.22         | 2.27                              | 2.02              | 0.21              | 0.04           | 0.50            | 0.00        |  |  |
| LOAN04                  | 85,647         | 0.99         | 3.43                              | 3.13              | 0.21              | 0.09           | 0.34            | 0.00        |  |  |
| S16DB2                  | 79,565         | 0.92         | 1.03                              | 0.70              | 0.17              | 0.17           | 0.10            | 0.00        |  |  |
| DCMQAB                  | 77,257         | 0.89         | 1.84                              | 1.56              | 0.20              | 0.08           | 0.16            | 0.00        |  |  |
| MVR14A                  | 74,320         | 0.86         | 2.44                              | 1.97              | 0.39              | 0.08           | 0.21            | 0.05        |  |  |
| MVS010                  | 63,606         | 0.74         | 1.90                              | 1.60              | 0.20              | 0.10           | 0.14            | 0.01        |  |  |
| SPL44D                  | 44,182         | 0.51         | 1.82                              | 0.70              | 0.27              | 0.85           | 0.09            | 0.00        |  |  |
| CTL022                  | 43,367         | 0.50         | 1.21                              | 0.43              | 0.76              | 0.02           | 0.06            | 0.01        |  |  |
| RTM001                  | 35,428         | 0.41         | 0.53                              | 0.26              | 0.23              | 0.04           | 0.02            | 0.03        |  |  |
| SPL44T                  | 31,546         | 0.37         | 1.40                              | 0.91              | 0.21              | 0.27           | 0.05            | 0.00        |  |  |
| NMD031                  | 24,079         | 0.28         | 1.09                              | 0.54              | 0.22              | 0.33           | 0.03            | 0.00        |  |  |
| SPL44C                  | 22,031         | 0.25         | 1.57                              | 0.84              | 0.45              | 0.28           | 0.04            | 0.00        |  |  |
| CAT036                  | 21,677         | 0.25         | 0.57                              | 0.29              | 0.26              | 0.03           | 0.01            | 0.00        |  |  |
| LOAN37                  | 21,616         | 0.25         | 5.05                              | 4.75              | 0.24              | 0.07           |                 | 0.00        |  |  |
| DCMSPD                  | 20,955         | 0.24         | 0.88                              | 0.65              | 0.19              | 0.03           |                 | 0.00        |  |  |
| SPL44B                  | 19,495         | 0.23         | 1.28                              | 0.76              | 0.26              | 0.27           |                 | 0.00        |  |  |
| LOAN05                  | 19,414         | 0.22         | 5.91                              | 5.52              | 0.21              | 0.17           |                 | 0.01        |  |  |
| APCM06                  | 19,183         | 0.22         | 1.09                              | 0.80              | 0.24              | 0.05           |                 | 0.01        |  |  |
| DCMSPA                  | 18,945         | 0.22         | 0.57                              | 0.31              | 0.24              | 0.03           |                 | 0.00        |  |  |
| APCD08                  | 15,756         | 0.18         | 2.23                              | 1.95              | 0.21              | 0.07           |                 | 0.00        |  |  |
| LOAN10                  | 12,626         | 0.15         | 5.75                              | 5.07              | 0.64              | 0.04           |                 | 0.00        |  |  |
| AUTM04                  | 10,952         | 0.13         | 1.60                              | 1.06              | 0.19              | 0.34           |                 | 0.00        |  |  |
| APCM04                  | 10,442         | 0.12         | 1.73                              | 0.89              | 0.18              | 0.66           |                 | 0.00        |  |  |
| JESCK5                  | 10,071         | 0.12         | 2.16                              | 1.88              | 0.25              | 0.03           |                 | 0.00        |  |  |
| APCM03                  | 9,871          | 0.11         | 0.86                              | 0.53              | 0.20              | 0.13           | 0.01            | 0.00        |  |  |

## Non-VSAM Data Set Activity

This report shows the MVS data set activity and requires SMF 14 records. Both standard and the following keyword parameters are supported:

#### **ORDERBY**

The variables used to sort for the final report, which can be any combination of DSNAME, EXCP, INPUT, or OUTPUT.

Default: EXCP D

#### TOP

Restricts the number of lines of output for each time interval.

**Default:** 99999999

#### **DSNAME**

Filters by data set name.

