

APPLICATION PERFORMANCE MEASUREMENT AND ANALYSIS MADE EASIER AND MORE AUTOMATIC

Compuware AutoStrobe proactively measures application performance, easing and improving performance analysis efforts.

AutoStrobe increases the flexibility of Compuware's Strobe and iStrobe products, boosts productivity and enhances application performance management (APM) programs by making the measurement process predictable and repeatable. It aids analysis by supplying historical data on application performance and automatically identifies measurement sessions that exceed user-defined resource utilization thresholds.

For application developers, performance analysts, database administrators, technical support engineers and other IT professionals who work with mission-critical applications, AutoStrobe offers:

- flexible, time-efficient ways to measure application performance
- historical data for analyzing application performance over time
- a way to analyze cost savings
- help in focusing application performance analysis
- proactive initiation of measurements on programs with performance degradation.

FOCUSED APPLICATION PERFORMANCE ANALYSIS

AutoStrobe enables users to focus their performance analysis efforts on application components that consume significant resources. Because it highlights measurement sessions that exceed user-defined thresholds for statistics such as CPU time and CPU percent utilization, wait time and I/O counts, users can quickly target performance profiles that warrant further analysis.

AutoStrobe proactively initiates a Strobe measurement when abnormal behavior occurs in a program. This feature allows organizations to measure and analyze application performance automatically, reaping continual benefits with minimal personnel costs. AutoStrobe oversees the execution of batch programs and identifies those that run long or consume excessive resources. By detecting possible performance problems and initiating Strobe measurements automatically, AutoStrobe lets you focus your APM efforts on only high-priority performance issues.

With AutoStrobe, users can schedule measurement sessions and reusable measurement session request groups by month, date, day of week and time.

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----- STROBE - REQUEST SCHEDULER -----
COMMAND ==>

JOBNAME:      WPAEXLXX                Specify dates in MM/DD/YYYY format
                                           Current Date: 06/30/2003
Select day of week  MON  TUE  WED  THU  FRI  SAT  SUN  Time: 14:58
by entering a Y ==>  -   Y   -   -   -   -   -

Starting Time(s) ==>  1) 10 : 30 24HR 2)  _ : _ 24HR 3)  _ : _ 24HR
Starting Date   ==> 09/17/2002
Number of Weeks ==> 4 (1-52)   OR   Ending Date   ==> / /

Add or exclude dates and times generated above or create a customized list
(OPT: A - Add a date and time      E - Exclude a date and time)

OPT   DATE       TIME 24HR      OPT   DATE       TIME 24HR
A     11/26/2002  10 : 30      -    _ / _ / _    _ : _
A     12/17/2002  10 : 30      -    _ / _ / _    _ : _

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A WAY TO ANALYZE COST SAVINGS

Because AutoStrobe quantifies differences in CPU utilization and I/O counts, users can easily calculate cost savings resulting from application performance improvements.

HISTORICAL DATA FOR ANALYZING PERFORMANCE OVER TIME

AutoStrobe collects historical measurement session data so users can track and compare changes in the performance of a particular application over time. By analyzing comparative statistics on measurements such as CPU utilization, wait time and I/O counts, users can determine application performance trends for a particular job step, online region, transaction or DBRM, and quickly identify application performance anomalies that warrant further analysis.

For example, users who are re-engineering applications can automatically collect and save data at each development milestone to identify deviations from an application's baseline measurements. Users can also measure and analyze applications during various testing phases to search for changes in CPU time, wait time and stretch time.

AUTOMATICALLY MEASURE CHANGED LOAD MODULES

AutoStrobe provides a utility called AutoMeasure that automatically measures new and changed load modules. AutoMeasure gives you a quick way to determine whether code changes have altered an application's performance. You can use AutoMeasure to look for new and changed load modules, and initiate a measurement the next time the target job step executes. Comparing the Performance Profile generated with those from previous Strobe measurements can help ensure your application's performance is maintained across updates.

AUTOSTROBE CICS TRANSACTION PROCESSING

AutoStrobe provides two functions that help detect when CICS transactions are behaving abnormally. You can create transaction candidates by building a list of CICS transactions that are candidates for monitoring. You can use this list as input into the Monitor Transactions function. This function monitors CICS transactions and triggers a measurement or warning whenever a transaction exceeds an average CPU or response time threshold.

