

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

↶ Use on all DECT Managers

✓ Activate on all DECT Managers

✗ Deactivate on all DECT Managers

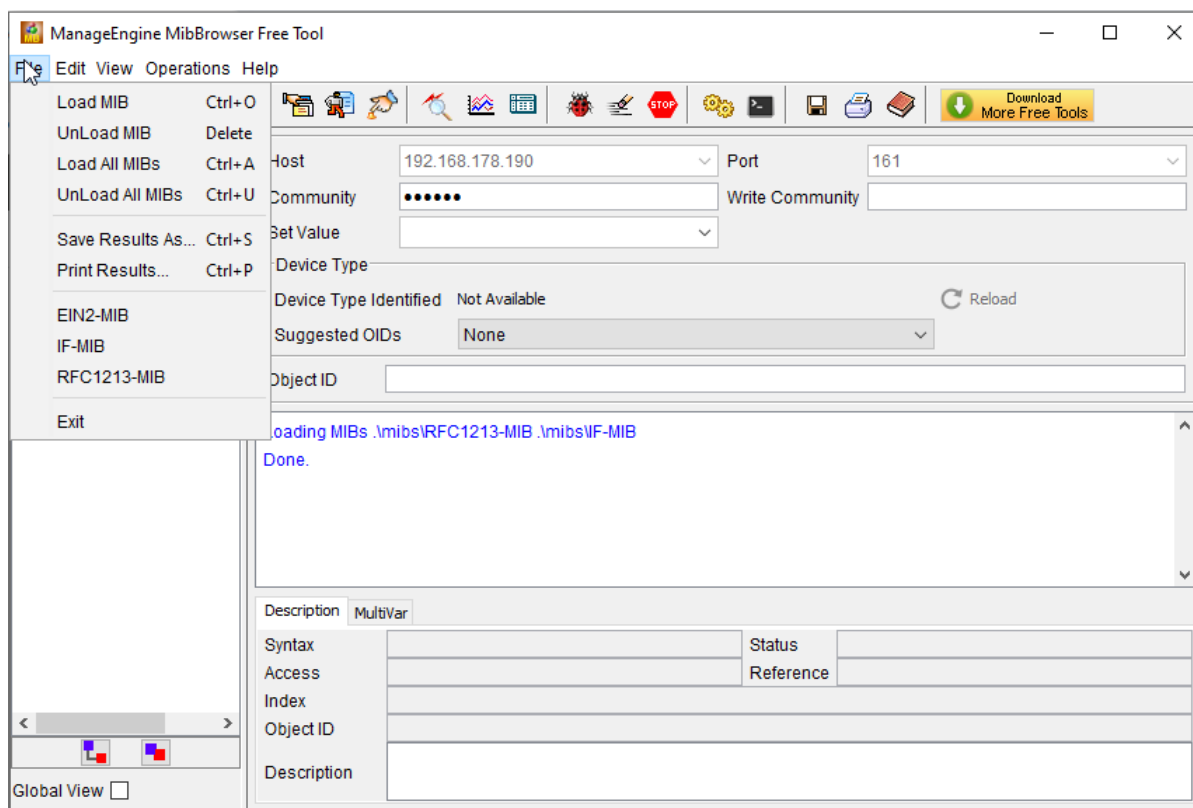
⬇ Download MIB

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

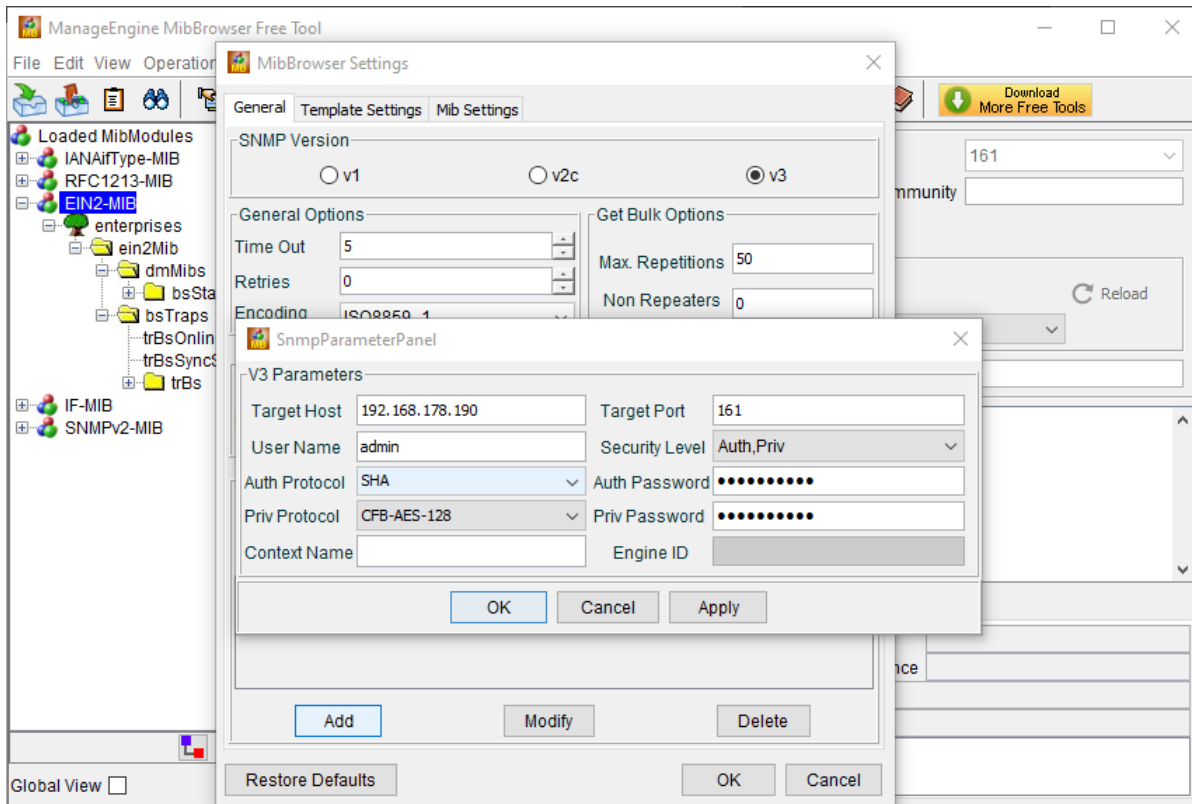
In the tool go to: File Load MIB



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 loaded MIB modules, including IANAType-MIB, RFC1213-MIB, and various enterprise-specific MIBs. The 'bsStatistics-01' MIB is selected, and the 'SNMPWALK' option is highlighted in the context menu. The main pane displays the results of