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## SAEAUT SNMP OPC Server



Using the Find tool in the SAEAUT SNMP OPC Server from SAE –  
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## Using the Find tool

## in the SAEAUT SNMP OPC Server

*The purpose of the article is to introduce and show how to use  
a new feature Find in SAEAUT SNMP OPC Server.*

### Introduction

The SAEAUT SNMP OPC Server facilitates to manage and monitor unlimited number of network devices. This feature allows even to create relatively complicated network configurations. Therefore, it would be nice to have an easy tool which enables you very fast, in SAEAUT SNMP OPC Server configuration, to search any text expression. Good message is that such tool we already added into SAEAUT SNMP OPC Server software. The tool is called **Find** and besides the searching any text expression it enables even immediately to review each individual search occurrences in more user friendly views.

## Exploitation of the SAEAUT SNMP OPC Server

For management of the network equipments SNMP manager working on workstation and SNMP agent running on network equipment are used. To be able to integrate this network management into the various HMI or SCADA systems, which include OPC clients, it is very useful to implement SNMP manager into the runtime application of the OPC server. The base functionality and exploitation of SAEAUT SNMP OPC Server is shown on two following figures below (Figure 1 and Figure 2).

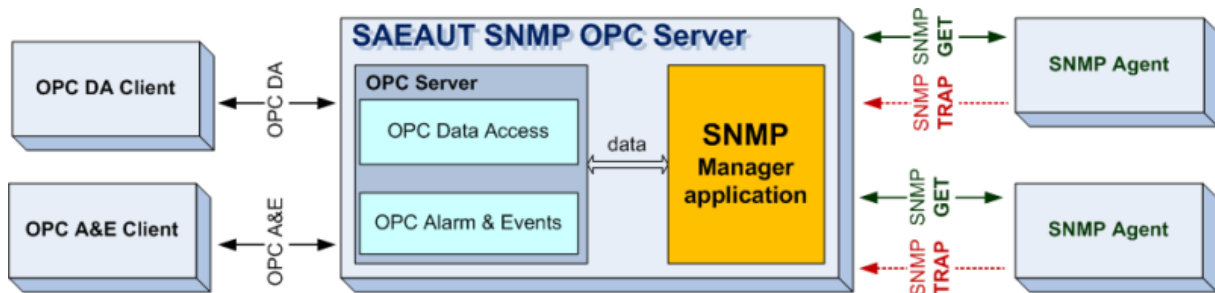


Figure 1: Using of SAEAUT SNMP OPC Server (simple block diagram).

