CA DataMinder

Performance Counters Reference Guide

Release 14.5

ca technologies

CA Technologies Product References

This document references the following CA Technologies products:

- CA DataMinder

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Chapter 1: Introduction

This reference guide lists the performance objects and counters available for CA DataMinder components. For each performance object, you can specify which counters and, if relevant, which instances you want to view.

Performance Counters Now Supported in 64-bit Perfmon.exe

On 64-bit systems, all CA DataMinder performance counters are now supported in the default 64-bit version of the Performance applet (perfmon.exe).

Previously on 64-bit systems, most CA DataMinder performance counters were only supported in a 32-bit version of the Performance applet. This anomaly particularly affected performance counters for the policy engine hub when the hub was installed on a 64-bit Exchange 2007 or 2010 server.

If you previously used the 32-bit Performance applet to monitor CA DataMinder components on a 64-bit system, you must switch to the 64-bit Performance applet after upgrading to CA DataMinder 14.1.

Background

On a 64-bit Windows operating system, there are two versions of perfmon.exe:

- A 64-bit version is available in the \Windows\System32 folder. This is the main System folder for the 64-bit operating system.

  Why 'System32'? The folder name, an apparent misnomer, is a legacy of the folder naming scheme in earlier Windows operating systems.

- A 32-bit version is available in the \Windows\SysWOW64 folder.

  Why 'WOW64'? On a 64-bit Windows operating system, there is an emulation of a 32-bit operating system called 'Windows on Windows 64', or WOW64.

Chapter 2: Account Import

The following counters are created by Account Import processes. There are separate instances for Assessment tasks (comparing data sources with existing accounts) and Update tasks (creating and changing the accounts). Also, only the last ten instances of performance counters are stored.

User accounts pre-processed

The number of user accounts loaded from the data source/change file.

User accounts pre-processed/sec

The number of user accounts loaded from the data source/change file per second.

User accounts processed

The number of user accounts that the job has completed processing.

User accounts processed/sec

The number of user accounts that the job has completed processing per second.

Chapter 3: Client Network Agent

The following performance monitors are available for the Client Network Agent:

Requests Total

Total number of network requests received by the network agent.

Not all requests require processing. The total includes successful requests, failed requests, and active requests.

Requests Successful

Total number of requests received by the network agent and which have not failed.

The total includes allowed requests, blocked requests, bypassed requests, and ignored requests.

Requests Failed

Total number of network requests that failed to be processed due to errors.

Requests Bypassed

Total number of network requests bypassed by the network agent because they are not relevant for policy analysis (such as unsupported protocols).

Requests Allowed

Total number of network requests that have been allowed by policy.

Requests Blocked

Total number of network requests that have been blocked by policy.

Requests Ignored

Total number of network requests not sent to the local policy engine for analysis.

For example, this total includes requests to ignored URLs or requests made while the network agent was disabled.

Requests Active

The total number of network requests currently being processed by the network agent.

Requests Waiting

Total network requests waiting to be processed by the agent. This must always be 1 less than Requests Active.

Requests Analyzed

Total number of network requests sent to the local policy engine for analysis.

Requests/sec

The number of network requests received per second (excluding bypassed network requests).

Average Request Time

The length of time (in milliseconds) required to handle a request, averaged over 100 requests.

The time is measured from when the request is taken off the queue of waiting requests to when the CNA ignores, blocks or allows the request.

This average excludes bypassed requests.

Average Wait Time

The length of time (in milliseconds) that network requests wait to be processed, averaged over 100 requests.

This metric is not a subset of the Average Request Time counter.

Average Decode Time

The length of time (in milliseconds) needed to decode a network request before policy analysis, averaged over 100 requests.

This metric is a subset of the Average Request Time counter.

Average Analysis Time

The length of time (in milliseconds) needed to apply policy to a network request, averaged over 100 requests.

This metric is a subset of the Average Request Time counter.

Chapter 4: Content Indexer

The following performance monitors are available for content indexer jobs:

Events Processed

Total number of events extracted from the CMS and prepared for indexing.

Events Ignored

Total number of events extracted from the CMS but not considered suitable for indexing.

