

Monitoring of System Parameters with OpenScape FM

This document describes how to monitor the system parameters of a Linux or Windows system with the system management agent of OpenScape Fault Management (OSFM).

Option 1 – install a local agent

The easiest way to monitor system parameters like CPU/file system/memory/network load is to install a local system management agent (**requires Java**). This document shows an example how this is done for Linux. The installer of the agent can be found in the folder “installer” in an installed OSFM:

```
[r5turbo:/opt/OpenScapeFM/installer # ls -l
total 60780
-rw-r--r-- 1 root root    3301 Mar 19 06:22 setup_agent_osfm.bat
-rw-r--r-- 1 root root 49787086 Mar 19 06:22 setup_agent_osfm.jar
-rw-r--r-- 1 root root   2014 Mar 19 06:22 setup_agent_osfm.sh
-rw-r--r-- 1 root root   3304 Mar 19 06:22 setup_mobilegw_osfm.bat
-rw-r--r-- 1 root root 12427611 Mar 19 06:22 setup_mobilegw_osfm.jar
-rw-r--r-- 1 root root   2031 Mar 19 06:22 setup_mobilegw_osfm.sh
r5turbo:/opt/OpenScapeFM/installer #
```

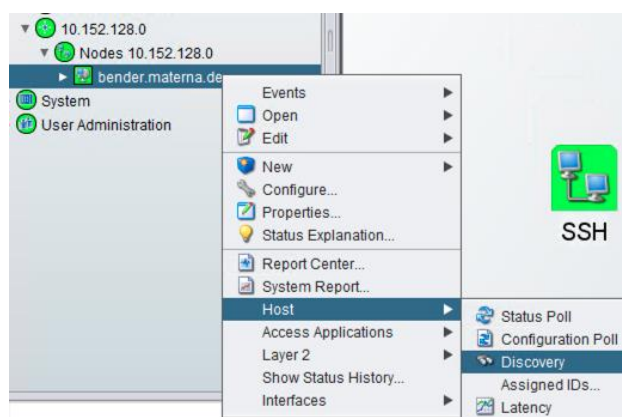
The two files “setup_agent_osfm.sh” and “setup_agent_osfm.jar” have to be copied to the target system. Then, invoke `sh ./setup_agent_osfm.sh` to start the installation and follow the instructions on the screen. For a Windows installation, you need the files “setup_agent_osfm.bat” and “setup_agent_osfm.jar”.

If Java is not found, you can set the environment variable `JAVA_HOME` to point to the desired Java installation, as shown in the screenshot:

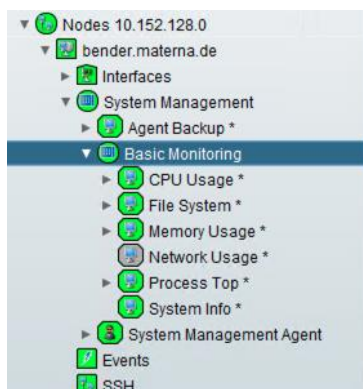
```
[[root@bender:/tmp]$ export JAVA_HOME=/usr/lib/jvm/java-8-openjdk-amd64/
[[root@bender:/tmp]$ /bin/bash ./setup_agent_osfm.sh
openjdk version "1.8.0_181"
OpenJDK Runtime Environment (build 1.8.0_181-8u181-b13-2~deb9u1-b13)
Matching Java version found:
/usr/lib/jvm/java-8-openjdk-amd64/bin/java
Logging to /tmp/install_210319.log

-----
OpenScape System Management Agent
This installer will guide you through the installation process
of OpenScape System Management Agent.
For an update installation, please install into the same folder where the
current version is installed.
-----
```

After the installation of the agent, locate the related host object in the OpenScape FM client and click “Host->Discovery” in it’s popup menu. If the host was not already added to OSFM, you can do this now via the main menu item “IP Manager->New”.



Now, the basic monitoring profile including the system parameters should automatically be available:



Option 2 – remote monitoring

Monitoring of a Linux or Windows system remotely is possible.

Linux

The remote monitoring of Linux is performed via SSH, so SSH must be available at the target system and you need valid login credentials.

