NTS Networker Administration Documentation

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1 Overview

NTS Networker enables IT-Helpdesk personnel to configure network components (switches) in realtime on a device group or device level. It also enables configuration and maintenance of network interfaces or ports through a web interface. All events are logged automatically and the logs can be displayed and filtered within the same tool. Furthermore, it is possible to view a graphical network topology around a freely selectable network device with configurable granularity (network hop-depth)

1.1 Technical prerequisites

NTS Networker user administration is based on Active Directory. Therefore, a working AD infrastructure is necessary. Furthermore, the main functionality is based on SNMP (Simple Network Management Protocol) version 2c (community based) with one read- and one write-community. Consequently, SNMP has to be properly configured and rolled out on the underlying network infrastructure.

Version 1 and 3 are supported as well. However, some features might not work as expected.

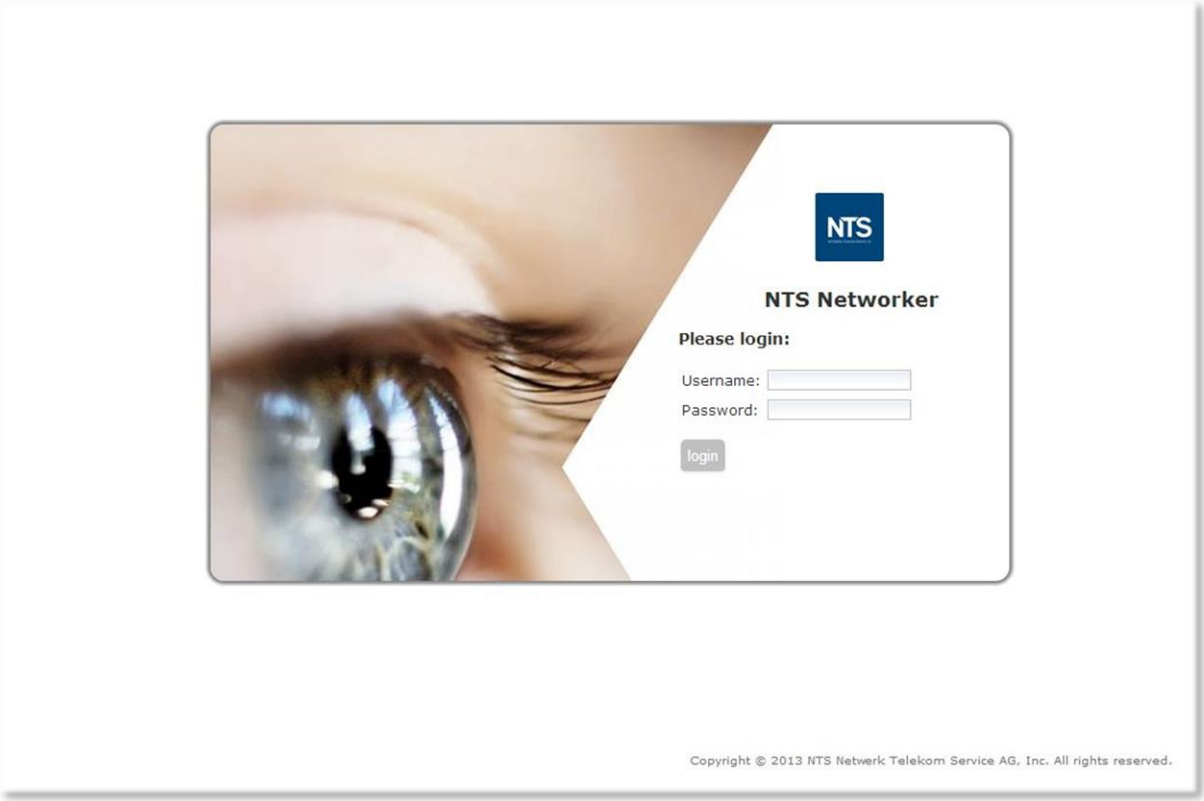
1.2 User Roles

NTS Networker features four user roles: admin, user, helpdesk, and readonly.

