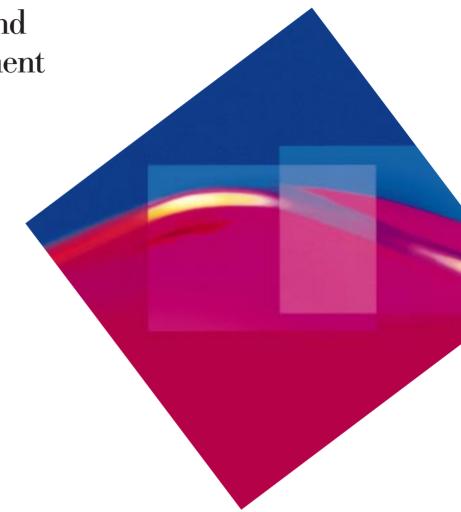


CICS for OS/390 and e-business enablement

# What's new in CICS Transaction Server for OS/390 V1.3

We're providing tools for you to help your company reach more customers by making business processes available on the Web. New or improved features include:

- A new CICS\* transaction gateway which provides related facilities for attaching Web browsers via outboard gateways so that CICS TS can work with Web servers on other platforms.
- More improvements to Web browser connections for your CICS applications, with enhanced HTTP support and new facilities for creating and manipulating HTML data.
- Support for industry-standard CORBA protocol means any CORBA-compliant client can access CICS applications, allowing true separation of client and server environments and integration of different types of systems.



### **Reaching customers with CICS**

e-business is about combining information technology and the Web for commercial operations. And for CICS customers, that means transaction processing using Internet technology – and the possibility of dramatically extending the reach of existing systems, flexibly and with very little expense.

The key to this is capitalizing on the investment you've already made in your CICS applications. It's not generally cost effective to exploit new business opportunities by completely redesigning applications but, if you can reuse your investments in skills, applications and data, then you can steal a march on the competition.

This is what CICS offers. There are two parts to the CICS strategy. We have collaborated with business partners to make tools available to give your existing applications a fresh GUI face for the Web. This is called Application Mining, and it maintains transactional integrity. And we've been making connectors available to extend your existing applications to the Web.

In this release, there are even more ways of connecting, plus exciting new developments like support for CORBA.

## **CICS** gateways to the Web

The CICS transaction gateway is a major new feature for e-business. It provides a robust, scalable, easy-to-use and secure complement to any CICS-attached Web server, so that Web users can access CICS business applications using standard Internet protocols in a range of configurations.

The gateway integrates the CICS Universal Clients V3 and two previous gateway functions, the Internet gateway and the gateway for Java.\*\* The new gateway is a highly optimized, multi-threaded Java application with sub-second response to connected Web browsers. It uses the embedded CICS Universal Client for efficient communication with CICS TS, and incorporates a load balancing facility for distributing the workload from a large number of browsers across multiple CICS regions or servers.

Browsers and Internet devices can connect through the gateway to CICS applications by:

- Using simple HTML. The gateway uses
  the external presentation interface (EPI)
  to request CICS 3270 data, and translates
  it into HTML automatically; or you can
  write your own Java servlets to present
  information from CICS applications in
  HTML. This approach is appropriate for
  simple BMS applications.
- Running Java applets in Java-enabled browsers. The gateway enables applets to access any CICS program using supplied Java classes (equivalent to the EPI and ECI) and Java beans. This is the obvious approach for putting a Java interface on your programs, and it can be used for existing 3270 applications or new programs.
- Running Java beans to interoperate with server-side Java beans via an ORBenabled Web browser and IIOP. The server side beans, running on the gateway, invoke any CICS programs using supplied Java classes.

## 3270 bridge interface

The 3270 bridge makes it easy and economical to give a new GUI interface to existing 3270 applications. The bridge provides an interface for accessing 3270-based CICS transactions without going through a 3270 terminal. Commands for the 3270 terminal are intercepted by CICS and replaced by a messaging mechanism such as MQSeries\* or the Web, providing a bridge between a client application and the CICS transaction.

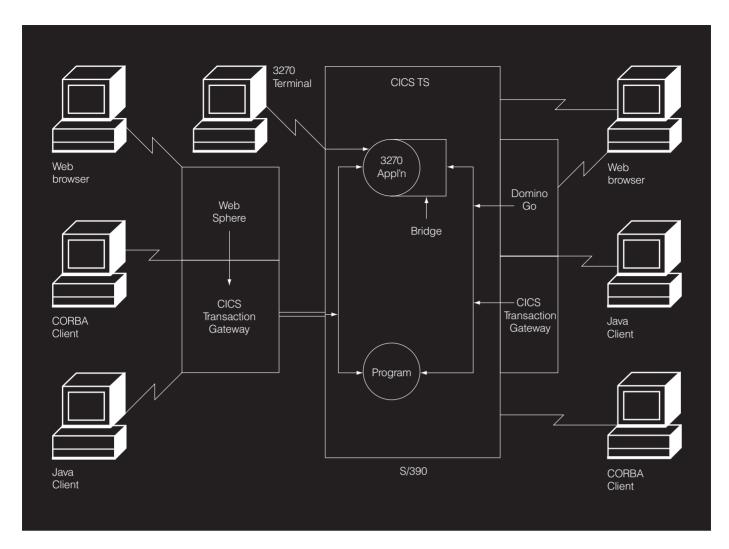
The CICS transaction can be an existing 3270 or BMS-based CICS transaction. It runs just as if it were in a 3270 environment, but with fast, direct Web access into CICS/390. The applications can still be run from 3270 terminals as well as workstations, to allow a phased migration of users from existing to new end-user applications.

