SNMP for the JNIOR

Last Updated November 4, 2020

The following is an explanation of how to utilize the JNIOR SNMP (Simple Network Management Protocol) functionality.

Please contact INTEG support at support@integpg.com or via phone at 724-933-9350 with any questions. Please visit our website at www.integpg.com for any updates and manuals.

JNIOR Software Version

Please download the All in One Update zip file, but do NOT unzip the file. Please use the JNIOR Support Tool (also available on the Downloads page) and go to the Update tab, click Open Project and then navigate to where you saved the zip file and select it. The JNIOR Support Tool will unzip it. Then click Publish Update to JNIOR.

Enabling SNMP

The JNIOR can provide information using the SNMP protocol to an SNMP browser or application on the network. To utilize this feature, the user must enable the SNMP functionality on the JNIOR. This is easily done on the series 3 and 4 JNIORs.
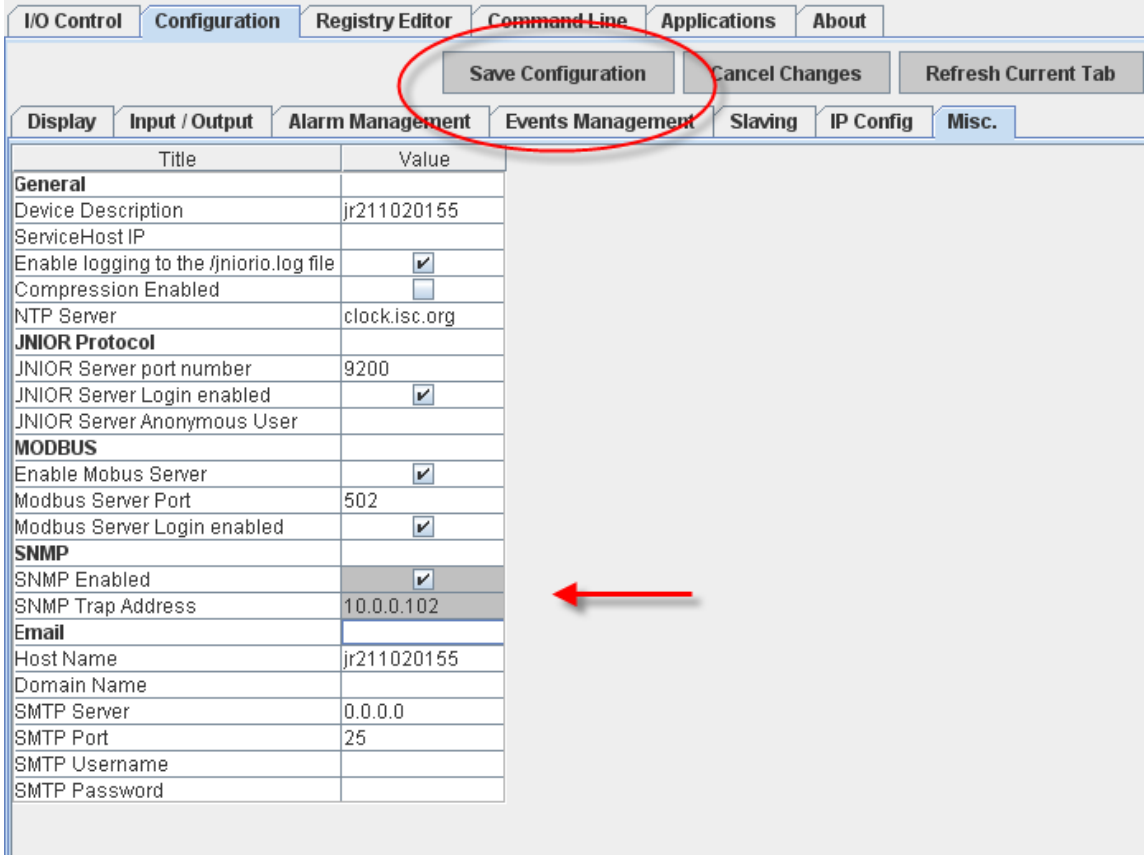
Series 3
Launch the Java Applet and click on the Configuration tab and then the Misc tab. As shown below, check the SNMP Enabled box and enter the IP address of the computer to receive the SNMP traps. You can enter a specific IP address and only that computer will receive the trap messages or you can enter 255.255.255.255 and all computers on the network will receive the trap message.

