

aidev **mongoDB** MONITORING PLUG-IN
FOR ORACLE ENTERPRISE MANAGER

javascript jobs guide

July 2016

This document details how to create and run javascript jobs using the mongoDB monitoring plug-in for Oracle Enterprise Manager 12c. The process is identical for Oracle EM 13c.

Overview

The mongoDB monitoring plugin for Oracle Enterprise Manager brings the ability to create, schedule, run and reuse javascript jobs against mongoDB targets.

To use this functionality, the following is required:

- the mongoDB monitoring plugin for Oracle Enterprise Manager deployed to the OMS
- targets of type mongoDB database added into Oracle Enterprise Manager
- a local installation of the mongoDB client on the EM agent machine
- for SSL enabled databases, local PEM and CA files on the agent machine as per <http://docs.mongodb.org/manual/tutorial/configure-ssl>.

Please refer to the target addition guide for more information on the above.

Compatibility

Oracle Enterprise Manager 12c R4 and above

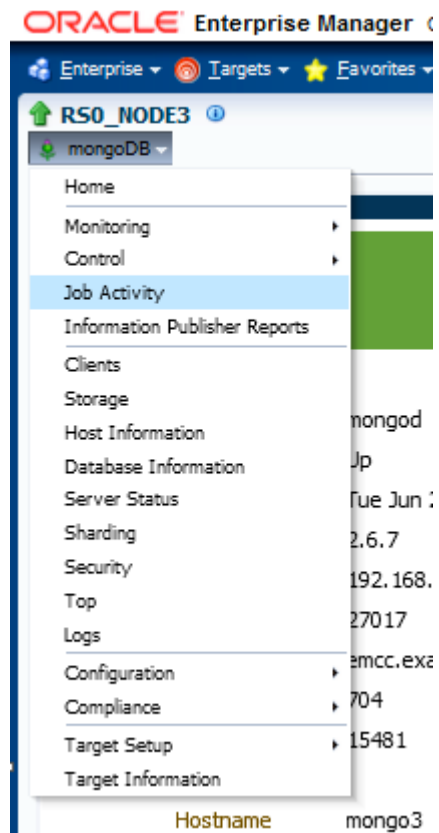
mongoDB version 2.6.5 and above

An EM 12.1.0.4.0 or higher agent installed and corresponding host target visible within EM.

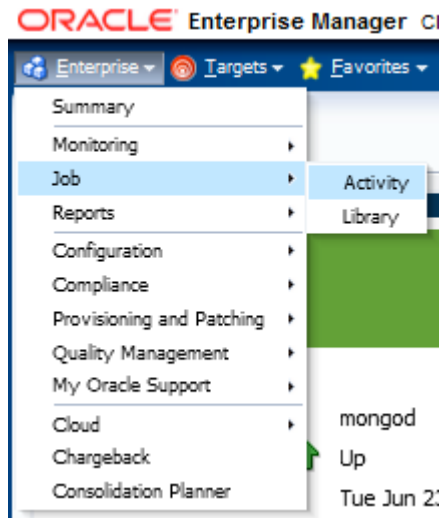
The agent side host should be an EM supported Linux 32 or 64 bit platform.

Job creation process

From the mongoDB target homepage, select the Job Activity link:



Alternatively, from the main Enterprise dropdown, choose Job->Activity



Select Execute mongoDB .js file from the dropdown for Create Job, click Go

ORACLE Enterprise Manager Cloud Control 12c

Enterprise Targets Favorites History

RSO_NODE3
mongoDB

RSO_NODE3 > Job Activity

Job Activity

Advanced Search

Name

Owner All

Start All

Show jobs scheduled to start during or after the selected period.

