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

Metrics

Report: MongoDB Background Flushes

Chart: Background Flushes

Metric Name	Metric Description
flushes count	Flushes in collection interval
flushes time	Time spend in flushes during the collection interval
avg. flush time	Avg. flush duration

Report: MongoDB Network

Chart: Traffic

Metric Name	Metric Description
received	The value of 'received' reflects the amount of network traffic, in bytes, received by this database.

Metric Name	Metric Description
transmitted	The value of 'transmitted' reflects the amount of network traffic, in bytes, sent by this database.

Chart: Connections

4

Metric Name	Metric Description
current	The value of current corresponds to the number of connections to the database server from clients.

Metric Name	Metric Description
created	Created provides a count of all incoming connections created to the server. This number includes connections that have since closed.

Chart: Requests

Metric Name	Metric Description
num requests	Number of network requests
requests rate	Network request rate

Report: MongoDB LockScope

Chart: Locks

Metric Name	Metric Description
acquire count	Lock count
acquire count waits	Number of times the acquireCount lock acquisitions encountered waits because the locks were held in a conflicting mode.

Metric Name	Metric Description
deadlock count	Number of times the lock acquisitions encountered deadlocks.
wait time	Cumulative wait time for the lock acquisitions.

Report: MongoDB Journal

Chart: Journal Commits

Metric Name	Metric Description
commits	Number of transactions written to the journal during the last journal group commit interval.

Metric Name	Metric Description
early commits	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.
	10

Metric Name	Metric Description
commits time	Amount of time spent for commits.

Metric Name	Metric Description
commits write-lock time	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.

Metric Name	Metric Description

Chart: Journal Data

Metric Name	Metric Description
written journal data	Amount of data written to journal during the last journal group commit interval.

Metric Name	Metric Description
written files data	Amount of data written from journal to the data files during the last journal group commit interval.

Report: MongoDB Storage

Chart: Storage

Metric Name	Metric Description
data size	The total size in bytes of the data held in this database including the padding factor.

Metric Name	Metric Description
storage size	The total amount of space in bytes allocated to collections in this database for document storage.
index size	The total size in bytes of all indexes created on this database.

Metric Name	Metric Description
file size	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	Metric Description
namespace size	The total size of the namespace files (i.e. that end with .ns) for this database.

Chart: Objects

Metric Name	Metric Description
objects count	Count of objects in db
avg. object size	Average object size

Chart: Collections

Metric Name	Metric Description
collections count	Count of collections/tables

Report: MongoDB Memory

Chart: Memory

Metric Name	Metric Description
resident mem	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	Metric Description
virtual mem	Virtual displays the quantity, in megabytes (MB), of virtual memory used by the mongod process. With journaling enabled, the value of virtual is at least twice the value of mapped. If virtual value is significantly larger than

Metric Name	Metric Description
mapped mem	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 to be roughly equivalent to the total size of your database or databases.

21

Metric Name	Metric	Metric Description
mapped mem with journal	mappedWithJournal	provides the amount of 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.

Report: MongoDB Documents

Chart: Documents

Metric Name	Metric Description
inserted	Number of inserted documents.
updated	Number of updated documents.
deleted	Number of deleted documents.
returned	Total number of documents returned by queries.

Report: MongoDB Operations

Chart: Commands

Metric Name	Metric Description
failed	Failed commands / operations (all DB commands/functions)
succeeded	Successful commands / operations (all DB commands/functions)

Chart: Replica Operations

Metric Name	Metric Description
insert	Insert operations
query	Query operations
update	Update operations
delete	Delete operations
getmore	Getmore operations
commands	Commands

Chart: Operations

Metric Name	Metric Description
insert	Insert operations

Metric Name	Metric Description
query	Query operations
update	Update operations
delete	Delete operations
getmore	Getmore operations
commands	Commands