# CA SYSVIEW® Performance Management

**Release Notes** 

Release 13.5



This documentation, which includes embedded help systems and electronically distributed materials, (hereinafter referred to as the "Documentation") is for your informational purposes only and is subject to change or withdrawal by CA at any time.

This Documentation may not be copied, transferred, reproduced, disclosed, modified or duplicated, in whole or in part, without the prior written consent of CA. This Documentation is confidential and proprietary information of CA and may not be disclosed by you or used for any purpose other than as may be permitted in (i) a separate agreement between you and CA governing your use of the CA software to which the Documentation relates; or (ii) a separate confidentiality agreement between you and CA.

Notwithstanding the foregoing, if you are a licensed user of the software product(s) addressed in the Documentation, you may print or otherwise make available a reasonable number of copies of the Documentation for internal use by you and your employees in connection with that software, provided that all CA copyright notices and legends are affixed to each reproduced copy.

The right to print or otherwise make available copies of the Documentation is limited to the period during which the applicable license for such software remains in full force and effect. Should the license terminate for any reason, it is your responsibility to certify in writing to CA that all copies and partial copies of the Documentation have been returned to CA or destroyed.

TO THE EXTENT PERMITTED BY APPLICABLE LAW, CA PROVIDES THIS DOCUMENTATION "AS IS" WITHOUT WARRANTY OF ANY KIND, INCLUDING WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NONINFRINGEMENT. IN NO EVENT WILL CA BE LIABLE TO YOU OR ANY THIRD PARTY FOR ANY LOSS OR DAMAGE, DIRECT OR INDIRECT, FROM THE USE OF THIS DOCUMENTATION, INCLUDING WITHOUT LIMITATION, LOST PROFITS, LOST INVESTMENT, BUSINESS INTERRUPTION, GOODWILL, OR LOST DATA, EVEN IF CA IS EXPRESSLY ADVISED IN ADVANCE OF THE POSSIBILITY OF SUCH LOSS OR DAMAGE.

The use of any software product referenced in the Documentation is governed by the applicable license agreement and such license agreement is not modified in any way by the terms of this notice.

The manufacturer of this Documentation is CA.

Provided with "Restricted Rights." Use, duplication or disclosure by the United States Government is subject to the restrictions set forth in FAR Sections 12.212, 52.227-14, and 52.227-19(c)(1) - (2) and DFARS Section 252.227-7014(b)(3), as applicable, or their successors.

Copyright © 2012 CA. All rights reserved. All trademarks, trade names, service marks, and logos referenced herein belong to their respective companies.

# **CA Technologies Product References**

This document references the following CA Technologies products:

- CA Application Performance Management (CA APM)
- CA DATACOM®/DB (CA DATACOM)
- CA Mainframe Software Manager (CA MSM)
- CA OPS/MVS® Event Management and Automation (CA OPS/MVS)
- CA SYSVIEW® Performance Management (CA SYSVIEW)
- CA SYSVIEW® Performance Management Option for CICS (CA SYSVIEW Option for CICS)
- CA SYSVIEW® Performance Management CA Datacom® Option (CA SYSVIEW CA Datacom Option)
- 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 Vantage<sup>™</sup> Storage Resource Manager (CA Vantage GMI)

# **Contact CA Technologies**

#### **Contact CA Support**

For your convenience, CA Technologies provides one site where you can access the information you need for your Home Office, Small Business, and Enterprise CA Technologies products. At <a href="http://ca.com/support">http://ca.com/support</a>, you can access the following:

- Online and telephone contact information for technical assistance and customer services
- Information about user communities and forums
- Product and documentation downloads
- CA Support policies and guidelines
- Other helpful resources appropriate for your product

#### **Providing Feedback About Product Documentation**

If you have comments or questions about CA Technologies product documentation, you can send a message to <u>techpubs@ca.com</u>.

If you would like to provide feedback about CA Technologies product documentation, complete our short customer survey, which is available on the CA Support website at <a href="http://ca.com/docs">http://ca.com/docs</a>.

# **Contents**

Chapter 1: New Features	7
System Configuration Options	8
CA SYSVIEW for DB2 Component	9
zIIP Exploitation	9
Data Collection	10
Exception Processing	10
Logon Security Password Phrases	11
Chapter 2: Enhancements to Existing Features	13
CA Mainframe Software Manager	13
Installation Enhancements	14
User Replaceable Modules	15
Administration	15
Main Services Address Space	15
SMF Records	15
Parameter Library Members Added	16
Parameter Library Data Set Member GROUPS	16
Parameter Library Data Set Member LINECMDS	17
Parameter Library Data Set Member OPTIONS GSVXGSVX	17
Parameter Library Data Set Member SYSVIEW	17
Parameter Library Member XSYSTEM	18
Options	18
Base Product Enhancements	18
Option for CICS	48
CA DATACOM Option	69
DB2	72
Option for IMS	73
CA ROSCOE Component	85
TCP/IP Option	85
Option for WebSphere MQ	93
CA APM Integration	99
Components	99
Audit Events Component	99
GMI Graphic User Interface	101
Security	105
REXX Environment	108

User Defined Displays	109
User Defined Commands	109
Dashboards	112

# **Chapter 1: New Features**

This section contains the following topics:

System Configuration Options (see page 8)

CA SYSVIEW for DB2 Component (see page 9)

ZIIP Exploitation (see page 9)

Data Collection (see page 10)

Exception Processing (see page 10)

Logon Security Password Phrases (see page 11)

# **System Configuration Options**

The system configuration options member is used to set configuration options during the initialization of CA SYSVIEW. The system configuration options member is located in the concatenation of the system parmlib data sets.

Example: SYS1.PARMLIB

Assign a subsystem ID to each instance or installation of CA SYSVIEW within a z/OS system or LPAR.

The four-character SYSVIEW subsystem ID (ssid) is used to name the System Configuration Options system parmlib member.

Member name = GSVXssid

The first four characters of the member name are always GSVX.

Example: SYSVIEW subsystem ID = GSVX

Member name = GSVXGSVX

The default SYSVIEW subsystem ID is GSVX.

Multiple instances of SYSVIEW can be installed on a single z/OS system. These instances of SYSVIEW can be of the same or different release levels.

- Multiple instances at the same release levels cannot share the SYSVIEW subsystem ID or System Configuration Options member. Assign a unique subsystem ID to each SYSVIEW running at the same release level.
- Multiple instances at different release levels can share the SYSVIEW subsystem ID and System Configuration Options member.

If multiple instances of SYSVIEW are installed with the same subsystem ID, those instances will specify their system configuration options in the same SYS1.PARMLIBs member GSVXssid.

Enclose the options for each instance within the following structure to separate the options by release.

Those options that are not unique to an instance can be shared across multiple instances and do not need to be within an ")IF" statement.

option1 option2

In releases before CA SYSVIEW r13.5, the SYSVIEW GEN modules specified the system configuration options. The GEN modules are no longer used.

# **CA SYSVIEW for DB2 Component**

A new DB2 component has been added to CA SYSVIEW to allow a user to monitor DB2 subsystems. The monitoring is provided through integration with the product CA Insight for DB2. Verify that you have the product CA Insight for DB2 licensed and installed.

# **zIIP Exploitation**

IBM offers an optional specialty processor type know as a z/architecture Integrated Information Processor (zIIP processor). The zIIP processor offers the potential of offloading specific types of work from a general processor or CP.

The following CA SYSVIEW components are enabled for zIIP exploitation:

- CA SYSVIEW Main Services Address Space
- CA SYSVIEW User Interface Address Space
- CA SYSVIEW Auxiliary Services Address Space
- CA SYSVIEW for CICS Data Collection

CA SYSVIEW zIIP Exploitation requires the CA zIIP Enablement Services of CAIRIM.

**Note:** For more information, see the *Administration Guide*.

#### **Data Collection**

The CA SYSVIEW data collection process collects and monitors metrics for all of supported components such as: z/OS, CICS, IMS, WebSphere MQ, and TCP/IP.

Data collection includes event-based and interval driven sampling.

The CA SYSVIEW Event Scheduler controls the data collection processes as follows:

- The scheduler provides the ability to schedule events on an interval basis.
- The scheduled event definitions can be customized to control the collection interval. For example, the time of day and day of the week.
- The scheduler controls the data that is being collected and how often.

In addition to being able to set the data collection frequency, you can select the individual metrics that are collected. The CA SYSVIEW data collector components collect, monitor, and provide exception processing for many resources and metrics.

In some sites, users do not collect data on all possible resources and metrics. In this situation, the collection of unwanted or unneeded metrics is a waste of important system resources and CPU cycles.

Disabling unneeded data collection metrics reduces CPU cycles and the amount of storage the data collection data spaces uses. The reduction in data space storage also reduces the amount of real storage the SYSVAAST data anchor address space uses.

**Note:** For more information, see the *Administration Guide*.

For more information, see the following online help topics:

- Data collection controlled by the SYSVIEW scheduler
- Enable and disable data collection metrics

# **Exception Processing**

The CA SYSVIEW exception or alerting definitions have been enhanced to include the following new attributes:

- Exception priority
- Start time
- End time
- Day of week

The time and day of week attributes provide the ability to create multiple exception definitions that can vary throughout the day such as the first shift and second shift.

# **Logon Security Password Phrases**

When logging on to CA SYSVIEW, you can enter a password or password phase. The password phrase has a maximum of 100 characters.

The SAF security package must also support password phrases. The SAF security profile of the individual user must have the password phrase support active.

# Chapter 2: Enhancements to Existing Features

This section contains the following topics:

CA Mainframe Software Manager (see page 13)
Installation Enhancements (see page 14)
User Replaceable Modules (see page 15)
Administration (see page 15)
Options (see page 18)
Components (see page 99)

# **CA Mainframe Software Manager**

The following functionality has been added for CA MSM Version 04.0.00:

- Software Deployment Service (SDS)—Use this service to deploy CA Technologies mainframe products to your target enterprise systems.
- Database Migration Tool—Use this tool to migrate your current CA MSM database after you upgrade CA MSM.
- Automatic Download Scheduling—Use this tool to automatically obtain updates for products and product releases on a regular basis.

**Note:** For more information, see your product's installation instructions and the *CA Mainframe Software Manager Product Guide*.

#### **Installation Enhancements**

The installation process has been enhanced.

■ SYSVIEW Load Library

The CA SYSVIEW load library contains program objects that require the data set to be allocated with DSNTYPE LIBRARY (PDS/E).

- CA SYSVIEW for CICS Terminal Interface
  - CICS resource definitions have been supplied to allow the CICS transaction SYSV to run with an alternate screen size.
  - Sample definitions have been added to parmlib member CICSCSD.
  - The CICS terminal interface is included with all CA SYSVIEW installations. This
    interface does not require the CA SYSVIEW for CICS option.
  - The transaction definition for SYSV specifies the PROFILE GSVXALTS. This profile allows the SYSV transaction to run as the alternate screen size. If you do not want the SYSV transaction to run as an alternate screen size, remove the "PROFILE(GSVXALTS)" parameter.
  - Multiple transactions can be defined to run the GSVXCICS program. One for primary and one for alternate screen sizes.
- Define Profiles

```
DEFINE PROFILE(GSVXALTS)

SCRNSIZE(ALTERNATE)

UCTRAN(NO)

GROUP(SYSVIEW)
```

■ Define transactions

```
DEFINE TRANSACTION(SYSV)
PROGRAM(GSVXCICS)
PRIORITY(250)
SPURGE (YES)
TPURGE (YES)
RUNAWAY(0)
TASKDATAKEY(CICS)
TASKDATALOC (BELOW)
PROFILE (GSVXALTS)
GROUP (SYSVIEW)
```

# **User Replaceable Modules**

The following modules are replaceable by the user.

■ GSVBSSID - Default SYSVIEW Subsystem ID

The GSVBSSID module contains the default CA SYSVIEW subsystem ID. The contents of the module GSVBSSID are used when a subsystem ID is not specified when invoking the CA SYSVIEW session.

This module is provided as a convenience for executing multiple instances of SYSVIEW or changing the default subsystem ID to something other than GSVX.

■ GSVBUXLT - User Translate Tables

#### **Administration**

The CA SYSVIEW administration features have been enhanced.

#### **Main Services Address Space**

The following subtask was deleted from the Main Services address space:

- GETJOBID Get JES job ID service task. The GETJOBID task is no longer required.
- LOG SYSLOG information collection task. The LOG task is no longer required at z/OS 1.11.

#### **SMF Records**

CA SYSVIEW can optionally create SMF records. The record layouts, DSECT, are distributed in the *sysview*.CNM4BMAC data set. The following table describes the default SMF type 255 subtype records and shows the macro library in which they are distributed:

Subtype	MACLIB	Description
001 x01	ZSMFADTR	Audit records
002 x02	ZSMFPLOT	Plot records
003 x03	ZSMF003	Threshold Exception records
004 x04	ZSMF004	State Exception records
024 x18	CSMF024	CICS exception records
025 x19	CSMF025	CICS transaction summary records

Subtype	MACLIB	Description
027 x1B	CSMF027	CICS transaction detail records
028 x1C	CSMF028	CICS system interval data records
034 x22	IMSIMTR	IMS transaction data records Replaces the previous subtype 032.
035 x23	IMSIMRA	IMS region summary records Replaces the previous subtype 033.
048 x30	ZSMFMQRR	MQ Application Request records

#### **Parameter Library Members Added**

The parameter library has been enhanced to include a new member.

#### New member:

■ CMDATTR - Command attributes

The data in this member is used to set attributes for commands.

#### **Parameter Library Data Set Member GROUPS**

The parameter library data set member GROUPS has been enhanced to include new logical group types.

#### **DB2SSID**

DB2 subsystem IDs.

#### **IMSBUFP**

IMS buffer pool name.

#### **JOBCLASS**

JES job classes.

#### Parameter Library Data Set Member LINECMDS

The parameter library data set member LINECMDS has been enhanced.

#### New keyword for the external line command definitions:

NOXSCONN

Only used for cross system data lines where the XSSYSTEM name is different from the current system name. The command that the line command definition generates would typically be executed cross system. Specifying the NOXSCONN option causes the command to execute locally.

