

# SAE - Automation, Ltd.

# SAEAUT SNMP OPC Server, Version 2.10.00 Professional

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This file provides information about removed bugs, changes, file versions and location of installed files.

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# 1. INSTALLATION

Using setup program Setup.exe.

# 2. HOW TO ACTIVATE YOUR PRODUCT TO FULL VERSION?

In order to activate your software product to full version you will need to enter a name and the license key. Please start the product you want to activate and click Enter key when asked about product registration. You will see the dialog window that shows hardware fingerprint. Please e-mail us this fingerprint and tell us the

Name under which you'd like to activate your product. Based on this information we will send you back the license key that can be used to activate your product.

To activate SAEAUT SNMP OPC Server, Professional version:

- 1. Install application SAEAUT SNMP OPC Server, Professional on PC where it will run.
- 3. Click on button "Enter key".
- 4. Make a copy of your PC "Hardware fingerprint" (for example: Hardware fingerprint: 2950-8AA7)
- 5. Please send us your "Hardware fingerprint" to e-mail <u>mailto:sae-automation@saeautom.sk</u>.

On the basis of your PC "Hardware fingerprint", we will generate the valid "Enter key" for your PC and send it back to you.

# 3. **NEW FEATURES**

#### Version 2.10.00 - New!!!

• The application SAEAUT SNMP OPC Server version 2.10.00 brings a new very useful feature which enables to export SNMP items to the CSV files. This functionality is available from the Device pop-pop menu via the Export to CSV menu item.

The SNMP items represented by OPC Data Items in the SAEAUT SNMP OPC Server configuration can be easy and fast exported into a CSV file.

<u>Note that</u>: Using the "Export to CSV" functionality along with the "Import from CSV" functionality you can copy defined SNMP items from a configuration to other configurations of SAEAUT SNMP OPC Server.

<u>Recommendation</u>: It is recommended to use as a destination folder for exported CSV files the following application folder ..\SAEAUT SNMP OPC Server\CSV\

Please read more about this issue in User's Guide topics "*Methods how to configure SAEAUT SNMP OPC Server effectively*."

This feature is available only in the version SAEAUT SNMP OPC Server, Professional.

• A new interesting topic in the User's Guide. Please read more in User's Guide topics "Methods how to configure SAEAUT SNMP OPC Server effectively."

#### Version 2.09.00 - New!!!

 The application SAEAUT SNMP OPC Server version 2.09.00 brings a new very useful feature which enables to load SNMP items from existing CSV files. This functionality is available from the Device pop-pop menu via the Import from CSV menu item.

(1) The SNMP items defined in CSV file can be easy and fast inserted to the SAEAUT SNMP OPC Server configuration.

This feature is available in all marketed versions:

- ✓ SAEAUT SNMP OPC Server, Professional,
- ✓ SAEAUT SNMP OPC Server, Enhanced,
- ✓ SAEAUT SNMP OPC Server, Basic.
- The application SAEAUT SNMP OPC Server version 2.09.00 brings also improved the MIB Browser (Off-Line) functionality for loading SNMP items from MIB Files.

The SNMP items defined in MIB file can be easy and fast inserted to the SAEAUT SNMP OPC Server configuration.

This feature is available only in the version SAEAUT SNMP OPC Server, Professional.

• The application folder ..\SAEAUT SNMP OPC Server\CSV\ includes a set of predefined CSV files which can be used in time creating of a SNMP OPC Server configuration.

<u>Note that</u>: The user of SAEAUT SNMP OPC Server can add other new CSV files into the CSV folder. All CSV files from the CSV folder are automatic available from the Import from CSV menu item.

This feature is available in all marketed versions:

- ✓ SAEAUT SNMP OPC Server, Professional,
- ✓ SAEAUT SNMP OPC Server, Enhanced,
- ✓ SAEAUT SNMP OPC Server, Basic.
- The application folder ..\SAEAUT SNMP OPC Server\MIBS\ includes a set of predefined MIB files which can be used in time creating of a SNMP OPC Server configuration.

This feature is available only in the version SAEAUT SNMP OPC Server, Professional.

#### Version 2.08.03

 The application SAEAUT SNMP OPC Server is very often used for managing and monitoring of Uninterruptible Power Supplies (UPS) devices.

Therefore, the application SAEAUT SNMP OPC Server version 2.08.03 brings in its package two new sample configurations where you can find a preconfigured UPS device according to UPS-MIB[rfc1628].mib file.

This MIB file defines the managed objects for Uninterruptible Power Supplies which are to be manageable via the Simple Network Management Protocol (SNMP).