Role	Configure Tool	Bulk Changes	Single Changes	View config
Admin	✓			
User		✓	✓	✓
Helpdesk			✓	✓
Readonly				✓

Admin is enabled to configure the tool and to create or insert devices and device groups into the system. User accounts can make changes on devices (including bulk changes). Helpdesk can make single changes (i.e. assign one port to a VLAN). The readonly group can only view configurations on a device basis.

1.3 Start

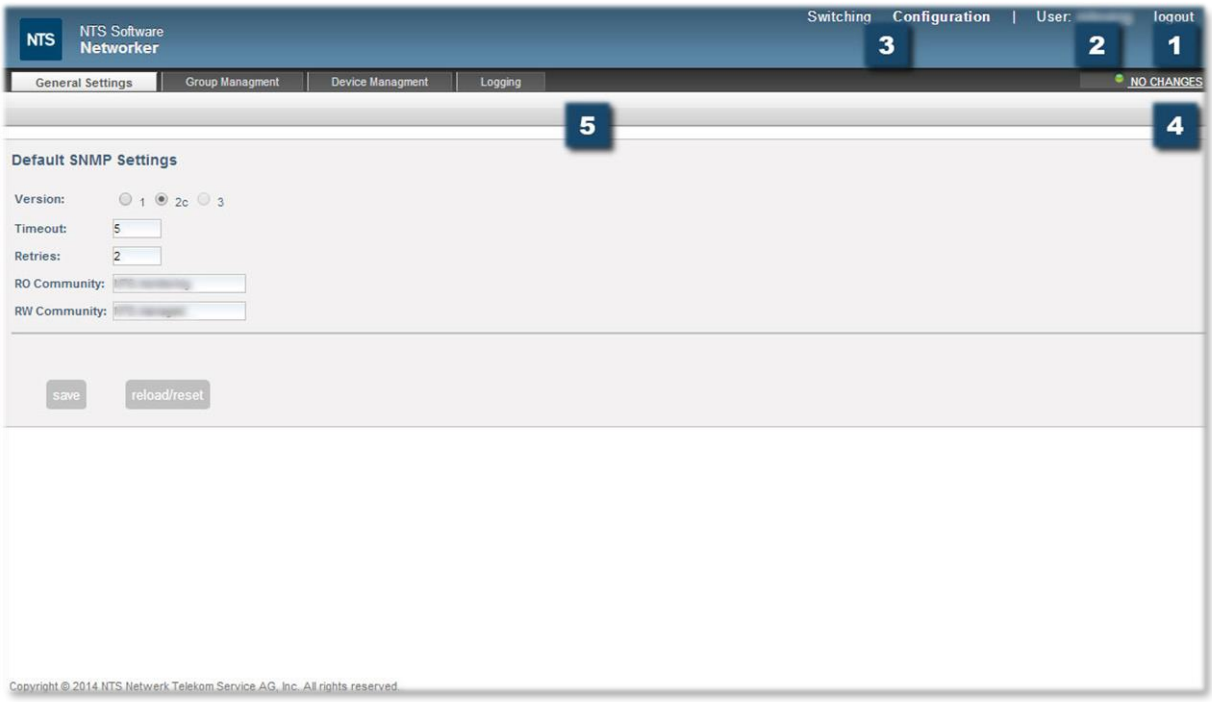


Login is possible with your active directory username and password.

2 UI Overview

Delete Button

Edit Button



1: **Logout** Button

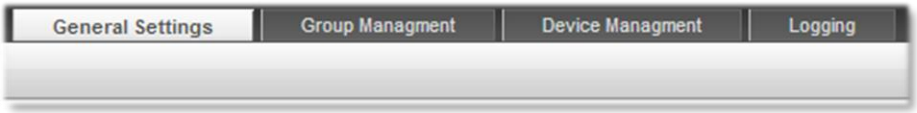
2: display of currently logged in **User**. A mouse-over displays the assigned role(s)

3: Switch between the **Switching mode (user)** and **Configuration mode (admin)** interface.

