



How to monitor MongoDB performance with Datadog

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series [datadog](#) / [alerts](#) / [nosql](#) / [mongodb](#) / [dashboard](#) / [database](#)
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This post is the last of a 3-part series about monitoring MongoDB. Part 1 presents the key performance metrics available from MongoDB: there is one post for the WiredTiger storage engine and one for MMAPv1. Part 2 explains the different ways to collect MongoDB metrics.

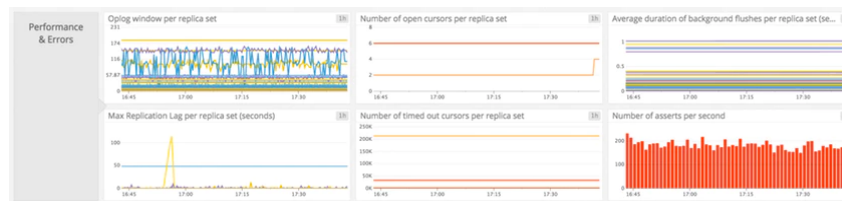


If you've already read our first two parts in this series, you know that monitoring MongoDB gives you a range of metrics that allow you to explore its health and performance in great depth. But for databases running in production, you need a

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...mechanisms are also essential to be able to query faster than things go wrong. In this post, we'll show you how to start monitoring MongoDB in a few minutes with Datadog.



Monitor MongoDB performance in 3 easy steps

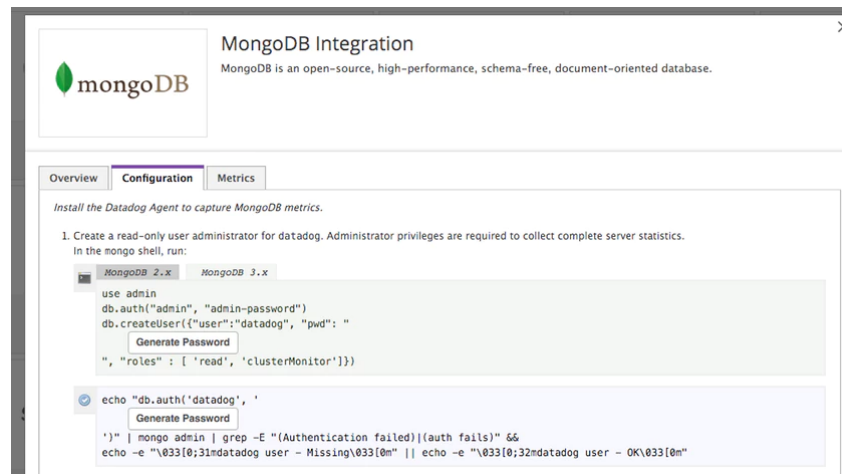
Step 1: install the Datadog Agent

The Datadog Agent is the open-source software that collects and reports metrics from your hosts so that you can visualize and monitor them in Datadog. Installing the agent usually takes just a single command.





Datadog so the Agent can collect all the server statistics. The commands to run in the mongo shell differs between MongoDB versions 2.x and 3.x. They are detailed in the “configuration” tab of the MongoDB’s integration tile on the integrations page on Datadog.



As soon as your Agent is up and running, you should see your host reporting metrics on your Datadog account.





Step 2: configure the Agent

Then you'll need to create a simple MongoDB configuration file for the Agent. For Linux hosts, configuration files are typically located **in/etc/dd-agent/conf.d/**, but you can find OS-specific config information [here](#).

The Agent configuration file **mongo.yaml** is where you provide instances informations. You can also apply tags to your MongoDB instances so you can filter and aggregate your metrics later.

The Agent ships with a **mongo.yaml.example** template, but to access all of the metrics described in [Part 1](#) of this series, you should use the modified YAML template available [here](#).

Step 3: verify the configuration settings

Restart the Agent using the [right command](#) for your platform, then check that Datadog and MongoDB are properly integrated by running the Datadog **info** command.

If the configuration is correct, you should see a section like this in the info output:





That's it! You can now turn on the integration

You can now switch on the MongoDB integration inside your Datadog account. It's as simple as clicking the "Install Integration" button under the Configuration tab in the

[MongoDB integration tile](#) on your Datadog account.

Metrics! Metrics everywhere!

Now that the Agent is properly configured, you will see all the MongoDB metrics available for monitoring, graphing, and correlation on Datadog.

You can immediately see your metrics populating a default dashboard for MongoDB containing the essential MongoDB metrics presented in [Part 1](#). It should be a great starting point for your monitoring. You can clone this dashboard and customize it as you wish, even adding metrics from other parts of your infrastructure so that you can easily correlate what's happening in MongoDB with what's happening throughout your stack.



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MongoDB default dashboard on Datadog

Alerting

Once Datadog is capturing and graphing your metrics, you will likely want to set up some alerts to keep watch over your metrics and to notify your teams about any issues.

Datadog allows you to alert on individual hosts, services, processes, and metrics—or virtually any combination thereof. For instance, you can monitor all of your hosts in a certain availability zone, or you can monitor a single key metric being reported by each of your MongoDB hosts.



For example, as explained in Part 1, the number of current connections is limited to 65,536 simultaneous connections by default since v3.0. So you might want to set up

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80K
60K
40K
20K
0K

13:00 13:30 14:00 14:30 15:00 15:30 16:00 16:30

1 Define the metric Source Edit

max mongodb.connections.current over Select tags for your metric excluding Select tags to exclude

Simple Alert Trigger a single alert when your metric satisfies your alert conditions. ?

2 Set alert conditions

Threshold Alert Change Alert An alert is triggered whenever a metric crosses a threshold.

Trigger when the metric is above the threshold on average during the last 5 minutes

Alert threshold: 60000

Warning threshold: 50000

Note: For sparse metrics < 1 point per 20 minutes you should choose something other than "on average" or "at all times". For both of those aggregators a full window of data is required.

Do not notify If data is missing. ?

[Never] automatically resolve this event from a triggered state. ?

3 Say what's happening Use message template variables ?

Preview Edit Markdown supported

Number of connections to MongoDB is getting close to the limit

@slack-ops





Datadog also integrates with many communication tools such as Slack, PagerDuty or HipChat so you can notify your teams via the channels you already use.

You are now a MongoDB pro!

This concludes the series on how to monitor MongoDB. In this post we've walked you through integrating MongoDB with Datadog to visualize your key metrics and notify your team whenever your database shows signs of trouble.

If you've followed along using your own Datadog account, you should now have unparalleled visibility into MongoDB's activity and performance. You are also aware of the ability to create automated alerts tailored to your environment, usage patterns, and the metrics that are most valuable to your teams.

If you don't yet have a Datadog account, you can sign up for [a free trial](#) and start monitoring MongoDB alongside the rest of your infrastructure, your applications, and your services today.



Source Markdown for this post is available [on GitHub](#). Questions, corrections, additions, etc.? [Please let us know](#).

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Further Reading

eBook: Monitoring Modern Infrastructure

Explore key steps for implementing a successful cloud-scale monitoring strategy.

[DOWNLOAD TO LEARN MORE](#)



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Monitor key TokuMX metrics for MongoDB applications

Monitoring MongoDB performance metrics (MMAP)

Monitoring MongoDB performance metrics (WiredTiger)

Monitoring Cassandra with Datadog



Start monitoring your metrics in minutes

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