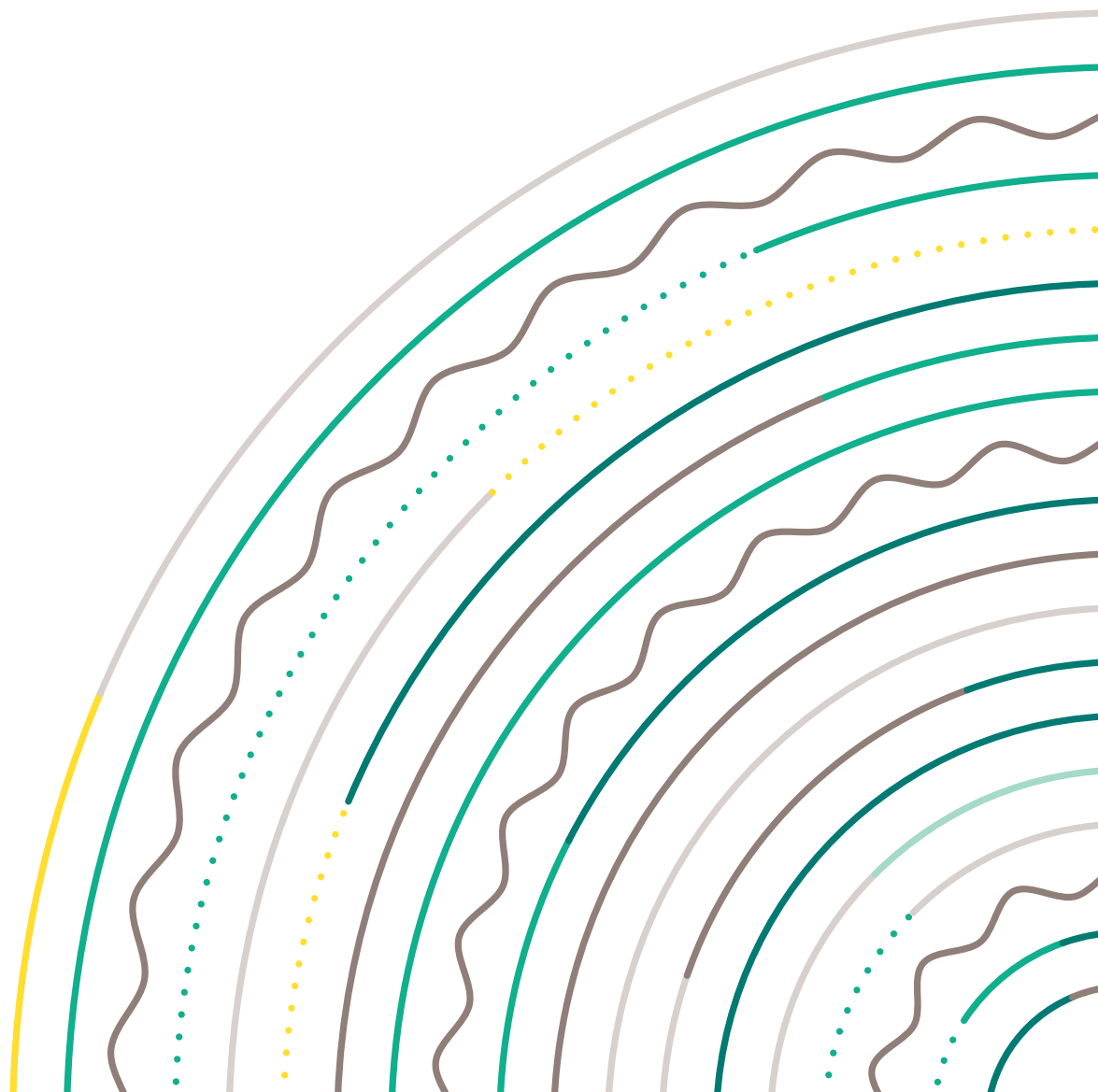


# Lifedomus SNMP

31/01/2018

Version 1.2



# SNMP protocol

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## 1 Prerequisites

Basic concepts about the SNMP protocol must be mastered to better understand some of the terms and how the connector operates.

