

CA Verify® for CICS



At a Glance

CA Verify® for CICS is the automated mainframe testing tool from CA Technologies for IBM CICS Transaction Server for z/OS applications that use 3270-type terminals or terminal emulation. Using CA Verify for CICS, you can perform unit, regression, stress, concurrency, migration and system testing, and resolve issues that occur as a result of these tests. Moreover, CA Verify for CICS helps you streamline the testing of major system changes, such as z/OS or IBM CICS Transaction Server upgrades and maintenance.

Key Benefits/Results

- **Identify errors in online CICS applications.** Helps provide that your IBM CICS Transaction Server for z/OS applications function correctly in both your test and production environments.
- **Automate critical testing.** Repeatable processes help drive reductions in the costs associated with assuring the quality of your applications—and the even higher costs arising from production errors and system downtime.
- **Automates testing tasks.** Improve confidence in your applications, systems and data integrity before migrating to production.

Key Features

- **Automates all types of testing.** Unit, regression, integration, stress, concurrency, migration.
- **REXX scripting.** Program REXX logic to drive test streams and alter tests as needed.
- **Rules function.** Streamlines testing by enabling testers to pre-define changes that are correct.

Business Challenges

Manual testing limitations. Despite your best intentions, manual testing can be error-prone and resource-intensive. CA Verify for CICS is designed to reduce these limitations through the use of test streams that enable you to perform quality assurance tests without having to re-key information or manually compare “before and after” results. Tests can be executed repeatedly, accurately and consistently with minimal effort. You can subsequently modify those test streams directly or establish rules that model and handle expected changes as your testing needs dictate.

True production testing. CA Verify for CICS allows you to simulate production conditions, one of the most critical types of testing. For example, you can use production-like data instead of contrived test data, execute similar or identical transactions simultaneously and simulate high-volume activity without consuming system resources or affecting response time. By utilizing virtual terminals, CA Verify for CICS enables more accurate simulation of production conditions with minimal resource overhead, reducing the cost to you and your organization.

Solution Overview

CA Verify for CICS is comprised of menu-driven, ISPF-like screens for easy automation of testing tasks. This helps you be more confident in your applications, systems and data integrity before migrating to production.

Regression testing. With CA Verify for CICS, it is easy to create and maintain standardized tests for your applications. Whenever you make a change, you can quickly determine whether or not the application performs as expected.

Unit testing. Using CA Verify for CICS, you record (Log) all screens connected with the change you plan to implement. Once you change the field on the screen in the application, you can then run the logged “Test Stream”. CA Verify for CICS automatically compares the output produced by the program before the modification with the output after the change, and highlights all differences. You can then more quickly determine whether the differences are correct or represent errors.

Integration testing. Integration testing determines if a program works with other programs as expected. A program can pass unit testing and then fail when executed in conjunction with other programs that were not part of the unit test. For example, if several programs update the same file, a change to one program may have unexpected effects on the others. CA Verify for CICS helps you perform integration testing more easily and efficiently so you can flag these errors before they impact production.

Concurrency testing. Concurrency testing determines what happens when similar or identical transactions execute at the same time and try to perform the same task, such as processing the same file or database record. This type of testing is very difficult to perform manually. With CA Verify for CICS, concurrency testing is both easier and more accurate because CA Verify for CICS automatically provides that the transactions are processed simultaneously.

Stress testing. Stress testing lets you discover and evaluate how your system behaves under heavy load levels, and how increased transaction volume affects response time so you can effectively tune your applications and systems. Your organization's capacity planners can also employ stress testing to determine when and how to improve your systems to meet projected growth estimates. Because CA Verify for CICS utilizes virtual terminals, you can simulate heavy system activity without consuming valuable system resources.

Migration testing. Migration testing provides that existing applications perform as expected when you anticipate major hardware or software changes, including upgrading from one release of CICS to another, adding disk packs or migrating to a new release of z/OS. You can simply use the test stream creation process in CA Verify for CICS to log several critical hours of activity for as many terminals as you believe are necessary to

provide a realistic perspective of production activity. To assess the effects of migration, you can re-execute this test stream post migration, making adjustments as needed.

REXX support. REXX scripting can help you drive the application process via REXX commands, and allows you to convert recorded test streams to REXX. Once converted, you can easily program additional REXX logic to drive test streams and alter tests as needed.

Rules function. Simple, automated point-and-click technology helps you to more easily specify and predefine known changes to a screen, as well as pinpoint inclusions and exclusions for items you do and do not wish to compare as you test.

Secure test data. CA Verify for CICS provides important safeguards to protect against unauthorized use, and is compatible with external security systems, such as CA ACF2™ for z/OS, CA Top Secret® for z/OS and IBM RACF. These interfaces can be used to restrict access only to authorized users. Additional security features include the ability to specify read, write and print protection for test streams and rule sets.

User ID logging. User ID logging facilitates inclusion or exclusion of screens captured during logging by a specific user or users. This feature allows for more secure testing and protects sensitive data by restricting screen access only to certain users.

Test data generation. CA Verify for CICS generates random test data for user-specified fields on a single screen or multiple screens.

Critical Differentiators

Using CA Verify for CICS does not require knowledge of a programming language. It is menu-driven, allowing non-technical users such as QA staff to fully leverage the solution. Event-related help and demo tutorials help speed familiarization and proficiency.

Related Products/Solutions

CA InterTest™ Batch and CA InterTest™ for CICS provide application debugging and source code analysis.

CA SymDump® Batch, CA SymDump® for CICS and CA SymDump® System provide fault management capabilities.

CA File Master Plus™ provides editing and data creation capabilities for z/OS and IMS datasets.

CA Endeavor® Software Change Manager automates software change management across the mainframe environment.

Supported Environments

- IBM z/OS
- IBM CICS Transaction Server

For more information, please visit ca.com/mainframe/testing

CA Technologies (NASDAQ: CA) creates software that fuels transformation for companies and enables them to seize the opportunities of the application economy. Software is at the heart of every business, in every industry. From planning to development to management and security, CA is working with companies worldwide to change the way we live, transact and communicate – across mobile, private and public cloud, distributed and mainframe environments. Learn more at ca.com.