

# FAQ - SNMP explained

Valid for: N610 N670 N870 N870E Embedded Integrator Virtual Integrator

## Introduction

On this page we would like to provide more details about SNMP and how to use a freeware tool for testing.

1. Download and install the freeware tool: <https://www.manageengine.com/products/mibbrowser-free-tool/>
2. N670 with the IP address 192.168.178.190
3. PC has the IP address: 192.168.178.14

From software 2.36 SNMP is disabled when the SNMP manager address = 0.0.0.0

## Nx70 Settings

In the Nx70 web-interface go to: **SETTINGS - System - System log - SNMP statistics**

Enter the SNMP manager information, in this example my PC (192.168.178.14).

We used the default username and password.

### SNMP statistics

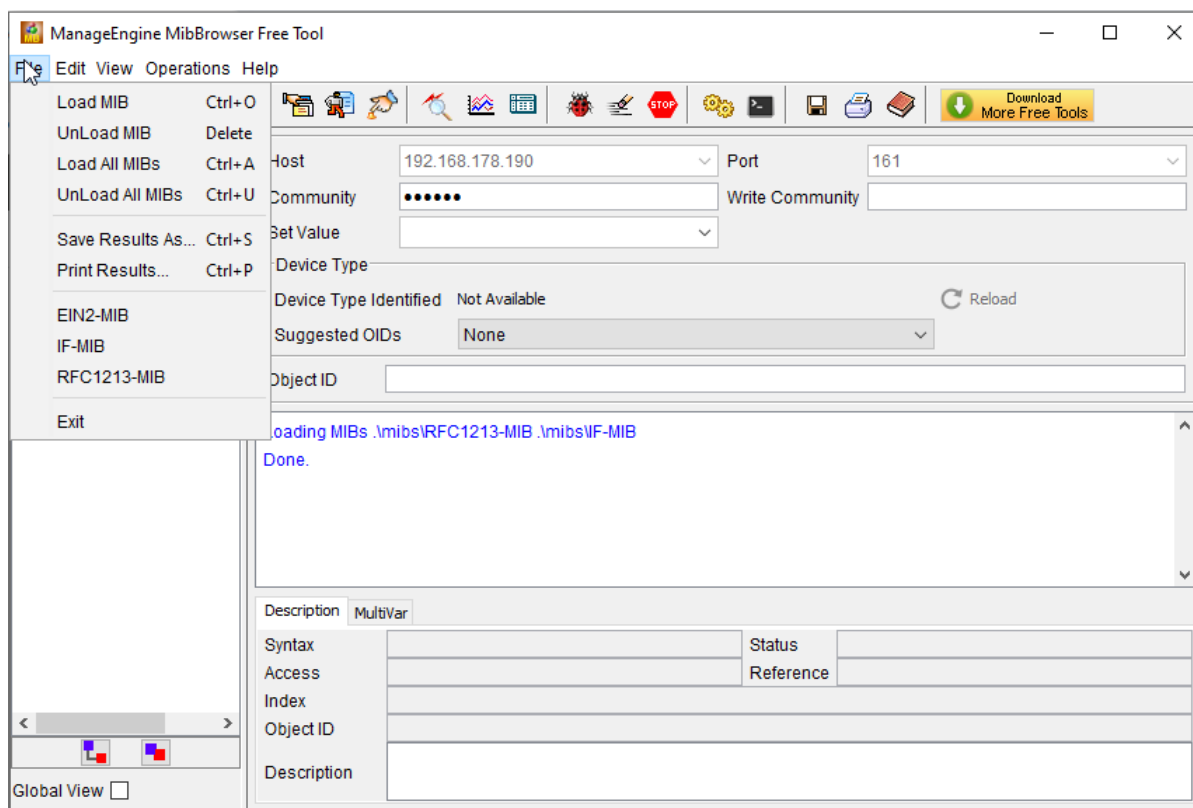
SNMP manager address ?	192.168.178.14
SNMP manager port ?	162
SNMP username ?	admin
SNMP password ?	snmp-admin
<input type="button" value="↶ Use on all DECT Managers"/>	
<input checked="" type="button" value="✓ Activate on all DECT Managers"/>	
<input type="button" value="✗ Deactivate on all DECT Managers"/>	
<input type="button" value="⬇ Download MIB"/>	

On this page you can also download the Nx70 MIB file that you can then upload on your SNMP server.

