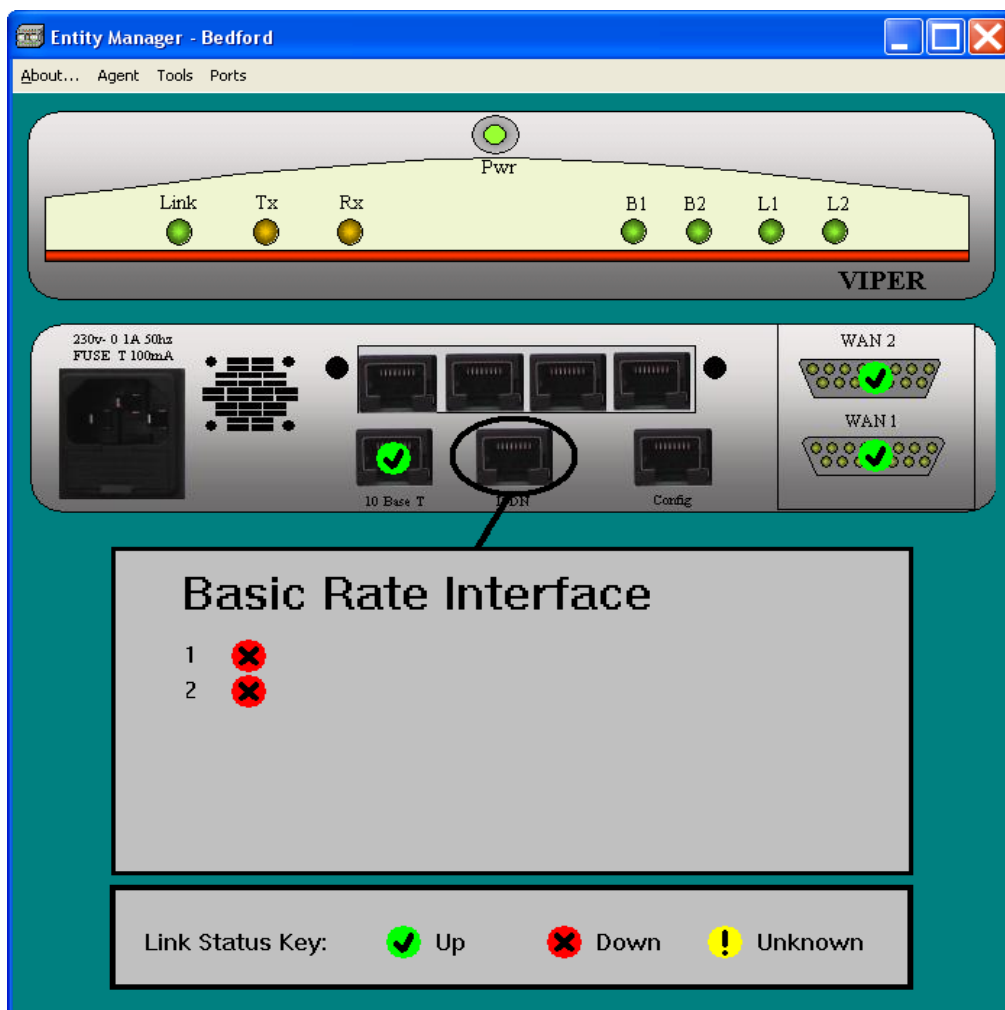


CASEVIEW NETWORK MONITORING AND MANAGEMENT

KEEPING A CLOSE EYE ON YOUR NETWORK



Case Viper Entity Manager Module

Network Monitoring and Management

Contents

| | |
|----------------------------|---|
| Contents | 2 |
| Introduction..... | 3 |
| Launching the EMM..... | 4 |
| EMM appearance | 4 |
| EMM Menus | 5 |
| About Menu | 5 |
| Agent Menu | 5 |
| Tools Menu | 6 |
| Ports Menu..... | 6 |
| Port Menu..... | 6 |
| Viewing/Changing Data..... | 7 |
| Access Modes | 7 |
| Support..... | 8 |

Network Monitoring and Management

Introduction

The *CaseView* core system provides generic support for devices which present an SNMP interface. However, in order to *extend* the support for network devices, *CaseView* provides additional *Entity Manager Modules (EMMs)* which are specific to particular devices and which extend the monitoring and management control of the devices.

