

PATHTRAK APPLICATION NOTE
HCU SNMP INTEGRATION PROCEDURE



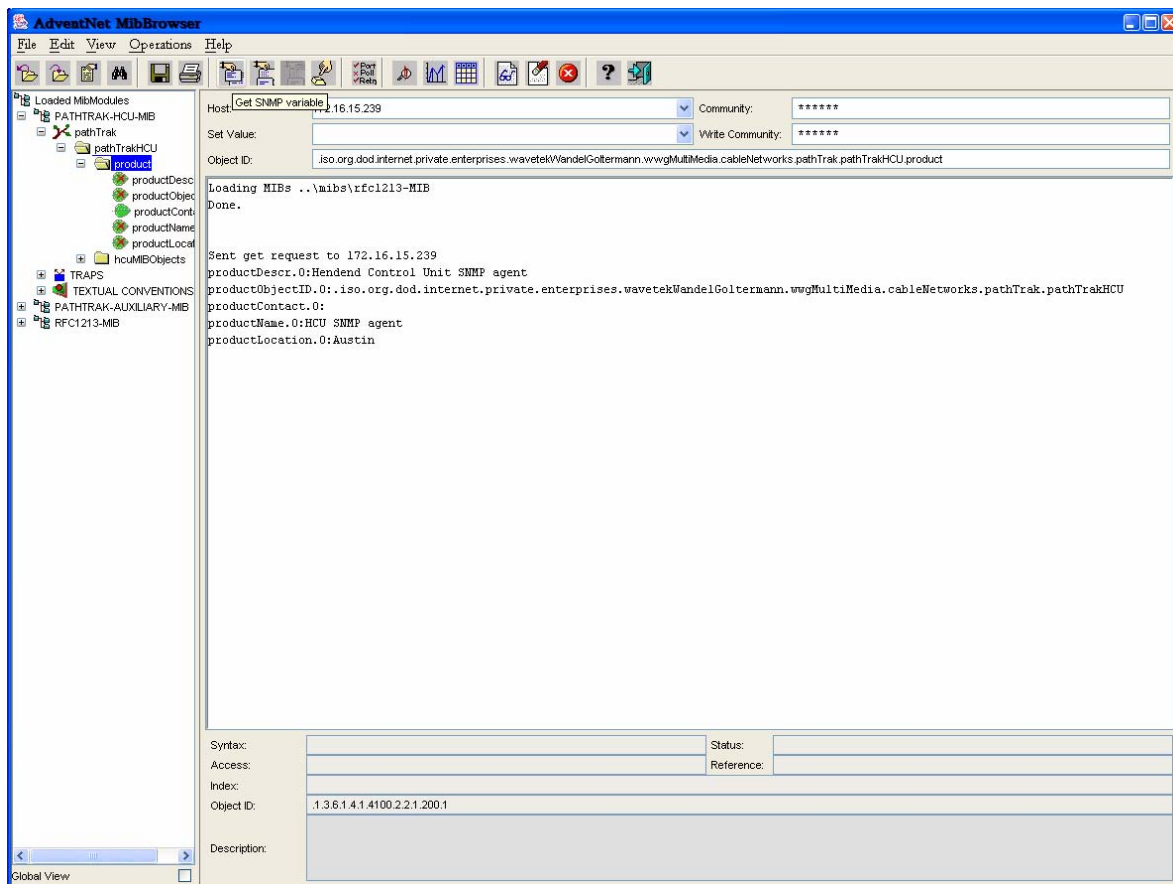
AUGUST 2005

PATHTRAK HCU SNMP INTEGRATION PROCEDURE

These instructions are for installing the HCU MIBs for support for sending traps to a SNMP alarm manager. The instructions are specifically written around a MIB Browser called AdventNet. However, any other MIB browser can be used while applying the same principles and steps detailed in this application note. For any additional assistance, please contact The Acterna CATV TAC at catvsupport@acterna.com or call the Technical Assistance Center at 1-317-614-8350.

