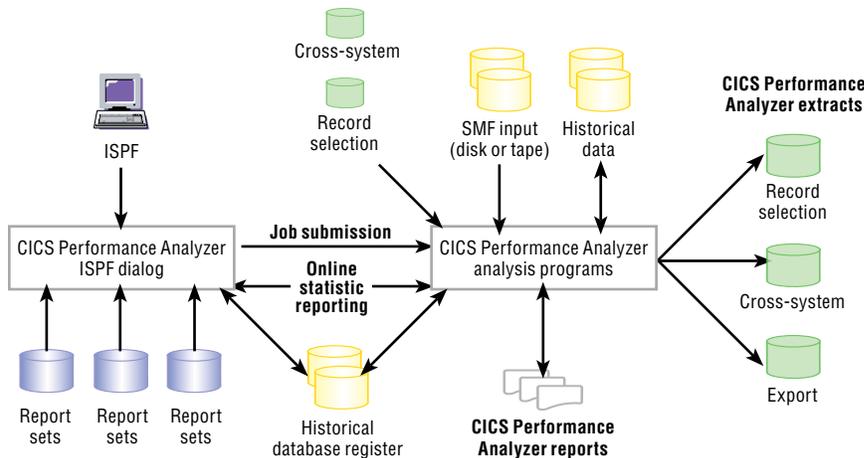


# IBM CICS Performance Analyzer for z/OS, Version 1.4

## Highlights

- Provides comprehensive CICS performance reporting
- Analyzes and reports CICS application performance to help eliminate system bottlenecks
- Helps to resolve online problems faster
- Enables you to easily tailor reports to specific analysis requirements
- Provides an easy-to-use interface and documentation
- Enables you to evaluate and proactively tune CICS system efficiency to increase system performance
- Helps prevent outages by uncovering trends that can lead to poor performance
- Offers powerful capacity-planning capabilities
- Gives insight into database usage of other vendors' products when used with Tivoli OMEGAMON XE for CICS

In an increasingly complex and competitive business environment, managers, system programmers, application developers and performance specialists are under pressure to operate their systems at peak level. Adopting flexible business strategies and implementing Web services, for example, creates more-complex, critical IBM CICS® applications, increasing the risk of you missing your service-level commitments. To mitigate this risk, you must carefully consider performance and, ultimately, customer satisfaction as part of your business strategy. Traditional performance tools might not provide a sufficiently flexible and comprehensive solution.



A key requirement for a successful business strategy is to implement performance reporting and analysis capabilities. These capabilities should be easy to run on a regular basis, and also should be easy to tailor to the analysis needs of everyone involved in CICS performance analysis, tuning and capacity planning. Another requirement is the depth of performance analysis provided.

*CICS Performance Analyzer enables you to take control of performance-problem analysis.*

Reports must provide the level of detail you need to assess the impact of changes, to anticipate and solve trends leading to poor CICS performance, and to take action rapidly when problems occur to minimize any downtime or performance degradation. And the information provided should enable careful capacity planning to meet demand, while optimizing the total millions of instructions per second (MIPS) cost and helping you meet your service-level commitments.

IBM CICS Performance Analyzer for z/OS, Version 1.4 is an offline performance-analysis tool that combines ease of use, flexibility, and the level of detail required to meet the performance challenges of today's business requirements. Designed to accurately detail how your enterprise uses specific CICS resources, CICS Performance Analyzer provides detailed reports about all aspects of CICS system performance, while helping you collect and manage historical performance data. It enables CICS system programmers and performance specialists to tailor these reports to gain fast access to the critical data they specify. Using CICS Performance Analyzer, you gain the insight you need to effectively manage CICS systems and enhance their function and efficiency.