This document describes the Case Communications Viper Router EMM. It handles the following variants of Viper:

- Basic Unit
- Basic Unit with E1 Interface
- E & M Board
- FXS / FXO board
- Primary Rate ISDN Board
- Basic Rate ISDN card
- Dual Port X.21 trunk Interface
- Dual Port V.35 trunk Interface

Network Monitoring and Management

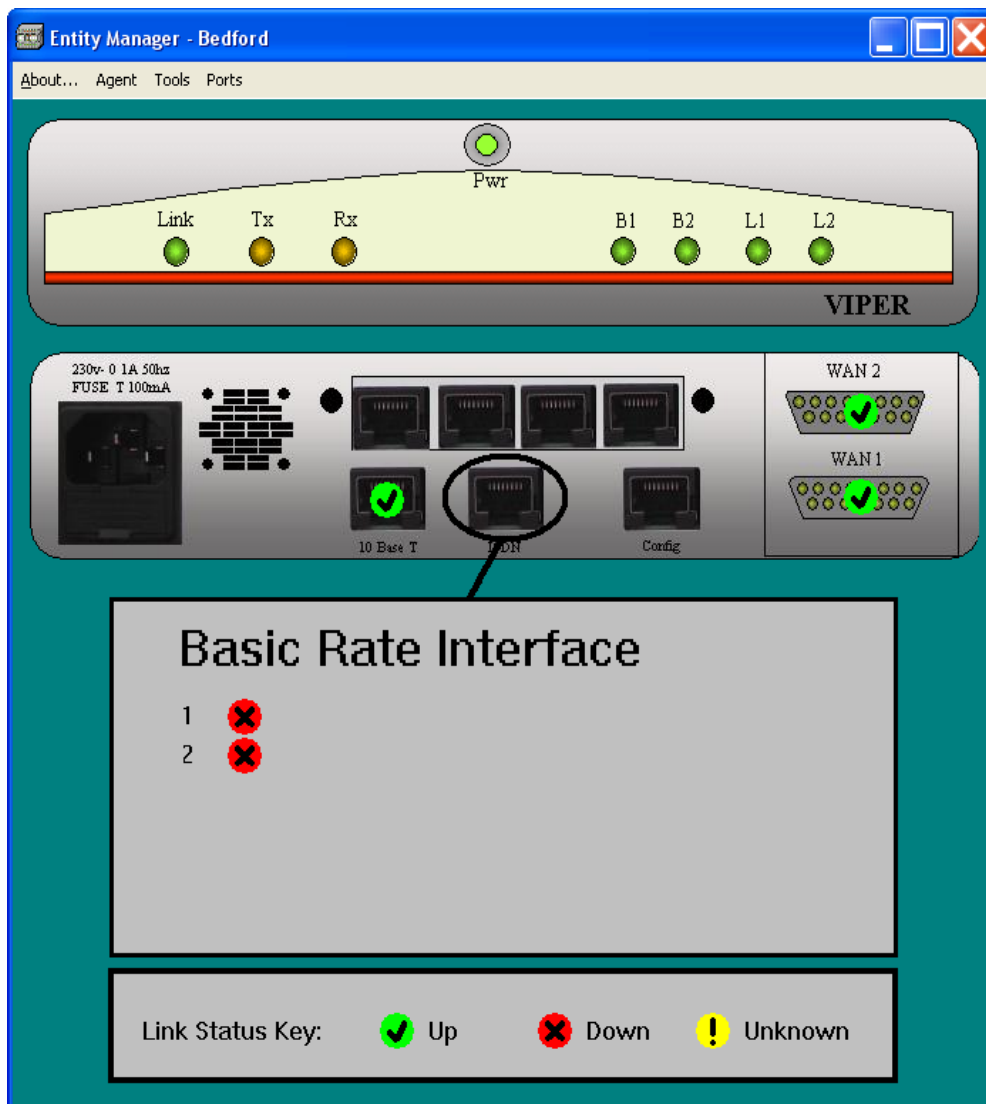
Launching the EMM

Launching the EMM is extremely straightforward. All you have to do is double click on the icon on the map which represents the Viper you wish to manage.