4: Display of pending changes. A click on this field leads to the „Write Memory“ interface, where the changes can be finally deployed on all affected devices (See user guide for details).

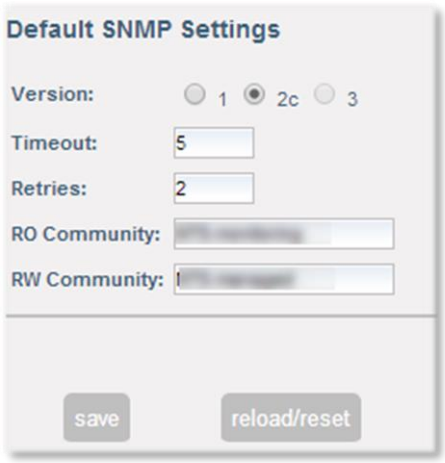
5: Four main tabs (functionality depends on the selected interface [Switching or Configuration])

3 Configuration



The configuration interface is divided into four tabs: General Settings, Group Management, Device Management, and Logging.

3.1 General Settings

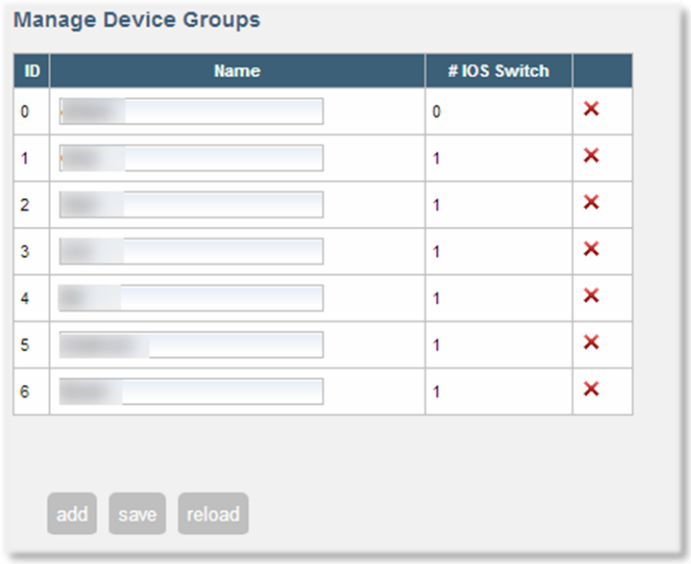


The General Settings interface can be used to change the SNMP version and to define SNMP Communities.

Timeout time has to be set in seconds. The number of retries defines how many reconnect attempts should be tried after a timeout occured.

Obviously, the “save” button saves any changes. Reload/Reset resets the configuration form and reloads the current configuration.

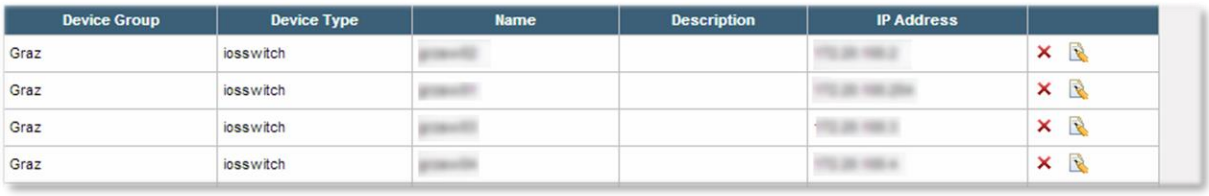
3.2 Group Management



The tab Group Management can be used to rename, create, or delete device groups. Groups can be renamed via the editable fields in the table. A click on the delete button deletes device groups. Again, save saves all changes. Reload/Reset resets the configuration form and reloads the current configuration.

