MySQL

Abstract

This document describes how you can monitor an MySQL database server such as:

- Connection time
- The number of connections
- Cache hit
- etc

There are some steps you'll need to follow in order to monitor a new database machine:

- Understand what is already available (in the Shinken Entreprise installation)
- Setup the MySQL user account
- Test the connection to the database
- Setup your server host definition

On this page

What is already available in the Shinken Installation

To make your life a bit easier, a few configuration tasks have already been done for you:

1. Installation of check_mysql_health plugin : /var/lib/shinken/libexec/check_mysql_health
2. Several host templates are ready to be used

Note

We suppose here that the MySQL server you want to monitor is named srv-lin-1 and is a Linux. Please change the configuration and commands according with the real name of your server.

Setup the MySQL user account

Connect with a root account on your MySQL database. change 'password' with your mysql root password:

```
lin-srv-1:# mysql -u root -ppassword
```

And create a shinken user:

```
GRANT usage ON *.* TO 'shinken'@'%' IDENTIFIED BY 'shinkenpassword';
```

It's a good thing to change the shinkenpassword to another password. Then you need to update the **/etc/shinken/resource.d/mysql.cfg**

```
$MYSQLUSER$=shinken
$MYSQLPASSWORD$=shinkenpassword
```

Test the connection

To see if the connection to the MySQL server is ok, just launch :

```
/var/lib/shinken/libexec/check_mysql_health --hostname "srv-lin-1" --username "shinken"
--password "shinkenpassword" --mode connection-time
```

What is checked with the templates

Public templates

mysql

This is the very basic MySQL template allowing to know if your MySQL database server is running and usable.

Every MySQL templates (except Mysql-connection-method) use it as a parent template.

Check	Detail	Check range	Default Warning	Default Critical
connection	Time to connect to the server	0 to n	1	5
restart	Time the server is running	0 to n	10:	5:
slow_queries	slow_queries	0 to n	0.1	1
tmp_disk_tables	Percent of temp tables created on disk	0 to n	25	50

mysql-full

Contains all MySQL host templates listed in the Shinken Adminstrators templates.

> **Warning**
>
> Using the *mysql-full* template will require a lot of resources on your poller daemon. We advise to use only the needed templates.

Shinken Administrator templates (can't be seen by other users)

mysql-connection-method

This template describes the method to connect to MySQL server. Every MySQL templates use it as a parent template.

mysql-cluster

This template gives informations about the MySQL cluster.

mysql-innoDB

This template gives informations about innoDB buffers and logwaits.

Check	Detail	Check range	Default Warning	Default Critical
bufferpool_hitrate	InnoDB buffer pool hitrate	0 to n	99:	95:
bufferpool_wait_free	InnoDB buffer pool waits for clean page available	0 to n	1	10
log_waits	InnoDB log waits because of a too small log buffer	0 to n	1	10

mysql-MyISAM

This template gives informations about MyISAM key cache hitrate.

Check	Detail	Check range	Default Warning	Default Critical
keycache-hitrate	MyISAM key cache hitrate	0 to n	99:	95:

mysql-performance

This template gives informations about the global server performance.

Check	Detail	Check range	Default Warning	Default Critical

index_usage	Usage of indexes	0 to n	90:	80:
long_running_procs	long running processes	0 to n	10	20
table_lock_contention	Table lock contention	0 to n	1	2
tablecache_hitrate	Table cache hitrate	0 to n	99:	95:
threadcache_hitrate	Hit rate of the thread-cache	0 to n	10	20

mysql-query-cache

This template gives informations about query cache.

Check	Detail	Check range	Default Warning	Default Critical
qcache_hitrate	Query cache hitrate	0 to n	90:	80:
qcache_lowmem_prunes	Query cache entries pruned because of low memory	0 to n	1	10

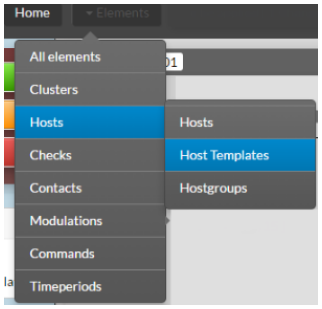
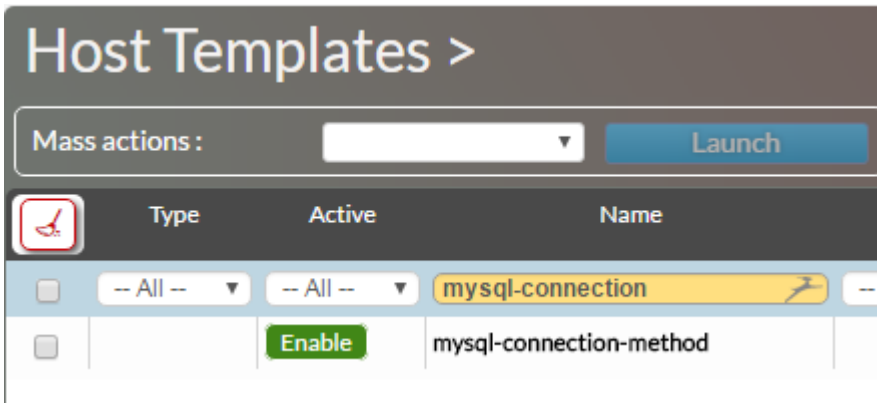
mysql-usage

