

Advantech AE Technical Share Document

Date	2018/11/09	SR#	1-3518008183
Category	■FAQ □SOP	Related OS	Windows, Linux
Abstract	How to send, set, and receive trap from SNMP subagent client from ECU-4784?		
Keyword	ECU, SNMP, subagent, send, set, trap		
Related Product	ECU-4784		

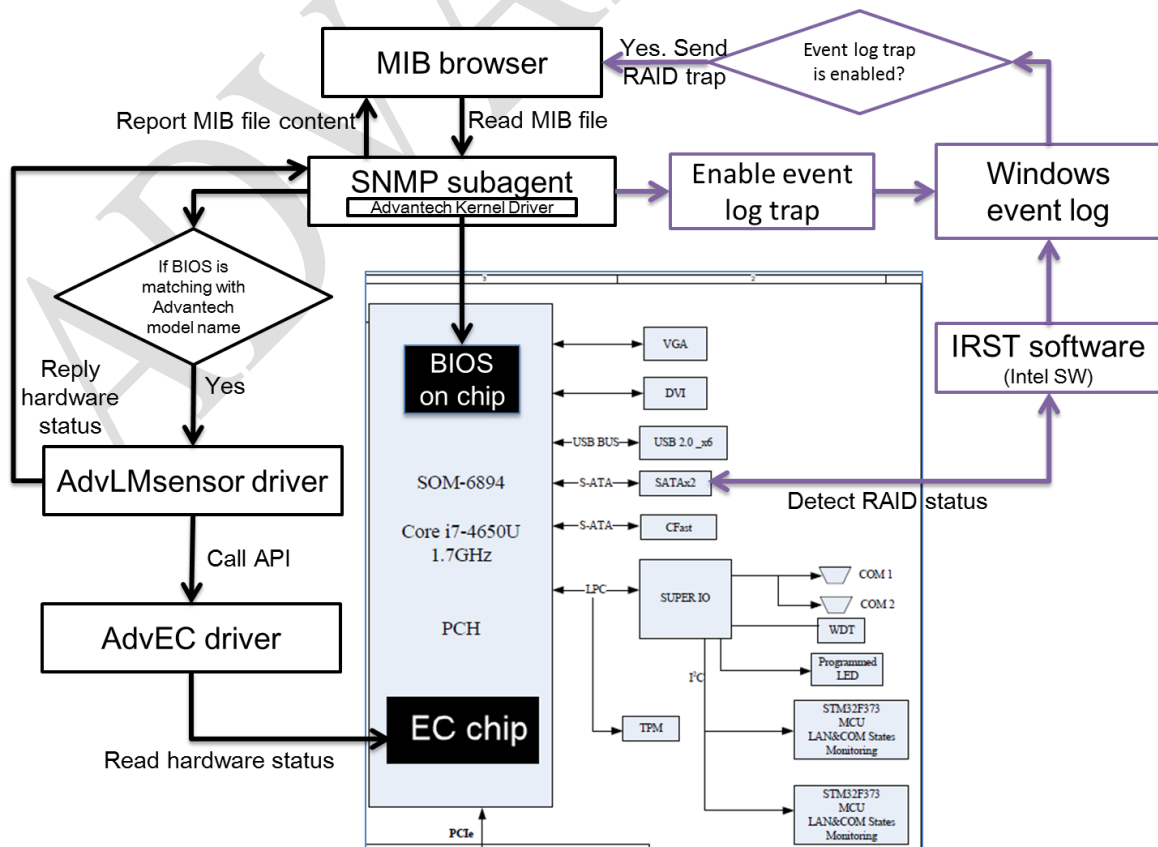
■ Problem Description:

This document shares the flow chart and the requirements of SNMP subagent.

■ Brief Solution:

For the SNMP, there are 3 requirements, and 1 item depends on the application:

1. EC hardware
2. AdvEC driver
3. AdvLmsensor driver
4. IRST (Intel® Rapid Storage Technology) application, only if a user made RAID setting, then this is a must.



- ※ No matter which OS that a user is using, Windows or Linux, there are corresponding driver can be downloaded on support portal.

