CICS Transaction Server for z/OS
Version 2 Release 2
Program Number 5697-E93

IBM® CICS® Transaction Server for z/OS™ Version 2 Release 2 (CICS TS V2.2) is the latest level of the CICS product for the OS/390® or z/OS platforms. This release is recommended for all CICS customers, for deployment in large-scale production. The base element of this product is CICS, but CICS TS V2.2 contains a number of other elements providing CICS-enabling functions. The elements of CICS TS V2.2, with their levels, are:

- CICS Version 6.2
- CICS Plex® System Manager (CICSPlex SM) Version 2.2
- REXX Development System for CICS/ESA® Version 1.1
- REXX Runtime Facility for CICS/ESA Version 1.1
- CICS Application Migration Aid Version 1.1
- CICS Distributed Data Management (CICS/DBM), which was included as an element in IBM CICS Transaction Server for OS/390 Version 1 Release 3, is now incorporated in the CICS base.

Also shipped with the product is IBM WebSphere® Application Server, Advanced Single Server Edition V4.0, under terms and conditions described on page 4 below. This is also available as a separate product.

CICS Transaction Server for z/OS Version 2 Release 2 is a member of the CICS family of products for general purpose, business-critical transaction processing. Its base CICS function supports application programs written in COBOL, PL/I, C, C++, Java™, and other programming languages, and provides a high-level application programming interface (API) to allow the application programs to request CICS facilities. These facilities include basic functions such as data management and terminal management and also many other capabilities. CICSPlex SM can manage CICS TS address spaces, and is capable of managing from one control point a collection of CICS systems, known as a CICSPlex.

CICS TS V2.2 delivers a range of major new functions in the CICS and CICSPlex SM elements. These include:

- Support for Java has been enhanced. The level of Java supported has been upgraded to Java 2 at SDK V1.3.1 level. CICS TS V2.2 exploits a completely new JVM specially designed to optimize performance for short running programs such as CICS transactions. Support for Java Enterprise APIs such as JDBC, JNDI, and RMI has been significantly enhanced. CICS applications can now use the Common Connector Framework (CCF) client API to allow portability between CICS and non-CICS servers of Java application classes that invoke CICS programs.

- Support is provided for session beans at EJB 1.1 specification level. CICS uses the common WebSphere container exploiting collaborator classes that map the infrastructure services that the container needs to the underlying CICS functions. The product includes the standard WebSphere application assembly tool (AAT) for deployment of enterprise beans. Enterprise beans running under CICS TS V2 can use a range of Java capabilities, as well as JCICS classes to exploit CICS functionality.

- A range of functions has been introduced to CICSPlex SM in support of the new facilities in CICS which support EJB technology. These functions include a capability for dynamic workload balancing of enterprise beans. Two new CICS-supplied transactions, CREA and CREC, have been introduced.

- A range of important new facilities has been introduced for CICS exploitation of procedural programming. These facilities include an integrated translator for COBOL and PL/I applications, CICS COBOL and PL/I XML application capability, improvements to the CICS 3270 bridge, enhancements to function shipping of remote file requests, CICS Web bridge enhancements, and improvements to the function of CICS with Language Environment ®.
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Enhancements have been made to network connectivity for e-business enablement. These include support for client applications to use TCP/IP communication with the external call interface (ECI) directly to CICS, enhancements to CICS exploitation of TCP/IP services, extensions to support for domain name system (DNS) registration for improved connection optimization, and CICS support for VTAM® LU alias facility.

Improvements to application availability include enhanced DB2® facilities for CICS-DB2 performance, DB2 group attach, and DB2 exploitation of the RMI purge option. Enhanced support for CICS data-sharing servers includes automatic restart of CICS data-sharing servers, system-managed rebuild support for coupling facility structures, and system-managed coupling facility structure duplexing. Also provided is sign-on retention for persistent sessions.

Systems management enhancements include a remote MAS agent for Windows™, CICSPlex SM communications enhancements, and improvements to the appearance of the CICSPlex SM Web user interface.

Other benefits include monitoring and statistics changes, and the introduction of the Information Center, which enhances the usability of the product documentation and delivers information that corresponds to the tasks that are performed by users.

EuroReady Products

This product is EuroReady. IBM considers an IBM product to be EuroReady if the product, when used in accordance with its associated documentation, is capable of correctly processing monetary data in the euro denomination and of respecting the euro currency formatting conventions (including the euro sign). This assumes that all other products (for example, hardware, software and firmware) that are used with this product are also EuroReady.

Machine Requirements

The basic requirement is for a processor that supports the prerequisite operating system and has sufficient processor storage to meet the requirements of the operating system, CICS TS V2.2, the application programs, the access methods, and all other software being run.