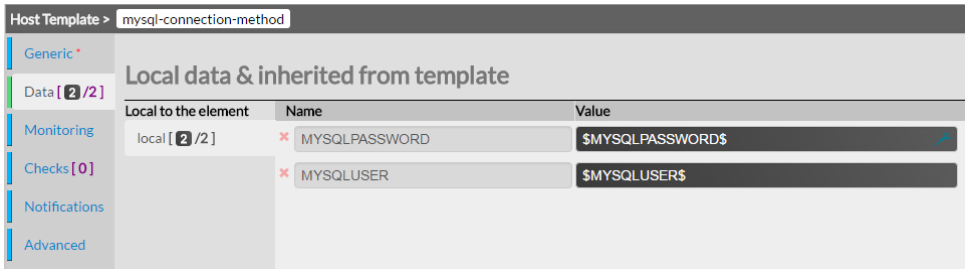
This template gives informations about MySQL server usage.

Check	Detail	Check range	Default Warning	Default Critical
open_files	Percent of opened files	0 to n	80	95
threads_connected	Number of currently open connections	0 to n	10	20

How to

Configuration of Mysql-connection-method host template

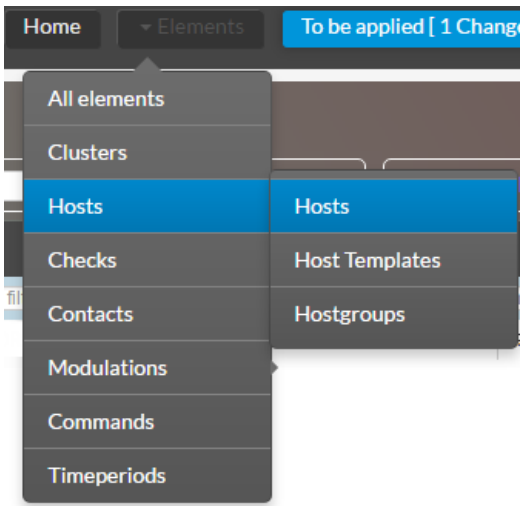
Click on **Hosts** then on **Hosts Templates** in the **Elements** menu	
In the Name field, type **mysql-connection**. Then clic on **mysql-connection-method**	
Clic on **Data** tab	

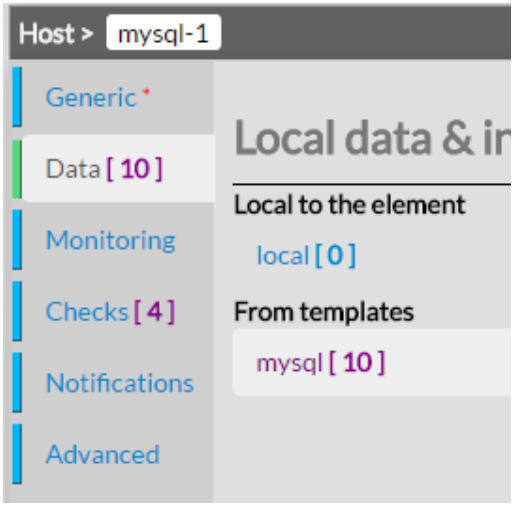
You can setup the following DATA : • *MYSSQLPASSWORD* : the MySQL password of the user used to connect to database • *MYSQLUSER* : the MySQL user name used to connect to database	

You can also set the user and password directly in **/etc/shinken/resource.d/myslq.cfg**

```
$MYSQLUSER$=shinken
$MYSQLPASSWORD$=shinkenpassword
```

Attach a MySQL template to you host

Clic on **Hosts** in the **Elements** menu	
Add the chosen MySQL host template to the *Host Templates to inherit* field. For example the *MySQL* host template.	

Click on the **Data** tab	
Check if the Following data are ok.