Windows:

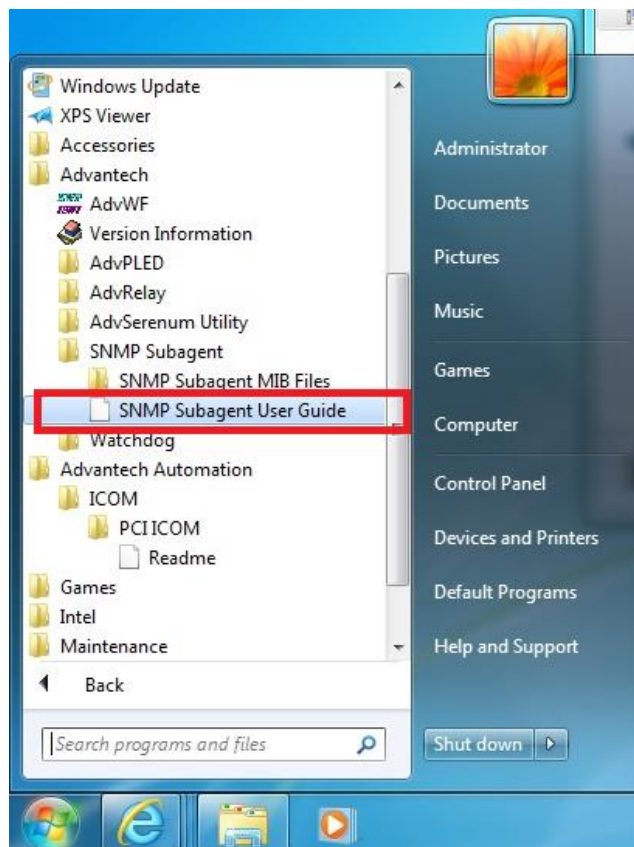
http://support.advantech.com/Support/DownloadSRDetail_New.aspx?SR_ID=1-1B9DXW7&Doc_Source=Download

Linux:

http://support.advantech.com/Support/DownloadSRDetail_New.aspx?SR_ID=1-1B9CYQ3&Doc_Source=Download

- ※ EC hardware is installed in ECU-4784 and UNO-4000 as a standard component.
- ※ EC driver provides API functions for LMsensor driver.
- ※ LMsensor reports hardware status to the SNMP subagent.
- ※ SNMP subagent reports MIB file contents to the MIB browser "iff" the model name in the BIOS or SMBIOS is matching with the Advantech style.
- ※ **If a user wants to utilize the SNMP subagent for monitoring RAID status. Need to install the IRST for the OS version on Intel support portal.** You can consider the IRST application is a window or a portal of SNMP trap event. And the SNMP service can be found only if a user is using ECU embedded WSP Windows. This service is not supported by standard Windows OS.

