

CA SYSVIEW® Performance Management

Best Practices Guide

Release 13.7



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CA Technologies Product References

This document references the following CA Technologies products:

- CA SYSVIEW® Performance Management (CA SYSVIEW)
- CA Graphical Management Interface (CA GMI)

Contact CA Technologies

Contact CA Support

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

- 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 techpubs@ca.com.

To provide feedback about CA Technologies product documentation, complete our short customer survey which is available on the CA Support website at <http://ca.com/docs>.

Best Practices Guide Process

These best practices represent years of product experience, much of which is based on customer experience reported through interviews with development, technical support, and technical services. Therefore, many of these best practices are truly a collaborative effort stemming from customer feedback.

To continue and build on this process, we encourage users to share common themes of product use that might benefit other users. Please consider sharing your best practices with us.

To share your best practices, contact us at techpubs@ca.com and preface your email subject line with "Best Practices for *product name*" so that we can easily identify and categorize them.

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Chapter 1: Introduction

This section contains the following topics:

[Purpose of this Guide](#) (see page 7)

[Audience](#) (see page 7)

[Mainframe 2.0 Overview](#) (see page 7)

[Mainframe 2.0 Features](#) (see page 8)

Purpose of this Guide

The guide provides a brief introduction to the CA Technologies mainframe management strategy and features, and describes the best practices for installing and configuring CA SYSVIEW.

Audience

The intended audience of this guide is systems programmers and administrators who install, configure, deploy, and maintain CA SYSVIEW.

Mainframe 2.0 Overview

Mainframe 2.0 is our strategy for providing leadership in the mainframe operating environment. We intend to lead the mainframe marketplace for customer experience, Out-Tasking solutions, and solution innovation. After listening to customer needs and requirements to keep the mainframe operating environment viable and cost-effective, we are providing new tools to simplify usage and to energize this operating environment for years to come.

CA Mainframe Software Manager™ (CA MSM) is an important step in realizing the Mainframe 2.0 strategy. CA MSM simplifies and standardizes the delivery, installation, and maintenance of mainframe products on z/OS systems. CA MSM has a browser-based user interface (UI) with a modern look and feel for managing those solutions. As products adopt Mainframe 2.0 features and CA MSM services, you can acquire, install, and manage your software in a common way.

CA MSM provides software acquisition and installation that make it easier for you to obtain and install CA mainframe products, and apply the recommended maintenance. The services within CA MSM enable you to manage your software easily based on industry accepted best practices. The common browser-based UI makes the look and feel of the environment friendly and familiar.

We follow the IBM z/OS packaging standards using SMP/E, with some additional CA qualities of service added, to make installation simple and consistent. Additionally, through the synchronization of product releases and the use of common test environments, we will declare a yearly mainframe software stack that includes many new releases with enhanced functionality. This stack is certified for interoperability across the CA mainframe product portfolio and the base IBM z/OS product stack.

Mainframe 2.0 Features

Mainframe 2.0 has the following main features:

CA Mainframe Software Manager (CA MSM)

Delivers simplified acquisition, installation, and deployment capabilities using a common z/OS-based web application delivered through a browser-based UI. CA MSM includes the following services:

Product Acquisition Service (PAS)

Facilitates the acquisition of our mainframe products and services, including product base installation packages and program temporary fixes (PTFs). This service integrates the inventory of products available on your system with CA Support, providing a seamless environment for managing and downloading software and fixes onto your system.

Software Installation Service (SIS)

Facilitates the installation and maintenance of our mainframe products in the software inventory of the driving system. This service enables you to browse and manage the software inventory using a web interface, and automates tasks for products that use SMP/E to manage installation. You can browse downloaded software packages, and browse and manage one or more consolidated software inventories (CSIs) on the driving system.

Software Deployment Service (SDS)

Facilitates the deployment of CA Technologies mainframe products from the software inventory of the driving system. This service enables you to deploy installed products that are policy-driven with a set of appropriate transport mechanisms across a known topology. The enterprise system topology can include shared DASD environments, networked environments, and z/OS systems. Policies represent a combination of metadata input and user-supplied input. Metadata input identifies the component parts of a product. User-supplied input identifies the deployment criteria, such as where it goes and what it is named.

Software Configuration Service (SCS)

Facilitates the mainframe products configuration from the software inventory of the driving system to the targeted z/OS mainframe operating system. The SCS guides you through the configuration creation process, and through the manual steps to implement the configuration. In addition, the SCS includes an address space communications service running on each targeted z/OS system.