#### Parameter Library Data Set Member OPTIONS GSVXGSVX

The parameter library data set member OPTIONS GSVXGSVX has been enhanced.

#### **New Keyword**

 IgnoreSpoolErrors - Specifies whether to ignore the spool read errors so the JOBS task continues to run. The spool read errors cause the JOBS task to terminate.

**Default:** Yes

Note: Before r13.5, the default was No.

#### **Deleted Keywords:**

The SITEID option has been removed from OPTIONS.

The site ID information is now specified in the System Configuration Option member GSVXGSVX. The new keyword is CA-Customer-SiteID.

■ The SITENAME option has been removed from OPTIONS.

The site name information is now specified in the System Configuration Option member GSVXGSVX. The new keyword is Company-Name.

#### **Parameter Library Data Set Member SYSVIEW**

The SYSLOG information collection task (LOG) was deleted. Therefore, the following statement can no longer be specified to the start the LOG task.

START LOG, INTERVAL=nn

#### **Parameter Library Member XSYSTEM**

The parameter library data set member XSYSTEM default values have changed.

Note: All values are specified in seconds.

#### XssiReceiveInputTimeout

Old default: 900 New default: 1800 Old Minimum: 1 New Minimum: 300

Maximum default: No change

#### XsxiReceiveInputTimeout

Old default: 900 New default: 1800 Old Minimum: 1 New Minimum: 300

Maximum default: No change

# **Options**

The enhancements to the CA SYSVIEW options are provided in this section.

#### **Base Product Enhancements**

The CA SYSVIEW base product has been enhanced.

#### Format of the Time or Interval Values

The time or interval value format in releases before r13.5 had the following format:

ddxhhym

dd

Indicates the number of days

X

Specifies the date separator character.

hh

Indicates the hour.

y

Specifies the time separator character.

mm

Indicates the minutes.

The date separator for the x position specified in the user profile has been eliminated and replaced with a permanent slash (/) character. For example:

Old: 5.02:30 - 5 days, 2 hours, 30 minutes

New: 5/02:30 - 5 days, 2 hours, 30 minutes

#### Commands Added to the Base Product

The following command has been added to the base product:

#### **METRIC**

Sets the metric attributes.

#### **Commands Enhanced**

The following enhancements have been made to existing commands.

#### **ASADMIN**

Address space administration

#### New data fields:

- zMode Specifies the zIIP mode of the task or session. Valid values are:
  - blank Indicates that the task or session is not initialized for zIIP processing.
  - TASK Indicates that the task or session is initialized for zIIP processing.
     However, the task is currently executing in the TASK mode, which makes it not eligible for a zIIP processor.
  - SRB Indicates that the task or session is initialized for zIIP processing. The
    task is currently executing in SRB mode, which makes it eligible for a zIIP
    processor.

#### **DLLIST**

#### **DATALIB** list

#### New data fields:

- Status Specifies the status of the member. Valid values are:
  - INDEX Indicates the index number and cannot be deleted.
  - OLD\_KEEP The dataid.system.ssid.build is the oldest and the latest found build. It is not known if you can delete this member.
  - OLD\_DEL The dataid.system.ssid.build is the oldest and the latest found build. You can delete this member.
  - CURRENT The dataid.system.ssid.build is the current build. Do not delete this member.
  - NEW The dataid.system.ssid.build is for a new build. Do not delete.
  - DELETED The DATALIB member was deleted with the DELETE or DLDELETE line command and the display has not yet been refreshed. No further action is allowed.

#### **GROUPS**

Logical groups

#### New logical group types:

- DB2SSID DB2 subsystem IDs.
- IMSBUFP IMS buffer pool name
- JOBCLASS JES job classes

#### **IDMSLIST**

CA IDMS address space list

#### Renamed data fields:

 Jobclass- Renamed and expanded Jc to Jobclass to support the eight-character job classes.

#### **LIBVIEW**

Library viewer

#### New library member type:

SYSPARM - Lets you view members located in the system parmlib concatenation. For example:

LIBVIEW SYSPARM GSVXGSVX

#### New syntax parameters:

LIBVIEW type <member|dsname(member)>

The values for *type* are SYSPARM and TEMPLATE.

#### **LISTDIR**

List PDS directory

#### New syntax parameters:

```
LISTDIR dsname,<volser>,<member>,<dirtype>
dsname<(member)>,<volser>,,<dirtype>
```

#### New dirtype screen:

Modid - The module ID screen is used to format the directory. This screen displays the LOAD type fields for any member that has a directory entry format of LOAD and MODID fields for any module found to contain one or more standard CA module identifier blocks.

Be sure that your CA products have implemented the standard module identifier block for all supported releases.

MODID fields are only displayed for orphan alias entries (the associated main member was not found).

#### New data fields:

■ DLL - Indicates DLL if it is DLL enabled program object otherwise it is blank.

#### Renamed data fields:

■ EpOffs - Indicates the offset of the entry point within the module. The old field name was EpAddr.

#### **MIMLIST**

MIM list

#### Renamed data field:

■ Jobclass - Renamed and expanded Jc to Jobclass to support the eight-character job classes.

#### **PRINT**

Print display lines

New options keywords:

■ HScroll | NOHScroll - Controls whether any horizontal scrolling in effect for the currently displayed data is duplicated in the printed output. These new keywords are not valid with the SCREEN option.

**Default:** HScroll

#### RECALL

Recall the last command

#### Command change:

The RECALL command has been changed to issue a message at the end-of-command input stack and a subsequent RECALL starts over at the top of the stack.

In previous releases, the subsequent RECALL command would continue to issue the same message.

#### **SENDMAIL**

Send a simple text mail

#### **Command enhancement:**

- The SENDMAIL command now lets you load a predefined template into the contents or body of the email message.
- New Event Capture members have been supplied to provide sample methods of sending alert emails that are based on triggered exceptions.

Sample event capture members: CICSMAIL, IMSMAIL, MQSMAIL, MVSMAIL, TCPMAIL

#### New syntax parameter:

■ TEMPLATE - Specifies to initialize the body of the mail to the contents of the specified template member.

#### **New SEND subcommand options:**

■ TAGS, NOTAGS - If HTML is specified, by default the SEND wraps the text in HTML tags. If the text already has HTML tags, the NOTAGS option causes SEND to skip wrapping any of the text in HTML tags.

Use this option with the TEMPLATE SENDMAIL parameter to load the body of the mail with HTML-based text.

This option is ignored if TEXT is also specified.

#### **STATUS**

Product status

#### New data fields:

- Product:
  - zIIP Mode
  - Customer Name
  - System Configuration Member
- Environment:
  - Sysplex CF level

- Sysplex Max systems
- Sysplex Max current
- Sysplex IPL token
- Sysplex ID
- Sysplex System ID
- CPU Normalization
  - CP Factor
  - SP Factor
- CPU Speed
  - CP percent of SP
  - SP percent of CP

#### **Deleted data fields:**

- Removed the security exit from the product.
- Removed the Gen Names Table and the Gen Module from the User Modules.
- Removed software versions for CICS, QUICKREF, and WebSphere MQ. Software version information is available through the SOFTWARE command.

#### **TOPICS**

Help topic knowledge base

#### New data fields:

Rels - Indicates the release when the online help topic was introduced.

#### **USERS**

**Product users** 

#### New data fields:

- CpuTime The total CPU time accumulated.
- Pct% The percent of the total address space CPU time the task has consumed.
- CPTime The accumulated task CPU time.
- EnclTime The accumulated enclave CPU time.
- ePct% The percent of the total CPU time the task that executed on an enclave used.
- zIIPTime The accumulated enclave CPU time running on a zIIP processor.
- zIIPonCP The accumulated enclave CPU time that ran on a general processor that was eligible to run on a zIIP processor.
- zPct% The percent of the total CPU time the task that executed on a zIIP processor used.

- zSwitch The number of zIIP mode switches.
- zMode The zIIP mode of the task session. Value values are:
  - blank Indicates that the task or session is not initialized for zIIP processing.
  - TASK Indicates that the task or session is initialized for zIIP processing.
     However, the task is currently executing in the TASK mode, which makes it not eligible for a zIIP processor.
  - SRB Indicates that the task or session is initialized for zIIP processing. The task is currently executing in SRB mode, which makes it eligible for a zIIP processor.
- XAID The target ASID of a cross memory data request if any is in progress. However, blank if none.
- XJobname The target job name of a cross memory data request. However, blank if none.
- XReq The cross memory request code if a cross memory data request is in progress. However, blank if none.
- XElpTime The elapsed time of any cross memory data request. However, blank if none.

#### **Profile Query Keywords**

The profile Query command has been enhanced to include the following new keywords:

#### **CICSGROUP**

Specifies the default CICS logical group name. The logical group contains a list of CICS regions to display.

The default CICS logical group name is used when a user does not specify a group name when entering a command with the "GROUP *name*" parameter.

#### **DB2TGTDEF**

Specifies the DB2 jobname to switch automatically to when a participating DB2 primary command is entered.

#### **FMID**

Specifies the product FMID.

#### **TABFORMATLINE**

Allows tabbing to the format line formats when the format line displays.

#### **TABINFOOPTS**

Allows tabbing to the information line options on screens that support the tabbing feature.

#### **TABXSSTATLINE**

Allows tabbing to the line formats when the xsstatus line is displayed.

#### **ZIIPMODE**

Specifies the zIIP mode.

#### z/OS Component Enhancements

The CA SYSVIEW for z/OS component has been enhanced.

#### **Data Collection**

The CA SYSVIEW Event Scheduler controls data collection events and attributes.

#### **Address Space Collection**

Each data collection function the Event Scheduler controls has a minimum and a maximum allowed interval.

The following value has changed for function MVSDATA-JOBS:

Minimum: 00:00:30 (No change)

New Maximum: 00:13:00

Previous Maximum: 00:02:00

#### **CA OPS/MVS Event Notification**

When an exception alert within CA SYSVIEW is triggered based on a defined threshold or state rule, multiple actions can be taken. One action is to send an event notification to CA OPS/MVS. This action is coded using )API rules.

The following REXX variables have been added:

#### **API.APPLICATION**

Provides a value that contains the application name. For example, SYSVIEW.

#### **API.VERSION**

13.5a

#### **API.LEVEL**

00000713

#### API.ID

CAGSVX0001

#### **API.COLOR**

Alert color

- 0 Default
- 1 Green
- 2 Blue
- 3 Red
- 4 White
- 5 Pink
- 6 Yellow
- 7 Turquoise

#### **API.GROUP**

Variable metric group name

#### API.NAME

Variable metric name

#### **API.DESCRIPTION**

Provides a value that contains the variable metric description.

#### **API.RESOURCE**

Associated resource

#### **API.STATUS**

Current status

#### **API.VALUE**

Current value

#### API.ELAPSED

REXX variable that provides the elapsed time after the last notification.

#### **API.ASID**

REXX variable that provides the ASID.

#### **API.JOBID**

REXX variable that provides the JES job ID.

#### **API.TEXT**

Exception message text

#### Commands Added to the z/OS Component

The following command has been added to the base product:

#### **ASPERF**

Displays active address the space performance.

#### Commands Enhanced for the z/OS Component

The following enhancements have been made to existing commands:

#### **ACTIVITY**

Displays the system activity.

#### Renamed data fields:

 Jobclass - Jc was renamed and expanded to Jobclass to support the eight-character job classes.

#### **ACTSUM**

Displays the job activity summary.

#### New syntax parameters:

- XSYStem, XSData This forces cross-system data collection to be on for this execution. The current profile setting of XSDATA is maintained.
- NOXSYStem, NOXSData This forces cross-system data collection to be off for this execution. The current profile setting of XSDATA is maintained.

#### New data fields:

- AuxStg JOBASTG
  - Indicates auxiliary storage.
- CP% JOBCP%

Indicates the percentage of CP used.

■ CPT% - JOBCPT%

Indicates the percentage total of CP used.

■ CPTime - JOBCPTM

Indicates the CP time.

■ GAuxStg - JOBGASTG

Indicates auxiliary storage to back 64-bit private storage.

■ G-CSA - JOBGCSA

Indicates the allocated G-CSA storage.

■ GPvtAllo - JOBGPVTA

Indicates the allocated G-Private storage.

■ GRealStg - JOBGRSTG

Indicates the real storage to back 64-bit private storage.

#### **ALERTS**

Displays the z/OS exception alerts.

#### New syntax parameters:

- ACK Display alerts that are both acknowledged and not acknowledged.
- NOACK Do not display acknowledged alerts.
- XSYStem, XSData This forces cross-system data collection to be on for this execution. The current profile setting of XSDATA is maintained.
- NOXSYStem, NOXSData This forces cross-system data collection to be off for this execution. The current profile setting of XSDATA is maintained.

#### New line commands:

- ACK Invokes the METRIC command to acknowledge the alert.
- CLR Invokes the METRIC command to clear an acknowledged alert.

#### New data fields:

- ACK Indicates that the alert has been acknowledged.
- Pri The relative priority of the exception.
- AckElaps The elapsed time since the alert has been acknowledged.
- AckDate The date that the alert was acknowledged.
- AckTime The time that the alert was acknowledged.
- RsceAttr Resource attribute qualifier.

#### Renamed data fields:

Resource - Argument was renamed.

#### APFLIST

Displays the APF list data sets.

#### **New Line commands:**

■ LMID - Invokes the LISTDIR command for the selected data set with the MODID keyword. Once invoked, LISTDIR displays the standard CA module identification information for all members in the data set.

#### **APFSTAT**

Displays the APF list data set status.

#### New line commands:

■ LMID - Invokes the LISTDIR command for the selected data set with the MODID keyword. Once invoked, LISTDIR displays the standard CA module identification information for all members in the data set.

#### **ASLIST**

Address space list

#### Renamed data field:

 Jobclass - Jc was renamed and expanded to Jobclass to support the eight-character job classes.

#### **CPU**

Displays CPU information.

#### New syntax parameters:

 PVtmod, NOPVtmod - Controls attempts to determine the module name and offset within the module for an EXOPSW34 address that is in the PVT or E-PVT region. When the LOCAL or CMS lock is held on the processor, this option is treated as though you specified NOPVTMOD.

