

ACHIEVE HIGH LEVELS OF APPLICATION PERFORMANCE IN CA-IDMS ENVIRONMENTS

Strobe for CA-IDMS, part of the Strobe product family, enables IT professionals to improve the efficiency and responsiveness of their z/OS-based applications that use CA-IDMS.

Strobe for CA-IDMS measures the performance of online and batch processing applications and contributes CA-IDMS-specific information to the Performance Profile, a series of hierarchical reports that pinpoints the sources of resource demand.

Strobe for CA-IDMS:

- identifies individual DML database calls that cause excessive wait time
- identifies CA-IDMS transactions and ADS/O dialogs that use excessive CPU resources or cause poor response time
- pinpoints ADS/O dialog statements that consume excessive CPU resources
- detects the inefficient use of CA-IDMS system services.

Using this information enables application developers, database administrators and other IT professionals to reduce batch runtimes, reduce transaction response times, increase transaction throughput and consistently meet service-level commitments.

A COMPREHENSIVE VIEW OF APPLICATION PERFORMANCE

Strobe for CA-IDMS helps users gain a comprehensive understanding of overall application performance — even in complex environments that use multiple databases and transaction processing systems. Performance data from Strobe for CA-IDMS is fully integrated with information from Strobe and other Strobe products, such as Strobe for CICS and Strobe for COBOL, in a single Performance Profile, allowing users to quickly locate and eliminate application inefficiencies.

The screenshot shows the iSTROBE Performance Profile interface. At the top, there are navigation tabs: Profiles, Reports, Options, and Help. The main content area displays a table with the following structure:

iSTROBE™ from Compuware										
									WAIT %	
									Page Total	
									Totals 0.00 97.39	
Pseudo-module	Module	Section	Description				Page	Total		
▼ .SVC	SVC 001		WAIT				0.00	94.97		
Was invoked by					Via					
Transaction	Module	Section	Return	Seq number	Proc	Module	Section	Description	Page	Total
	SARU710	SARU710	00006CA8	58		RHDCOMVS		IDMS SYSTEM SERVICES	0.00	6.08
	SARU710	SARU710	00006DA8	59		RHDCOMVS		IDMS SYSTEM SERVICES	0.00	4.24
	SARU710	SARU710	0000711C	60		RHDCOMVS		IDMS SYSTEM	0.00	11.29

Figure 1: For local and central version batch job steps, Performance Profile reports identify DML database calls that cause excessive wait time and show the invoking module and CSECT location.

IMPROVE APPLICATION EFFICIENCY AND RESPONSIVENESS

With *Strobe for CA-IDMS*, IT professionals can identify and improve the performance of resource-consumptive DML calls, CA-IDMS transactions and ADS/O dialogs. They can also avoid the inefficient use of CA-IDMS system services and ADS/O runtime routines.

IMPROVE THE PERFORMANCE OF RESOURCE-CONSUMPTIVE DML DATABASE CALLS

For both local and central version batch-processing applications, *Strobe for CA-IDMS* identifies the DML database calls that cause excessive wait time. Profile reports supply the percentage of wait time caused by individual DML database calls and identify the invoking module and CSECT location.

IMPROVE THE PERFORMANCE OF RESOURCE-CONSUMPTIVE CA-IDMS TRANSACTIONS AND ADS/O DIALOGS

Strobe for CA-IDMS takes the guesswork out of identifying and improving CA-IDMS transactions and ADS/O dialogs that cause excessive CPU time or poor response time. Performance Profile reports summarize the percentage of CPU time used by transactions and ADS/O dialogs, and supply execution counts and average service time for the measurement period.

In addition, for ADS/O dialogs, detailed Profile reports pinpoint the ADS/O dialog statements that use excessive CPU time, and supply statement number and text.

For CA-IDMS transactions, detailed Profile reports identify the CA-IDMS transaction components that use excessive CPU time — such as user code, CA-IDMS or other system services, and language runtime routines — and supply the percentage of CPU time used by each.

AVOID THE INEFFICIENT USE OF CA-IDMS SYSTEM SERVICES AND ADS/O RUNTIME ROUTINES

Strobe for CA-IDMS helps users avoid the inefficient use of resource-consumptive CA-IDMS system services and ADS/O runtime routines by identifying the program statements that call them. Performance Profile reports identify the statements that cause excessive wait time or execution in CA-IDMS system services and ADS/O runtime routines, and supply module descriptions to aid in analysis. *iStrobe* offers additional help in reducing resource consumption by supplying more detailed descriptions of system services and runtime modules, and offering specific performance hints.

