

The World's Only Intelligent Tap

iTap GigaBit Port Aggregator with SFP Monitor Ports

Aggregation + information =
network monitoring flexibility



intelligent tap

Access

- Real time traffic usage levels
- Size and time of the greatest traffic peaks
- Counters for total packets, total bytes, CRC errors, collisions, and more
- Status for system, link, and power

Remote

- Browser-based Web Manager
- Management Information Base (MIB) for third-party SNMP tools
- SNMP tool, System Manager
- SNMP traps indicate status changes for system, link, power, and threshold

Control

- Turn off Management and Monitor Ports
- Set usage alarm threshold
- Reset statistics counters and peak data
- Turn off LCD information

Easy to Use

- Uses only one monitoring device NIC
- At-a-glance monitoring from front panel
- Completely passive and device neutral
- Cables included
- Application diagram shows all connections

Intelligent Tap™

The iTap Port Aggregator makes network monitoring easier. The powerful combination of a permanent, passive access point and remote monitoring of key traffic indicators increases your management options and speeds response to troubled links. When an iTap Port Aggregator indicates high usage or CRC errors are occurring on a critical network link, you are given a timely warning, without the need to rely on other time-consuming tools.

The iTap Port Aggregator displays the link usage level in both directions in real time, including the size and time of the last peak, right on the front panel. The iTap Port Aggregator is accessible from remote interfaces that provide information and control from anywhere in the network. The iTap Port Aggregator gives you the information and the passive access point you need to respond quickly to network events.

For greater flexibility and response speed, use iTap Port Aggregators with Net Optics' Matrix Switches and control the deployment of your analyzers from one point without disturbing a single network connection.

Best in Aggregation

The iTap Port Aggregator combines and regenerates both directions of a full-duplex stream, sending all aggregated traffic out one or two separate passive monitoring ports. Typically, full-duplex monitoring with a network tap requires two NICs (or a dual-channel NIC)—one interface for each side of the full-duplex link. Net Optics' iTap Port Aggregator enables one or two devices to simultaneously monitor a full-duplex link using only one NIC per device.

After the traffic has been aggregated to a single flow, it is no longer possible to distinguish the usage levels of each side of the bi-directional link. The iTap Port Aggregator tracks these levels prior to aggregation, keeping this vital information easily accessible from both remote and command line interfaces.

With its visual display, remote interfaces, and well-buffered aggregation, Net Optics' iTap Port Aggregator creates an entirely new, easy to implement and easy to use category of passive access devices.

Buffers Absorb Bursts

When traffic levels exceed the capacity of the receiving NIC, the iTap Port Aggregator stores overflow traffic in buffer memory. For high-load links, the iTap Port Aggregator is available with 1GB of memory. The buffers clear automatically when traffic volume falls below the receiving capacity of the NIC. These buffers allow the iTap Port Aggregator to absorb traffic bursts, without dropping packets.

Traffic Monitoring

The iTap Port Aggregator monitors the usage levels of both sides of a full-duplex link. Knowing the usage levels is critical for determining if packets could be dropped during high-load periods. This information is displayed on the front panel and is also available from the remote interfaces. The iTap Port Aggregator allows you to set a threshold for each side of the full-duplex link. For example, the iTap Port Aggregator can warn you when usage in either direction passes the 30% level. When a threshold level is exceeded, the alarm LED illuminates and the remote

interfaces record the event. The iTap Port Aggregator records the level of the highest peak along with the date and time. Since the iTap Port Aggregator is monitoring the usage levels, this information is always available, regardless of the aggregation process.

Seeing is Believing

Display and alarm LEDs provide a quick visual check to ensure that usage levels are not exceeding the capacity of either the monitoring device or a pre-determined threshold. From the display, you can view the current bandwidth usage of each side of a full-duplex link with the size and time of the highest peak. A quick check of the display lets you know if there was an event that requires further investigation. After taking action on a usage or peak event, you can reset the data from a recessed Reset button on the front panel, or from a remote interface. The iTap Port Aggregator is ready to detect and display the next critical event.

