Intel[®] Device View User Guide



Year 2000 Capable

An Intel product, when used in accordance with its associated documentation, is "Year 2000 Capable" when, upon installation, it accurately stores, displays, processes, provides, and/or receives date data from, into, and between the twentieth and twenty-first centuries, including leap year calculations, provided that all other technology used in combination with said product properly exchanges date data with it.

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Quick Start

For complete installation instructions and requirements, see Chapter 1.

Run the install program

Put the Intel® Device View CD-ROM in your computer's CD-ROM drive. The Intel Device View installation screen appears. If it doesn't appear, run autoplay.exe from the CD-ROM.



Choose a version to install

- Click **Install for Windows**^{*} to install Intel Device View on a Windows NT^{*} or Windows 95 or 98 PC.
- Click **Install for Web** to install Intel Device View on a Web server.
- Click Install as Plug-in to install Intel network device support for Hewlett-Packard OpenView^{*}, Tivoli NetView^{*} or Intel LANDesk[®] Network Manager.





Follow the steps in the wizard

After you've chosen the version you want to install, follow the steps in the installation wizard to complete the installation.





Windows version

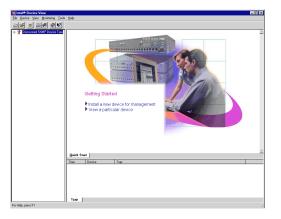
Click the Intel Device View – Windows icon in the Intel Device View program group.

Web version

- To run Intel Device View from the Web server, click the Intel Device View – Web icon in the Intel Device View program group.
- To view Intel Device View from another PC on your network, enter the following URL in Internet Explorer*'s Address field:

http://servername/devview/main.htm

where *servername* is the IP address or name of the Intel Device View server.



5

Manage devices

Double-click a device icon in the device tree. The device image appears or the embedded Web server launches.

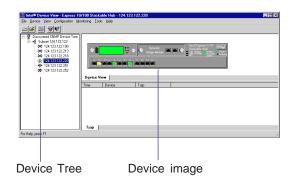
Non-embedded Web server devices

Right-click the device or a port to view management options.

Embedded Web server devices

Manage the device as you normally do.

For more information on managing devices, see Chapter 3



1

Installation

Overview

This chapter explains how to install Intel Device View and lists system requirements for each version of the program.

Intel Device View supports these Intel network devices:

Hubs	Intel Express 330T Stackable Hubs (requires optional Management Module)		
	Intel Express 200 Series and 10/100 Stackable Hubs (requires optional Management Module)		
	Intel Express 100BASE-T Stackable Hubs (requires optional Network Management Module)		
Switches	Intel Express 500 Series Switches		
	Intel Express 10 Series Switches		
	Intel Express 100FX Switches		
	Intel Express 10/100 Fast Ethernet Switches		
	Intel Express 100BASE-TX Switching Hubs		
Routers	Intel Express 8100 Routers		
	Intel Express 9000 Series Routers		

Choosing a version

When you install Intel Device View, you have three installation options. If an option isn't available, its selection button on the installation screen is disabled.

Install for Windows

The Windows version of Intel Device View allows you to manage Intel networking devices from a single PC on the network.

Install for Web

The Web version of Intel Device View is hosted on a Web server and allows you to manage Intel devices from any PC on the network running Windows 95, Windows 98, or Windows NT 4.0 or later and Internet Explorer 4.0x.

Install as Plug-in

The plug-in versions of Intel Device View provide Intel network device support for Hewlett-Packard OpenView Network Node Manager^{*} (version B.05.01 or later) for Windows NT^{*}, Tivoli NetView^{*} for NT 5.1 and Intel LANDesk® Network Manager. For more information, see the documentation that ships with those programs.

System requirements

Windows version

Minimum requirements

Recommended	133 MHz or faster Intel Pentium® brand processor	
Memory	At least 32 MB	
Disk space	At least 25 MB	
Operating system	 Windows 95 or 98 Windows NT 4.0 (server or workstation) 	
Web browser	Internet Explorer 4.x or later recommended for full functionality	

Web version

Server hardware	
Recommended	133 MHz or faster Intel Pentium® brand processor
Memory	At least 64 MB
Disk space	At least 25 MB
Server software	
Operating system	Windows NT 4.0 (server or workstation) (Service Pack 3 or later recommended)
Web server	D 1.1
	 Recommended: Internet Information Server* (IIS) 2.0 or later Peer Web Services* 2.0 or later Netscape Enterprise Web Server* 3.01 or 3.5.1

Webclient	
Recommended	133 MHz or faster Intel Pentium® brand processor
Memory	At least 32 MB
Disk space	At least 25 MB
Operating system	 Windows 95 or 98 Windows NT 4.0 (server or workstation)
Web browser	Internet Explorer 4.x or later (Internet Explorer 5.0 is included on the Intel Device View CD-ROM)

LANDesk Network Manager plug-in

See the Intel LANDesk Network Manager User Guide for system requirements.

