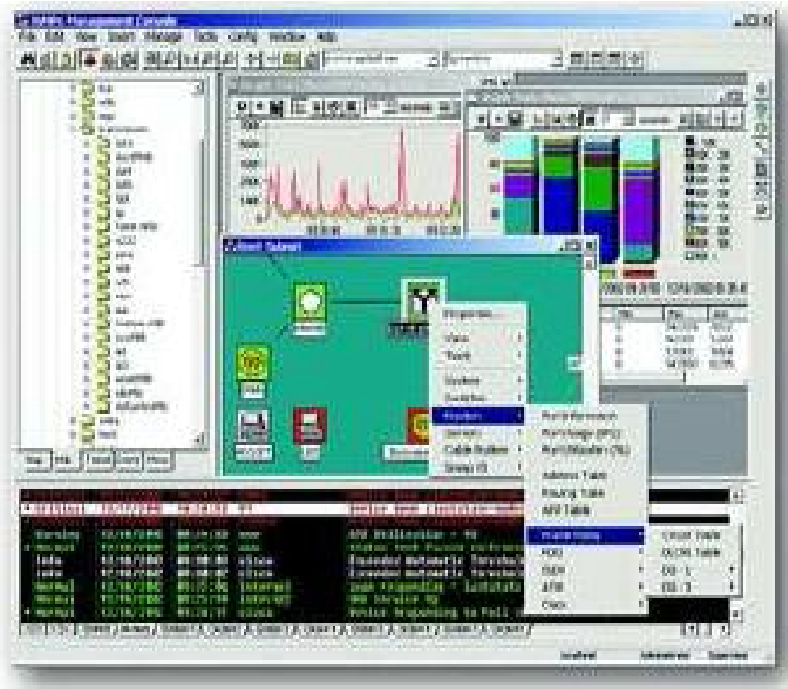


CASEVIEW NETWORK MONITORING AND MANAGEMENT
KEEPING A CLOSE EYE ON YOUR NETWORK



Introduction

Network Monitoring and Management

Contents

| | |
|----------------------------|----|
| Contents | 2 |
| Introduction..... | 3 |
| Product options | 4 |
| Workgroup Edition | 4 |
| Enterprise Edition | 4 |
| System Requirements..... | 5 |
| Installation..... | 6 |
| Uninstallation..... | 7 |
| Licences | 8 |
| Core Licences..... | 8 |
| EMM Licences..... | 8 |
| Secure Device Access | 9 |
| Device-Specific EMMs..... | 10 |
| Launching an EMM | 10 |
| EMM appearance | 10 |
| EMM Menus | 11 |
| About Menu..... | 11 |
| Agent Menu | 11 |
| Tools Menu | 12 |
| Ports Menu..... | 12 |
| Port Menu..... | 12 |
| Viewing/Changing Data..... | 13 |
| Support..... | 14 |

Network Monitoring and Management

Introduction

CaseView is an SNMP-based Network Management System (NMS) that helps you visualise, monitor and pro-actively manage your network. It is a secure distributed NMS that will monitor your entire network infrastructure.

CaseView is powered by the industry-standard Castle Rock SNMPC7 System. Castle Rock have been creating network solutions since 1987 and, with support for all versions of SNMP v3, unparalleled ease of use, and versions for both small and large networks, it is easy to see why over 100,000 copies have been deployed.

CaseView takes the solid base of SNMPC and extends it even further, providing extra functionality and personalising itself to *your* particular network.

Amongst many others, *CaseView* provides the following key features:

» **Secure**

Safely manage devices with SNMP v3 Authentication and Encryption. Tailor views and capabilities to each management user.

» **Scalable**

Use distributed polling and server components for workgroup, large Intranet or Management Service Provider configurations.

» **Connected**

Catch problems quickly with Email and Pager event notifications. Forward events to helpdesk or domain management systems.

» **Accessible**

Monitor and manage your network from remote locations with the SNMPC Windows Client and JAVA WEB Consoles.