- 1) Open AdventNet application or other similar MIB browser. The window in Figure 1 will appear if you use AdventNet.

Figure 1 - AdventNet Main Window



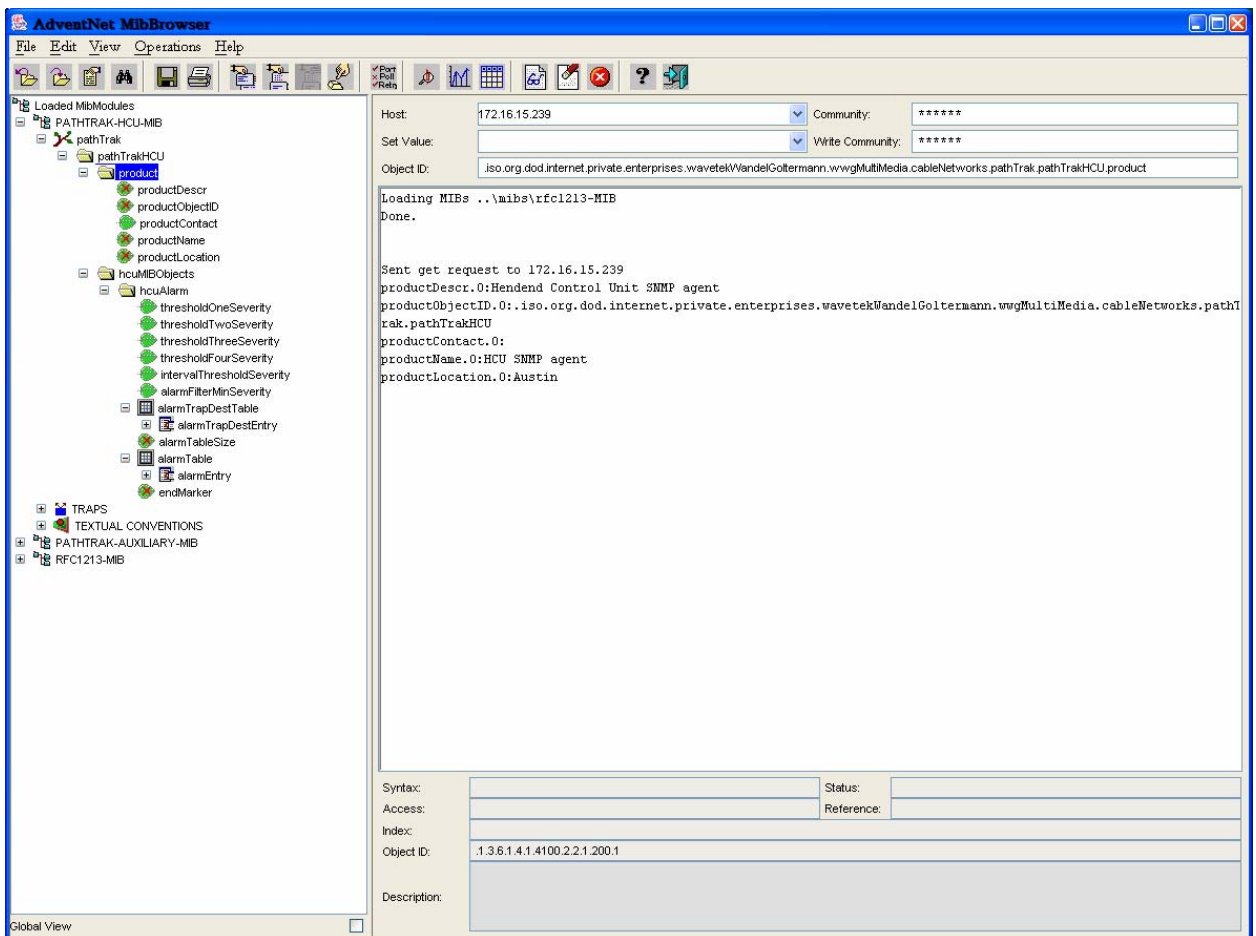
- 2) Load the two PathTrak MIBs by using the file\load MIB command. The two MIBS to be loaded are:
 - PathTrak HCU MIB
 - PathTrak Auxiliary MIB

If you do not have these MIBs, please contact The Acterna CATV TAC at catvsupport@acterna.com or call the Technical Assistance Center at 1-317-614-8350 in order to obtain a copy of the corresponding MIBs

- 3) In the host section, enter in the host information. This is the IP address of the HCU that you are configuring.
- 4) Enter in the community and write community string. The community string for both is - public (all lowercase).
- 5) Using the tree view in the left pane, browse the PathTrak HCU MIB to the following location (this path is displayed in Figure 2):
 - PATHTRAK-HCU-MIB\PathTrak\PathTrak HCU\Product
 - Choose the get SNMP variable icon on toolbar. This will load the SNMP variables.

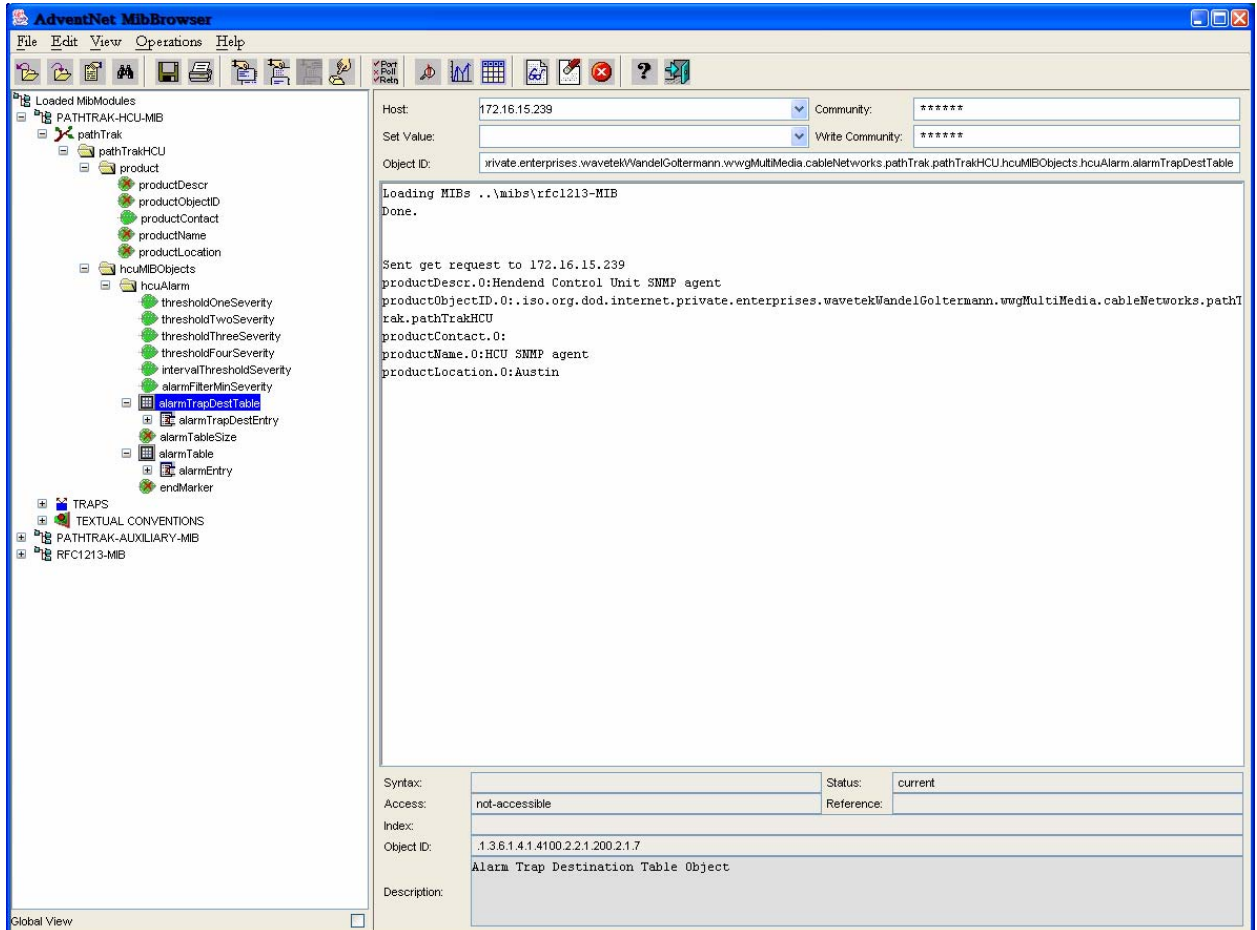
 - Get SNMP Variable Icon

Figure 2 - AdventNet Main Window



- 6) Using the tree view in the left pane, browse the PathTrak HCU MIB to the following location (this path is displayed in Figure 3):
- Pathtrak-HCU-MIB\PathTrak\PathTrakHCU\hcuMIBObjects\
hcuAlarm\alarmTrapDestTable

Figure 3 - AdventNet Main Window



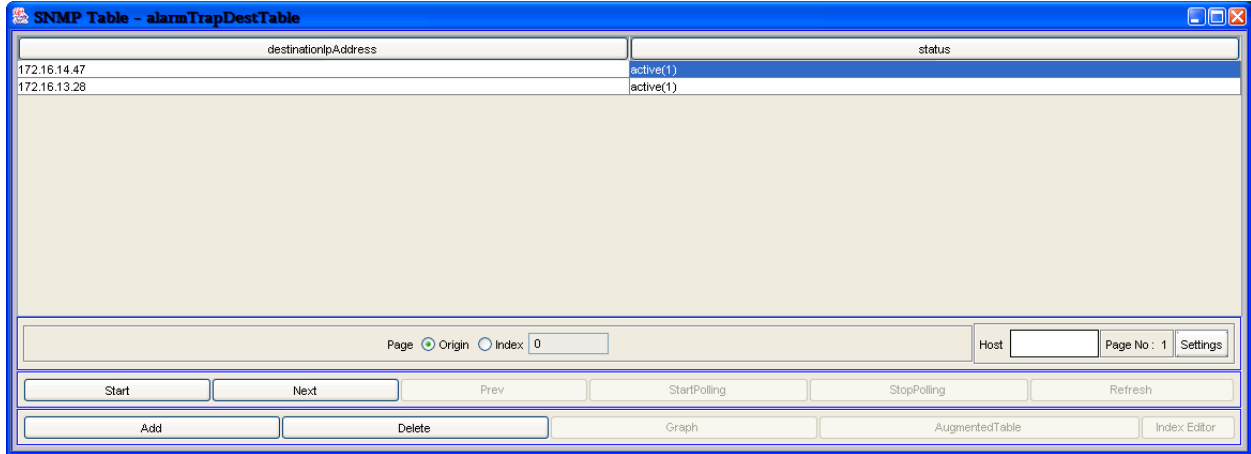
- Click the view SNMP data table icon in the toolbar



- View SNMP data table icon

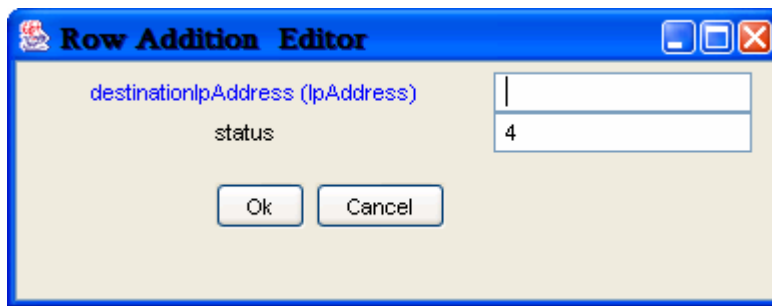
- This will open the window in Figure 4. Click start in this window (there will be no visible notification from clicking the start button, which is normal).