Electronic Software Delivery (ESD)

Enables you to get our products from an FTP server. We have improved this process so that you no longer need to build a tape to install the product.

Best Practices Management

Integrates with IBM Health Checker for z/OS to verify that deployed software follows our best practices. The health checks continually monitor the system and software to provide feedback on whether the software continues to be configured optimally.

Best Practices Guide

Provides best practices for product installation and configuration.

Chapter 2: Installation Best Practices

This section contains the following topics:

[Install Using CA MSM](#) (see page 11)

[Keep Current on CA Common Services](#) (see page 12)

[Install on Test System First](#) (see page 12)

[Display Software Versions](#) (see page 12)

Install Using CA MSM

Use the CA Mainframe Software Manager (CA MSM) to acquire, install, and maintain your product.

Business Value:

CA MSM provides a web interface, which works with ESD and standardized installation, to provide a common way to manage CA mainframe products. You can use it to download and install CA SYSVIEW.

CA MSM lets you download product and maintenance releases over the Internet directly to your system from the CA Support website. After you use CA MSM to download your product or maintenance, you use the same interface to install the downloaded software packages using SMP/E.

Additional Considerations:

After you install the product, follow the appropriate steps in the *CA SYSVIEW Installation Guide* to set it up. CA MSM can continue to help you maintain CA SYSVIEW.

More Information:

For more information about CA MSM, see the *CA Mainframe Software Manager Guide*. For more information about product setup, see the *CA SYSVIEW Installation Guide*.

Keep Current on CA Common Services

Make sure you have installed the most current release of CA Common Services.

Business Value:

The latest release of CA Common Services contains the most current infrastructure updates allowing you to use newer features of CA SYSVIEW, including licensing changes, service desk integration, and product health checks. Staying on the current release and service pack of CA Common Services helps you avoid problems encountered by others, getting you up to speed sooner and without as many problems.

Install on Test System First

Perform your installation and initial evaluations of the product and its components on a test system. New releases of CA SYSVIEW are always compatible with previous releases, letting you run a new release on a test system while still running the older version on a production system.

Business Value:

Evaluating CA SYSVIEW in a test environment helps you detect any possible problems before you roll out the product to a production system.

Display Software Versions

Display the CA Technologies, IBM, and Chicago-Soft software and software versions running at your site by issuing the command SOFTWARE.

Business Value:

Maintaining supported software and the many software versions available at your site is difficult. Quickly reviewing the installed software and software versions at your site simplifies upgrading and maintaining your software.

Chapter 3: Configuration Best Practices

This section contains the following topics:

[Data Collection Metrics for Optimal Performance](#) (see page 14)

[Authorized Product Features](#) (see page 14)

[Online Help](#) (see page 15)

[Dashboards](#) (see page 16)

[zIIP Processors](#) (see page 16)

[Workload Manager](#) (see page 17)

[Control Data Collection](#) (see page 17)

[Event Captures](#) (see page 18)

[Persistent Data Storage DATALIB-AUTO-SAVE](#) (see page 19)

[View Library Status](#) (see page 20)

Data Collection Metrics for Optimal Performance

Make sure you limit the data collection by enabling or disabling the collection metrics.

Business Value:

When you decide to collect information but not on all possible resources and metrics, limiting the data collection provides many benefits.

In this situation, disabling unwanted or unneeded data collection metrics reduces CPU cycles and the amount of data collection data spaces storage. The reduction in data space storage also reduces the amount of real storage that the SYSVAASST data anchor address space uses.

Additional Considerations:

The CA SYSVIEW data collector components collect, monitor, and provide exception processing for many resources and metrics.

The following CA SYSVIEW parmlib members limit the data collection by enabling or disabling the collection metrics:

- MVSVARS defines the MVS metrics.
- MQSVARS defines the WebSphere MQ metrics.
- IMSVARS defines the IMS metrics.
- TCPVARS defines the TCP/IP metrics.
- CICSSTAT - Defines the CICS metrics.

More Information:

For more information, see the CA SYSVIEW online help and the chapter "Data Collection" in the *Administration Guide*.

Authorized Product Features

Display information about the defined, selected, and authorized product features by issuing the command FEATURES.

Business Value:

CA SYSVIEW provides many options and features. The FEATURES command lets you quickly see all features and options that are authorized at your site.

Online Help

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

- Online help commands
- Online reference materials in the Online Help Information menu

Business Value:

CA SYSVIEW has many features and can overwhelm new users. However, users have access to substantial online help that provides understanding and potentially saves money on training.

