WebSphere Performance Metrics

In addition to the WebSphere metrics that Uptime Infrastructure Monitor collects, detailed system level performance metrics are also available. This enables you to analyze system compute performance, memory usage, disk and network performance, and then relate underlying system behavior to specific metrics within WebSphere.

Uptime Infrastructure Monitor collects metrics from WebSphere objects called *modules*. A module represents a resource category for which data is collected by the WebSphere Performance Management Infrastructure. Each module has at least one XML configuration file that lists a unique identifier for each piece of performance data contained in the module.

Per EJB

The following metrics are collected per Enterprise JavaBean (EJB) on a WebSphere server:

Metric	Explanation	Module
CreateCount	The number of times that the Enterprise JavaBeans that are running on the server were created.	beanModule.creates
RemoveCount	The number of times that the EJBs were removed.	beanModule.removes
PassivateCount	The number of times that EJBs were removed from the cache. Note that passivation preserves the state of the EJBs on the disk.	beanModule. passivates
MethodCallCount	The total number of method calls that were made to the EJBs.	beanModule. activates
MethodResponse Time	The average response time, in milliseconds, on the bean methods.	beanModule. avgMethodRt

Per Connection Pool

The following metrics are collected per connection pool on a WebSphere server:

Connection PoolSize	The size of the connection pool to the data source.	connectionPoolModule.poolSize
FreePoolSize	The number of free connections in the pool.	connectionPoolModule.freePoolSize
PercentUsed	The percentage of the connection pool that is currently in use.	connectionPoolModule.percentUsed
WaitTime	The average time, in milliseconds, that a connection is used. The average time is the difference between the time at which the connection is allocated and the time at which it is returned.	connectionPoolModule.avgWaitTime
CloseCount	The total number of connections that were closed.	connectionPoolModule.numDestroys
Connection PoolCount	The total number of connections that were created.	connectionPoolModule.numDestroys
WaitingThreadCount	The number of threads that are currently waiting for a connection.	
UseTime	The average time, in milliseconds, that a connection is used. The average use time is the difference between the time at which the connection is allocated and that time at which it is returned.	Module.useTime

Other

The following metrics are collected from the WebSphere system, the Java Virtual Machine, the thread pool, or servlets:

CPUUsage	The percent of CPU resources that were used since the last query.	systemModule. avgCpuUtilization
HeapSize	The total amount of memory that is available for the Java Virtual Machine (JVM).	jvmRuntimeModule. totalMemory
UsedMemory	The amount of memory that is being used by the JVM.	jvmRuntimeModule. usedMemory

ActiveCount	The number of threads which are concurrently active.	threadPoolModule. activeThreads
CommittedCount	The total number of global transactions that have been committed.	transactionModule. globalTransCommitted
RolledBackCount	The total number of global transactions that have been rolled back.	transactionModule. globalTransRolledBack
LiveCount	The number of servlet sessions that are currently cached in memory.	servletSessionsModule. liveSessions
TimeSinceLastActivated	The difference, in milliseconds, between the previous and current access time stamps of a servlet session. This counter does not include session time out values.	servletSessionsModule. timeSinceLastActivated
ServletPoolSize	The average number of threads in the servlet connection thread pool.	