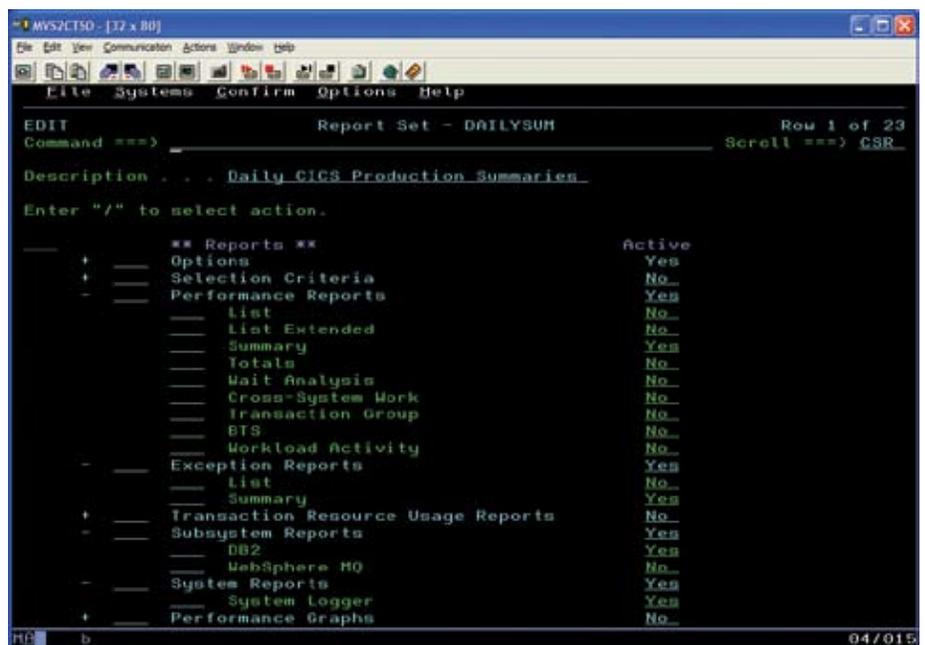
With CICS Performance Analyzer, you can:

- *Easily produce regular reports for ongoing performance management.*
- *Run performance reports to analyze fluctuations in transaction volume and identify the effect of new applications on your CICS systems.*
- *Improve the productivity of CICS systems by knowing when to increase resource availability during high-demand cycles.*
- *Estimate system and resource requirements to prepare for enterprise growth.*
- *Achieve faster resolution of online problems by quickly determining what caused the problems identified by your online monitor.*

CICS Performance Analyzer can help you discover new ways to improve CICS system performance, lower maintenance costs and strategically plan IT investments.

### Get a complete view of your CICS systems performance

CICS Performance Analyzer reports are designed to enable comprehensive analysis of your CICS systems—with a detailed overview of transaction volume and performance—so that you can evaluate resource usage and forecast demands accurately. The product's analysis programs use the performance and accounting data written to IBM z/OS® System Management Facilities (SMF) data sets to generate reports.



The report set menu allows you to easily select reports and extracts.

This data includes that collected by IBM CICS Monitoring Facility, IBM CICS Statistics and IBM CICS Server Statistics, IBM DB2® Universal Database™ for z/OS, IBM WebSphere® MQ, and IBM z/OS System Logger.

To help you get started quickly, CICS Performance Analyzer, Version 1.4 comes with more than 120 standard reports. You can analyze the information from these standard reports to:

- *Track transaction performance across CICS, DB2, IBM IMS™, WebSphere MQ and z/OS environments from one easy-to-read report.*
- *Easily identify potential sources of performance bottlenecks using performance wait-analysis reports.*
- *Analyze CICS statistics and CICS Server Statistics online.*
- *Understand the range of a transaction response time for performance problem determination through response-time distribution reports.*
- *Evaluate the performance of CICS Web support, Web services, XPLink and other new performance data introduced in IBM CICS Transaction Server, Version 3.1.*
- *Analyze CICS systems' use of external subsystems, including DB2 and IMS databases.*
- *Use z/OS system-logger reports in conjunction with CICS logger reports—produced by standard CICS statistics-reporting utilities—to provide a comprehensive analysis of the log-stream activity for all your CICS systems.*

- *Understand how well your CICS transactions are meeting your response-time goals using IBM z/OS Workload Manager reports.*

### **Tailor analysis to fit your needs**

With CICS Performance Analyzer, you can generate a range of valuable reports about CICS system and resource usage.