Click on Save Configuration at the top and then reboot your JNIOR by going to the About tab and clicking on the Reboot button. This will enable the SNMP functionality.

Series 4
Launch the WebUI, then click on the Configuration tab, and in the applications page a list of all applications that that can be enabled. One of the available applications to enable should be the SNMP application, which you can enable with the checkbox next to the application.

Series 3 JNIOR Java Applet Interface
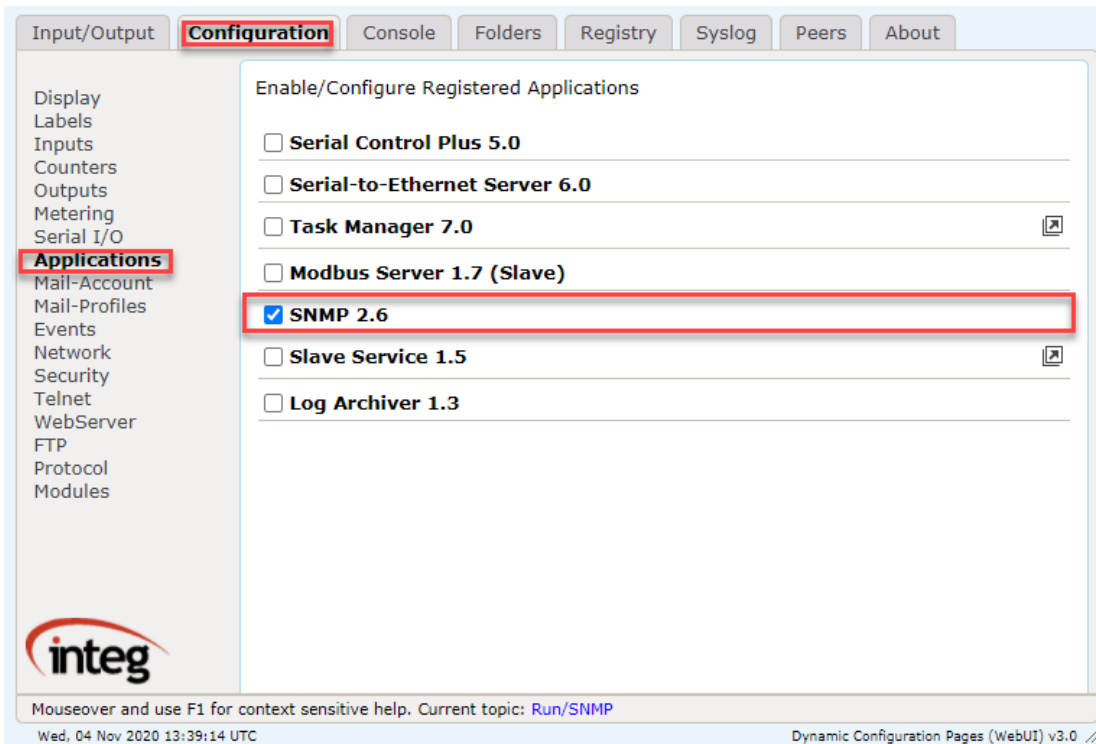

Series 4 JNIOR WebUI Interface

JNIOR MIB File

The JNIOR-MIB file is available for download from the INTEG website for loading into your SNMP browser.

The JNIOR-MIB file provides the user with the ability to query the JNIOR for various system information and I/O status.

