

PRODUCT SHEET
CA SymDump for CICS

CA SymDump® for CICS Version 9.0



CA SymDump® for CICS is a comprehensive online facility that helps you diagnose IBM CICS Transaction Server (CICS) for z/OS transaction failures. It presents dumps in an easy-to-read source statement format and aids you in resolving problems in production. It is also helpful in addressing sporadic problems that cannot easily be re-created.

Overview

CA SymDump for CICS intercepts CICS abends and helps you resolve issues promptly and efficiently. By highlighting the source statement that triggered the abend, identifying the values of data items and providing formatted displays of trace information, this solution helps you more efficiently assess and resolve CICS errors.

Business value

Like many organizations, you rely on CICS-based applications to help you deliver critical functionality to your customers. Application outages, abends, logic errors and performance issues often lead to frustrated customers, lost revenue and unforeseen costs. CA SymDump for CICS helps you quickly identify and resolve CICS-based application failures, promoting increased application reliability.

Features

Mainframe 2.0

CA SymDump for CICS has adopted key Mainframe 2.0 features that are designed to simplify your use of CA SymDump for CICS and enable your staff to install, configure and maintain it more effectively and quickly.

- **CA Mainframe Software Manager™:** CA Mainframe Software Manager (CA MSM) automates CA SymDump for CICS installation and maintenance and removes SMP/E complexities.
 - **The Product Acquisition Service** enables you to easily move product installation packages and maintenance from CA Support Online directly to your mainframe environment and prepare them for installation.
 - **The Software Installation Service** standardizes CA SymDump for CICS installation, which includes a new, streamlined Electronic Software Delivery (ESD) method that allows CA SymDump for CICS to be installed using standard utilities. This service also provides standardized SMP/E product installation and maintenance via APARs and PTFs, and simplifies SMP/E processing through an intuitive graphical user interface and an intelligent Installation Wizard.
 - **The Software Deployment Service** enables you to more easily deploy CA SymDump for CICS in your mainframe environment.
- **Installation Verification Program (IVP) and Execution Verification Program (EVP):** As part of qualification for inclusion in the set of CA Technologies mainframe products released every May, CA SymDump for CICS has passed stringent tests performed through the IVP and EVP to find and resolve interoperability problems prior to release. These programs are an extension of our ongoing interoperability certification initiative launched in May 2009.
- **Best Practices Guide:** This Guide provides information on CA SymDump for CICS installation, initial configuration and deployment to shorten the learning curve for staff who are responsible for the installation and management of this product.

What's New in CA SymDump for CICS Version 9.0

New Graphical User Interface Based on Eclipse: CA SymDump for CICS now includes a graphical user interface that provides a common look and feel and consistent functionality where applicable across all CA SymDump products. This graphical user interface includes:

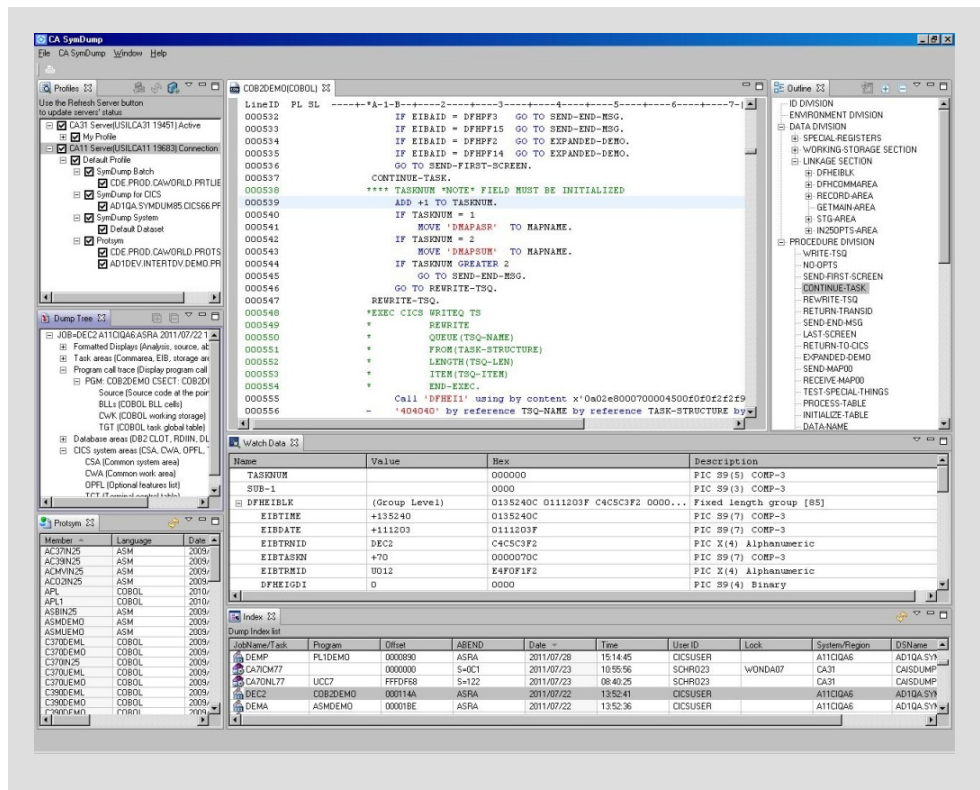
- A plug-in deliverable for Eclipse users and a Rich Client Platform (RCP) deliverable for non-Eclipse users. Both are CA MSM compatible to facilitate easy installation and upgrades.

