

EMC M&R Generic SNMP collector – Collection and report generation

Dell EqualLogic

This document covers how to use the pre-created Masks and Reports for EqualLogic in EMC SRM.

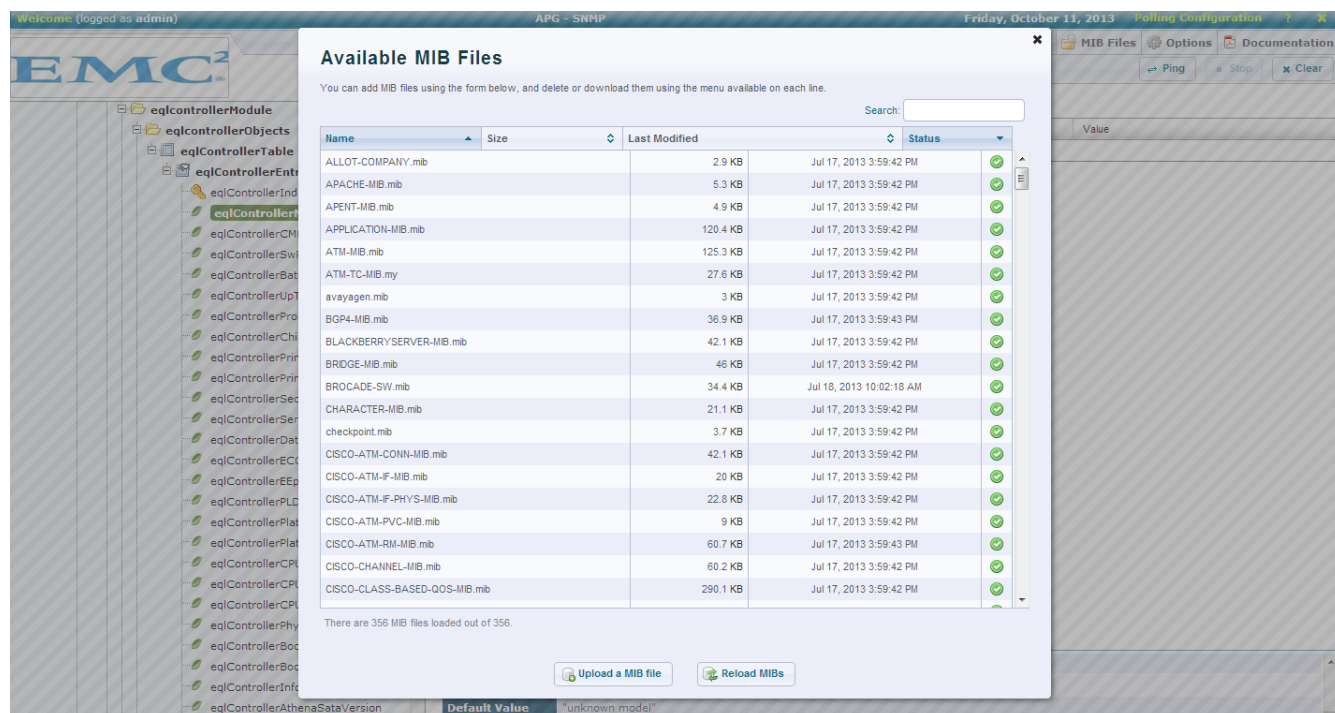
The document is divided into six different steps that are involved in the process.

1. Load third-party MIB definitions into EMC M&R

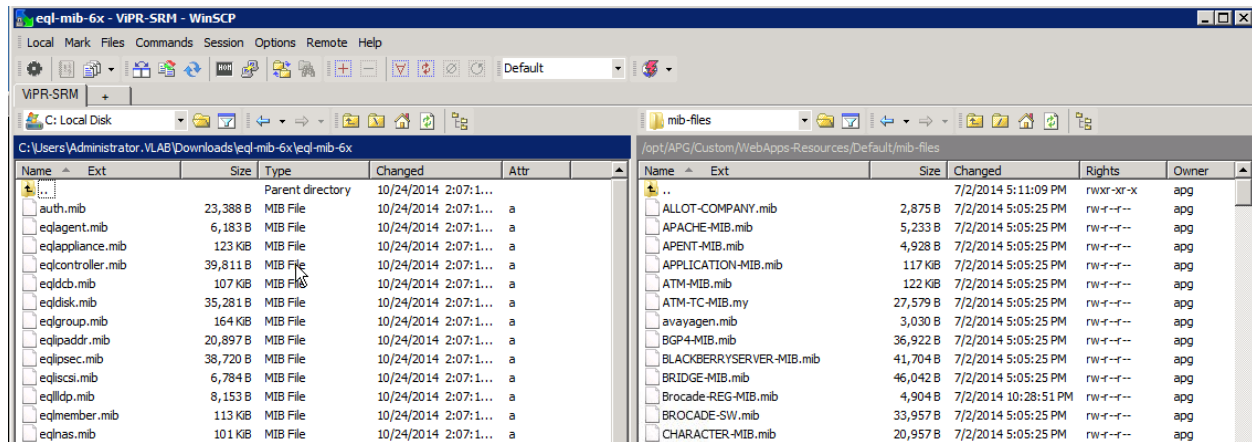
In order to be able to query the third party system, we need to load the SNMP MIB definitions published by the vendor. If these are not available from the system itself, a good place to find these definitions is <http://mibdepot.com>