The mentioned two configurations are named as follows:

- SNMPConf.mdb,
- SNMPConf UPS-MIB rfc1628.mdb,

You can find them in the application folder: ..\SAEAUT SNMP OPC Server\Examples\Configurations

Please read more on our company Web in the document <u>SAEAUT SNMP OPC Server</u> <u>receives Trap messages</u> about using SAEAUT SNMP OPC Server for handling of SNMP Trap messages from UPS devices.

#### Version 2.08.00

- The application SAEAUT SNMP OPC Server version 2.08.00 brings the possibility to access all available data even via the latest OPC standard called Unified Architecture (UA). The Unified Architecture is the next generation OPC standard that provides a cohesive, secure and reliable cross platform framework for access to real time and historical data and events.
- The installation package includes a new version of OPC UA COM Server Wrapper. The OPC UA COM Server Wrapper provides immediate access to all data of SAEAUT SNMP OPC Server via UA interface.

Please Read more about Configuring DCOM for using of OPC UA COM Wrapper with OPC servers from SAE-Automation, Ltd. in the document available in Windows Start ⇒ SAEAUT SNMP OPC Server ⇒ Configuring OPC UA COM Wrapper for SAE products.

 The installation package includes a new SAEAUT UA Data Access Client version 1.00.00. The application gives the end-user possibility to make first attempts and connections to SAEAUT SNMP OPC Server via UA interface. Therefore, this product will be very useful for you.

The application SAEAUT UA Data Access Client version 1.00.00 includes already predefined links for connecting to SAEAUT SNMP OPC Server through UA COM Server Wrapper interfaces:

- http://localhost:48401/UA/ComServerWrapper
- opc.tcp://localhost:48400/UA/ComServerWrapper

This feature is available in the following marketed versions:

- ✓ SAEAUT SNMP OPC Server, Professional,
- ✓ SAEAUT SNMP OPC Server, Enhanced,

#### Version 2.07.00

 The application SAEAUT SNMP OPC Server version includes a MIB Browser (Off-Line) for loading SNMP items from MIB Files. The browsed SNMP items can be inserted to the SAEAUT SNMP OPC Server configuration.

Moreover, the SAEAUT SNMP OPC Server version 2.07.00 (only Professional) inserts to the configuration file also description (obtained from MIB file) about each SNMP item. Please read more about this issue in User's Guide topics "*How to browse available SNMP variables?*" and associated sub-topics.

This feature is available only in the version SAEAUT SNMP OPC Server, Professional.

- The SAEAUT SNMP OPC Server version 2.07.00 includes a new policy which determines compatibility of configuration projects created in the versions BASIC, ENGANCED and PROFESSIONAL. The policy is the following:
  - Basic

The BASIC version enables to open and use only projects created (updated) in the BASIC version.

Enhanced

The ENHANCED version enables to open and use only projects created (updated) in the ENHANCED version and the BASIC version.

- Professional The PROFESSIONAL version has no restrictions. It enables to open and use projects created (updated) in the PROFESSIONAL version, the ENHANCED version and the BASIC version.
- The configuration projects created in the SAEAUT SNMP OPC Server version 2.07.00 has a new different structure in compare with the previous released versions of the SAEAUT SNMP OPC Server. At the moment, no already existing project can be open in the SAEAUT SNMP OPC Server version 2.07.00. It means that there is no backward compatibility to the older projects. We recommend you to rewrite your existing projects to new projects.

There is a possibility to contact us and send your existing projects to our company. We can try to convert these existing projects to new structure.

#### Version 2.06.01

 The SNMP GET operation: The application SAEAUT SNMP OPC Server Configurator version 2.06.01 enables to call SNMP GET operation. The GET operation retrieves the current value of a SNMP object (associated by Object ID). The value is retrieved ON-LINE from a connected SNMP device. Please read more about this issue in User's Guide topics "How to verify whether your SNMP device is available? How to use GET, SET operations from the server configurator?" and associated sub-topics.

 The SNMP SET operation: The application SAEAUT SNMP OPC Server Configurator version 2.06.01 enables to call SNMP SET operation. The SET operation sets a new value of a SNMP object (associated by Object ID). The value is set ON-LINE to a connected SNMP device. Please read more about this issue in User's Guide topics "How to verify whether your SNMP device is available? How to use GET, SET operations from the server configurator?" and associated sub-topics.

#### Version 2.06.00

- The application SAEAUT SNMP OPC Server version 2.06.00 was tested with OPC Compliance Test Tool (OPC Foundation) for verification the correct operation of this product for following interfaces:
  - - OPC Data Access 2.05a ⇒ Test passed.
  - OPC Alarm and Events 1.1 ⇒ Test passed.