HP OpenView plug-in

Intel Device View supports HP OpenView Network Node Manager release B.05.01 or later for Windows NT. See the OpenView documentation for system requirements.

Tivoli NetView for NT plug-in

Intel Device View supports Tivoli NetView for NT version 5.1. See the NetView documentation for system requirements.

Note

Intel Device View does not support Netscape Navigator*.

Installing Intel Device View

Note

If you're installing Intel Device View on a Windows NT PC, you must log in with **Administrator** rights. Before you install Intel Device View, make sure your PC meets the system requirements on pages 5-6.

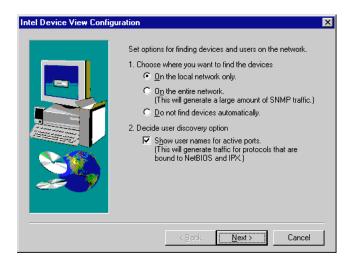
1 Put the Intel Device View CD-ROM in your computer's CD-ROM drive. The Intel Device View installation screen appears. If it doesn't appear, run autoplay.exe from the CD-ROM.



- 2 Choose the version of Intel Device View you want to install.
 - Click **Install for Windows** to install Intel Device View for use on this PC only.
 - Click **Install for Web** to install Intel Device View on a web server. You will be able to access the Device View server from any PC on your network with Internet Explorer 4.0x or later.
 - Click Install as Plug-in to install Intel network device support for HP OpenView or Intel LANDesk Network Manager. This option isn't available if you don't have OpenView or LANDesk Network Manager installed on the PC.
- **3** Follow the on-screen instructions in the installation program.

Starting Device Discovery

At the end of Intel Device View installation, the setup program asks you to configure Discovery settings.



Device Discovery settings

Choose one of three options:

On the local network only searches for devices on the Intel Device View PC or Web server's subnet.

On the entire network searches for devices on all subnets. This option creates extra network traffic.

Do not find devices automatically leaves Device Discovery off.

User Discovery settings

Show user names for active ports allows you to view information about the user who is connected to a port on Intel 100Base-TX, 10/100, and 200 Series Stackable Hubs. This option creates extra network traffic.

2 Using Intel Device View

Overview

This chapter explains how to start Intel Device View and use some of its basic features.

For more information on managing devices, see Chapter 3 or the documentation that shipped with the device you're managing.

Starting Intel Device View

Windows version

Click the Intel Device View – Windows icon in the Intel Device View program group. Intel Device View's main screen appears.

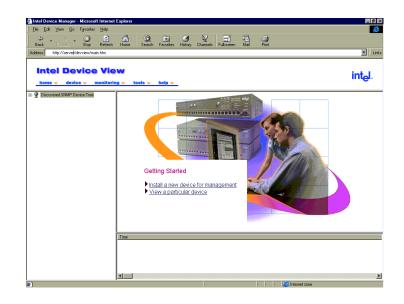
Web version

- To run Intel Device View on the Device View Web server, click the Intel Device View Web icon in the Intel Device View program group.
- To view Intel Device View from another PC on your network, enter the following URL in Internet Explorer's Address field:

http://servername/devview/main.htm

where *servername* is the IP address or name of the Intel Device View server.

Intel Device View's main screen appears.



Installing a new device

After you've installed a new manageable hub, switch, or router on your network, you can use Intel Device View's Device Install Wizard to configure the device for management.

The Device Install Wizard supports these devices:

- Intel Express 330T Stackable Hub (with optional Management Module)
- Intel Express 500 Series Switches
- Intel Express 8100 Routers
- Intel Express 9000 Series Routers
- Intel Express 10 Series Switches
- Intel Express 100FX Switches

To install and configure a new device for management

- **1** Start Intel Device View.
- 2 Double-click the appropriate device icon in the Unconfigured Devices branch of the Device Tree. Unconfigured devices are identified by MAC address. The Device Install Wizard appears.

Note

The first time you run Intel Device View for Windows, the Device Install Wizard appears automatically.



3 Follow the instructions in the wizard.

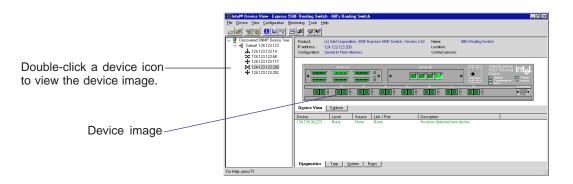
Managing devices

Intel Device View allows you to manage devices with embedded Web servers and devices without embedded Web servers.