Bridge applications can be extended by integrating with technologies, like MQSeries, that enable you to build solutions that best suit your business, whether delivering e-business applications or coupling mixed heterogeneous environments. Best of all, an existing 3270 application does not have to be altered or recompiled. The bridge takes care of interacting with the transaction - the programmer does not need to know anything about 3270 datastreams.

#### **CWI** enhancements

The CICS Web interface (CWI) is enhanced by:

- restructure as a CICS domain, conforming to the domain architecture
- a new API for manipulation of HTML documents
- improvements to the definition and management of HTML templates
- a new EXEC CICS interface for the Web, which allows CWI work to be sysplex-enabled so that more than 32K of data can be transferred inbound and outbound
- extension to the range of 3270 transactions which can use the bridge environment.



CICS Clients connectivity

# **CORBA**

The Internet inter-ORB protocol (IIOP) is a CORBA defined message exchange that serves as a common backbone protocol for communication between object-oriented application programs executing on different processors. CICS TS 1.3 supports inbound requests to Java applications using IIOP.

In an e-business environment, CORBA interoperability is important because it allows the use of vendor-independent client platforms, giving true separation of server and client environments.

It also provides improved application development productivity. A distributed object model ensures well defined interfaces for applications with object characteristics, so stronger type checking at compile-time and run-time gives a reduction in application errors compared with the use of untyped COMMAREAS used in CICS ECI calls.

## **Application mining**

To take advantage of these connections as productively as possible, you need tools. IBM has formed marketing partnerships with a growing number of business partners, such as Planetworks and Lincoln Software.

The tools from these partners are for programmers who understand C++, Java and object methodologies, rather than traditional procedural languages. The tools support popular front-end interfaces like Java, Visual Basic\*\* and PowerBuilder. You can put a new interface onto existing 3270 CICS programs without having to know anything about 3270 datastreams and testing the client applications is correspondingly easy.



### Information for decision makers

- The CICS Transaction Gateway V3 and the CICS Universal Clients V3 have support for the following systems:
  - Windows NT\*\* V4, Workstation and Server versions
  - OS/2\* Warp V4, and OS/2 Warp Server V4
  - Windows 95\*\* and Windows 98
  - AIX 4.2.1 or later, AIX 4.3.1 or later
  - Solaris 2.5.1 or later
- The gateway requires a Java Development Kit (JDK) 1.1.6 or later

### Other helpful information

- Try www.software.ibm.com/cics/ for the latest news of CICS on the Internet.
- For more information about Interspace and Lincoln Software look in
  - www.planetw.com
  - www.lincolnsoftware.com/
- For more detailed information on CICS and WWW, read Accessing CICS Business Applications from the World Wide Web, SG24-4547-00.
- For further help, contact your IBM Representative or dealer.



### **IBM United Kingdom Limited**

Hursley Park Winchester Hampshire SO21 2JN, UK

Telephone: +44 1962 815000

### IBM Ireland Limited

2 Burlington Road Dublin 4

Telephone: 1850 205 205

The IBM home page can be found on the Internet at www.ibm.com and some more information on CICS can be found at www.software.ibm.com/cics

UK company-wide registration to ISO9001. Certificate number FM 12587.

IBM is a registered trademark of International Business Machines Corporation.

- \* The e-business logo, CICS, OS/390 MQSeries and OS/2 are trademarks of International Business Machines Corporation.
- \*\* Windows NT, Windows 95 and Visual Basic are trademarks of Microsoft Corporation.

  Java and all Java-based trademarks and logos are trademarks or registered trademarks of Sun Microsystems, Inc. in the U.S. and other countries.

Other company, product or service names may be trademarks or service marks of others.

References in this publication to IBM products, programs or services do not imply that IBM intends to make these available in all countries in which IBM operates. Any reference to an IBM product, program or service is not intended to imply that only IBM's product, program or service may be used. Any functionally equivalent product, program or service may be used instead.

IBM hardware products are manufactured from new parts, or new and used parts. In some cases, the hardware product may not be new and may have been previously installed. Regardless, our warranty terms apply.

This publication is for general guidance only.

Printed in England by Basingstoke Press (75) Limited, Basingstoke, Hampshire.

© International Business Machines Corporation 1998.

GC33-1983-01 (09/98)