Default: \* (an asterisk), which selects all data sets

To create the Non-VSAM Data Set Activity report, use this DSNSTAT code:

%DSNSTAT TOP 30

The following is a sample report:

| 008/05/20 08:08 CA SYSVIEW Non-VSAM Dat<br>rom: 2008/03/25 06:23 Each: | DAY         |               |                | PAGE 1 |  |
|--|-------------|---------------|----------------|--------|--|
| o: 2008/03/29 09:57 Shift:   | 00:00 24:00 |               |                |        |  |
| nterval Start: 2008/03/25 00:00 Order by                               | : EXCP D    |               |                |        |  |
|  | Total       | Toput         | Output         |        |  |
| Dataset Name   | EXCP        | Input<br>EXCP | Output<br>EXCP |        |  |
| Dataset Name   |             | LACI          |                |        |  |
| PCDAL.BMS.CKPT   | 34,405,362  | 34,403,742    | 1,620          |        |  |
| YSPROG.OPSMVS.USER.REXX  | 1,359,545   | 1,359,545     | 0              |        |  |
| CMQA.QAMUFM.A01797   | 482,262     | 0             | 482,262        |        |  |
| CMQA.STEPLIB.CAILIB  | 158,702     | 158,702       | 0              |        |  |
| IST.CAGJG0.SRCLIB  | 155,920     | 155,920       | 0              |        |  |
| CMQA.QAMUFM.LXX  | 104,537     | 0             | 104,537        |        |  |
| CMQA.PROCLIB   | 86,130      | 86,130        | 0              |        |  |
| EN.C5100.DOMCA01.P3300445.SVCDUMP                                      | 59,499      | 59,140        | 359            |        |  |
| CMQA.QAMUFM.IXX797   | 50,234      |               | 50,234         |        |  |
| TM.QA.SYSV771.PARMLIB  | 45,278      | 45,278        | 0              |        |  |
| PCMTL.JSKVIEW.SARDBASE.D0000001  | 33,875      | 0             | 33,875         |        |  |
| YS1.SMFDATA.MS032504.T0624A1   | 27,073      | 0             | 27,073         |        |  |
| YS1.SMFDATA.MS032504.T0624P1   | 27,073      | 0             | 27,073         |        |  |
| TM.QA.SYSV771.PR0FILE  | 26,053      | 26,053        | 0              |        |  |
| CMQA.QAMUFM.IXX796   | 23,519      | 0             | 23,519         |        |  |
| PSQA.OPST.CPM.REXX   | 21,603      | 21,603        | 0              |        |  |
| CMQA.QAMUFM.IXX795   | 18,654      | 0             | 18,654         |        |  |
| ST.SASCDEV.LINKLIB   | 14,415      | 14,415        | 0              |        |  |
| PCMTL.SITA.FOPS.VPS2SP10.CNTL  | 13,999      | 13,999        | 0              |        |  |
| CMQA.QAMUFM.IXX794   | 13,294      | 0             | 13,294         |        |  |
| CMQA.QA10.CICSTEST.JCL   | 11,226      | 5,932         | 5,294          |        |  |
| CMQA.QAMUFM.CXX  | 10,471      | 0             | 10,471         |        |  |

# **Paging Statistics**

This report shows the MVS paging statistics. This report requires SMF 71 records.

To create the Paging Statistics report, use this PAGESTAT code:

%PAGESTAT EACH HOUR

The following is a sample Paging Statistics report:

| 2008/05/20 08:15 | (A 5V     | SVTFW Pa | ging Stat | tictics |          |      |      |       |       |      | PAGE | 1      |
|------------------|-----------|----------|-----------|---------|----------|------|------|-------|-------|------|------|--------|
| ,                | 2008/03/2 |          | 5 5       | HOU     | R        |      |      |       |       |      | IAGE | -      |
|                  | 2008/03/2 |          |           |         | 00 24:00 |      |      |       |       |      |      |        |
|                  | PAGE      | PAGE     | PAGE      | VIO     | VIO      | SWAP | SWAP | PAGE  | PAGE  | MIN  | MAX  | AVG    |
| Interval         | IN        | 0UT      | RECLM     | IN      | 0UT      | IN   | 0UT  | MOVE  | M0VEX | UIC  | UIC  | UIC    |
| 2008/03/25 06:00 | 1.08      | 21.50    | 0.00      | 0.00    | 0.00     | 0.08 | 0.00 | 13.66 | 0.00  | 2030 | 2540 | 1886.1 |
| 2008/03/25 07:00 | 2.82      | 2.88     | 0.00      | 0.00    | 0.00     | 0.08 | 0.00 | 26.23 | 0.00  | 2540 | 2540 | 1903.6 |
| 2008/03/29 08:00 | 1.40      | 0.00     | 0.00      | 0.00    | 0.00     | 0.00 | 0.00 | 10.94 | 0.00  | 320  | 1970 | 528.5  |
| 2008/03/29 09:00 | 1.79      | 37.00    | 0.00      | 0.00    | 0.00     | 0.55 | 0.55 | 37.92 | 0.00  | 1970 | 2540 | 1855.3 |