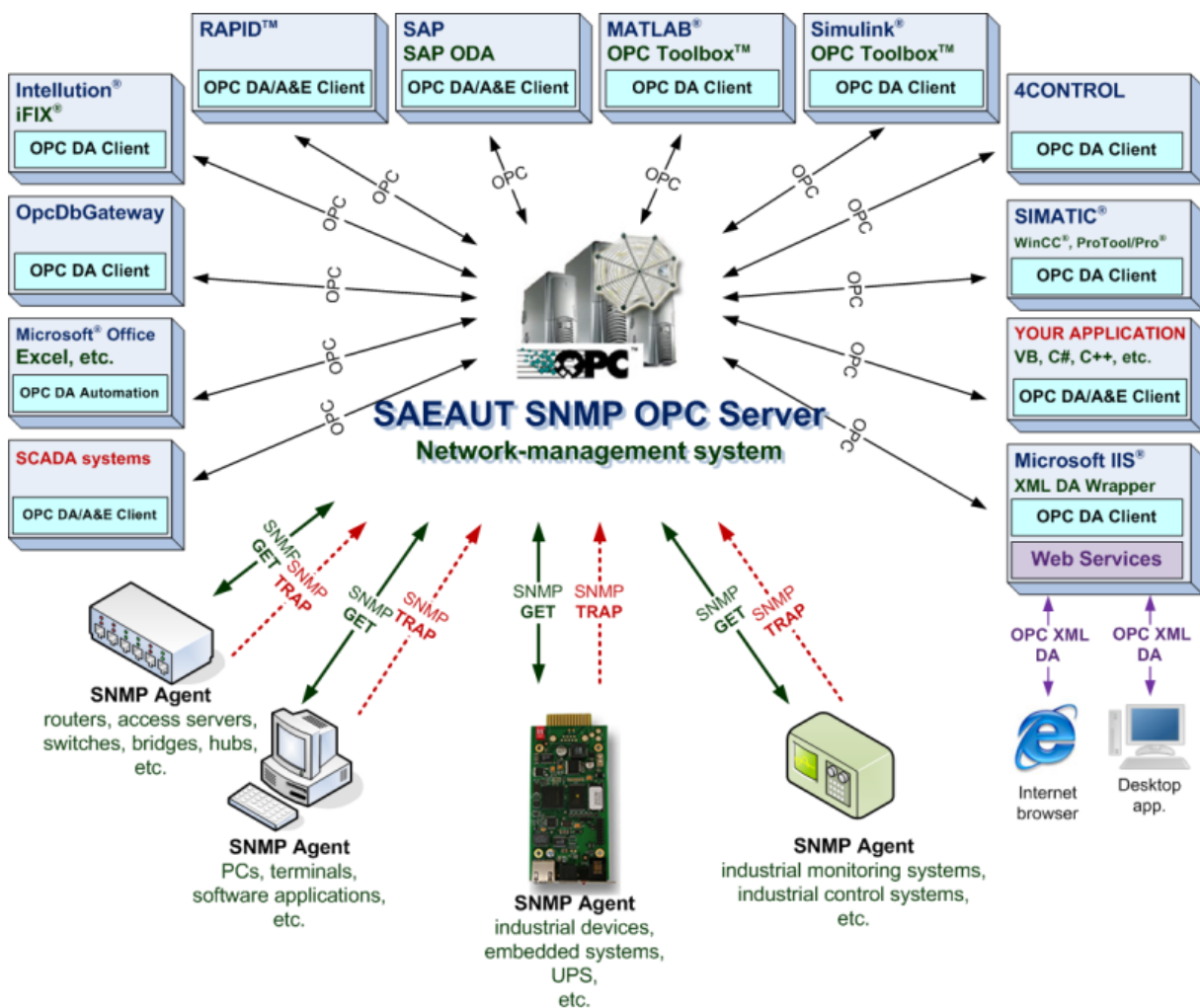


Figure 2: Exploitation of SAEAUT SNMP OPC Server.

## The SAEAUT SNMP OPC Server base features

- Implementation of protocols SNMPv1, SNMPv2c.
- Implemented OPC specification:
  - OPC DA 3.0, 2.05, 1.0,
  - OPC Alarm & Events 1.10, 1.0.
- Installation package is enhanced with OPC XML-DA 1.01 wrapper which enables communication with SAEAUT SNMP OPC Server using Web Services.
- The application provides the possibility to manage and monitor unlimited number of devices with running SNMP agent.
- The application provides the Heartbeat functionality for devices without running SNMP agent.
- The application configuration is possible to create in user friendly configurator software.
- Processing data using JScripts.
- Tags in address space of the OPC server are defined using MIB object identifier (OID) e.g.: .1.3.6.1.4.1.2681.1.2.102
- Implementation of MIB Browser, which requests SNMP manageable device for its SNMP variables corresponding to MIB objects and supplies user with MIB objects IDs, data types and values
- The application process Traps sent from SNMP devices.
- Module IP Scanner, which is used for scanning computer network in defined IP area.
- Event logging of SAEAUT SNMP OPC Server.
- The Find tool allows you to search for text within the current configuration and then interactively review matches. The new feature will be described in the

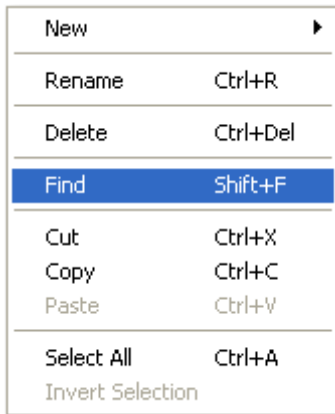
Finally, the last mentioned feature Find will be described in the following document more detail.

## The Find dialog box

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.

To display the **Find** dialog box, please use on one of the following items:

- Click on the menu-item **Edit** ⇒ **Find** (Please see Figure 3).
- Click on the toolbar-item **Find** (Please see Figure 4).
- Press the hot key buttons **Shift + F**.

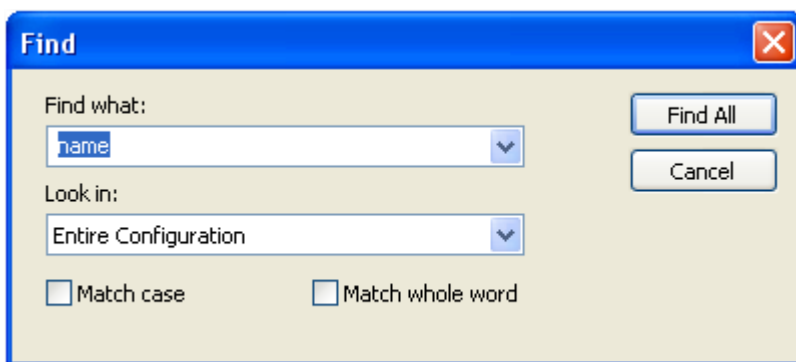


**Figure 3:** To display the Find dialog box from application menu.

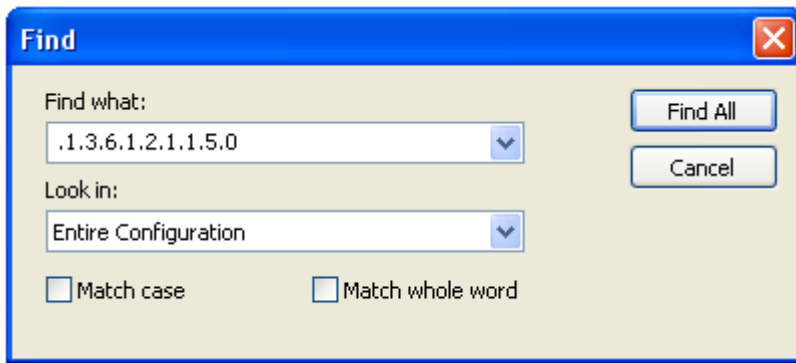


**Figure 4:** To display the Find dialog box from the application toolbar.

After it, you can see the Find dialog box as it is shown on the following figures (Figure 5 and Figure 6).



