

## Overview

The client for “SPM for MongoDB” is an open-source mongodb monitoring agent that collects MongoDB metrics and sends them to SPM. It is available as npm package (see Installation & Configuration section below).

In addition to collecting MongoDB metrics, you can send Custom Metrics, such as the number of concurrent users, the number of items placed in a shopping cart, or any other kind of business transaction or KPI.

## Installation and Configuration

1. Create an SPM App of type “MongoDB” in SPM
2. Click the “**Install Monitor**” button and follow the customized instructions for the created SPM App (basically how to install the NPM package and configure the SPM App Token)

## Troubleshooting and “How To”

### Generate diagnostics file for Sematext Support

If you are not seeing some or all MongoDB metrics, you can create a “diagnostics dump” and contact us via chat or email. To create the diagnostics dump just run the following in your application directory:

```
spm-client-diagnostics
```

The output of this script points to the ZIP file and shows the Sematext Support email address to which the ZIP file should be sent.

### Using SPM for MongoDB behind Firewalls / Proxy servers

By default data is transmitted to SPM via HTTPS. If no direct connection is possible, a proxy server can be used by setting the environment variable `HTTPS_PROXY=https://your-proxy`.

### Installation of native modules on Windows

The native modules are automatically compiled during “npm install” (using node-gyp). On Windows the required build tools like python or C++ compilers are typically not installed by default.

In this case please check <https://github.com/TooTallNate/node-gyp> for details about the required compiler and build tools.

## Upgrading to a new node.js version

If you switch the node.js version (e.g. from 0.12 to 4.x), the spm-agent-mongodb package will need to be installed again (due to the fact that included native modules may change from version to version). After the version change please run a fresh installation “npm i spm-agent-mongodb -g”

## Upgrading to the latest version of spm-agent-mongodb

To use the latest version of spm-agent-mongodb we recommend you install/upgrade using:

```
npm i spm-agent-mongodb@latest -g
```

## Github Repository

The latest version and related information is available in the Github repository [sematext/spm-agent-mongodb](https://github.com/sematext/spm-agent-mongodb)

## Integration

- Instructions: <https://apps.sematext.com/ui/howto/MongoDB/overview>

## Metrics

Metric				
Name	Key	Agg	Type	Description
flushesmongo	flushes	Time		
time				Time spend in flushing during the collection interval

Metric				
Name	Key	Agg	Type	Description
flushescount	mongo	flushes	Long	Flushes in collection interval
created	mongo	new	Long	Connections created to the server. This number includes connections that have since closed.

Metric				
Name	Key	Agg	Type	Description
currentmongoconnections	avg	two	Double	The value of current connections to the database server from clients.
numre-quests	mongo	sum	Long	Number of network requests

Metric				
Name	Key	Agg	Type	Description
received	mongo	Sum	Long	The value of 'received' reflects the amount of network traffic, in bytes, received by this database.

Metric				
Name	Key	Agg	Type	Description
transmitted	mongoNetwork	Sum	Long	The tx.rate value of 'transmitted' reflects the amount of network traffic, in bytes, sent by this database.
acquirecount	mongoLocks	Sum	Long	Lock count

Metric				
Name	Key	Agg	Type	Description
acquiremongo count waits	locks.wait	count	Sum	Number of times the acquire-Count lock acquisition encountered waits because the locks were held in a conflicting mode.
wait time	mongo.locks.acquire	sum	Cumulative	wait time for the lock acquisition.

Metric				
Name	Key	Agg	Type	Description
deadlock count	locksongo	Sums	Long	Number of times the lock acquisition encountered deadlocks.



Metric				
Name	Key	Agg	Type	Description
early com-mits	mongo	JournalLong	Number	of times MongoDB requested a commit before the scheduled journal group commit interval. Use this value to ensure that your journal group commit interval is not too long for your deployment.

Metric				
Name	Key	Agg	Type	Description
commit-write-lock time	tsongo	Journal	Long	Amount of time spent for commits that occurred while a write lock was held. Commits in a write lock indicate a MongoDB node under a heavy write load and call for further diagnosis.