EMM appearance

The EMM presents a window which shows a representation of the device –both front and back view. It also draws onto these views the current state of the SNMP-monitored interfaces (e.g. links, protocols) that the Viper presents to the rest of the network. This information is continually refreshed at a constant interval – typically every ten seconds.

The screenshot below shows the appearance of the Viper EMM screen. In this screenshot it can be seen that the ethernet and WAN links are up but no BRI ISDN connections are established.



Network Monitoring and Management

EMM Menus

About Menu

The **About** menu provides information about the EMM version in use and about the information reported by the particular Viper in question.



Agent Menu

The **Agent** menu allows you to inspect, chart and graph the MIB-II SNMP variables that the Viper supports (an introduction to MIB-II is provided elsewhere in the documentation pack). The Viper provides access to the following tables (the numbers in brackets are the MIB Object IDs of the tables):

- System Table (1.3.6.1.2.1.1).
- Internet Protocol Address Table (1.3.6.1.2.1.4.20).
- Internet Protocol Routing Table (1.3.6.1.2.1.4.21).
- Internet Protocol ARP Table (1.3.6.1.2.1.4.22).
- ICMP Table (1.3.6.1.2.1.5).
- SNMP Table (1.3.6.1.2.1.11).

The example below shows the System Table.

| Descr | PRX Router V4.20 24 | |
|----------|-------------------------|--|
| ObjectID | 0.0 | |
| UpTime | 0 days 00:06:15.79 | |
| Contact | SimonH | |
| Name | Keynote | |
| Location | Bedford | |
| Services | 4 | |

Note that the Interface Table (1.3.6.1.2.1.2) is not available on this menu but it is available in great detail from the **Ports** and **Port** menus.

Network Monitoring and Management

Tools Menu

The **Tools** menu allows you to perform miscellaneous operations on the device:

- Make a telnet connection to the Viper manager.
- Load configuration data to the device. You will be prompted to specify a file in which the configuration data has previously been stored.
- Dump configuration data from the device. You will be prompted to specify a file in which the configuration data will be stored.
- Restart the Viper.
- Show status information.

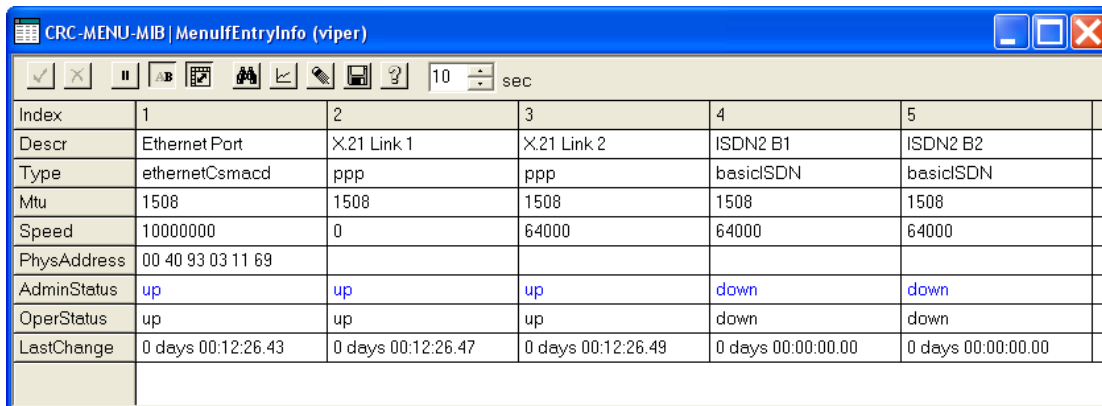
Ports Menu

The **Ports** menu allows you to inspect, chart and graph SNMP variables from the Interface Table (1.3.6.1.2.1.2). It displays the interface entry for all the SNMP-monitorable interfaces on the device (as displayed on the graphic device display).

The options on the menu allow you to use different views into the table:

- Full View. This displays every variable in the entry.
- Info View. This displays a selection of the more important variables.
- Usage (BPS) View. This displays the port usage variables.
- Utilisation (%) View. This displays the port utilisation variables.

