BIM dance Building Data Building

SNMP

BIMdance SNMP SmartConnector

Datasheet

Version 2.0.4

BIMdance SNMP SmartConnector

SNMP Manager

BIMdance SNMP SmartConnector is middleware that can be plugged into the Schneider Electric SmartConnector Framework as an extension. BIMdance SNMP SmartConnector allows communication between SNMP agents and EWS servers corresponding to user-provided configuration. The EWS server generates EBO alarms when TRAP messages are received. This extension supports the following versions of the SNMP protocol: v1, v2, and v3.

SNMP Manager Configurator

The BIMdance SNMP SmartConnector includes the SNMP Manager Configurator module, which allows the creation of some configuration of SNMP Manager to receive required OIDs and TRAP messages. The main functionalities of the SNMP Manager Configurator are:

- Discovering SNMP agents in the LAN or manually adding them to the created configuration;
- SNMP v3 security settings provided;
- Allowing SNMP v3 engine configuration;
- Allow users to choose required MIB entities for sending it to the EWS server (objects, tables, TRAPS, etc.)
- Vendors MIBs parsing;
- SNMP communication logging;

The main window of SNMP Manager Configurator

The main window of the SNMP Manager Configurator shows the list of discovered or added SNMP agents in the current configuration. Also, it shows the statuses of SNMP agents and communication logs.