# **Swap Statistics**

This report shows the MVS paging statistics. This report requires SMF 71 records.

To create the Swap Statistics report, use this SWAPSTAT code:

LIST OFF %SWAPSTAT

The following is a sample Swap Statistics report:

| 2008/05/20 08:09 CA SYSVIEW S   | wap Statis | tics  |       |       |       |       | PAGE    | 1 |
|---------------------------------|------------|-------|-------|-------|-------|-------|---------|---|
| From: 2008/03/25 06:2           | 3 Each:    | DAY   |       |       |       |       |         |   |
| To: 2008/03/29 09:5             | 7 Shift:   | 00:00 | 24:00 |       |       |       |         |   |
| Interval Start: 2008/03/25 00:0 | 0          |       |       |       |       |       |         |   |
|                                 | Swap       | Swap  | Swap  | Swap  | Swap  | Swap  | Swap    |   |
| Swap Reason                     | Count      | Rate  | P-AUX | L-AUX | P-EXT | L-EXT | Migrate |   |
| TERMINAL OUTPUT WAIT            | 196        | 0.00  | 0     | 0     | 0     | 0     | 6       | ) |
| TERMINAL INPUT WAIT             | 5,660      | 0.07  | 0     | Θ     | Θ     | 0     | e       | ) |
| LONG WAIT                       | 654        | 0.01  | 0     | Θ     | Θ     | Θ     | 6       | ) |
| DETECTED WAIT                   | 2,104      | 0.02  | 0     | Θ     | Θ     | 0     | Э       | ) |
| EXCHANGE ON RECOMMENDATION VAL  | 1          | 0.00  | 0     | Θ     | Θ     | Θ     | 6       | ) |
| UNILATERAL                      | 29         | 0.00  | 0     | Θ     | Θ     | 0     | Э       | ) |
| TRANSITION TO NON-SWAPPABLE     | 341        | 0.00  | Θ     | 0     | 0     | 0     | 6       | ) |

## **VSAM Data Set Activity**

This report shows the VSAM data set activity. This report requires SMF 64 records. In addition to standard parameters, the following keyword parameters are supported:

#### **ORDERBY**

The variables used to sort for the final report, which can be any combination of DSNAME, ACTIVITY, RETRIEVE, INSERTS, DELETES, UPDATES, EXCPS, CISPLITS, and CASPLITS.

Default: EXCP D

## TOP

Restricts the number of lines of output for each time interval.

**Default:** 99999999

## **DSNAME**

Filters by data set name.

**Default:** \* (an asterisk), which selects all data sets.

To create the VSAM Data Set Activity report, use this VSAMSTAT code:

LIST OFF %VSAMSTAT TOP 30

The following is a sample VSAM Data Set Activity report:

| 2008/05/20       08:09       CA SYSVIEW VSAM Datase         From:       2008/03/25       06:23       Each:         To:       2008/03/29       09:57       Shift:         Interval Start:       2008/03/25       00:00       Order by | DAY<br>00:00 24:00 |                  |         |                |         |           | PAGE      | 1                 |
|--|--------------------|------------------|---------|----------------|---------|-----------|-----------|-------------------|
| Dataset Name   | DSN                | DSN<br>RETRIEVES |         | DSN<br>DELETES |         |           | VSAM      | VSAM<br>CA SPLITS |
| Dataset Name   | ACIIVIIY           | KEIKIEVES        | INSERTS | DELETES        | UPDATES | EXCPS     | CI SPLIIS | CA SPLITS         |
| SYSPROG.XE44.RMF4.DATA   | 1,687,650          | 739,650          | 800,050 | 0              | 147,950 | 1,174,160 | 0         | 0                 |
| SYS1.MAN1.DATA   | 219,459            | 219,459          | 0       | 0              | 0       | 60,120    | 0         | 0                 |
| SYS1.MAN2.DATA   | 85,426             | 85,426           | 0       | 0              | 0       | 13,787    | 0         | 0                 |
| BST.P40.STG2.MCF.DATA  | 148                | 148              | 0       | Θ              | Θ       | 24        | 0         | 0                 |
| YUNED01.TPX50.ADMIN1.DATA  | 119                | 119              | Θ       | 0              | 0       | 10        | Θ         | 0                 |
| BST.P40.STG2.MCF   | 87                 | 87               | 0       | Θ              | Θ       | 62        | -         | 0                 |
| BST.DEVEL.ELMCATL  | 14                 | 14               | 0       | 0              | 0       | 48        | 0         | 0                 |
| BST.DEVEL.ELMCATL.DATA   | 9                  | 9                | 0       | 0              | 0       | 15        | 0         | 0                 |
| BST.P40.STG1.MCF.DATA  | 6                  | 6                | 0       | 0              | 0       | 4         | -         | 0                 |
| YUNED01.TPX50.ADMIN2.DATA  | 5                  | 5                | 0       | 0              | 0       | 1         | 0         | 0                 |
| BST.P40.STG1.MCF   | 3                  | 3                | 0       | Θ              | Θ       | 19        | 0         | 0                 |
| BST.DEVEL.ELMCATL.INDEX  | 0                  | 0                | 0       | 0              | 0       | 43        | 0         | 0                 |
| BST.P40.STG1.MCF.INDEX   | 0                  | 0                | 0       | 0              | 0       | 39        | 0         | 0                 |
| BST.P40.STG2.MCF.INDEX   | 0                  | 0                | 0       | Θ              | Θ       | 67        | 0         | 0                 |
| RTM.QA.SYSV771.CAPINDEX.XE44.DATA  | 0                  | •                | 0       | 0              | 0       | 12        | -         | 0                 |
| RTM.QA.SYSV771.CAPINDEX.XE44.INDEX   | 0                  | 0                | 0       | 0              | 0       | 12        | 0         | 0                 |
| SYSVIEW.DEV.BASE.CAPINDEX.XE44.DATA  | 0                  | 0                | 0       | 0              | 0       | 4         | 0         | 0                 |
| SYSVIEW.MILD003.V770.CAPINDEX.DATA   | 0                  | 0                | 0       | 0              | 0       | 12        | -         | 0                 |
| SYSVIEW.MILD003.V770.CAPINDEX.INDEX  | 0                  | 0                | 0       | 0              | 0       | 12        | 0         | 0                 |
| SYSVIEW.DEV.BASE.CAPINDEX.XE44.INDEX   | 0                  | 0                | 0       | 0              | 0       | 6         | 0         | 0                 |
| YUNED01.TPX50.ADMIN1.IX  | 0                  | 0                | 0       | 0              | 0       | 16        | 0         | 0                 |
| YUNED01.TPX50.ADMIN2.IX  | 0                  | 0                | 0       | Θ              | Θ       | 2         | 0         | 0                 |

## WebSphere MQ Reports

This section shows the WebSphere MQ sample reports and the code used to produce them.

## **Buffer Manager Statistics**

This report shows the WebSphere MQ buffer pool usage statistics. This report requires SMF 115 records. In addition to the standard parameters, the following keyword parameter is supported:

#### **SUBSYS**

Specifies a target queue manager. The default is CSQ1.

To create the WebSphere MQ Buffer Pool Usage report, use this WMQBUFFU code:

LIST OFF %WMQBUFFU

The following is a sample WebSphere MQ Buffer Pool Usage report:

| GE 1          | PA             |                      |                         | Report              | er Pool Usage    | Buffe            |                        |                        |                |
|---------------|----------------|----------------------|-------------------------|---------------------|------------------|------------------|------------------------|------------------------|----------------|
| Dasd<br>Reads | Dasd<br>Writes | Stealable<br>Buffers | No Buffers<br>Available | Lowest<br>Available | Total<br>Buffers | Buffer<br>Util % | Interval<br>Start Time | Interval<br>Start Date | Buffer<br>Pool |
|               | 8              | 49963                |                         | 49961               | 50000            |                  | 08:15:07               | 2008/04/14             | Θ              |
|               | Ü              | 49963                |                         | 49963               | 50000            |                  | 08:45:11               | 2008/04/14             | Ü              |
|               | 59             | 932                  |                         | 719                 | 1050             | 11               | 08:15:07               | 2008/04/14             | 1              |
| 11            |                | 915                  |                         | 915                 | 1050             | 12               | 08:45:11               | 2008/04/14             |                |
|               | 1              | 1049                 |                         | 1049                | 1050             |                  | 08:15:07               | 2008/04/14             | 2              |
|               |                | 1049                 |                         | 1049                | 1050             |                  | 08:45:11               | 2008/04/14             |                |
|               | 1              | 1049                 |                         | 1049                | 1050             |                  | 08:15:07               | 2008/04/14             | 3              |
|               |                | 1049                 |                         | 1049                | 1050             |                  | 08:45:11               | 2008/04/14             |                |

## **Log Manager Statistics**

This report shows the WebSphere MQ log manager statistics. This report requires SMF 115 records. In addition to the standard parameters, the following keyword parameter is supported:

## **SUBSYS**

Specifies a target queue manager.

Default: CSQ1

To create the WebSphere MQ Log Manager report, use this WMQLOGR code:

LIST OFF %WMQLOGR

# The following is a sample Log Manager report:

|                  |                  |                  | Log Manager F | Report          |                  |                   | P                 | AGE 1                 |
|------------------|------------------|------------------|---------------|-----------------|------------------|-------------------|-------------------|-----------------------|
| Interval<br>Date | Interval<br>Time | Suspend<br>Count | Read<br>Hits  | Read<br>Actives | Read<br>Archives | Write<br>Page-Ins | MAXRTU<br>Delayed | LOGLOAD<br>Checkpoint |
|                  |                  |                  |               |                 |                  |                   |                   |                       |
| 908/04/14        | 08:15:07         | 1                | 123           | 5               | Θ                | 0                 | Θ                 | 1                     |
| 908/04/14        | 08:45:11         | 0                | 34            | 1               | 0                | 0                 | Θ                 | 0                     |
| 908/04/14        | 09:00:07         | Θ                | 154           | 1               | 0                | 0                 | Θ                 | 0                     |
| 008/04/14        | 09:15:11         | 2                | 24            | 0               | 0                | 5                 | 0                 | 0                     |

# **Report Structure**

The following example code for the ABENDSUM canned report is based on the provided macros and shows the structure of a CA Easytrieve program. Most of the comments in this example were removed for brevity.

**Note:** The line numbers shown on some lines match the explanation section, but are not part of the program.

```
1 MACRO 0 EACH 'DAY'
          SHIFT '00:00 24:00' +
          FROM 'ALL'
               'ALL'
          RECTYPE 255
2 %SYSVCDEF RECTYPE &RECTYPE +
           EACH '&EACH'
           FROM '&FROM'
           T0
               '&T0'
           SHIFT '&SHIFT'
           SEGMENT EXPCRABS
3 JOB INPUT SMFIN START SET-PARMS
4 PERFORM SELECT-REC.
   IF SELECTED = 'T'
     %SYSVFOR EXPCRABS ABENDS
     END-IF
6 %SYSVPROC. *Common subroutines
7 REPORT ABENDS PRINTER REPORTS SUMMARY SUMCTL DTLCOPYALL +
  SPACE 2 NOADJUST LONGDATE
  SEQUENCE TITLE-TSTAMP MNS TRAN ABS ABNDPGM ABS ABNDCODE
  CONTROL FINAL NOPRINT TITLE-TSTAMP NEWPAGE NOPRINT MNS TRAN NOPRINT +
          ABS ABNDPGM NOPRINT ABS ABNDCODE
  TITLE 1 '
                        Sysview CICS Program ABEND Summary'
  TITLE 2 'From:
                         ' LOW-STAMP ' Each:
                                                    &EACH '
                         ' HIGH-STAMP ' Shift:
  TITLE 3 'To:
                                                    &SHIFT'
  TITLE 4 'Interval Start:' TITLE-TSTAMP
  HEADING MNS TRAN
                      ('TRAN'
  HEADING ABS_ABNDPGM ('PROGRAM' '-----')
  HEADING ABS ABNDCODE ('CICS'
                                  'ABEND CODE' '----')
                                  'ABEND CODE' '----')
  HEADING ABS ABNDOCOD ('SYSTEM'
  HEADING TALLY
                                  '----')
                       ('COUNT'
  LINE MNS TRAN ABS ABNDPGM ABS ABNDCODE TALLY
```

The following explanations correspond to the line numbers in the preceding example:

This section of the code defines the ABENDSUM program as a macro so that
parameters can be specified easily when the program is run. This example has no
positional parameters, and five keyword parameters (EACH, SHIFT, FROM, TO, and
RECTYPE), each with a default value.

The following examples show how to invoke this macro:

%ABENDSUM EACH HOUR

- 2. This section invokes the SYSVCDEF macro. This macro:
  - Includes definitions of all the CA SYSVIEW SMF record types and some related MVS and RMF record types
  - Sets global variables that are referenced in the common subroutines.

The SEGMENT parameter identifies the primary data segment to use for the report.

3. This line begins the extraction section. The JOB statement defines and initiates processing activities as follows:

#### **INPUT SMFIN**

The INPUT parameter identifies the SMFIN input file.

#### **START SET-PARMS**

The START parameter runs the SET-PARMS subroutine, which initializes the selection criteria.

- 4. This PERFORM statement runs the SELECT-REC subroutine for each record in the input file. This subroutine performs common selection and filtering. If you want to process the record, set the variable SELECTED to T (true); otherwise it is set to F (false).
- 5. This line issues a PRINT statement for each EXPCRABS segment in the current record.
- 6. This line includes common subroutine definitions.
- 7. This section defines the output report.

# **Macros**

The canned reports are constructed from several macros that provide common functionality. These macros help you eliminate duplicated effort and are described in the following sections.

### SYSVCDEF Macro

The SYSVCDEF macro provides common definitions for global variables that various utility macros and subroutines use. SYSVCDEF includes the SMF record definitions needed by the canned reports. Invoke it as the first noncomment statement in the CA Easytrieve program.

The SYSVCDEF macro supports the following keyword parameters:

#### **EACH**

Determines the length of each reporting interval. The SELECT-BY-TIME subroutine of the SYSVPROC macro uses this parameter to set the TSTAMP value for each SMF record. For most reports, SMF data is aggregated for each reporting interval. Specify one of the following:

#### n DAY

Reporting interval is n days.

#### **MONTH**

Reporting interval is one month.

#### n HOUR

Reporting interval is *n* hours.

#### n MIN

Reporting interval is *n* minutes.

#### **RECORD**

Set the TSTAMP value for each SMF record set to the actual timestamp, without adjustment. In practice, this value prevents data aggregation.

**Default: DAY** 

#### **FROM**

Determines the starting timestamp for SMF record selection. The SELECT-PROC subroutine uses this value to exclude SMF records which have timestamps earlier than the provided value. The timestamp is specified as YYYY/MM/DD-HH:MM.

**Default:** ALL, which allows all records to be selected.

## **PRODUCT**

Indicates the name of the product that produced the SMF records. This name is used to filter the SMF records. Typically, the SEGMENT specification automatically sets this value.

Default: Null string, "

#### **RECSTYPE**

Specifies the SMF record subtype that contains the desired data. Typically, the SEGMENT specification automatically sets this value.

Default: 0

#### **RECTYPE**

Specifies the SMF record type for the SYSVIEW IMS records. The SEGMENT specification automatically sets this value when SEGMENT is the name of a section in a standard MVS or RMF record.

Default: 255

#### **SEGMENT**

Indicates the name of the primary data segment type to extract. SEGMENT is used to:

- Determine RECTYPE and RECSTYPE when appropriate
- Set up variables that can be used for stepping through the segments with the SYSVFOR macro

Default: Null string, "

#### **SHIFT**

Determines the time range for selecting data. The SELECT-PROC subroutine uses SHIFT to exclude SMF records that do not fall within the specified time range. The range is specified as h1:m1 h2:m2.

- h1:m1 is the starting time for the shift.
- h2:m2 is the ending time for the shift.
- If h1:m1 is greater than h2:m2, then two time ranges are assumed: h2:m2 24:00, and 00:00 h1:m1.