The user can get the following System information:

- SysDescr – returns the JNIOR serial number, OS version and sub-OS version
- sysObjectID – returns the Object ID for the JNIOR (INTEG)
- sysUpTime – returns the amount of time the JNIOR has been running since the last reboot
- sysContact – returns contact information for INTEG
- sysName – returns the Hostname for the JNIOR (configurable from the JNIOR Support Tool)
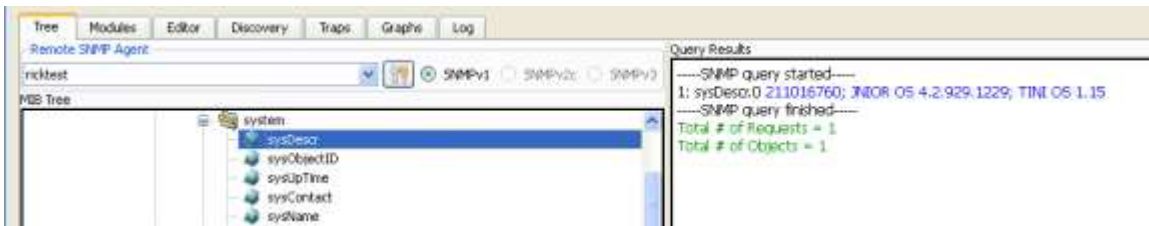

The user can also query specifically for the JNIOR serial number.
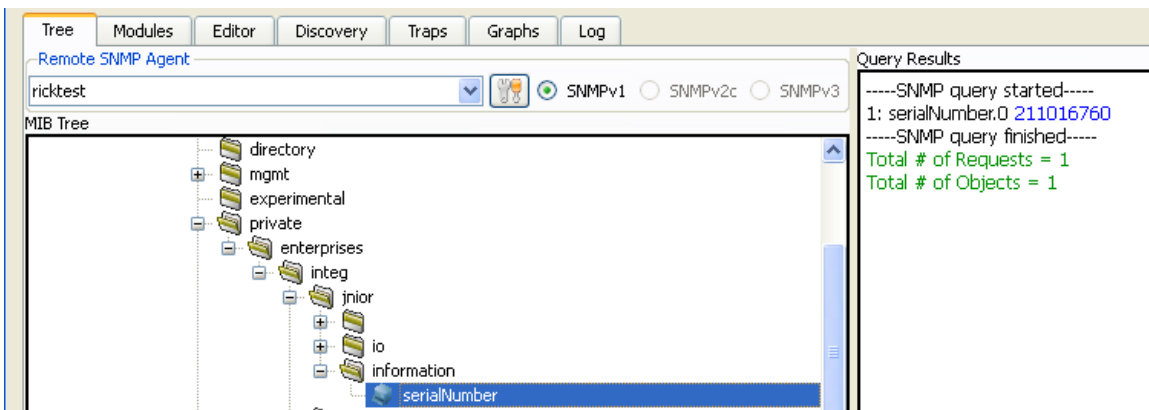
The user can query the status of each input and output either as a 'mask' (one number that represents the status of all inputs or outputs - decimal number based on binary representation of 1's and 0's for each input or output) or the status of each individual input or output.

The user can query for input number from 1 through 12 and outputs 1 through 16 whether the outputs are on the JNIOR (Models 310, 312, 314) or an expansion module (4ROUT).