You can add a new device group with the „add“ button. A click on this button creates a new row in the group table where the group name has to be defined. New rows can be deleted via the delete button at any time. Reload reloads the currently valid configuration

3.3 Device Management



Device Group	Device Type	Name	Description	IP Address	
Graz	iosswitch	[redacted]		[redacted]	
Graz	iosswitch	[redacted]		[redacted]	
Graz	iosswitch	[redacted]		[redacted]	
Graz	iosswitch	[redacted]		[redacted]	

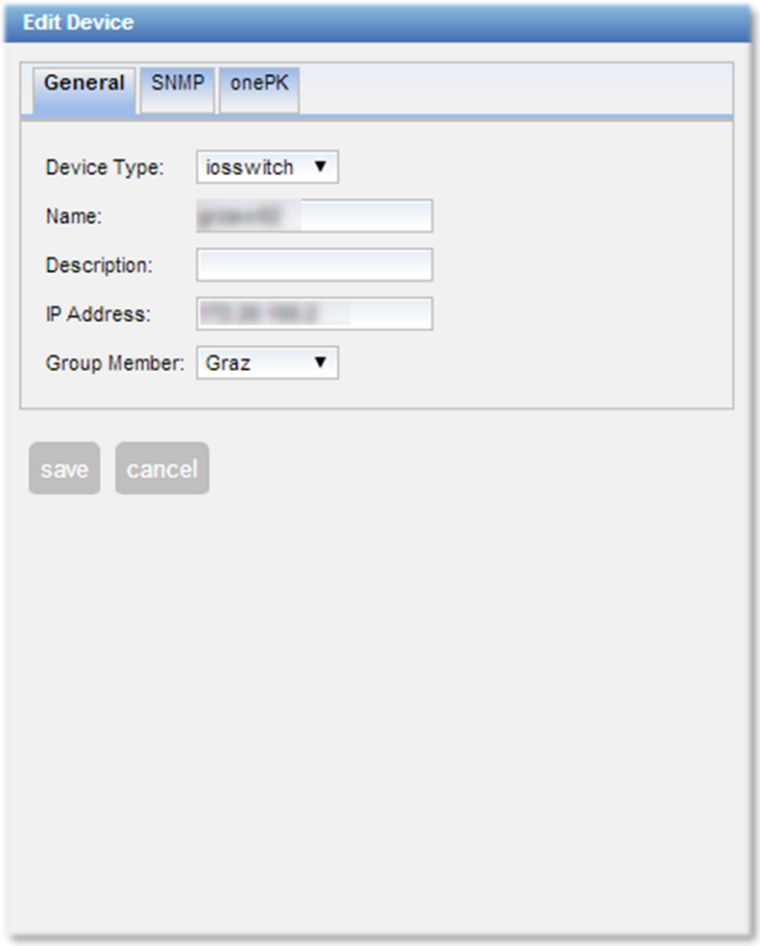
The device management interface lists all devices. All devices may be deleted or edited using the corresponding buttons.

A click on the edit button opens a floating input window where device settings can be altered. This configuration input window is divided into three parts by tabs (General, SNMP, onePK).

Below, at the bottom of the table, there is a “new device” button that can be used to add a new device. The input window looks exactly like the configuration input window. Name and IP address are mandatory, when adding a new device.