FLEXIBLE, TIME-EFFICIENT WAYS TO MEASURE APPLICATION PERFORMANCE

By increasing options for specifying measurement session requests, AutoStrobe can increase the efficiency of APM processes. For example, IT professionals can create a reusable group of measurement session requests and then submit it with a single action. Later, they can resubmit the group and readily collect and analyze data at successive stages in an application's life cycle or following a series of coding changes.

Users can also schedule measurement sessions — including reusable groups of measurement session requests — by day of the week, date or time of day. Because the sessions run automatically, IT professionals can gather application performance data at regular intervals during peak processing times. They can also save time by measuring multiple steps of the same job with a single request and by measuring multiple, related address spaces concurrently.

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----- STROBE - HISTORY - JOB/STEP/PROGRAM COMPARISON -----
COMMAND ==>                                SCROLL ==> PAGE

Job:      WPAEAG14                          PE - Print/Export          MORE>>
Step:     IDMS141                           CC - Cost Comparison
Program:  IDMSDC   Annual Frequency ==> 0   CM - Change Machine Costs

-----
Line Options:      U - Update History Record
BASELINE MEASUREMENT
----DATE-----TIME---COST-SESSION TIME----CPU TIME----WAIT TIME-STRETCH TIME
_ 10/12/2002 11:25:43 PR    2M 35.12s    0M 20.02s    1M 19.78s    0M 55.31s
--COMPARE TO BASELINE-----
_ 10/12/2002 12:41:45 PR   -0M 29.84s   -0M  3.22s    0M 27.77s   -0M 54.39s
_ 10/13/2002 14:59:36 PR   -0M 42.26s   -0M 16.23s   -0M 17.19s   -0M  8.83s
_ 10/17/2002 09:58:21 PR   -0M 22.71s   -0M  5.31s    0M 26.25s   -0M 43.65s
_ 10/17/2002 11:30:49 PR   -2M 13.53s   -0M 19.67s   -1M 11.96s   -0M 41.89s
-----
                                BOTTOM OF DATA -----
```

On the Job/Step/Program Comparison panel, users can differentiate recent measurement sessions from the baseline measurement session by session time, CPU time, wait time and stretch time. With this function, you can quantify application performance improvements and track application performance trends over time.

EXTENDING THE VALUE OF STROBE

For additional performance event notification and reporting capabilities, AutoStrobe publishes performance events it detects to Abend-AID Fault Manager, Compuware's fault detection and resolution product. Integration with Fault Manager allows for sophisticated notification capabilities and unique management-level reporting of performance events that have occurred.

APM PROBLEM SOLVER SERVICE

The APM Problem Solver service assists clients in identifying and resolving specific performance problems in their mainframe-centric, business-critical applications.

Using Compuware's industry-leading products, our experienced Delivery Consultants work closely with a client's IT personnel to measure an application's performance, identify performance improvement opportunities and make recommendations for implementing solutions.

With the APM Problem Solver services, organizations can not only resolve problems quickly and effectively, but also gain the skills necessary to prevent future application performance degradation.

Compuware's Delivery Consultants are experts in managing APM projects. They have the latest knowledge of APM methodology and technologies. They average 10 or more years experience in OS/390 and z/OS application or system programming, database administration and/or application performance tuning.

Ask your sales representative for information on our Mainframe APM offerings that support your operating environment.

Mainframe APM: Strobe Products

Z/OS OPERATING ENVIRONMENT

- Strobe
- iStrobe
- AutoStrobe

SUBSYSTEM AND DATABASE ENVIRONMENTS

- Strobe for CICS
- Strobe for DB2
- Strobe for IMS
- Strobe for WebSphere MQ
- Strobe for WebSphere Application Server
- Strobe for CA IDMS
- Strobe for ADABAS/NATURAL
- Strobe for UNIX System Services

LANGUAGES

- Strobe for Java™
- Strobe for COBOL
- Strobe for C/C++
- Strobe for PL/I
- Strobe for FORTRAN
- Strobe for CA Gen

To learn more about Compuware AutoStrobe, visit:
compuware.com/strobe

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