Default: 00:00 24:00

#### **SUBSYS**

Indicates the name of the subsystem that produced the SMF records. SUBSYS is used to filter the SMF records. Typically, SUBSYS is set automatically from the SEGMENT specification.

Default: Null string, "

#### TO

Determines the ending timestamp for SMF record selection. The SELECT-PROC subroutine uses TO to exclude SMF records that have timestamps later than the provided value. The timestamp is specified as YYYY/MM/DD-HH:MM.

**Default:** ALL, which allows all records to be selected.

### SYSVPROC Macro

The SYSVPROC macro defines common subroutines for selecting and filtering records and data segments. Invoke SYSVPROC after the first JOB statement, and before the first REPORT statement. The following subroutines are provided:

#### **SELECT-BY-TIME**

Filters the SMF records by the record timestamp. Any record that does not satisfy the FROM, TO, and SHIFT parameters is rejected by setting the SELECT variable to F.

#### **SELECT-REC**

Performs the standard record selection by using the values previously set through the SYSVCDEF macro and the SET-PARMS subroutine. Upon return from the routine, the SELECT variable has a value of T if the record passes all filtering criteria, otherwise the value is F.

Specifically, the routine verifies that SMFRTYP, SMFRSTYP, SMFHSSI, and SMFHPROD match the corresponding values for RECTYPE, RECSTYPE, SUBSYS, and PRODUCT.

The routine also calls SELECT-BY-TIME to verify that the record timestamp is within the time ranges specified in the FROM, TO, and SHIFT parameters.

#### **SET-OFFSETS**

Sets addressability to the various record definitions, based on RECTYPE, RECSTYPE, SMFRTYP, SMFRSTYP, and SEGMENT.

SELECT-BY-TIME calls SET-OFFSETS, and is not typically named directly from a user program.

#### **SET-PARMS**

Decodes the standard parameters that are specified on the SYSVCDEF macro. The values are then inserted into global variables that are accessible to the various filtering and selection routines and macros.

SET-PARMS is typically invoked as the START procedure on a JOB statement, but can also be invoked directly at any time using a PERFORM statement.

#### **SET-SMFTIME**

Examines the SMF record timestamps to determine the lowest and highest timestamp found in the data.

Because SET-SMFTIME is an internal subroutine, it typically is not invoked directly from a user program.

#### **SPLIT-PARM**

Splits a parameter into two parts, delimited by the first blank.

Because SPLIT-PARM is an internal subroutine, it typically is not invoked directly from a user program.

### FILTERID Macro

The FILTERID macro filters on an alphanumeric field.

This macro supports the following three positional parameters:

#### **FAIL**

Specifies the name of a label to branch to when PAT is not matched.

#### **PAT**

Specifies the pattern to match. The pattern is a text string to match against the content of VAR. Each position of VAR is matched against PAT, until a mismatch is found, or until a blank is found in VAR.

- The asterisk (\*) in PAT matches the rest of VAR.
- The question mark (?) matches any single character.

#### VAR

Specifies the name of the field or variable to filter.

#### **Example: FILTERID Macro**

In this example, all remaining processing in the current JOB is skipped if the value of SMF74SER does not begin with TSO.

```
%FILTERID SMF74SER 'TS0*' JOB
```

In this example, processing jumps to the SKIPIT label if the value of SMF74SER does not end in 01.

```
%FILTERID SMF74SER '?????01' SKIPIT
```

## **SMFDATE Macro**

The SMFDATE macro converts a binary 8-byte SMF timestamp into a numeric date using the YYYYMMDD format.

This macro supports two positional parameters:

## DATEOUT

8-byte numeric, typically defined as follows:

8 N MASK(9999/99/99)

#### **SMFTOD**

SMF timestamp, usually SMFHTOD

## **SMFTIME Macro**

The SMFTIME macro converts a binary 8-byte SMF timestamp into a numeric time using the HHMMSS format.

This macro supports two positional parameters:

#### **SMFTOD**

SMF timestamp, typically SMFHTOD

## **TIMEOUT**

8-byte numeric, typically defined as follows:

8 N MASK(99:99:99)

## **STCKCONV Macro**

The STCKCONV macro converts data between a binary STCK timestamp and its 19-byte character representation as YYYY/MM/DD HH:MM:SS.