Option 1, Once we have the MIB files, we go into W4N:

- Navigate to Administration -> Modules -> MIB Browser
- Click MIB Files on the top right corner
- Upload all EQL MIB files one by one

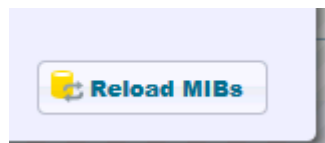


Option 2, you can copy the MIB files as a group on to the server.. Use WinSCP or a similar tool to copy all of the Equallogic MIB files into the /opt/APG/Custom/WebApps-Resources/Default/mib-files folder on the SRM Frontend server.



Once the files are copied go back to the MIB File UI in the SRM UI.

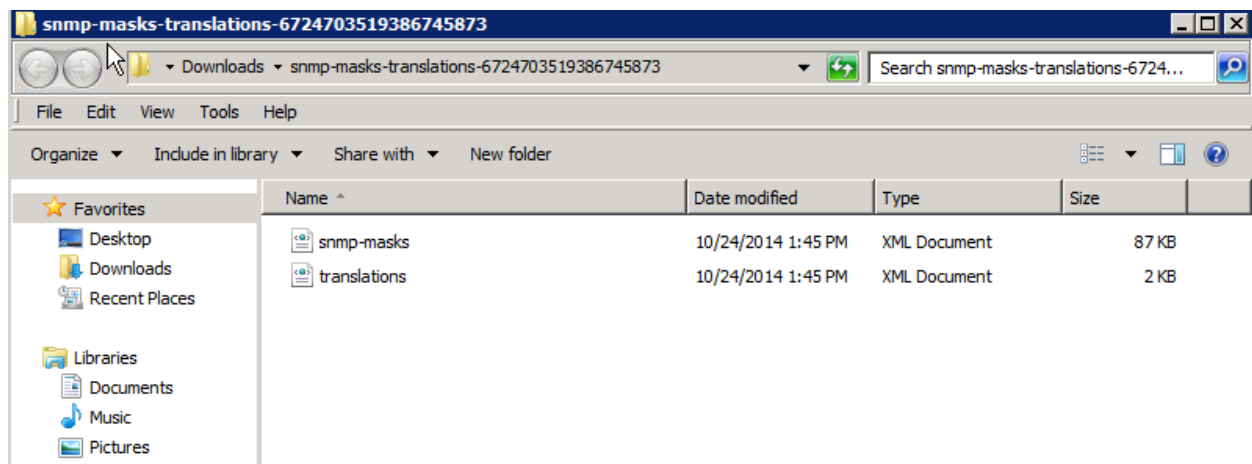
- Navigate to Administration -> Modules -> MIB Browser
- Click MIB Files on the top right corner



Click on Reload MIBs

2. Import Masks and Translations

First, Extract the snmp-masks-translations-xxx.zip file.



Access the **SNMP Collector** module in **Administration**, expand **Collectors**-><collectorname> and click on **Masks**.

Expand **Import** and select the snmp-masks.xml and translations.xml files you extracted.

Watch4NetSnmpCollector-1 Masks

▼ Import

Masks from different files can be merged together, for instance when installing new report packs, through the following fields. The first one will take an `snmp` matter; only the content and extension (.xml) do. Both fields are optional, which means that each file can be uploaded separately.

Masks

C:\Users\Administrator.V

Browse...

Translations

C:\Users\Administrator.V

Browse...

Overwrite

☒ ?

Import

Copy Masks

Paste Masks

Export Masks

☐ ▶ CISCO-ENHANCED-MEMORY-POOL

☐ ▶ CISCO-MEMORY

Click **Import** and ensure the import job is successful

3. Create Agent

We will now create the agent for the device we want to poll. Expand Agents, your collector name and click on Agents. Click on “New Agent” and specify the values for your device:

All the configured agents for this collector can be listed here, alongside with their respective properties and polling settings. Commonly used options are displayed here while the most advanced ones are only visible when clicking on the corresponding icon, one agent at a time.