#### **OPC Compliance Test Tool parameters:**

GUI Version: 2.15.0.1152 CTT Data Control Version: 2.00.15.1152

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#### OPC Data Access 3.0 Compliance Test:

Test Control Version: 1.00.15.1152 Test Settings Version: 1.15.0.1152 **OPC Data Access 2.05a Compliance Test Version 2**: Test Control Version: 2.00.19.1152 Test Settings Version: 2.19.0.1152 **OPC Alarm and Events 1.1 Compliance Test**: Test Control Version: 1.00.14.1152 Test Settings Version: 1.14.0.1152

All test details are available on OPC Foundation web site in the <u>SAEAUT SNMP OPC</u> Server product detail list.

- The application SAEAUT SNMP OPC Server version 2.06.00 was tested in collaboration with XML-DA Wrapper with OPC Compliance Test Tool (OPC Foundation) for verification the correct operation of this product for following interfaces:
  - OPC XML Data Access 1.01 

    Test passed.

#### **OPC Compliance Test Tool parameters:**

GUI Version: 2.15.0.1152 CTT Data Control Version: 2.00.15.1152

**OPC XML Data Access 1.01 Compliance Test:** Test Control Version: 1.00.8.1146 Test Settings Version: 1.08.0.1146

 The application SAEAUT SNMP OPC Server version 2.06.00 includes a new MIB Browser (Off-Line) for loading SNMP items from MIB Files. The browsed SNMP items can be inserted to the SAEAUT SNMP OPC Server configuration. Please read more about this issue in User's Guide topics "How to browse available SNMP variables?" and associated sub-topics.

This feature is available only in the version SAEAUT SNMP OPC Server, Professional.

 The user interface of MIB Browser (On-Line) for browsing SNMP items from SNMP Devices was enhanced about a few useful fields. Please read more about this issue in User's Guide topics "How to browse available SNMP variables?" and associated subtopics.

This feature is available only in the versions SAEAUT SNMP OPC Server, Enhanced and SAEAUT SNMP OPC Server, Professional.

 The installation package includes a new version of XML-DA Wrapper. The XML-DA Wrapper provides immediate access on data of SAEAUT SNMP OPC Server via Web Service <u>http://localhost/XmlDaSnmpOpcServerWrapper/Service.asmx</u>. It needs the Internet Information Services (IIS).

More about how to access data from the SAEAUT SNMP OPC Server through Internet via XmIDaSnmpOpcServerWrapper you can find in User's Guide of SAEAUT SNMP OPC Server. Please read more about this issue in User's Guide topics "*How to access SAEAUT SNMP OPC Server data through Internet.*" and associated sub-topics.

- The installation package includes the SAEAUT SNMP OPC Client version 1.00.00. The application SAEAUT SNMP OPC Client version 1.00.00 includes already predefined links for connecting to SAEAUT SNMP OPC Server through standard OPC interfaces:
  - OPC Data Access 3.0 opcda://localhost/SAEAutomation.SNMPOpcServerDA.3
  - OPC XML Data Access 1.01
     http://localhost/XmlDaSnmpOpcServerWrapper/Service.asmx

More about the SAEAUT SNMP OPC Client application you can find in User's Guide of SAEAUT SNMP OPC Server. Please read more about this issue in User's Guide topics *"How to use SAEAUT SNMP OPC Client."* and associated sub-topics.

The application gives the end-user possibility to make first attempts and connections to SAEAUT SNMP OPC Server. Therefore, this product will be very useful for you.

This feature is available only in the versions SAEAUT SNMP OPC Server, Enhanced and SAEAUT SNMP OPC Server, Professional.

- The installation package includes the latest OPC Core Components. These modules include DCOM proxy/stub libraries, the OPC Server Enumerator, .NET wrappers, etc.
- The installation package includes the SAEAUT SNMP Agent version 1.00.00 (FREE) Solution how to simulate SNMP devices.

If you need to simulate SNMP devices or generate the SNMP Trap messages then this product will be very useful for you.

To read more details about how to use it you can download special white paper <u>SAEAUT SNMP Agent - User's Guide</u>.

The SAEAUT SNMP Agent is necessary to install additionally manually. To install that product go to SAEAUT SNMP OPC Server directory ..\SAEAUT SNMP OPC Server\SAEAUT SNMP Agent Setup\ or download the latest version of product from the following link <u>http://www.saeautom.sk/download/products/snmpagent/saeaut-snmpagent.zip</u>.

This feature is available only in the versions SAEAUT SNMP OPC Server, Enhanced and SAEAUT SNMP OPC Server, Professional.

- Changed functionality for manual items (tags). The manual items are created directly internal in SAEAUT SNMP OPC Server and are completely independent on target devices.
- Updated User's Guide, Read Me and company web page updated section FAQ.