Windows

For Windows, the WMI protocol is used (Windows Management Instrumentation). *Remote monitoring via WMI is only possible if the OSFM server (if the internal agent is used) or the system management agent is running also on a Windows machine. The related service must be configured to run under a Windows user account which is allowed to perform remote WMI operations (e.g. Administrator).*

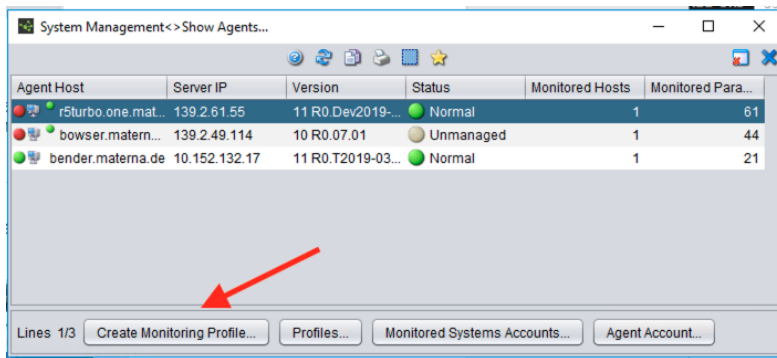
You need valid Windows user credentials for the target system for a user, which is allowed to perform WMI queries. Alternatively, you can configure the OSFM or agent service to run with a domain account which is also available on the target system.

This example describes how the internal system management agent of OSFM can be used for remote monitoring of Linux, but this should work in a similar way with external standalone agents or Windows systems.

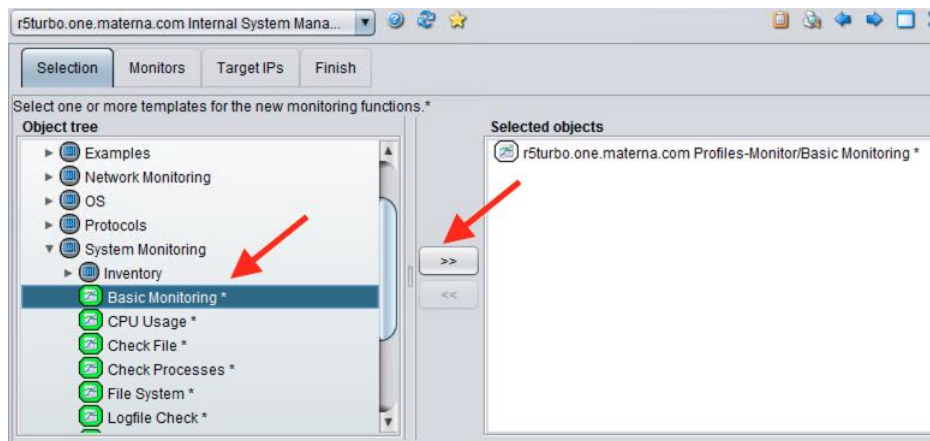
The system you want to monitor must have been added to OSFM. If this was not already done, you can do this now via the main menu item "IP Manager->New".

Select the agent, which should be used for monitoring via "System Management->Show Agents", and click the button "Create Monitoring Profile" to create a new basic monitoring.