Below is an example query for the status of input 5 (which is 'on').
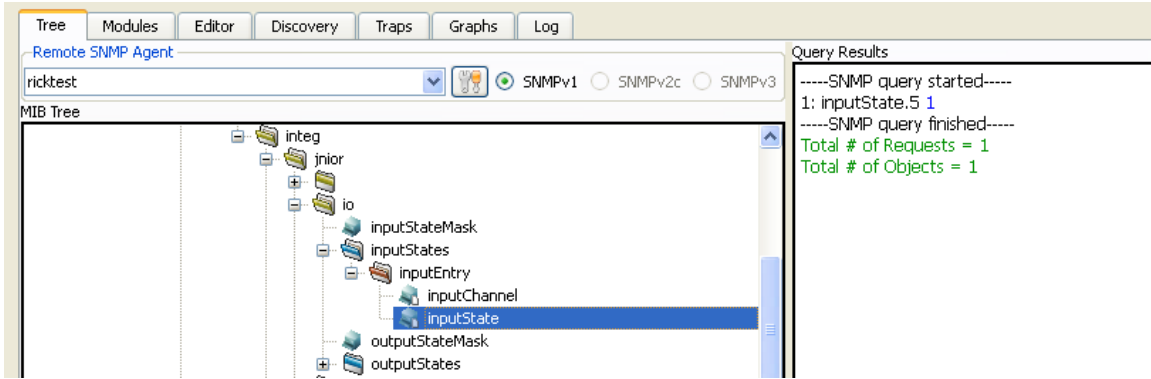
Standard Trap Messages

The JNIOR-MIB also generates several standard trap messages, including:

- JNIOR is rebooting
- JNIOR has rebooted successfully
- An application has started on the JNIOR (such as Cinema.JNIOR)
- A log file has been backed up because the primary log file is full
- A log file has been compressed (when compression is enabled)

Below is an example of a typical trap message.
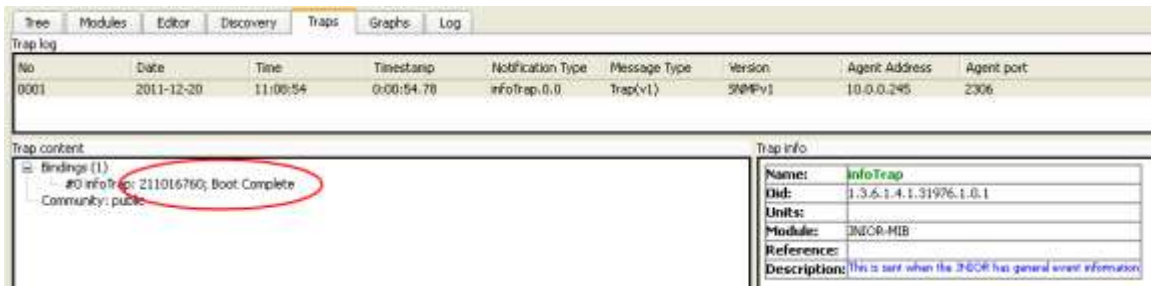
Custom Trap Messages

The user can generate custom 'traps' based on a change in an input or output going from off (low) to on (high). The individual I/O traps are set by adding the following Registry Keys.

NOTE: The easiest way to enter a <u>new</u> Registry Key is to go to the Command Line tab in the JNIOR web page or to open a Telnet session. An example of how the user types the command is as follows:

registry IO/Inputs/din5/SnmpTrap = enabled

NOTE: The command must be typed exactly as defined. It is case sensitive and there is a 'space' on each side of the equal sign. If the prompt is returned without any other text, then the command was accepted. Please see example screen pictures below.

Registry Keys for I/O Trap Messages

IO/Inputs/din1/SnmpTrap = enabled   where 1 can be replaced with any <u>input</u> number

IO/Outputs/rout1/SnmpTrap = enabled   where 1 can be replaced with any <u>output</u> number

Or the user can enter the following Registry Key that contains a 'mask' indentifying all the inputs or outputs that will generate a trap message. Examples are:

IO/Inputs/SnmpTrapMask = 7   where 7 is a binary 111 so <u>inputs</u> 1, 2, 3 will be traps

IO/Outputs/SnmpTrapMask = 2   where 2 is a binary 010 so <u>output</u> 2 is a trap

NOTE: 7 and 2 are just examples and can be replaced with any other 'mask'.

NOTE: You do NOT need to reboot the JNIOR when you add or modify these Registry Keys. The trap will become active usually in less than a minute.

Below is an example of some I/O traps.