- *Transactions and programs*
- *Terminals*
- *Files*
- *Journal and log streams*
- *Basic mapping support*
- *Secure Sockets Layer (SSL) and CICS Web support*
- *Temporary storage*
- *Transient data*
- *Virtual storage*
- *Java™ Virtual Machine (JVM) support*
- *Web services*
- *Program channel usage*
- *Container-channel usage*

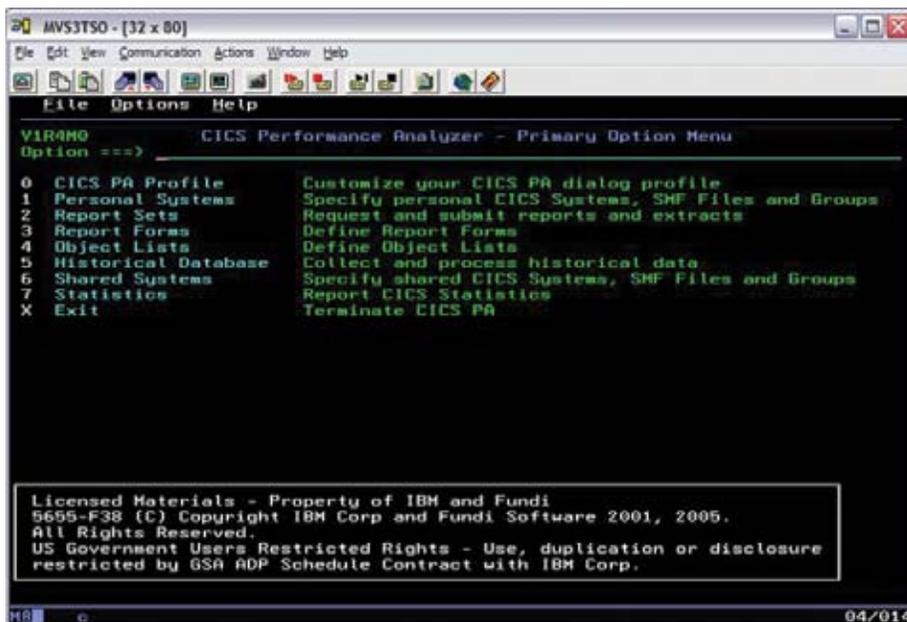
Using report sets, report forms and object lists gives you the flexibility to tailor the format and content of your reports and data extracts. You can report performance data by individual or grouped transactions, by application or by terminal. You can group similar transaction data—for example, all transactions from a specific application—to deliver quick, relevant processing and report generation.

Consolidated, transaction-group reports help you gain a better perspective of the whole system. You can also select and sort records, and customize and format reports to fit your preferences. With CICS Performance Analyzer, you get relevant, useful information presented in a way that improves your ability to plan and communicate your resource needs effectively.

### **Analyze stored historical data to discover performance trends**

The historical database function enables you to retrieve and analyze historical data easily. This flexible facility helps you collect and manage historical performance data for your CICS systems. The CICS Performance Analyzer historical database function provides:

- *Short-term history data, detailing individual transaction performance to use in performance problem analysis.*
- *Long-term history data summarized over time, which can be used for trend analysis and capacity planning.*
- *Statistics history data for use in performance analysis and reporting.*
- *A powerful and flexible definition facility for historical data repositories.*
- *Comprehensive reporting facilities.*
- *A facility to optionally export and load historical data into DB2 databases to analyze and generate reports, using DB2 reporting tools, such as IBM Query Management Facility.*



You can use the CICS Performance Analyzer primary option menu to manage reports and historical databases.

### Easily build reports and extract data

CICS Performance Analyzer provides an easy-to-use, Interactive System Productivity Facility (ISPF) dialog that is IBM Common User Access® (IBM CUA®) technology-compliant, to build, maintain and submit report requests. The ISPF dialog enables you to easily define and manage historical databases. You can also submit your report requests as part of any job-scheduling or automation process.

IBM offers extensive online help and detailed documentation for CICS Performance Analyzer, making it easy to tailor your reports—such as setting format and content—to present the information you need, when you need it. You can also select a particular subset of SMF data and use it as input to CICS Performance Analyzer to enable faster processing. CICS Performance Analyzer enables you to export relevant data conveniently to your personal computer in a customized format to use and analyze in applications like IBM Lotus® 1-2-3®, IBM Lotus Approach® and Microsoft® Excel.

### Evaluate and improve system performance

CICS Performance Analyzer facilitates cross-system performance evaluation. You can analyze CICS systems that employ multiregion operation (two or more discrete CICS systems communicating), Advanced Program-to-Program Communication (APPC) and DB2 subsystems. And by identifying exception events that cause performance degradation, CICS Performance Analyzer can help you reduce maintenance costs and save time.