Managing non-embedded Web server devices

To manage a non-embedded Web server device

- **1** Double-click the device's icon in the Device Tree. The device image appears.
- 2 Select a management option:
 - Right-click a port to view management options for the port.
 - Right-click anywhere else on the device image to view management options for the device.



Different devices have different management options available. See the documentation that shipped with the device for more information about its features.

Managing embedded-Web server devices

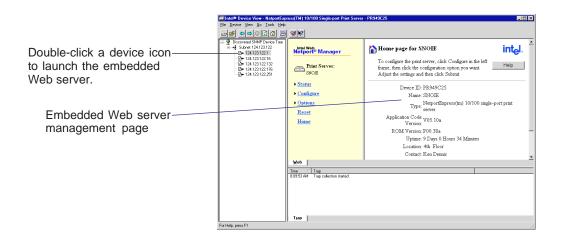
Intel Device View can display embedded Web server management pages and lets you manage those devices as you normally would.

These devices have embedded Web servers:

- Intel NetportExpressTM Print Server
- Intel Express Gigabit Switch
- Intel Express 330T and 200 Series Stackable Hubs (with Management Module)

To manage an embedded-Web server device

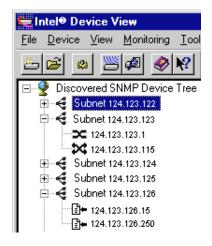
- 1 Double-click the device's icon in the Device Tree. The device's Web management screen appears.
- 2 Use the Web management screens as you normally do.



See the documentation that shipped with the device for more information on using the Web management pages.

Using the Device Tree

When you start Intel Device View, the Device Discovery service begins searching for supported Intel network devices on your network. As it discovers devices, the Device Discovery service adds an icon for each device to the Device Tree on the left side of the screen.



To expand the root or a subnet, click the (+) next to the icon. To collapse the view, click the (-) next to the icon. Double-click a device icon to view the device image or launch the embedded Web server.

Each type of device is represented by a unique icon in the Device Tree.

The Device Tree icons represent individual devices as well as subnets, groups, and the Device Tree root.

Device icons indicate whether a device is operating normally, is unconfigured, or has lost contact with Intel Device View.

Device Tree icons

lcon	Normal	Unconfigured
Device Tree root	9	-
Subnet	4	-
Express Stackable Hub	*	⇒.
Express Switch	\sim	*
Express Routing Switch	×	×
Express Router		\
NetportExpress TM Print Server	∎ +	-
Unknown device	2	-

Non-responding device icons look like normal icons, but they are red.

Adding a device to the Device Tree

To add a device to the Device Tree

- 1 Right-click anywhere on the Device Tree.
- 2 Click Add Device on the menu that appears.
- 3 In the Add an SNMP device dialog box, enter the IP address of the device you want to add.
- 4 Fill in the other fields if necessary.
- 5 Click OK.

The new device's icon appears in the Device Tree.

Grouping devices in the Device Tree

You can group devices in the Device Tree by subnet, device type, or product. By default, the Device Tree groups devices by subnet.

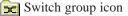
To group devices in the Device Tree

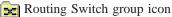
- 1 Right-click the Device Tree, then click Group By.
- From the sub-menu that appears, click the grouping you want to use: Subnet, Product, or Device Type. The Device Tree regroups the devices.

When grouping devices by device type or product, the Device Tree replaces the subnet icon with a group icon, which resembles a folder.

🔏 Subnet i	con
------------	-----

📊 Hub group icon





井 Router group icon

🔁 Print Server group icon

Refreshing the Device Tree

Refreshing the Device Tree updates it to show any newly discovered devices and changes in device status.

To refresh the Device Tree

- 1 Right-click anywhere on the Device Tree.
- 2 Click Refresh on the menu that appears.

Deleting a device from the Device Tree

Deleting a device from the Device Tree does not affect the actual device in any way.

To delete a device from the Device Tree

- 1 Right-click the device you want to remove from the Device Tree.
- 2 Click Delete on the menu that appears.

Finding a device in the Device Tree

To find a particular device

- 1 Right-click anywhere on the Device Tree.
- 2 Click Find on the menu that appears.
- 3 In the Find Device dialog box, enter the IP address of the device you want to find in the tree.
- 4 Click OK.

The device's icon is highlighted in the Device Tree.

The Find command searches the Device Discovery database for devices. It does not search the entire network.

Views and windows

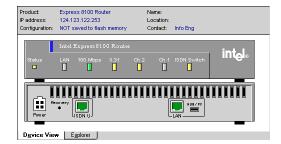
Intel Device View provides several different views and windows that display different types of information about the device you're managing.