1. The manual is in attached file or under the folder after install SNMP driver.

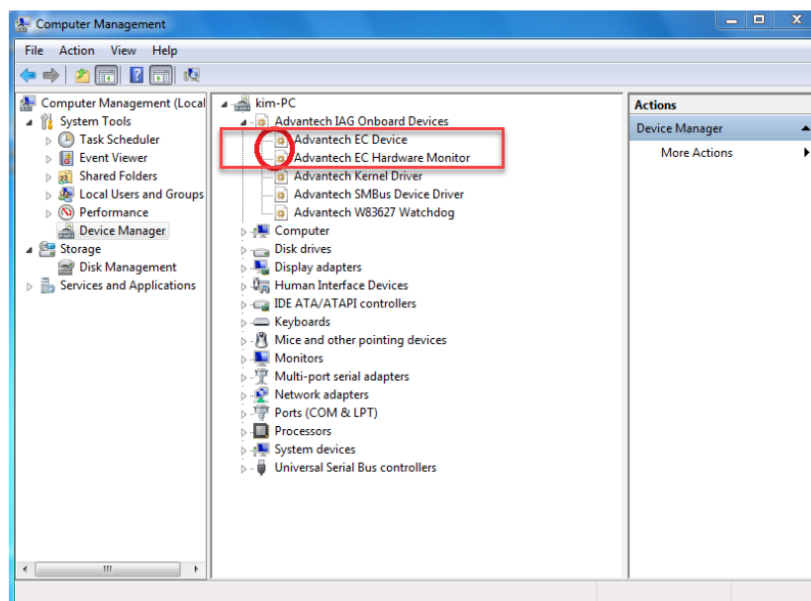


2. The pre-requirement driver is list in the manual.

To install the Advantech Lmsensor Driver on ECU

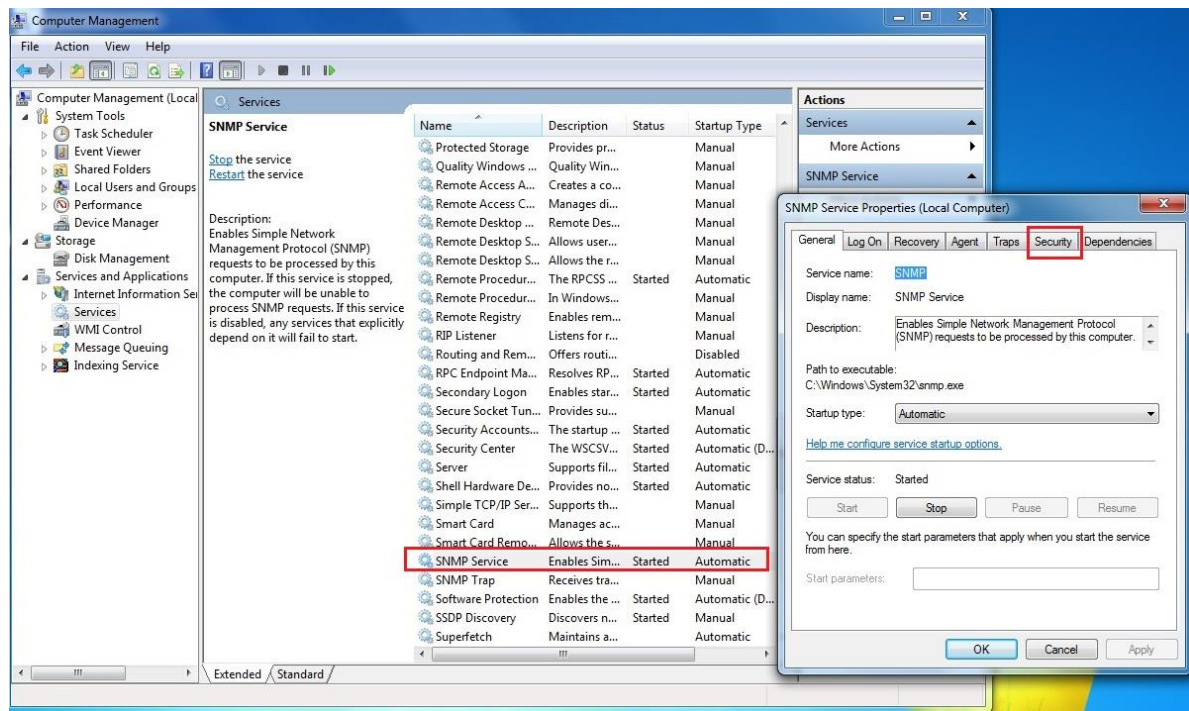
1. Run the AdvEC_V1.04.003.exe first.
2. Run the AdvLmsensor_EC_V1.14.002.exe.

You can find the **Advantech EC Device** and the **Advantech EC Hardware Monitor** under the **Advantech IAG Onboard Devices** in the Windows Device Manager.



3. In manual P.34 panel can be found in “service”.

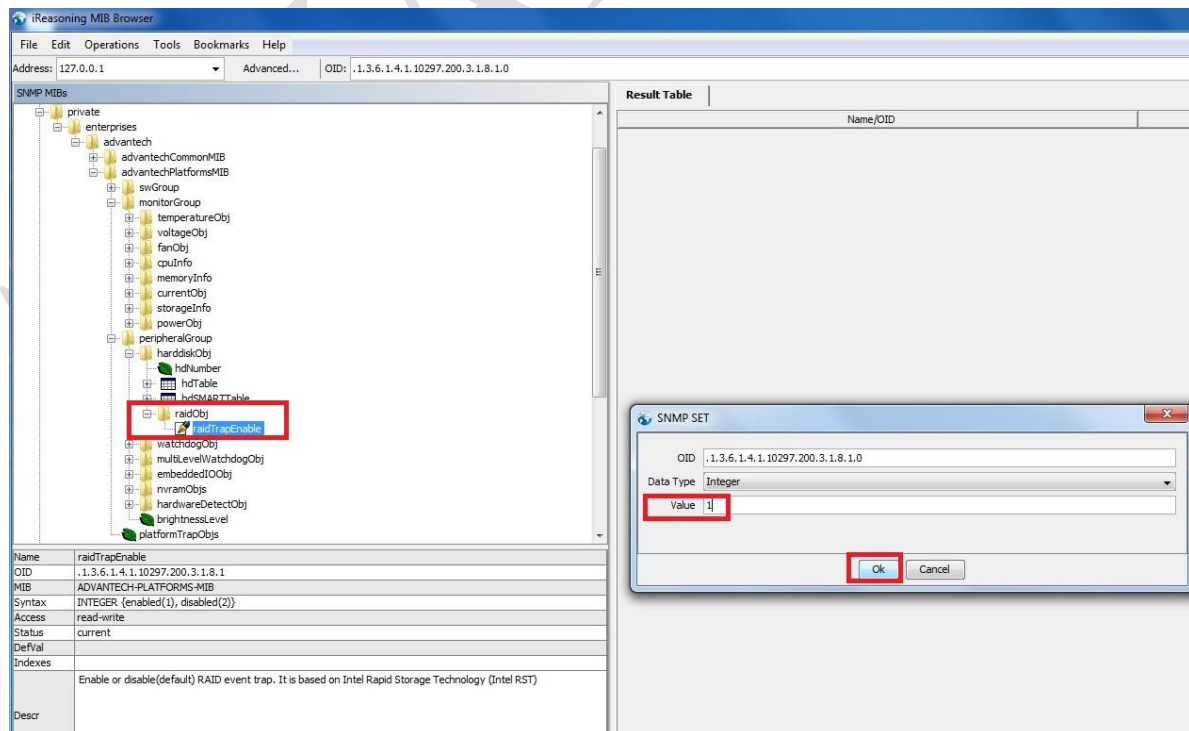
This SNMP service can be found only if a user is using ECU embedded WSP Windows.



4. Enable trap function.

Value: 0; //disable

Value:1; //enable



5. Set up the target IP list.

The screenshot shows the iReasoning MIB Browser interface. The left pane displays a tree of MIBs under the 'private' branch, with 'snmpTrapSrvTable' selected. The right pane shows a table titled '127.0.0.1 - snmpTrapSrvTable' with 12 rows. The first and last rows are highlighted with red boxes.

Index	snmpTrapSrvIP	snmpTrapSrvPort	snmpTrapSrvAuth	snmpTrapSrvComm	snmpTrapVersion	Index Value
1	127.0.0.1	162	enabled	public	v1	1
2	172.16.123.15	162	enabled	public	v1	2
3	10.0.0.12	162	enabled	public	v1	3
4	0.0.0.0	162	enabled	public	v1	4
5	0.0.0.0	162	enabled	public	v1	5
6	0.0.0.0	162	enabled	public	v1	6
7	0.0.0.0	162	enabled	public	v1	7
8	0.0.0.0	162	enabled	public	v1	8
9	0.0.0.0	162	enabled	public	v1	9
10	0.0.0.0	162	enabled	public	v1	10
11	0.0.0.0	162	enabled	public	v1	11
12	127.0.0.1	162	enabled	public	v1	12

6. Track the event from receiver.

➔ If remove USB.

The screenshot shows the iReasoning MIB Browser interface. The left pane displays a tree of MIBs under 'advantechPlatformMIB'. The right pane shows a 'Trap Receiver' window with a table of received traps. The selected trap is a 'trapRemovableDeviceEvent' from source '10.0.0.100' at time '2018-07-27 16:32:45'. The 'Variable Bindings' section shows the following details:

Name	Value
.iso.org.dod.internet.private.enterprises.advantech.advantechPlatformMIB.peripheralGroup.hardwareDetectObj.hwdTable.hwdEntry.hwdNumber	[Integer] usb-rawdevice (1)
.iso.org.dod.internet.private.enterprises.advantech.advantechPlatformMIB.peripheralGroup.hardwareDetectObj.hwdTable.hwdEntry.hwdName	[Integer] remove (2)
.iso.org.dod.internet.private.enterprises.advantech.advantechPlatformMIB.peripheralGroup.hardwareDetectObj.hwdTable.hwdEntry.hwdDescription	[OctetString] USB Mass Storage Device

The description of the trap is: "The trap will be sent while there is a device insertion/removal event."

➔ If RAID status changed.

The screenshot shows the iReasoning MIB Browser interface. The left pane displays a tree of MIBs under 'advantechPlatformMIB'. The right pane shows a 'Trap Receiver' window with a table of received traps. The selected trap is a 'trapRemovableDeviceEvent' from source '10.0.0.100' at time '2018-07-27 16:31:44'. The 'Variable Bindings' section shows the following details:

Name	Value
.1.3.6.1.4.1.10297.200.2.1.2.1.3.1.16.73.65.83.116.111.114.68.97.116.97.77.103.114.83.118.99.1	[OctetString] Volume Volume1: Rebuilding complete.
.1.3.6.1.4.1.10297.200.2.1.2.1.3.1.16.73.65.83.116.111.114.68.97.116.97.77.103.114.83.118.99.2	[OctetString] Unknown
.1.3.6.1.4.1.10297.200.2.1.2.1.3.1.16.73.65.83.116.111.114.68.97.116.97.77.103.114.83.118.99.3	[OctetString] ECU4784
.1.3.6.1.4.1.10297.200.2.1.2.1.3.1.16.73.65.83.116.111.114.68.97.116.97.77.103.114.83.118.99.4	[OctetString] 4
.1.3.6.1.4.1.10297.200.2.1.2.1.3.1.16.73.65.83.116.111.114.68.97.116.97.77.103.114.83.118.99.5	[OctetString] 0

- This driver supports event ID: 7202, 7206, 7001, 7207, 7225.

The event ID means the event which is logged in “Windows event log”.