#### Version 2.05.05

- The Find dialog box allows you to search for text within the current configuration and then interactively review matches. You can access the Find dialog box by choosing Find on the Edit menu, choosing the loupe icon on toolbar or through hot key Shift + F.
- The Find dialog box provides several standard search options to help you improve the accuracy of your search. It allows you to search entire configuration or only part of configuration.
- All Find results are always displayed in the Find Results tab, which is included in Output View.
- The Find Results tab allows you to review each individual search occurrences directly in the main Tree view and also the item details in Dialog view. To review individual search occurrences please Double Click on an item directly in Find Results.
- More about the Find dialog you can find in User's Guide. Please read more about this issue in User's Guide topics "Added the Find dialog box" and associated sub-topics.

#### Version 2.05.04

The import of XML files is more optimized.

#### Version 2.05.03

- Installation package was enhanced about new important documents:
  - Installation & Activation of SNMP Service and SNMP Trap Service for SNMP applications from SAE – Automation, s.r.o.
  - Configuring OPC and DCOM for OPC server and client applications from SAE Automation, s.r.o.
- User's Guide, Read Me and company web page updated section FAQ.

#### Version 2.05.02

- Checking the log file size.
- It is possible to set a maximal log file size through SNMP OPC Server Configurator.
- It is possible to set a maximal number of log files through SNMP OPC Server Configurator.

#### Version 2.05.01

 User's Guide was enhanced about topic "The first start of SAEAUT SNMP OPC Server".

#### Version 2.05.00

- Optimized startup time and decreased CPU load.
- Optimized a logging of messages.

#### Version 2.04.02

- Alarm definitions definable also for JScript items.
- Support for scanning of network for all accessible devices or for devices with given SNMP community - IP Scanner.
- Enhanced viewing of Log files.

#### Version 2.03.01

• Support for multi-selecting and multi-adding of MIB objects browsed by MIB Browser.

#### Version 2.03.00

 Support for browsing for MIB objects of chosen device and adding selected objects to configuration database - MIB Browser.

#### Version 2.02.00

- Script item user interface changed, adding of Data items into Script item is filtered by chosen Device.
- New user interface for editing of Global JScript variables, support for BOOL, LONG, ULONG, FLOAT, DOUBLE and STRING data types and arrays for all of them apart from STRING data type.

#### Version 2.01.02

• Global JScript variables implemented.

### Version 2.02.00

• Global JScript variables support for BOOL, LONG, ULONG, FLOAT, DOUBLE and STRING data types and arrays for all of them apart from STRING data type.

# 4. CORRECTED ERRORS

### Version 2.09.00 - Fixed bugs

• Resolved an issue with generating of J-Script file for operating systems Windows 7 and Windows Vista.

### Version 2.08.02 - Fixed bugs

• Resolved an issue with DEMO application for Windows Vista (64-bit edition) and Windows 7 (64-bit edition).

#### Version 2.07.00 - Fixed bugs

- Resolved an issue with enabling/disabling the Heartbeat data items.
- Resolved an issue with freezing in IP Scanner.

This feature is available only in the versions SAEAUT SNMP OPC Server, Enhanced and SAEAUT SNMP OPC Server, Professional.

### Version 2.06.00 - Fixed bugs

- Resolved a memory leak in methods for reading and writing of OPC item.
- Resolved possible deadlock when unloading the OPC server.
- Resolved possible deadlock when rapidly removing multiple groups at the same time.
- Resolved an issue with server not shutting down after an error had occurred during a creation of OPC group object.
- Changed default good quality for manual tags to OPC\_QUALITY\_GOOD.

#### Version 2.05.04 - Fixed bugs

• The import of XML files fails.

### Version 2.05.03 - Fixed bugs

• The receiving traps which are different from SNMPv1 protocol resulted in the application crash.

#### Version 2.05.00 - Fixed bugs

- Logging of messages.
- Reading and writing of data items.

### Version 2.04.02 - Fixed bugs

• Digital alarms supported.

### Version 2.03.03 - *Fixed bugs*

• Support for Counter64 data type.

### Version 2.01.02 - Fixed bugs

• Global JScript variables removable from user interface.

### Version 2.00.01 - Fixed bugs

- The header and the body of the script in a Script or Data Item is correctly updated when user applies any changes on the name of the Item or device or any parent folder.
- In Data Item, user can first define using of the script and then apply the changes.
- User is not allowed to enter into controls more than database-defined length of specific field.
- Description field have been extended to be of the length of 255 characters.