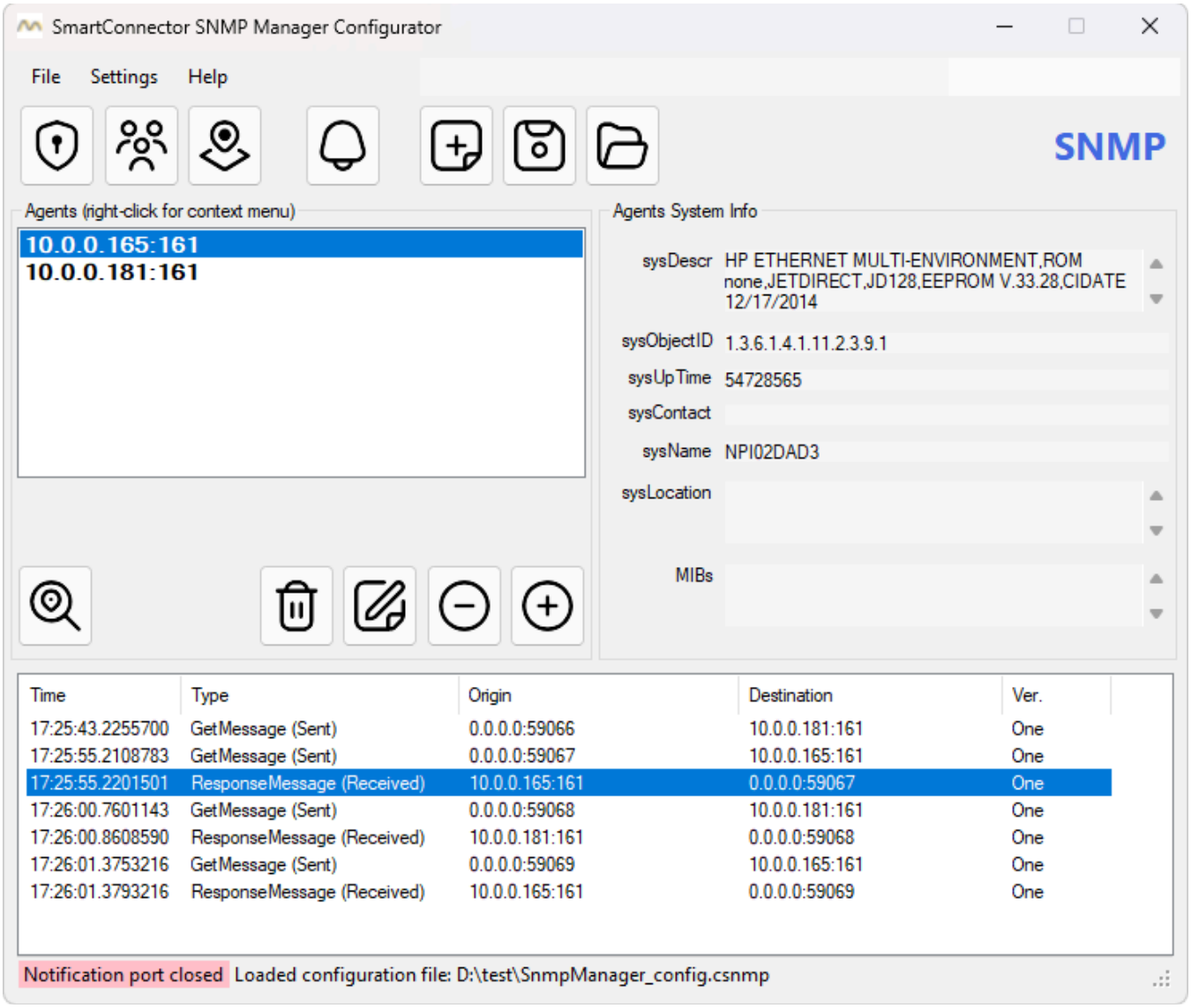

Fig. 1. Main window of SNMP Manager Configurator

SNMP communication logging

SNMP Manager Configurator allows troubleshooting of SNMP communication issues using an integrated logger with a detailed problem description and notable indication.

