

HaulPass V60s™

Gigabit Ethernet Wireless Link



TECH NOTE

HaulPass V60s SNMP Monitoring and Command Line Interface

Simple Network Management Protocol (SNMP) is an Internet Standard Protocol for collecting and organizing information about managed devices on IP networks and for modifying that information to change device behavior. Devices that typically support SNMP include routers, switches, servers, and now the HaulPass V60s.

SNMP is widely used in network management systems to monitor network-attached devices for conditions that warrant administrative attention. SNMP exposes management data in the form of variables on the managed systems, which describe the health of the system and configuration. These variables can then be queried (and sometimes set) by managing applications.

SNMP agents expose management data on the managed systems as variables. The protocol also permits active management tasks, such as modifying and applying a new configuration through remote modification of these variables. The variables accessible via SNMP are organized in hierarchies. These hierarchies, and other metadata (such as type and description of the variable), are described by Management Information Bases (MIBs).

HaulPass V60s Proprietary MIB

Below is the HaulPass V60s radio frequency (RF) MIB. (Note that Vubiq also provides a complete switch MIB.)

.1.3.6.1.4.1.46330.2.2.1.1.0	Integer	vubiqRfTxFreq
.1.3.6.1.4.1.46330.2.2.1.2.0	Integer	vubiqRfTxSynthStatus
.1.3.6.1.4.1.46330.2.2.1.3.0	Integer	vubiqRfRxFreq
.1.3.6.1.4.1.46330.2.2.1.4.0	Integer	vubiqRfRxSynthStatus
.1.3.6.1.4.1.46330.2.2.1.5.0	Integer	vubiqRfRxSync
.1.3.6.1.4.1.46330.2.2.1.6.0	Integer	vubiqRfRxUncorrectableErrors
.1.3.6.1.4.1.46330.2.2.1.7.0	Integer	vubiqRfDssi
.1.3.6.1.4.1.46330.2.2.1.8.0	Integer	vubiqRfTxIfAtten
.1.3.6.1.4.1.46330.2.2.1.9.0	Integer	vubiqRfRxIfAtten
.1.3.6.1.4.1.46330.2.2.1.10.0	Integer	vubiqRfRxBbAtten1
.1.3.6.1.4.1.46330.2.2.1.11.0	Integer	vubiqRfRxBbAtten2
.1.3.6.1.4.1.46330.2.2.1.12.0	Integer	vubiqRfRxAutoAttenMode
.1.3.6.1.4.1.46330.2.2.1.13.0	Integer	vubiqRfRxAutoAttenSeekStatus
.1.3.6.1.4.1.46330.2.2.1.14.0	Integer	vubiqRfRxAgcSensitivity
.1.3.6.1.4.1.46330.2.2.1.15.0	Integer	vubiqRfBoardTemp
.1.3.6.1.4.1.46330.2.2.1.16.0	Integer	vubiqRfTxTemp
.1.3.6.1.4.1.46330.2.2.1.17.0	Integer	vubiqRfRxTemp
.1.3.6.1.4.1.46330.2.2.1.18.0	Integer	vubiqRfBoardCurrent5V
.1.3.6.1.4.1.46330.2.2.1.19.0	Integer	vubiqRfBoardUpTime
.1.3.6.1.4.1.46330.2.2.1.20.0	OctetString	vubiqRfFirmwareVersion
.1.3.6.1.4.1.46330.2.2.1.21.0	OctetString	vubiqRfFpgaVersion
.1.3.6.1.4.1.46330.2.2.1.22.0	Integer	vubiqRfBoardSpeed
.1.3.6.1.4.1.46330.2.2.1.23.0	Counter32	vubiqRfRxFecErrors

Setting Community Strings

A common security step in SNMP is to change the Community Strings away from the default values of “public” for reading SNMP values and “private” for writing SNMP values. Below is an example of changing the strings from the command line

CLI Example: Set the Read Community string to “hello” and the Write Community String to “world”:

```
# configure terminal
(config)# snmp-server community v2c hello
(config)# (config)# snmp-server community v2c world rw
(config)# exit
#
```

Web GUI Example: Set the Read Community string to “hello” and the Write Community String to “world”:

1. Navigate the menu system: Configuration > Security > Switch > SNMP > System.
2. Update the strings and then press the Save button.

