

CA SYSVIEW® Performance Management

Best Practices Guide

Version 14.0



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 © 2014 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 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 are based on customer experience reported through interviews with development, technical support, and technical services. Therefore, many of these best practices are a collaborative effort stemming from customer feedback.

To continue to build on this process, we encourage you 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.

Contents

- Chapter 1: Introduction** **7**

- Chapter 2: Your Product Installation Best Practices** **9**
 - Implement a Proactive Preventive Maintenance Strategy9
 - Display Software Versions.....11

- Chapter 3: Your Product Configuration Best Practices** **13**
 - Data Collection Metrics for Optimal Performance14
 - Authorized Product Features14
 - Online Help15
 - Dashboards16
 - zIIP Processors.....16
 - Workload Manager17
 - Control Data Collection17
 - Event Captures18
 - Persistent Data Storage DATALIB-AUTO-SAVE19
 - View Library Status.....20

- Index** **21**

Chapter 1: Introduction

The guide introduces the CA Technologies mainframe management strategy and features, and describes the best practices for installing and configuring your product.

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

Chapter 2: Your Product Installation Best Practices

This section contains the following topics:

[Implement a Proactive Preventive Maintenance Strategy](#) (see page 9)

[Display Software Versions](#) (see page 11)

Implement a Proactive Preventive Maintenance Strategy

CA Technologies formerly delivered product maintenance using Service Packs. We have replaced this model with [CA Recommended Service \(CA RS\) for z/OS](#), which provides more flexibility and granular application intervals. CA RS is patterned after the IBM preventive maintenance model, Recommended Service Upgrade (RSU). With CA RS, you can install preventive maintenance for most CA Technologies z/OS-based products in a consistent way on a schedule that you select (for example, monthly, quarterly, annually).

We recommend that you develop and implement a proactive preventive maintenance strategy whereby you regularly apply maintenance. You could follow the same schedule that you use to apply IBM maintenance, or you could implement a schedule for CA Technologies products only.

Business Value:

Keeping your products current with maintenance helps your team remain productive and minimize errors while safely protecting your systems. If you do not install preventive maintenance regularly, you risk encountering known problems for which we have published and tested fixes.

Our mainframe maintenance philosophy is predicated upon granting you the flexibility to maintain your sites and systems consistent with industry best practices and site-specific requirements. Our philosophy focuses on two maintenance types. Understanding each type can help you maintain your systems in the most efficient manner.

Note: This philosophy applies to the [CA Next-Generation Mainframe Management stack products](#). For legacy products, contact CA Support for maintenance details.

Corrective Maintenance

Helps you address a specific and immediate issue. This type of maintenance is necessary after you encounter a problem. We may provide a test APAR when a new problem is uncovered, or a confirmed PTF when the problem has been resolved. Your primary goal is to return your system to the same functional state that it was before you experienced the issue. This type of maintenance is applied on an as-needed basis.

Preventive Maintenance

Lets you apply PTFs that we have created and made public. You may have experienced the issues that each PTF addresses. CA RS provides a way to identify all published maintenance that has been successfully integration-tested. This maintenance has been tested with other CA Technologies products, current z/OS releases, and IBM subsystems, such as CICS and DB2. Major CA RS service levels are published quarterly, with updates for HIPER and PE-resolving PTFs that are published monthly. After you test the CA RS level, we recommend that you accept that level before you apply a new CA RS level.

You can initiate a maintenance installation activity at any time. You can then install the current CA RS level of maintenance (recommended) or an earlier level. Additionally, you can install maintenance to support a new hardware device, software upgrade, or function using our [FIXCAT](#) method.

For all maintenance, *before* you initiate any maintenance action, obtain the current SMP/E HOLDDATA.

Important! [CA Chorus™ Software Manager \(CA Chorus Software Manager\)](#) - formerly known as CA Mainframe Software Manager™ (CA MSM) - is an intuitive web-based tool that can automate and simplify many CA Technologies product installation and maintenance activities. We strongly recommend that you use CA Chorus Software Manager to maintain your CA Technologies z/OS-based products.

More Information:

To apply preventive maintenance using CA Chorus Software Manager or from CA Support Online on <http://ca.com/support>, see the *Installation Guide* for your product and the CA Chorus Software Manager online help.

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: Your Product 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
- CICSNCNL
- CICSMDMPM
- CICSGRPS
- CICSCHD
- CICSSTAT
- CICSTHRS
- 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.

Index

A

Authorized Product Features • 14

C

CA Technologies Product References • 3

Contact CA Technologies • 3

Control Data Collection • 17

D

Dashboards • 16

Data Collection Metrics for Optimal Performance •
14

Display Software Versions • 11

E

Event Captures • 18

I

Implement a Proactive Preventive Maintenance
Strategy • 9

Introduction • 7

O

Online Help • 15

P

Persistent Data Storage DATALIB-AUTO-SAVE • 19

V

View Library Status • 20

W

Workload Manager • 17

Y

Your Product Configuration Best Practices • 13

Your Product Installation Best Practices • 9

Z

zIIP Processors • 16