Default: NOPVTMOD.

#### New data fields:

- PSAV The virtual PSA address.
- PSAR The real PSA address.

#### **DDLIST**

Displays and searched the ddname libraries.

#### New line commands:

■ LMID - Invokes the LISTDIR command for the selected data set with the MODID keyword. Once invoked, LISTDIR displays the standard CA module identification information for all members in the data set.

#### **DSALLOC**

Displays the allocated data set.

#### New data fields:

- SSNm Subsystem name.
- SSCA Subsystem communication area address.

#### New line commands:

■ LMID - Invokes the LISTDIR command for the selected data set with the MODID keyword. Once invoked, LISTDIR displays the standard CA module identification information for all members in the data set.

#### **DSCAT**

Cataloged data sets.

#### New line commands:

■ LMID - Invokes the LISTDIR command for the selected data set with the MODID keyword. Once invoked, LISTDIR displays the standard CA module identification information for all members in the data set.

#### **EXTENTS**

Displays the volume extents.

#### New line commands:

■ LMID - Invokes the LISTDIR command for the selected data set with the MODID keyword. Once invoked, LISTDIR displays the standard CA module identification information for all members in the data set.

#### **Status**

Displays the IPL information.

#### New data fields for section: IEASYS

 AUTOR - Enables an installation to specify its own auto-reply policy during IPL, or to request the auto-reply processing is not activated.

Default: Valid only at z/OS 1.12 or higher.

CATALOG - Identifies the IGGCATxx members to use during the current IPL. The
two alphanumeric characters (aa, bb, and so on) are appended to IGGCAT to
form the names of the IGGCATxx members. The IGGCATxx parmlib members
specify catalog parameters for the initializing system.

**Default:** Valid only at z/OS 1.13 or higher.

IXGCNF - Identifies the IXGCNFxx parmlib members to use when the system logger starts or is restarted on the initializing system within the sysplex. Syntax IXGCNF=aa specifies a single member. Syntax IXGCNF=(aa,bb,....) identifies groups of system logger initialization statements across several IXGCNFxx members. When concatenating multiple IXGCNFxx members, the individual system logger options merge with the last parmlib member option taking precedence.

**Default:** Valid only at z/OS 1.13 or higher.

#### **IRLMLIST**

Displays the IRLM list.

#### Renamed data fields:

 Jobclass - Jc was renamed and expanded to Jobclass to support the eight-character job classes.

#### **LINKLIBS**

Displays the dynamic linklist libraries.

#### New line commands:

■ LMID - Invokes the LISTDIR command for the selected data set with the MODID keyword. Once invoked, LISTDIR displays the standard CA module identification information for all members in the data set.

#### LINKLIST

Displays the linklist data sets.

#### New line commands:

■ LMID - Invokes the LISTDIR command for the selected data set with the MODID keyword. Once invoked, LISTDIR displays the standard CA module identification information for all members in the data set.

#### **LISTDRI**

Displays the list PDF directory.

#### New data fields:

- IdSecLoc The location of the module identifier block within the CSECT containing module identifier.
- IdModLoc The location of the CSECT containing the module identifier within the module.

#### **LPALIBS**

Displays the LPALIST data sets.

#### New line commands:

■ LMID - Invokes the LISTDIR command for the selected data set with the MODID keyword. Once invoked, LISTDIR displays the standard CA module identification information for all members in the data set.

#### **MOBJECTS**

Memory objects summary

#### Renamed data fields:

 Jobclass - Jc was renamed and expanded to Jobclass to support the eight-character job classes.

#### **MODULES**

Displays the modules

#### New syntax parameters:

Modid, NOModid - MODID requests that all modules be searched for standard CA module identifiers. The MODID option causes additional fields to display on the screen. These fields contain the module identification information from any and all module identifier within the module.

#### New data fields:

- IdSecLoc The location of the module identifier block within the CSECT containing module identifier.
- IdModLoc The location of the CSECT containing the module identifier within the module.

#### **STATES**

State definition

#### New syntax parameters:

■ SAVE - Save definitions to the persistent data store.

#### New data fields:

- Pri The priority of an exception. The priority can be used to sort exceptions within a like status level such as PROBLEM.
- TimeBeg The beginning time that the definition is eligible to be applied. Specify the time using the following format: HH:MM:SS. The time value can also be defined using any of the following values:

```
12AM | 1AM | 2AM | ... | 11AM
12PM | 1PM | 2PM | ... | 11PM
NOON | MIDNIGHT
```

TimeEnd - The ending time that the definition is eligible to be applied. Specify the time using the following format: HH:MM:SS. The time value can also be defined using any of the following values:

```
12AM | 1AM | 2AM | ... | 11AM
12PM | 1PM | 2PM | ... | 11PM
NOON | MIDNIGHT
```

- TimeRng The time range or interval in which the definition is eligible to be used.
- Sun, Mon, Tue, Wed, Thu, Fri, Sat Specifies the day that the exception is eligible to execute. To make a day eligible, type the three-character name in the appropriate field or YES. To make the day ineligible, type NO in the appropriate field.
- SMTWTFS The days of eligibility.
  - S Sunday
  - M Monday
  - T Tuesday
  - W Wednesday
  - T Thursday
  - F Friday
  - S Saturday
- Active The current active status of the definition. Possible values are:
  - ACTIVE The definition is currently eligible for processing.
  - INACTIVE The definition is currently not eligible for processing.

 Disabled - Indicates whether the definition is currently enabled or disabled. If an exception definition is disabled, the definition is not used.

#### Renamed data fields:

IMOD - Run was renamed.

#### Deleted subcommands:

■ DELETE - The DELETE subcommand has been removed. Use the DELETE line command to delete the definition.

#### **SYSTEMS**

Displays the Systems Overview menu.

The SYSTEMS command has been changed to show data from all SYSVIEWs running on all systems reachable through the CCI network by default.

Options are available to restrict the data to only the HOME system or to the CURRENT system.

#### New data fields:

- Type The type of server providing the data.
- Ssid The subsystem ID of the server providing the data.
- Jobname The jobname of the server providing the data.
- Jobid The job ID of server providing the data.
- Sysid The CCI system ID of the communication server.
- Loc The location of the server. LCL or RMT.
- Rels The release of the server providing the data.
- Bld The build of the server providing the data.

### TASK

Displays the task structure.

#### New data fields:

■ TToken - The TCB token.

### **TASKLIB**

TASKLIB/STEPLIB/JOBLIB libraries

#### New line commands:

■ LMID - Invokes the LISTDIR command for the selected data set with the MODID keyword. Once invoked, LISTDIR displays the standard CA module identification information for all members in the data set.

#### **THRESH**

Threshold definitions

#### New syntax parameters:

■ SAVE - Save definitions to the persistent data store.

#### New data fields:

- Pri The priority of an exception. The priority can be used to sort exceptions within a like status level such as PROBLEM.
- TimeBeg The beginning time that the definition is eligible to be applied. Specify the time using the following format: HH:MM:SS. The time value can also be defined using any of the following values:

```
12AM | 1AM | 2AM | ... | 11AM
12PM | 1PM | 2PM | ... | 11PM
NOON | MIDNIGHT
```

TimeEnd - The ending time that the definition is eligible to be applied. Specify the time using the following format: HH:MM:SS. The time value can also be defined using any of the following values:

```
12AM | 1AM | 2AM | ... | 11AM
12PM | 1PM | 2PM | ... | 11PM
NOON | MIDNIGHT
```

- TimeRng The time range or interval in which the definition is eligible to be used.
- Sun, Mon, Tue, Wed, Thu, Fri, Sat Specifies the day that the exception is eligible to execute. To make a day eligible, type the three-character name in the appropriate field or YES. To make the day ineligible, type NO in the appropriate field.
- SMTWTFS The days of eligibility.
  - S Sunday
  - M Monday
  - T Tuesday
  - W Wednesday
  - T Thursday
  - F Friday
  - S Saturday
- Active The current active status of the definition. Possible values are:
  - ACTIVE The definition is currently eligible for processing.
  - INACTIVE The definition is currently not eligible for processing.

 Disabled - Indicates whether the definition is currently enabled or disabled. If an exception definition is disabled, the definition is not used.

### Renamed data fields:

IMOD - Run was renamed.

#### Deleted subcommands:

 DELETE - The DELETE subcommand has been removed. Use the DELETE line command to delete the definition.

#### **USSLIST**

USS list address spaces

#### Renamed data fields:

 Jobclass - Jc was renamed and expanded to Jobclass to support the eight-character job classes.

#### **VARS**

z/OS monitor variables.

### New data fields:

- RsceAttr The resource attribute type. Possible values are:
  - blank None
  - jobtype The following job types:

JOB - A batch job

SYS - A system task

STC - A started task

TSU - A TSO user

INIT - An initiator

ATX - An APPC transaction

OTX - An OpenMVS transaction

# Renamed data fields:

■ Resource - Argument was renamed

# VTOC

Volume table of contents

### New line commands:

■ LMID - Invokes the LISTDIR command for the selected data set with the MODID keyword. Once invoked, LISTDIR displays the standard CA module identification information for all members in the data set.

#### **WMADELAY**

WLM address space delay

### Renamed data fields:

 Jobclass - Jc was renamed and expanded to Jobclass to support the eight-character job classes.

#### **WMAGRAPH**

WLM address space delay graph

# Renamed data fields:

 Jobclass - Jc was renamed and expanded to Jobclass to support the eight-character job classes.

### **WMASINFO**

WLM address space information

#### Renamed data fields:

 Jobclass - Jc was renamed and expanded to Jobclass to support the eight-character job classes.

#### **WMSYSCAP**

WLM system capacity information.

### New data fields:

- Type The processor type. Possible values are:
  - \* System entry. Not processor specific.
  - CP General CP processor
  - IFA IFA processor (zAAP)
  - IIP IIP processor (zIIP)
- Factor The total CPU service unit capacity per second. The normalization factor for this processor type.

CP equivalent:

```
Processor time * Factor
```

# ZAP

Display and alter DASD records.

# **Deleted syntax parameters:**

■ ZAP SPOOL - The JES2 spool volume data sets.

# Changed subcommands:

- NEXT The minimum number of required characters is increased from NEXt to NEXT.
- PREVIOUS The minimum number of required characters is increased from PREvious to PREVious.

# **Data Collection Threshold Metrics Added**

The following threshold metrics were added to enhance data collection.

#### **JOBALLTM**

All processors CPU time (interval)

Resource: jobname

### **JOBALLTT**

All processors CPU time (total)

Resource: jobname

### **JOBASTG**

Auxiliary storage

Resource: jobname

### JOBCP%

CP CPU usage percentage.

Resource: jobname

### **JOBCPT%**

CP CPU usage percentage total

Resource: jobname

# **JOBCPTM**

CP CPU time (interval)

Resource: jobname

# **JOBCPTM**

CP CPU time (total)

Resource: jobname

# **JOBGASTG**

Auxiliary storage to back 64-bit private

Resource: jobname

### **JOBGCSA**

G-CSA storage allocated

Resource: jobname

# **JOBGPVTA**

G-Private storage allocated

Resource: jobname

#### **JOBGRSTG**

Real storage to back 64-bit private

Resource: jobname

### **JOBIIPNE**

IIP CPU time non enclave (interval)

Resource: jobname

#### **JOBIIPNT**

IIP CPU time non enclave (total)

Resource: jobname

Starting at release r13.5, the metrics contains CPU time values that combine time from all processor types. New metrics have been created for CP processors only.

# JOBCPU%

CPU usage percentage

Resource: jobname

### JOBCPUT%

CPU usage percentage total

Resource: jobname

# **JOBCPUTM**

CPU time (interval)

Resource: jobname

### **JOBCPUTT**

CPU time (total)

Resource: jobname

Starting at release r13.5, the metrics contains CPU time on IIP processors that include enclave and non-enclave time. New metrics have been created for non-enclave time only.

#### **JOBIIP%**

IIP usage percentage

Resource: jobname

# **JOBIIPT%**

IIP usage percentage total

Resource: jobname

# JOBIIPTM

IIP CPU time (interval)

Resource: jobname

### JOBIIPTT

IIP CPU time (total)

Resource: jobname

# JES2 and JES3

JES2 and JES3 have been enhanced.

### **Job Classes**

JES2 and JES3 have been enhanced to include support for eight-character job classes.

# **JES Commands Added**

The following JES command has been added:

# **JCGROUP**

Displays the JES3 class groups.

### **JTRANQUE**

Displays the JES transaction output queue.

### **Commands Enhanced**

The following enhancements have been made to existing commands.

### JINIT

Initiators

### Renamed command:

■ INIT was renamed to JINIT. The synonym INIT has been defined.

### Renamed data field:

 Jobclass - Jc was renamed and expanded to Jobclass to support the eight-character job classes.

# INTRDR

Internal readers

# **Deleted data fields:**

- Jobc
- Notify
- Programmer
- Xeqdest

# JCOPYOUT

Copy JES output.

# **Renamed command**

■ JCOPYOUT - Renamed the command COPYOUTP to JCOPYOUT. The synonym COPYOUTP has been defined.

### Support added

■ Support has been added for JES3.

#### JINPRTY

JES2 input job priority summary.

# Renamed data fields:

 Jobclass - Cl was renamed and expanded to Jobclass to support the eight-character job classes.

#### **JOBCLASS**

Job classes.

#### Support added:

■ JES3 is now supported.

#### New data fields:

- CndPrg Specifies whether to purge the JES data sets conditionally.
- DupJobs Specifies whether to delay jobs with duplicate job names.
- Group Specifies the group name for the class.
- JESLog Specifies whether the JES job log data sets are spin eligible. The JES job log data sets are JESMSGLG and JESYSMSG.
- Partition Specifies the spool partition name where output for this class is placed.
- Prty Specifies the priority for the class.
- SchEnv Specifies the default scheduling environment for the job class.
- SDepth Specifies the setup depth.
- Status Specifies the job class status. If the class is held, the status is HELD.
   Otherwise, the status is ACTIVE.
- TrkGrps Specifies the primary and secondary track group allocation for output in this class.