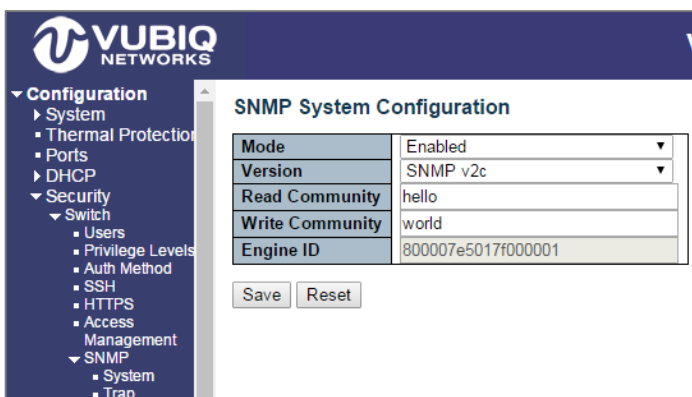


Figure 1. Web GUI Example: Set the Read Community string to “hello” and the Write Community String to “world”

Saving Community Strings

At this point the new Community strings are in the running configuration but not in the startup configuration. On the next reboot, the terminal will drop back to the default values in the startup configuration. To prevent this, copy and save the running configuration as the startup configuration.

CLI Example: Copy the current configuration in to the startup configuration:

```
# copy running-config startup-config
Building configuration...
% Saving 1333 bytes to flash:startup-config
#
```

Web GUI Example: Copy the current configuration in to the startup configuration:

1. Navigate the menu system: Maintenance à Configuration à Save startup-config
2. Then press the Save Configuration button.

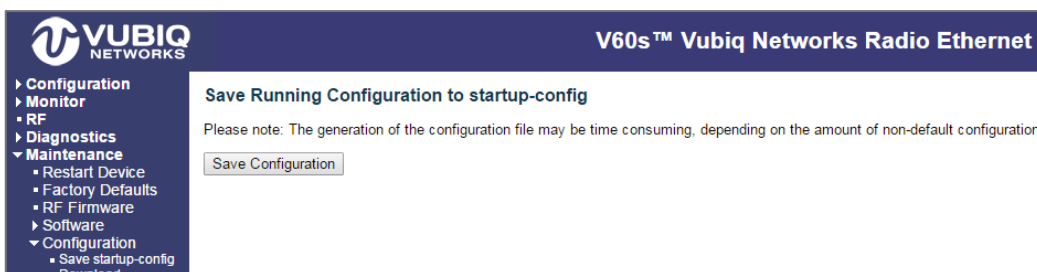


Figure 2. Web GUI Example: Copy the current configuration in to the startup configuration

HaulPass V60s Command Line Interface

The HaulPass V60s also support a command line interface via Telnet (or SSH). The commands for the HaulPass V60s CLI are listed below:

Username: admin

Password:

rf ?

board	Board setting/status
rx	Rx module command
tx	RF Tx module setting/status

rf board ?

current-5v	Board 5V current status
firmware	Board firmware version setting
fpga	Board FPGA version setting
speed	Board speed setting/status
temp	Board temperature setting
uptime	Board uptime status

rf rx ?

agc-sensitivity	Rx AGC sensitivity setting
auto-atten	Rx auto-atten setting/status
bb	Rx BB atten setting
dssi	Rx DSSI status
errors	Rx error status
freq	Rx frequency setting (GHz)
if	Rx IF atten setting
sync	Rx sync status
synth	Rx synth status
temp	Rx temperature setting

rf tx ?

freq	Tx frequency setting (GHz)
if	Tx IF atten setting
synth	Tx synth status
temp	Tx temperature setting

#



Making V-Band Ubiquitous

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