You will find the documentations online, including on the following websites:

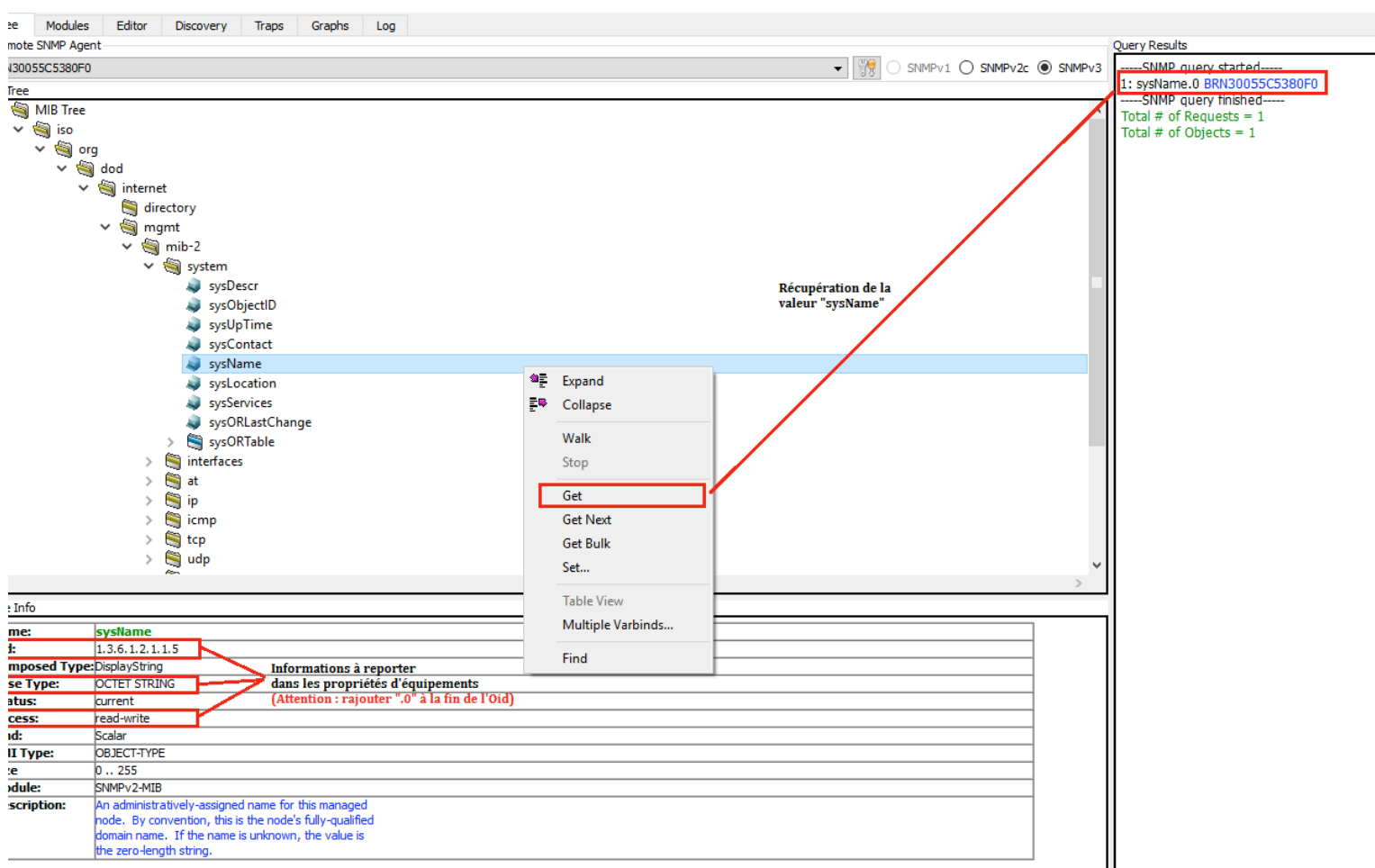
<http://www.frameip.com/snmp/>

<http://irp.nain-t.net/doku.php/215snmp:start>

## 2 SnmpB software

We recommend simultaneously using the SnmpB software, which will enable you to browse the MIB tree structure, as well as import external MIBs, in order to obtain the OIDs and any information useful for data recovery.

The software can be found at the following address: <https://sourceforge.net/projects/snmpb/>



The screenshot shows the SnmpB software interface. The top menu bar includes Modules, Editor, Discovery, Traps, Graphs, and Log. The main window displays the MIB tree structure, with the 'sysName' node selected. A context menu is open over the 'sysName' node, with the 'Get' option highlighted. A red arrow points from the 'Get' option to the 'Query Results' panel on the right. The 'Query Results' panel shows the following information:

```

-----SNMP query started-----
1: sysName.0 BRN30055C5380F0
-----SNMP query finished-----
Total # of Requests = 1
Total # of Objects = 1
  
```

Below the MIB tree, the 'Info' panel displays the following information for the 'sysName' node:

me:	sysName
l:	1.3.6.1.2.1.1.5
Proposed Type:	DisplayString
se Type:	OCTET STRING
atus:	current
cess:	read-write
id:	Scalar
II Type:	OBJECT-TYPE
se:	0 .. 255
odule:	SNMPv2-MIB
scription:	An administratively-assigned name for this managed node. By convention, this is the node's fully-qualified domain name. If the name is unknown, the value is the zero-length string.

