

SolutionPack for Oracle MySQL Database

Release number 1.0.0.0

Summary Sheet

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Overview

This article explains how to install and configure the SolutionPack for Oracle MySQL Database. This SolutionPack provides management capabilities typically found in database-centric tools along with management support from other technologies. You can measure client activity by reporting on data from your database tier alongside your business logic and presentation tiers.

This SolutionPack is one of many provided with [Service Assurance Suite](#).

Technical Specifications

SolutionPack version

1.0

Compatible EMC M&R version

6.4

Supported Oracle MySQL versions

- ◆ MySQL 5.1
- ◆ MySQL 5.5
- ◆ MySQL 5.6

User privilege requirements

This SolutionPack requires MySQL database user login privileges to collect information from MySQL database servers running remotely.

Data collection method

- ◆ The Oracle MySQL SolutionPack's sql-collector queries the information_schema.GLOBAL_STATUS table and the information_schema.SESSION_VARIABLES table.

Main reports

- ◆ Query Cache Volume among all MySQL Databases
- ◆ Number of SQL queries among all MySQL Databases
- ◆ Total Current Connection
- ◆ Database Health and Performance
- ◆ Connection Health
- ◆ Memory Health
- ◆ Slave's Health
- ◆ Database Performance

Where to find the latest SolutionPack software

SolutionPack software updates

Obtain new or updated SolutionPack software by doing one of the following:

- ◆ Install the latest core software update, such as 6.4. SolutionPacks distributed with core software have a 30-day free evaluation period. If you plan to use the software

longer than 30 days, you must install a SolutionPack license before the trial period ends.

- ◆ Upload a `SolutionPackCenter Update.zip` file from **Centralized Management** › **Packages Management** › **Packages Listing** › **Upload**. Since new SolutionPacks distributed in the zip file do not include a 30-day trial license, you must install a license file before installing the SolutionPack.

Installing the SolutionPack

Before you begin

- ◆ Determine whether you need a SolutionPack license file by checking the feature names and expiration dates listed in **Centralized Management** › **License Management**. If the license is not listed, obtain one by completing a Support Request (SR) form, which you can find on the EMC support website <http://support.emc.com>.
- ◆ Make sure the core modules, such as the Module-Manager, are up-to-date on all servers since not all module dependencies are validated during the SolutionPack installation. See the *EMC M&R (Watch4net) Installation and Configuration Guide* provides for more information.

Procedure

1. Log in to **Centralized Management**.
2. Select **SOLUTIONPACK CENTER**.
3. Select the **SolutionPack for MySQL Database** in the **Browse and Install SolutionPacks** screen.
4. Read the summary information and click **Install**.
5. Edit the default instance name, `oracle-mysql-database`, and click **Next**.
6. Set these values for the MySQL database server:
 - **Database hostname or IP address**
 - **Database port**
 - **Please select the credentials**
7. If you have multiple instances of the Oracle MySQL database servers in your configuration, click **+** to name each server and set the values shown in the previous step.
8. Select **Administration Web-Service Instance** as the default and click **Install**.
9. When a checkmark appears next to the Collector and the Report, click **OK**.

After you finish

After the installation is complete, select **Centralized Management** › **SolutionPack** to verify the installed SolutionPack.

Confirming report creation

After you install a SolutionPack, you can view its reports.

To view the reports:

Procedure

1. Go to **User Interface > Report Library**.
2. Click the SolutionPack to view its reports.

Results

It may take a minimum of three polling cycles to display all relevant information in these reports. By default, one polling cycle is five minutes.

Troubleshooting

Report display problems

- ◆ [What to do if data does not appear in any reports on page 4](#)
- ◆ [What to do if data does not appear in some reports on page 4](#)
- ◆ [Viewing collector errors in the Collector-Manager log files on page 5](#)

What to do if data does not appear in any reports

Procedure

1. After the completion of at least three collection cycles, verify if data is populating into the reports.
2. On the **Device Discovery Dashboard**, verify that all icons are green.
3. To view the log files for errors, go to **Centralized Management** and click **Collecting > Collector-Manager::<instance name> > Log Files**.
4. Log in to your MySQL database and verify data is being written to the MySQL database server. Look specifically at the `data_property`, `data_variable`, and all cache tables:

```
select * from data_property;
select * from data_variable;
select * from <cache-table-name>;
```

5. In the MySQL database, verify the user has the required login permissions to the local and remote MySQL servers being monitored by the SolutionPack. If not, follow these steps to create credentials for the user:

a. Navigate to `bin/mysql/` `-u root -p <rootUserPassword> -P <mysqlServerPort>`

- b. Type the following commands to create the credentials:

```
use mysql;
CREATE USER 'testuser'@'%' IDENTIFIED BY 'watch4net';
GRANT ALL ON *.* TO 'testuser'@'%';
```

- c. Use these user credentials to log in to the local and remote MySQL database servers from the SolutionPack.

What to do if data does not appear in some reports

Procedure

1. Run the scheduled task to import data into reports. If there is still no data in the reports, continue to step 2.

2. Search for the metric in the database.
3. To view the log files for errors, go to **Centralized Management** and click **Collecting > Collector-Manager::<instance name> > Log Files**.

Running a scheduled task to import data into reports

After you push a new configuration into a collector, a scheduled task runs and populates the reports with new data. You can manually run the scheduled task to import the data more quickly.

Before you begin

Allow at least three polling cycles to pass before manually running the scheduled task.

Procedure

1. Click **Administration**.
2. Click **Centralized Management**.
3. Expand **Scheduled Tasks**.
4. Click **Database**.
5. Select the **import-properties-Default** task.
6. Click **Run Now**.
7. Confirm success in running the task in the **Last Result** and **Last Result Time** columns.

Searching for metrics in the Oracle MySQL database

You can verify that a metric is being collected and used for reporting when you search and find the metric in the database.

Procedure

1. Go to the **Administration** page.
2. Under **Modules**, click **Management of Database Modules**.
3. On the **Metric Selection** page, create the filter.

For example, to list the `key_reads` (the number of physical reads of a key block from disk to the MyISAM cache), type `source== 'MySQL-Collector'` & `&name== 'key_reads'` in the **Filter** field.

4. Click **Query**.

A list of the metric results appears. If nothing displays, the metric is not being collected.

Viewing collector errors in the Collector-Manager log files

Review the Collector-Manager log files to troubleshoot problems with data collection.

Procedure

1. Click **Administration**.
2. Click **Centralized Management**.
3. Expand **Collecting**.
4. Click the Collector-Manager for your collector instance.
Collector-Manager::<Collector-Manager instance> - <physical_host_ID>

5. Expand **Log Files** and click the **View File** icon to review the configuration error messages.

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