# 5. FILELIST AND FILEINFORMATION

#### SAEAUT SNMP OPC Server

Name:	SNMPRuntime.exe
Version:	2.9.0.0
Location:	\SAEAUT SNMP OPC Server\
Description:	The main runtime module SAEAUT SNMP OPC Server application.
Name:	SNMPConf.exe
Version:	2.10.0.0
Location:	\SAEAUT SNMP OPC Server\
Description:	The module is used for creating configuration for SAEAUT SNMP OPC Server.
Name:	SNMPOPCServer.chm
Location:	\SAEAUT SNMP OPC Server\Help
Description:	The User's Guide for SAEAUT SNMP OPC Server application.
<b>Documents</b> Name: Location: Description:	License.pdf \SAEAUT SNMP OPC Server\ The software license agreement for end-user for software from company.
Name: Location: Description:	Relnotes.pdf \SAEAUT SNMP OPC Server\ This file provides information about removed bugs, changes, file versions and location of installed files.
Name:	White Papers.pdf
Location:	\SAEAUT SNMP OPC Server\Help
Description:	List of White Papers related to SAEAUT SNMP OPC Server from SAE-Automation, Ltd.
Name:	opcuaforsaeproducts.pdf
Location:	\SAEAUT SNMP OPC Server\Help
Description:	Configuring DCOM for using of OPC UA COM Wrapper with OPC Servers from SAE-
Automation, Lto	d.
<b>XML-DA Wrap</b>	per
Name:	XmIDaSnmpOpcServerWrapper.msi

Location: ..\SAEAUT SNMP OPC Server\XML-DA Wrapper Setup\ Description: The XML-DA Wrapper makes SAEAUT SNMP OPC Server available through Web Services. It needs the Internet Information Services (IIS). Please read more about this issue in User's Guide topics "*XML DA Wrapper – Web services*" and associated sub-topics.

## OPC Core Components 3.00 (101.2)

Name:	OPC Core Components Redistributable (x86).msi
Location:	\SAEAUT SNMP OPC Server\OPC Core Components Setup\
Description:	These modules include DCOM proxy/stub libraries, the OPC Server Enumerator, .NET
	wrappers, etc.

### **SAEAUT SNMP OPC Client**

Name:	Setup.exe
Location:	\SAEAUT SNMP OPC Server\SAEAUT SNMP Client Setup\
Description:	The installation Setup.exe file includes the SAEAUT SNMP OPC Client application which
	enables connecting to SAEAUT SNMP OPC Server through interfaces DA 3.0 and XML-DA
	1.01. This feature is available only in the versions SAEAUT SNMP OPC Server, Enhanced
	and SAEAUT SNMP OPC Server, Professional.

### SAEAUT SNMP Agent

Name:	Setup.exe
Location:	\SAEAUT SNMP OPC Server\SAEAUT SNMP Agent Setup\

Description: The installation Setup.exe file includes the SAEAUT SNMP Agent application which enables simulating of SNMP device. *This feature is available only in the versions SAEAUT SNMP OPC Server, Enhanced and SAEAUT SNMP OPC Server, Professional.* 

## Examples

Name:	SAEConf.mdb
Location:	\SAEAUT SNMP OPC Server\Examples\Configurations
Description:	Example of simple project file.
Name:	SNMPConf UPS-MIB rfc1628.mdb
Location:	\SAEAUT SNMP OPC Server\Examples\Configurations
Description:	A special configuration file which contains the UPS_MIB_rfc1628 device preconfigured according to UPS-MIB[rfc1628].mib file.

#### **SAEAUT UA Data Access Client**

Name:	Setup.exe
Location:	\SAEAUT SNMP OPC Server\UA Client\
Description:	The installation Setup.exe file includes the SAEAUT UA Data Access Client application
	which enables connecting to SAEAUT SNMP OPC Server via UA interface. This feature is
	available only in the version SAEAUT SNMP OPC Server, Enhanced.

### **UA Config XML**

Name:	Setup.exe
Location:	\SAEAUT SNMP OPC Server\UA Config XML\
Description:	The installation Setup.exe file adds the SAEAUT SNMP OPC Server to the UA COM Server Wrapper configuration file. This feature is available only in the version SAEAUT SNMP OPC.
	Server, Enhanced.

#### **UA COM Interop**

Name:	Setup.exe
Location:	\SAEAUT SNMP OPC Server\UA COM Interop\
Description:	The installation Setup.exe file includes the UA Configuration Tool which can be used to configure the UA COM proxy and wrapper for use with different COM applications. <i>This feature is available only in the version SAEAUT SNMP OPC Server, Enhanced.</i>

### CSV & MIB parser

Name:	pmib.dll
Location:	\SAEAUT SNMP OPC Server\ExternalApp\
Description:	The module for loading SNMP items from CSV and MIB files.

### **CSV** files

Name:	CSV folder
Location:	\SAEAUT SNMP OPC Server\CSV\
Description:	The application folder\SAEAUT SNMP OPC Server\CSV\ includes a set of predefined
•	CSV files which can be used in time creating of a SNMP OPC Server configuration.

#### **MIB** files

Name:	MIBS folder
Location:	\SAEAUT SNMP OPC Server\MIBS\
Description:	The application folder\SAEAUT SNMP OPC Server\MIBS\ includes a set of predefined
-	MIB files which can be used in time creating of a SNMP OPC Server configuration. This
	feature is available only in the version SAEAUT SNMP OPC Server, Professional.

