

# JSR 77 Performance Monitoring (Stats Interfaces)

## JSR 77 Standard Stats

No.	J2EEManagedObject	Stats Interface	Methods	Description	Affected Source	StatisticsProvider Class	Comments
1	EJB	EJBStats	CountStatistic getCreateCount()	Number of times the beans create method was called	OpenEJB		
			CountStatistic getRemoveCount()	Number of times the beans remove method was called			
2	SessionBean	SessionBeanStats	RangeStatistic getMethodReadyCount()	Number of beans in the method-ready state	OpenEJB		
3	StatelessSessionBean	StatelessSessionBeanStats	NONE	-	OpenEJB		
4	StatefulSessionBean	StatefulSessionBeanStats	RangeStatistic getPassiveCount()	Number of beans that are in the passivated state	OpenEJB		
5	MessageDrivenBean	MessageDrivenBeanStats	CountStatistic getMessageCount()	Number of messages received	OpenEJB		
6	EntityBean	EntityBeanStats	RangeStatistic getReadyCount()	Number of bean instances in the ready state	OpenEJB		
			RangeStatistic getPooledCount()	Number of bean instances in the pooled state			
7	Servlet	ServletStats	TimeStatistic getServiceTime()	Execution time of the servlets service method	Tomcat / Jetty		
8	JCAResource	JCAStats	JCAConnectionStats[] getConnections()	* list of JCAConnectionStats that provide statistics about the nonpooled connections associated with the referencing JCA resource statistics	?		
			JCAConnectionPoolStats[] getConnectionPools()	* list of JCAConnectionPoolStats that provide statistics about the connection pools associated with the referencing JCA resource statisticsZ			
9	?	JCAConnectionStats	OBJECT_NAME getConnectionFactory()	* JCAConnectionFactory OBJECT_NAME of the managed object that identifies the connector's connection factory for this connection	?		
			OBJECT_NAME getManagedConnectionFactory()	* JCAManagedConnectionFactory OBJECT_NAME of the managed object that identifies the connector's managed connection factory for this connection			
			TimeStatistic getWaitTime()	Time spent waiting for a connection to be available			
			TimeStatistic getUseTime()	Time spent using a connection			
10	?	JCAConnectionPoolStats	CountStatistic getCloseCount()	Number of connections closed	?		
			CountStatistic getCreateCount()	Number of connections created			
			BoundedRangeStatistic getFreePoolSize()	Number of free connections in the pool			
			BoundedRangeStatistic getPoolSize()	Size of the connection pool			
			RangeStatistic getWaitingThreadCount()	Number of threads waiting for a connection			
11	JTAResource	JTAStats	CountStatistic getActiveCount()	Number of active transactions	?		
			CountStatistic getCommittedCount()	Number of committed transactions			
			CountStatistic getRolledbackCount()	Number of rolled-back transactions			
12	JDBCResource	JDBCStats	JDBCConnectionStats[] getConnections()	* list of JDBCConnectionStats that provide statistics about the nonpooled connections associated with the referencing JDBC resource statistics	Geronimo		
			JDBCConnectionPoolStats[] getConnectionPools()	* list of JDBCConnectionPoolStats that provide statistics about the connection pools associated with the referencing JDBC resource statistics			
13	?	JDBCConnectionStats	OBJECT_NAME getJdbcDataSource()	* name of the managed object that identifies the JDBC data source for this connection	Geronimo		
			TimeStatistic getWaitTime()	Time spent waiting for a connection to be available			
			TimeStatistic getUseTime()	Time spent using a connection			
14	?	JDBCConnectionPoolStats	CountStatistic getCreateCount()	Number of connections created	Geronimo		
			CountStatistic getCloseCount()	Number of connections closed			
			BoundedRangeStatistic getPoolSize()	Size of the connection pool			
			BoundedRangeStatistic getFreePoolSize()	Number of free connections in the pool			
			RangeStatistic getWaitingThreadCount()	Number of threads waiting for a connection			
15	JMSResource	JMSStats	JMSConnectionStats[] getConnections()	* list of JMSConnectionStats that provide statistics about the connections associated with the referencing JMS resource	ActiveMQ		

