

IMPROVE EFFICIENCY AND RESPONSIVENESS OF CA GEN APPLICATIONS

Compuware Strobe for CA Gen helps IT organizations deliver efficient and responsive CA Gen applications and maintain high standards of performance throughout the life cycle.

Part of Compuware's Strobe Application Performance Management (APM) System, Strobe for CA Gen measures the performance of online batch-processing applications and contributes CA Gen-specific information to the Performance Profile, a series of hierarchical reports that pinpoints the sources of resource demand.

Strobe for CA Gen:

- identifies the individual CA Gen action diagram and COBOL program statements that cause excessive CPU consumption
- identifies the SQL calls generated by CA Gen that cause excessive CPU usage or wait time

- detects the inefficient use of system services and language runtime routines.

Application developers, database administrators, performance analysts and other IT personnel can use this application performance information to reduce batch runtimes, improve transaction response times, increase transaction throughput and consistently meet service-level commitments.

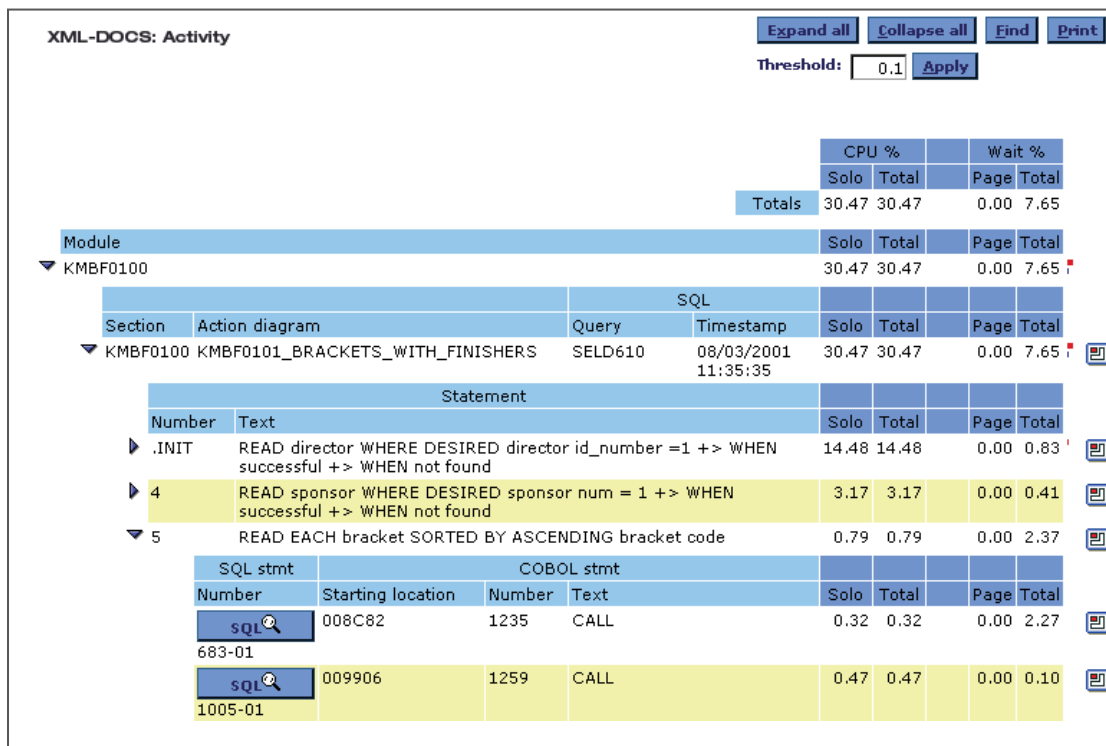


Figure 1: The Activity by CA Gen Action Diagram report shows CPU and wait activity at the module level, the section and action diagram level, and the statement level.

A COMPREHENSIVE VIEW OF APPLICATION PERFORMANCE

Performance data from Strobe for CA Gen is fully integrated with information from Compuware Strobe and its other prerequisite products, such as Strobe for CICS, DB2, IMS and COBOL, in a single Performance Profile. Users gain a comprehensive understanding of overall application performance, even in the most complex processing environments, to quickly locate and eliminate application inefficiencies.

IMPROVE APPLICATION EFFICIENCY AND RESPONSIVENESS

With Strobe for CA Gen, users can identify and improve the performance of resource-consumptive CA Gen action diagrams and generated COBOL programs and SQL statements, and avoid the inefficient use of system services and language runtime routines.

IMPROVE THE PERFORMANCE OF RESOURCE-CONSUMPTIVE CA GEN ACTION DIAGRAMS AND COBOL PROGRAMS

Strobe for CA Gen makes it easy for developers to gauge the effects of their coding choices on application performance. Performance Profile reports pinpoint the CA Gen action diagram statements that use excessive resources within online regions and batch job steps, supplying the percentage of CPU time used, along with full statement text. Profile reports also show the percentage of CPU time used by individual COBOL program statements generated by the action diagrams.

Strobe for CA Gen doesn't just identify the sources of application inefficiencies, it helps improve them. When this product is used in conjunction with Compuware iStrobe, users can make informed coding and design decisions because of extensive CA Gen-specific performance hints.