# 6. FAQ

This section is regularly updated on the company web page, please the link: <u>http://www.saeautom.sk/products/snmpopcserver/faq.htm</u>

- 1. What SNMP protocols are implemented in SAEAUT SNMP OPC Server?
  - SNMPv2c.
  - SNMPv1.
- 2. What OPC interfaces are implemented in SAEAUT SNMP OPC Server?
  - OPC Data Access 3.0, 2.05 and 1.0.
  - OPC Alarm and Events 1.0.
  - OPC XML Data Access 1.01 (Part of installation package is the OPC XML-DA Wrapper which provides an OPC XML-DA Web Service interface as a front-end to one or more OPC COM DA 2.x and 3.0 servers.)
  - OPC Unified Architecture 1.01 (Part of installation package is the OPC UA COM Server Wrapper which provides an OPC UA interface.)

3. DEMO configuration: The first start of SAEAUT SNMP OPC Server. How to start it? <u>Recommendation</u>: Please read more about this issue in User's Guide topic "The first start of SAEAUT SNMP OPC Server application" (Windows Start ⇔ SAEAUT SNMP OPC Server ⇔ User's Guide).

The User's Guide as PDF document you can download from link <a href="http://www.saeautom.sk/download/help/saeaut\_snmp\_opc\_server\_en.pdf">http://www.saeautom.sk/download/help/saeaut\_snmp\_opc\_server\_en.pdf</a>.

4. DEMO configuration: The Quality of OPC item is "Bad" and the item Subquality is "Comm Failure". Why?

<u>Recommendation A</u>: The white paper named Installation & Activation of the SNMP Service and SNMP Trap Service addresses this issue.

You can download the latest version of this white paper from the following link http://www.saeautom.sk/download/install\_snmp\_service.pdf.

#### Recommendation B:

Make sure that in the SNMP Service Properties dialog, in the tab Security, is added Community item named "public" with access rights "READ WRITE". If this item is not included between community names then please add it. A sequence, how to add the "public" item to the list of Accepted community names is step-by-step described in the document <a href="http://www.saeautom.sk/download/install\_snmp\_service.pdf">http://www.saeautom.sk/download/install\_snmp\_service.pdf</a> (Please see Figure 6 and Figure 7).

### 5. Writing of a new value to OPC item fails. Why?

- <u>OPC Data Item is read only</u>: Check the rights of data items you are using. Open SAEAUT SNMP Server Configurator and choose data item. Change the rights to Read/Write.
- <u>SNMP Community of the device is Read Only</u>: Check the rights of the community you are using. When the device is PC, in administrative tools choose services and SNMP service. Open SNMP Service Properties dialog and choose Security tab. Check Accepted community names and choose the community you are using. Change the rights to "READ WRITE". You can add your own communities with desired rights and use them when configuring the device.

#### 6. Which communication ports does the SAEAUT SNMP OPC Server exploit?

SNMP communication (between SNMP OPC Server and SNMP device):

- SNMP (**UDP** 161)
- SNMP Trap (UDP 162)

OPC communication (between SNMP OPC Server and OPC Client):

• OPC (**TCP** 135)

XML-DA communication (between SNMP OPC Server and XML-DA Client):

• XML-DA (HTTP/SOAP 80)

Heartbeat communication (between SNMP OPC Server and SNMP device):

 Heartbeat (ICMP Echo (ping) request; ICMP Echo (ping) reply). ICMP is Internet Control Message Protocol.

# Be aware that according to required communication is necessary to permit a port in your firewalls. Settings of the standard operating system firewall are made automatic during installation.

#### 7. Which ports are used in the SNMP communication?

SNMP uses the default UDP port 161 for general SNMP messages and UDP port 162 for SNMP trap messages. If these ports are being used by another protocol or service, you can change the settings by modifying the local *Services* file on the agent. The *Services* file is located in *\%SystemRoot* %\*System32\Drivers\Etc* 

#### 8. The SAEAUT SNMP OPC Server doesn't receive any Traps? Why?

Please try to check the Windows Firewall whether the SNMP trap messages use allowed. The SNMP trap messages use default UDP port 162.

To enable SNMP trap messages in Windows Firewall, please do the following:

- 1. Click on the Windows Start ⇒ Control Panel ⇒ Windows Firewall.
- 2. In the Exceptions tab click on Add Port and in the associated dialog fill out the fields as follows:
  - Name: SNMP Trap
  - Port number: 162
  - Select the UDP radio button.

<u>Note that</u>: The SNMP trap messages may be received on another UDP port as well. Please see more in the next point: Which ports are used in the SNMP communication?