Access Information Anywhere

Both Web Manager and System Manager

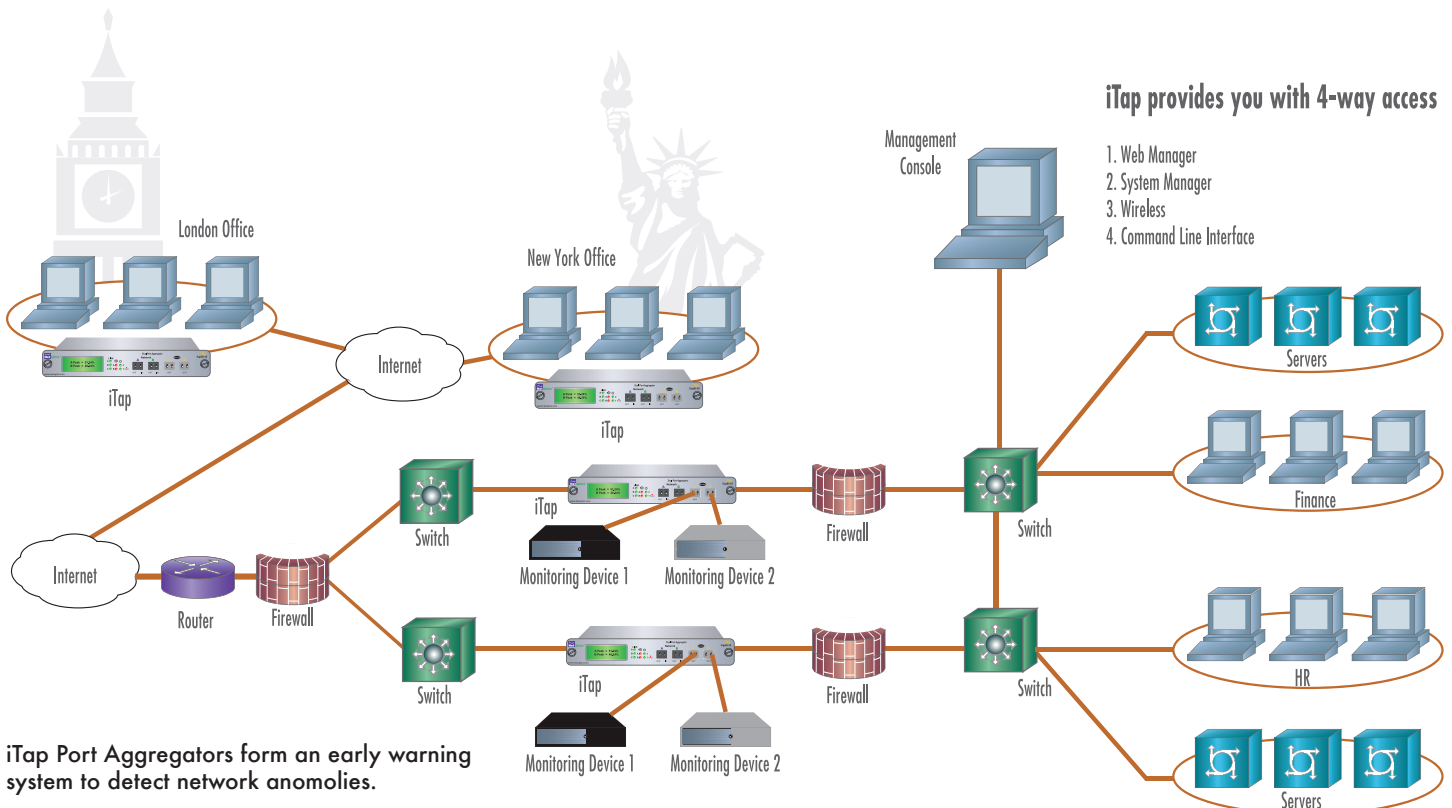
A Current = 37%
B Current = 25%

Current usage is available at a glance

A Peak = 51%
B Peak = 42%

The greatest peaks are also displayed

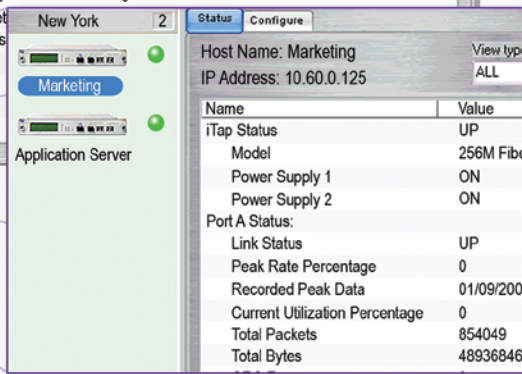
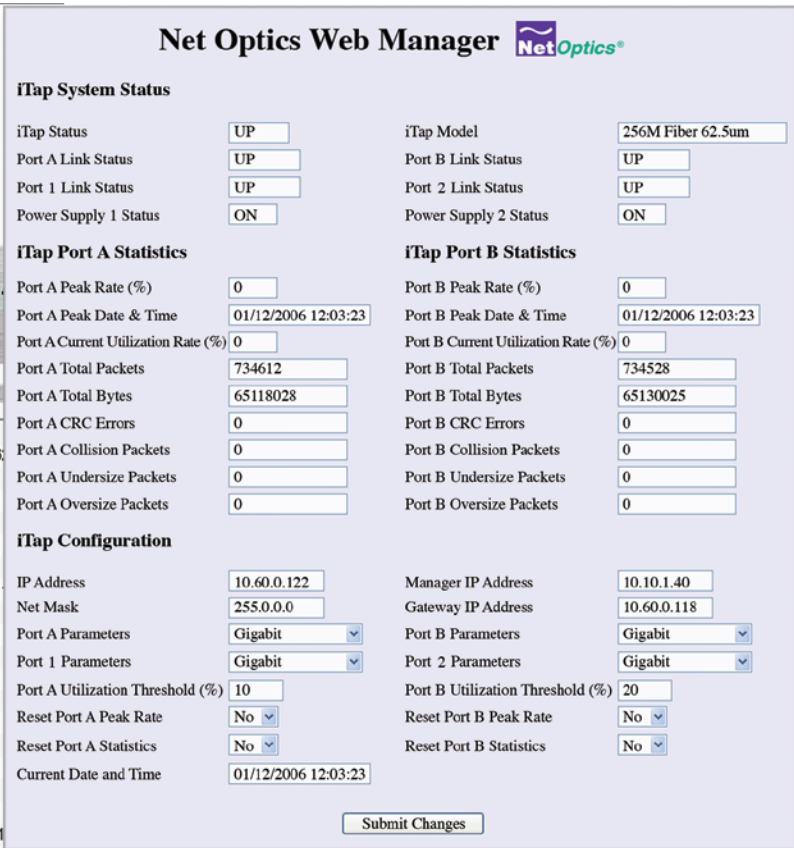
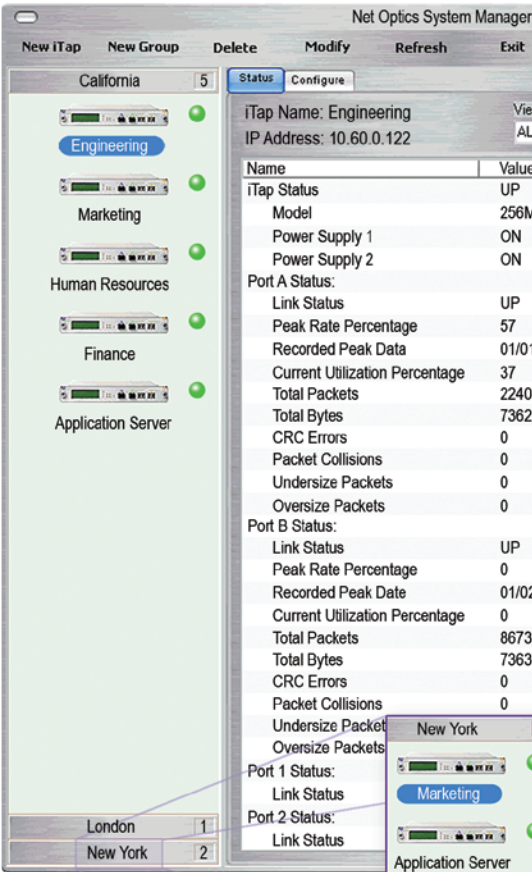
allow you to remotely set parameters, view status information, and monitor traffic statistical data. These interfaces provide security and performance information such as the number of over- and under-sized packets, packet collisions, and CRC errors. You can remotely set alarm thresholds, clear traffic data counters, and turn a Monitor Port on or off.



iTap Port Aggregators form an early warning system to detect network anomalies.