**Figure 5:** The Find dialog box.



**Figure 6:** The Find dialog box.

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.

#### **Find what**

Enter the text for which you intend to search. Select the drop-down list to display the last 10 items entered.

#### **Look in**

It allows you to search for in entire configuration or only in part of configuration. You can select a pre-defined scope from the drop-down list. These scopes include Entire Configuration, Data Items and Script Items.

#### **Match case**

When selected, the search operation looks only for occurrences that match the uppercase and lowercase characters you enter in the Find what box.

#### **Match whole word**

When selected, the search operation looks only for occurrences that match whole words.

## The Find Results and Review of search occurrences

All Find dialog box results are always displayed in the Find Results tab, which is included in the Output View. The Find Results provides a list of all occurrences of the specific text within the current configuration and then interactively review matches.

Note that: 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 make **double-click** on an item directly in Find Results. Then, the item details will be shown as in the figure below (Figure 7).

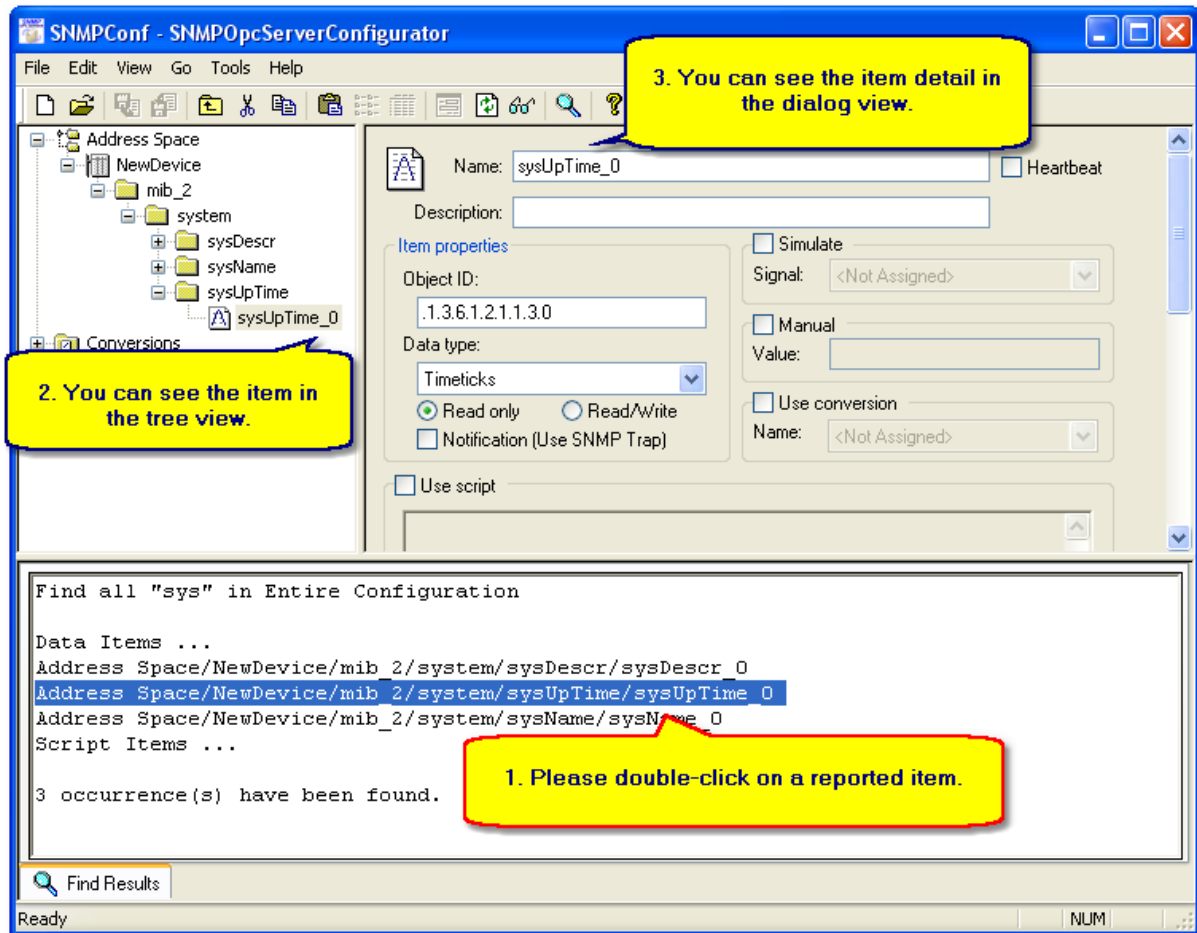


Figure 7: The Find Results tab and review of individual items in associated views (tree & dialog).

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