

Technical Bulletin

Using the Prisma II SNMP interface to communicate with TNCS

Overview

This addendum applies to Scientific-Atlanta customers who use TNCS to monitor the Prisma II Intelligent Communication Interface Module (ICIM) via the SNMP interface.

Introduction

This addendum is a supplement of the TNCS Software User's Guide. (P/N 730201)

This addendum provides TNCS administrators with the following information:

1. Requirements for monitoring Prisma II via the ICIM's SNMP interface.
2. How to connect to the Prisma II ICIM.
3. How to add the Prisma II SNMP devtypes to the TNCS devlist.
4. TNCS graphics with the Prisma II SNMP devtypes.

Requirements:

1. TNCS Version 1.6.1 Service Pack 5 or greater with SNMP Manager License
2. Prisma II ICIM Revision 13 or greater
3. IP connectivity from the TNCS server to the Prisma IP chassis

Setup of Prisma II ICIM

1. Set the IP address, Subnet mask and the Gateway for each ICIM module to be monitored. **Important: The new IP parameters do not take effect until the ICIM is restarted.** . Refer to the ICIM document (P/N 4002373) for details of setting up the IP addresses and restarting the ICIM
2. Note the chassis addresses on all chassis in the ICIM domain.
3. Connect the ICIM's Ethernet port to the IP network with a Cat5 Cable.

Setup of TNCS

There are 2 methods to add Prisma II SNMP devices to TNCS.

A. Editing the Devlist

1. Open the TNCS file devlist.txt with a text editor. It is recommended that a backup copy of the devlist.txt file be made anytime changes are being made to the file.
**Note: The devlist.txt file is normally found in the following directory:
C:\Program Files\TNCS 1.6.1**
2. Enter the groups and devices into the devlist.txt file. Below is a sample devlist for Prisma II SNMP devtypes. **Note: There are only two Devtypes for Prisma II SNMP. (p2snmpicim which is used for the ICIM module and p2snmpmod – which is used for all other Prisma II modules.)**

```

group racksnmp graphic="rack 40" desc=snmp address=1000
group prisma2 port=none address=122323 graphic="chassis prisma2" racverpos=30
p2snmpicim icim2x address="172.18.184.175" port=ethernet
p2snmpmod mod3x address="172.18.184.175" subslo=1 slonum=54
p2snmpmod mod5x address="172.18.184.175" subslo=5 slonum=54
p2snmpmod mod6x address="172.18.184.175" subslo=6 slonum=54
p2snmpmod mod7x address="172.18.184.175" subslo=7 slonum=54
p2snmpmod mod8x address="172.18.184.175" subslo=8 slonum=54
p2snmpmod mod9x address="172.18.184.175" subslo=9 slonum=54
p2snmpmod mod10x address="172.18.184.175" subslo=10 slonum=54
p2snmpmod mod11x address="172.18.184.175" subslo=11 slonum=54
p2snmpmod mod12x address="172.18.184.175" subslo=12 slonum=54
p2snmpmod mod13x address="172.18.184.175" subslo=13 slonum=54
p2snmpmod mod14x address="172.18.184.175" subslo=14 slonum=54
group prisma2hd port=none address=13323 graphic="chassis prisma2hd" racverpos=20
p2snmpmod ps1 address="172.18.184.175" subslo=1 slonum=1
p2snmpmod mod5x address="172.18.184.175" subslo=5 slonum=1
p2snmpmod mod6x address="172.18.184.175" subslo=6 slonum=1
p2snmpmod mod7x address="172.18.184.175" subslo=7 slonum=1
p2snmpmod mod8x address="172.18.184.175" subslo=8 slonum=1
p2snmpmod mod9x address="172.18.184.175" subslo=9 slonum=1
p2snmpmod mod10x address="172.18.184.175" subslo=10 slonum=1
p2snmpmod mod15x address="172.18.184.175" subslo=15 slonum=1
p2snmpmod mod16x address="172.18.184.175" subslo=16 slonum=1
p2snmpmod mod19x address="172.18.184.175" subslo=19 slonum=1
p2snmpmod mod20x address="172.18.184.175" subslo=20 slonum=1
p2snmpmod mod23x address="172.18.184.175" subslo=23 slonum=1
p2snmpmod mod26x address="172.18.184.175" subslo=26 slonum=1
group prisma2hdrx port=none address=113 graphic="chassis hdrx" racverpos=10
p2snmpmod ps1 address="172.18.184.175" subslo=0 slonum=2
p2snmpmod rx5 address="172.18.184.175" subslo=15 slonum=2
p2snmpmod rx6 address="172.18.184.175" subslo=26 slonum=2
p2snmpmod rx7 address="172.18.184.175" subslo=37 slonum=2
p2snmpmod rx8 address="172.18.184.175" subslo=42 slonum=2

