

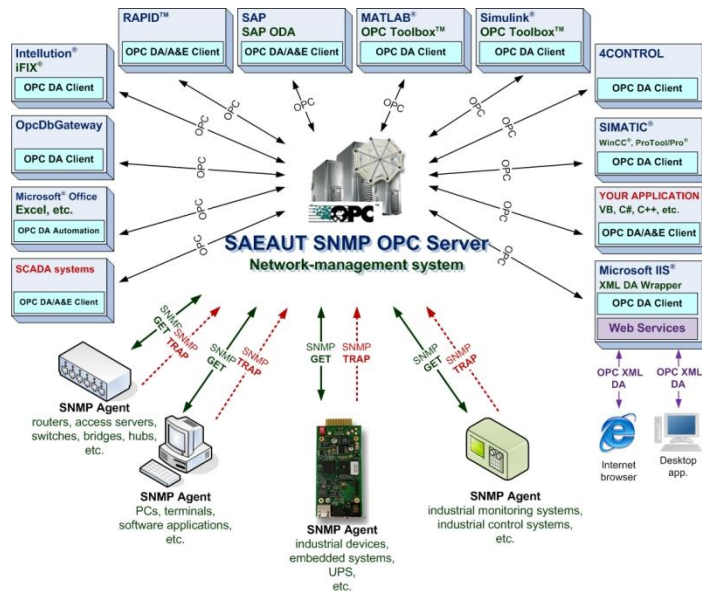
# SAE AUT SNMP OPC Server

## Exploitation of SAE AUT SNMP OPC Server

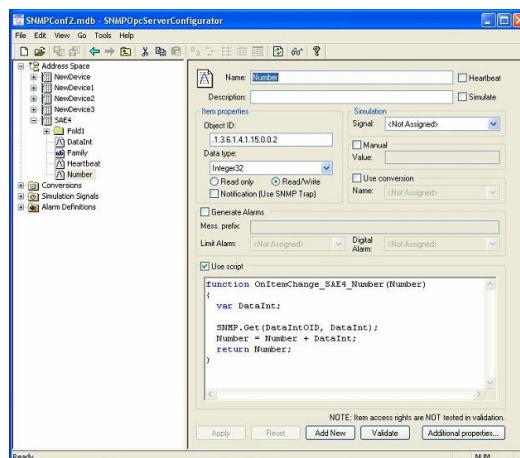
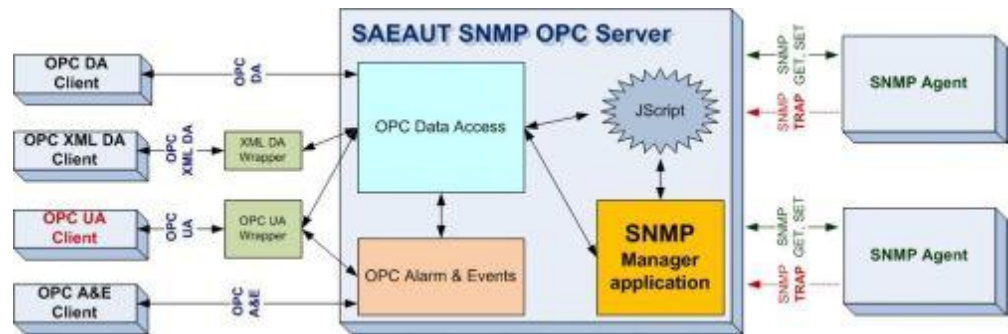
The common way for managing industrial and network devices is to run SNMP manager on a workstation while SNMP agents run on devices themselves.

In order to be able to integrate the network management into various HMI and SCADA systems with implemented OPC clients, it is very useful to incorporate SNMP manager into OPC server application.

Devices without SNMP agent can be watched using ICMP PING.