» **Pro-Active**

Monitor LAN/WAN performance and Service availability with scheduled WEB reports to effectively plan upgrades and reduce wasted bandwidth.

» **Integrated**

Automatically export map topology, trend statistics and event log entries to industry standard databases.

» **Multi-Vendor**

View and modify standard and private information on routers, switches, servers and other devices from any vendor.

» **Tight Integration**

As well as being able to manage all network devices that present an SNMP interface, tighter integration is available via add-on device-specific Entity Manager Modules (EMMs).

Network Monitoring and Management

Product options

CaseView comes in two forms - Enterprise Edition and Workgroup Edition.

Workgroup Edition

This is the entry-level single user version for managing small to medium sized networks. All components run on a single system and support one user. The map database size is limited to 1000 objects. The Workgroup Edition does not include advanced reporting functions.

Enterprise Edition

This is the base system for a scalable multi-user environment. The Enterprise Edition includes the SNMPc Server licence, one Remote Console licence, and one Remote Poller licence. This system can be used simultaneously by two users, one at the server system and another at a Remote Console system.

There is a Remote Access Extension for the Enterprise Edition. It is a licence-only option which allows an unlimited number of Remote Console users and Remote Polling agents. It also provides JAVA Console support.

Network Monitoring and Management

System Requirements

The system requirements depend on the Product Option selected according to the table below:

| Parameter | Enterprise | Workgroup |
|-----------------------|-------------------|--------------------|
| CPU | Pentium III 1GHz | Pentium III 600MHz |
| Memory | 512 MB | 128 MB |
| Disk | 2 GB | 500 MB |
| Console Systems | 98/NT/2000/XP | 98/NT/2000/XP |
| Server/Poller Systems | NT/2000/XP | Not applicable |

Network Monitoring and Management

Installation

This procedure covers the installation of the whole system – both the central core and the additional device-specific Entity Manager Modules (EMMs).

1. Log on to Windows with Administrator permission.
2. Insert the *CaseView* CDROM into your computer's CDROM drive.
3. If you have **autorun** enabled, the Setup program will run automatically. If not, use the **Windows Start/Run** menu and enter *d:\setup*, substituting the appropriate drive letter for the CDROM if it is not *d*.
4. The *CaseView Setup* screen will be presented.
5. Optionally, press the **Check Disk Space** button. This will allow you to select the drive on which you intend to install the program and it will check if there is enough disk space available. Once the disk space has been checked, press the **Done** button to return to the main **Setup** screen.
6. Press the **Install** button to start the installation.
7. It is recommended that you quit all other applications before proceeding with the installation. A dialog box reminds you of this and gives you the chance to quit any other applications.
8. The Licence Agreement is displayed next. Please read it and accept it if you are happy with the terms. If you do not wish to accept the terms, the installation will not proceed.
9. The SNMPc core installer is now launched. Details can be found in the **Getting Started** document in your printed documentation pack. To ensure the simplest installation, the following selections are recommended:
 - On the **Select Component** screen, select **Server** the first time through. This is required for both Enterprise and Workgroup Editions. Further extensions for the Enterprise Edition can be installed later.
 - On the **Discovery Seed** screen, leave the **Discovery Seed** fields blank and check the **Start with Discovery off** checkbox. This will install the system with a blank map. A CaseView service is available, as part of the personalisation for your network, to provide the definition of your network without having to go through the discovery stage. If this service is not required (i.e. you want to create the map yourself), the **Discovery** process can be run at any time after installation.
10. Once the core system is installed, the device-specific EMMs are installed, with progress being reported in the original **Setup** window.
11. Finally, the option is given to restart your computer immediately. It must be restarted at some point so that the installation process can be completed.

Once the installation is complete, *CaseView* will be started automatically when the computer is restarted. This behaviour can be controlled if required – see the **Getting Started** document for details.

Network Monitoring and Management

Uninstallation

This procedure covers the uninstallation of the whole system – both the central core and the additional device-specific Entity Manager Modules (EMMs).

