

# TriTune

IT organizations are being asked to reduce processing costs while simultaneously improving service levels with increasingly fewer skilled technical staff and constant budget cuts. TriTune® is an advanced Performance Analysis and Tuning Solution designed to address one of the primary issues impacting the performance, cost and complexity of today’s massively-scaled z/OS-based systems – application efficiency.

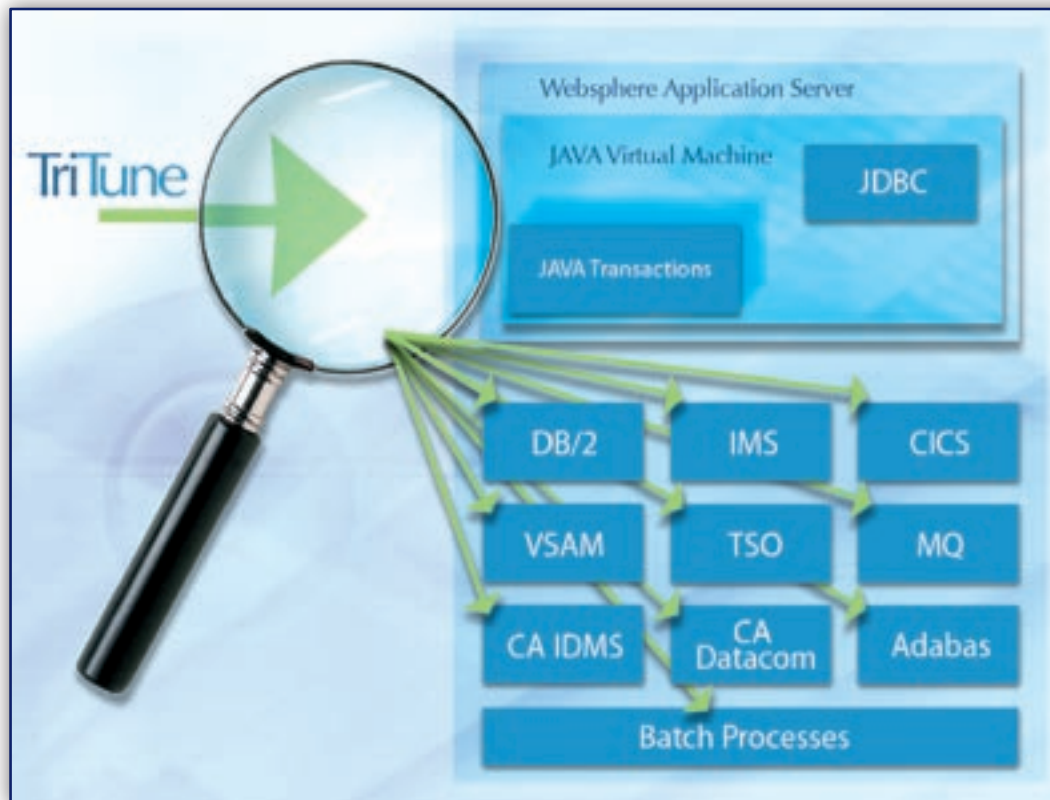
TriTune helps performance engineers, technical analysts, and applications development teams isolate the sources of excessive processing faster and more easily than traditional application performance analysis products. TriTune is the most advanced solution for eliminating performance inefficiencies that unnecessarily inflate application operational costs.

## TriTune Key Features & Benefits

- ▶ Enables applications and performance specialists to uncover system, database, I/O and application performance inefficiencies in z/OS-based systems.
- ▶ Recovers wasted processing time and reduces CPU consumption leading to improved processor utilization, deferred capacity increases, and reduced chargeback costs.
- ▶ Provides enhanced analysis for DB2 Version 8 and Distributed Data Facility.
- ▶ Provides in-depth analysis for Websphere-based applications running on z/OS.
- ▶ Delivers subsystem and language support components in a single all-inclusive license.

## TriTune at a Glance

- ▶ TriTune pinpoints application execution delays and presents an in-depth performance profile through an easy-to-use, interactive interface. TriTune works for traditional and Parallel Sysplex environments.
- ▶ TriTune provides detailed delay and execution metrics that let analysts quickly identify the root-cause for suboptimal or bad performance of mission-critical mainframe applications.
- ▶ TriTune provides content-sensitive online help containing tuning information that can turn even junior analysts into tuning experts. With TriTune, you can capture, document, and share site-specific information throughout the organization.



## Parallel Sysplex support

TriTune makes it easy to work in a complex Parallel Sysplex environment. It:

- ▶ Monitors batch jobs regardless of which system the job executes on.
- ▶ Views an entire Sysplex as a single logical system.
- ▶ Runs monitor requests locally on a specific system in the Sysplex, or manages requests across all systems in the Sysplex.

## Support for DB2 DDF & Stored Procedures

TriTune provides detailed performance data on DB2 database processing on z/OS for tuning SQL calls arriving via DB2 Distributed Data Facility (DDF) or running as Stored Procedures. With the growth in distributed applications that generate DB2 database processing on z/OS, Dynamic SQL and Stored SQL Procedures have become critical areas requiring in-depth performance analysis.