#### 9. How to configure OPC and DCOM for OPC Servers and OPC Clients from SAE-Automation, Ltd.? Please refer to the document Configuring OPC and DCOM for OPC server and client applications from SAE – Automation, s.r.o. that describes OPC and DCOM settings in detail - available in Windows Start ⇒ SAEAUT SNMP OPC Server ⇒ White Papers ⇒ Configuring OPC and DCOM for OPC server and OPC client applications.

You can download the latest version of this white paper from the following link http://www.saeautom.sk/download/dcom\_config.pdf.

#### 10. How to make SAEAUT SNMP OPC Server data available via Internet/Intranet?

<u>Recommendation</u>: Please read more about this issue in User's Guide topics "*How to access SAEAUT SNMP OPC Server data through Internet.*" and associated sub-topics.

#### 11. How is it possible to verify that XML-DA wrapper has been installed correctly?

<u>Recommendation</u>: Please type the URL in the internet browser as follows:

<u>http://localhost/XmlDaSnmpOpcServerWrapper/Service.asmx</u>. If the XML-DA wrapper is working correctly you will see a web service test page which will inform you about all operations which are supported (it is a standard test page for all ASP.NET web services).

# 12. If the XML-DA wrapper is installed successfully and working, how should we get the related web services' WSDL?

<u>Recommendation</u>: If the web service test page is working, just click on "Service Description" link on the top of the screen to display web service's WSDL or visit the following link http://localhost/XmIDaSnmpOpcServerWrapper/Service.asmx?WSDL.

#### 13. Why is it not possible to overwrite the data items browsed and added by MIB Browser?

SNMP variables browsed from device do not contain information about access rights of variable and by default all the items added to configurator by browsing have access rights set to read only to avoid misusing. Such variables are not possible to overwrite from the client and it is user's task to change access rights and all desired properties of the data item. Properties of data items including access rights are possible to change from user interface of configurator. Please read more about this issue in User's Guide topic "*Data Item*".

#### 14. In data item definition: Why does the data item validation fail?

Validation of data item can fail in following cases: device supposed to have SNMP agent with desired SNMP variable is not connected or is incorrectly defined. Check IP address and community of device. Or: desired

SNMP variable is not a leaf variable of a MIB Tree. Only leaf variables are readable from the device and valid able. Check the Object ID of the SNMP variable. To be sure about Object ID, you can browse all the SNMP variables of the device from a specified default Object ID. If you do not wish to browse all the SNMP variables of the device, specify different default Object ID that is closely to the desired you are looking for. For example, if you are not sure about OID: .1.3.6.1.2.1.25.3.2.1.3, if it is a leaf node, put it into Default OID and press Get button for SNMP request. If it is a branch node, all the nodes below will be browsed and you can access wished Object ID. See MIB Browse help.

#### 15. Why OPC client cannot read Script items or Data items that use scripting?

Reading of Script items or Data items that use scripting fails when any of the used scripts fails to be parsed. If any script fails to be parsed, no script is executed for any item. Check the scripts that you defined in the configurator, if there are no illegal characters or programming errors.

#### 16. Transfering of items from MIB browser into configuration fails. Why?

If adding of browse items into configurator fails and throws an error, it is usually because items supposed to be browsed would not be unique in a project file. It happens when attempting to write to the project file that is not active. Make sure that the project file is set to active and try browsing again. Please read more about this issue in User's Guide topic "*Make Active*".

#### 17. How to activate product to full version?

In order to activate your software product to full version you will need to enter a name and the license key. Please start the product you want to activate and click Enter key when asked about product registration. You will be presented with a dialog window that shows hardware fingerprint. Please e-mail us this fingerprint and tell us the Name under which you'd like to activate your product. Based on this information we will send you back the license key that can be used to activate your product.

#### 18. How to configure DCOM for using of OPC UA COM Wrapper with OPC Servers from SAE-Automation, Ltd.?

Please refer to the document Configuring DCOM for using of OPC UA COM Wrapper with OPC servers from SAE-Automation, Ltd. that describes DCOM settings in detail - available in Windows Start ⇒ SAEAUT SNMP OPC Server ⇒ Configuring OPC UA COM Wrapper for SAE products.

You can download the latest version of this white paper from the following link <u>http://www.saeautom.sk/download/opcuaforsaeproducts.pdf</u>.

# 7. KNOWN ISSUES

1. From the XML-DA Wrapper link <u>http://localhost/XmlDaSnmpOpcServerWrapper/Service.asmx</u> is not possible to display a Web Service Test Page. How can the problem be solved?

