SCUtils Management Pack for APC NetBotz 200 Guide

Solution for Microsoft System Center 2012 Operations Manager

Published: 20th September 2016

Version: 1.2

Authors:

Marat Kuanyshev

Feedback:

support@scutils.com

Contents

1. Getting started

SCUtils Management Pack for APC NetBotz 200 is an extension for Microsoft System Center 2012 Operations Manager to monitor APC NetBotz 200 and APC NetBotz 150 devices. The product is based on the 'powernet417.mib' MIB file.

APC and NetBotz are trademarks of the Schneider Electric. All other trademarks are property of their respective owners.

2. Compatibility

SCUtils Management Pack for APC NetBotz 200 has been designed and tested for the following versions of Microsoft System Center 2012 Operations Manager:

▪ Microsoft System Center 2012 Operations Manager R2.

The product might work in Microsoft System Center 2012 Operations Manager and Microsoft System Center 2012 Operations Manager SP1, but it is not tested. If you intend to use **SCUtils Management Pack for APC NetBotz 200** in pre-R2 environments, please carefully evaluate the product in the testing environment.

2.1. Try before buy

SCUtils Management Pack for APC NetBotz 200 has a unified installer for trial and full versions and can be obtained on http://www.scutils.com on the Download page. We highly recommend to evaluate the software in a testing lab before the implementing in the production environment.

The free 15-day trial version is fully functional and offers every feature of the product. Please become familiar with this guide before starting using **SCUtils Management Pack for APC NetBotz 200** and do not hesitate to contact us at support@scutils.com. You are also more than welcome to our YouTube channel where you will find video tutorials for **SCUtils Management Pack for APC NetBotz 200** and other our products.

2.2. Feedback

Our team is always on the way of the improvement of our solutions. We highly appreciate every feedback from our customers. Please send us your thoughts, complains, and feature requests at support@scutils.com.

3. Requirements

All APC NetBotz 200 devices must be discovered as network devises. Please refer to the [Operations Manager guide](#) to details.

4. Installation

Download the installation package **SCUtils Management Pack for APC NetBotz 200 Setup.msi** from Download page of www.scutils.com. Copy the installation package to the Operations Manager management server.

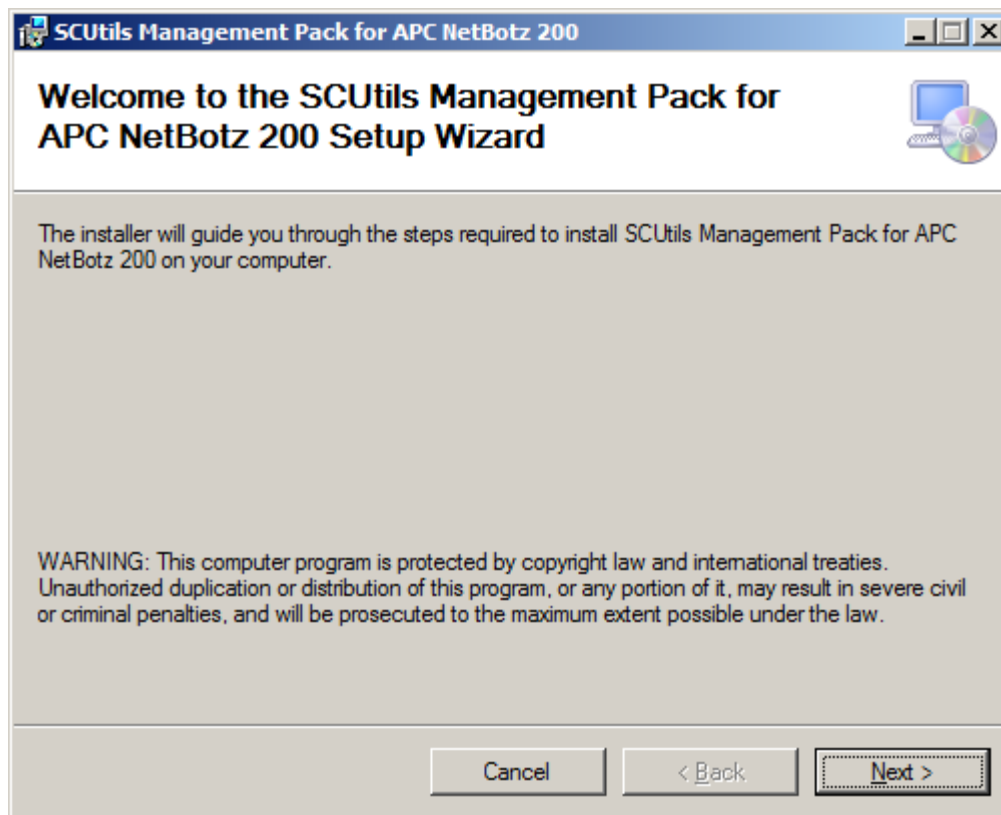Run **SCUtils Management Pack for APC NetBotz 200 Setup.msi** file on the server.