1. Log on to Windows with Administrator permission.
2. Exit the *CaseView* system using the icon in the System Tray.
3. Use the **Add Or Remove Programs** utility in the **Control Panel** to locate and uninstall **SNMPc Network Manager**.
4. Manually delete the installation directory and its subdirectories.

Network Monitoring and Management

Licences

The very first time that the software is installed, the installation process will ask if you have full licence keys, and any option keys, to be used during the installation and from then on. If such keys are unavailable at that time, perhaps because the software is being installed on a trial basis, a 30 day evaluation licence key will be generated and used instead.

When, at a later date, licence keys become available, they can be used in the following manner.

Core Licences

The main core licence is 23 characters long and takes the following:

XXXXXX-XXXXXX-XXXXXX-XXXXXX

It can be entered in one of three ways:

- During initialisation.
- Each time the Console is started up.
- On the **Config|SoftwareKey...** Console menu option.

EMM Licences

The Entity Manager Module (EMM) licence is 32 characters long and takes the following form:

CASEVIEW:XXXXXXXXXXXXXXXXXXXXXXXXXXXX

It can be entered in one of three ways:

- On the **Tools|Add Module Licence..** Console menu option.
- After licence expiry, you will be prompted for it when you use EMM tools such as load and dump of device configuration.

Secure Device Access

Access to devices comes in various forms. Some devices can be accessed using simple standard protocols such as telnet and FTP. Others, however, require a higher level of security – Secure Shell (SSH) and Secure Copy (SCP).

In order to provide this capability, *CaseView* makes use of a free utility called PuTTY. PuTTY provides both an SSH and an SCP interface and so can provide the secure access required.

This procedure covers installation of PuTTY for use with *CaseView*:

1. Log on to Windows with Administrator permission.
2. Download PuTTY from <http://www.chiark.greenend.org.uk/~sgtatham/putty/>.
3. Install PuTTY, following the PuTTY installation procedure.
4. During the installation you will be prompted to choose a directory in which to install PuTTY. Once the installation is complete, add this directory to your Windows path. To set your PATH on Windows NT, 2000, and XP, use the **System Variables** section of the **Environment** tab of the **System Control Panel**. On Windows 95, 98, and ME, you will need to edit your **AUTOEXEC.BAT** to include a set command similar to:

```
set PATH=C:\path\to\putty\directory;%PATH%
```

Device-Specific EMMs

The 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 Management Modules (EMMs) which are specific to particular devices and which extend the monitoring and management control of the devices.

Examples of devices for which additional EMMs are available are:

- Case Communications Multi-Access Router 60521 and 61222.
- Case Communications Rugged Router 60311 and 60813.
- Case Communications TransPort Router TR1000.
- Case Communications Viper Router.

More details can be found in the documentation for the individual EMMs.

Please contact your supplier for a complete list.

