



IBM Software Group

CICS Tools Overview February 2005



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CICS Tools | IBM UK Laboratories

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Preface

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Transform your CICS applications

**Extend and modernize
CICS applications
efficiently**

**Improve programmer
productivity**

**Increase customer
satisfaction**

Enable IT for SOA

CICS Application Transformation Tools

CICS Business Event Publisher for MQSeries®

- Create and manage outbound events using WebSphere MQ without changing existing CICS applications

CICS VSAM Transparency

- Enable VSAM to DB2 migration without rewriting applications

CICS Interdependency Analyzer

- Understand your active application inventory for efficient maintenance and upgrades

WebSphere Studio Enterprise Developer

- Efficiently develop and maintain a new generation of CICS COBOL or JAVA applications

CICS Integrator Agent (in CICS TS V3.1)

- *Deploy modeled web service flows across CICS applications (Commarea & 3270)*



Manage your CICS subsystem

Reduce down time

**Use CICS resources
more efficiently**

Control software cost

**Improve end-user
productivity**

Coming Soon!

CICS Configuration Manager (*)

- Manage, replicate, and deploy CICS system definitions

CICS Subsystem Management tools

CICS Performance Analyzer

- Comprehensive off-line performance reporting and analysis for tuning and capacity planning

OMEGAMON XE for CICS

- Real-time and historical performance monitoring and troubleshooting solution for CICS TS

IBM Session Manager

- Provide secure, reliable, and easy access to multiple z/OS and OS/390 applications from a single terminal

CICS Online Transmission Time Optimizer

- Optimize 3270 data streams to increase your system performance

CICS VSAM Recovery

- Automate recovery of lost VSAM data

CICS VSAM Copy

- Create point-in-time copies of VSAM files concurrent with business-critical online processing activity

CICS Batch Application Control

- Simplify and automate batch access to CICS resources



CICS Tools Support for CICS Transaction Server Version to Version Migration

- All tools exploit CICS TS 3.1 functionality where relevant
 - ▶ Exploitation and support at GA
- Improved speed of version to version migration projects
 - ▶ Prepare for migration: prioritize and optimize
 - Application understanding
 - CICS IA and WSAA
 - Performance and application analysis to improve application design and performance
 - CICS PA
 - ▶ Improve speed of migration – move through Test, Q&A and into production faster
 - CICS Configuration Manager for improved productivity and control
 - CICS IA for improved quality of testing
 - ▶ Make applications threadsafe
 - CICS IA provides information needed to understand which applications conform to threadsafe standards
 - CICS PA reports can show CICS TCB usage by your threadsafe CICS applications
 - ▶ Enable CICSplex SM
 - CICS IA identifies affinities
 - CICS Configuration Manager simplify resource definitions management in CICSplex SM environments
- Improved efficiency to support SOA and Web Services implementations
 - ▶ CICS Subsystem management tools help move closer to 24/7 operation, a key requirement for SOA.
 - CICS BAC potentially shortens the batch window
 - CICS VR provides automatic recovery of VSAM data to improve uptime
 - CICS IA and CICS PA help improve availability
 - ▶ CICS VT enabling the move of data from VSAM to DB2, which opens the data up to WebSphere based services.



CICS Tools Support for CICS Transaction Server V3.1 at GA

CICS Tool	Support for CICS TS 3.1	APAR number	Comments
CICS Performance Analyzer V1.4	Support/exploitation	In CICS PA 1.4	Exploitation at 3.1 GA
OMEGAMON XE for CICS	Support		Exploitation at 3.1 GA
CICS Interdependency Analyzer V1.3	Support/exploitation, PTF required	TBD	Separate exploitation PTF 2Q
CICS VSAM Recovery V3.3 and V3.2	Support	None	Exploitation is not applicable
Session Manager V1.2 and V1.1	Support	None	Exploitation is not applicable
CICS Business Event Publisher V1.2	Support/exploitation, PTF required	TBD	Separate exploitation PTF 2Q
CICS OTTO V1.1	Support	None	Exploitation is not applicable
CICS VSAM Transparency V1.1	Support	None	Exploitation is not applicable
CICS VSAM Copy V1.1	Support, PTF required	TBD	Exploitation is not applicable
CICS Batch Application Control V1.1	Support, PTF required	TBD	Exploitation is not applicable

Earlier releases of the tools do not support CICS TS V3.1



Reference

zSeries Enterprise Tools Summary

<http://www.ibm.com/software/info1/websphere/index.jsp?tab=landings/ets>

CICS Tools WEB Sites ...