Average Event Processing Rate (events/sec)

Average rate at which events are extracted from the CMS and prepared for indexing since job start. Measured as events per second.

Documents Indexed

Total number of documents successfully processed by the IDOL connector

Documents Failed

Total number of documents that failed to be indexed.

Documents Pending

Number of documents currently being processed by the IDOL connector.

Average Document Processing Rate (docs/sec)

Average rate at which documents are processed since job start. Measured as documents per second.

Status

0=Not started

1=Running

2=Ran to Completion

3=Paused

4=Terminated on Error

5=Waiting for Content Database to Finish

6=Stopping

7=Terminated

8=Content Database Inactive

9=Connecting to CMS

10=Reconnecting to CMS

11=Queued Catchup Job

12=Waiting on loopback timeout

13=Processing SQL Query

Chapter 5: Event Import

The following counters represent an instance of an importer:

Collision Count

The number of times the importer has collided with another importer when trying to rename a file during continuous import. Note, this is benign.

Messages Captured

The number of messages (such as emails or IM 'chapters') for which database events have been created.

Messages Deleted

The total number of messages currently being processed. This includes messages being created in the broker thread, those sat in the pending queue, those being processed by worker threads, and those that have been passed off process for external processing, e.g. to the policy engine or hub.

Messages Excluded

The number of messages excluded since the start of the import session. Messages can be excluded for numerous reasons such as invalid message type, failing the user filter, or simply not being captured by the policy engine's policy application.

Messages Failed

The number of messages that have failed to import since the start of the import session.

Messages Processed

The number of messages that have been processed. This includes those captured, excluded and failed. It is a count of all the messages read from the source directory by the importer since the start of the import session.

Pending Callback

The number of messages that are being processed by another executable (that is, Import Policy Hub or the Policy Engine) that the importer is waiting for a callback from regarding the processing status.

Pending Messages

The number of messages in the importer process that are waiting to be processed.

Rate: Messages Imported/Sec

The number of messages currently being imported per second.

Chapter 6: Exchange Server Agent

CA DataMinder ESA SMTP Sink

The following counters are for Exchange server agent SMTP sink job (for Exchange Server 2000 and 2003):

Integration status

Status of the integration: 1=enabled or 0=disabled.

Interactive warnings status

Status of interactive warnings: 1=enabled or 0=disabled.

Local processing time - captured messages (ms)

Average local processing time of captured messages (in milliseconds). This is a rolling average.

Local processing time - failed messages (ms)

Average local processing time of failed messages (in milliseconds). This is a rolling average.

Local processing time - ignored messages (ms)

Average local processing time of ignored messages (in milliseconds). This is a rolling average.

Messages captured

Total number of messages captured by policy since integration was last enabled.

Messages failed

Total number of messages failed since integration was last enabled.

Messages ignored

Total number of messages ignored since integration was last enabled. For example, a message can be ignored because:

■   Server agent integration is disabled.

■   The message has already been processed.

■   The message type is set to be an ignored message (for example, non-delivery notifications).

■   The message is a response e-mail to a server side warning notification.

■   The message sender doesn't match that of the SenderAddressInclusionFilter.

■   Policy application did not capture the message.

Messages in progress

Messages currently in progress (excludes messages warned by policy and currently pending).

Messages pending warned

Messages warned by policy and currently pending waiting for a response (continue or heed warning).

Messages total (submitted)

Total number of messages submitted to the sink since integration was last enabled.

Up time (minutes)

Up time in minutes since integration was last enabled.

CA DataMinder ESA Transport Agent

The following performance counters are for the flow of messages within the Exchange server agent (for Exchange Server 2007 and 2010):

Messages total (submitted)

Total number of original messages submitted since integration was last enabled (or the agent started).

Messages captured

Total number of messages captured by policy since integration was last enabled (or the agent started).

Messages ignored

Total number of messages ignored since integration was last enabled.

For example, a message can be ignored because:

- Server agent integration is disabled

- The message has already been processed

- The message type is set to be an ignored message (for example, non-delivery notifications)

- The message is a response e-mail to a server side warning notification

- The message sender doesn't match that of the SenderAddressInclusionFilter

- Policy application did not capture the message.