#### New line commands:

- HOLD Holds an output data set. Support has been added for JES3.
- RELEASE Releases a held output data set. Support has been added for JES3.

#### **JOUTDES**

Displays the output descriptors

### Support added:

■ JES3 is now supported.

### Renamed command:

■ The command OUTDES was renamed to JOUTDES. The synonym OUTDES has been defined.

### **JTRANQUE**

Displays the JES transaction output queue.

# Renamed command:

■ The command APPCOUTQ was renamed to JTRANQUE. The synonym APPCOUTQ has been defined.

#### **LISTFILE**

Displays a list of the JES job data sets.

For executing jobs, information is not available for some of the fields until the output data set closes.

#### New information fields:

ExecSys- Displays the execution system name.

#### New data fields:

- ExecSys The execution system name.
- Spin Shows whether the data set is marked as a spin data set. Spin data sets that are closed can be deleted while a job is still running. The spool space the output data set uses is released when the data set is deleted.
- TRAN Job is a transaction job output.

#### Modifiable data fields for JES2 and JES3:

- Prty The priority of the output data set.
- Forms The forms number to used when the output is printed.

# Modifiable data fields for JES3 only:

- Bur Shows whether to burst the job when printed (YES) or to print in normal mode (NO).
- Chars The character-arrangement tables to use for printing the output.
- FCB The forms control buffer image to use when the output is printed.
- Flash The forms overlay name to use when the output is printed.
- Prmode The process mode for the output.
- UCS The universal character set name to use when the output is printed.

### New line commands:

- HOLD Holds an output data set.
- RELEASE Releases a held output data set.

### **LISTHELD**

Job held output queue

#### Renamed data fields:

 Jobclass - Jobc was renamed and expanded to Jobclass to support the eight-character job classes.

#### Deleted data fields:

User-Data

### **LISTJOBS**

All job queues.

### Renamed data fields:

 Jobclass - Jobc was renamed and expanded to Jobclass to support the eight-character job classes.

### **Deleted data fields:**

■ User-Data

# **LISTOUT**

Job output queue.

#### Renamed data fields:

 Jobclass - Jobc was renamed and expanded to Jobclass to support the eight-character job classes.

### **Deleted data fields:**

User-Data

# OUTPUT

JES job output.

### New information fields:

■ ExecSys - The execution system name.

### **READER**

Readers

#### Renamed data fields:

 Jobclass - Jobc was renamed and expanded to Jobclass to support the eight-character job classes.

# **Commands Removed (JES)**

The following command has been removed.

APPCOUTQ - Use the new JTRANQUE command to display transaction output.

# **Option for CICS**

The CA SYSVIEW Option for CICS has been enhanced.

# **CA OPS/MVS Event Notification**

When a threshold or state exception triggers, you can take various actions. One of these actions include notifying CA SYSVIEW of the exception event.

Event notification triggers the )API rule CAGSVY0001.

The following table provides the available REXX variables and their values.

REXX Variable	Value
API.APPLICATION	SYSVIEW
API.VERSION	13.5a
API.LEVEL	00000713
API.ID	CAGSVY0001
API.COLOR	Alert color:
	0 - Default
	1 - Green
	2 - Blue
	3 - Red
	4 - White
	5 - Pink
	6 - Yellow
	7 - Turquoise
API.GROUP	Variable metric group name
API.NAME	Variable metric name
API.DESCRIPTION	Variable metric description
API.RSCE1	Associated resource
API.RSCE2	Associated resource
API.STATUS	Current status
API.VALUE	Current value
API.ELAPSED (New REXX variable)	Elapsed time after notification
API.TEXT	Exception message text

# WTO Console Messages (CICS)

CA SYSVIEWcan write many different messages to the console or job log using a WTO. Most messages are dynamically built at runtime with data that is inserted into predefined messages templates.

In most cases, extra blanks are removed from the message before writing the messages to the log using a WTO.

The maximum message length for a single-line WTO is 126 characters. If the total length of the dynamically built message is greater than 126 characters, the message gets written to the log using a multiple line WTO.

A multiple line WTO has a limit of 71 characters per line. The original message text is dynamically split into multiple lines that are based on blank characters in the message text. An attempt is made to use as much of the 71 characters available on each message line.

The following lines of messages are written as a multiple line WTO. The number of messages lines and data on each line can vary based on dynamic insert data.

GSVC100W <type> [set the product group or family] <metric> <rscel> <rscel> <oldstat> <newstat> V= <value> W= <warning> P= <problem> <ruletype> <elapsed> <jobname> <tran> <task#> <term> <user> Desc='<description>

# **Commands Added to the Option for CICS**

The CA SYSVIEW Option for CICS has been enhanced to include the following new commands:

### CCONN

Provides information about the CICS connections.

### **CPROFILE**

Provides information about the CICS profiles.

### **Commands Enhanced**

The following enhancements have been made to existing commands.

#### **CALERTS**

CICS exception alerts

### New syntax parameters:

- ACK Displays the alerts that are acknowledged and not acknowledged.
- NOACK Does not display acknowledged alerts.

#### New line commands:

- ACK Invokes the METRIC command to acknowledge the alert.
- CLR Invokes the METRIC command to clear an acknowledged alert.

#### New data fields:

- Ack Indicates that the alert has been acknowledged.
- Pri Indicates the relative priority of the exception.
- AckElaps Indicates the elapsed time after acknowledging the alert.
- AckDate Indicates the date that the alert was acknowledged.
- AckTime Indicates the time that the alert was acknowledged.

# **CDATAMON**

CICS data monitoring statistics

### New data fields:

- GPvtLim The maximum amount of grande storage that can be allocated and internally managed.
- GPvtSize The current amount of grande storage that has been allocated from MVS and is being internally managed.
- GPvtExt The number of allocations of grande storage that have been to MVS.
- GPvtPri The primary grande storage allocation size.
- GPvtSec The secondary grande storage allocation size.
- AllocSize The amount of currently allocated or in use storage.
- AllocHWM The high watermark of allocated storage.
- AllocCnt The number of allocated storage blocks.
- FreeSize The amount of storage currently free or available for use.
- FreeMax The maximum contiguous block of free storage.
- FreeCnt The number of free storage blocks.

#### **CDUMPMGT**

CICS dump management

#### New syntax parameter:

DELETE - Deletes the definitions.

Available parameters:

- tranid Transaction ID
- program Program name
- dumpcode Dump or abend code

#### New line command:

■ DELETE - Deletes the selected definition.

#### New data fields:

■ AbNotify - The abend notify data field specifies whether to write a message to the job log whenever a CICS transaction abends.

When an abend occurs, an attempt is made to match the abending transaction to an entry in this table. If a match is found, the Abend Notify method determines the method to write the messages. If a match is not found, the default configuration option is used. The ABEND-NOTIFICATION parameter in the parmlib member CICSOPTS specifies the default.

Valid values are:

- NONE No message gets written.
- SHORT Writes a single GSVC201E message. The following information is included:

Transaction ID

Task number

Abend code

Program

Request ID

Resource

LONG - Writes a set of messages. The following information is included:

Transaction ID

Task number

Abend code

Program

Request ID

Resource

PSW

Access registers

General registers

# CICS

Set the target CICS

# Deleted syntax parameter:

 SSID - This parameter is no longer needed with the removal of MVS subsystems.

### **CICSLIST**

CICS address spaces

#### New data fields:

■ ExecStage - The execution stage of the CICS region.

### Possible values are:

- INACTIVE Inactive
- SWAPPED Logically swapped
- INITIALIZE Initialization
- INIT-1st First stage initialization
- INIT-2nd Second stage initialization
- INIT-3rd Third stage initialization
- EXECUTING Executing
- CANCELED Shut down due to cancel
- CANCELED-1st Shut down due to cancel, quiesce first stage
- CANCELED-2nd Shut down due to cancel, quiesce second stage
- SHUTIMM Immediate shutdown, first stage
- SHUTIMM-1st Immediate shutdown, second stage
- SHUTIMM-2nd Immediate shutdown, third stage
- SHUTDOWN Shut down, first stage
- SHUTDOWN-1st Shut down, second stage
- SHUTDOWN-2nd Shut down, third stage

### Renamed data field:

■ Jobclass - C was renamed and expanded to support eight-character job classes.

### New line command:

■ CANCEL - Invokes the ASCANCEL command to cancel the selected address space.

ASCANCEL asid CONFIRM

#### **CLIBS**

CICS program statistics

#### New line command:

■ LMID - Invokes the LISTDIR command with the MODID keyword for the selected data set. The standard CA module identification information for all members in the data set displays.

### **CPROGRAM**

CICS program statistics

# New data fields:

- API Specifies the API for the program to use.
- Dataset The data set name from which a module has been loaded. Displays the data set name for those modules that are currently loaded from DFHRPL or a CICS dynamic library.
- ExecSet Specifies whether CICS links to and runs the program as if it were running in a remote CICS region.

#### **CSTATES**

CICS state definition

#### New data fields:

- Pri The priority of an exception. Use priority to sort exceptions within the same status levels, such as PROBLEM.
- TimeBeg The beginning time that the definition is eligible to be applied. Specify the time using the HH:MM:SS format. You can define the time value using any of the following values:

```
12AM | 1AM | 2AM | ... | 11AM
12PM | 1PM | 2PM | ... | 11PM
NOON | MIDNIGHT
```

■ TimeEnd - The end time that the definition is eligible to be applied. Specify the time using the HH:MM:SS format. You can define the time value using any of the following values:

```
12AM | 1AM | 2AM | ... | 11AM
12PM | 1PM | 2PM | ... | 11PM
NOON | MIDNIGHT
```

- TimeRng The time range or interval in which the definition is eligible to be used
- Sun, Mon, Tue, Wed, Thu, Fri, Sat Specifies that the exception is eligible to execute on the specified day. To make a day eligible, type the three-character name in the appropriate field or enter YES. To make the day ineligible, type NO in the appropriate field.
- SMTWTFS The days of eligibility.
- Active The current active status of the definition. Possible values are:
  - ACTIVE The definition is currently eligible for processing.
  - INACTIVE The definition is currently not eligible for processing.
- Disabled Indicates whether the definition is currently enabled or disabled. If an exception definition is disabled, the definition is not used.

#### Renamed data field:

■ IMOD - Run was renamed.

# Deleted subcommand:

■ DELETE - The DELETE subcommand has been removed. Use the DELETE line command to delete the definition.

# **CTERMS**

CICS terminal statistics

# New data fields:

- TT Displays the terminal type code.
- TermType Displays the terminal type.

#### **CTHRESH**

CICS threshold definitions

# New data fields:

- Pri The priority of an exception. Use priority to sort exceptions within the same status levels, such as PROBLEM.
- TimeBeg The beginning time that the definition is eligible to be applied. Specify the time using the HH:MM:SS format. You can define the time value using any of the following values:

```
12AM | 1AM | 2AM | ... | 11AM
12PM | 1PM | 2PM | ... | 11PM
NOON | MIDNIGHT
```

■ TimeEnd - The end time that the definition is eligible to be applied. Specify the time using the HH:MM:SS format. You can define the time value using any of the following values:

```
12AM | 1AM | 2AM | ... | 11AM
12PM | 1PM | 2PM | ... | 11PM
NOON | MIDNIGHT
```

- TimeRng The time range or interval in which the definition is eligible to be used
- Sun, Mon, Tue, Wed, Thu, Fri, Sat Specifies that the exception is eligible to execute on the specified day. To make a day eligible, type the three-character name in the appropriate field or enter YES. To make the day ineligible, type NO in the appropriate field.
- SMTWTFS The days of eligibility.
- Active The current active status of the definition. Possible values are:
  - ACTIVE The definition is currently eligible for processing.
  - INACTIVE The definition is currently not eligible for processing.
- Disabled Indicates whether the definition is currently enabled or disabled. If an exception definition is disabled, the definition is not used.

#### Renamed data field:

■ IMOD - Run was renamed.

# **Deleted subcommand:**

■ DELETE - The DELETE subcommand has been removed. Use the DELETE line command to delete the definition.

# **CTRANS**

CICS transaction summary

# New data field:

Profile - The name of the terminal profile to use.

# New line command:

■ PROFILE - Invokes the CPROFILE command selecting the transactions profile name.

#### **CTRANOPT**

CICS transaction options

#### New syntax parameters:

- TRANLOG Sends a transaction record to a CICS logger task running in the main services address space so that the record is written to the defined log stream.
- NOTRANLOG No data from this transaction gets logged except when overridden by one of the following CICSOPTS configuration options:
  - TRANSACTION-LOG-IF-ABEND
  - TRANSACTION-LOG-IF-CICSEXC
  - TRANSACTION-LOG-IF-THRESHOLD
- SMF Sends a transaction record to a CICS logger task running in the main services address space so that the record is written to SMF.
- NOSMF Data from this transaction is not logged except when overridden by one of the following CICSOPTS configuration options:
  - TRANSACTION-LOG-IF-ABEND
  - TRANSACTION-LOG-IF-CICSEXC
  - TRANSACTION-LOG-IF-THRESHOLD
- DYNEXIT Sends a transaction record to a CICS logger task running in the main services address space so that the record is passed to the dynamic exit GSVX.CICSTRAN.
- NODYNEXIT Data from this transaction is not passed except when overridden by one of the following CICSOPTS configuration options:
  - TRANSACTION-LOG-IF-ABEND
  - TRANSACTION-LOG-IF-CICSEXC
  - TRANSACTION-LOG-IF-THRESHOLD
- WILYAPM Sends the transaction information to a CICS logger task running in the main services address space so that the information is sent to Wily APM for transaction tracing. The information is collected and sent only when the Wily APM product has requested a transaction trace.
- NOWILYAPM The transaction information is not sent except when overridden by one of the following CICSOPTS configuration options:
  - TRANSACTION-LOG-IF-ABEND
  - TRANSACTION-LOG-IF-CICSEXC
  - TRANSACTION-LOG-IF-THRESHOLD

### New data fields:

- TranLog Specifies if a transaction record is sent to a CICS logger task running in the main services address space so that the record is written to the defined log stream.
- SMF Specifies if a transaction record is sent to a CICS logger task running in the main services address space so that the record is written to SMF.
- DynExit Specifies if a transaction record is sent to a CICS logger task running in the main services address space so that the record is passed to the dynamic exit GSVX.CICSTRAN.
- WilyAPM Specifies if transaction information is sent to a CICS logger task running in the main services address space so that the information is sent to Wily APM for transaction tracing. The information is collected and sent only when the Wily APM product has requested a transaction trace.
- Internal Specifies if the transaction option definition was created internally.
   You cannot modify internally created definitions.