```

Line 1 is a standard entry for an equipment rack.

Line 2 is a standard entry for a Prisma II chassis

Note: The same chassis Graphics are used with the Prisma II SNMP devtypes as with the Standard Prisma II Chassis.

HDRX should use graphic="chassis hdrx"

Prisma II High Density should use graphic="chassis prisma2hd"

Prisma II should use graphic="chassis prisma2"

Line 3 describes a Prisma II ICIM SNMP devtypes entry.

p2snmpicim is the devtype for the ICIM module. The other fields required are:

Unique Name - "icim2x" is the name used in this example.

Address – This will be the IP of the ICIM module.

Port – Use “Ethernet” for the ICIM module.

Line 4 – 11 describes standard entries for Prisma II modules using SNMP devtypes.

Notice that the devtypes for all entries are the same. When using the SNMP interface on the ICIM, only one devtypes is required regardless of the module being monitored.

The other fields required are as follows:

Unique Name – In this example Mod3x is used.

Address – The IP address of the ICIM is required

Subslo – This is the slot number in the chassis where the module is plugged into.

Standard Prisma II chassis use slots 1 – 16

Slot 1 is the Fan Tray and Power Supply

Slot 3 is the second power supply if installed

High Density Prisma II chassis uses slots 1- 26

Slot 1 is the Fan Tray and Power Supply

Slot 3 is the second power supply if installed

HDRX Chassis uses slots 1 – 42

Slot 0 is the NCM / Power Supply

Slonum – This is the Prisma II chassis address from the Fan Tray.

B. On line Add / Delete

The p2snmp devtypes can be added online using the TNCS on-line add/delete function. However when using the on-line add / delete, there are a couple of rules to follow.

1. When adding the Group for the chassis, **do not specify the chassis graphic until all modules have been added to the chassis**. If the chassis graphic is specified before the modules are added, TNCS will not allow the modules to be added. After all of the modules have been added, the group detail can be opened and the chassis graphic added.
2. On –Line Add/ Delete allows the slot to be specified. Enter the Prisma II chassis address from the Fan Tray in this field. (This is equivalent to the “slonum” in the devlist.) After all of the modules have been added to the chassis, the Sub slot for each module (subslo in the devlist) will need to be added. The subslo can be added by opening the detail screen of each module and entering the module slot number in the “Sub Slot” field.

TNCS Graphics with SNMP devtypes

The chassis graphics displayed when using the Prisma II SNMP devtypes are slightly different than the graphics when using the standard Prisma II devtypes.

1. With the SNMP devtypes, all Prisma II modules are displayed as single wide modules.
2. HDRX modules and targeted services transmitter modules are displayed the same as the original devtypes.
3. The ICIM module is shown as a double wide module in chassis slots 15 and 16. The label (P2 ICIM) for the ICIM will be displayed on both slots 15 and 16 of the chassis in which the ICIM is located.

4. If a second power supply is used, it will be required to be entered as a module in chassis slot 3. **Note – If 2 power supplies are installed, information for all power supplies will be displayed in both power supply locations (Slot 1 and Slot 3) as well as the Fan Tray.**
5. The label for all modules displayed on the chassis graphic will be “P2 Module”. The label cannot be changed by the user.
6. There will not be a communication alarm in TNCS when a module is removed from the chassis or is a chassis is disconnected from the ICIM domain. Communication alarms for all modules are based on communications with the ICIM.