A red box highlights the 'me:', 'l:', 'Proposed Type:', 'se Type:', and 'atus:' fields. A red arrow points from this box to the 'Informations à reporter dans les propriétés d'équipements (Attention : rajouter ".0" à la fin de l'Oid)' note.

## 3 Connector creation

First of all, enter the device's IP address, its port and SNMP trap recovery port.

Depending on the SNMP version you are using, other properties are required

Propriétés :

Adresse IP 192.168.1.35

Port IP 161

Port pour réception de trap 162

Version

1

2c

3

### 3.1 Version 1/2c

In version 1 and 2c, all you need to do is enter the read and write community strings (respectively 'public' and 'private').

Version 2c

Communauté de lecture public

Communauté d'écriture private

### 3.2 Version 3

Version 3

Nom d'utilisateur admin

Contexte lifedomus

Niveau de sécurité AuthPriv

CLSID-LBL-AUTHENTICATION-PROTOCOL MD5

Code d'authentification \*\*\*\*

Protocole de chiffrement DES

Clé de chiffrement \*\*\*\*

In version 3, several authentication parameters are required (you will find them in your device's protocol settings).

Enter the user name, associated context and the security level.

- NoAuthNoPriv: No authentication required
- AuthNoPriv: Enter the authentication code and the associated protocol (MD5 by default)

- AuthPriv: Also enter the encryption key and associated protocol (DES by default)

### 3.3 Cyclic readout

You can also enable a cyclic readout of all the connector's properties by entering an update period for state feedbacks (in seconds) superior to 0 (enabled by default with a period of 300 seconds, i.e. 5 min)

Délai entre chaque mise à jour des retour d'états

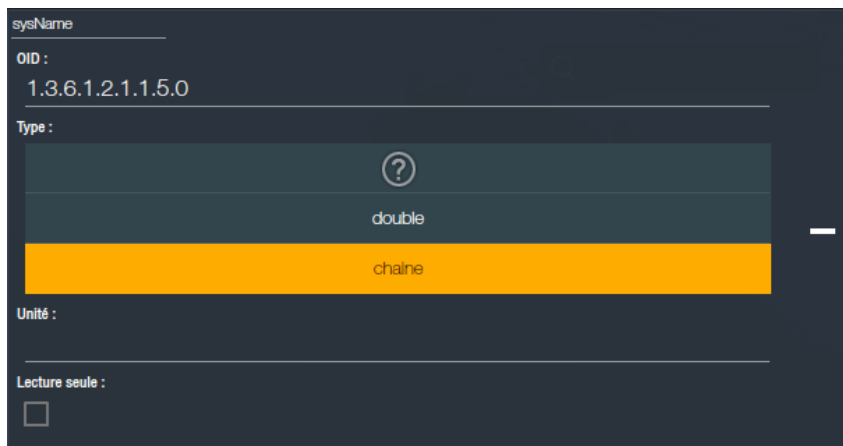
300

## 4 Device properties

The SNMP protocol can be used with all generic devices.

Create a device, then associate the associated connector. Press  to add a property:

OID: You will find the OID value via the SnmpB tool (remember the '.0' at the end, or the line index - e.g. '.1' for line 1 - when reading a table column)

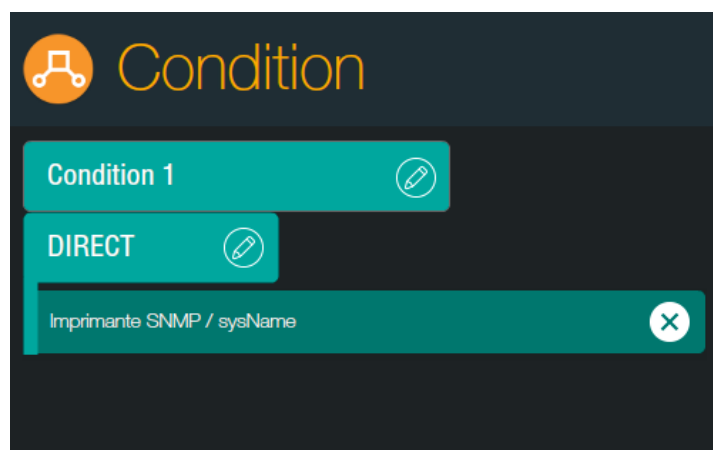


Type: String or Double. In SnmpB, corresponds to an 'OCTET STRING' or 'INTEGER' or any other numeric type.

Unit: Free text field, used if you want to recover the device temperature value in °C for example

Read only: 'Read-only' property in SnmpB. If the 'read only' box is selected, only a state feedback will be associated with this property. Otherwise, an edit action for this value will also be added.

E.g. 'sysName' property painter:



Painter result:

BRN30055C5380F0