- Support for IBM Rational Developer for System z® (RDz) to help provide seamless integration between the CA SymDump graphical user interface and the RDz integrated development environment.
- Specialty views that expedite the fault analysis and resolution process, including fault repository views, source and data views, analysis views and CICS trace views.
- User-customizable views and perspectives and user-defined profiles that help you maximize your effectiveness.
- Value-add features such as the Watch View, which helps you to more quickly examine data fields and assess their role in, and relationship to, the problem.
- Incorporated product-use guidelines including basic help with contents and index search, dynamic help and cheat sheets. This facilitates interactive training, decreases the learning curve, increases adoption rate, and helps you become more effective quickly.

FIGURE A.

New CA SymDump for CICS Graphical User Interface

The new CA SymDump graphical user interface helps both the new and experienced mainframe programmer more easily analyze and resolve batch, CICS and system faults.



Other Key Features

- **Symbolic dump display:** With CA SymDump for CICS, you can display a dump symbolically, beginning at the source statement where your program abended. This capability makes it easy to display the value of any program variable because you can refer to every location by the actual data names you define. Symbolic support also applies to data in main storage and to IBM CICS system-related areas and extensive abend analysis information is available even for programs for which symbolic information is not available.
- **Integration with CA InterTest for CICS for problem resolution:** The comprehensive integration of CA SymDump for CICS and CA InterTest for CICS gives you invaluable tools to diagnose and resolve problems.

For example, with CA SymDump for CICS you can:

- View the statement that triggered the abend and the dump code in the familiar CA InterTest for CICS format
 - Scroll through your program listing and compiler output or search for a data string
 - Display main storage symbolically—in both user and system areas
 - Display and modify auxiliary storage
 - Access HELP for a detailed explanation of the abend and suggested strategies for resolving the problem
 - Set breakpoints and monitoring options for future testing with CA InterTest for CICS
 - Display the IBM CICS-formatted trace table in a way that is easy to understand
 - Easily determine program flow up to the point of failure
 - Display the last screen prior to an abend
 - Display the program call trace
 - List the tasks used and files accessed by a program
 - Display the contents of a program status word (PSW) and the registers at an abend
 - Display transaction summary and terminal summary information
 - Display DB2 and DL/I database areas
 - View dumps based on selection criteria; for example, from multiple dump files and by IBM CICS User ID
- **Debugging problems in production:** With CA SymDump for CICS, you have a comprehensive set of tools to diagnose and resolve problems that arise after a program goes into production. Dumps captured in one IBM CICS region can be analyzed in another region, making CA SymDump for CICS very useful in production environments. If symbolic information is unavailable, the CA SymDump for CICS Abend Analysis screen provides

valuable information about the abend and identifies the abending instruction and the values of its operands.