#### New data field:

Log - Specifies if a transaction record is logged.

#### **CWAITS**

CICS degradation analysis

#### New data fields:

- Metric Displays the data collection metric/variable name.
- DFHGroup, MCTNum If the metric is related to a CICS transaction performance data metric, the displayed values are the associated CICS performance data name as defined in the CICS Monitor Control Table. Additional information can be found in the IBM CICS Performance Guide. If the metric is not related to a CICS performance data metric, the DFHGroup field displays a "\*" and the MCTNum field is blank.

# **Transaction Data Collection Threshold Metrics**

The data collection threshold metrics have been enhanced to include the following new transaction variable:

# **WMQASRBT**

Displays the WebSphere MQ API SRB time.

# CICS Dump Management—Parmlib Member CICSDMPM

You can write a set of messages to the CICS job log whenever a transaction abends. The new abend notification option provides the ability to specify the level of detail to provide. Specify the level of detail by transaction ID.

# New notification option:

 AbNotify - The abend notify data field specifies whether to write a message to the job log whenever a CICS transaction abends.

When an abend occurs, an attempt is made to match the abending transaction to an entry in this table. If a match is found, the Abend Notify method determines the method to write the messages. If a match is not found, the default configuration option is used. The ABEND-NOTIFICATION parameter in the parmlib member CICSOPTS specifies the default.

# Valid values are:

- NONE, NO No message is written.
- SHORT, YES Writes a single GSVC201E message that can include the following information:
  - Transaction ID
  - Task number
  - Abend code
  - Program
  - Request ID
  - Resource
- LONG Writes a set of messages that can include the following information:
  - Transaction ID
  - Task number
  - Abend code
  - Program
  - Request ID
  - Resource
  - PSW
  - Access registers
  - General registers

# **Configuration Options—Parmlib Member CICSOPTS**

The configuration options member CICSOPTS has been enhanced to include the following options:

#### **DATALIB-AUTO-SAVE**

Specify whether automatically save configuration definitions to the persistent data storage (DATALIB) during initialization and termination.

At the end of initialization, configuration information that was obtained by reading the definitions from a PARMLIB member (COLD start) are automatically saved to the persistent data store. Saving definitions to the persistent data store lets you do a WARM start.

During termination, configuration information that has been altered or updated after initialization is automatically saved to the persistent data store so that the configuration can be reused upon the next WARM start.

**Default: YES** 

If NO is specified, configuration can be saved manually.

The information contained in the following PARMLIB members is saved to the persistent data store:

- CICSARTM
- CICSCNCL
- CICSDMPM
- CICSGRPS
- CICSSCHD
- CICSSTAT
- CICSTHRS
- CICSTOPT

### **MESSAGE-MLWTO-ENABLED**

Enables messages that are written to the console or job log using a WTO request to be written as a multiple line WTO. A single-line WTO message is limited to 126 characters.

Setting MESSAGE-MLWTO-ENABLED to NO truncates any message longer than 126 characters.

**Default: YES** 

#### MESSAGE-MLWTO-INDENT-CHARACTERS

If multiple line WTO messages are enabled, you can indent the second through nth lines to enhance readability.

Default: 9

Minimum: 0 no indentation

Minimum: 16

Example messages with MESSAGE-MLWTO-INDENT-CHARACTERS = 0

GSVC100W (TPPT) TRANEND TRANS LIFETIME CEMT U032 NONE PROBLEM V=00:01:24 W= 7.500000 P= 10.00000 UPPER 0.000000 SYSVCICS CEMT 71

Example messages with MESSAGE-MLWTO-INDENT-CHARACTERS = 9

GSVC100W (TPPT) TRANEND TRANS LIFETIME CEMT U032 NONE PROBLEM V=00:01:24 W= 7.500000 P= 10.00000 UPPER 0.000000 SYSVC670 CEMT 71

Example messages with MESSAGE-MLWTO-INDENT-CHARACTERS = 16

GSVC100W (TPPT) TRANEND TRANS LIFETIME CEMT U032 NONE PROBLEM V= 00:01:24 W= 7.500000 P= 10.00000 UPPER 0.000000 SYSVCICS CEMT 71

#### MESSAGE-TASKNAME-INSERT

Inserts the task name after the message ID.

#### **Default: YES**

Example messages with MESSAGE-TASKNAME-INSERT = YES

GSVC101I (XDIS) USR1234 has issued a CANCEL for the transaction CEMT GSVC102I (XDIS) CANCEL Tran CEMT Task 124 WaitType ZCIOWAIT

GSVC150W (GSVI) Function NORMAL\_CANCEL Response 02 EXCEPTION

Example messages with MESSAGE-TASKNAME-INSERT = NO

GSVC101I USR1234 has issued a CANCEL for the transaction CEMT GSVC102I CANCEL Tran CEMT Task 124 WaitType ZCIOWAIT

GSVC150W Function NORMAL\_CANCEL Response 02 EXCEPTION

# MONITOR-ENVIRONMENT-REUSE

Specifies if the monitoring environment is retained and available for reuse when the data collector is terminated.

Portions of the monitoring environment are maintained in E-CSA storage. This storage is reused. By setting this option to NO, the storage that is maintained for ongoing statistics is freed at termination.

**Default: YES** 

#### PERFORMANCE-DATA-DB2-BY-PROGRAM

Specifies if the unique program that made the request collects the DB2 segments.

The unique segment key is made up of the following keys:

- Program
- Type
- Statement

If set to NO, then the Program portion of the key is set to "\*".

# PERFORMANCE-DATA-DB2-BY-STMT

Specify if a unique request program statement number collects DB2 segments.

The unique segment key is made up of the following keys:

- Program
- Type
- Statement

If set to NO, then the statement portion of the key is set to 0.

#### PERFORMANCE-DATA-DB2-BY-TYPE

Specifies if a unique request type collects DB2 segments.

The unique segment key is made up of the following keys:

- Program
- Type
- Statement

If set to NO, then the Type portion of the key is set to "\*".

### PERFORMANCE-DATA-SEGLIMIT-DB2

Specifies the number of unique segments that are collected per transaction for DB2 requests.

If more than "n" unique resource segments are found, the all additional segments are collected with a resource key of:

- Program \*
- Type \*
- Statement 0
- Minimum = 1
- Maximum = 100
- Default = 25

#### **TERMINAL-STATES-CONSOLE**

Specifies whether to perform terminal state collection for console terminal definitions.

**Default: YES** 

This option requires the data collection function STATE-TERMINALS to be active in the Event Scheduler.

# **TERMINAL-STATES-MRO**

Specifies whether to perform terminal state collection for MRO terminal definitions.

**Default:** YES

This option requires the data collection function STATE-TERMINALS to be active in the Event Scheduler.

#### **TERMINAL-STATES-VTAM**

Specifies whether to perform terminal state collection for VTAM terminal definitions.

Default: NO

This option requires the data collection function STATE-TERMINALS to be active in the Event Scheduler.

# Transaction Options—Parmlib Member CICSTOPT

The Transaction Options member CICSOPTS has been enhanced to include the following new keyword options:

#### **TRANLOG**

A transaction record is sent to a CICS logger task running in the main services address space so that the record can be written to the defined log stream.

#### **NOTRANLOG**

Data from this transaction is not logged except when one of the following CICSOPTS configuration options overrides the data:

- TRANSACTION-LOG-IF-ABEND
- TRANSACTION-LOG-IF-CICSEXC
- TRANSACTION-LOG-IF-THRESHOLD

Online statistics are maintained. Threshold processing is performed unless the NOTHRESH option is coded.

#### **SMF**

A transaction record is sent to a CICS logger task running in the main services address space so that the record can be written to SMF.

#### **NOSMF**

Data from this transaction is not logged except when one of the following CICSOPTS configuration options overrides the data:

- TRANSACTION-LOG-IF-ABEND
- TRANSACTION-LOG-IF-CICSEXC
- TRANSACTION-LOG-IF-THRESHOLD

### **DYNEXIT**

A transaction record is sent to a CICS logger task running in the main services address space so that the record can be passed to the dynamic exit GSVX.CICSTRAN.

### **NODYNEXIT**

Data from this transaction is not passed except when one of the following CICSOPTS configuration options overrides the data:

- TRANSACTION-LOG-IF-ABEND
- TRANSACTION-LOG-IF-CICSEXC
- TRANSACTION-LOG-IF-THRESHOLD

#### **WILYAPM**

Transaction information is sent to a CICS logger task running in the main services address space so that the information can be sent to Wily APM for transaction tracing. The information is collected and sent only when the Wily APM product has requested the transaction trace.

#### **NOWILYAPM**

Transaction information is not sent except when one of the following CICSOPTS configuration options overrides the data:

- TRANSACTION-LOG-IF-ABEND
- TRANSACTION-LOG-IF-CICSEXC
- TRANSACTION-LOG-IF-THRESHOLD

The following keywords have been removed:

#### LOG

Logs a transaction record.

#### **NOLOG**

Do not log a transaction record.

# **CICS Transaction Options Definitions**

Replaced and removed the keywords LOG and NOLOG by new keywords that expand the control over the logging of transaction records and information. Transaction option definitions that are stored in the persistent data store (DATALIB) are automatically converted to the new definition structure. If the prior definition contained the keyword LOG, the following keyword options are used to duplicate the prior definition:

- TRANLOG
- SMF
- DYNEXIT
- WILYAPM

If the prior definition contained the keyword NOLOG, the following keyword options are used to duplicate the prior definition:

- NOTRANLOG
- NOSMF
- NODYNEXIT
- NOWILYAPM

If the LOG and NOLOG keywords are found in parmlib definition, they are also processed and converted.

# **Virtual Storage Constraint Relief**

All module and permanent storage is now allocated in 31- or 64-bit storage.

Most storage that is used for monitoring the CICS region using the CA SYSVIEW for CICS Data Collector is located in 64-bit storage.

# **Configurations Options Member SYSVIEW**

The system configuration options member is used to set configuration options during the initialization of CA SYSVIEW. Put the system configuration options member in the concatenation of the system parmlib data sets.

Specify the subsystem ID if the CA SYSVIEW CICS Data Collector is connecting to a CA SYSVIEW subsystem ID other than the default GSVX.

The default subsystem ID can be specified or overridden using the following methods:

Starting the CICS data collector

The transaction ID for starting the CICS data collector is GSVS.

GSVS <initialization parameters>

For example:

GSVS GSVI=tran,USERID=userid,START=start,SSID=ssid

Restarting the CICS data collector

The transaction ID for stopping and restarting the CICS data collector is GSVT.

GSVT RESTART <initialization parameters>

For example:

GSVT RESTART GSVI=tran, USERID=userid, START=start, SSID=ssid

■ The parameters can also be specified as part of the SIT INITPARMs.

For example:

```
INITPARM=(DFHMQPRM='SN=CSQ2,IQ=CICS.SYSVC660.INITQ',
DFHDBCON='00,SVPB',GSVCGSVS='GSVI=*,USERID=*,START=*,SSID=*'),
```

# **CA DATACOM Option**

The CA SYSVIEW CA DATACOM Option has been enhanced.

# **Commands Added**

The CA SYSVIEW CA DATACOM Option has been enhanced to include the following new command:

# **DCLOCKS**

Displays the Datacom MUF locks information.

# **DCSYSOUT**

Displays the Datacom MUF SYSOUT information.

# **DCBUFCON**

Displays the Datacom MUF buffer pool contents.

### **Commands Enhanced**

The following enhancement has been made to existing commands.

#### **DCKEYS**

Displays Datacom directory keys

#### New data fields:

- UsesRAAT A count of initial commands to locate and read one record at a time against this key definition. The count increments by one for every LOC/RED/RDU/CNT command with KY/KG/KR/KL/KX/KI or GSETL command.
- UsesCBS Provides a general key usage count, the times a SELFR command selected this key for a traversal set. This count does not include population counting or key usage to determine if the key is used in the completion of the request. This count does not include use of the command by SQL.
- UsesSQL Provides a general key usage count, the times a SELFR command selected this key for a traversal set. This count does not include population counting or key usage to determine if the key is used in the completion of the request. This count only includes use of the command by SQL.

### **DCLIST**

List of monitored Datacom jobs

### Renamed data fields:

■ Jobclass - C was renamed and expanded to support the eight-character job classes.

#### **DCTABLES**

Displays CA DATACOM directory tables

#### New data fields:

- Jobclass Renamed and expanded C to support eight-character job classes.
- Trigger Indicates whether the table has one or more SQL triggers.
- Partition Indicates whether the table is a partition.
- FullName Indicates the full parent name, if a partition.
- FullParSQLauth Indicates the full parent SQL AUTHID, if a partition.
- FullParSQLname Indicates the full parent SQL name, if a partition.
- AnyName Indicates any parent name, if a partition.
- AnyParSQLauth Indicates any parent SQL AUTHID, if a partition.
- AnyParSQLname Indicates any parent SQL name, if a partition.

# DB<sub>2</sub>

The CA SYSVIEW DB2 Option has been enhanced.

# Commands Added to DB2

The CA SYSVIEW Option for DB2 has been enhanced to include the following new commands:

- DB2 Sets the target DB2 subsystem.
- DBBPOOLS DB2 buffer pools
- DBDSETS DB2 open data sets
- DBERRMSG DB2 error message
- DBLOGAL DB2 log allocation
- DBLOGCKP DB2 log checkpoint
- DBPRMBP DB2 buffer pool parameters
- DBPRMGBP DB2 group buffer pool parameters
- DBSQLDY DB2 dynamic SQL cache
- DBTHACT DB2 active threads

#### **Commands Enhanced**

The following enhancements have been made to existing commands.