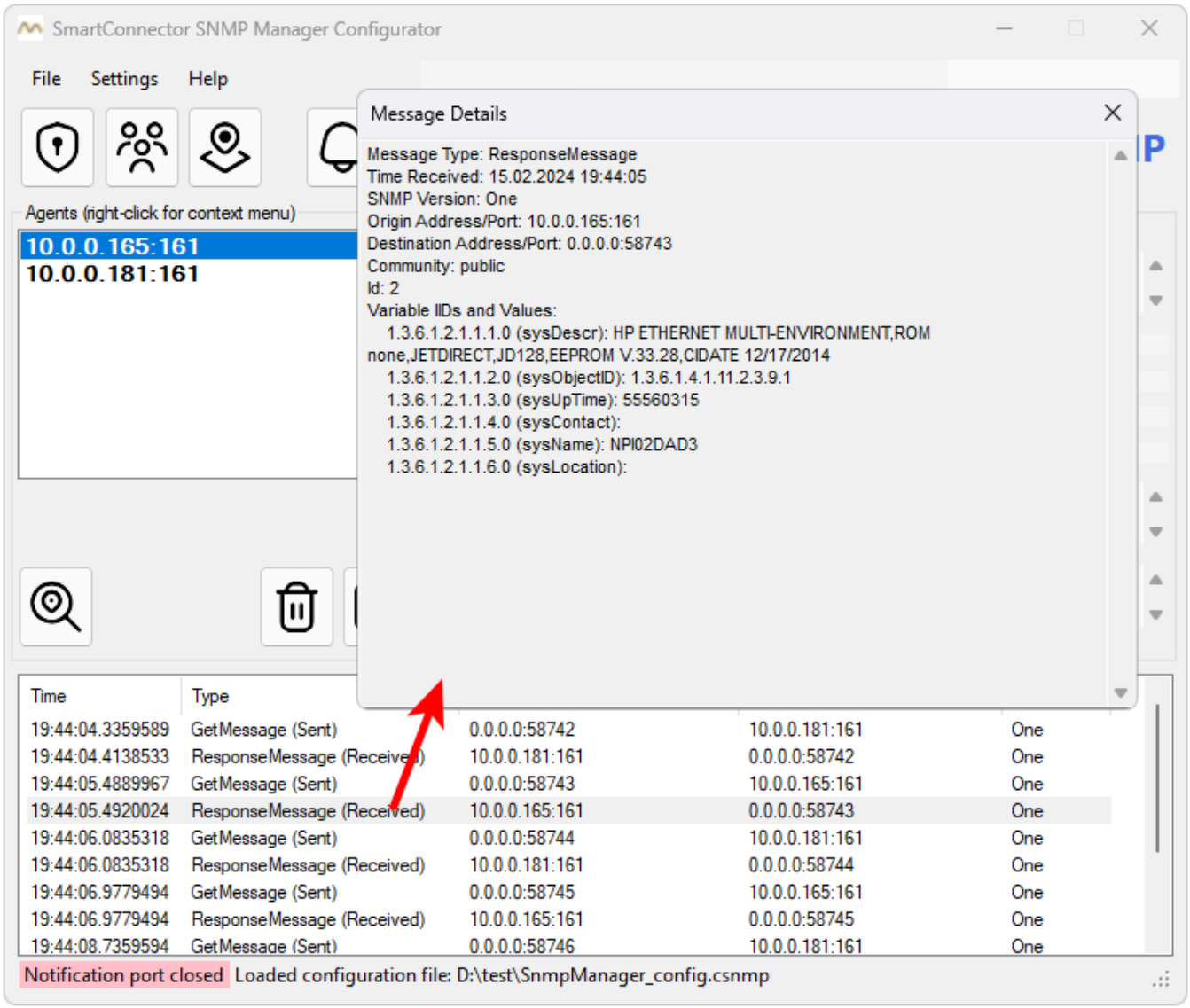

Fig. 2. Response details in logger.

SNMP agent configuration

SNMP Manager Configurator lets you choose required objects from vendor or standard MIB files. Values from selected objects will be sent to the EWS server. Users can load vendor MIB files.

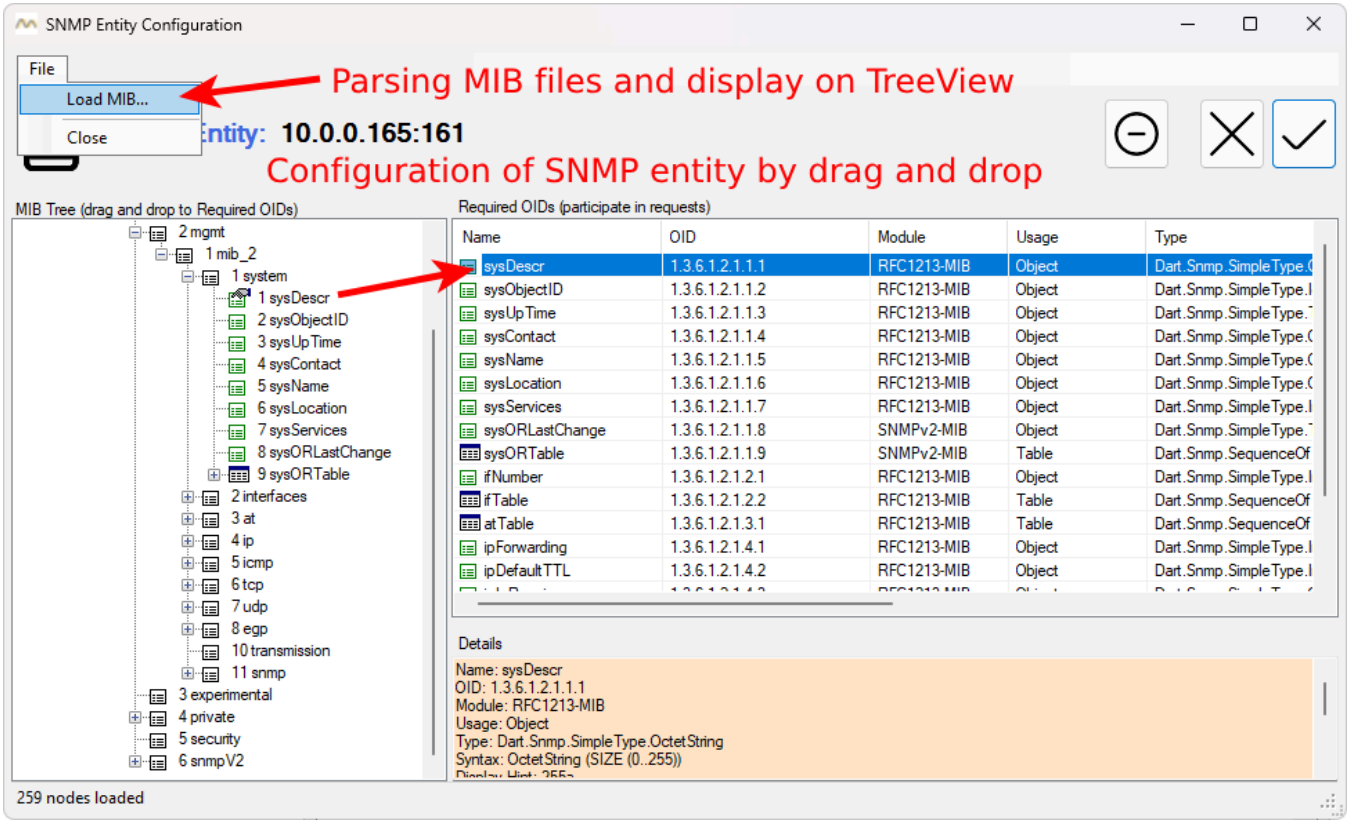

Fig. 3. SNMP device configuration.

