

KEEP WEBSPHERE MQ APPLICATIONS PERFORMING AT THE HIGHEST LEVELS

Part of the Compuware Strobe product family, *Strobe for WebSphere MQ* helps IT professionals measure the efficiency and responsiveness of their IBM z/OS-based applications using IBM WebSphere MQ.

Compuware *Strobe for WebSphere MQ* contributes MQ-specific information to the Performance Profile, a series of hierarchical reports identifying the sources of resource demand, by:

- pinpointing individual MQ calls causing excessive wait time or CPU time
- summarizing wait time and CPU time for MQ message queues by call type
- supplying information on MQ call options and message attributes
- identifying counts of MQ calls by command
- identifying program statements calling resource-consumptive MQ system services.

With this information, application developers, performance analysts and other IT professionals can reduce batch runtimes, improve transaction response times, increase transaction throughput and consistently meet service-level commitments.

IBM's Hursley Laboratory — developer of CICS Transaction Server, the leading e-business Enterprise Application Server, and WebSphere MQ, the award-winning family of messaging software — is using Strobe to help develop its next generation of CICS for z/OS and WebSphere MQ for z/OS.

A COMPREHENSIVE VIEW OF APPLICATION PERFORMANCE

Performance data from *Strobe for WebSphere MQ* is fully integrated with information from Strobe and other Strobe products, such as Compuware's *Strobe for CICS*, *Strobe for IMS* and *Strobe for COBOL*, in a single Performance Profile. Users gain a complete picture of application performance and can quickly locate and eliminate application inefficiencies and improve response times.

ISTROBE												
MQM2L5PDD0CA: MQSeries Activity by Queue												
						CPU %		Wait %				
						Solo	Total	Page	Total			
Totals						0.49	0.49	0.00	44.29			
Queue Manager												
						MQ count	Solo	Total	Page	Total		
CSQS						35,225	0.49	0.49	0.00	44.29		
Queue												
						MQ count	Solo	Total	Page	Total		
MQ.BATCH.NO.TRIGGER1						19,250	0.32	0.32	0.00	32.81		
Message size												
Module	Section	Priority range	Smallest	Largest	Average	Solo	Total	Page	Total			
CSQVQDFL		1 - 6	5K	66K	41K	0.16	0.16	0.00	32.81			
MULTB1Q5	MQBARUT5	1 - 6	66K	66K	66K	0.16	0.16	0.00	0.00			
MQSeries call												
	COA	COB	Browse	Data conv.	Wait	Ctrl ID	Sync point	MQ count	Solo	Total	Page	Total
MQGET								9,660	0.16	0.16	0.00	18.69
MQPUT								9,590	0.16	0.16	0.00	14.12
Queue												
						MQ count	Solo	Total	Page	Total		
MQ.BATCH.NO.TRIGGER3						15,947	0.16	0.16	0.00	11.48		
Message size												
Module	Section	Priority range	Smallest	Largest	Average	Solo	Total	Page	Total			
CSQVQDFL		1 - 6	5K	66K	63K	0.16	0.16	0.00	11.48			
MQSeries call												
	COA	COB	Browse	Data conv.	Wait	Ctrl ID	Sync point	MQ count	Solo	Total	Page	Total
MQGET								9,383	0.16	0.16	0.00	10.88

Performance Profile reports pinpoint the individual MQ calls causing delay, identifying the queue and queue manager name, and the location within the user module that originated the call.

IMPROVE APPLICATION EFFICIENCY AND RESPONSIVENESS

With *Strobe for WebSphere MQ*, users can identify and improve resource-consumptive MQ calls; evaluate and improve message queue efficiency; and avoid the excessive use of MQ system services.

IDENTIFY AND IMPROVE RESOURCE-CONSUMPTIVE MQ CALLS

Strobe for WebSphere MQ takes the guesswork out of locating resource-consumptive WebSphere MQ calls. For CICS, IMS and batch-processing applications, Performance Profile reports pinpoint the individual MQ calls causing excessive wait time or using CPU time, and display the associated message queue and queue manager. Profile reports also identify where from within a user program an MQ call was made and the number of times the API call was observed.

IMPROVE MESSAGE QUEUE EFFICIENCY

Strobe *for WebSphere MQ* helps users manage the demands an application makes on WebSphere MQ message queues. Performance Profile reports summarize wait and CPU time by MQ call types for each message queue used by the measured application, and display call options and message attributes observed during the measurement session, such as confirm on arrival, data conversion, size of message and priority.

Working in conjunction with Strobe *for CICS* and Strobe *for IMS*, Strobe *for WebSphere MQ* also makes it easy to diagnose MQ activity that causes poor transaction response time. Profile reports show the amount of transaction suspend time and execution time caused by MQ activity for each unique transaction that accessed a particular message queue.

AVOID THE INEFFICIENT USE OF WEBSPPHERE MQ SYSTEM SERVICES

Strobe *for WebSphere MQ* helps users avoid the inefficient use of system services. Performance Profile reports identify the program statements that cause excessive CPU or wait time within MQ system service modules (prefixed by CSQ) and supply function descriptions to aid in analysis.

A SIMPLE WAY TO MEASURE AND ANALYZE APPLICATION PERFORMANCE

Measuring the performance of applications that use WebSphere MQ is easy with Strobe *for WebSphere MQ*. Performance data on MQ calls, message queues and MQ system services is automatically captured and reported for measured applications. No recompiles, relinks or JCL changes are necessary. Strobe can also be used confidently in both production and test environments because of its low-density sampling technology.

Transaction	Overall transaction count	Dispatch delay	Suspend	Exec	Total	Transaction service time (sec) due to MQSeries
HQAA	143	0.05	2.61	0.05	2.72	0.00 0.03 0.01
HQAO	255	0.05	1.47	0.05	1.57	0.00 0.03 0.03

Performance Profile reports summarize wait and CPU time for message queues by type of MQ call and display observed characteristics.

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