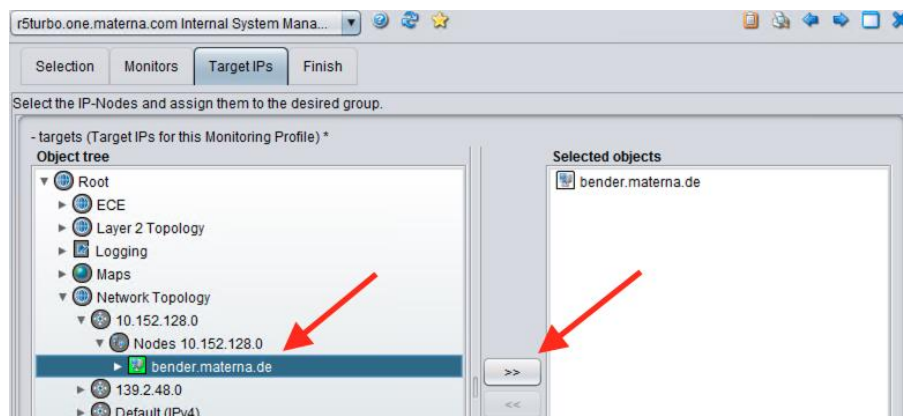




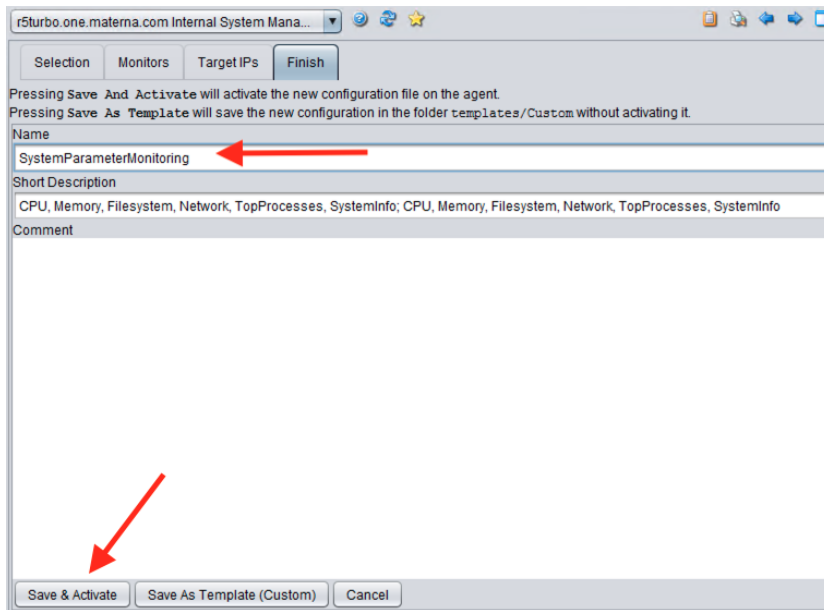
Then, locate the monitoring profile “Basic Monitoring” below the folder “System Monitoring” and move it to the list of selected objects on the right by clicking the “>>” button.



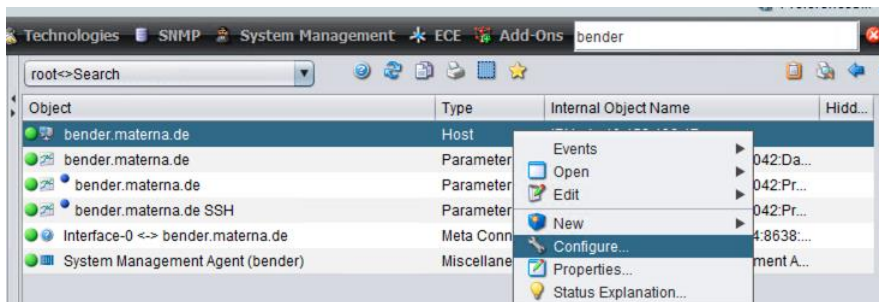
Click the “Next” button at the bottom of the dialogue, which will open the tab “Monitors”. Here, you can leave the defaults as they are and move on to the tab “Target IPs” by clicking the “Next” button. At the tab “Target IPs”, locate the host you want to monitor at the tree view on the left and click the button “>>” to move it to the list of monitored objects on the right.



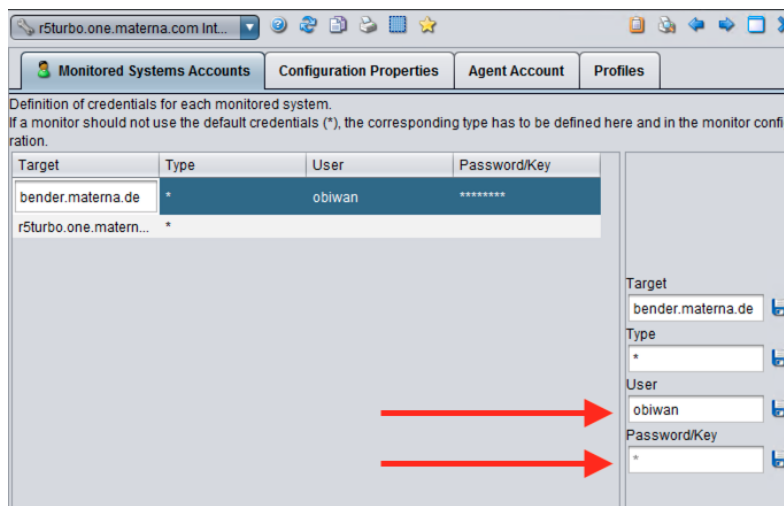
After clicking the “Next” button at the bottom of the dialogue, enter a meaningful name and click the button “Save & Activate” to activate the new monitoring profile.



To make the new monitoring function work, you have to enter valid credentials for the SSH login to the system. To do so, locate the host which should be monitored, e.g. by entering its hostname at the fulltext search box at the upper right corner of the Java client, right-click on the corresponding host line and select "Configure" from the popup menu.



In the configuration dialogue, navigate to the tab "System Management" and "Monitored System Accounts", select the line which corresponds to the agent on which you have created the monitoring profile and enter a valid SSH user and password.



If everything worked correctly, the new (remote) monitoring functions should appear below the target host object. Please note that the label of the system management container includes the name of the host on which the agent is running which is monitoring this host. In the example shown by the screen shot, the host "r5turbo" monitors the host "bender".