SNMP responses

After choosing the required MIB objects, users can send requests to the agent and view responses.

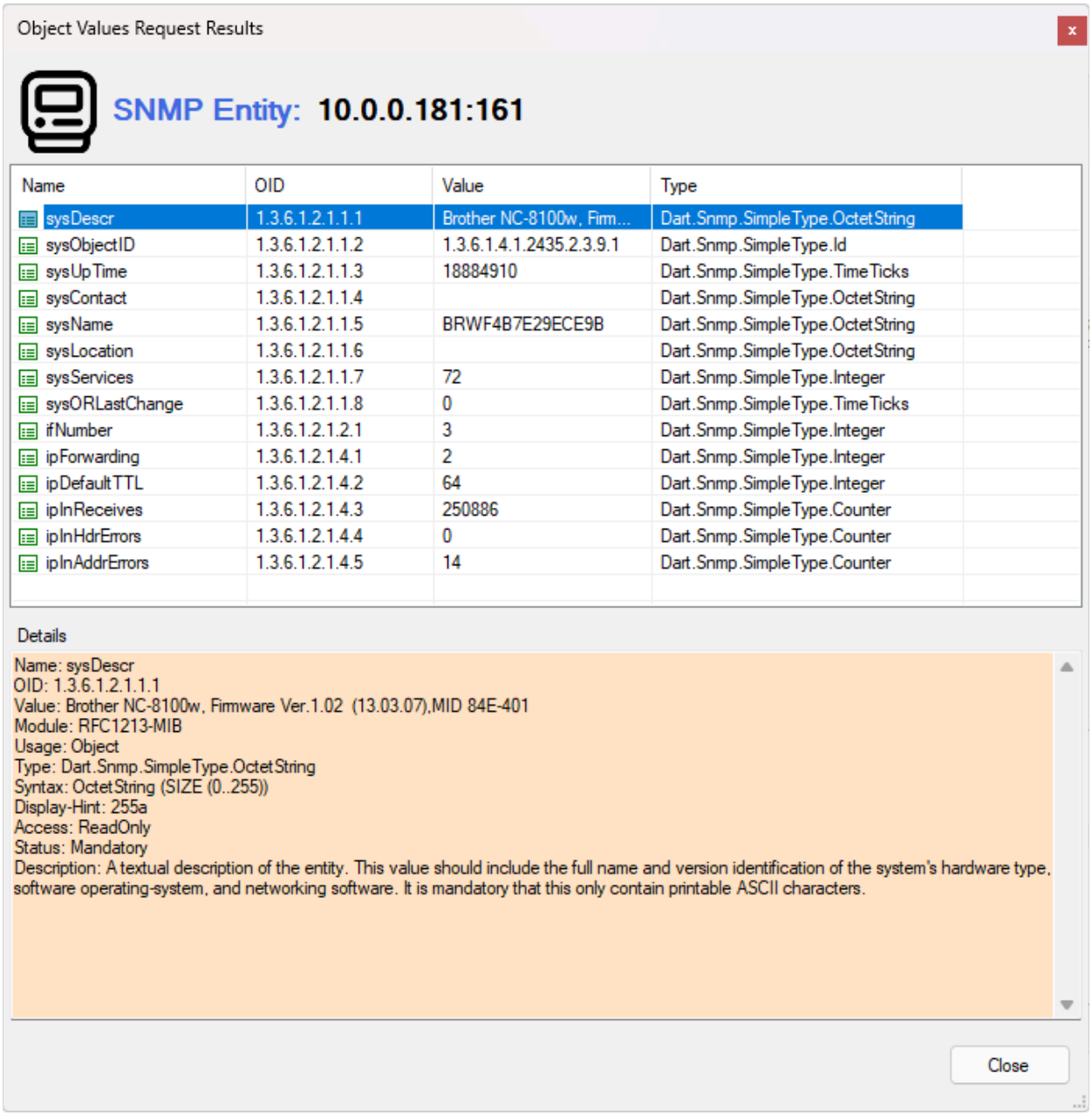

Fig. 4. SNMP responses.