the SNMP walk, showing a list of objects and their values. The objects listed include bsMAC-01, bsFrom-01, bsTo-01, bsRPN-01, bsName-01, bsCl-01, bsLv-01, bsConn-01, bsHoIn-01, bsHoOut-01, bsCallDrop-01, bsAsync-01, bsBusy-01, and bsDpcOff-01. The values for these objects are displayed in a table format. The bottom pane shows the description of the selected object, bsMAC-01, which is the MAC address of the base station.

Object	Value
bsMAC-01	58EC60D90CA
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

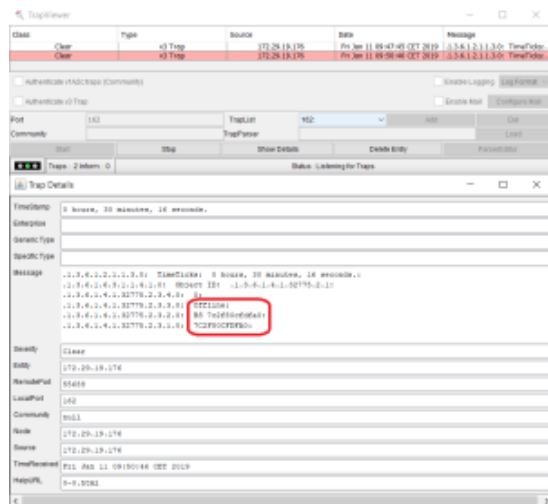
Supported traps:

- 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:

