

PRTG SAP PLUGIN USER MANUAL

Abstract

The purpose of this document is to describe the prerequisites, to configure and to use the PRTG SAP Plugin application.

CORP-IT

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1 INTRODUCTION

1.1 About this document

This document is elaborated for the end user of the SAP Connector and PRTG SAP Plugin. It contains a detailed explanation of the software's usage and all the steps involved, starting with the establishment of a connection to the SAP instance server, all the way through generating the output parameters needed for running the SAP PRTG Plugin and creating custom sensors in PRTG.

1.2 About the software

The SAP Connector was developed in order to offer a visual aid for monitoring SAP systems using the PRTG SAP Plugin.

The tool can be used in order to connect to the desired SAP system through either the SAP XMI interface or SAP Control imported web methods. The retrieved monitoring structure is then represented in a tree view format. All the settings made by the user are translated into parameters, used by the PRTG SAP Plugin in order to monitor the desired SAP system values.

1.3 System requirements

The following software requirements must be met by the machine on which the application will run.

- Windows Server 2008 R2/Windows 7 or later
- .NET Framework 4.5 (if not present on the machine, the plugin installer will install the prerequisite)
- SAP .NET connector libraries (if not present on the machine, the plugin installer will install the prerequisite)

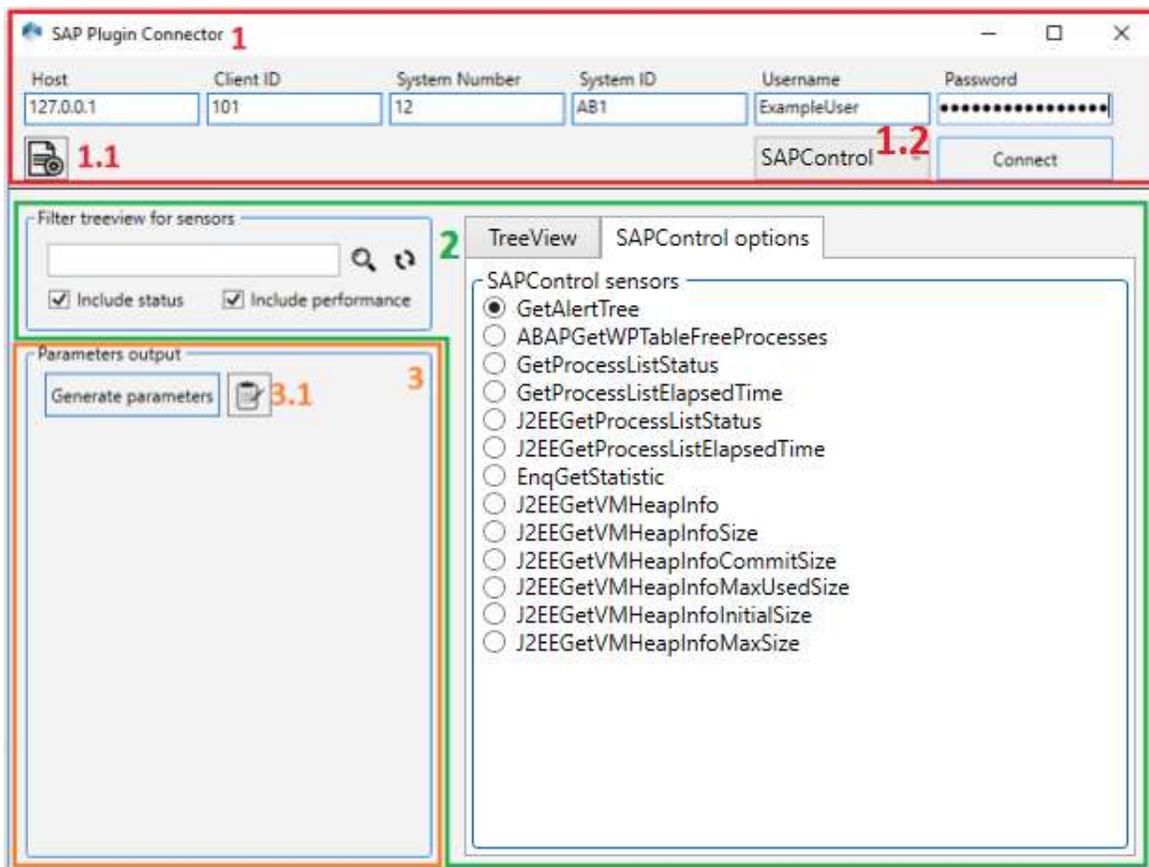
2 GENERAL OVERVIEW

The PRTG SAP Plugin consists of two separated applications, as follows:

1. **SAP Plugin** – Console application used on the server side (same server as PRTG application or the PRTG Remote Probe). This makes the communication between PRTG and SAP.
2. **SAP Plugin Connector** – Windows application used on the client side, by each user that wants to define the parameters needed by the PRTG Custom Sensor.

2.1 SAP Plugin Connector

1. SAP instance details
 - 1.1 – Import parameters button
 - 1.2 – Connection mode dropdown
2. SAP sensors tree and filters
3. Parameter output for PRTG SAP plugin
 - 3.1 – Copy to clipboard button



img. 1 – General Overview

3 USING THE SAP CONNECTOR

3.1 Connecting to the SAP instance

The first section of the application's user interface consists of SAP system details. The following details are needed:

- Host
- Client ID
- System Number
- System ID
- Username
- Password

Note: The sections that follow are disabled until a successful connection is established to an SAP instance with the given settings.

Note: After initiating a connection, if successful, population of the sensor structure treeview may take up to a couple of minutes, depending on the size of the monitoring structure of the targeted SAP system.

3.2 Selecting the needed sensors

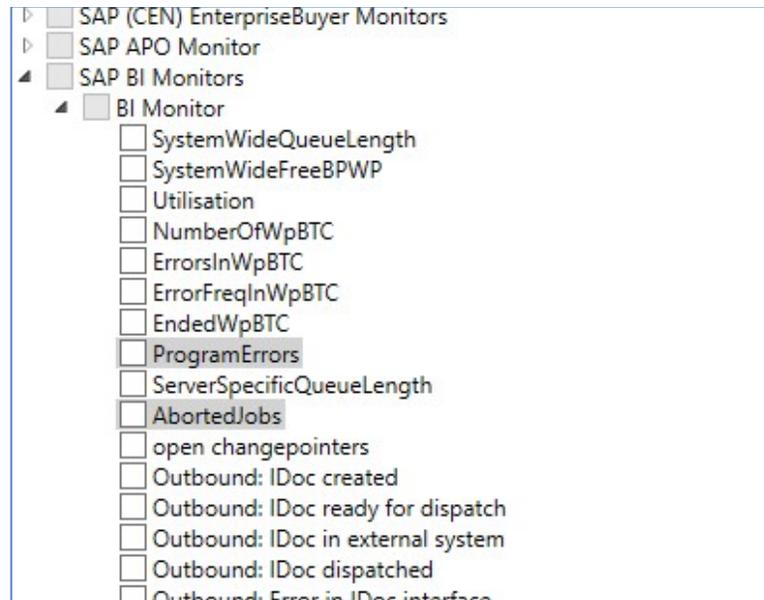
After a successful connection is made to the given SAP system, the tool retrieves the system's monitoring tree. The monitoring sets and monitors, together with the sensors that are contained in each of them are represented in a treeview structure.

3.2.1 Filtering

The treeview nodes can be filtered, with the following options:

Filter input: The treeview elements will be filtered to contain these keywords.

Include checkboxes: Only the selected sensor categories will be included in the treeview. In the SAP Plugin Connector, the STATUS attributes are marked with a Light Gray background, to easily identify them among the PERFORMANCE attributes.



img. 2 – Status attributes vs Performance attributes

Note: The search box can contain multiple items, separated by comma. Eg. „CPU, Memory”

Note: As PRTG sensors have a maximum recommendation of 40 channels, a limitation must be set regarding this issue. Although more channels are supported, ignoring this limit could lead to a poor user experience in PRTG.

3.3 Generating parameters

After selecting all the desired sensors, the final step consists of the parameter’s generation.

Note: Changes in the selected sensors or any of the settings are not reflected in the generated parameters until the „generate” button is clicked on.

Note: The generated text containing the parameters is copied without the formatting.

4 ADDING A PRTG SAP PLUGIN CUSTOM SENSOR

The PRTG Plugin for SAP is a tool that offers the possibility to create PRTG custom sensors for monitoring a SAP system. It does this by connecting to an SAP instance, calling RFC functions or webmethods(in case of SAPControl) in order to retrieve monitoring data and create custom XML sensors that are inserted into PRTG.

4.1 Adding a custom sensor in PRTG

In order to add a custom sensor in PRTG, the following steps are needed:

- 1) Right click the device on which you need an SAP sensor. From the context menu click on the “Add Sensor” option. (as presented in image. 2)



img. 3 - Add sensor option in the device context menu

- 2) In the Add Sensor page select the “Custom Sensors” category. In the “most used sensor types” section select the “EXE/Script Advanced” sensor type. (image 3)



img. 4 - Select the sensor type

- a) Add a name for your sensor
- b) Select the Plugin executable file from the “EXE/Script” list
- c) Add the parameters generated by the SAP Connector.

d) Click the “Continue” button

Add Sensor to Device example device (Step 2 of 2)

BASIC SENSOR SETTINGS

Sensor Name	SAP Work Processes
Parent Tags	C_OS_Win
Tags	xml.exe.sensor ✕
Priority	★★★★★

SENSOR SETTINGS

Important: The EXE file has to run on the computer where the parent probe is installed, not on the parent device. The working directory for “exe” files is the probe directory, “vbs,ps1” or other script files may use different working directories.

EXE/Script	SAPPlugin.exe
Parameters	-HOST:DRDDEVBN04 -SYS:00 -USER:%linuxuser -PWD:%linuxpassword -CLIENT:100 -MSET
Environment	<input checked="" type="radio"/> Default Environment <input type="radio"/> Set placeholders as environment values
Security Context	<input checked="" type="radio"/> Use security context of probe service <input type="radio"/> Use Windows credentials of parent device

Continue > Cancel

img. 5 - Final steps

3) You will be redirected to the device page, where you can find the newly created sensor (image. 5)



Pos	Sensor	Status
1.	SAP Work Processes (paused)	Paused (paused)
2.	SAP Application Error (paused)	Paused (paused)
3.	SAP User Statistics (paused)	Paused (paused)

img. 6 - Redirect to device page

5 MENTIONS

5.1 Recommendations

- The PRTG Custom sensor does not support more than 50 channels officially. Paessler recommends a maximum number of 40 channels per sensor. Although it is possible to have more channels in a sensor, the user experience above this limit is very poor.
- Paessler recommends Windows 2012 R2 on the monitoring system for this kind of sensor's optimal performance.

5.2 Limitations

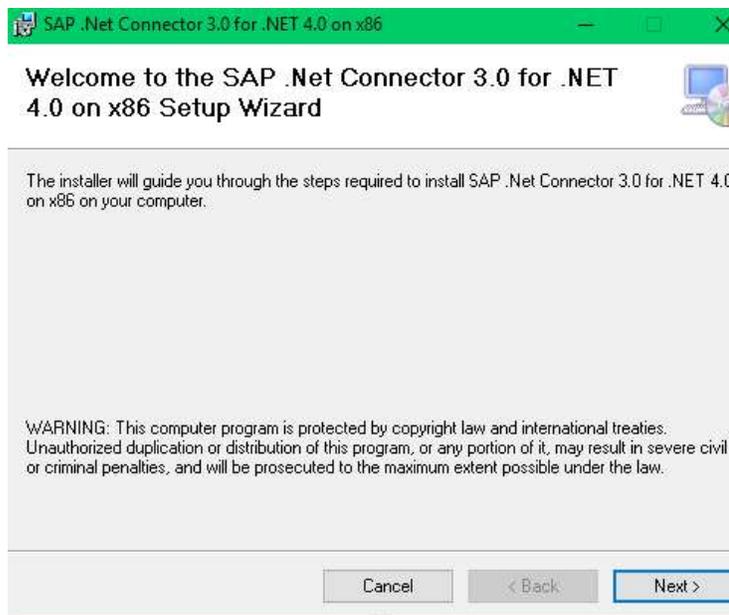
- The PRTG Custom Sensor Channel can hold only values which are numeric (integers or floats). This means that a custom sensor can hold multiple values (multiple channels) only for the SAP Performance Attributes values.
- Because the SAP Status Attribute returns a message (string), the STATUS attributes and PERFORMANCE attributes cannot be combined into the same PRTG sensor.
- A PRTG custom sensor can hold only one SAP Status Attribute. For each SAP Status Attribute that needs to be monitored, will result a PRTG Custom Sensor with one channel only.
- The executable (**SAPPlugin.exe**) file must be stored on the system of the probe the sensor is created on: If used on a remote probe, the file must be stored on the system running the remote probe. In a cluster setup, please install the plugin on every cluster node.