Messages Failed

Total number of messages failed since integration was last enabled (or the agent started).

Messages pending warned

Messages warned by policy and currently pending waiting for a response (continue or heed warning).

Messages in progress

Messages currently in progress (excludes messages warned by policy and currently pending).

Integration status

Status of the integration: 1=enabled or 0=disabled.

Interactive warnings status

Status of interactive warnings: 1=enabled or 0=disabled.

Up time (minutes)

Up time in minutes since integration was last enabled (or the agent started).

Latency - captured messages (ms)

Average time spent in the agent by captured messages (in milliseconds). This is a rolling average.

Latency - ignored messages (ms)

Average time spent in the agent by ignored messages (in milliseconds). This is a rolling average.

Latency - failed messages (ms)

Average time spent in the agent by failed messages (in milliseconds). This is a rolling average.

Raw Submissions - Peak Concurrent Count

Peak number of raw messages processed concurrently by the agent.

Raw Submissions - Average Latency (ms)

Average time spent in the agent by raw messages (in milliseconds). This is a rolling average. See the documentation for the number of messages used.

Warning notification mails issued

Total number of interactive warning emails issued to users since integration was last enabled (or the agent started).

Warning response mails received

Total number of interactive warning response emails received since integration was last enabled (or the agent started).

Warning responses forwarded

Total number of interactive warning response emails received for notifications not issued by this agent. The responses have been forwarded to the agents that issued the notifications. The count is since integration was last enabled (or the agent started).

Warning responses from other agents

Total number of interactive warning responses received from other agents, for notifications issued by this agent. See also 'Warning responses forwarded'. The count is since integration was last enabled (or the agent started).

Warning responses total for local agent

Total number of responses received as mails and received from other agents, for notifications issued by this agent. The count is since integration was last enabled (or the agent started).

Chapter 7: File Scanning Agent

This section contains the following topics:

CA DataMinder FSA

The following counters are relevant to the File Scanning Agent:

FSA Input Locations

Current number of inputs being scanned.

FSA Jobs

Current scheduled jobs running.

Worker Threads

Number of processing worker threads.

CA DataMinder FSA Jobs

The following counters are relevant to the File Scanning Agent:

Average Processing Time (ms)

Average processing time in ms for a file item.

Items Excluded

Number of excluded items (XML job filter, scan DB or NIST).

Items Failed

Number of completely failed items.

Items in Ready List

Number of items ready to be processed.

Items in Retry list

Number of items to be retried after a processing attempt failure.

Items Processed

Number of items analyzed by policy.

Items Processed per minute

Average number of processed items per min.

Items Processing

Number of items currently processing.

Items Scanned

Number of scanned items including Items Excluded.

Items succeeded

Number of successful analyzed items.

Scan passes

Number of the scan iterations of the current job.

Chapter 8: iConsole

This section contains the following topics:

CA DataMinder iConsole Front End Web Server

The following counters are relevant to the iConsole front-end Web server:

Average Request Time (ms)

Average time (in milliseconds) for a request to complete in the front-end web server.

CA DataMinder iConsole Application Server

The following counters are relevant to the iConsole application server:

Total Audit Operations

Total number of audit operations. That is, each time an audit button is used, per event.

Cached Events

Number of events currently stored in the iConsole cache.

Active Sessions

Number of currently active iConsole sessions.

Cached Searches

Number of iConsole search result sets currently stored in the iConsole cache.

Cached Search Rows

Number of rows in all cached searches.

Total Search Requests

Total number of search requests made. That is, each time any user runs a search.

Average Search Time (ms)

Average time taken to run a search, based on the previous 20 searches. This does not include the time taken to generate HTML in the front-end Web server, or render it in the iConsole browser.

Chapter 9: External Socket Agent

This section contains the following topics:

CA DataMinder External Socket Agent Summary

The following counters are relevant to the External Socket Agent:

Early Analysis – Required data

The number of items that Early Analysis returned due to the need for additional data.

Items analyzed

The number of items successfully analyzed.

Items awaiting second pass completion

Number of items that have completed first pass processing in the Policy Engine and are awaiting a Completion Message.