- **Tracking down sporadic problems:** CA SymDump for CICS helps to resolve problems that are sporadic or errors that are difficult to replicate. CA SymDump for CICS actively monitors programs without any additional overhead. If a program abends, you can use CA SymDump for CICS to examine the dump and find the error without waiting for the problem to recur.
- **Facilitates maintenance of unfamiliar code:** With the volume of applications that mainframe programmers must handle, and the complexity of code in today's IBM CICS applications, maintenance programming is very difficult. CA SymDump for CICS helps you debug code that is written by someone else. The less time you spend debugging, the more time you have to address the maintenance backlog.
- **Dump management capability:** CA SymDump for CICS provides extensive control over IBM CICS dumps. Transaction dumps are written to the CA SymDump for CICS dump data set, while system dumps continue to be written to the system dump data sets. You can manage the CA SymDump for CICS dump data set online by:
 - Listing all the dumps
 - Selecting specific dumps to view online
 - Deleting specific dumps
 - Holding specific dumps for later use

CA SymDump for CICS also lets you print selected dumps or all dumps, and an index of the dumps in the dump data set. CA SymDump for CICS options give you tremendous flexibility in maintaining your dump data set. For example, you can specify that duplicate dumps be suppressed and that the oldest dump be dynamically purged to provide space for a current dump if the dump data set is full.

- **Powerful trace capabilities:** The formatted trace table for the task that produces the dump provides key diagnostic information, including the entry level, domain and time of each entry. You can also filter the display to limit the amount of information provided and specify your own trace entries.

With CA SymDump for CICS, you can capture and review the IBM CICS Internal Trace Table at any time. This powerful, online diagnostic tool may be used instead of the IBM CICS AUX TRACE facility to quickly analyze the flow of unfamiliar applications, or to pinpoint performance problems at the application or systems level. Like the formatted trace display of user dumps, the internal trace can be effortlessly and immediately filtered to display only the trace entries in which you are interested.

Program call trace information displays the program call/link chain in the order of calls. This helps you quickly diagnose failures by directing you to the specific program that demands attention.

- **Immediate support for IBM CICS transaction server releases:** CA SymDump for CICS supports all current IBM-supported versions of IBM CICS Transaction Server for z/OS. Immediate support helps MIS managers implement successful migration projects and enhanced support for IBM CICS Transaction Server for z/OS helps you to easily debug application programs that utilize the new features.

Support for IBM CICS Transaction Server includes exploitation of the following IBM CICS Transaction Server feature introduced in version 3.1:
 - **Channels and containers:** When capturing transaction abends for programs that use the new Channel and Container features, CA SymDump for CICS displays Channel and Container information with displays of transaction dumps. This supports a new IBM CICS application programming feature that addresses an IBM CICS 32K COMMAREA limitation.
- **CICSplex exploitation:** CA SymDump for CICS exploits the CICSplex environment by listing all dumps from any region in the CICSplex. CA SymDump for CICS also supports non-CICSplex MRO/ISC configurations.
- **Interface to external security:** CA SymDump for CICS allows you to take advantage of your external security interface in IBM CICS to determine if users are authorized to perform a function. This permits existing security products, such as CA Top Secret®, CA ACF2™ and IBM's RACF, to control CA SymDump for CICS functions.
- **Support for IBM CICS and SQL integrated translators for COBOL and PL/I compilers:** The most recent versions of the IBM Enterprise COBOL and PL/I compilers provide options for internal translation of IBM CICS and SQL commands so that you do not need to use external precompilers. CA SymDump for CICS supports the use of these integrated translators.
- **Numerous usability and technical currency features:** Additional features include the ability to:
 - Capture and display the full 64-bit register contents for program check abends
 - Display data items from the IBM Enterprise COBOL compiler LOCAL STORAGE data section
 - View and group large data fields in the Keep Window through the ability to scroll left and right by individual field within the window

Delivery approach

CA Services provides a portfolio of mainframe services delivered through CA Technologies internal staff and a network of established partners chosen to help you achieve a successful deployment and get the desired business results as quickly as possible. Our standard service offerings are designed to speed deployment and accelerate the learning curve for your staff. CA Technologies field-proven mainframe best practices and training help you lower risk, improve use/adoption and ultimately align the product configuration to your business requirements.

Benefits

CA SymDump for CICS offers a friendly, ISPF-like interface, helping you more effectively diagnose and resolve CICS dumps. Features include identification of the statement that triggered an abend, detailed abend diagnostics, a comprehensive abend report repository and integration with CA InterTest for CICS, so you can immediately begin to debug your application. As such, CA SymDump for CICS helps you more quickly identify and resolve CICS-based failures, promoting increased application reliability.

The CA Technologies advantage

CA Technologies has 30 years of recognized expertise in robust, reliable, scalable, and secure enterprise-class IT management software. CA SymDump for CICS is a key component of the Mainframe 2.0 initiative from CA Technologies to change the way the mainframe is managed forever by helping you maximize the value of our mainframe products and by providing a simplified experience and innovative solutions that deliver value quickly and flexibly.