#### **DB2LIST**

DB2 subsystem list

# New syntax parameters:

- ALL- Displays all DB2 subsystems that the agent CA Insight for DB2 is monitoring.
- GROUP Specifies that an argument is to follow specifying the group name containing the list of DB2 subsystems to display. The list of available groups with type DB2SSID can be found on the GROUPS command.
  - A group name of "\*" can be entered to indicate that no group processing is required.
- MONitored Displays only DB2 subsystems that the agent CA Insight for DB2 is monitoring.

#### New data fields:

- Mon Indicates whether the DB2 subsystem monitors CA Insight for DB2.
- Conn The status of the connection to the agent CA Insight for DB2 XNET.
- XnetDirld The XNET director ID value for the connection to the agent CA Insight for DB2 XNET.
- XnetSock The XNET director TCP socket number for the connection to the agent CA Insight for DB2 XNET.

# Renamed data fields:

- Jobclass Jc was renamed and expanded to support eight character job classes.
- New line commands:
- IPLISTEN Invokes IPLISTEN for jobnames that contain the DB2 SSID.
- IPTCONN Invokes IPTCONN for jobnames that contain the DB2 SSID.
- START Invokes the MVS command START DB2 using the command prefix for this DB2 subsystem.
- STOP Invokes the XMVS command STOP DB2 MODE(QUIESCE) using the command prefix for this DB2 subsystem.
- STOPFOR Invokes the XMVS command STOP DB2 MODE(FORCE) using the command prefix for this DB2 subsystem.

# **Option for IMS**

The CA SYSVIEW Option for IMS has been enhanced.

# **IMS Transaction Tracing for CA APM Integration**

CA SYSVIEW extends CA APM Introscope Transaction Tracing into IMS. The CA APM integration increases end-to-end visibility to isolate transaction performance problems.

# **IMS Data Collection - Buffer Pools**

A new data collection event function has been added for IMS buffer pools. The CA SYSVIEW Event Scheduler controls the data collection event and schedule.

# **New Event Scheduler function:**

# **IMSDATA-BUFPOOLS**

The new event is dynamically added to existing schedules during the initialization of the IMS data collection task IMSDATA.

The Event Scheduler definition has been added to the parmlib member SCHDIMS.

```
DEFINE IMS-BUFPOOLS
          GROUP
                     IMSDATA
          DESC
                     'IMS data collection - Buffer Pools
          TYPE
                     RECUR
          ALLDAYS
          DATEBEGIN *
                               DATEEND *
          TIMEBEGIN MIDNIGHT TIMEEND *
          EVERY
                     1MINUTE
          LIMIT
                     NOLIMIT
          FUNCTION IMSDATA-BUFPOOLS
          Parms
          ENABLED
   ENDDEFINE
```

# **IMS Transactions Monitoring**

Nonrecoverable Inquiry and Synchronous OTMA Transactions

CA SYSVIEW now creates Transaction History records (SMF 255 subtype 34) for Nonrecoverable Inquiry and Synchronous OTMA (Open Transaction Manager Access) transactions. Previously, these transactions were only summarized in the Region Accounting records (SMF 255 subtype 35). This change leads to an increase in the volume of Transaction History records.

# **CA OPS/MVS Event Notification**

When a threshold or state exception triggers, you can take various actions. One of these actions include notifying CA OPS/MVS of the exception event.

Event notification triggers the )API rule CAGSVP0001.

The following table provides the available REXX variables and their values.

REXX Variable	Value
API.APPLICATION	SYSVIEW
API.VERSION	13.5a
API.LEVEL	00000713
API.ID	CAGSVP0001
API.COLOR	Alert color:
	0 - Default
	1 - Green
	2 - Blue
	3 - Red
	4 - White
	5 - Pink
	6 - Yellow
	7 - Turquoise
API.GROUP	Variable metric group name
API.NAME	Variable metric name
API.DESCRIPTION	Variable metric description
API.IMSID	IMS subsystem ID
API.RESOURCE	Associated resource
API.STATUS	Current status
API.VALUE	Current value
API.ELAPSED (New REXX variable)	Elapsed time after notification
API.TEXT	Exception message text

# **Commands Added**

The Option for IMS has been enhanced to include the following new commands:

# **IMSOMAT**

Displays IMS OM audit trail.

# **IMSOMAX**

Displays IMS OM audit response record.

# **Commands Enhanced**

The following enhancements have been made to existing commands.

#### **IMSALERT**

IMS exception alerts.

# New syntax parameters:

- ACK Displays the alerts that are acknowledged and not acknowledged.
- NOACK Does not display acknowledged alerts.
- XSYStem, XSData This forces cross-system data collection be set on for this execution. The current profile setting of XSDATA is maintained.
- NOXSYStem, NOXSData This forces cross-system data collection be set off for this execution. The current profile setting of XSDATA is maintained.

#### **New line commands:**

- ACK Invokes the METRIC command to acknowledge the alert.
- CLR Invokes the METRIC command to clear an acknowledged alert.

#### New data fields:

- Ack Indicates that the alert has been acknowledged.
- Pri Indicates the relative priority of the exception.
- AckElaps Indicates the elapsed time after acknowledging the alert.
- AckDate Indicates the date that the alert was acknowledged.
- AckTime Indicates the time that the alert was acknowledged.

#### Renamed data fields:

Resource - Argument was renamed.

#### **IMSDATA**

Sets the IMS data collection options.

#### New parameter:

 IMSDATA-BUFPOOLS - Controls threshold processing for the data collection type.

# New syntax parameters:

 ${\tt IMSDATA\ THRESH\ } \textit{datatype}$ 

- *datatype* Specifies the data collection type. Valid values are:
  - IMSDATA-BUFPOOLS
  - IMSDATA-POOLS
  - IMSDATA-SYSTEM

#### IMSDATA-TRANSUM

# **IMSLOCKS**

Displays IMS IRLM locks.

#### New data fields:

- DCB The database data set DCB number.
- RBA The database RBA.

#### **IMSOSAM**

Displays IMS OSAM statistics.

#### New information fields:

- Max The Max amount if sequential buffer storage.
- Free The amount of available sequential buffer storage.
- Curr The currently used amount of sequential buffer storage.
- High The high-water mark of used sequential buffer storage.

#### **IMSSTATE**

Displays the IMS state definition.

# New syntax parameters:

■ SAVE - Saves definitions to the persistent data store.

#### New data fields:

- Pri The priority of an exception. Use priority to sort exceptions within the same status levels, such as PROBLEM.
- TimeBeg The beginning time that the definition is eligible to be applied. Specify the time using the HH:MM:SS format. You can define the time value using any of the following values:

```
12AM | 1AM | 2AM | ... | 11AM
12PM | 1PM | 2PM | ... | 11PM
NOON | MIDNIGHT
```

■ TimeEnd - The end time that the definition is eligible to be applied. Specify the time using the HH:MM:SS format. You can define the time value using any of the following values:

```
12AM | 1AM | 2AM | ... | 11AM
12PM | 1PM | 2PM | ... | 11PM
NOON | MIDNIGHT
```

 TimeRng - The time range or interval in which the definition is eligible to be used.

- Sun, Mon, Tue, Wed, Thu, Fri, Sat Specifies that the exception is eligible to execute on the specified day. To make a day eligible, type the three-character name in the appropriate field or enter YES. To make the day ineligible, type NO in the appropriate field.
- SMTWTFS The days of eligibility.
- Active The current active status of the definition. Possible values are:
  - ACTIVE The definition is currently eligible for processing.
  - INACTIVE The definition is currently not eligible for processing.
- Disabled Indicates whether the definition is currently enabled or disabled. If an exception definition is disabled, the definition is not used.

#### Renamed data fields:

■ IMOD - Run was renamed.

# **Deleted subcommands:**

■ DELETE - The DELETE subcommand has been removed. Use the DELETE line command to delete the definition.

# **IMSTIMES**

Displays the IMS transaction times.

#### New data fields:

■ OSAWait - The OSAM I/O IWait time.

#### **Deleted data fields:**

- DMBLoad The DMB block loader time
- FmtBPool The format buffer pool time
- MFSBlock The MFS block IWait time
- MFSDir The MFS dir IWait time
- MPPSched The MPP schedule time
- PSBLoad The PSB block loader time
- QMGRIO The QMGR I/O IWait time
- QMGRSnap The QMGR SNAPQ IWait time
- SchedCnt The transaction schedules
- VSOCastO The VSO area castout time
- VSOLoad The VSO preload time

# **IMSTHRSH**

Displays the IMS threshold definitions.

# New syntax parameters:

SAVE - Saves definitions to the persistent data store.

#### New data fields:

- Pri The priority of an exception. Use priority to sort exceptions within the same status levels, such as PROBLEM.
- TimeBeg The beginning time that the definition is eligible to be applied. Specify the time using the HH:MM:SS format. You can define the time value using any of the following values:

```
12AM | 1AM | 2AM | ... | 11AM
12PM | 1PM | 2PM | ... | 11PM
NOON | MIDNIGHT
```

■ TimeEnd - The end time that the definition is eligible to be applied. Specify the time using the HH:MM:SS format. You can define the time value using any of the following values:

```
12AM | 1AM | 2AM | ... | 11AM
12PM | 1PM | 2PM | ... | 11PM
NOON | MIDNIGHT
```

- TimeRng The time range or interval in which the definition is eligible to be used.
- Sun, Mon, Tue, Wed, Thu, Fri, Sat Specifies that the exception is eligible to execute on the specified day. To make a day eligible, type the three-character name in the appropriate field or enter YES. To make the day ineligible, type NO in the appropriate field.
- SMTWTFS The days of eligibility.
- Active The current active status of the definition. Possible values are:
  - ACTIVE The definition is currently eligible for processing.
  - INACTIVE The definition is currently not eligible for processing.
- Disabled Indicates whether the definition is currently enabled or disabled. If an exception definition is disabled, the definition is not used.

#### Renamed data fields:

■ IMOD - Run was renamed.

# **Deleted subcommands:**

■ DELETE - The DELETE subcommand has been removed. Use the DELETE line command to delete the definition.

# **IMSTRANS**

Displays IMS transaction codes.

#### New data field

■ Transtat - The transaction level statistics indicator.

# **IMSVARS**

Displays the available IMS monitor variables.

# Renamed data fields:

Resource - Argument was renamed.

# **Data Collection Threshold Metrics Added**

The following threshold metrics were added to enhance data collection.

# **IMBPFREE**

Buffer pool free Resource: imsbufp

#### **IMBPOVER**

Buffer pool overflow Resource: imsbufp

# **IMBPSIZE**

Buffer pool size
Resource: imsbufp

# **IMBPUSE%**

Buffer pools used percent

Resource: imsbufp

# **IMBPUSED**

Buffer pool used Resource: imsbufp

# **IMSLARCH**

Archive required OLDS data sets

Resource: none

# **IMSLBUFW**

Output buffer waits during checkpoint

Resource: none

# **IMSLCHKW**

SLOG CHKW requests

Resource: none

# **IMSLERR**

OLDS data set with I/O errors

Resource: none

# **IMSLFULL**

Full OLDS data sets

Resource: none

# **IMSLINAC**

Inactive OLDS data sets

Resource: none

# **IMSLREAD**

SLOG read requests

Resource: none

# **IMSLSTOP**

Stopped OLDS data sets

Resource: none

# **IMSLWRIT**

SLOG write requests

Resource: none

# **IMTROIWC**

IMS OSAM IWAIT count

Resource: imstran

# **IMTROIWT**

IMS OSAM IWAIT time

Resource: imstran

#### **Data Collection Transaction Metrics Deleted**

The following threshold metrics were deleted.

- IMTRBSCC IMS BMP schedule count
- IMTRBSCT IMS BMP schedule time
- IMTRBTMC IMS BMP term count
- IMTRBTMT IMS BMP term time
- IMTRDBLC IMS DMB block loader count
- IMTRDBLT IMS DMB block loader time
- IMTRFBIC IMS Format buffer pool count
- IMTRFBIT IMS Format buffer pool time
- IMTRMBIC IMS MFS block IWAIT count
- IMTRMBIT IMS MFS block IWAIT time
- IMTRMDQC IMS MPP DQ count
- IMTRMFIC IMS MFS dir IWAIT count
- IMTRMFIT IMS MFS dir IWAIT time
- IMTRMSCC IMS MPP schedule count
- IMTRMSCT IMS MPP schedule time
- IMTRMTMC IMS MPP term count
- IMTRMTMT IMS MPP term time
- IMTRPBLC IMS PSB block loader count
- IMTRPBLT IMS PSB block loader time
- IMTRQCNT IMS Queue count
- IMTRQIWC IMS QMGR I/O IWait count
- IMTRQIWT IMS QMGR I/O IWait time
- IMTRQSQC IMS QMGR SNAPQ IWAIT count
- IMTRQSQT IMS QMGR SNAPQ IWAIT time
- IMTRSCHD IMS transaction schedules
- IMTRVSCC IMS VSO area castout count
- IMTRVSCT IMS VSO area castout time
- IMTRVSOC IMS VSO preload count
- IMTRVSOT IMS VSO preload time

# **IMS Options Parmlib Member IMS**

The following option has been removed from the parmlib member IMS:

#### **AUTO-SWITCH-IMSCMD**

This functionality is now included in the SET IMSTGTDEF command.

# **IMS Logger Options Parmlib Member IMSLOGR**

The following options have been removed from the parmlib member IMSLOGR:

#### SKIP-DBT-SLOG-RECORDS

Specifies if the IMSLOGR task skips DBT written DC Monitor records.

Default: NO

#### SKIP-DBT-DLI-SLOG-RECORDS

Specifies if the IMSLOGR task skips DBT written DLI DC Monitor records.

Default: YES

# **CA ROSCOE Component**

For CA ROSCOE, CA SYSVIEW monitors and lets you display information about executing its jobs. This component has been enhanced.

# **Commands Enhanced**

The following enhancements have been made to existing commands.

# **ROSLIST**

Lists the monitored CA ROSCOE jobs.