Fig.1 Installing

Follow the installation wizard steps (Fig.1). On the **Select Installation Folder** page you can change the location in which **SCUtils Management Pack for APC NetBotz 200** will be installed.

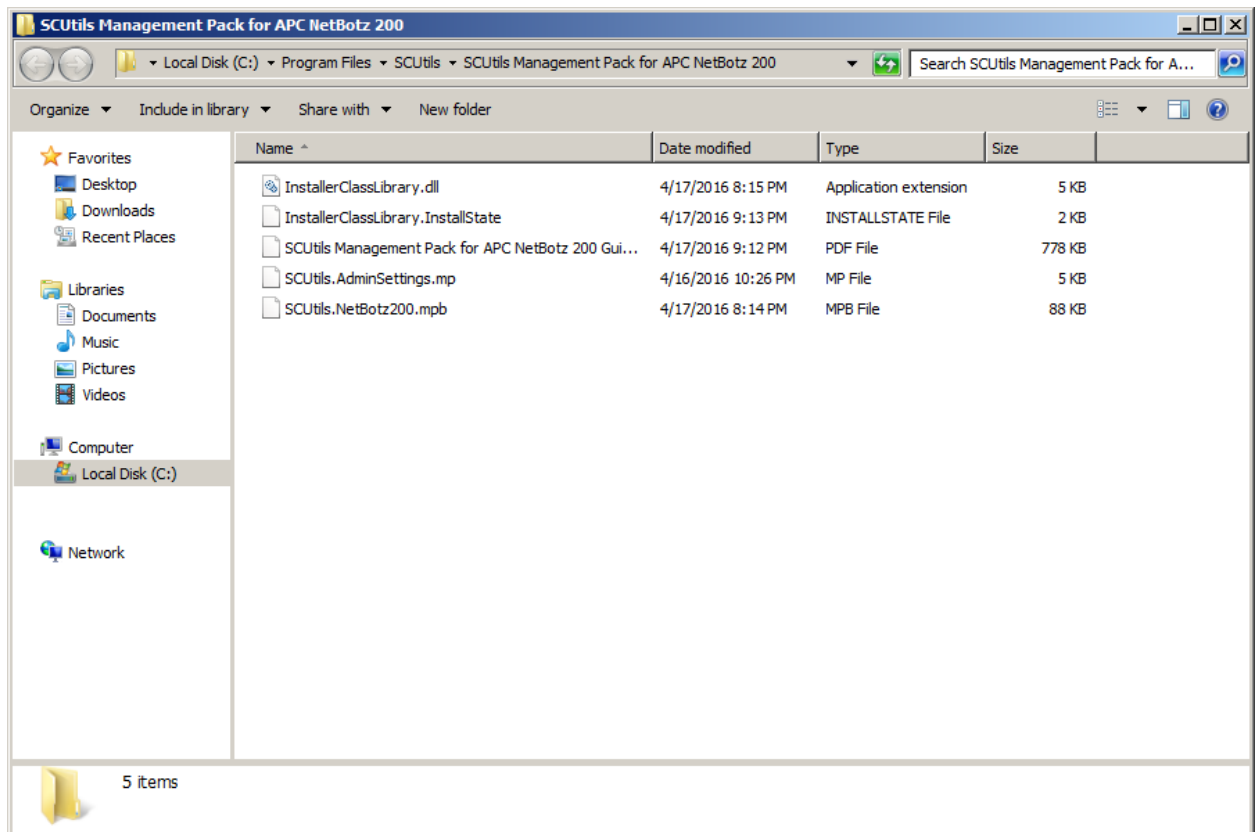After the successful installation, the installation folder will be opened automatically.