Figure 4 – SNMP Table Window



- Click Add in the same window above and the window in Figure 5 is displayed (This will tell the system where to send traps to).

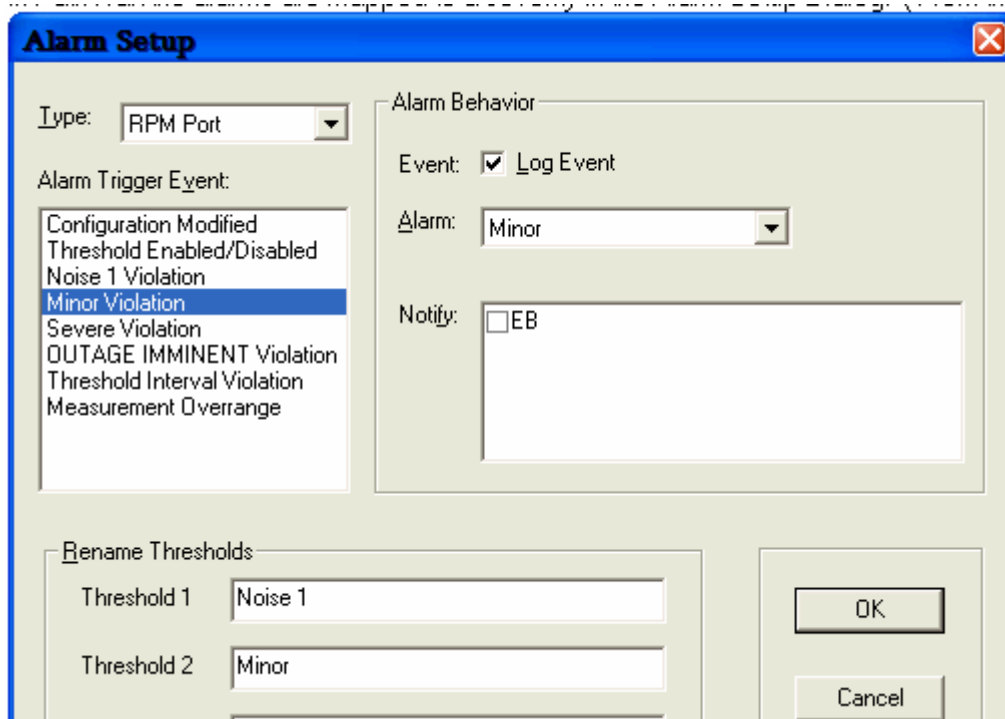
Figure 5 -Row Addition Editor Window



- In the destinationIpAddress field, enter the NMS server or the SNMP alarm manager IP address
- In the status field, enter in 4

- 7) When accessing alarms directly from the HCU, it is also necessary to map the each threshold (from 1 to 4) to the severity as it is mapped in the PathTrak server. In the PathTrak server these are system wide settings and will apply to all HCUs for the corresponding PathTrak server. From the PathTrak client access the Alarm Setup window, select Tools -> alarm setup. This displays the screen in figure 6.
- In the alarm trigger event list ensure that for each one selected that the alarm severity is accurate in the alarm drop down box
 - If you have custom named the thresholds, then you must indicate which one is a minor, major etc.

Figure 6 - PathTrak Alarm Setup Window



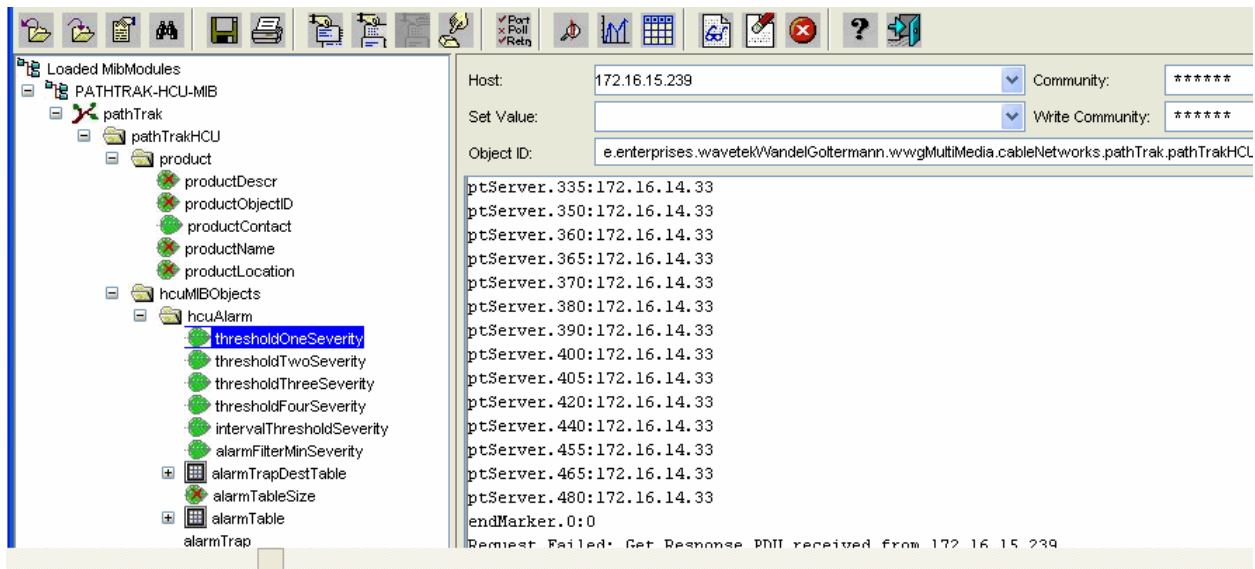
- 8) Using the AdventNet MIB browser, it is necessary to map the severity by performing a set on the appropriate threshold with the desired alarm severity level.
- 9) Open the tree to the following location:
 - Pathtrak-HCU-MIB\PathTrak\PathTrakHCU\hcuMIBObjects\ hcuAlarm
 - In the hcuAlarm folder there will be a setting for the four thresholds – ThresholdOneSeverity, ThresholdTwoSeverity, ThresholdThreeSeverity, ThresholdFourSeverity
 - Select each one individually, make sure the right host ID is entered as well as the community and write community strings. For each one, you must set the value in the Set Value box. For example, if Threshold one is a warning, then select ThresholdOneSeverity and enter in one of the corresponding numbers for that threshold in the set value box and hit the set value icon:

- 2 = Warning
- 3 = Minor
- 4 = Major
- 5 = Critical



- Set Value icon

Figure 7 – AdventNet Main Window



- 10) It is also necessary to tell the system what severity level of alarms will be sent to the NMS system. This is done using the minimum severity level setting.
- Pathtrak-HCU-MIB\PathTrak\PathTrakHCU\hcuMIBObjects\ hcuAlarm and select alarmFilterMinSeverity
 - Follow the same process as explained in step 9 (enter the number in the set value box and click the set value icon) but you only set the value once.
 - The HCU will only send alarms with a severity level at or greater than the severity level specified. For example, if you enter in 3 for the set value, then only minor, major and critical alarms will be sent.
- 11) Repeat this entire process for each HCU that you wish to send traps to your SNMP alarm manager.

Note: For assistance with configuration of your SNMP alarm manager or NMS system please contact your local national or system representative.