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Metric				
Name	Key	Agg	Type	Description
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writtenmongo	Journal	data	Arif	ent
files				of
data				data
				writ-
				ten
				from
				jour-
				nal
				to
				the
				data
				files
				dur-
				ing
				the
				last
				jour-
				nal
				group
				com-
				mit
				in-
				ter-
				val.

Metric				
Name	Key	Agg	Type	Description
writtenjournal data	mongoJournal	data	Amount	of data written to journal during the last journal group commit interval.
commit time	mongoJournal	Long	Amount	of time spent for commits.

Metric				
Name	Key	Agg	Type	Description
commitsongojournal	Journal	Long	Number	Number of transactions written to the journal during the last journal group commit interval.
collectioncount	mongo	Aggregate	Count	Count of collections/tables

Metric				
Name	Key	Agg	Type	Description
data size	mongo	avg	mongodb	The total size in bytes of the data held in this database including the padding factor.
index size	mongo	avg	mongodb	The total size in bytes of all indexes created on this database.

Metric				
Name	Key	Agg	Type	Description
namespace.size	mongo	avg	long	The total size of the namespace files (i.e. that end with .ns) for this database.
storage.size	mongo	avg	long	The total amount of space in bytes allocated to collections in this database for document storage.

Metric				
Name	Key	Agg	Type	Description
objects count	mongo	avg	database	Count of objects in db
file size	mongo	avg	database	The total size in bytes of the data files that hold the database. This value includes pre-allocated space and the padding factor.



Metric				
Name	Key	Agg	Type	Description
mappedmem	mongo	Average	Long	The value of mapped provides the amount of mapped memory, in megabytes (MB), by the database. Because MongoDB uses memory-mapped files, this value is likely to be roughly equivalent to the total size of your database or databases.

Metric				
Name	Key	Agg	Type	Description
resident mem	mongo	Average	Long	The value of resident is roughly equivalent to the amount of RAM, in megabytes (MB), currently used by the database process. In normal use this value tends to grow.

Metric				
Name	Key	Agg	Type	Description

virtualmongo- mem	virtualmongo- mem	Average	Long	Virtual dis- plays the quan- tity, in megabytes (MB), of vir- tual mem- ory used by the mon- god pro- cess. With jour- nal- ing en- abled, the value of vir- tual is at least twice the value of mapped. If vir- tual value is sig- nifi- cantly larger than mapped (e.g. 3
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Metric				
Name	Key	Agg	Type	Description
mappedmemwithjournal	mongo	Average memory used by mapped memory, in megabytes (MB), including the memory used for journaling. This value will always be twice the value of mapped. This field is only included if journaling is enabled.	Long	With Journal

Metric				
Name	Key	Agg	Type	Description
inserted	mongo	\$documents	Number	Number of inserted documents.
returned	mongo	\$documents	Total	Total number of documents returned by queries.
updated	mongo	\$documents	Number	Number of updated documents.
deleted	mongo	\$documents	Number	Number of deleted documents.
query	mongo	\$queries	Query	Query operations
commands	mongo	\$commands	Commands	Commands

Metric				
Name	Key	Agg	Type	Description
query	mongo	Suplica	Log	Query op- era- tions
insert	mongo	Sup	Insert	Insert op- era- tions
insert	mongo	Suplica	Log	Insert op- era- tions
update	mongo	Suplica	Log	Update op- era- tions
failed	mongo	Summary	Log	Failed com- mands / op- era- tions (all DB com- mands/functions)
delete	mongo	Suplica	Log	Delete op- era- tions
commands	mongo	Suplica	Log	Commands

Metric				
Name	Key	Agg	Type	Description
updatemongo	Sup	update	Long	Update op- era- tions
delete mongo	Sup	delete	Long	Delete op- era- tions
getmongo	Sup	get	Long	Getmore op- era- tions
getmongo	Sup	log	Long	Getmore op- era- tions