Items canceled

The number of items canceled by the caller of the API.

Items currently processing

The number of messages being processed by the Socket Agent. Request Messages, Completion Messages and Cancel Message all count as separate messages.

Items failed (Analysis)

The number of items that failed to be analyzed.

Items failed (Other)

The number of items that failed for other reasons. For example, an error occurred on a call to the EAAPI.

Items failed (Syntax)

The number of items that failed syntax checking.

Items failed (Throttling)

The number of items rejected due to throttling.

Items failed (Timeout)

The number of items timed out, and messages abandoned after the Socket was closed or the system shutdown.

Items failed (Total)

The number of items processed with errors.

CA DataMinder External Socket Agent Detail

The following counters are relevant to the data being processed by the External Socket Agent:

Analysis Items processing

The number of items submitted for full analysis and awaiting a response.

Items awaiting analysis

The number of items awaiting full analysis processing.

Analysis Latency

The average elapsed time the last 100 times took for full analysis.

Average item size

The average total Request Message data size for the last 100 items. The size does not include the message headers.

Early Analysis Items pending

The number of items submitted for Early Analysis and awaiting a response.

Early Analysis Latency

The average processing time of the last 100 items for Early Analysis.

Input queue latency

The average length of time an item waited in the in the Input Queue.

Items awaiting Early Analysis

The number of items awaiting Early Analysis processing

Items awaiting processing

The number of items waiting to be processed.

Items incomplete

Incomplete messages awaiting more data.

Items multipart wait

Items awaiting additional multipart messages.

Items pending error

The number of items still current, but in error.

Messages Throttling

The number of messages currently delayed by throttling.

Peak Message Concurrency

The maximum number of messages being processed concurrently by the Socket Agent at any time since the Socket Agent was started.

Second Pass Completion latency

The average time the last 100 Completion Message took to process.

Second Pass items awaiting completion

The number of items awaiting Completion or Timeout processing.

Throttling – Disk Space Minimum Limit

The registry entry for the External Socket Agent Disk Space Minimum Limit.

Throttling – Disk Space Threshold

The registry entry for the External Socket Agent Disk Space Throttling Threshold.

Throttling – Disk space available

The available disk space in MB, on the Windows Temporary File drive.

Throttling – Disk Status

0 = Not throttling

1 = Disk throttling active

3 = Disk free space below minimum level

Throttling - Import Queue Limit

The maximum number of allowed items in the Import Queue.

Throttling – Memory Usage Limit

The registry entry for the External Socket Agent Memory Usage Limit.

Throttling – Memory Throttling Threshold

The registry entry for the External Socket Agent Memory Throttling Threshold.

Throttling - Memory used

The memory currently in use by the External Socket Agent (in MB).

Throttling – Memory Status

0 = Not throttling

1 = Memory throttling active

3 = Memory usage above maximum level

CA DataMinder External Socket Agent Data

The following counters are relevant to the External Socket Agent:

Active Connections

The number of active connections.

Incoming Messages Parts

The number of message parts received.

Incoming Messages Parts/sec

The number of message parts received per second.

Incoming Bytes

The number of bytes received.

Incoming Bytes/sec

The number of bytes received per second.

Outgoing Messages Parts

The number of message parts sent.

Outgoing Messages Parts/sec

The number of message parts sent per second.

Outgoing Bytes

The number of bytes sent.

Outgoing Bytes/sec

The number of bytes sent per second.

Chapter 10: Infrastructure

This section contains the following topics:

CA DataMinder Client Policy Processor

The following counters are relevant to client performance:

Average Processing Time (ms)

The average time taken to process the hundred most recent events in milliseconds.

Failed Items

The total number of items that failed processing in the Policy Engine Core.

Items Processed/sec

The rate at which items are being processed by the Policy Engine Core.

Total Items Processed

The total number of items that have been successfully processed across all Policy Engine interfaces.

CA DataMinder Infrastructure BLOB Connectors

The following counters are relevant to BLOB file storage:

BLOB Queue Size

The number of BLOBs queued for storage.

BLOBs Retrieved

The number of BLOBs retrieved from the third party storage device.