# Renamed data fields:

 Jobclass - C was renamed and expanded to support the eight-character job classes.

# **TCP/IP Option**

The TCP/IP Option for CA SYSVIEW has been enhanced.

# **CA OPS/MVS Event Notification**

When a threshold or state exception triggers, you can take various actions. One of these actions include notifying CA OPS/MVS of the exception event.

Event notification triggers the )API rule CAGSVN0001.

The following table provides the available REXX variables and their values.

REXX Variable	Value
API.APPLICATION	SYSVIEW
API.VERSION	13.5a
API.LEVEL	00000713
API.ID	CAGSVN0001
API.COLOR	Alert color:
	0 - Default
	1 - Green
	2 - Blue
	3 - Red
	4 - White
	5 - Pink
	6 - Yellow
	7 - Turquoise
API.GROUP	Variable metric group name
API.NAME	Variable metric name
API.DESCRIPTION	Variable metric description
API.TCPID	TCP/IP jobname of the stack
API.RESOURCE	Associated resource
API.STATUS	Current status
API.VALUE	Current value
API.ELAPSED (New REXX variable)	Elapsed time after notification
API.TEXT	Exception message text

# **Commands Added**

The Option for TCP/IP has been enhanced to include the following new commands:

# **IPEESUM**

Displays the Enterprise Extended summary.

# **IPEECONN**

Displays the Enterprise Extended connections.

# **Commands Enhanced**

The following enhancements have been made to existing commands.

#### **IPCONFIG**

Sets the IP configuration.

# New data field: SMF Type 119 parameters

■ DVIPA - Determines whether subtype 32, 33, 34, 35, 36, and 37 records are created for sysplex events that are related to dynamic virtual IP addresses (DVIPAs).

# New data field: Global configuration

■ Join - Indicates whether the stack joins the sysplex group during stack initialization.

# New data fields: IPV6 configuration

- ChecksumOffload Indicates whether checksum offload support is in effect for IPv6.
- SegOffload Indicates whether TCP segmentation offload support is in effect for IPv6.

# New data fields: Network Monitor configuration

- ChecksumOffload Indicates whether checksum offload support is in effect for IPv4.
- CsMail Determines whether the real-time SMF service creates SMF 119 records for subtype 50.
- CsSMTP Determines whether the real-time SMF service creates SMF 119 records for subtype 48, 49, 51, and 52.
- DVIPA Determines whether the SMF subtypes 32, 33, 34, 35, 36, and 37 are created for sysplex events that are related to dynamic virtual IP addresses (DVIPAs).
- SegOffload Indicates whether TCP segmentation offload support is in effect for IPv4.

# **IPSTATS**

Displays the IP statistics.

# New data field: TCP segments statistics

 Rcvd on OSA Bulk Queues - The number of received segments from the OSA-Express QDIO inbound workload queuing the function BulkData ancillary input queue (AIQ).

#### New data fields: TCP connections statistics

- Current Stalled The number of stalled connections for send data flow. Possible causes are the TCP send queue is full or an issue with the TCP send window size.
- Current Servers Flooded The number of TCP servers under a potential connection flood attack. Possible cause is the backlog queue is required to be expanded to handle incoming requests. No server backlog queue is allowed to expand when this number exceeds 25.

# **IPUSERS**

Displays information about the TCP/UDP users.

#### New data fields:

- Bytes Total bytes in and out
- Delta Total bytes in and out for the interval
- Rate Total bytes in and out rate

#### **TCPALERT**

Displays TCP/IP exception alerts.

# New syntax parameters:

- ACK Displays the alerts that are acknowledged and not acknowledged.
- NOACK Does not display acknowledged alerts.
- XSYStem, XSData This forces cross-system data collection be set on for this execution. The current profile setting of XSDATA is maintained.
- NOXSYStem, NOXSData This forces cross-system data collection be set off for this execution. The current profile setting of XSDATA is maintained.

#### New line commands:

- ACK Invokes the METRIC command to acknowledge the alert.
- CLR Invokes the METRIC command to clear an acknowledged alert.

# New data fields:

- Ack Indicates that the alert has been acknowledged.
- Pri Indicates the relative priority of the exception.
- AckElaps Indicates the elapsed time after acknowledging the alert.
- AckDate Indicates the date that the alert was acknowledged.
- AckTime Indicates the time that the alert was acknowledged.

#### Renamed data fields:

Resource - Argument was renamed.

#### **TCPLIST**

Displays the TCP/IP images.

#### Renamed data fields:

Jobclass - Jc was renamed and expanded to support eight-character job classes.

# **TCPSTATE**

Displays TCP/IP state definitions.

#### New syntax parameters:

■ SAVE - Saves definitions to the persistent data store.

#### New data fields:

- Pri The priority of an exception. Use priority to sort exceptions within the same status levels, such as PROBLEM.
- TimeBeg The beginning time that the definition is eligible to be applied. Specify the time using the HH:MM:SS format. You can define the time value using any of the following values:

```
12AM | 1AM | 2AM | ... | 11AM
12PM | 1PM | 2PM | ... | 11PM
NOON | MIDNIGHT
```

■ TimeEnd - The end time that the definition is eligible to be applied. Specify the time using the HH:MM:SS format. You can define the time value using any of the following values:

```
12AM | 1AM | 2AM | ... | 11AM
12PM | 1PM | 2PM | ... | 11PM
NOON | MIDNIGHT
```

- TimeRng The time range or interval in which the definition is eligible to be used.
- Sun, Mon, Tue, Wed, Thu, Fri, Sat Specifies that the exception is eligible to execute on the specified day. To make a day eligible, type the three-character name in the appropriate field or enter YES. To make the day ineligible, type NO in the appropriate field.
- SMTWTFS The days of eligibility.
- Active The current active status of the definition. Possible values are:
  - ACTIVE The definition is currently eligible for processing.
  - INACTIVE The definition is currently not eligible for processing.
- Disabled Indicates whether the definition is currently enabled or disabled. If an exception definition is disabled, the definition is not used.

#### Renamed data fields:

■ IMOD - Run was renamed.

# **Deleted subcommands:**

 DELETE - The DELETE subcommand has been removed. Use the DELETE line command to delete the definition.

#### **TCPTHRSH**

Displays TCP/IP threshold definitions.

#### New syntax parameters:

■ SAVE - Saves definitions to the persistent data store.

#### New data fields:

- Pri The priority of an exception. Use priority to sort exceptions within the same status levels, such as PROBLEM.
- TimeBeg The beginning time that the definition is eligible to be applied. Specify the time using the HH:MM:SS format. You can define the time value using any of the following values:

```
12AM | 1AM | 2AM | ... | 11AM
12PM | 1PM | 2PM | ... | 11PM
NOON | MIDNIGHT
```

■ TimeEnd - The end time that the definition is eligible to be applied. Specify the time using the HH:MM:SS format. You can define the time value using any of the following values:

```
12AM | 1AM | 2AM | ... | 11AM
12PM | 1PM | 2PM | ... | 11PM
NOON | MIDNIGHT
```

- TimeRng The time range or interval in which the definition is eligible to be used.
- Sun, Mon, Tue, Wed, Thu, Fri, Sat Specifies that the exception is eligible to execute on the specified day. To make a day eligible, type the three-character name in the appropriate field or enter YES. To make the day ineligible, type NO in the appropriate field.
- SMTWTFS The days of eligibility.
- Active The current active status of the definition. Possible values are:
  - ACTIVE The definition is currently eligible for processing.
  - INACTIVE The definition is currently not eligible for processing.
- Disabled Indicates whether the definition is currently enabled or disabled. If an exception definition is disabled, the definition is not used.

# Renamed data fields:

■ IMOD - Run was renamed.

### **Deleted subcommands:**

■ DELETE - The DELETE subcommand has been removed. Use the DELETE line command to delete the definition.

# **TCPVARS**

Displays available TCP/IP monitor variables.

# Renamed data fields:

Resource - Argument was renamed.

# **Data Collection Threshold Metrics**

The following threshold metrics variable was added to enhance data collection.

# **IPSROSAB**

Displays the received segments on OSA bulk queues.

Resource: none

# **Option for WebSphere MQ**

The CA SYSVIEW Option for WebSphere MQ has been enhanced.

# **CA OPS/MVS Event Notification**

When a threshold or state exception triggers, you can take various actions. One of these actions include notifying CA OPS/MVS of the exception event.

Event notification triggers the )API rule CAGSVS0001.

The following table provides the available REXX variables and their values.

REXX Variable	Value
API.APPLICATION	SYSVIEW
API.VERSION	13.5a
API.LEVEL	00000713
API.ID	CAGSVS0001

REXX Variable	Value
API.COLOR	Alert color:
	0 - Default
	1 - Green
	2 - Blue
	3 - Red
	4 - White
	5 - Pink
	6 - Yellow
	7 - Turquoise
API.GROUP	Variable metric group name
API.NAME	Variable metric name
API.DESCRIPTION	Variable metric description
API.QMGR	Queue manager
API.RESOURCE	Associated resource
API.STATUS	Current status
API.VALUE	Current value
API.ELAPSED (New REXX variable)	Elapsed time after notification
API.TEXT	Exception message text

# Commands Added (MQ)

The Option for WebSphere MQ has been enhanced to include the following new command:

# **MQCHAUTH**

Displays the MQ channel authentications.

# **Commands Enhanced**

The following enhancements have been made to existing commands.

#### **MQALERTS**

WebSphere MQ exception alerts

# New syntax parameters:

- ACK Displays the alerts that are acknowledged and not acknowledged.
- NOACK Does not display acknowledged alerts.
- XSYStem, XSData This forces cross-system data collection be set on for this execution. The current profile setting of XSDATA is maintained.
- NOXSYStem, NOXSData This forces cross-system data collection be set off for this execution. The current profile setting of XSDATA is maintained.

#### **New line commands:**

- ACK Invokes the METRIC command to acknowledge the alert.
- CLR Invokes the METRIC command to clear an acknowledged alert.

#### New data fields:

- Ack Indicates that the alert has been acknowledged.
- Pri Indicates the relative priority of the exception.
- AckElaps Indicates the elapsed time after acknowledging the alert.
- AckDate Indicates the date that the alert was acknowledged.
- AckTime Indicates the time that the alert was acknowledged.

#### Renamed data fields:

Resource - Argument was renamed.

#### **MQCHAN**

MQ channel definitions

# New line commands:

■ AUTH - Invokes the MQCHAUTH command for the selected channel.

# **MQCHCRCV**

MQ cluster receiver channels.

#### New line commands:

■ AUTH - Invokes the MQCHAUTH command for the selected channel.

# **MQCHRCVR**

MQ receiver channels

# New line commands:

AUTH - Invokes the MQCHAUTH command for the selected channel.

# **MQCHSCON**

MQ server channels connected

#### New line commands:

■ AUTH - Invokes the MQCHAUTH command for the selected channel.

# **MQCHSTAT**

MQ channel status

# New syntax parameters:

■ ACTIVE - Filters out channels with a status of SAVED or INACTIVE.

#### New line commands:

AUTH - Invokes the MQCHAUTH command for the selected channel.

# **MQLIST**

MQ subsystem list

#### New line commands:

- REFEXP Issues a REFRESH QMGR TYPE(EXPIRY) command.
- REFPROXY Issues a REFRESH QMGR TYPE(PROXYSUB) command.

# **MQSTATES**

MQ state definition

#### New syntax parameters:

SAVE - Saves definitions to the persistent data store.

# New data fields:

- Pri The priority of an exception. Use priority to sort exceptions within the same status levels, such as PROBLEM.
- TimeBeg The beginning time that the definition is eligible to be applied. Specify the time using the HH:MM:SS format. You can define the time value using any of the following values:

```
12AM | 1AM | 2AM | ... | 11AM
12PM | 1PM | 2PM | ... | 11PM
NOON | MIDNIGHT
```

■ TimeEnd - The end time that the definition is eligible to be applied. Specify the time using the HH:MM:SS format. You can define the time value using any of the following values:

```
12AM | 1AM | 2AM | ... | 11AM
12PM | 1PM | 2PM | ... | 11PM
```

# NOON | MIDNIGHT

- TimeRng The time range or interval in which the definition is eligible to be used.
- Sun, Mon, Tue, Wed, Thu, Fri, Sat Specifies that the exception is eligible to execute on the specified day. To make a day eligible, type the three-character name in the appropriate field or enter YES. To make the day ineligible, type NO in the appropriate field.
- SMTWTFS The days of eligibility.
- Active The current active status of the definition. Possible values are:
  - ACTIVE The definition is currently eligible for processing.
  - INACTIVE The definition is currently not eligible for processing.
- Disabled Indicates whether the definition is currently enabled or disabled. If an exception definition is disabled, the definition is not used.

#### Renamed data fields:

■ IMOD - Run was renamed.

# **Deleted subcommands:**

■ DELETE - The DELETE subcommand has been removed. Use the DELETE line command to delete the definition.

#### **MQTHRESH**

MQ threshold definitions

#### New syntax parameters:

■ SAVE - Saves definitions to the persistent data store.

#### New data fields:

- Pri The priority of an exception. Use priority to sort exceptions within the same status levels, such as PROBLEM.
- TimeBeg The beginning time that the definition is eligible to be applied. Specify the time using the HH:MM:SS format. You can define the time value using any of the following values:

```
12AM | 1AM | 2AM | ... | 11AM
12PM | 1PM | 2PM | ... | 11PM
NOON | MIDNIGHT
```

■ TimeEnd - The end time that the definition is eligible to be applied. Specify the time using the HH:MM:SS format. You can define the time value using any of the following values:

```
12AM | 1AM | 2AM | ... | 11AM
12PM | 1PM | 2PM | ... | 11PM
NOON | MIDNIGHT
```

- TimeRng The time range or interval in which the definition is eligible to be used.
- Sun, Mon, Tue, Wed, Thu, Fri, Sat Specifies that the exception is eligible to execute on the specified day. To make a day eligible, type the three-character name in the appropriate field or enter YES. To make the day ineligible, type NO in the appropriate field.
- SMTWTFS The days of eligibility.
- Active The current active status of the definition. Possible values are:
  - ACTIVE The definition is currently eligible for processing.
  - INACTIVE The definition is currently not eligible for processing.
- Disabled Indicates whether the definition is currently enabled or disabled. If an exception definition is disabled, the definition is not used.