## SNMP tool settings

### Import MIB file

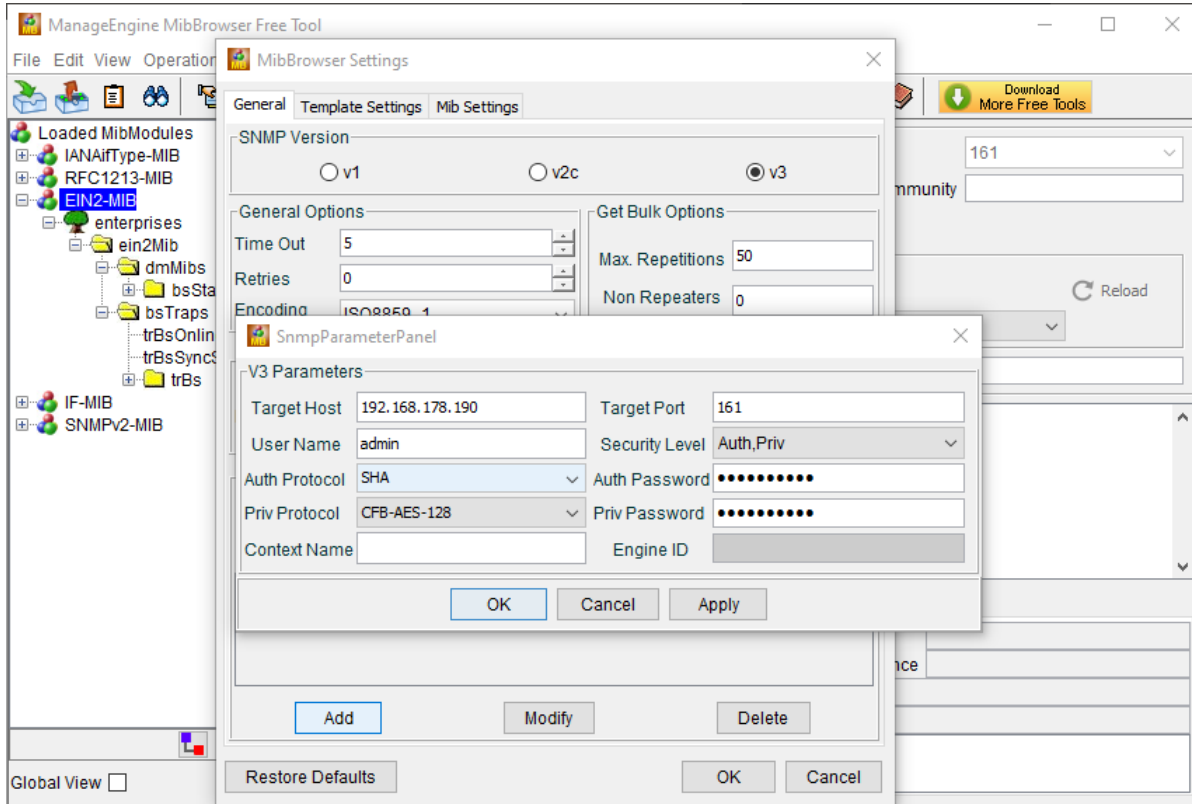
In the tool go to: File Load MIB



Enter login credentials.

In the tool go to:

- **Edit - Settings**
- Select **SNMP v3**
- Click on **Add**
- **Target Host:** The IP address of the Nx70
- **Target port:** The port number (161)
- **Username:** The username configured in the Nx70 (admin)
- **Auth Password:** The password configured in the Nx70 (snmpadmin)
- **Priv Password:** The password configured in the Nx70 (snmpadmin)
- **Auth Protocol:** SHA
- **Priv Protocol:** CFB-AES-128



## Read SNMP Values

- Select a base station
- **Right click** and select **SNMPWALK**
- You will get the supported SNMP values

The screenshot shows the ManageEngine MibBrowser Free Tool interface. On the left, a tree view displays the hierarchy of MIBs, with 'bsStatistics-01' selected. The main pane shows the 'SNMPWALK' operation results for the selected MIB. The results are displayed in a table with columns for the MIB name and its value. The table lists various MIBs and their corresponding values, such as 'bsMAC-01' with value '589EC60D90CA' and 'bsFrom-01' with value '2020-02-19 08:30:15'. The bottom pane shows the 'Description' field for the selected MIB, which is 'bsMAC-01'.

MIB Name	Value
bsMAC-01	589EC60D90CA
bsFrom-01	2020-02-19 08:30:15
bsTo-01	2020-02-19 15:10:27
bsRPN-01	5
bsName-01	Redundant_Level1
bsCl-01	1
bsLv-01	2
bsConn-01	5
bsHoIn-01	0
bsHoOut-01	0
bsCallDrop-01	0
bsAsync-01	0
bsBusy-01	0
bsDpcOff-01	1

Supported SNMP values	Description
bsMAC-xx	MAC address of Base station
bsFrom-..	BS start time when connection to DM
bsTo-..	actual time of BS connection to DM
bsRPN-..	RPN number
bsName-..	name of BS
bsCl-..	cluster level
bsLv-..	sync level
bsConn-..	DECT MAC layer connection setup
bsHoIn-..	Handover setup in
bsHoOut-..	Handover setup out
bsCallDrop-..	Call Drop
bsAsync-..	BS lost DECT synchronisation
bsBusy-..	Single module enter in busy state
bsDpcOff-..	TCP/IP connection toward base station was lost

## SNMP Traps

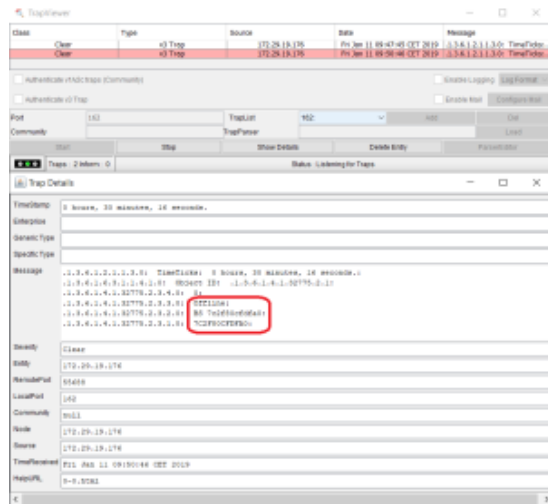
Supported traps:

- BS synchronization status trap
- BS online/offline status trap

In the tool enabled the Trap viewer (ALT + P)

As mention above, Nx70 supports two Traps:

**trBsOnlineState** (OID: .1.3.6.1.4.1.32775.2.1) triggered when BS goes offline:



**trBsSyncState** (OID: .1.3.6.1.4.1.32775.2.2) triggered when BS lost synchronization:

