

Description: Guide to using SNMP traps in GENESIS32
OS Requirement: Win 2000, XP Pro, Server 2003, Vista, Server 2008, Windows 7
General Requirement: installation of GENESIS32 v9.x and windows SNMP services

Introduction

SNMP Traps are similar to alarms, they are automatically sent through SNMP messages by a device. These messages can say that the "Printer is low" as well as "The machine has been reset". Thanks to the translation of the SNMP connector, there is no practical difference between traps and OPC alarm management within the GENESIS32 suite. ICONICS SNMP Trap Server is exposed as standard A&E Server where user can subscribe to it and display the messages in AlarmWorX32 Viewer like standard alarms.

NOTE: If you want to send SNMP Traps from your device, you have to pre-configure the device itself first. For more details on how to setup the SNMP Traps on your device, please refer to the documentation provided by the vendor.

SNMP Service Pre-requisites

Before you start with SNMP Traps configuration, you should install and configure SNMP Services in your OS. For more details, please refer to the application note called *SNMP Connector - Setting up Windows to support SNMP Connectivity*. Notice that SNMP Traps service should be disabled.

SNMP Traps Configuration

Before the user subscribes to the ICONICS SNMP Trap Server, he needs to pre-configure the traps in SNMP Configurator. Follow these steps below to configure the traps correctly:

1. Start SNMP Configurator from Start → Programs → ICONICS Tools → SNMP Configurator
2. In the right-pane navigate under Traps
3. Right-click on Traps and select New Traps
4. Name it and fill up the "Full OID", which you know from the device. If you don't know the Full OID, you can check it under the MIBs Items folder, which contains the OID structure.
5. Select an appropriate Event Type and click Apply:
 - Condition Event is an alarm
 - Simple Event is a simple message
 - Tracking Event is a message that is based on user name and password

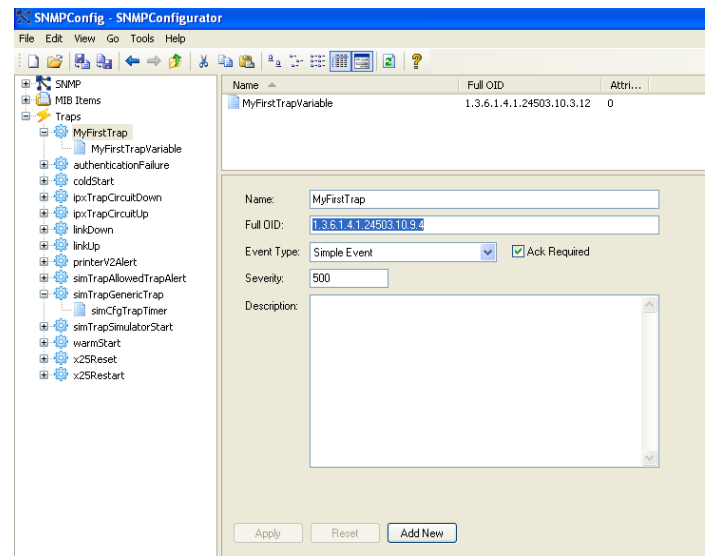


Figure 1 - SNMP Traps in SNMP Configurator

6. Create new SNMP Trap Variable by right-clicking on your SNMP Trap you just created.
7. Name it and select Full OID for your SNMP Trap Variable.
8. Use the dropdown menu to specify the Attribute for your SNMP Trap Variable. We will later configure this attribute in the SNMP Trap Server subscription.

NOTE: If you don't know exactly the Full OID for your device, you can consult the SNMP device configuration/documentation. Please notice that Full OID has to be unique. Therefore, when you copy, for example, the Generic Trap OID (), which is part of the default configuration you have to rename it.

9. Specify the severity, which can be used for message filtering in AlarmWorX32 Viewer. Check the box "Ack Required" if you want to acknowledge the Trap and click on Apply when you are done with configuring the SNMP Trap Variable.

SNMP Traps in GraphWorX32

1. Launch GraphWorX32 by going to Start → Programs → ICONICS GENESIS32 → GraphWorX32 → GraphWorX32
2. Insert an alarm viewer into the display by clicking on the "ICONICS AWXView32" icon.
3. Double-click on the ActiveX to bring up the properties.
4. Click on the Subscription tab and delete all the subscriptions that are there.

NOTE: You can also enable AlarmWorX32 Viewer filters if you don't want to delete other subscriptions. See the alarm viewer help file for more detail.

5. Add a new subscription for *ICONICS.SNMPTrapServer.1*, which can be found on your local or remote computer and confirm the selection by clicking OK.

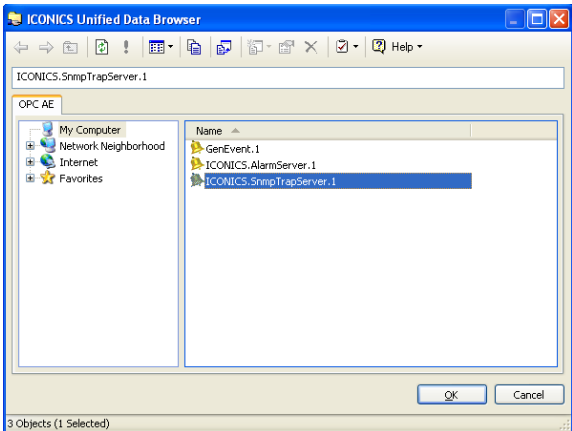


Figure 2 - ICONICS SNMP Trap Server Subscription

6. You can rename the subscription you just created for easier recognition.
7. Click on OK to save and exit out of the alarm viewer properties.
8. Go into runtime. You should see a similar output to the one below which indicates that you received SNMP Trap (Condition Event) from your device.

Time / Date	Description	Tag	Value	Priority	Type	Quality
4:51:41 PM 11/23/20	This is the simulated trap. It is sent or not, depending on the	simTrapGenericTrap	2000	500	EnterpriseSpecific	Good - Non-Specific
4:51:14 PM 11/23/20	This is the simulated trap. It is sent or not, depending on the	simTrapGenericTrap	500			
4:51:12 PM 11/23/20	This is the simulated trap. It is sent or not, depending on the	simTrapGenericTrap	500			
4:51:10 PM 11/23/20	This is the simulated trap. It is sent or not, depending on the	simTrapGenericTrap	500			
4:51:10 PM 11/23/20	This is the simulated trap. It is sent or not, depending on the	simTrapGenericTrap	500			
4:51:08 PM 11/23/20	This is the simulated trap. It is sent or not, depending on the	simTrapGenericTrap	500			
4:51:08 PM 11/23/20	This is the simulated trap. It is sent or not, depending on the	simTrapGenericTrap	500			
4:51:06 PM 11/23/20	This is the simulated trap. It is sent or not, depending on the	simTrapGenericTrap	500			
4:51:06 PM 11/23/20	This is the simulated trap. It is sent or not, depending on the	simTrapGenericTrap	500			
4:51:04 PM 11/23/20	This is the simulated trap. It is sent or not, depending on the	simTrapGenericTrap	500			
4:51:04 PM 11/23/20	This is the simulated trap. It is sent or not, depending on the	simTrapGenericTrap	500			
4:51:02 PM 11/23/20	This is the simulated trap. It is sent or not, depending on the	simTrapGenericTrap	500			
4:51:02 PM 11/23/20	This is the simulated trap. It is sent or not, depending on the	simTrapGenericTrap	500			
4:51:00 PM 11/23/20	This is the simulated trap. It is sent or not, depending on the	simTrapGenericTrap	500			
4:50:59 PM 11/23/20	This is the simulated trap. It is sent or not, depending on the	simTrapGenericTrap	500			
4:50:58 PM 11/23/20	This is the simulated trap. It is sent or not, depending on the	simTrapGenericTrap	500			
4:50:56 PM 11/23/20	This is the simulated trap. It is sent or not, depending on the	simTrapGenericTrap	500			
4:50:55 PM 11/23/20	This is the simulated trap. It is sent or not, depending on the	simTrapGenericTrap	500			
4:50:54 PM 11/23/20	This is the simulated trap. It is sent or not, depending on the	simTrapGenericTrap	500			
4:50:53 PM 11/23/20	This is the simulated trap. It is sent or not, depending on the	simTrapGenericTrap	500			
4:50:51 PM 11/23/20	This is the simulated trap. It is sent or not, depending on the	simTrapGenericTrap	500			
4:50:51 PM 11/23/20	This is the simulated trap. It is sent or not, depending on the	simTrapGenericTrap	500			
4:50:49 PM 11/23/20	This is the simulated trap. It is sent or not, depending on the	simTrapGenericTrap	500			
4:50:47 PM 11/23/20	This is the simulated trap. It is sent or not, depending on the	simTrapGenericTrap	500			
4:50:47 PM 11/23/20	This is the simulated trap. It is sent or not, depending on the	simTrapGenericTrap	500			
4:50:45 PM 11/23/20	This is the simulated trap. It is sent or not, depending on the	simTrapGenericTrap	500			

Figure 3 - SNMP Traps in AlarmWorX32 Viewer