

CA SymDump® System

Best Practices Guide

Release 9.1.00



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CA Technologies Product References

This document references the following CA products:

- CA SymDump® Batch
- CA SymDump® for CICS
- CA SymDump® System
- CA Chorus Software Manager™ (CA CSM)

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.

Documentation Changes

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

- Changed the release number to Release 9.1.00.
- [Introduction](#) (see page 9)—Streamlined and improved.
- Installation best practices and configuration best practices have been moved into a single chapter "[Installation and Configuration Best Practices](#) (see page 11)."
- [Implement a proactive Preventive Maintenance Strategy](#) (see page 17)—Added to the guide.

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Chapter 1: Introduction

This guide 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: Installation and Configuration Best Practices

This section contains the following topics:

[Use CA Chorus Software Manager for Installation](#) (see page 11)

[Use Electronic Software Delivery](#) (see page 12)

[CA Common Services](#) (see page 12)

[IBM APARs](#) (see page 12)

[Installation in a Test Environment](#) (see page 13)

[Common Symbolic Component](#) (see page 13)

[Installation with Other SVC 51 Intercepts](#) (see page 15)

[Managing Multiple Dump Indexes](#) (see page 16)

[Storage and Report Data Set Allocation](#) (see page 17)

[Implement a Proactive Preventive Maintenance Strategy](#) (see page 17)

Use CA Chorus Software Manager for Installation

Use CA CSM to acquire, install, deploy, and maintain your product. Although CA CSM is the preferred method for installing CA Technologies mainframe products, some sites may decide to use the Electronic Software Delivery (ESD) installation method instead.

Business Value:

CA CSM provides a web interface, which works with ESD and standardized installation, to provide a common way to manage CA Technologies mainframe products. You can use it to download, install, and deploy your product.

CA CSM lets you download product and maintenance releases over the Internet directly to your system from the CA Support website. After you use CA CSM to download your product or maintenance, you use the same interface to install the downloaded software packages using SMP/E. After installation, deployments allow system objects to be deployed across your enterprise's different environments.

For more information about CA CSM, see the *CA Chorus Software Manager Product Guide*. For more information about installation, see the *Installation Guide*.

Use Electronic Software Delivery

Although CA CSM is the preferred method for installing your CA Technologies mainframe products, some sites may decide to use the Electronic Software Delivery (ESD) method instead. For sites who have decided to use ESD, download the installation files from ca.com/support and install directly from your disk.

Business Value:

Using electronic software delivery (ESD) avoids ordering, shipping, and processing physical tape media to install the application. It is more timely, more cost-effective, and environmentally friendly. It uses standard z/OS utilities to prepare the product installation image on your system.

For information about how to download your CA Technologies products from the CA Support Online web site for installation using the enhanced ESD pax process, see the *Installation Guide*.

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 successfully use the latest features and preventing potential errors that can occur from using out-of-date services.

For more information about CA Common Services, see the *Installation Guide*.

IBM APARs

No IBM APARs are required at this time.

Business Value:

There are no known IBM APARs that impact the operation or performance of the product. You may apply the most recent IBM APARs appropriate for your environment as needed.

Installation in a Test Environment

Perform your installation and initial evaluations of a new release of the product and its components on a test system.

Business Value:

New releases of CA Technologies testing tools can always co-exist with previous releases, letting you test a new release on a test system while still running the older version on a production system. Evaluating the product in a test environment lets you detect any possible problems before you roll out the product to a production system.

Additional Considerations:

Always be sure to review any migration considerations in the *Installation Guide* before upgrading your CA Technologies product.

Common Symbolic Component

When installing more than one of the CA Technologies mainframe testing tools, we recommend that you install and maintain only one version of CA Technologies common symbolic component that is shared by all of the testing tool products.

Several testing tool products (CA InterTest Batch, CA InterTest for CICS, CA SymDump for CICS, CA SymDump Batch, CA Optimizer/II, and CA Mainframe Application Tuner) each distribute the common symbolic component in the VH FMID. This FMID was named CVHrr00 in previous versions and is now named CAVHrr0. The *rr* portion of the FMID contains the version number. For example, CAVH910 contains the symbolic common component provided with Release 9.1.00.

When installing any of these CA Technologies testing tool products, first query your Consolidated Software Inventory (CSI) to determine whether you already have a version of CVHrr00 or CAVHrr0 installed. If you use one CSI for all of your testing tool products then you need to perform only one query for these FMIDs. If you have one CSI for each testing tool product then you will need to query each CSI.

If you locate an installed version of CVHrr00 or CAVHrr0 during your query, compare the *rr* in your installed version of that FMID with the *rr* in the FMID provided with the product you are installing. Replace your existing FMID only if the *rr* in the product you are installing is higher than the *rr* in your existing function.