To change to a different view or window, click its tab. Not all devices support all views and windows.

Device view

The Device view is Intel Device View's primary display. You can fully manage a device using this view.

Right-click a device or one of its ports to view management options.



Explorer view

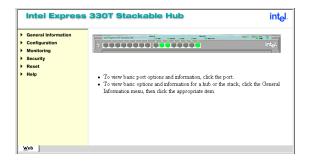
Intel Device View's Explorer view allows you to view a logical view of management information for switches and routers.

Right-click the Explorer tree for management options.

124.123.122.218	Intel Switch	
Port 1	Switch Name:	
Port 2	VLAN Domain:	in501eb8
Port 3	VLAN Mode:	Standalone
Port 4	Switch IP:	124.123.122.218
Port 5	Port description:	Port 1
- 3 Port 1 - 3 Port 2 - 3 Port 3 - 3 Port 4 - 3 Port 5 - 3 Port 5 - 3 Port 6 - 3 Port 6 - 3 Port 8 - 3 Port 9 - 3 P	Port no.:	1
Port 6		
Port 7	Packets/Sec.:	0.0
Port 8	Total Packets:	0
🖻 👝 VLANs	Bytes/Sec.:	0.0
🔄 🚰 System	Total Bytes:	0
Port	Utilization:	0.00 %
- A Port 1		
T Port 2		
Device View Explorer		

Web view

The Web view appears when you manage a device that has an embedded Web server. It displays the embedded Web server management pages within Intel Device View, allowing you to manage the device as you normally do.



Diagnostics window

The Diagnostics window lists all diagnostic messages sent by the device being managed.



Trap window

The Trap window lists traps received by the Device View PC or server.

Time	Device	Trap	
17:12:31	0.0.0.0	Failed to bind socket to port	
17:12:31	0.0.0.0	Unable to activate local TRA	
17:12:31	0.0.0	Trap reception permanently d	
Diagnos	ics Tran	System	
Djagnos	ics T <u>r</u> ap	System	

System window

The System window displays a log of all the major events that have occurred on the switch or router being managed. All events list date and time.

Device	Time	Rep Message text
124.123.122.100 124.123.122.100 124.123.122.100 124.123.122.100 124.123.122.100 124.123.122.100 124.123.122.100 124.123.122.100	Aug 19 12:33:04 Aug 19 12:42:44 Aug 22 11:41:57 Aug 22 11:44:23 Aug 22 12:03:38 Aug 22 12:03:38 Aug 22 12:04:04 Aug 27 14:23:26	Station operative Manager session timed out Port 1's forwarding mode has changed to Store-and-F Port 1's forwarding mode has changed to Cut-Through Port 1's forwarding mode has changed to Store-and-F Port 1's forwarding mode has changed to Store-and-F Port 2's forwarding mode has changed to Store-and-F
4		

Errors window

The Error view lists all error messages generated by the switch or router being managed.

Error	logfile saved on Wednesday	, August 26, 1998, 14:31:49 (PC local time).
Device	e Time	Rep Message text
Trap	System Errors	
l līah		

Using Device Discovery

Intel Device View's Device Discovery service detects supported Intel devices on your local subnet or the entire network.

When you install Intel Device View, you configure Device Discovery settings. You can update these settings later to change the scope of discovery or enable and disable discovery.

Starting Device Discovery

To start Device Discovery

1 Click Device Discovery on the Device menu. The Device Discovery Options dialog box appears.

Device Discovery Options		×		
Services Settings Database				
Discovery Options Enable Discovery Discovery allows Intel Device View to find new devices on your network.	Poling Options F Enable Poling Poling allows Intel View to keep track discovered device	cof		
Discovery Interval:	Poling Intervat	nutes		
DNS Lookup DNS Lookup ahows DNS names for discovered devices in the Device Tree.				
OK (ancel Apply	Help		

- 2 Click the Settings tab.
- **3** Type the IP address, subnet mask, and read community string of a heavily used, SNMP-enabled switch or router on your network.
 - To discover devices on your Intel Device View PC or Web server's subnet, type the subnet of the PC or server in the Subnet mask field.
 - To discover devices on all subnets, type "0.0.0.0" in the Subnet mask field.
- 4 Click the Services tab, then check the Enable Discovery box.
- 5 In the Discovery Interval box, type the number of minutes you want to wait between discovery cycles.
- 6 Click OK.

Changing the polling rate

The polling rate determines how often Intel Device View polls a device to see if it's still active and responding. If a device is no longer responding, its icon in the Device Tree changes to red to indicate its status.