An online statistics-reporting facility is available through the CICS Performance Analyzer ISPF dialog. This facility enables you to conduct comprehensive analysis and reporting of CICS statistical data either directly from an unloaded standard message format (SMF) data set or from a CICS Performance Analyzer historical database (HDB). The online statistics-reporting facility includes the following features:

- *Tabular reporting, sorting by field (column)*
- *Forms you can use to design personalized reports*
- *Hyperlinks you can use to jump directly to related reports*
- *A print facility, either to a data set or to SYSOUT*

CICS Performance Analyzer complements your online monitoring tools, like IBM Tivoli® OMEGAMON® XE for CICS. You can respond quickly to online performance issues because CICS Performance Analyzer can drill down deeply into CICS performance data to identify the cause of the problem. CICS Performance Analyzer also complements the enterprise-wide, historical-performance capabilities of IBM Tivoli Decision Support for z/OS with more deep and detailed CICS performance data. And you can use these tools and capabilities to focus on CICS performance-problem determination, bottleneck analysis, tuning and capacity planning.

CICS Performance Analyzer, Version 1.4 also supports the Tivoli OMEGAMON XE for CICS user fields that can be added by Tivoli OMEGAMON XE into the CICS Monitoring Facility (CMF) performance (SMF 110) records. You can create CICS Performance Analyzer reports that detail your application's use of Adabas, CA-Datcom, SUPRA, CA-IDMS and Tivoli OMEGAMON XE user-defined events, as well as reporting on those transactions that have exceeded Tivoli OMEGAMON XE resource-limiting thresholds.

**Use the IBM tools portfolio**

CICS Performance Analyzer is a part of an extensive portfolio of IBM System z™ tools. These tools support the entire enterprise-application life cycle to help you build, integrate, test and manage enterprise solutions. You can use your System z platform investments and take advantage of the latest functions introduced in CICS Transaction Server. This portfolio includes a suite of integrated performance-management tools that enable you to monitor the health of all your System z machines and applications, so that you can improve IT operational efficiency and transform CICS applications to achieve greater business flexibility.

**For more information**

To learn how you can enhance the performance of your CICS systems using CICS Performance Analyzer reports, contact your IBM representative or IBM Business Partner, or visit:

[ibm.com/cics/tools](http://ibm.com/cics/tools)

The screenshot shows a terminal window titled 'MVSZCTSD - [37 x 80]' with a menu bar (File, Edit, View, Communication, Actions, Window, Help) and a toolbar. The main content is a report titled 'REPORT DSA's' with the following details: 'Line 00000001 Col 002 008', 'Command ==>', and 'Scroll ==> DSR'. The system information is 'System: CICSXX64/SYS', 'Type: E00', and 'Interval: 2006/05/02 16:18:43 Tuesday'. The report table is as follows:

DSA Name	DSA Location	Access	Current DSA Size	Peak DSA Size	Current Cushion Size	GETMAIN Requests
CDSA	BELOW	CICS	1280K	1280K	64K	1129
UDSA	BELOW	USER	1024K	1024K	64K	1137
SDSA	BELOW	USER	256K	256K	64K	11
RDSA	BELOW	READONLY	256K	256K	64K	18
ECDSA	ABOVE	CICS	17408K	17408K	128K	28547
EUDSA	ABOVE	USER	133120K	133120K	0K	1435
ESDSA	ABOVE	USER	0K	0K	0K	0
ERDSA	ABOVE	READONLY	20480K	20480K	256K	396

The bottom of the window shows '04/015'.

You can analyze CICS Transaction Server, Version 3.1 system and resource usage with the CICS Performance Analyzer online statistics report.

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## IBM CICS Performance Analyzer for z/OS, Version 1.4 at a glance

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### Hardware requirements

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Any hardware supporting the following:

- IBM CICS Transaction Server for z/OS, Version 3.1
- IBM CICS Transaction Server for z/OS, Version 2.2 and Version 2.3
- IBM CICS Transaction Server for OS/390, Version 1.3

### Software requirements

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- System Modification Program/Extended (SMP/E) of the supported z/OS or IBM OS/390<sup>®</sup> system for installation and maintenance
  - IBM ISPF Program Development Facility, Version 5.2 or later
  - IBM Data Facility Sort (IBM DFSORT<sup>™</sup>), Version 1.13 or later, or an equivalent product
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