Fig. 2 Installation folder

To install the management packs:

1. Log on to the computer that hosts the **Operations Manager console** using an account that administrative rights in the Operations Manager.
2. In the Operations Manager console, select **Administration**.
3. In the **Administration** pane, select **Management Packs.**
4. In the **Tasks** pane, under **Actions**, click **Import Management Packs**.
5. In the **Select Management Packs** box, click on **Add** button, select **Add from disk**, in the **Online Catalog Connection** dialog select **No**.
6. In the **Select Management Packs to Import** box, point to the location of **SCUtils Management Pack for APC NetBotz 200** installation folder (the default path is '*C:\Program Files\SCUtils\ SCUtils Management Pack for APC NetBotz 200*').
7. In the list of files, select the management packs **SCUtils.AdminSettings.mp** and **SCUtils.NetBotz200.mpb**, and then click **Open**.
8. In the window **Import Management Packs** click **Install**.

After the installation you have to activate your copy of the software. There are two ways to activate the product: online (recommended) and offline.

4.1. Using with gateway servers

If you plan to use Operations Manager gateway server as members of a resource pool to monitor APC NetBotz 200 devices, you have to perform the following actions in this manner:

1. Install the **Operations Manager console** on **each gateway server** that is a member of a resource pool for monitoring APC NetBotz 200 devices.
2. Adjust a firewall if a gateway server and its management server are separated by the firewall.

3. Specify the **credentials** for an account that will be used to connect to a management server of the gateway. This action has to be performed on **each gateway server** that is a member of a resource pool for monitoring APC NetBotz 200 devices.

If the gateway server and management server are separated by a firewall, you have to adjust the firewall to open the following ports in both directions between the gateway server and its management server:

1. TCP 5723
2. TCP 5724

Please refer to the [Microsoft article](#) to find an additional information about ports used by Operations Manager servers.

If you have already specified the **credentials** on gateway servers for **other SCUtils products**, you don't need to repeat the procedure. If not, you need to set the credentials for the connectivity.

To specify the credentials:

1. Prepare an account that is a member of **Operations Manager Read-Only Operators** group.
2. Copy **SetAccountToRegistry.exe** from the installation folder (the default path is '*C:\Program Files\SCUtils\ SCUtils Management Pack for APC NetBotz 200*'') to **each gateway server** that is a member of a resource pool for monitoring APC NetBotz 200 devices.
3. Run **SetAccountToRegistry.exe** using a local administrator account.
4. Fill in all the required fields.
5. Click on **Test** button.
6. If the connectivity test has succeeded, click on **Save** button (the password will be encrypted before saving). Otherwise, reenter the information and try to test again.
7. Repeat the procedure on **each gateway server** that is a member of a resource pool for monitoring APC NetBotz 200 devices.
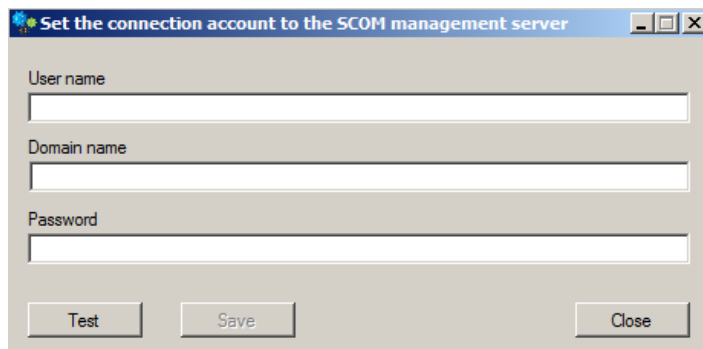

Fig. 3 SetAccountToRegistry dialog.