To change the polling rate

- 1 Click Device Discovery on the Device menu. The Device Discovery dialog box appears.
- 2 Click the Services tab.
- **3** Click Enable Polling.
- 4 Enter a polling rate in the Polling Interval box.
- 5 Click OK.

Enabling DNS Lookup

After you enable DNS Lookup, the Device Tree displays a device's DNS name if it doesn't have a system name defined.

To enable DNS Lookup

- 1 Click Device Discovery on the Device menu. The Device Discovery dialog box appears.
- 2 Click the Services tab.
- 3 Click Enable DNS Lookup.
- 4 Click OK.

Clearing the Device Discovery database

Clearing the Device Discovery database removes all discovered devices from the database and from the Device Tree.

- 1 Click Device Discovery on the Device menu. The Device Discovery dialog box appears.
- 2 Click the Database tab. The database tab tells you how many device are currently in the database.
- 3 Click Clear Database, then click Yes when asked to confirm your decision.
- 4 Click OK.

Note

If you're using the Web version of Intel Device View and you clear the Device Discovery database, you will clear the Device Tree of any one connected to the server.

Matching users and MAC addresses

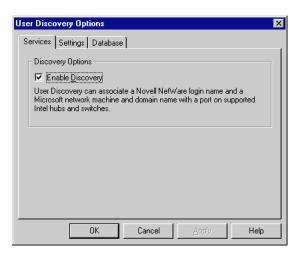
Intel Device View's MAC User Matching dialog box lists all detected MAC addresses and their associated machine and domain names and NetWare* usernames.

Enabling User Discovery

If you didn't enable User Discovery when you installed Intel Device View, do so now.

To enable User Discovery

 Click User Discovery on the Device menu. The User Discovery Options dialog box appears.



- 2 On the Services tab, click Enable Discovery.
- 3 If you want to discover NetWare usernames, click the Settings tab.
- 4 Click Add Server, then enter the name of the server Intel Device View will use to discover NetWare usernames.
- 5 Type a guest login name and password for the server.
- 6 Click OK.

Viewing the MAC address list

After you've enabled User Discover, you can view the list of MAC addresses and machines, domains, and users.

To view the MAC User Matching dialog box.

 Click MAC to User Matching from the Tools menu. The MAC User Matching dialog box may take a few seconds to list entries.

MAC Address 👘 🏾 🖉	Machine/Netware User	Domain Name
00001B1E405A	MGMTPC	CLRD01
00002480D6D5	MIKES2	SEGGM
00003910A409	CRUMP-7010CT	ORRD02
00003917270E	DPHAM-DESK3	LABRAT
00003960EA09	APASHUPA3-MOBL	ORRD11
000039B02A0E	PHPHAM-DESK5	ORRD02
000039C3EB09	KSMITH5-MOBL	ORRD02
000039CB160F	PTUNG-MOBL	ORRD02
000039D2EA09	RNORADK-MOBL	ORRD02
00004CF58BEF	MNAKAMU1-DESK	JPRD01
00005A40A668	FMSAP065	ENTRD03
00005A40AA49	FMSAP064	ENTRD03
00005A40AA4E	FMSAP067	ENTRD03
00005A40AA63	AZSAP009	AZRD01
00005A40AA64	FMSAP073	ENTRD03
00005A40AA65	AZSAP008	AZRD01
00005A40AC81	FMSAP034	ENTRD03
	FUCADOSS	
atus: Ready		
		Find Next

2 Click one of the sorting categories at the top (MAC address, Machine/NetWare User, or Domain Name) to sort the list by that category.

To find a device in the list

- 1 Type the search text in the Keyword box. You can search by MAC address, machine name, domain name, or username.
- 2 Click Find Next.
- **3** Click Find Next again to continue searching.

3

Managing Devices

Overview

This chapter describes how to perform several management tasks on Intel hubs, switches, and routers. For more detailed information on product features, see the documentation that shipped with the device.

Managing the Intel Express 330T Stackable Hub

Note

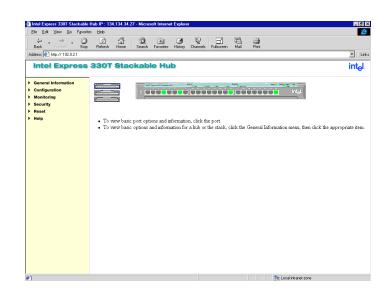
Hubs must have Management Modules to support Intel Device View. The Intel Express 330T Stackable Hub Management Module has an embedded Web server that is used for managing the hub stack. Intel Device View launches the embedded Web server and allows you to manage the hub stack as you normally do. You can view and configure port, hub, and Management Module settings and monitor statistics and utilization.