<http://ibm.com/cics/products/tools.html>

<http://ibm.com/cics/library/>





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Appendix: Product Summaries

A decorative horizontal bar at the bottom of the page, featuring a series of colorful squares (purple, cyan, green, yellow, red) followed by a grid of small icons including a starburst, a person's face, a globe, a vertical bar chart, and a circular pattern of dots.

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CICS Business Event Publisher

- What does it do?
 - ▶ Creates MQPUT messages for MQSeries queues from events in CICS, IMS and DB2 *without changing existing applications*
 - ▶ Events are based on user-specified rules, Queue names and MQPUT options
 - ▶ Provides easy-to-use workstation GUI for selection and rules creation
 - ▶ Real time action and results
- Why do I need it?
 - ▶ Offers low-cost, low-risk integration strategy
 - ▶ Fast, powerful, yet simple way to drive business processes from existing CICS, IMS and DB2 applications



CICS Interdependency Analyzer

- What does it do?
 - ▶ Automated on-line discovery of application code
 - ▶ Automated discovery of runtime relationships in CICS
 - ▶ Provides flexible reports to help clients understand interdependency and affinity data in their daily operations
- Why do I need it?
 - ▶ Improve CICS application maintenance, reuse, modification and new application development and save time and money
 - ▶ Enable faster application migration
 - ▶ Minimize the impact of routine application maintenance for the end user
 - ▶ Improve CICS systems and application design to help improve availability, especially for 24x7 and e-business projects
 - ▶ Implement workload balancing for continuous availability



CICS VSAM Transparency

- What does it do?
 - ▶ Enables migration of data in VSAM to DB2 without changing application programs
 - ▶ CICS and batch programs access data in DB2 under the control of CICS VT
- Why do I need it?
 - ▶ Fast, low-risk migration from VSAM to DB2
 - ▶ Simple migration - completely separate from application program
 - ▶ Gain transparent access to data in DB2
 - ▶ Move to a single source of production data
 - ▶ Migrate individual VSAM files as required
 - ▶ New applications can be fully DB2 technology-based
 - ▶ Preserve investments in legacy applications



WebSphere Studio Enterprise Developer

- What does it do?
 - ▶ Modernizes CICS COBOL application development via an eclipse workstation-based IDE
 - ▶ Increases CICS COBOL developer productivity
 - ▶ Integrates both COBOL and JAVA application development for the mainframe

- Why do I need it?
 - ▶ To reduce application development time and cost
 - ▶ Allows CICS COBOL developers to easily create new applications including web services
 - ▶ Enables efficient development and integration of mixed workload applications



CICS Batch Application Control

- What does it do?
 - ▶ Enables a batch-job step to change the state of relevant CICS resources
 - ▶ Tracks resource state change requests across participating CICS systems and batch streams
 - ▶ Ensures resources are in their correct state when CICS regions start
 - ▶ Powerful “group” feature enables a job step to change the state of all resources associated with an application
- Why do I need it?
 - ▶ Reduces errors and abends related to batch processing
 - ▶ Reduces manual interventions by operators and system programmers
 - ▶ Moves your CICS applications closer to 24x7 availability



CICS Configuration Manager(*)