3.4 New Device/Edit Device

3.4.1 General



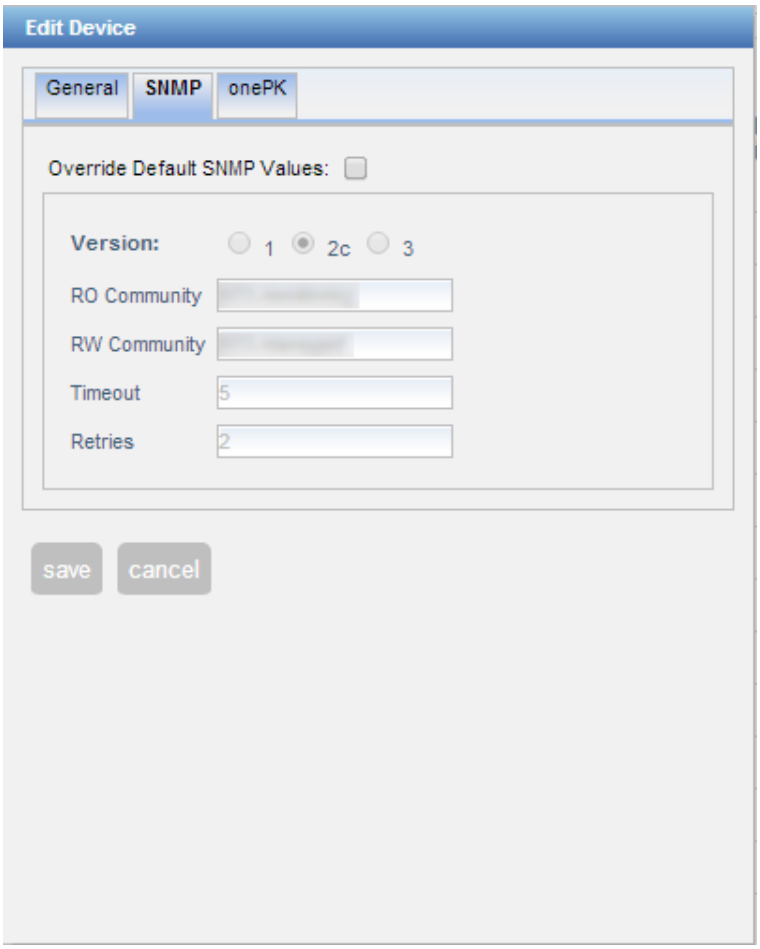
Name and IP Adress are mandatory and always need to have a value. The description field is optional.

Device Type (iosswitch, iosrouter, nxos) and Group Member are configurable via the corresponding drop-down fields.

Obviously, the device group has to be created via the Group Management interface (see chapter 3.2) before it can be selected here.

Again, “save” saves the changes. Cancel aborts the operation and closes the window at once.

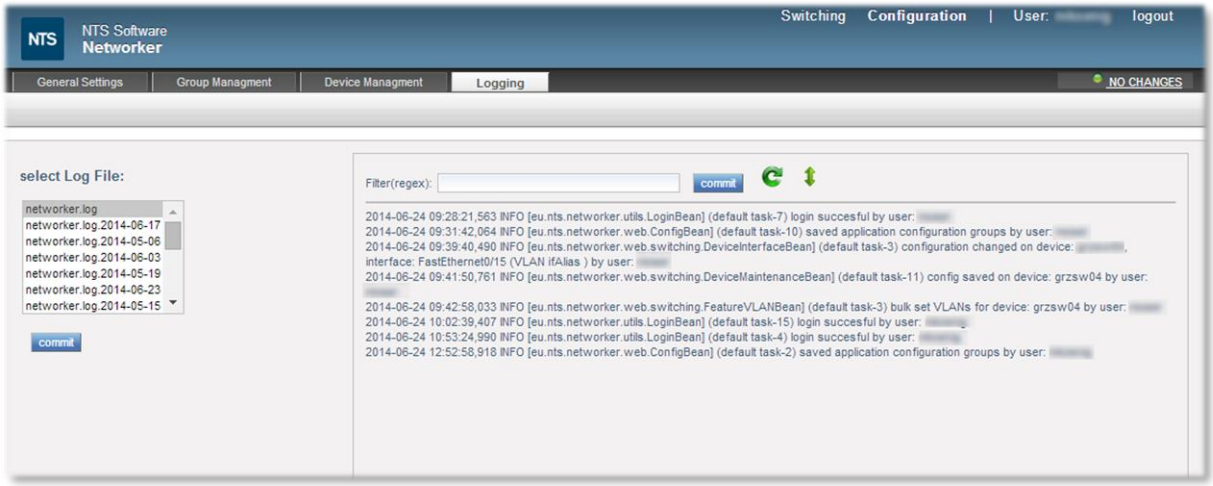
3.4.2 SNMP



The SNMP tab enables a manual override of the General Settings (see chapter 3.1) at device level. It is necessary to activate the SNMP override option; otherwise, the input fields will stay inactive.