BLOBs Retrieved/sec

The rate at which BLOB are being retrieved from the third party storage device.

BLOBs Stored

The number of BLOBs stored to the third party storage device.

BLOBs Stored/sec

The rate at which BLOBs are stored to the third party storage device.

Concurrent Storage Tasks

The current number of threads storing groups of BLOBs to the third party storage device.

New BLOB Queue Entries/sec

The rate at which new entries are being added to the BLOB queue.

CA DataMinder Infrastructure BLOB Files

The following counters are associated with Binary Large Object files stored on the file system. These files include captured event data and policy files:

Average BLOB size (bytes)

The average blob size stored. Note that this does not include initial capture of BLOBs.

BLOBs deleted

The number of BLOBs deleted from disk since the infrastructure started.

BLOBs deleted/sec

The number of BLOBs deleted from disk per second.

BLOBs read

The number of BLOB files read from disk since the infrastructure started.

BLOBs read/sec

The number of BLOB files read from disk per second.

BLOBs written

The number of BLOB files written to disk since the infrastructure started. Note that this does not include initial capture of BLOBs.

BLOBs written/sec

The number of BLOBs written to disk per second. Note that this does not include initial capture of BLOBs.

Bytes written/sec

The number of bytes written to disk per second. Note that this does not include initial capture of BLOBs.

Bytes read/sec

The number of bytes read from disk per second.

CA DataMinder Infrastructure Sessions

The following counters are relevant to infrastructure user sessions:

Administration sessions

The number of user sessions created by the local infrastructure for the Administration console, Data Management console, Executive console or other administrative task.

Client sessions

The number of user sessions created by the local infrastructure for client plug-ins.

Hosted sessions

The number of user sessions hosted by the local infrastructure. For a CMS, this is the number of administration sessions. For a client, this is the number of sessions created by plug-ins.

Loaded policy documents

The number of policy documents currently in use.

CA DataMinder Infrastructure Communications

The following counters are relevant to network communications:

Client sockets

The number of active socket connections.

Received identification messages/sec

The rate at which remote machines are exchanging machine identification UDP packets with this infrastructure.

Server sockets

The number of opened server sockets.

CA DataMinder Infrastructure Data Lookup

The following counters are associated with attribute lookup (either from client machines or server side user matching):

Cache cleardowns

The number of times the cache has been cleared down after, for example, a policy setting change has invalidated the cache.

Cache hits

The number of times a query has been satisfied with an entry from the cache.

Cache hits/sec

The rate at which queries are being satisfied with entries from the cache.

Cache hits for search failures

The number of times a cache entry is used to indicate that there is no database entry.

Cache hits for search failures/sec

The rate at which a cache entry is used to indicate that there is no database entry.

Cache misses

The number of times a query has not been satisfied by the cache, but a successful database query has been made instead.

Cache misses/sec

The rate at which queries are not being satisfied by the cache, but successful database queries are being made instead.

Cache size

The number of entries in the cache.

Search fails

The number of times a search has failed because an entry is not found in the cache or the database.

Search fails/sec

The rate at which searches fail because an entry is not found in the cache or the database.

CA DataMinder Infrastructure Database

The following counters are relevant to the infrastructure database:

Active connections

The number of database connections active at one time.

Connection failures

The number of times a request for a database connection has been refused.

Connection waits

The number of times an infrastructure task has needed to wait for a database connection to become available.

Objects deleted

The total number of Objects deleted from the database.

Objects deleted/sec

The number of Objects deleted from the database per second.

Objects deleted elapsed time (ms)

The total time spent deleting Objects from the database in milliseconds.

Objects read

The total number of Objects read from the database.

Objects read/sec

The number of Objects read from the database per second.

Objects read elapsed time (ms)

The total time spent reading Objects from the database in milliseconds.

Objects written

The total number of Objects written to the database.

Objects written/sec

The number of Objects written to the database per second.

Objects written elapsed time (ms)

The total time spent writing Objects to the database in milliseconds.

CA DataMinder Infrastructure Java Objects

The following counter is associated with retrieving data from Java Objects:

Object Count

The number of this type of object stored in memory.