4.2. Online activation

Run the Operations Manager console under an Operations Manager administrative account on the computer connected to internet. Open **SCUtils Management Pack for APC NetBotz 200 Activation** to activate the copy of the product:

1. In the Operations Manager console, select **Administration.**
2. In the **Administration** pane, expand **SCUtils Settings**.
3. In the **SCUtils Products Activation** view, click **SCUtils Management Pack for APC NetBotz 200 Activation.**
4. In the **Tasks** pane, under **SCUtils Management Pack for APC NetBotz 200 Activation Tasks**, click **Activate**.

5. **Run Task - Activate** window will be opened (Fig.4).

Fig.4 SCUtils Management Pack for APC NetBotz 200 Activation

If you want to evaluate the product, simply click on **Run** button.

If you want to activate a full version, click on **Override** button, then define new values for **CompanyName** and **LicenseKey** (exactly as in the license), then click on **Run** button.

If the management server haven't finished the deployment of the management pack's resources, you could receive errors or the task will stay in a scheduled state. In this case, just wait for 2-5 minutes and run the **Activate** task again.

If you have any issues with the activation process or are not able to use the online activation, please send your **Unique ID** at support@scutils.com and we will provide you with an offline **Activation Key**. To get the **Unique ID** of your environment, use **Get a Unique ID for an offline activation** task.

4.3. Offline activation

If you prefer to activate offline or for some reasons you are not able to use the online activation, send your **Unique ID** at support@scutils.com and specify what activation type you need (trial or full) and we will provide you with offline **Activation Key**.

After you receive the Activation Key, use **Override** button fill out **CompanyName**, **LicenseKey,** and **ActivationKey** (of just **ActivationKey** for a trial activation), then click on **Run** button.

5. Uninstallation

To uninstall **SCUtils Management Pack for APC NetBotz 200** log in the Operations Manager management server where the product was installed. Open **Control Panel**, click on **Uninstall a program**, select **SCUtils Management Pack for APC NetBotz 200**, and click on **Uninstall**.

Open Operations Manager 2012 console, go to **Administration** -> **Management Packs.** Select **SCUtils Management Pack for APC NetBotz 200** and click on **Delete** task. If required, delete all depending management pack as well. If you don't have any other SCUtils products, you can also delete **SCUtils Base Settings Library** management pack.

6. Using SCUtils Management Pack for APC NetBotz 200

Once you complete the activation process, you can start using **SCUtils Management Pack for APC NetBotz 200**.

6.1. Discovery APC NetBotz 200/150 devices

After the successful activation the discovery process will start. The default interval for discoveries is set to **3600** seconds. It allows to discover all APC NetBotz 200 instances within 3-4 hours. You can use override to specify shorter intervals to speed up the process. The installation folder includes a management pack named **SCUtils.APC.NetBotz200.FirstDiscovery.Overrides.xml**. You could import it to set the intervals for all discoveries to 300 seconds (5 minutes). When the discovery is over, please don't forget to delete this management pack (**Overrides for SCUtils Management Pack for APC NetBotz 200**).

After the discovery is completed, please use overrides to increase the discovery intervals to **86400** seconds (24 hours). Please refer to the [Operations Manager guide](#) to details.