# Renamed data fields:

■ IMOD - Run was renamed.

### **Deleted subcommands:**

■ DELETE - The DELETE subcommand has been removed. Use the DELETE line command to delete the definition.

#### **MQVARS**

MQ monitor variables

#### Renamed data fields:

Resource - Argument was renamed.

# **Configuration Options Member - MQSERIES**

The configuration options member MQSDATA has been enhanced to include the following options:

### **API-LOAD-LIBRARY**

Specifies the name of the MQ Interface load library. Use the keyword LINKLIST if the library is present in the STEPLIB or LINKLIST concatenation or the interface modules have been placed in LPA.

Examples:

LINKLIST

MQSERIES.SCSQLOAD

The default value is NONE, meaning that the MQ API modules are not loaded.

#### **CHLAUTH-DATA-QUEUE**

Specifies the name of the queue that contains the channel authorization data.

# **CA APM Integration**

The CA SYSVIEW and CA APM integration has been enhanced.

# **IMS Transaction Tracing**

CA SYSVIEW extends CA APM Introscope Transaction Tracing into IMS. This increases end-to-end visibility to enhance a core Introscope value proposition for quickly isolating transaction performance problems.

# **Components**

The enhancements to the CA SYSVIEW components are provided in this section.

# **Audit Events Component**

The Audit Events component tracks or audits the activities and actions that are performed within the CA SYSVIEW product. The Audit Events component is designed to record activities that alter or change resources.

# **Audit Events Enhanced**

The following enhancements have been made to audit events.

# SESSION\_LOGOFF

The session termination record has been enhanced to include zIIP usage and SAF requests information.

The SAF statistics section only appears when the user has defined a SAF entity class for their user group.

# Section: zIIP utilization:

Total CPU time	18.32178	
TCB CPU time	6.954424	
SRB CPU time	11.36736	
Enclave time	11.36728	62.04%
zIIP time	11.08692	60.51%
zIIP on CP time	0.280360	2.47%
zIIP switches	372919	
zIIP ALESERV requests	1	
zIIP SRB starts	2	

# **Section: Command execution:**

Command SubCmd	Count Pct%	CPUTime EnclTime	ePct%	zSwitch
ACTIVITY	1 2%	0.017236 0.011443	66.39%	154
ACTSUM	2 4%	0.350080 0.349390	99.80%	10
CGBLEXIT	1 2%	0.005389 0.004375	81.18%	68
CICSLIST	1 2%	0.031654 0.026766	84.56%	106

# **Section: SAF statistics:**

SAF	calls made	1012
SAF	calls avoided	3267
	Total SAF calls	4279
	JQUE calls	0
	JTYP calls	0
	NTFY calls	1074
	USER calls	1410
	JOBN calls	1410
	DDNM calls	0

WTRN calls	0
RESN calls	345
CMND calls	10
SUBC calls	0
Other calls	30
Access Entity Table (AET) size	256K
SAF CPU time	0.101173
SAF elapsed time	0.765851
SAF exit CPU time	9.908062
SAF exit elapsed time	45.73008

# **GMI Graphic User Interface**

The CA SYSVIEW CA Vantage GMI component provides a modern GMI Windows GUI interface from which you can access and use CA SYSVIEW. This interface has been enhanced.

# **SYS--Objects Added**

The following objects have been added to the CA SYSVIEW CA Vantage GMI component interface:

- ASPERF Address Space Performance
- CPROFILE Profiles
- CURIMAPS URI Maps
- CXDISTAT Extern Data Interface
- DBBPOOLS Buffer Pools
- DBDSETS Open data sets
- DBERRMSG Error Messages
- DBLOGAL Log Allocation
- DBLOGCKP Log Checkpoint
- DBPRMBP Buffer Pool Parameters
- DBPRMGBP Group Buffer Pool Parameters
- DBPRMS System Parameters
- DBSQLDY SQL Dynamic Cache
- DBSTG Storage Statistics
- DBTHACT Active Threads
- IMSOMAT Operation Manager Audit Log
- IPEECONN EE Connections
- IPEESUM EE Summary
- LISTDIR List MODID Directory
- MODULES Modules with MODIDs
- MQCHAUTH Channel Authentication
- SYSDMON Data Collection Monitor

# **Objects Enhanced (GMI)**

The following objects have been enhanced:

# **ALERTS**

Displays z/OS exception alerts.

### New actions:

- Acknowledge Acknowledge the alert.
- Clear Clear an acknowledged alert.

#### **CALERTS**

Displays the CICS exception alerts.

# **New actions:**

- Acknowledge Acknowledge the alert.
- Clear Clear an acknowledged alert.

# **CDUMPMGT**

Displays a list of dump management definitions and statistics. Dump management lets you suppress unwanted dumps.

# **New actions:**

Delete - Deletes the selected definition.

# **DB2LIST**

Displays information about DB2 address spaces and subsystems that are currently defined or executing.

# New actions:

- Set Current Target Sets the current DB2 target address space.
- Start DB2
- Stop DB2
- Stop DB2 Force

# **IMSALERT**

Displays IMS data collection exception alerts.

# New actions:

- Acknowledge Acknowledge the alert.
- Clear Clear an acknowledged alert.

# **MQALERTS**

Displays MQ data collection exception alerts.

#### **New actions:**

- Acknowledge Acknowledge the alert.
- Clear Clear an acknowledged alert.

# **MQCHAN**

Displays MQ channel definitions.

#### New zooms:

Channel Authentications

#### **MQCHCRCV**

Displays information about cluster receiver channels.

#### New zooms:

Channel Authentications

# **MQCHRCVR**

Displays information about receiver channels.

#### New zooms:

Channel Authentications

# **MQCHSCON**

Displays information about the server connections.

#### New zooms:

■ Channel Authentications

# **MQCHSTAT**

Displays MQ channel status.

#### New zooms:

■ Channel Authentications

#### **STATES**

Displays the current state definitions.

#### **Deleted actions:**

 Delete - The delete object level action was removed. The line level action for Delete is available.

#### **TCPALERTS**

Displays the TCP exception alerts.

# New actions:

- Acknowledge Acknowledge the alert.
- Clear Clear an acknowledged alert.

# **THRESH**

Displays the current z/OS threshold definitions.

# **Deleted actions:**

 Delete - The delete object level action was removed. The line level action for Delete is available.

# **SYS--Objects Rename**

The following objects were renamed:

- JINIT was previously named INIT.
- JOUTDES was previously named OUTDES.
- JTRANQUE was previously named APPCOUTQ.

# **Object Tree Enhancements**

The object tree has been enhanced to include the following folders:

# CA SYSVIEW\Network\Enterprise Extender

Contains the new TCP enterprise extended commands.

# CA SYSVIEW\Databases\CA Datacom\MUF Database Monitoring

DCLOG and DCBUFP objects have moved to this folder.

# **Security**

CA SYSVIEW Security has been enhanced.

# **Security Data Set Conversion**

During installation, the conversion utility GSVXCNVS converts the security data set from a previous CA SYSVIEW release to the current release 13.5.

If the security file is converted, command authorization for commands that are introduced in 13.5 are marked as FAILED. Marking the commands as failed prevents new commands being introduced into an existing system without the examination of the security administrator.

The security administrator can update the command authorizations by logging on to CA SYSVIEW and then issuing the command SECURITY.

# **External Security Considerations**

New commands have been added to CA SYSVIEW in this release. Additional external security rules could be required.

The sample SAF exits SAFSECX and JSPLSECX are no longer supported. SAF entity checking is now internal to CA SYSVIEW. Enable SAF entity checking by defining a SAF entity class in the External Security Section of the internal security group for the user, or in the GLOBAL group.

You can call the pre-SAF notification exit before calling SAF. CA SYSVIEW passes the class name and entity name to the exit.

**Note:** For more information, see the *Security Guide*.

SAF resource calls can now be suspended for a specific resource type. Previously, the ability to suspend all resource calls could be done by granting a user read access to entity SV.SUSP.<system>.RESN. Now, a specific resource type can be suspended by granting a user read access to entity SV.SUSP.<system>.RESN.<resource>.

# **Example: Suspend Resource Checks**

Code the following suspend rule to suspend all resource checks for the output class a job on spool is in:

SV.SUSP.<system>.RESN.OUTCLASS

# **Commands Enhanced**

The following enhancements have been made to existing commands.

#### **SECURITY**

Security administration

#### Miscellaneous section

The Miscellaneous Section of a CA SYSVIEW security user group contains a new option to control the access to commands that have been defined in multiple command groups.

# Option(YES, NO)

Fail command if failed in any CMDGROUP. Valid values are:

YES - Denies access to the command when the command has been failed in any command group.

NO - Allows access to the command when the command has been allowed in any command group.

# **External security section**

- The External Security Section of a CA SYSVIEW security user group contains the following new options to control external security requests:
  - Option: SAF Entity Class Name

The SAF resource class name that is used when you want external security to validate the use of commands and other resources. Specify NONE to bypass SAF authorization calls. When NONE is specified, all command and resource validation is done using internal security definitions.

Option: SAF Entity Name Prefix

The prefix, or first node name, to be used to build the entity names for SAF calls. The prefix is only used when a SAF entity class is defined.

Option: Use JESSPOOL for Job Validation

Specify a value of YES if you want to use JESSPOOL resources for all job name validation calls. All other resource verifications still use the resources that are defined for the SAF Entity Class Name. If you want SAF to verify only JESSPOOL resources (no SAF calls for CMND, SUBC, RESN, and so on), then specify JESSPOOL for the SAF Entity Class Name.

- Option: Use System SMFID in Entity Name

Specify if you want the SAF entity name to contain the system SMFID as the third node. This option only applies when a SAF entity class is defined.

Option: Use System QUAL in Entity Name

Specify if you want the SAF entity name to contain a qualifier following the resource type. Some example qualifiers would be JES2 for JES resource types, or the subsystem ID for IMS resources. This option only applies when a SAF entity class is defined.

Option: SAF Exit Name

The name of an optional user exit that is invoked before SAF. The exit is passed the entity class and entity name.

- Option: Access Entity Table Size (KB)

The initial size of the SAF Access Entity Table (AET). The AET is used to cache responses to SAF calls so subsequent calls can retrieve them for the same entity name. Using the AET improves performance. The size of the AET is specified in K. AET storage is allocated above the 2G bar. If you specify a value of zero, no AET is used.

# **Security Resources Added**

The security resources have been enhanced to include the following new resource:

# **JESGROUP**

JES job class groups.

# **REXX Environment**

The CA SYSVIEW REXX function has been enhanced.

# **REXX Functions Added**

The CA SYSVIEW REXX function has been enhanced to include the following new commands:

- ABEND Forces an abend in a REXX EXEC.
- BLDPARM Returns a standard CA SYSVIEW command string parameter for a supplied character string.
- MCCOMP Masked character compares a pattern string with an argument string.

# **User Defined Displays**

CA SYSVIEW lets users create their own command displays. Use the following process to create the displays:

- 1. Use REXX to build the user command displays.
- 2. Use the RXDISP command to invoke a REXX EXEC.
- 3. Use the data queued to the REXX stack to create the CA SYSVIEW display.

The display can be simple rows of text data, or can be formatted using extended attributes.

The user display can support the following functions:

- Extended attributes
- Online help
- Line commands
- Selection
- Sorting

# **User Defined Commands**

The commands that the user defines have been enhanced.

# **User Command Definition**

The user command definition has been extended to allow a HELP member to be associated with the user command.

DEFINE commandname
MINlen nn
DESCription ' '
HELP member
CMDstring string
ENDDEFINE

Example product supplied user commands:

# **CICSDATA**

CICS data collect dashboards

# **DASHboard**

Display dashboards

# **FILEList**

Multi-DSN Directory

# **GOTOCICS**

Go to the CICS region

#### **LOAN**

Loan calculator

# LOGOFF

Logout of the product

# **MQCLUSTERTopic**

Cluster MQ Topic objects

# MQLOCALTopic

Locally defined MQ Topic objects

# **NEWCHELP**

LibCache reload the HELP library

# **NEWCPARM**

LibCache reload parameter library

# **NEWCTEMP**

LibCache reload template

#### **PROBlem**

Select problem lines

# **STARTSYSVIEW**

Start SYSVIEW Main address space

# **STOPSYSVIEW**

Stop SYSVIEW Main address space

# **STP**

Server Time Protocol

# **SYSVDATA**

SYSVIEW data collect dashboards

# **SYSVZIIP**

SYSVIEW zIIP usage dashboard

# **TOPCPU**

Top 10 CPU address spaces

# **UNIQflds**

Unique fields

# **WARNing**

Select warning lines

# **Dashboards**

The dashboard feature provides the ability to create customized screen views and combine data from various CA SYSVIEW sources (CICS, MQ, DATACOM, IMS, JES, and z/OS) to enhance performance management and troubleshooting capabilities.

The dashboard display consists of horizontal areas, or windows, and each window is divided into one or more areas or panes. You can display multiple CA SYSVIEW and user commands in the window panes.

For more information, see the online help topic Dashboards.

# **Dashboard Definition Syntax**

The dashboard definition syntax has been enhanced to include new window processing options.

# **OPTIONS Statement**

When the OPTIONS statement is found after a DEFINE WINDOWS statement, and before the first DEFINE PANE statement, the options apply to the window:

 ADDBLANK - Adds a blank line to the end of each pane in the window which creates separation from the window that follows and can help improve the aesthetics of the dashboard.

# Pane option INFO

The pane option INFO can now also be specified as INFO(s,e). The dashboard topic describes it as:

■ INFO, INFO(s,e) - Adds informational rows to the pane. By default they are not displayed.

The form INFO(s,e) can be used to display a subset of informational rows. 's' is the starting row number and 'e' is the ending row number. The parameters can also be specified as:

- INFO(s) Displays informational rows 's' through the end of the rows.
- INFO(,e) Displays informational rows 1 through 'e'.