This macro supports three parameters:

#### **BINSTAMP**

Name of the BIN variable, defined as 8 A

## **CHARSTAMP**

Name of the CHAR variable, defined as 19 A

## **FORMAT**

Type of conversion desired:

В

Convert from CHAR to BINARY

С

Convert from BINARY to CHAR

## **SYSVFOR Macro**

The SYSVFOR macro generates a report line for each instance of a segment type within the current SMF record.

This macro supports two explicit arguments:

#### **SEGN**

Name of the desired segment

#### **RPTN**

Name of the report to generate

Before you invoke this SYSVFOR macro, set the following global variables in the SET-OFFSETS subroutine, which are invoked internally through the SELECT-REC and SELECT-BY-TIME subroutines.

## SEG\_COUNT

Sets the number of segments in the record.

#### SEG\_LEN

Sets the length of the segment type.

#### SEG\_OFFSET

Sets the offset within the SMF record to the first byte of the first segment. Calculate the offset from SMFHSI, which is the first byte following the RDW.

For SMF records, such as SYSVIEW CMCR that provide "triplets" containing offsets relative to the RDW, set the SEG\_OFFSET to four less than the provided value. The SELECT-REC subroutine code in macro SYSVPROC does this set for each of the segment types defined in any of the provided SMF record types.

This following macro steps through all of the SMF74B segments and issues PRINT EXTRACT for each such segment found.

%SYSVFOR SMF74B EXTRACT

## **TOP Macro**

The TOP macro restricts report output to the first *n* lines in each control break. Use it in any report that does not already have a REPORT-INPUT procedure.

This macro supports two positional parameters:

#### **FIELD**

Name of the control break field, which is typically the timestamp for interval reporting and typically named T\_TSTAMP.

Maximum length of the field is 44.

#### **TOP**

Number of lines to include in each control group.

Example TOP macro:

%TOP TSTAMP 20

# **SMF Record Descriptions**

The following macros contain CA Easytrieve definitions of SMF record types:

## **SMFHDR**

Common record header

### SMFR14

Data set activity (types 14 and 15)

#### SMFR30

Job/step termination

#### SMFR64

VSAM data set activity

#### SMFR70

RMF type 70

#### SMFR71

RMF type 71

## SMFR74

RMF type 74

## **IMSIMTR**

The IMS Transaction record

#### **IMSIMRA**

The IMS Region Accounting record

#### CSMF027

SYSVIEW CICS Transaction Detail

#### CSMF008

**SYSVIEW CICS Thresholds** 

## CSMF025

**SYSVIEW CICS Transaction Summary** 

## CSMF028

SYSVIEW CICS System Interval Data

#### **CSMF009**

**SYSVIEW CICS State Thresholds** 

#### CSMF024

**CICS Exceptions** 

## **ZSMF003**

**SYSVIEW Threshold Exception Records** 

## ZSMF004

**SYSVIEW State Exception Records** 

# **Chapter 17: Creating Command Displays**

This section contains the following topics:

<u>User Defined Displays</u> (see page 203) <u>How to Create Displays</u> (see page 204)

# **User Defined Displays**

CA SYSVIEW lets you create your own command displays that look-and-feel like any other CA SYSVIEW display. You can tailor the displays to the needs of your site. They can contain rows of text data, or be formatted using extended attributes.

For more information, see the CA SYSVIEW online help topic User Displays - RXDISP Formatting Extensions.

# **How to Create Displays**

CA SYSVIEW lets users create their own CA SYSVIEW command displays. The display can be simple rows of text data, or can be formatted using extended attributes.

The user display supports the following:

- Extended attributes
- Help
- Line commands
- Selection
- Sorting

To create your displays, do the following:

- 1. Use REXX to build your new user command.
- 2. Use the control statement to let the REXX EXEC embed statements to define a title, info lines, header lines, link fields, and so on.
- 3. Use the data queued to the REXX stack to create the display.
- 4. Use the RXDISP command to invoke a REXX EXEC and display any output returned on the stack on a CA SYSVIEW screen.

## **Example: REXX EXEC Samples**

The REXXLIB data set, SYSVIEW.CNM4BREX, contains the following REXX EXEC samples:

#### **FILELIST**

Provides a sample REXX EXEC to create a display that contains a directory listing of multiple data sets.

#### LOAN

Provides a sample REXX EXEC to calculate loan. payments.

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