<u>Recommendation A</u>: Please make sure that are correct set COM Security for ASP.NET. Please read more about this issue in User's Guide of SAEAUT SNMP OPC Server topics "How to access SAEAUT SNMP OPC Server data through Internet  $\Rightarrow$  How to set the Access Rights for OPC XML-DA Wrapper" and associated sub-topics. (Windows Start  $\Rightarrow$  SAEAUT SNMP OPC Server  $\Rightarrow$  User's Guide)

<u>Recommendation B</u>: Please make sure that the SAEAUT SNMP OPC Server is installed on your computer correctly.

Recommendation C: Please make sure that your Web Service link is written right.

Recommendation D: Please make sure that the Internet Information Services (IIS) is started.

Recommendation E: Please make sure that .asmx file extension is registered in IIS server.

<u>Recommendation F</u>: Please make sure that Microsoft .NET Framework 1.1 or higher is installed on your computer correctly (you can see if .NET Framework is installed via Administrative Tools panel). If so, try to reinstall .NET Framework. You can download it at:

http://www.microsoft.com/downloads/details.aspx?FamilyID=262d25e3-f589-4842-8157-034d1e7cf3a3&displaylang=en

#### 2. A MIB file is not possible to load through MIB Browser (Off-Line).

This feature is available only in the version SAEAUT SNMP OPC Server, Professional.

There are various mal-formed MIB files which are used in the SNMP devices all over the world. Therefore, we cannot warrant that each available MIB file will be parsed and loaded successfully by MIB Browser (Off-Line).

# 3. The SAEAUT SNMP OPC Server version 2.07.00 has no backward compatibility to the older projects (configurations).

The configuration projects created in the SAEAUT SNMP OPC Server version 2.07.00 has a new different structure in compare with the previous released versions of the SAEAUT SNMP OPC Server. At the moment, no already existing project can be open in the SAEAUT SNMP OPC Server version 2.07.00. It means that there is no backward compatibility to the older projects. We recommend you to rewrite your existing projects to new projects.

There is a possibility to contact us and send your existing projects to our company. We can try to convert these existing projects to new structure.

#### 4. The SAEAUT SNMP OPC Server data are not available via OPC UA COM Wrapper interface.

Please refer to the document Configuring DCOM for using of OPC UA COM Wrapper with OPC servers from SAE-Automation, Ltd. that describes DCOM settings in detail - available in Windows Start ⇒ SAEAUT SNMP OPC Server ⇒ Configuring OPC UA COM Wrapper for SAE products.

You can download the latest version of this white paper from the following link <u>http://www.saeautom.sk/download/opcuaforsaeproducts.pdf</u>.

# 5. DEMO configuration: SNMP variables are not available on 64-bit Windows. The Quality of OPC item is "Bad" and the item Subquality is "Comm Failure".

Make sure that in the SNMP Service Properties in the tab Security dialog is added Community item named "public" with access rights "READ WRITE". If this item is not included between community names then please add it. A sequence, how to add the "public" item to the list of Accepted community names is step-by-step described in the document <u>http://www.saeautom.sk/download/install\_snmp\_service.pdf</u> (Please see Figure 6 and Figure 7).

Up to now, this issue was obtained for Microsoft Windows Vista (only 64-bit edition) and Microsoft Windows 7 (only 64-bit edition).

# 8. SUPPORT

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# 10. DOWNLOADS

In this section are listed links to important documents which relates with the SAEAUT SNMP OPC Server.

## SAEAUT SNMP OPC Server documentation (User's Guide)

http://www.saeautom.sk/download/help/saeaut\_snmp\_opc\_server\_en.pdf

# Using of the SAEAUT SNMP OPC Server for receiving Trap messages from SNMP Agents http://www.saeautom.sk/download/SAEAUT SNMP OPC Server receives TRAP

messages\_eng.pdf

Installation & Activation of the SNMP Service and SNMP Trap Service http://www.saeautom.sk/download/install\_snmp\_service.pdf

SAEAUT SNMP Agent documentation (User's Guide) http://www.saeautom.sk/download/help/saeaut\_snmp\_agent\_en.pdf

Elegant solution for the management of computer network http://www.saeautom.sk/download/snmpopcserver\_en.pdf

# Monitoring of network infrastructure

http://www.saeautom.sk/download/monitoring\_en.pdf

#### Configuring OPC and DCOM for OPC server and OPC client applications from SAE – Automation, Ltd. http://www.saeautom.sk/download/dcom\_config.pdf

Configuring DCOM for using OPC UA COM Wrapper with OPC servers from SAE – Automation, Ltd.

http://www.saeautom.sk/download/opcuaforsaeproducts.pdf

#### Internet browser based OPC client http://www.saeautom.sk/download/opc explorer.pdf

# OpcDbGateway – Powerfull program system for PC

http://www.saeautom.sk/download/opcdbgateway\_en.pdf

SAEAUT SMS Service, sending and receiving SMS from/to various applications http://www.saeautom.sk/download/smsservice\_en.pdf

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