For further details on machine requirements, refer to information in the CICS Transaction Server for z/OS Version 2 Release 2 Program Directory, GI10-2543, and to information provided for the particular level of operating system being employed.

Programming Requirements

The basic requirement for CICS TS V2.2 is OS/390 (5647-A01) Version 2 Release 10, or z/OS (5694-A01), at any release level.

For further details, together with information on supported levels of other products required for particular functions, refer to information in the CICS Transaction Server for z/OS Version 2 Release 2 Program Directory, GI10-2543.

Licensed Program Materials Availability

Restricted materials - Yes. This licensed program is available with source licensed program materials for some modules designated as “RESTRICTED MATERIALS OF IBM.” In addition, some modules are available without source licensed-program materials. These modules are available in object code. The remaining modules are available with source licensed program materials.

Source licensed program materials are not available for some modules. Refer to the CICS Transaction Server for z/OS Release Guide (GC34-5983) for the identity of those functional areas with some or all modules available without source licensed program materials.

Source code for applicable modules is in assembler language. Sample program source code is in COBOL, C, C++, Java, PL/I, and assembler.

Supplemental Terms

Designated Machine Identification

Designated Machine Identification Required: Yes

Testing Period

Basic License: Two months
DSLO: Not Applicable
To support authorized use of the Program, printed copies of the displayable or source material may be made if the copyright notice and any other legend of ownership is reproduced on each copy or partial copy.

**Information Center**

Customers with a license for CICS Transaction Server for z/OS Version 2 Release 2 are licensed, at no additional charge, to install and run the Information Center on suitable workstation or server machines, which are not the designated machine, within the same enterprise. It may be run on as many machines as are reasonably necessary for use in conjunction with CICS TS V2.2.

**Connectivity Code**

Customers with a license for CICS Transaction Server for z/OS Version 2 Release 2 may copy free of charge the following connectivity code to any S/390® or zSeries™ machine to enable communication with the licensed CICS TS V2.2:

- CICS External Communication Interface (EXCI - Load Library SDFHEXCI)

They may also copy free of charge the CICS inter-region communication SVC (DFHIREP) from this version to a prior version of CICS, on a different machine in the same Parallel Sysplex®, for communicating with CICS TS V2.2.

The service and support entitlement under the license for the CICS Transaction Server for z/OS Version 2 Release 2 extends to copies of the above items when they are running on a different S/390 or zSeries machine for this purpose.

**Application Development Utilities**

To assist developing, testing, or analyzing their applications off-line from their production CICS systems, customers with a CICS Transaction Server for z/OS Version 2 Release 2 license may copy the following utilities, free of charge, to any S/390 or zSeries machine within the same enterprise:

- The CICS Translator (modules DFHEAP1$, DFHEDP1$, DFHECP1$, and DFHEPP1$, which are to be found in SDFHLOAD)
- The Statistics utility program (DFHSTUP)
- The Trace utility program (DFHSTUP)
- The Dump utility program (DFHDP
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The Monitoring utility program (DFHMNDUP)
The System Definition File utility program
(DFHCS DUP)
The CICS Transaction Affinities utility program
(formerly 5696-582, now part of the CICS element)

The service and support entitlement under the license
for the CICS Transaction Server for z/OS Version 2
Release 2 extends to copies of these utilities when they
are running on a different S/390 or zSeries machine
within the same enterprise.

CICSPlex SM Remote MAS Agents

Customers with a license for CICS Transaction Server
for z/OS Version 2 Release 2 are licensed to make and
use any number of copies of the CICSPlex SM remote
MAS agent for OS/2® and the CICSPlex SM remote
MAS agent for Windows NT, subject to their use being
in conjunction with the licensed CICS TS V2.2. If
required, the agents may be copied to secondary media
for convenience of installation.

WebSphere Application Server, Advanced Single
Server Edition V4.0

This program is accompanied by WebSphere
Application Server, Advanced Single Server Edition
V4.0, with five (5) Proofs of Entitlement. A license of
the program entitles you to install WebSphere
Application Server, Advanced Single Server Edition
V4.0 in no more than five (5) processors, for use only in
conjunction with your authorized use of the CICS
Transaction Server for z/OS Version 2 Release 2
program. Except for the foregoing additional
restrictions and rights, your use of WebSphere
Application Server, Advanced Single Server Edition
V4.0 is subject to the terms and conditions of the IBM
International Program License Agreement and of the
License Information document for the WebSphere
Application Server, Advanced Single Server Edition
V4.0 included in the packaging for the program.

Warranty

This program is warranted as specified in the IBM
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in specifications.

Specifications

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