CA DataMinder Infrastructure Replication

The following counters are relevant to database replication:

Bytes/object

The average number of bytes needed to replicate an object from this machine. Note that this excludes BLOB data.

Bytes/replication

The average number of bytes transmitted to a machine during each replication (a replication typically consists of many objects). This excludes BLOB data. This counter can be used to help determine network impact.

Failed notifications

The number of 'failed' notifications to connected machines. Note: It is quite normal for notifications to fail, if for example the connected machine is not available when the notification attempt is made. However a steadily increasing number of failed notifications may indicate a communication problem related to the local machine.

Data cache size

The number of objects waiting to be replicated.

Events Received

The number of events replicated to this machine since the infrastructure service was started.

Events Received/sec

The total number of events replicated to this machine per second.

Events Sent

Total number of events replicated to the parent machine since the infrastructure service was started.

Events Sent/sec

The total number of events replicated to the parent machine per second.

Incoming connections

This is the current (active) number of connections that are applying replication data to this machine. This counter can be used in conjunction with the 'Incoming Connections Pending' to help tune the policy settings that govern incoming connection handling.

Incoming connections pending

This counter shows the number of connected machines that are waiting to replicate data to this machine. A value of 0 indicates that this server has no replication backlog, whereas a value consistently near the number of connected machines may indicate that the machine is overworked.

Last Batch Size/Bytes

The size (in bytes) of the last batch of replicated objects sent from this machine. For application data, if this value is consistently close to the policy specified batch size then it indicates that this machine is processing data faster than its parent machine. A consistently small value may indicate that this machine cannot pass data to the parent quickly enough.

Last Batch Size/Objects

The size (in cache objects) of the last batch of replicated objects sent from this machine.

Last notification time

The last time (in milliseconds) needed to notify all connected machines that they have data to replicate. This can be compared against the average time (Notification Time) to help verify notification related problems and performance.

Notification time

The average time (in milliseconds) needed to notify all connected machines that they have data to replicate. This counter can be used to determine how much time a machine actually spends 'notifying' connected machines, and can be used to tune the policy notification intervals to acceptable values.

Objects received

The number of objects replicated into the local infrastructure.

Objects received/sec

The rate at which objects are being replicated into the local infrastructure.

Objects sent

The number of objects replicated out of the local infrastructure.

Objects sent/sec

The rate at which objects are being replicated out of the local infrastructure.

Outgoing connections

This is the count of active machines currently reading replication data from this machine. It can be used to help identify periods of heavy load on CMS and Gateway machines caused by large amounts of replication traffic.

Outstanding notifications

When the replication notification scheduler becomes active, it must determine which machines require replication notifications to be generated. This counter is the number of connected machines that still need to be processed by the notification scheduler in the current notification period. It can be used to show the behavior of the notification scheduler over a notification period. A value of 0 means that the scheduler is currently inactive, waiting for the next scheduled notification.

Replication Time

The average time (in milliseconds) taken by all connected machines to read replication data from this machine.

Replicated Bytes In/sec

The total number of bytes replicated to this machine in the last second. This total relates to database objects only, and excludes any BLOB data.

Replicated Bytes Out/sec

The total number of bytes replicated to the parent machine in the last second. This total relates to database objects only, and excludes any BLOB data.

Successful notifications

The number of successful notifications made to connected machines. This value should increase (by 1 for each notified machine) when the notification scheduler is active.

% objects replicated

Infrastructure data is replicated by notifying 'key' information of all object changes to all connected machines. However client and utility machines only request full details of the changes that apply to themselves. This counter (maintained by the publisher – usually the parent machine) indicates (as a percentage) how many of the replication objects are actually requested by the connected machines.

CA DataMinder Infrastructure DB Connections

The following counters are relevant to each instance of JDBC connection used by the infrastructure:

Next calls

The number of 'Next calls' that have been made on this JDBC Connection.

Next calls/sec

The number of 'Next calls' per second that have been executed on this JDBC connection.

Next elapsed time (ms)

The total elapsed time spent calling ResulSet.next() in milliseconds.

Query executions

The number of executed queries on this JDBC connection.