							CPU %	
							Solo	Total
Totals							26.74	26.74
Dialog	Version	Dictionary name	Dictionary node	Execution count	Creation date/time	Solo	Total	
STRD2EMP	0001	DEFAULT	DEFAULT	356	2001-01-15 10:42:31	26.74	26.74	
Process		Version	Execution count	Average service time (sec)				
NEXTMP		0001	36	0.02	Solo	Total		
					11.63	11.63		
Statement number	Statement text					Solo	Total	
200						3.49	3.49	
1500						5.81	5.81	
4000						1.16	1.16	

Figure 2: Performance Profile reports identify resource-consumptive ADS/O dialogs, supplying execution counts, average service time and percentage of used CPU time. Drill down further and see detailed information pinpointing ADS/O dialog statements and percentage of used CPU time.

ISTROBE™ from Compuware					
Profiles	Reports	Options	Help	CPU %	
				Solo	Total
Totals				99.97	99.97
Transaction	Description	Transaction count	Avg service time (sec)	Solo	Total
▶ *LDRVR*				38.37	38.37
▶ *MSTR*				1.16	1.16
▼ ADS2		355	0.03	60.44	60.44
Pseudo-csect	Description			Solo	Total
▼ .IDMS	IDMS SYSTEM SERVICES			32.54	32.54
Module	Description			Solo	Total
▶ ADSOMAIN	RUNTIME DIALOG EXECUTION			3.48	3.48
▶ IDMSBLDR	BUILD RUNTIME STRUCTURES			3.49	3.49
▶ IDMSDBMS	DATABASE MANAGER			4.65	4.65
▶ IDMSDC	IDMS SYSTEM SERVICES			1.16	1.16
IDMSDTCN	SQL DATE/TIME CONVERSION			1.16	1.16
▶ IDMSLMGR	LOCK MANAGER			2.32	2.32

Figure 3: Performance Profile reports provide a summary of transactions that used CPU and show the IDMS system services called.

A SIMPLE WAY TO MEASURE AND ANALYZE APPLICATION PERFORMANCE

Measuring application performance is easy with Strobe for CA-IDMS. No JCL changes, recompiles or relinks are necessary. Performance data is captured automatically and reported for CA-IDMS transactions, ADS/O dialogs, DML database calls, CA-IDMS system services and ADS/O runtime routines. Because of its low-density sampling technology, Strobe can be used with confidence in both production and test environments.

In addition, iStrobe provides CA-IDMS system module help and specific performance improvement hints. iStrobe consolidates this data into a format that is easy for users to navigate to quickly determine where performance problems occur. iStrobe's Top Resource Consumer Reports provide an overview of the Performance Profile, quickly highlighting the location within Advantage CA-IDMS or other subsystems where performance problems may occur. Users can document their findings in Profile Notes.

Context in IDMS2: Program CPU Usage						Print	Close
Pseudo-module	Description	Attrib	Comb	Solo	Total		
.SYSTEM	SYSTEM SERVICES	0.00	99.97	99.97	99.97		
Pseudo-section	Description	Attrib	Comb	Solo	Total		
📄 .IDMS	IDMS SYSTEM SERVICES	0.00	37.18	37.18	37.18		
Module	RMODE	Description	Interval	Attrib	Comb	Solo	Total
RHDCEVAL		RUNTIME EXPRESSION EVAL	22376	0.00	1.16	1.16	1.16

Show

RHDCEVAL

RHDCEVAL is a generalized program CA-IDMS tools, such as ADS/O, use to perform run-time expression evaluation and address resolution. It performs arithmetic operations and resolves expressions commonly found in applications.

Hints

If RHDCEVAL has high CPU use, some dialogs may be interpreted. ADS/O dialogs can be generated to be interpreted (SYMBOL TABLE YES) or to contain executable object code (SYMBOL TABLE NO). Interpreted dialogs cause increased activity in RHDCEVAL due to the increased need for ADS/O run-time services. Using SYMBOL TABLE NO reduces this processing.

Figure 4: Performance Profile reports identify resource-consumptive CA-IDMS system services and ADS/O runtime routines. iStrobe supplies more detailed descriptions of system services and runtime routines, and offers performance hints.

APM PROBLEM SOLVER SERVICE

The Application Performance Management (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.

To learn more about Compuware Strobe *for CA-IDMS*, visit: 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*

Compuware Corporation, the technology performance company, provides software, experts and best practices to ensure technology works well and delivers value. Compuware solutions make the world's most important technologies perform at their best for leading organizations worldwide, including 46 of the top 50 Fortune 500 companies and 12 of the top 20 most visited U.S. web sites. Learn more at: compuware.com.

Compuware Corporation World Headquarters • One Campus Martius • Detroit, MI 48226-5099

© 2011 Compuware Corporation

Compuware products and services listed within are trademarks or registered trademarks of Compuware Corporation. Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

11.04.11 20122pcg