To change the scope in the Object Discoveries view in the Authoring Pane, please filter objects by '*APC NetBotz*'.
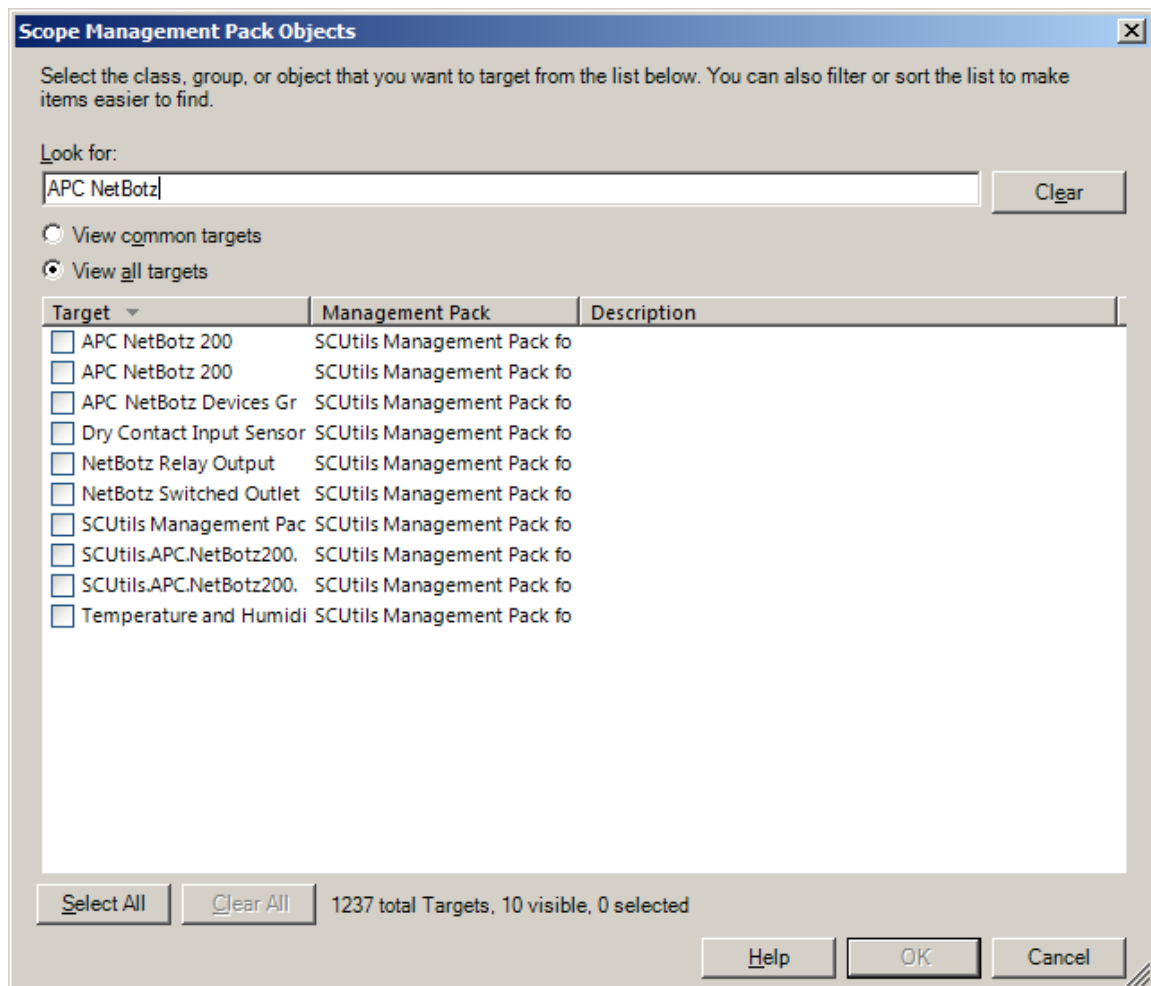
Fig. 5 Changing the scope in Object Discoveries

6.2. Informative rules and monitors

6.2.1. APC NetBotz 200 Sensors Humidity Rule

The rule presents the humidity value for a specific humidity sensor for a defined interval. It is used to collect performance data.

6.2.2. APC NetBotz 200 Sensors Temperature Rule

The rule presents the temperature value for a specific temperature sensor for a defined interval. It is used to collect performance data.