Accessing the Embedded Web Server

To access the Embedded Web Server

- Enter the Management Module's IP address in your Web browser's Address or Location field. The login dialog box appears. If you haven't set the Management Module's IP address, use its default address: 192.0.2.1.
- 2 Press ← Enter). By default, no username or password are set. If you already created a user account in local management, use that username and password.

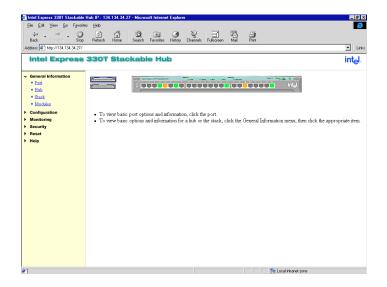
The Embedded Web Server screen appears in your Web browser.



Navigating the Embedded Web Server

To view management or monitoring options

1 Click a menu head in the navigation menu on the left side of the screen. The menu expands to show the available options.



- 2 Select the option you want to view by clicking on it. The management or monitoring screen appears on the right side of your Web browser.
- 3 Click the menu head again to collapse the menu option view.

Using Management Screens

After you select an option from the navigation menu, a management screen appears on the right side of the Web browser.

Hub graphic

A graphical representation of the hub's faceplate appears at the top of the screen.



If the management option you're working with allows you to manage or monitor a specific port, you can change to another port by clicking it on the hub image.

Port color on the hub graphic indicates status.

Port Color	Meaning
Green	Port has a link at 100Mbps.
Green with 10	Port has a link at 10Mbps.
Orange	Port is disabled.
Gray	No link.

Stack graphic

When managing a stack of hubs, you will see a graphical representation of the stack. The hub you're currently managing is highlighted.

 Intel [®] Express 3007 Stackable Hub	Madari A		urent and the second	New Colored State	
		12 12 14 15 15			intel.

To manage a different hub, click its image in the stack graphic.

Configuring the IP Address

- 1 Click Configuration on the navigation menu. The menu expands to show the Configuration options.
- 2 Click IP Address. The IP Configuration screen appears.

IP Configuration

Current Settings

Management Module MAC Address	00902739003A
IP Address	192.0.2.1
Subnet Mask	255.255.255.0
Default Gateway	0.0.0.0
BOOTP Service	disable

New Settings

IP Address	134.134.34.27
Subnet Mask	255.255.2
Default Gateway	134.134.34.251
BOOTP Service	disabled 💌

Apply

3 In the New Settings section, type the values you want to use for the Management Module's IP address, subnet mask, and default gateway.

If you're managing a stack of hubs, the entire stack will use these settings.

4 Click Apply.

These settings will take effect after the next Management Module reboot.

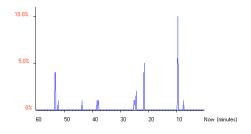
Monitoring Device Activity

The Embedded Web Server lets you view utilization graphs or statistics tables for a stack, hub, or portions of a hub.

To check device activity or statistics

- 1 Click Monitoring on the Navigation menu. The menu expands to show the Monitoring options.
- 2 Click the option you want to view:
 - Utilization is measured on a graph.
 - Statistics are sorted in a table.





Hub 1 Port 5 Counter Table

Frames	7019460	37 /sec
Octets	2313468807	5009 /sec
FCS errors	18	0 /sec
Align errors	25	0 /sec
Frames too long	0	0 /sec
Short events	446	0 /sec
Late events	0	0 /sec
Very long events	0	0 /sec
Rate mismatch	0	0 /sec
Symbol errors	0	0 /sec
Total errors	489	0 /sec
Collisions	210353	0 /sec
Runts	55482	0 /sec
Auto paritions	0	0 /sec

Configuring a port

You can use the Embedded Web Server to enable or disable a port, change its speed, or determine whether it sends traps when its state changes.

To change port settings

- 1 Click General Information on the navigation menu. The menu expands to show the General Information options.
- 2 Click Port.

The Port Information screen defaults to port 1 on hub 1. If you want to configure another port, click it on the hub image.

Port State	enabled 💌
Port Speed Setting	auto negotiation 💌
Link Status	no link
Auto-partition Status	not auto-partitioned
Polarity	reversed
Port Security Setting	security disabled
Generate Trap When Link State Changes	disabled 💌
Generate Trap When Speed State Changes	disabled 💌

Hub 1 Port 1 Information

Apply

- **3** Select the options you want to change.
 - **Port State** lets you enable or disable the port.
 - **Port Speed Setting** lets you set port speed to 10Mbps, 100Mbps, or auto.
 - Generate Trap When Link State Changes lets you set whether the Management Module sends an SNMP trap when the port's link state changes (for example, from "link at 100Mbps" to "no link").
 - Generate Trap When Speed State Changes lets you set whether the Management Module sends an SNMP trap when a port changes speed.
- 4 Click Apply.