Again, “save” saves the changes. Cancel aborts the operation and closes the window at once.

3.5 Logging

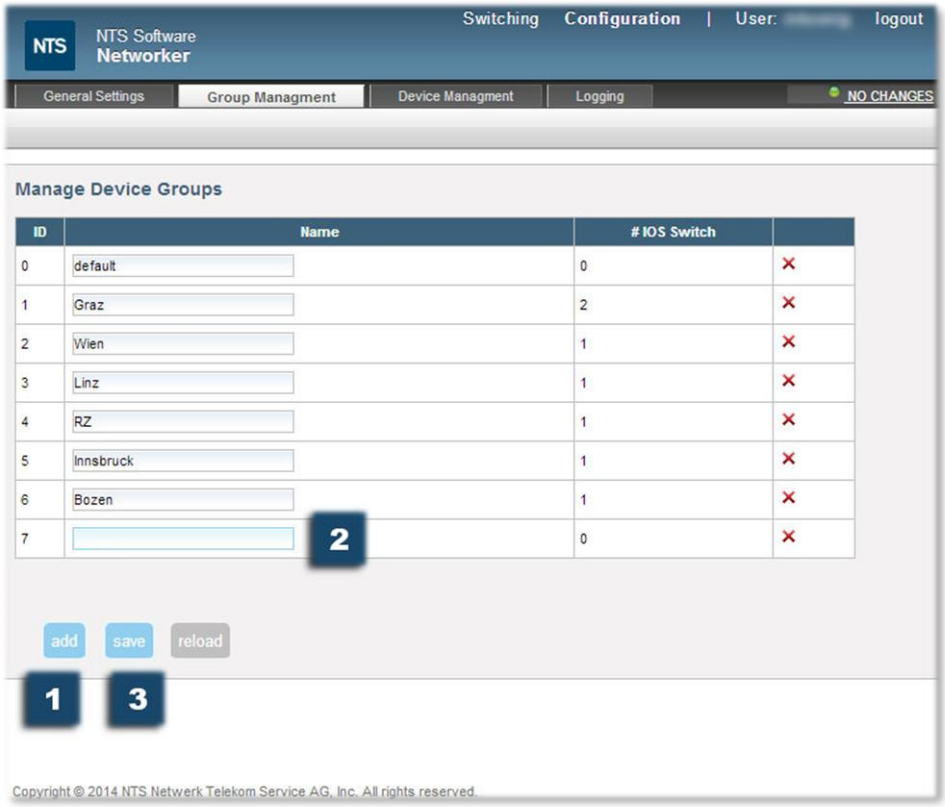


Lastly, the Logging tab opens the interface where all Networker logs can be viewed. It is possible to search or filter a logfile using RegEx.