View	Runs	Create Job	OS Command	Go
Select	Name		Associate Cs FA Block Agent Clone Home Configure Log Archive Locations Create FA compliance standards. Database Configuration Delete APM Engines Discover Oracle Fusion Middleware Discover Promote Oracle Home Target Execute mongoDB .js file Fusion Middleware Process Control Import Application Dependencies from ADP Log Rotation Monitor Load Test OPatch Update OS Command Real-time Monitoring Kernel Module Installation Refresh From My Oracle Support Refresh Oracle Fusion Middleware Refresh Updates	
	No Jobs Found			

enter the following:

Name: job name

Description: enter a description for the job

Click the Add button and select the target(s) to run the job against

Click the Parameters tab

ORACLE Enterprise Manager Cloud Control 12c

Enterprise Targets Favorites History

Create 'Execute mongoDB .js file' Job

General Parameters Credentials Schedule Access

* Name: SERVERSTATUS
Description: runs a serverStatus
Target Type: mongoDB Database

Target
Add individual targets or one composite target, such as a Group.

Remove | Add

Select All | Select None

Select	Name ▲	Type
<input type="checkbox"/>	RS0_NODE1	mongoDB Database

Enter the following:

- Path to mongo executable on agent host, for example **/usr/bin**
- mongoDB authentication database, this defaults to **admin**
- sslPEM KeyFile location (for SSL enabled databases)
- sslCAFile location (for SSL enabled databases)
- .js script contents

SSL example:

Create 'Execute mongoDB .js file' Job

General **Parameters** Credentials Schedule Access

* Path to mongo executable on agent host:
Enter path to mongo binary location on agent host, for example: /usr/bin).

* mongoDB authentication database:
Enter database to be used for authentication.

sslPEMKeyFile:
Enter PEM key file for SSL communication. Leave as NONE for non SSL.

sslCAFile:
Enter CA PEM file for SSL communication. Leave as NONE for non SSL.

* .js Script:

Click the Credentials tab

Enter credentials for the agent host and mongoDB targets. Preferred credentials, existing named credentials or new credentials can be used.

Click the Schedule tab

ORACLE Enterprise Manager Cloud Control 12c

The screenshot shows the 'Create Job' page in Oracle Enterprise Manager Cloud Control 12c, specifically the 'Credentials' tab for a job named 'Execute mongoDB .js file'. The page has a blue header with navigation links for Enterprise, Targets, Favorites, and History. Below the header, there are tabs for General, Parameters, Credentials (selected), Schedule, and Access. A tip message states: 'TIP Select global named credentials. Target instance associated credentials are not supported.' The 'Host Credentials' section is titled 'Credentials to authenticate on the host to launch command.' and includes radio buttons for Credential type (Preferred, Named, New), input fields for *UserName (orade), * Password (masked with dots), * Confirm Password (masked with dots), a Run Privilege dropdown (None), and a checked 'Save As' checkbox with the value 'NC_HOST_2015-06-23-071004'. The 'mongoDB Credentials' section is titled 'Credentials to connect mongoDB.' and includes radio buttons for Credential type (Preferred, Named, New), a Credential Name dropdown (NC_MONGODB__2015-06-23-010914), and a table for Credential Details. The table has two columns: Attribute and Value. The details shown are Username: em_monitor and Password: *****. A 'More Details' link is present below the table.

Enterprise ▾ Targets ▾ Favorites ▾ History ▾

Create 'Execute mongoDB .js file' Job

General Parameters **Credentials** Schedule Access

✓ TIP Select global named credentials. Target instance associated credentials are not supported.

Host Credentials

Credentials to authenticate on the host to launch command.

Credential Preferred Named New

* UserName

* Password

* Confirm Password

Run Privilege

Save As

mongoDB Credentials

Credentials to connect mongoDB.

