

XCICS





► **XCICS Transaction Server is a core component of the XFRAME mainframe re-hosting environment, providing a native implementation of CICS for Unix, Linux and Windows.**

With a very high degree of compatibility with IBM CICS, HTWC'S XCICS offers a high-throughput transaction processing system designed to handle thousands of connected terminals, users, high volume of transaction and several connection to remote systems.

XCICS manages all the entities of the typical mainframe CICS environment, such as programs, transactions, files, temporary storage, BMS and more, providing a robust and transaction system.

Most importantly, XCICS allows mainframe CICS applications to run with little or no code changes.

For more than 15 years and over 50 running installations, XFRAME is proven to be the most reliable, stable and high-performance system in the Unix, Linux and Windows environments.

Optimized Performance & Reliability

The XCICS architecture is designed to use a shared pool of server processes, which guarantees high transaction performance, while ensuring stability and transaction integrity.

XCICS supports an extensive set of features provided by IBM CICS, in addition to its own unique set of functions.

This exceptional architecture allows XFRAME to optimize the use of the system's resources, allowing each region to run on multiple CPUs, without any complex configuration.

In addition, it allows the administrators

to predefine the impact that each region can have on system resources. XCICS offers a powerful data recovery that has restart features and is proficient with the most marketable clustering software and architectures and ensures a minimal downtime in any system fault.

Transaction Management

XCICS provides the ability to access many types of local and remote resources such as databases, APPC conversations and others. XCICS ensures resource consistency through robust transaction isolation and integrity.

This allows XCICS to efficiently reply to transaction processing commands such as, SYNCPOINT and ROLLBACK that may be issued by application programs, in addition to handling unexpected situations such as, program or system faults.

Resource Management

The high degree of compatibility with IBM CICS is achieved by implementing many of the features offered in the mainframe environment:

- Full BMS implementation
- Terminal and Printer Handling
- TN3270 Terminals Management
- Program and Transaction Services
- Temporary Storage
- Transient Data
- File Management
- Journaling & Accounting
- Resource Assigning, Inquiring and Setting
- Inter-System Communication

Key Features Highlights

- ▶ Full IBM CICS compatibility
- ▶ High performance scalable architecture
- ▶ Transaction integrity/recovery
- ▶ Full BMS implementation
- ▶ Temporary Storage & Transient Data
- ▶ File services
- ▶ Program & Transaction services
- ▶ Multiple DB connectivity
- ▶ Inter-System Communication
- ▶ TN3270 Server
- ▶ Easy configuration
- ▶ Remote GUI based administration
- ▶ Web Services

Database

XCICS ensures data and transaction integrity with features such as, data recovery and a warm or cold start. Through its XA interface, XCICS offers a high degree of integration with relational databases such as, Oracle and IBM UDB, as well as ODBC database connectivity, MySQL and Microsoft SQL Server. XVSAM, XFRAME's powerful VSAM emulator, provides a full VSAM emulation layer. With XVASM, XCICS supports KSDS, ESDS and RRDS files, providing transaction, restart and AIM recovery features.

Legacy Communication

XCICS offers the most complete inter-system communication layer for CICS implementations on open systems. XCICS offers the ability to communicate over APPC/LU6.2 with other mainframe CICS regions or with other SNA speaking systems.

XCICS supports Distributed Transaction Processing (DTP) up to SYNCLEVEL 2, in addition to Remote Function Shipping and Distributed Program Link (DPL).

Only XCICS provides a powerful Dynamic Conversion System, which is designed to automatically and transparently resolve all the encoding problems caused by the different character sets used by Unix and Linux (ASCII) and the mainframe (EBCDIC). XCICS supports the Transaction Routing mechanism, which allows to act as a Terminal Owning Region (TOR), Application Owning Region (AOR) or Data Owning Region (DOR). XCICS is built to effortlessly integrate into an existing legacy environment.

There is no need to install software or make changes to the existing mainframe system.

A system running XCICS is seen by a mainframe running IBM CICS as simply another CICS region.

This distinctive ability gives customers the flexibility to modernize legacy systems in phases without a need to "rip and replace" the entire legacy environment in a single project.

Security

XCICS supports a RACF-like access and authentication system that permits it to manage users, to put them into classes and assign them only the required resources, exactly as in the mainframe environment.

The XCICS security setting may be shared among different regions, making security management easier for system administrators. In addition, an ESM-like entry point provides the flexibility to allow a broad range of customization.

The XCICS security system can also be integrated with LDAP servers, allowing the region to obtain and authenticate users directly from the enterprise user management system.