Viewing general information

You can view general information about a port, hub, stack, or optional modules.

To view general information

- 1 Click General Information on the navigation menu. The menu expands to list the General Information options.
- 2 Click the option you want to view. To view information for another port or another hub, click the hub in the stack graphic or the port.

Port State	enabled 💌
Port Speed Setting	auto negotiation 💌
Link Status	no link
Auto-partition Status	not auto-partitioned
Polarity	reversed
Port Security Setting	security disabled
Generate Trap When Link State Changes	disabled 💌
Generate Trap When Speed State Changes	disabled 💌

Hub 1 Port 1 Information

Apply

Some General Information screens let you change or update settings. After modifying settings, click Apply.

Managing Intel Express Switches

This section describes some basic switch management tasks. For more information on these or other procedures, see the documentation that ships with the switch.

Intel Device View supports these Intel switches:

- Intel Express 500 Series Switches
- Intel Express 10 Series Switches
- Intel Express 100FX Switches
- Intel Express 10/100 Fast Ethernet Switches
- Intel Express 100BASE-TX Switching Hubs

To manage an Intel Express 500 Series Switch

1 Double click the Intel Express Switch icon in the Device Tree.



Express Switch icon

The device image appears on the screen.

	Intel® Device View - Express 510T Switch - ace
	Ele Device View Configuration Monitoring Tools Help
	The solution the second
Device Tree	Statistic Stock
	Device View Explorer
	Tree Device Trap
	Yup System Engrs
Device image	For Help, press F1

2 Choose a management option:

- To view management options for a port, right-click the port.
- To view management options for the switch or stack of switches, right-click anywhere else on the switch image.

Basic management tasks

Note

Press This PC in the Web version of Intel Device View to use the Web server as a trap receiver.

Managing a port

- **1** Right-click the port you want to manage.
- 2 Click Port Setup on the menu that appears. The Port Setup dialog box appears.

Port 24 Setup - 510T Switch		×
General Port Mode Spanning	Tree	- 1
Port Status:	✓ Enable port	
Auto negotiation:	Enable auto negotiation	
Duplex:	🖲 Half duplex - 🖸 Full duplex	
Speed:	C 10 Mbps C 100 Mbps C 1Gbps	
Switch forwarding mode:	Default (Adaptive)	
Flow control mode:	Default (Enabled)	
	OK Cancel Help	

To set port speed and duplex mode

- 1 Click the Port Mode tab in the Port Setup dialog box.
- 2 Configure port settings:
 - To let the port automatically determine speed and duplex mode settings, check the Enable auto negotiation box (default setting).
 - To force the speed and duplex mode settings, clear the Enable auto negotiation box, then check the appropriate speed and duplex mode buttons.
- 3 Click OK.

To disable a port

You can disable a port on the switch when the connected device is disrupting network traffic.

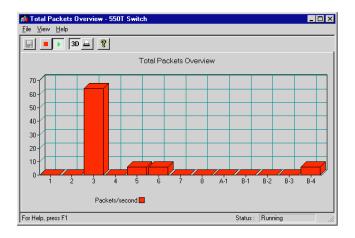
- 1 Click the Port Mode tab in the Port Setup dialog box.
- 2 Clear the Enable port box, then click OK.

Graphing device activity

Intel Device View allows you to view graphs of total packets, transmitted packets, received packets, and errors.

To graph device activity

- 1 Right-click anywhere on the switch image, except a port.
- 2 Click Device Activity, then click one of the graphing options on the menu that appears.



To graph port activity

- 1 Right-click a port.
- 2 Click Port Activity, then click either Tx packets or Rx packets.

Adding a trap receiver

Add a trap receiver when you want a management PC alerted of an event that occurs on the switch.

To add a trap receiver

- 1 Right-click anywhere on the switch image, except a port.
- 2 Click Device Setup on the menu that appears.
- 3 Click the Traps tab in the Device Setup dialog box.
- 4 Click Add.
- 5 Choose the IP address of the trap receiver.
 - To use the PC you're managing from, click This PC.
 - To send traps to another PC on the network, type the IP address and community string of the PC you want to use.

Add/Edit Trap	Destination	×
IP address		Ihis PC
Community:	public	
ОК	Cancel Help	

6 Click OK, then click OK on the Device Setup dialog box.

Setting alarms

An alarm monitors a variable and generates an event (an SNMP trap, log event, or both) when a limit is exceeded. The Quick Alarms dialog box allows you to automatically set up rising alarms on these commonly-used SNMP variables:

- Network utilization exceeding 50%
- Broadcast packets exceeding 3000 per second
- CRC align errors exceeding 10 per second
- Collisions exceeding 30000 per second

To set a Quick Alarm

- **1** Right-click the switch image.
- 2 On the menu that appears, click Monitoring, RMON, Alarms, and Configure.