4 Use cases

4.1 Add a device group

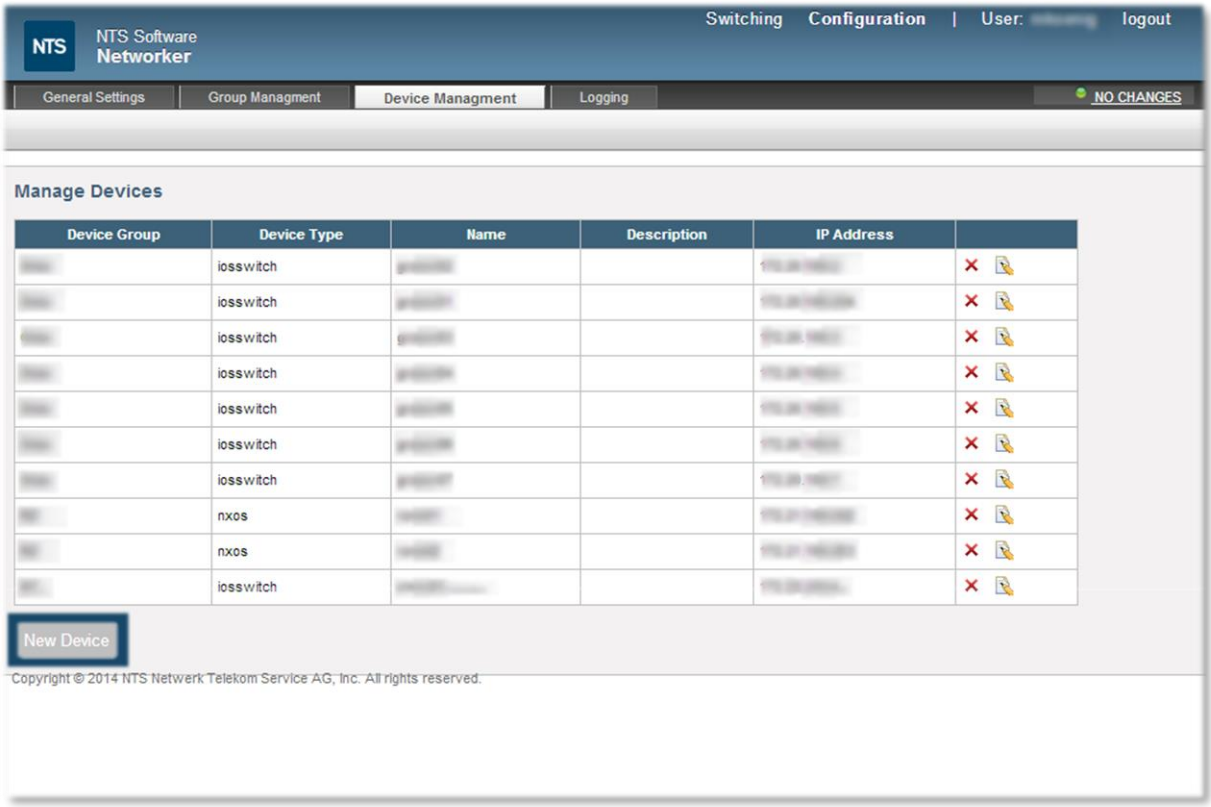
To add a device group, you have to switch to the configuration interface mode. There you select the tab Group Management.

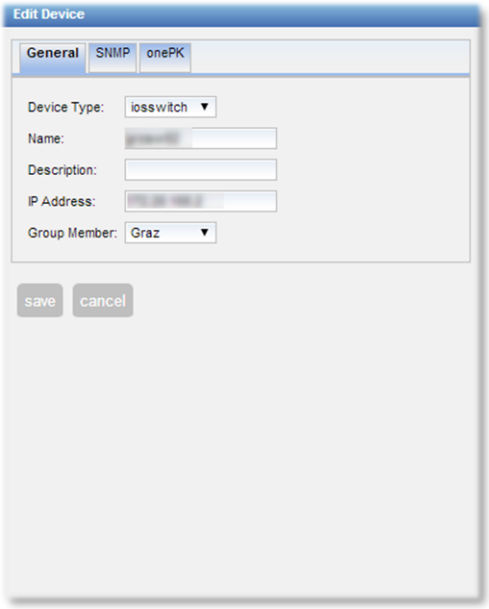


Click the add button (1) to add a new row into the group table. There you can define the group name (2). A click on save (3) finalizes the task.

4.2 Add a device

To add a device, you have to switch to the configuration interface mode. There you select the tab Device Management.





Click on New Device to add a new device to the device table. This opens the New Device/Edit Device window. Define the parameters. Name and IP address are mandatory.