Accounting & Journaling

Important mainframe features such as, journaling and accounting are supported

by XCICS, offering either direct journaling commands or system managed journaling like VTAM dialog journals. Of course, the journal file format used by XCICS is fully compatible with the format used on the mainframe.

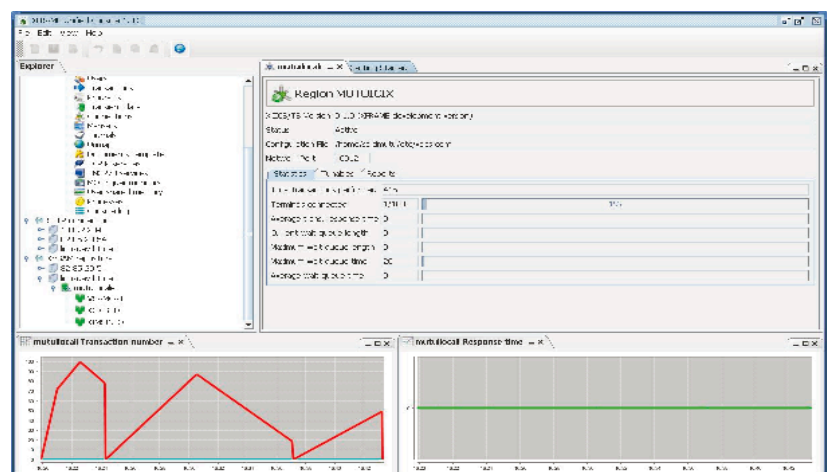
To meet the accounting needs of system administrators, XCICS tracks the activities performed over a region's lifetime offering the ability to obtain statistical reports for analysis and to account for any aspect of the region's usage and activity.

Administration and Monitoring

Mainframe administration concepts are fully preserved by XCICS, making them available in the open systems environment. XCICS configuration is defined through simple text files and a graphical interface utility is provided to remotely administer one or more XCICS instances.

The XCICS administration module of the XFRAME Unified Console provides interactive managing and monitoring of one or more running regions, allowing administrators to start, stop, configure and monitor multiple regions directly from a PC.

A command line version of these tools allows to administer and to gather information about the region at any given



time directly from the Unix/Linux shell: These can be used directly by system administrators or by other software to integrate the XCICS/TS management or survey into other popular monitoring or management software.

Programming

XCICS fully supports most CICS APIs EXEC commands, return codes and handling systems are reproduced to maintain full compatibility with the mainframe environment. This allows CICS applications to be easily moved onto open systems without changes, preserving and reusing the existing programmers' skills. XCICS programs may be coded in COBOL, PL/I, C or Java.

This flexibility allows more than just the migration of COBOL and PL/I applications it also provides the ability to improve existing applications with new technologies.

Java classes may access XCICS resources through the XCICS Java package and they may be invoked by other programs using the LINK or XCTL commands, as if they were common programs.

This allows the ability to easily mix legacy coding with new functions written in Java, providing access to functionalities that would be too complex to be accessed with traditional languages.

This high level of flexibility allows the skills of all programming resources to be fully utilized regardless of their programming specialty.

The mix of XCICS and third party application development tools generates a solution that not only maintains mainframe programmer's productivity, but improves it as well.

Connectors

Besides the traditional communication facilities, XCICS offers a wide range of enterprise connectors that allows data exchange with other applications on different protocols:

- Native TCP/IP
- EZASOKET
- XECI (XCICS External Call Interface)
- SOAP Web Services
- CICS Web Interface
- J2EE connectors
- JSP Web Interface CWI
- WebSphere/MQ™ adapter
- WCF

XIMS Compatibility Toolkit

This is unique on the market and is only available with XFRAME, the XIMS Compatibility Toolkit further enhances the capabilities of XCICS by allowing the execution of IMS/DC programs without any code changes.

The toolkit delivers as an add-on component that provides a runtime system which maps the IMS/DC calls into CICS commands that reproduce typical IMS/DC resources like SPA, MFS and others.

IMS/DB runtime is also available for data access.

Further Information

For further information on the HTWC products, please visit our website at www.htwc.com

or for specific questions, please contact us directly at info@htwc.com.

Overview of HTWC

HTWC is one of the top leading European re-hosting, software conversion and application management solutions company. HTWC focuses on large organizations and is a valid aid in all those problem solving processes related to enterprise systems.

In particular, HTWC deals with all matters related to the integration and modernization of legacy environments. HTWC has specialized in Mainframe re-hosting and software management solutions since 1987.

Currently, HTWC labs develop products for re-hosting analysis, migration, conversion and reengineering of legacy software. The integration of these products guarantees a reliable, flexible and cost effective solution for our customers.



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