6.2.3. APC NetBotz 200 Sensor High Humidity Monitor

The monitor controls a high humidity. The threshold of the high humidity is defined in an APC NetBotz 200 web interface.

Fig. 6 A High Humidity Threshold

6.2.4. APC NetBotz 200 Sensor Low Humidity Monitor

The monitor controls a low humidity. The threshold of the low humidity is defined in an APC NetBotz 200 web interface.

Fig. 7 A Low Humidity Threshold

6.2.5. APC NetBotz 200 Sensor High Temperature Monitor

The monitor controls a high temperature. The threshold of the high temperature is defined in an APC NetBotz 200 web interface.

Fig. 8 A High Temperature Threshold

When the temperature exceeds the value for temperature thresholds **High**, the monitor changes its status to **Warning**.

When the temperature exceeds the value for temperature thresholds **Maximum**, the monitor changes its status to **Critical**.

6.2.6. APC NetBotz 200 Communications Status Of The Sensor Monitor

The monitor controls a communication status of a sensor. The monitor has three states:

1. notInstalled (1)
2. commsOK (2)
3. commsLost (3)

In the case of the lost communication, the monitor's status is set to **Critical**.

If you intentionally disconnect the sensor, please go to the web interface to confirm the disconnection to avoid the critical alarms.

6.2.7. APC NetBotz 200 Alarm Status Of The Sensor Monitor

The monitor controls the status of the sensor. The monitor has three states:

1. Normal (1)
2. Warning (2)
3. Critical (3)

6.2.8. APC NetBotz 200 Communications Status Of The Dry Contact Input Monitor

The monitor controls the communication status of the **Dry Contact** sensor. The monitor has three states:

1. notInstalled (1)
2. commsOK (2)
3. commsLost (3)

In the case of the lost communication, the monitor's status is set to **Critical**.

If you intentionally disconnect the sensor, please go to the web interface to confirm the disconnection to avoid the critical alarms.

6.2.9. APC NetBotz 200 Dry Contact Input Status Alarm Status Monitor

The monitor controls the status of the **Dry Contact** sensor. The monitor has three states:

1. Normal - Informational (1)
2. Warning (2)
3. Critical (3)

The **normal** state (**Open** or **Closed**) is defined in the web interface.

Depending on the Severity setting in the web interface, in the abnormal state the monitor is set in 2 (Warning) or 3 (Critical) state.

Fig. 9 Dry Contact Input settings

6.2.10. APC NetBotz 200 Relay Output Status Alarm Status Monitor

The monitor controls the status of the **Relay Output** sensor. The monitor detects automatically the **Normal** state setting defined in the web interface.

Fig. 10 Relay Output settings

6.2.11. APC NetBotz 200 Switched Outlet Status Alarm Status

The monitor controls the status of the **Switched Output** sensor. The monitor detects automatically the **Normal** state setting defined in the web interface.

Fig. 11 Switched Output settings

6.3. SNMP traps

SCUtils Management Pack for APC NetBotz 200 supports monitoring with SNMP traps.

Please make sure that SNNMP Trap service is not running on the management servers belong to resource pools used for network monitoring.

Fig. 12 Inactive SNMP Trap service

Then set up APC NETBOTZ 200s to send SNMP traps to specific events using **IP address** or **hostname** of the **management server** from the network monitoring resource pool.

Specify **SNMP v1** *(SNMP trap rules are not supported for SNMP v3 devices in Operations Manager 2012 – more details https://technet.microsoft.com/en-us/library/hh212935.aspx).*

Specify the **same community string** as in a discovery rule for that APC NETBOTZ 200 devices.

Please refer to a manual of APC NetBotz 200 for details.

Fig. 13 Setting up SNMP trap receiver.

The management pack contains of around 50 trap rules. For each rule you can specify your own **Priority** and **Severity** level using **overrides**. Please refer to the [Operations Manager guide](#) to details.