The example below shows the Info View.



| Index | 1 | 2 | 3 | 4 | 5 |
|-------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Descr | Ethernet Port | X.21 Link 1 | X.21 Link 2 | ISDN2 B1 | ISDN2 B2 |
| Type | ethernetCsmacd | ppp | ppp | basicISDN | basicISDN |
| Mtu | 1508 | 1508 | 1508 | 1508 | 1508 |
| Speed | 10000000 | 0 | 64000 | 64000 | 64000 |
| PhysAddress | 00 40 93 03 11 69 | | | | |
| AdminStatus | up | up | up | down | down |
| OperStatus | up | up | up | down | down |
| LastChange | 0 days 00:12:26.43 | 0 days 00:12:26.47 | 0 days 00:12:26.49 | 0 days 00:00:00.00 | 0 days 00:00:00.00 |

Port Menu

The **Port** menu is available when a particular port has been selected. You select a port by right or left clicking on its icon on the graphical display. This is the icon that is reporting its current status (Up/Down/Unknown).

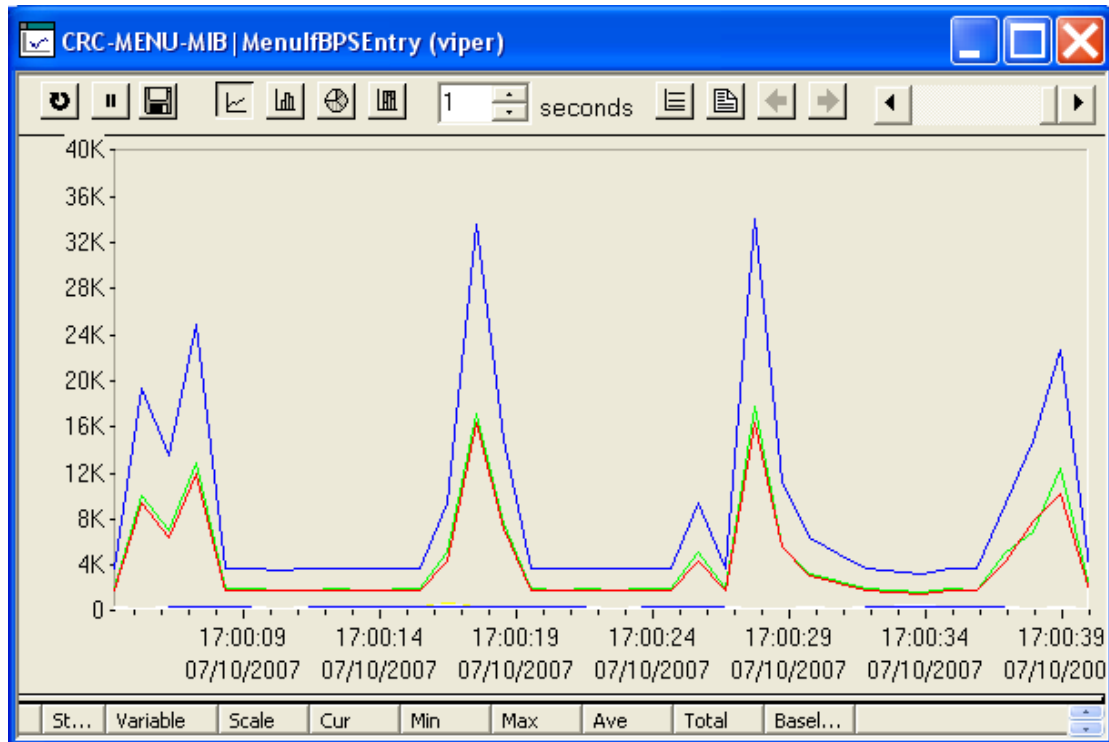
It provides access to the same variables as described in the **Ports** menu, the only difference being that it is the data for the selected port (rather than all ports).

Network Monitoring and Management

Viewing/Changing Data

Some of the EMM menus allow you to inspect, chart and graph SNMP variables. Exactly how to perform these very powerful operations is described in the **Getting Started** documentation.

The example below shows a graph of Port Utilisation data.



Access Modes

In general, the Viper provides read-only access to its SNMP tables. However, the following entries of the System Table can also be modified:

- sysContact (1.3.6.1.2.1.1.4).
- sysName (1.3.6.1.2.1.1.5).
- sysLocation (1.3.6.1.2.1.1.6).

Network Monitoring and Management

Support

In order to procure the most efficient and effective support for your query, please email a clear description of your query to the following address:

caseview@casecomms.com