Business Value:

By installing and maintaining a single version of the CA Technologies common symbolic component, you reduce your maintenance effort, save disk space, and eliminate the possibility of executing symbolic utilities that are not up to date with the latest maintenance.

Additional Considerations:

The APPLY job of the installation places an SMP/E copy of the CAVHrr0 function in a library; however, many companies do not execute the testing tool products from this library. Therefore, always be sure to make the executables for the common symbolic component available for the testing tools products to use.

There are many ways to make the executables for the common symbolic component available, including:

- LNKLIST
Always update your LNKLIST library after applying maintenance to CAVHrr0 if you have copied the executables for the common symbolic component from CAVHrr0 into a separate load library that you have added to your LNKLIST for all products to share.
- STEPLIBs
- CLISTs (for ISPF interfaces)

We recommend using the LNKLIST method because it has the specific advantage of making the executables available to all CA Technologies products with no additional changes to any JCL or CLISTs. If you cannot use LNKLIST for some reason (for example, your company has issues with updating LNKLIST or has specific rules prohibiting or limiting the use of LNKLIST), it is acceptable to add these executables to your STEPLIB or CLIST allocations. However, using STEPLIB or CLIST requires more initial setup and can be difficult to maintain if library names change.

Installation with Other SVC 51 Intercepts

If you have multiple products that use an intercept for SVC 51, run CAIRIM to initialize CA SymDump System after all other products.

Business Value:

Initializing CA SymDump System after all other products have been initialized helps ensure that CA SymDump System will get control first. This enables the most accurate possible analysis and reporting before any possible interference can occur.

Additional Considerations:

When CA SymDump System is initialized, it replaces the address of SVC 51, the DUMP SVC. When the product is finished with its reporting, it will take one of the following actions, depending on the SDUMP option.

- If the SDUMP option is OFF, control will be returned to the operating system.
- If the SDUMP option is ON, control will be given to the address that was replaced when CA SymDump System was initialized.

Therefore, if any other product, such as CA SymDump System, that intercepts SVC 51 was initialized before CA SymDump System, that product will not get control unless the SDUMP option is set to ON.

CA SymDump Batch is the exception to this rule. If you have CA SymDump Batch, check the following items:

- CA SymDump Batch is initialized *after* CA SymDump System
- Your CA SymDump Batch DUMP option is set to ON

Configuring the two CA SymDump products in this way lets you get the maximum value out of both products.

Managing Multiple Dump Indexes

When configuring CA SymDump System, you must set your default dump index.

Note: The dump index is the VSAM data set that maintains the location of your dumps and reports.

Care must be taken to determine if your installation requires the use of more than one dump index. You could have one index for multiple z/OS systems or one per system. While one dump index can be shared across multiple LPARs, only one dump index can be active for a given LPAR.

Business Value:

Well managed repositories let your application programmers easily locate, access, and share dumps for their applications.

As a result, you get better performance from your CA testing tools, optimal use of your DASD space, and the best possible productivity for your application programmers.

Additional Considerations:

When CA SymDump System is configured, the default dump index is defined with the INDEX option of CADVTABL. However, not all installations may prefer using one repository. Some installations may want a specific index for their production systems and another set for their test systems. To provide this flexibility, you must maintain multiple copies of the CADVTABL options table.

More information:

For information on using the dump index file, see the *CA SymDump System Administration Guide*.

Storage and Report Data Set Allocation

Two data sets are created during dump capture:

- A data set containing the reports generated by CA SymDump System
- A storage data set populated by SDUMP

During the configuration of CA SymDump System, be sure to update the CADVTABL INDEX option with the space allocation parameters for the storage data set and the reports data set. Always be sure to allocate enough primary space for the storage data set.

Business Value:

Providing sufficient space for the storage and reports data sets prevents out-of-space errors on those data sets. It also ensures that CA SymDump System can capture a complete dump and that all the reports are generated by CA SYSVIEW the first time a job abends. This best practice eliminates the need to adjust the space allocation parameters at a later date and rerun jobs, saving CPU cycles as well as the programmer's time and effort.

Additional Considerations:

When you define the destination of the storage and dump data sets, you can use a specific UNIT and VOLUME. Alternatively, you can specify an SMS class to manage the destination.

More information:

For specific instructions on defining the space allocation for the reports and storage data sets, see the *CA SymDump System Installation Guide*.

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 Chorus Software Manager Enabled 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. CA RS levels are published monthly that include PTFs, HIPERs and PRPs (PE-resolving PTFs). Before you download, apply, and test a new CA RS level, we recommend that you accept the previous 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 the [FIXCAT](#) method.

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

Important! [CA Chorus™ Software Manager \(CA CSM\)](#) - 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 CSM to maintain your CA Technologies z/OS-based products.

More Information:

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