The name of trap alert rule starts with 'NetBotz Alert Rule'.
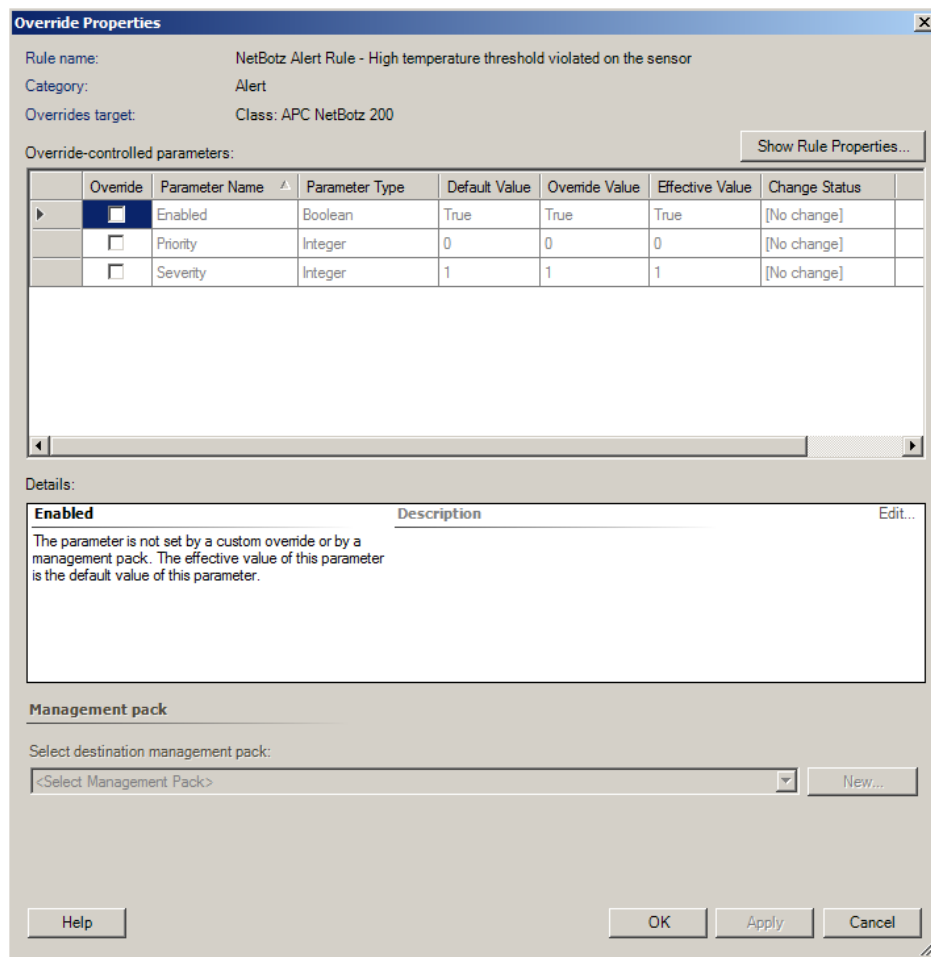
Fig. 14 Overriding Priority and Severity.

Severity defines the alert severity and can be one of the following values:

- 0 - Information
- 1 - Warning
- 2 – Critical

Priority defines the alert priority and the mapping, and it can be one of the following values:

- 0 - Low
- 1 – Medium
- 2 – High

7. Known issues and troubleshooting

Here we describe the known issues. If you haven't found a solution in this section, please contact us at support@scutils.com.

7.1. The Activate task fails to complete

If you've just installed the management packs and try to activate the product, the Activate task may fail to complete. It happens because the management servers require some time to complete the deployment of the management pack's resources. Please wait for 2-5 minutes and try to activate again. If the task fails again, just give a bit more time and repeat the attempt.

7.2. Fault-positive alerts during the discovery process

During the discovery process there's a possibility of the temporary fault-positive alerts for sensors. It may happen because not all sensor's settings are found and the default values are used. When the discovery is over, all alerts of that kind will be closed automatically.