Launching an EMM

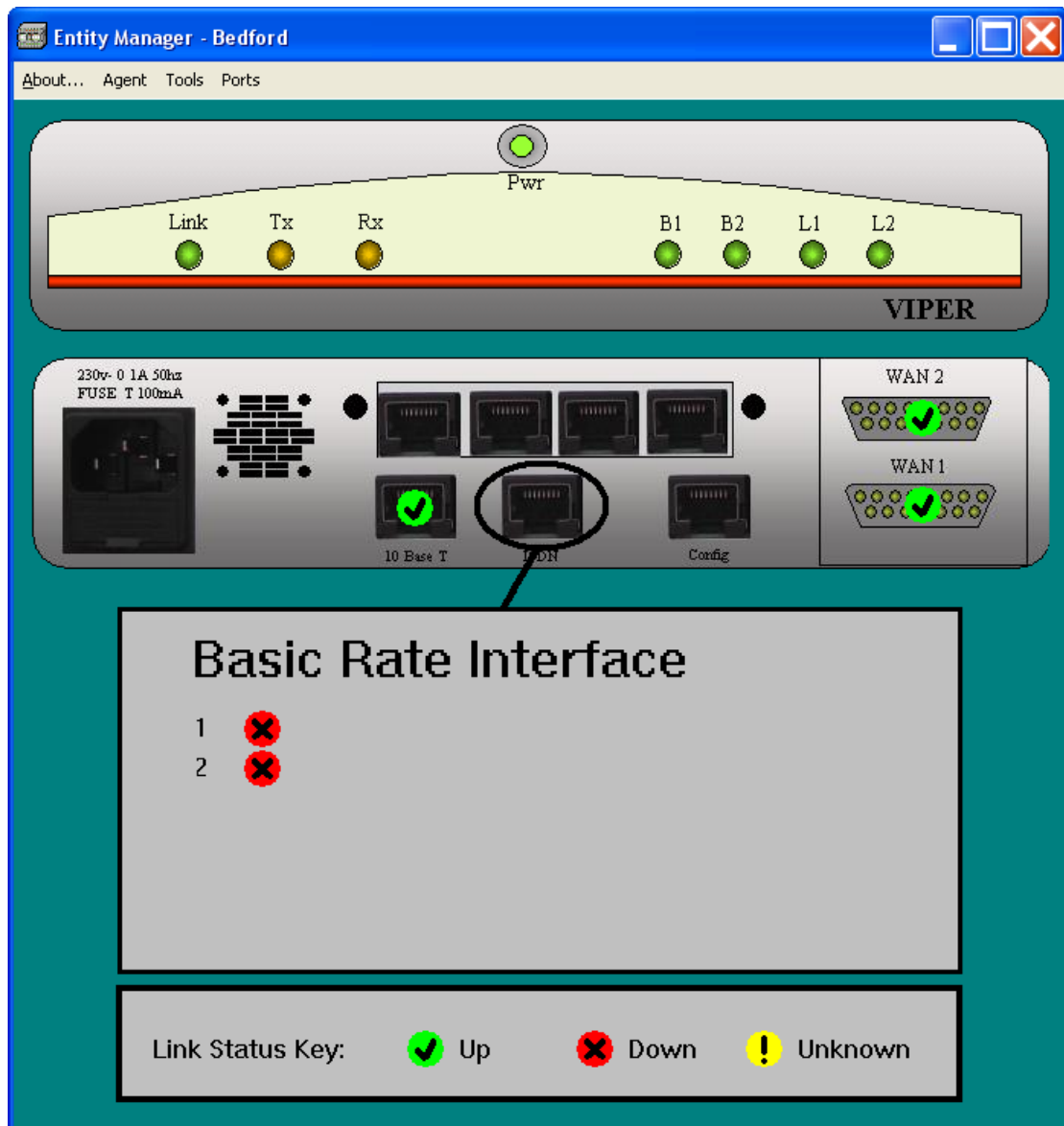
Launching an EMM is extremely straightforward. All you have to do is double click on the icon on the map which represents the device you wish to manage. The system will automatically interrogate the device and launch the appropriate EMM for the device.

EMM appearance

The EMM presents a window which shows a representation of the device – generally both front and back view. It also draws on these views the current state of the SNMP-monitorable interfaces (e.g. links, protocols) that the device 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 example of a Case Communications Viper router. 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 device information reported by the particular device in question.

Agent Menu

The **Agent** menu allows you to inspect, modify, chart and graph such MIB-II SNMP variables as the device supports (an introduction to MIB-II is provided elsewhere in the documentation pack).

The precise tables that are made available will vary between device EMMs but, in the example of the Case Communications Viper router, the following tables are offered:

Network Monitoring and Management

- 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).

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.

Tools Menu

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

- Connect to the device manager. Depending on the management interface offered by the device, this will be telnet, SSH or Web Browser.
- 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 device.

Ports Menu

The **Ports** menu allows you to inspect, modify, 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.

Port Menu

The **Port** menu is available when a particular port has been selected. You select a port by right 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, modify, chart and graph SNMP variables. Exactly how to perform these very powerful operations is described in the **Getting Started** documentation.

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