- What does it do?
 - ▶ Provides the ability to manage CICS resource definitions including
 - Create, Update, Delete, Copy, Replicate
 - ▶ Provides the ability to “change manage” definitional change through the various user environments (e.g. Development, Test, Production)
 - ▶ Provides the ability create customized reports, enabling users to identify redundant definitions, resource relationships, change management history
 - ▶ Provides audit, back-out and change authorization capabilities
- Why do I need it?
 - ▶ Greatly simplifies the task of managing new application development through test and deployment
 - ▶ Speeds version to version migrations of both CICS and CICS apps
 - ▶ Simplifies CICS systems administration thus lowering costs and reducing downtime due to administrative errors



CICS Performance Analyzer

- What does it do?
 - ▶ Enables off-line performance analysis of CICS, and CICS-related DB2, WebSphere MQ, and MVS SMF records, as well as IMS information
 - ▶ Provides flexible reporting and analysis capabilities with supplied reports or your own reports for day-to-day performance analysis
 - ▶ Historical data processing for trending and capacity planning
- Why do I need it?
 - ▶ Reduce cost of effort to analyze performance
 - ▶ Improves tuning and capacity planning analysis
 - ▶ Helps take proactive approach to CICS systems tuning
 - ▶ Helps plan capacity for optimal performance
 - ▶ Helps review application performance and identify potential to improve application design
 - ▶ Use with online monitors to quickly identify and correct causes of online problems



OMEGAMON XE for CICS

- What does it do?
 - ▶ Enables proactive management of performance and availability of CICS systems – including CICS in Parallel Sysplex environments
 - Helps identify bottlenecks at the record level
 - Can trace transactions from one system to another
 - Helps detect application performance problems
 - ▶ Eases creation of complex thresholds, situations and alerts without deep scripting or coding skills
 - ▶ Facilitates automated responses to alerts
- Why do I need it?
 - ▶ Maximizes performance and availability of CICS systems
 - ▶ Speeds problem identification and resolution
 - ▶ Helps allocate resources for better performance
 - ▶ Automated responses allow for less repetition of manual tasks



CICS VSAM Copy

- What does it do?
 - ▶ Creates CONSISTENT copies of VSAM data sets
 - While they remain online and open to CICS applications for update
 - While they are closed to CICS
- Why do I need it?
 - ▶ Create ad hoc copies of VSAM data sets
 - Without affecting current performance of running CICS applications
 - Produced copies are consistent (no incomplete units of work)
 - ▶ Work towards 24*7 VSAM availability
 - No need to take the data set offline from CICS before creating copy



CICS VSAM Recovery

- What does it do?
 - ▶ Recovers CICS and batch VSAM data after physical or logical corruption
 - ▶ Removes updates made by failed batch job steps
 - ▶ Reapplies changes made by applications since last data back up.
- Why do I need it?
 - ▶ Reduce business cost of VSAM errors
 - Reduce impact of batch window processing errors
 - Helps you detect and reverse errors
 - Reduce the impact for VSAM data users against the effects of physical loss or incorrect update
 - Reduce cost of down time
 - Helps you minimize recovery time



CICS Online Transmission Time Optimizer

- What does it do?
 - ▶ 3270-type data stream optimization
 - ▶ Examines outgoing data streams and dynamically compresses them
 - ▶ CICS-specific solution; interface familiar to CICS systems programmers
 - ▶ Collects statistics
 - ▶ Optimization features are easily controlled
- Why do I need it?
 - ▶ Reduces network load
 - ▶ Helps to increase the productivity of the network without rewriting applications
 - ▶ Minimizes the need for new communications equipment
 - ▶ Easy to install, customize and use



IBM Session Manager

- What does it do?
 - ▶ Provides a password-protected single menu from which users can access all applications running on any z/OS or OS/390 machine in the network
 - ▶ Provides log-off procedures, security checking, audit logging and centralized administration, operations, and monitoring
 - ▶ Reduces cost and effort associated with network administration and brings benefits to helpdesk and operations personnel who can easily view user problems
 - ▶ Offers centralized user ID administration and the ability to broadcast messages to end users
- Why do I need it?
 - ▶ Improve user productivity
 - ▶ Reduce training requirements and help desk costs
 - ▶ Enhance system usage
 - ▶ Provide increased security

