title: MongoDB Monitoring Integration description: Monitor all key MongoDB metrics and stats, namely server state, global lock ratio, current vs. available connections, opcounters, and more. View and analyze performance reports with our infractructure monitoring and logging management platform, and let your whole devops team monitor MongoDB database deployments with multi-user RBAC and application sharing support

Overview

Sematext MongoDB monitoring agent is an open-source mongodb monitoring agent. It continuously collects MongoDB metrics and sends them to Sematext. It is available as an NPM package (see Installation & Configuration section below).

** Installation and Configuration **

1. Create a Monitoring App of type "MongoDB" in Sematext
2. Click the "**Install Monitor**" button and follow the customized instructions for the created Monitoring App (basically how to install the NPM package and configure the App Token)

Troubleshooting and How-to

** Generate diagnostics file for Sematext Support **

If you are not seeing some or any MongoDB metrics, you can create a "diagnostics dump" and contact us via live chat or email. To create the diagnostics dump just run the following:

```
sudo spm-mongodb-diagnostics
```

This will create a ZIP file and show the Sematext Support email address to which the ZIP file should be sent.

** Using Sematext for monitoring MongoDB behind Firewalls / Proxy servers **

By default data is transmitted to Sematext 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 9.x to 10.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

Integration

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

Metrics

Metric Name	Key	Agg	Type	Description
flushes time	mongo.flushes.time	Sum	Long	Time spend in flushes during the collection interval
flushes count	mongo.flushes	Sum	Long	Flushes in collection interval
created	mongo.network.connections.total	Sum	Long	Created provides a count of all incoming connections created to the server. This number includes connections that have since closed.

Metric Name	Key	Agg	Type	Description
current	mongo.network.connections	Avg	Double	The value of current corresponds to the number of connections to the database server from clients.
num requests	mongo.network.requests	Sum	Long	Number of network requests
received	mongo.network.transfer.rx.rate	Sum	Long	The value of ‘received’ reflects the amount of network traffic, in bytes, received by this database.
transmitted	mongo.network.transfer.tx.rate	Sum	Long	The value of ‘transmitted’ reflects the amount of network traffic, in bytes, sent by this database.
acquire count	mongo.locks	Sum	Long	Lock count

Metric Name	Key	Agg	Type	Description
acquire count waits	mongo.locks.wait	Sum	Long	Number of times the acquireCount lock acquisitions encountered waits because the locks were held in a conflicting mode.
wait time	mongo.locks.acquiring.time.microsec	Sum	Long	Cumulative wait time for the lock acquisitions.
deadlock count	mongo.locks.deadlock	Sum	Long	Number of times the lock acquisitions encountered deadlocks.
early commits	mongo.journal.commits.early	Sum	Long	Number of times MongoDB requested a commit before the scheduled journal group commit interval. Use this value to ensure that your journal group commit intervalis not too long for your deployment.

Metric Name	Key	Agg	Type	Description
commits write-lock time	mongo.journal.commits.locked.time	Sum	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.
written files data	mongo.journal.data.written	Sum	Long	Amount of data written from journal to the data files during the last journal group commit interval.
written journal data	mongo.journal.data	Sum	Long	Amount of data written to journal during the last journal group commit interval.
commits time	mongo.journal.commits.time	Sum	Long	Amount of time spent for commits.

Metric Name	Key	Agg	Type	Description
commits	mongo.journal.commits	Sum	Long	Number of transactions written to the journal during the last journal group commit interval.
collections count	mongo.database.collections	Avg	Long	Count of collections/tables
data size	mongo.database.data.size	Avg	Long	The total size in bytes of the data held in this database including the padding factor.
index size	mongo.database.index.size	Avg	Long	The total size in bytes of all indexes created on this database.
namespace size	mongo.database.namespace.size	Avg	Long	The total size of the namespace files (i.e. that end with .ns) for this database.
storage size	mongo.database.storage.size	Avg	Long	The total amount of space in bytes allocated to collections in this database for document storage.
objects count	mongo.database.objects	Avg	Long	Count of objects in db

Metric Name	Key	Agg	Type	Description
file size	mongo.database.file.size	Avg	Long	The total size in bytes of the data files that hold the database. This value includes preallocated space and the padding factor.
mapped mem	mongo.memory.mapped	Avg	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 to be roughly equivalent to the total size of your database or databases.

Metric Name	Key	Agg	Type	Description
resident mem	mongo.memory.resident	Avg	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.
virtual mem	mongo.memory.virtual	Avg	Long	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 mapped (e.g. 3 or more times), this may indicate a memory leak.

Metric Name	Key	Agg	Type	Description
mapped mem with journal	mongo.memory.mapped.withjournal	Avg	Long	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.
inserted	mongo.documents.inserted	Sum	Long	Number of inserted documents.
returned	mongo.documents.returned	Sum	Long	Total number of documents returned by queries.
updated	mongo.documents.updated	Sum	Long	Number of updated documents.
deleted	mongo.documents.deleted	Sum	Long	Number of deleted documents.
query	mongo.ops.query	Sum	Long	Query operations
commands	mongo.ops.command	Sum	Long	Commands
query	mongo.replica.ops.query	Sum	Long	Query operations
insert	mongo.ops.insert	Sum	Long	Insert operations
insert	mongo.replica.ops.insert	Sum	Long	Insert operations
update	mongo.replica.ops.update	Sum	Long	Update operations

Metric Name	Key	Agg	Type	Description
failed	mongo.commands.failed	Sum	Long	Failed commands / operations (all DB commands/functions)
delete	mongo.replica.ops.delete	Sum	Long	Delete operations
commands	mongo.replica.ops.command	Sum	Long	Commands
update	mongo.ops.update	Sum	Long	Update operations
delete	mongo.ops.delete	Sum	Long	Delete operations
getmore	mongo.ops.getmore	Sum	Long	Getmore operations
getmore	mongo.replica.ops.getmore	Sum	Long	Getmore operations