6 INSTALLING THIRD PARTY LIBRARIES

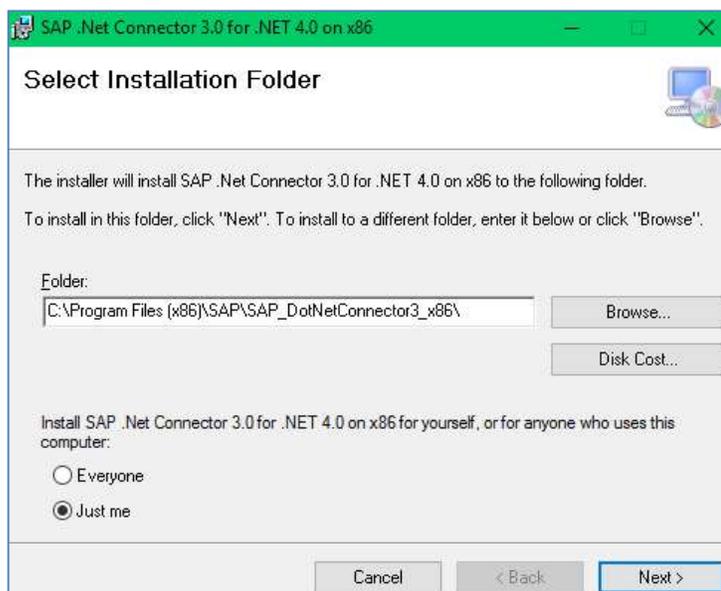
6.1 SAP .NET Connector

When using the SAP Plugin installer, the connector libraries will be automatically detected and selected for installation of the libraries to the Global Assembly Cache. When the connector installer opens, perform the following steps:

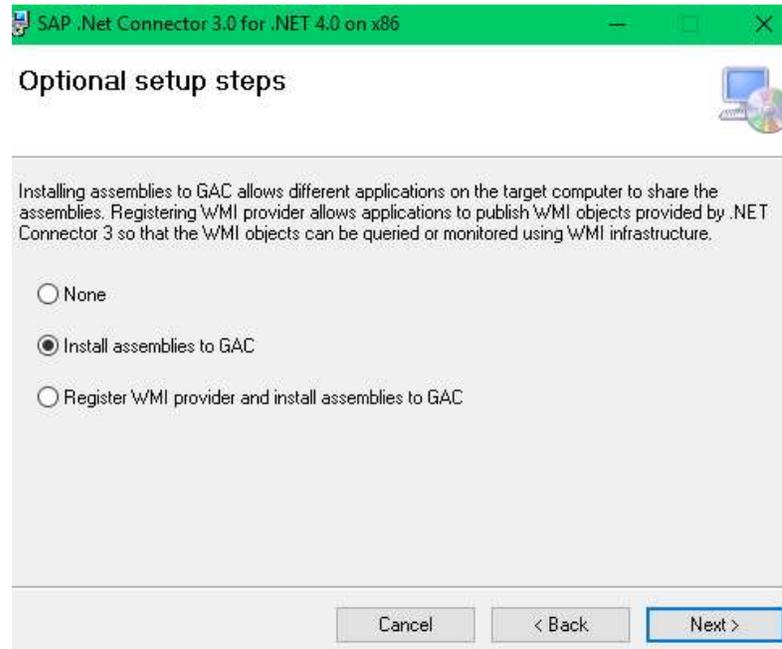
1. On the first form, click Next



2. Select your desired path where you want to install the SAP .NET Connector libraries and click Next.



3. Make sure that the **Install assemblies to GAC** option is selected and click Next



Afterwards click Next until the libraries will be installed on the machine.