The Alarms Table dialog box appears.

3 Click Add.

The Quick Alarms dialog box appears.

Quick Alarms		×
Interface Port 9	-	OK
Alarms	E	Cancel
✓ Network <u>U</u> tilization %	Exceeding 50	Advanced
Broadcast Packets/sec	3000	<u>H</u> elp
CRC Align Errors/sec	0	
Collisions/sec	0	

- 4 Select the port you want to monitor in the Interface pull-down box.
- 5 Check the statistic you want to monitor and change the threshold value if necessary.
- 6 Click OK, then click Close.

Managing Intel Express Routers

This section describes some basic router management tasks. For more information on these or other procedures, see the documentation that ships with the router.

Intel Device View supports these Intel routers:

- Intel Express 8100 Routers
- Intel Express 9000 Series Routers

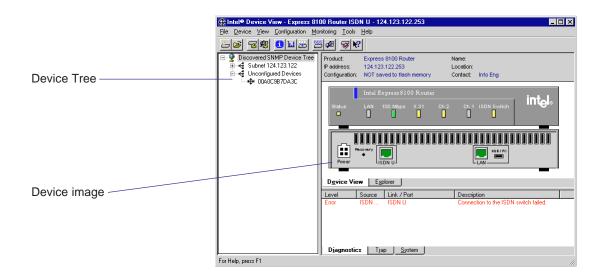
To manage an Express Router

1 Double-click the Express router icon in the Device Tree.



Express Router icon

The device image appears on the screen.



- 2 Choose a management option:
 - To view management options for a port, right-click the port.
 - To view management options for the router, right-click anywhere else on the router image.

Note

Press This PC in the Web version of Intel Device View to use the Web server as a trap receiver.

Basic management tasks

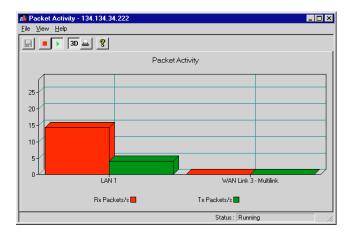
This section describes some basic router management tasks. For more information on these or other procedures, see the documentation that ships with the router.

Monitoring WAN traffic

To monitor WAN traffic

- 1 Right-click anywhere on the router image, except a port.
- 2 Click Link Activity, then click one of the options on the menu that appears.

The activity graph appears.



Checking link status

To check link status

- 1 Right-click anywhere on the router image, except a port.
- 2 Click Links Overview on the menu that appears. The Link Overview Table appears.

📰 Link Overview Table - 1	134.134.34.	204		_ 🗆 ×
<u>F</u> ile <u>O</u> ptions <u>H</u> elp				
Name	Port	Туре	State	Connect State
LAN	LAN	Ethernet	Up	
Internet Service Frovider Internet Service - Slave #1 Internet Service - Slave #2	Multi ISDN S/T ISDN S/T	PPP Multilink Bundle PPP PPP	υρ υρ υρ	υρ υρ υρ

3 Double-click a name for more information. The Link Details dialog box appears.

🗮 LAN Link Details - LAN - 134.134.34.204 📃 🔲							
<u>File Tools Options H</u>	<u>H</u> elp						
[Link] Ethernet Statistics							
Link Status Status:	Up	Port:	LAN				
Last Change:	Sat Aug 29 16:12:36 1998						
Received		-Transmitted					
Bytes:	638,464,628	Bytes:	1,308,325				
Ucast packets:	11,312	Ucast packets:	8,850				
Non-Ucast packets:	1,768,640	Non-Ucast packets:	724				
		Queue length:	0				
Unknown Protocols:	1,408,823						
Discards:	0	Discards:	0				
Errors:	0	Errors:	0				
-							

Adding a trap receiver

Add a trap receiver when you want a management PC alerted of an event that occurs on the router.

- 1 Right-click anywhere on the router image, except a port.
- 2 Click Configuration, then click Management Setup on the menu that appears.
- 3 Click the Traps tab in the Management Setup dialog box.
- 4 Click Add.
- 5 Choose the IP address of the trap receiver.
 - To use the PC you're managing from, click This PC.
 - To send traps to another PC on the network, type the IP address and community string of the PC you want to use.

Add/Edit Trap	×	
IP address		Ihis PC
Community:	public	Tuere
OK	Cancel Help	

6 Click OK, then click OK on the Management Setup dialog box.

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