- Monitoring
- Control
- Connecting different devices with programs using OPC Clients



**Development and support:**  
SAE – Automation, s.r.o. (Ltd.)

Str. Trenčianska 19,  
018 51 Nova Dubnica  
Slovak republic  
[www.saeautom.sk](http://www.saeautom.sk)  
[sae-automation@saeautom.sk](mailto:sae-automation@saeautom.sk)  
tel :+421 42 4450701,  
fax: +421 42 4450702

# Versions

## Installation package contains:

SNMP OPC Server configurator with built in JScript editor

Runtime application (SNMP OPC Server process)

OPC XML-DA wrapper, OPC UA wrapper

Source code examples for OPC test clients (written in VB6 and VB.NET) for the communication with SNMP OPC server, using OPC DA3 OPC AE interface or Web Services

OPC UA test client



OPC Foundation Self-Tested for Compliance logo indicates that this product has been tested by the manufacturer to be compliant with the following OPC Specifications:  
 Data Access 2.05a  
 Data Access 3.00  
 Alarm & Event 1.02  
 XMLDA

SAEAUT SNMP OPC Server	Basic	Enhanced	Professional
Configurator	✓	✓	✓
Built-in monitoring client in configurator	✓	✓	✓
Max. number of connected devices	10	unlimited	unlimited
MIB Browser (On-line)	✓ (without the option to add new items)	✓ (full-featured)	✓ (full-featured)
MIB Browser (Off-line)	✗	✗	✓
Import from CSV files - reading OID and other information from CSV files	✓	✓	✓
Export to CSV files	✗	✗	✓
Alarm management	✓	✓	✓
SNMP GET operation can be called from the configurator	✓	✓	✓
SNMP SET operation can be called from the configurator	✓	✓	✓
JScripts	✗	✓	✓
IP Scanner	✗	✓	✓
Events logging	✗	✓	✓
Find tool	✓	✓	✓
XML DA wrapper	✓	✓	✓
SAEAUT SNMP OPC Agent	✗	✓	✓
SAEAUT SNMP OPC Client	✗	✓	✓

## The SAEAUT SNMP OPC Server features

- from **SNMP** point of view, it acts as a **Network Management System**
- implemented protocols **SNMPv2c** and **SNMPv1**
- implemented specifications **OPC DA (Data Access) 3.0, 2.05, 1.0, OPC AE (Alarms and Events) 1.10**
- the installation package contains **OPC UA 1.01 wrapper** which brings the possibility to access all data from SAEAUT SNMP OPC server even via the latest OPC standard called **Unified Architecture (UA)**
- the installation package contains **OPC XML DA 1.01 wrapper** which enables communication with SAEAUT SNMP OPC server through **Web Services**
- manages and monitors unlimited number of devices with SNMP agents
- the installation package contains a simple example of running **DEMO** configuration
- ability to define tags by using the **object identification (OID)** from **MIB file** e.g.: .1.3.6.1.4.1.2681.1.2.102
- supports standard SNMP commands **GET** and **SET**
- built-in **MIB Browser (on-line)** sends requests to SNMP manageable devices to get SNMP variables which correspond to objects in MIB database, providing the user with object IDs, data types and values
- Import/Export OID and other information from/to CSV files
- built-in **MIB Browser (off-line)** for browsing SNMP variables from MIB files, provided with SNMP device
- ability to manipulate the acquired data by using **JScripts** which can be configured directly in the SNMP OPC server \*
- IP Scanner module for scanning of computer network in a given IP range, in order to find connected SNMP devices \*
- allows to receive **SNMP TRAP**, notification message from SNMP Agents
- logging of server events \*
- configuration can be done in an **user friendly configuration software**
- allows to obtain information about manageable and unmanageable network devices through standard **Ping** command
- provides the Heartbeat functionality for monitoring of devices which does not include SNMP Agents. This function presents a response time of device as a special OPC variable
- Find tool, which allows you to search for a text within current configuration and immediately browse the occurrences in user friendly views
- contains examples of OPC clients together with source codes in C# .NET, VB. NET, VB6