New Agent

The search boxes below are used to filter the list of displayed agents, and they both accept Unix-like wild-cards (such as * or ?). Please note that both field values are used in this search, combined as a logical AND

Search using the device name:

Search using the device IP:

Show selected Agents Clear search

Warning: agents that were changed will not be saved when sorting the list or going to another page

1 Devices found, displaying 1 to 1 << < 1 > >> 25 agents per page

| | Name | IP Address | Port | Timeout (ms) | Retries | Version | Community (v1/v2) or User (v3) | devtype | Actions |
|--------------------------|----------------------|------------|------|--------------|---------|---------|--------------------------------|---------|---------------------------|
| <input type="checkbox"/> | Equallogic-Hopkinton | | 161 | 1000 | 2 | v1 | | Array | <div>L R Edit Trash</div> |

All Toggle None

For selected ones: Port

Update Test Remove

1 Devices found, displaying 1 to 1 << < 1 > >> 25 agents per page

4. Create Polling Group

Now go back to Polling Groups and create a new one. In this case PG_EQUALLOGIC. Select the same Polling Period, Refresh Property Time and Group.

| | | | | | | | |
|-------------------------------------|---------------|-----|----------|-------|---|---|--|
| <input checked="" type="checkbox"/> | PG_EQUALLOGIC | 300 | 00:42:00 | group | 3 | 1 | |
|-------------------------------------|---------------|-----|----------|-------|---|---|--|

Select the Polling Group you just created from the left tree. Here you have to select the Agent you just created and select the SNMP masks that apply to this device:

Polling Group PG_EQUALLOGIC (Collector Watch4NetSnmpCollector-1)

Configuration

* Name

* Polling Period

Enable this Group
 ☒

▶ Advanced

Agents & Groups

The available agents and/or groups are those defined in the corresponding SNMP Agents section available at the bottom of the tree in the left panel. They need to be defined there under the same name as the one of this specific collector, before being selected in that screen.

Explicit Groups

IP Groups

Agents

10.244.1.78:161 (Equallogic-Hopkinton)

Masks

The available masks are those defined for this specific collector, under the corresponding section. They need to be defined there before being selected in that screen.

* Masks

Equallogic
 GENERIC-INTERFACES-NO-IFXTABLE
 GENERIC-SYSUPTIME

We are now ready to restart the SNMP collector and wait for the data to come in. Wait at least 10 minutes so two collection jobs can run completely.

5. Import the reports

In the Administration UI, click on ReportPacks and select Upload a ReportPack

ReportPacks Management | Administration

Complete ReportPacks (in arp format) can be imported through the following form. The list below contains the ReportPacks that have been installed or created.

Select the corresponding file and then click on Upload for the ReportPack name, version, description, template and formulas to be processed, imported, and made available.

[Upload a ReportPack](#)

Click on any line to view details for a specific ReportPack.

| Name | Description |
|-----------------------------|--|
| Brocade Fabric Switch | This SolutionPack contains reports that are specifically designed for the Brocade Fabric Switch devices; version 3.5.0.0 |
| Cisco MDS Nexus | SolutionPack for Cisco MDS/Nexus; version 3.5.0.0 |
| Cisco UCS | This SolutionPack contains reports that were specifically designed for the Cisco UCS; version 1.1.0.0 |
| Default ReportPack | The default ReportPack, included with any Watch4net install.; version 3.5.0.1 |
| EMC Atmos | This SolutionPack contains reports that were specifically designed for EMC Atmos; version 2.0.0.0 |
| EMC Centera | SolutionPack for EMC Centera; version 1.4.0.0 |
| EMC Data Domain | SolutionPack for EMC Data Domain; version 1.0 |
| EMC Data Protection Advisor | SolutionPack for EMC Data Protection Advisor; version 1.1.0.0 |
| EMC Isilon | SolutionPack for EMC Isilon; version 3.5.0.0 |


Select the Dell Equallogic.arp file and click OK

After upload you should see these details for the ReportPack

ReportPack Modification: Dell EqualLogic | Administration

This section allows the creation and modification of ReportPacks.

ReportPack Information

 This information is for administration purposes only. It will not be displayed in the user interface.

| | |
|-------------|---|
| Name | <input type="text" value="Dell EqualLogic"/> |
| Version | <input type="text" value="0.90"/> |
| Description | <input type="text" value="Beta Reports for EqualLogic PS Series Arrays"/> |

[Delete](#)

[Export](#)

[Save](#)

This list contains all the templates that have been created for this ReportPack.

| Template Name | Description |
|-------------------|-------------|
| EqualLogic Arrays | |

In the Reporting UI, you will now see the Dell EqualLogic reports under Report Library

The screenshot shows a web application interface. On the left is a sidebar menu with the following items: 'Scheduled Reports', 'Stored Reports', 'Favorite Reports', 'Dashboards', 'Explore', 'Operations', 'Planning', 'Report Library' (which is expanded), 'Brocade FC Switch', 'Cisco MDS/Nexus', 'Cisco UCS', 'Dell EqualLogic', 'PS Series Arrays' (highlighted with a blue background), and 'EMC Atmos'. The main content area on the right displays the date 'July 2014, Monday 21', the message 'No elements found.', a search filter labeled 'Device Name' with a dropdown arrow, and a status message 'Report generated in 0.1:'.

Allow the data to be collected via SNMP and the report should start populating