XML-DOCS: Activity				Expand all	Collapse all	Find	Print	<input type="text" value="0"/>	Go
				CPU %		Wait %			
				Solo	Total	Page	Total		
Totals				30.47	30.47	0.00	7.65		
Module				Solo	Total	Page	Total		
▼ KMBF0100				30.47	30.47	0.00	7.65		
		SQL							
Section	Action diagram	Query	Timestamp	Solo	Total	Page	Total		
▼ KMBF0100 KMBF0101_BRACKETS_WITH_FINISHERS				30.47	30.47	0.00	7.65		
		SELD610	08/03/2001 11:35:35						
Statement		Solo	Total	Page	Total				
Number	Text			Page	Total				
▶ .INIT	READ director WHERE DESIRED director id_number =1 +> WHEN successful +> WHEN not found	14.48	14.48	0.00	0.83				
▶ 4	READ sponsor WHERE DESIRED sponsor num = 1 +> WHEN successful +> WHEN not found	3.17	3.17	0.00	0.41				
▶ 5	READ EACH bracket SORTED BY ASCENDING bracket code	0.79	0.79	0.00	2.37				
▶ 8	READ EACH event_roster WHERE DESIRED event_roster shows_sign_up SOME entran AND THAT entran belongs_to CURRENT bracket AND DESIRED event_roster place > 0	12.03	12.03	0.00	4.04				

Figure 2: This report shows a further level of CPU consumption of system services invoked by the generated code.

Figure 3: This example of the Activity by CA Gen Action Diagram report shows the services invoked level.

XML-DOCS: Activity						Expand all		Collapse all		Find		Print		0		Go	
						CPU %		Wait %									
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Module						Solo		Total		Page		Total					
▼ KMBF0100						30.47		30.47		0.00		7.65					
						SQL											
Section		Action diagram		Query		Timestamp		Solo		Total		Page		Total			
▼ KMBF0100		KMBF0101_BRACKETS_WITH_FINISHERS		SELD610		08/03/2001 11:35:35		30.47		30.47		0.00		7.65			
Statement						Solo		Total		Page		Total					
Number		Text				Solo		Total		Page		Total					
▼ .INIT		READ director WHERE DESIRED director id_number =1 +> WHEN successful +> WHEN not found				14.48		14.48		0.00		0.83					
SQL stmt		COBOL stmt				Solo		Total		Page		Total					
Number		Starting location		Number		Text		Solo		Total		Page		Total			
▼		00014DC		1052		CALL		14.48		14.48		0.00		0.83			
Services invoked						CPU %											
Pseudo-module		Module		Section		Description		Transaction		Solo		Total					
.HME00UD		TELWDGT		TELWDGT		TEL ASSIST STRNG FILE				7.26		7.26					
.HME00UD		HMFIMEM		MEMCPY		DELTA MEM ADVNTG				3.73		3.73					
.HME00UD		DNTRFRWDS		CLSWOPRD		TEL ASSIST STRNG FILE				1.98		1.98					
.HME00UD		HMFIYOD		ORGJNNW		FRAMISTAN W/HENWAY				1.51		1.51					

IMPROVE THE PERFORMANCE OF RESOURCE-CONSUMPTIVE SQL STATEMENTS

With *Strobe for CA Gen*, users can easily locate resource-consumptive SQL statements generated by the action diagram and improve SQL access path efficiency. Profile reports highlight the percentage of CPU time and wait time used by individual SQL statements and list the full SQL statement text. For resource-consumptive queries, iStrobe supplies EXPLAIN data and translations for analyzing access path efficiency and offers recommendations for modifying SQL statements and database definitions to improve application performance.

AVOID THE INEFFICIENT USE OF SYSTEM SERVICES AND LANGUAGE RUNTIME ROUTINES

Strobe for CA Gen helps users avoid the inefficient use of system services and language runtime routines. Profile reports identify the action diagram and program statements that call resource-consumptive system services, including CA Gen, z/OS and DB2 system services as well as COBOL and Language Environment (LE) runtime routines. To aid users in analysis, iStrobe supplies a comprehensive help system that includes detailed module descriptions and performance hints.

A SIMPLE WAY TO MEASURE AND ANALYZE CA GEN APPLICATION PERFORMANCE

Measuring the performance of applications developed with CA Gen is easy with *Strobe for CA Gen*. Performance data for action diagrams, generated COBOL programs and SQL calls, and system services is automatically captured and reported. No recompiles, rebinds, relinks or JCL changes are necessary. And because of the feature's low-density sampling technology, it can be used with confidence in both production and test environments. In addition, iStrobe provides CA Gen system module help and specific performance improvement hints. iStrobe consolidates this data into a format that users can easily navigate to quickly determine where performance problems occur. iStrobe's Top Resource Consumers reports provide an overview of the Performance Profile, quickly highlighting the location within CA Gen or other subsystems where performance problems may occur. Users can document their findings in Profile Notes.

APM PROBLEM SOLVER SERVICE

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

Using Compuware's industry-leading products, experienced Compuware Delivery Consultants work closely with your 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 not only resolve problems quickly and effectively, but they 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 and average 10 or more years' experience in OS/390 and z/OS application or system programming, database administration and/or application performance tuning.

To learn more about Compuware Strobe, visit:

www.compuware.com/strobe

APM 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-Optimizer*
- Strobe *for CA Gen*

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