- ▶ Reports detailed statistics on DBRM processing and individual Dynamic SQL arriving via DDF.
- ▶ Provides Requesting and Correlation IDs to link resource-intensive Dynamic SQL processing to the originating applications.
- ▶ Reports procedure name and processing statistics for DB2 Stored Procedures executed during TriTune monitor session.

## Support for Websphere on z/OS

For JAVA applications executing under Websphere configured on z/OS, TriTune makes the critical connection between the z/OS-based system services visible to standard monitors and the JAVA application itself where meaningful performance analysis can occur.

- ▶ Identifies individual transactions entering the Websphere Application Server.
- ▶ Reports individual JAVA class and method names and specific JAVA program statements responsible for generating the heaviest amounts of execution and database processing.
- ▶ Provides important statistics on Websphere memory utilization and performance.

## Support for CA IDMS

TriTune now includes support for CA IDMS. When TriTune detects a poor performer or runaway process related to CA IDMS activity, it will be able to attribute the CPU response times to CA IDMS application code. Included in the CA IDMS support are :

- ▶ Monitoring of the activity of the IDMS Central Version.
- ▶ Tracking of activity for both batch and online CA IDMS applications.
- ▶ Tracking of CA IDMS database activity for batch and online applications.
- ▶ Tracking of CA IDMS batch and online applications.

## Interactive Analysis Interface

TriTune presents the information needed to keep applications tuned and performing optimally — all in an easy-to-use, interactive format.

## Monitor management features

Monitor definitions can be stored and saved for later use, grouped together to execute at the same time for different address spaces within the Sysplex, and scheduled for automatic invocation. Monitor history reports let you review run-to-run measurement overview statistics to see how a tuning effort is progressing.

## Easy analysis

TriTune enables the analyst to group related modules for fast, easy analysis.

- ▶ Defines related modules as a single group, resulting in a clearly delineated application module on which to focus tuning efforts.
- ▶ Measures elapsed time for all grouped modules and reports back by using the pseudo group identifier.
- ▶ Relates delays to program statements.
- ▶ Compares program activity to the actual high-level language statements that were executed, instead of only CSECT offsets.
- ▶ Registers programs during the analysis phase (*see complete list below*)
- ▶ Identifies and displays the sections of code that are causing delays or excessive CPU consumption.

## Detailed analysis of online transactions

An analyst can review online performance at the transaction level by selecting transactions by transaction ID, user ID, terminal ID, or a combination of IDs. TriTune lets you view data delays by transaction, code activity by transaction, and database activity by transaction.

## Supported subsystems and languages

TriTune supports the following subsystem and language environments with a single, integrated solution:

- 
- |                |                    |
|----------------|--------------------|
| ▶ CICS         | ▶ ADABAS           |
| ▶ CTS          | ▶ COBOL VS         |
| ▶ CA-Datcom    | ▶ COBOL II         |
| ▶ CA-Optimizer | ▶ REXX             |
| ▶ NATURAL      | ▶ CA-Ideal         |
| ▶ FORTRAN      | ▶ Enterprise COBOL |
| ▶ PL/I         | ▶ Enterprise PL/I  |
| ▶ C/C++        | ▶ CA IDMS          |
| ▶ Assembler    | ▶ JAVA             |
| ▶ DB2®         | ▶ USS              |
| ▶ IMS          |                    |

## Automated AQM: the solution for proactive Application Performance Tuning

Combined with APC™ for TriTune®, the leading automation and data mining engine on the market, TriTune is the most advanced performance analysis and tuning solution available. The combination with APC maximizes the benefits of TriTune by integrating powerful functionalities. APC offers the highest degree of automation possible and eliminates over 90% of manual efforts.

## Automated AQM

- ▶ Discovers all concealed tuning opportunities across your entire z/OS production system, even before performance problems arise.
- ▶ Provides the highest levels of IT cost savings possible, by dramatically increasing the scope of tuning opportunities, discovering all unnecessary resource consumption.
- ▶ Helps corporations improve customer service, meet SLA's and maintain a competitive edge, saving millions of dollars in deferred hardware and software.



## About AQM Solutions

AQM Solutions Inc. is a leading provider of Application Quality Management (AQM) software and professional services. Our mission is to help Fortune 1000 companies implement Automated AQM programs to improve application quality, performance, and IT profitability. Our customers consistently defer mainframe upgrades and reduce IT costs using TriTune, APC and APC Performance Desktop to simplify and automate the task of identifying application performance bottlenecks. Automated AQM turns application performance tuning practices into a strategic advantage. AQM Solutions Inc. is headquartered in Boston, MA and is a subsidiary of TRILOGexpert with offices in Munich, Germany and Zurich, Switzerland. For further information on TRILOGexpert please visit — [www.trilogexpert.com](http://www.trilogexpert.com)

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