16	?	JMSConnectionStats	JMSSessionStats[] getSessions()	* list of JMSSessionStats that provide statistics about the sessions associated with the referencing JMSConnectionStats	ActiveMQ		
			boolean isTransactional()	* transactional state of this JMS connection			
17	?	JMSSessionStats	JMSProducerStats[] getProducers()	* list of JMSProducerStats that provide statistics about the message producers associated with the referencing JMS session statistics	ActiveMQ		
			JMSConsumerStats[] getConsumers()	* list of JMSConsumerStats that provide statistics about the message consumers associated with the referencing JMS session statistics			
			CountStatistic getMessageCount()	Number of messages exchanged			
			CountStatistic getPendingMessageCount()	Number of pending messages			
			CountStatistic getExpiredMessageCount()	Number of expired messages			
			TimeStatistic getMessageWaitTime()	Time spent by a message before being delivered			
			CountStatistic getDurableSubscriptionCount()	Number of durable subscriptions			
18	?	JMSEndpointStats	CountStatistic getMessageCount()	Number of messages sent or received	ActiveMQ		
			CountStatistic getPendingMessageCount()	Number of pending messages			
			CountStatistic getExpiredMessageCount()	Number of messages that expired before delivery			
			TimeStatistic getMessageWaitTime()	Time spent by a message before being delivered			
19	?	JMSProducerStats	String getDestination()	* encapsulates the identity of a message destination	ActiveMQ		
20	?	JMSConsumerStats	String getOrigin()	* encapsulates the identity of a message origin	ActiveMQ		
21	JavaMailResource	JavaMailStats	CountStatistic getSentMailCount()	Number of mail messages sent	Geronimo		
22	URLResource	URLStats	NONE	-	Geronimo		
23	JVM	JVMStats	CountStatistic getUpTime()	The length of time that the JVM has been running	Geronimo	org.apache.geronimo.j2ee.management.impl.JVMImpl	Implemented
			BoundedRangeStatistic getHeapSize()	The memory usage of the JVM			

## JSR 77 Geronimo Specific Stats

No.	J2EEManagedObject	Stats Interface	Methods	Description	Affected Source	StatisticsProvider Class	Comments
1	EJBModule	EJBModuleStats	CountStatistic getEntityBeanCount()	number of entity beans defined in this EJB Module	OpenEJB		
			CountStatistic getStatelessSessionBeanCount()	number of stateless session beans defined in this EJB Module			
			CountStatistic getStatefulSessionBeanCount()	number of stateful session beans defined in this EJB Module			
			CountStatistic getMessageDrivenBeanCount()	number of message driven beans defined in this EJB Module			
			CountStatistic getTotalBeanCount()	total number of beans defined in this EJB Module			
2	ThreadPool	ThreadPoolStats	BoundedRangeStatistic getThreadsInUse()	min and max pool size, as well as the most, least, and current number of threads in use	Geronimo		
			CountStatistic getCountForConsumer(String consumer)	can be used to find out how many threads that consumer is consuming at the time these statistics were generated			
			String[] getThreadConsumers()	list of the known consumers of threads from this pool; this may not be all consumers			
3		WebConnectorStats	TimeStatistic getRequestTime()	Time statistics (count, total, Max, Min) for requests (includes figures across all requests since statistics gathering started)	Tomcat		
			CountStatistic getErrorCount()	number of errors that have been returned since statistics gathering started			
			RangeStatistic getActiveRequestCount()	number of requests being processed concurrently (as well as the min and max since statistics gathering started)			
			RangeStatistic getOpenConnectionCount()	number of connections currently open (as well as the min and max since statistics gathering started)			
			RangeStatistic getSpareThreadCount()	number of threads currently available (as well as min and max since statistics gathering started)			
4		WebContainerStats	CountStatistic getTotalConnectionCount()	total number of connections thus far	Jetty		
			RangeStatistic getOpenConnectionCount()	number of connections currently open (as well as the min and max since statistics gathering started)			

			RangeStatistic getConnectionRequestCount() )	number of requests handled by a particular connection (as well as the min and max since statistics gathering started)			
			TimeStatistic getConnectionDuration()	length of time that connections have been open (includes figures across all connections open at present)			
			CountStatistic getTotalErrorCount()	number of errors that have been returned since statistics gathering started			
			CountStatistic getTotalRequestCount()	number of requests that have been processed since statistics gathering started			
			RangeStatistic getActiveRequestCount()	number of requests being processed concurrently (as well as the min and max since statistics gathering started)			
			TimeStatistic getRequestDuration()	length of time taken to process a request (includes figures across all requests since statistics gathering started)			
			boolean isStatsOn()	current state of statistics collection (on or off)			
5	WebModule	WebModuleStats	CountStatistic getProcessingTime()	cumulative processing times of requests by all servlets in this Context	Tomcat		
			CountStatistic getStartupTime()	time (in milliseconds) it took to start this context			
			CountStatistic getTldScanTime()	scan time of the TLD contents of all tag library descriptor files			
			TimeStatistic getSessionAliveTime()	time (in seconds) that an expired session had been alive (count, max, total)			
			CountStatistic getSessionCount()	total number of sessions created by this manager			
			CountStatistic getActiveSessionCount()	number of currently active sessions			
			CountStatistic getExpiredSessionCount()	number of sessions that have expired			
			CountStatistic getRejectedSessionCount()	number of sessions that were not created because the maximum number of active sessions was reached			