Credential Preferred Named New

Credential Name

Attribute	Value
Username	em_monitor
Password	*****

[More Details](#)

Enter a schedule or execute the job immediately

Click the Access tab

The screenshot shows the Oracle Enterprise Manager Cloud Control 12c interface. At the top, the logo reads "ORACLE Enterprise Manager Cloud Control 12c". Below the logo is a navigation bar with "Enterprise", "Targets", "Favorites", and "History" menus. The main heading is "Create 'Execute mongoDB .js file' Job". There are five tabs: "General", "Parameters", "Credentials", "Schedule", and "Access". The "Schedule" tab is active. Under "Type", there are three radio buttons: "One Time (Immediately)" (selected), "One Time (Later)", and "Repeating". Under "Grace Period", there are two radio buttons: "Indefinite" (selected) and "End After". The "End After" option has two input fields for "Hours" and "Minutes".

Use or amend access to the job then click Submit or Save to Library

ORACLE Enterprise Manager Cloud Control 12c Setup ▾ Help ▾

Enterprise ▾ Targets ▾ Favorites ▾ History ▾ Search Target Name ▾

Create 'Execute mongoDB .js file' Job

General Parameters Credentials Schedule **Access**

This table contains Administrators and Roles that have access to this job.

[Add](#)

Name ▲	Type	Access Level	Remove
CLOUD_ENGINE_USER	Super Administrator	View ▾	
SYS	Super Administrator	View ▾	
SYSMAN	Super Administrator	Owner	
SYSTEM	Super Administrator	View ▾	

E-Mail Notification for Owner

A Notification rule may be used by any Administrator to receive notifications about this job. The owner may choose to receive e-mail notifications based on severity of below. E-mail will be sent based on the Owner's notification schedule.

Match status and severity
 Either Both

Select severity of status
 Critical Informational

Select status
 Scheduled Running Suspended Succeeded Problems Action Required

No E-mail addresses are found.
The notification schedule is not defined.

After running, the job Summary will be displayed:

The screenshot displays the Oracle Enterprise Manager Cloud Control 12c interface. The breadcrumb navigation shows the path: RSO_NODE3 > Job Activity > Job Run: SERVERSTATUS. The main heading is "Job Run: SERVERSTATUS".

Summary


Status Succeeded
Scheduled [redacted]
Started [redacted]
Ended [redacted]
Elapsed Time 2 seconds

Targets [input field]
Status All [dropdown]
Go [button]

Expand All | Collapse All

Name	Targets	Status
Execution: RSO_NODE1	RSO_NODE1	Succeeded
Step: Create mongoDB .js script	RSO_NODE1	Succeeded
Step: Run mongoDB .js script	RSO_NODE1	Succeeded
Step: Remove mongoDB .js script	RSO_NODE1	Succeeded

And the output of each step can be viewed:



The screenshot shows the Oracle Enterprise Manager Cloud Control 12c interface. The top navigation bar includes 'Enterprise', 'Targets', 'Favorites', and 'History'. The main content area is titled 'RSO_NODE3' and 'mongoDB'. The terminal window displays the following output:

```
MongoDB shell version: 3.0.4
connecting to: 192.168.0.71:27017/admin
{
  "host" : "mongo1",
  "version" : "2.6.7",
  "process" : "mongod",
  "pid" : NumberLong(20803),
  "uptime" : 930974,
  "uptimeMillis" : NumberLong(930973771),
  "uptimeEstimate" : 861501,
  "localTime" : ISODate("2015-06-23T14:22:53.803Z"),
  "asserts" : {
    "regular" : 0,
    "warning" : 0,
    "msg" : 0,
    "user" : 48,
    "rollovers" : 0
  },
  "backgroundFlushing" : {
    "flushes" : 15516,
    "total_ms" : 382183,
    "average_ms" : 24.631541634441867,
    "last_ms" : 35,
    "last_finished" : ISODate("2015-06-23T14:22:53.803Z")
  },
  "connections" : {
    "current" : 13,
    "available" : 51187,
    "totalCreated" : NumberLong(293574)
  },
  "cursors" : {
    "note" : "deprecated, use server status metrics",
    "clientCursors_size" : 2,
    "totalOpen" : 2,
  }
}
```



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