EBO Workstation SNMP data presentation

EBO workstation can receive SNMP data from agents through BIMdance SNMP SmartConnector.

sysContact	1.3.6.1.2.1.1.4	10.0.0.106_1.3.6.1.2.1.1.4	string	Ilya Likhopavlov YAHOO	Good
sysDescr	1.3.6.1.2.1.1.1	10.0.0.106_1.3.6.1.2.1.1.1	string	Hardware: Intel64 Family 6 Model 60 Stepping 3 AT/AT COMPAT...	Good
sysLocation	1.3.6.1.2.1.1.6	10.0.0.106_1.3.6.1.2.1.1.6	string	Home PC	Good
sysName	1.3.6.1.2.1.1.5	10.0.0.106_1.3.6.1.2.1.1.5	string	DESKTOP-36PSEBF	Good
sysObjectID	1.3.6.1.2.1.1.2	10.0.0.106_1.3.6.1.2.1.1.2	string	1.3.6.1.4.1.311.1.1.3.1.1	Good
sysServices	1.3.6.1.2.1.1.7	10.0.0.106_1.3.6.1.2.1.1.7	long	76	Good
sysUpTime	1.3.6.1.2.1.1.3	10.0.0.106_1.3.6.1.2.1.1.3	long	53 172 139	Good
tcpActiveOpens	1.3.6.1.2.1.6.5	10.0.0.106_1.3.6.1.2.1.6.5	long	9 358	Good
tcpAttemptFails	1.3.6.1.2.1.6.7	10.0.0.106_1.3.6.1.2.1.6.7	long	76	Good
tcpEstabResets	1.3.6.1.2.1.6.8	10.0.0.106_1.3.6.1.2.1.6.8	long	1 826	Good
tcpInErrs	1.3.6.1.2.1.6.14	10.0.0.106_1.3.6.1.2.1.6.14	long	0	Good
tcpInSegs	1.3.6.1.2.1.6.10	10.0.0.106_1.3.6.1.2.1.6.10	long	1 652 951	Good
tcpMaxConn	1.3.6.1.2.1.6.4	10.0.0.106_1.3.6.1.2.1.6.4	long	-1	Good
tcpOutRsts	1.3.6.1.2.1.6.15	10.0.0.106_1.3.6.1.2.1.6.15	long	6 001	Good
tcpOutSegs	1.3.6.1.2.1.6.11	10.0.0.106_1.3.6.1.2.1.6.11	long	1 828 911	Good
tcpPassiveOpens	1.3.6.1.2.1.6.6	10.0.0.106_1.3.6.1.2.1.6.6	long	1 181	Good
tcpRetransSegs	1.3.6.1.2.1.6.12	10.0.0.106_1.3.6.1.2.1.6.12	long	15 062	Good
tcpRtoAlgorithm	1.3.6.1.2.1.6.1	10.0.0.106_1.3.6.1.2.1.6.1	long	3	Good
tcpRtoMax	1.3.6.1.2.1.6.3	10.0.0.106_1.3.6.1.2.1.6.3	long	-1	Good
tcpRtoMin	1.3.6.1.2.1.6.2	10.0.0.106_1.3.6.1.2.1.6.2	long	10	Good
udpInDatagrams	1.3.6.1.2.1.7.1	10.0.0.106_1.3.6.1.2.1.7.1	long	5 258 752	Good
udpInErrors	1.3.6.1.2.1.7.3	10.0.0.106_1.3.6.1.2.1.7.3	long	0	Error
udpNoPorts	1.3.6.1.2.1.7.2	10.0.0.106_1.3.6.1.2.1.7.2	long	22 869	Good
udpOutDatagrams	1.3.6.1.2.1.7.4	10.0.0.106_1.3.6.1.2.1.7.4	long	0	Error

Fig. 5. EcoStruxure Building Operation SNMP data receiving.

Software requirements

BIMdance SNMP SmartConnector tested on the following operating systems:

- Windows 7
- Windows 8.1 x64
- Windows 10 x64
- Windows 11 x64
- Windows Server 2008 x64
- Windows Server 2012 x64
- Windows Server 2016 x64
- Windows Server 2019 x64
- Windows Server 2022 x64

This software requires .NET framework 4.8, SmartConnector v2.5.4 or later, and EcoStruxure Building Operation v5.0 or later.

Ordering

Product Name: BIMdance SNMP SmartConnector

Art Number: bimdance-snmp-001

Contacts

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