Additional Considerations:

You can access online help by issuing the command HELP from the following areas:

- A display
- Anywhere in CA SYSVIEW with the appropriate parameter
- A displayed message
- The Main Menu

More Information:

For more information, see the *User Guide*.

Dashboards

Dashboards provide performance statistics and data in window panes displayed in a single display. Multiple CA SYSVIEW commands and user commands generate the data contained in each window pane.

To customize your dashboards, modify the template RXDISP DASHBOARD that is shipped with the product.

Business Value:

Dashboards increase productivity by providing multiple panes of relevant statistics that let you accurately customize your system for more real-time value.

Additional Considerations:

You can display a list of defined dashboards by entering the command DASHBOARD.

More Information:

For more information, see the *User Guide*.

zIIP Processors

Elect to use the IBM System z Integrated Information Processor (zIIP) when you set up your regions.

Business Value:

zIIP processors let you achieve the following goals:

- Reduce the execution time on the central processing unit (CPU)
- Free up processing cycles from the CPU to other work
- Exploit the zIIP processing power

These benefits save you billable CPU time.

Additional Considerations:

The command ACTSUM displays all address spaces that use zIIP processors.

More Information:

For more information, see the *Administration Guide*.

Workload Manager

Determine your workload using the Workload Manager component and dispatch all appropriate jobs to your zIIP processor.

Business Value:

zIIP processors let you achieve the following goals:

- Reduce the execution time on the central processing unit (CPU)
- Free up processing cycles from the CPU to other work
- Exploit the power of zIIP processing

These goals provide benefits that save you billable CPU time.

Additional Considerations:

The command WMENCLAV provides useful information about the WLM enclaves that are utilizing the zIIP processors.

Control Data Collection

Data collection is the process of gathering data metrics over a specified period. You can control data collections and exception processes by enabling and disabling your collection metrics. The CA SYSVIEW Event Scheduler lets you configure your metrics to initiate functions at a specified time or recurring interval.

Business Value:

Initiating processes and functions that are based on a predefined time schedule is an important part of operating a computer system. Using the Event Scheduler to control or limit your data collection metrics eliminates the collection of unwanted or unneeded data. Collection of unused information wastes important system resources and CPU cycles.

Additional Considerations:

Exception processing analyzes collected data and provides alerts and notifications that are based on user-defined criteria.

More Information:

For more information, see the *Administration Guide*.

Event Captures

Capture and provide historical event information using the CA SYSVIEW Event Capture option. This option displays requested information that you gathered using the following methods:

- When the threshold was met
- On an interval basis
- Through a capture command

Business Value:

The CA SYSVIEW Event Capture option captures critical event data. This data lets you analyze the cause of past system events and performance problems for problem determination and systems tuning. CA technical support requests Event Capture data for customer support issues.

Additional Considerations:

An additional capability of the CA SYSVIEW Event Capture option supports SMF data collection logging and RMF past performance displays. The collected data is logged to an MVS log stream. Log stream maintenance lets you view the SMF data for retroactive performance problem resolution.

To display the Event Capture menu, issue the command CAPTURE.

More Information:

For more information, see the *Administration Guide*.

Persistent Data Storage DATALIB-AUTO-SAVE

Specify that your configuration definitions be saved automatically to the persistent data storage (DATALIB) during initialization and termination.

Obtaining configuration information by reading the definitions from a PARMLIB member (COLD start) automatically saves the information to the persistent data storage. This process makes a WARM start possible.

WARM start and COLD start defined:

- Warm (Default) retrieves configuration information from the persistent data storage. Configuration information from the previous session is restored.
- Cold retrieves configuration information from the PARMLIB member. Configuration information from the previous session is not restored.

Business Value:

During termination, configuration information that has been altered or updated after initialization is automatically saved to the persistent data storage. The persistent data storage lets the configuration be reused on the next WARM start.

Additional Considerations:

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

- CICSARTM
- CISCNCL
- CICSDFMPM
- CICSGRPS
- CICSCHD
- CICSSTAT
- CICSSTHS
- CICSSTOPT

More Information:

See the Persistent Data Storage chapter in the *Administration Guide*.

View Library Status

Verify the state and status of your library by using the Library Viewer. The Library Viewer lets you view the contents of a library member.

To access the Library Viewer, issue the command LIBVIEW.

Business Value:

The Library Viewer displays valuable resource information that you use to configure your system and set your thresholds for alerts.

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