Query executions/sec

The number of executed queries per second on this JDBC connection.

Statement executions

The number of queries and updates that have been executed on this JDBC connection.

Statement executions/sec

The number of queries and updates per second that have been executed on this JDBC connection.

Update elapsed time (ms)

The total elapsed time calling ExecuteUpdate() in milliseconds.

Update executions

The number of updates (SQL insert/update and delete operations) that have been executed on this JDBC connection.

Update executions/sec

The number of updates (SQL insert/update and delete operations) per second that have been executed on this JDBC connection.

CA DataMinder Infrastructure Service

The following counters are relevant to the Infrastructure service instance:

Free JVM memory bytes

The amount of free memory managed by the Java Virtual Machine.

Maximum JVM memory bytes

The maximum amount of memory allowed to be managed by the Java Virtual Machine.

Service Uptime

The length of time the infrastructure service has been running (in seconds) from startup.

This counter resets to 0 each time the infrastructure restarts.

Total JVM memory bytes

The total amount of memory managed by the Java Virtual Machine. This is the sum of the 'Used' and 'Free' counters.

Used JVM memory bytes

The amount of used memory managed by the Java Virtual Machine.

CA DataMinder Infrastructure Sessions

The following counters are associated with user sessions created by the local infrastructure:

Administration sessions

The number of user sessions created by the local infrastructure for the Administration console, Data Management console, Executive console, or other administrative task.

Client sessions

The number of user sessions created by the local infrastructure for client plugins.

Hosted sessions

The number of user sessions hosted by the local infrastructure. For a CMS, this is the number of administration sessions. For a client, this is the number of sessions created by plugins.

Loaded policy documents

The number of policy documents currently in use.

CA DataMinder Infrastructure Remote Data

The following counters are associated with retrieving data from a remote data source:

Active requests

The number of remote data objects currently being retrieved.

Failed requests

The total number of requests that failed since the CMS started.

Requests

The total number of requests since the CMS started.

Requests/sec

The rate at which requests are being made.

Chapter 11: Policy Engine

This section contains the following topics:

CA DataMinder Policy Engine Counters

The following are policy engine counters:

Items awaiting completion

Number of items that have been processed by the policy engine - results are being passed back to the policy engine hub.

Items currently analyzing

Number of items that are currently being analyzed by the policy engine.

Items currently processing

Total number of items currently being processed by this policy engine.

Items currently storing

Number of items being stored in the database.

Items pending analysis

Number of items that have been accepted by the policy engine, and are awaiting analysis.

Pending analysis requests

Number of pending requests to analyze items that have not been accepted by the policy engine.

CA DataMinder Policy Engine Processing Core

The following are policy engine processing core counters:

Average processing time (ms)

Average time taken to process the hundred recent events in milliseconds.

Events failed while saving

Total number of events that could not be stored in the database.

Events saved/sec

The rate at which events are being saved to the database by the Policy Engine Core.

Events successfully saved

Total number of events successfully stored in the database (may be more than one per item processed).

Failed items

Total number of items that failed processing in the policy engine core.

Items awaiting completion

Number of items that have been processed by the policy engine core - results are being passed back to a policy engine hub.

Items currently analyzing

Number of items that are currently being analyzed across all policy engine instances.

Items currently processing

Total number of items currently being processed across all policy engine instances.

Items currently storing

Number of items being stored in the database.

Items pending analysis

Number of items that have been accepted across policy engine instances, and are awaiting analysis.

Items processed/sec

The rate at which items are being processed by the policy engine core.

Pending analysis requests

Number of pending requests to analyze items that have not been accepted by the policy engine core.

Policy engines number

Number of policy engine instances.

Total items processed

Total number of items that have been successfully processed across all policy engine instances.

Total policy number

Total number of policy instances currently loaded.

Unique policy number

Number of unique policies currently loaded.

Chapter 12: Policy Engine Hub

This section contains the following topics:

CA DataMinder Hub

The following counters are relevant to the policy engine hub:

Allocation latency (ms)

The average time difference between when an item is taken from the allocation queue and when it is returned to the completion queue after analysis.

Completion latency (ms)

The average time difference between when an item is taken from the completion queue and when it is finished in the hub.

Completion pending items

The number of events awaiting completion acknowledgement from the source.

Input connection count

The number of client applications passing events to the hub.

Input queue pending items

The number of items in the input queue waiting to be pre-processed.

Input received items/sec

The rate at which items are being added to the hub input queue.

Input throttling

'1' if the hub is memory throttling.

'2' if the hub is event count throttling.

'0' if no throttling.

Item count high watermark

The maximum number of items the hub will accept before throttling or failing items.

Item count low watermark

The item count at which the hub resumes normal operation after the high watermark has been reached.

Item latency (ms)

The average time difference between when an item arrives in the input queue and when it is finally removed from the completion queue.

Items being completed

The number of items currently being completed.

Items being preprocessed

The number of items currently being preprocessed.

Items failed (throttling)

The number of items failed by throttling in 'Fail' mode - not applicable if in 'Wait' mode.

Items failed (timeout)

The number of items failed by event timeout.

Items failed (total)

The total number of items that have failed analysis.

Items processed

The number of items successfully analyzed.

Items received

The number of items passed to the hub for analysis.

Memory high watermark

The maximum data size (bytes the hub will accept before throttling or failing items).

Memory low watermark

The data size (bytes at which the hub resumes normal operation after the high watermark has been reached).

Preprocessed items/sec

The rate at which items are being pre-processed before being analyzed by a policy engine.

Total item count

The number of items in all the input queues.

Total item memory

The data size (bytes) of all the items in the hub, that is, the total memory allocated to all hub input queues. This value is the basis for the HighWaterMarkMB and LowWaterMarkMB hub registry values.

CA DataMinder Hub Connections

The following counters are relevant to the specified policy engine connected to the current hub:

Allocation latency (ms)

The average time difference between when an item is taken from the allocation queue and when it is returned to the completion queue after analysis.

Analysis pending items

The number of items currently being processed.

Analysis processed items/sec

The rate at which items are being removed from the queue.

Analysis received items/sec

The rate at which items are being passed to the queue.

Internal state

The internal state of the Proxy:

0=Inactive

1=Connecting (high frequency)

2=Connecting (low frequency)

3=Connected

4=Processing

5=Cleanup (standard)

6=Cleanup (processing)

7=Cleanup (terminal processing)

8=Cleanup (suspended processing)

9=Suspended

10=Dying

11=Dead

Item latency (ms)

The average time difference between when an item arrives in the input queue and when it is finally removed from the completion queue.

Processing enabled

A Boolean counter. This is set to '1' if the policy engine is able to process data; otherwise it is set to '0'.

Items failed (pe)

The number of items that have failed on this policy engine.

Items failed (timeout)

The number of items failed by event timeout.

Items failed (total)

The total number of items that have failed analysis.

Items processed

The number of items successfully analyzed on this policy engine.

Items received

The number of items passed to the policy engine for analysis.

CA DataMinder Hub Queues

The following counters are relevant to individual hub queues:

Allocation queue pending items

The number of items in the queue waiting to be allocated to a policy engine.

Byte limit (higher)

The maximum size of message events that can be processed by the current queue. This value is the basis for the MaxSizeBytes hub registry value.

Byte limit (lower)

The minimum size of message events that can be processed by the current queue. If the hub only supports a single (default) queue, this lower limit is zero bytes; if multiple queues are defined, the lower limit is always zero bytes for the smallest size queue.

Configured active engines

The number of configured active policy engines available to this queue.

Configured standby engines

The number of configured standby policy engines available to this queue.

Connected active engines

The number of active policy engines with which a connection has been established and available to this queue.

Connected standby engines

The number of standby policy engines with which a connection has been established and available to this queue.

Failure Mode

A Boolean value specifying whether the queue is currently rejecting new events because there have been no connected PEs for more than a configured period of time.

Items failed (timeout)

The number of items failed by event timeout.

Items received

The number of items passed to the queue for analysis.

Items received (supplemental)

The total number of items poached from other queues by the policy engines assigned to the current queue.

Processed items/sec

The rate at which items are being passed to the queue.