2 Net Optics System Manager gives you access to all your iTap Port Aggregators around the world.

1 Access the web for any iTap Status.



Web Manager

The iTap Port Aggregator has built-in support for remote control and monitoring from any computer with an Internet browser. Net Optics Web Manager is the browser-based interface that allows you to change settings, view status, and retrieve data remotely with simple-to-use controls. When you access an iTap Port Aggregator with Web Manager, all configurations, status, and traffic data are displayed on a single Web page. Changes to the configuration can be made with a few clicks of the mouse.

System Manager

iTap Port Aggregators can be used as a system managed via Simple Network

Management Protocol (SNMP) from a single interface. Net Optics System Manager is an SNMP management tool that offers central management of all Net Optics iTap devices in the network. You can organize iTaps into groups according to workgroup, location, or any other criteria. As with Web Manager, you can view all status, configuration, and traffic information and make changes quickly to any iTap in the system. The iTap Port Aggregator generates SNMP traps for system status, threshold alarm, link status, and power status. If you are already using an SNMP management tool, iTap Port Aggregators can be fully

accessed after loading Net Optics Management Information Base (MIB) file.

Security, Visibility, and Reliability

You have the option of setting the iTap Port Aggregator so that it will not display data on the LCD, and the Management Port will be disabled, preventing it from being accessed from the network. The Monitor Ports can also be turned off to prevent unauthorized access to the network link. The monitoring device connected to the iTap Port Aggregator sees all full-duplex traffic including Layer 1 and Layer 2 errors. Redundant power connections provide uptime protection.

Features and Benefits

Front Panel Display and LEDs	Real-time usage and peak traffic information displayed on the front panel saves you time and money spent using other tools to get basic information. Alarm LEDs indicate if traffic levels have exceeded a set threshold, allowing you to respond quickly to changing traffic conditions.
Net Optics Web Manager	Without any specialized software, you can access the traffic information monitored by any iTap Port Aggregator. All you need is a computer with a browser and access to the IP address of the iTap Port Aggregator. No matter where you are, you can control your iTap Port Aggregator and monitor traffic information.
Net Optics System Manager	Net Optics' SNMP management tool, System Manager, gives you single-point control and visibility into any link in the network with an iTap Port Aggregator anywhere in the world. Distributed on strategic links, iTap Port Aggregators provide baseline information and early warning alarms to help you deploy your security and monitoring devices more effectively over more links.
Command Line Interface	The password-protected command line interface gives you complete access to all of iTap Port Aggregator's functionality via an RS232 port. Most importantly, you can use the CLI to disable the Management Port and prevent the front panel display from showing traffic information.
Net Optics Management Information Base (MIB)	Use the iTap Port Aggregator with your current SNMP management tool. Net Optics' MIB and SNMP traps are completely compatible with popular SNMP tools such as OpenView and Tivoli®.
Aggregation	Net Optics' proven port aggregation technology allows you to monitor traffic using a single NIC on your monitoring device. Unlike any other port aggregator tap, the iTap Port Aggregator monitors usage levels of both sides of the full-duplex link so this information is not lost. 256MB traffic buffers help ensure that your monitoring device does not miss traffic during bursts.
Cables Included	All cables required for installation are included. Follow the connection diagram on top of the iTap Port Aggregator and you are halfway done with the installation of your iTap Port Aggregator.

Optical - SX Fiber Tap

Fiber Type: Corning Multimode 50 or 62.5/125µm, 850nm

Transceiver: GigaBit SX 850nm, VCSEL, supports 50 or 62.5/125µm

Monitor Port Output Power: -9.5 dBm

Network Connectors: LC

Monitor Connectors: SFP

Split Ratio: 50/50, 60/40

Optical - LX Fiber Tap

Fiber Type: Corning Singlemode 8.5/125µm, 1310nm

Transceiver: GigaBit LX 1310nm, supports 8.5/125µm

Monitor Port Output Power: -10 dBm

Network Connectors: LC

Monitor Connectors: SFP

Split Ratio: 50/50, 60/40

Electrical

Power Supply Input:

100-240VAC, 0.5A, 47-63Hz

Output: 12V, 1.5A

Memory

1GB buffer

Environmental

Operating Temperature: 0°C to 40°C

Storage Temperature: -10°C to 70°C

Relative Humidity: 10% min, 95% max, non-condensing

Mechanical

Dimensions: 1.125" high x 11" deep x 8.5" wide

Indicators

(1) 2x16 LCD

(3) Link LEDs

(2) Threshold Alarm LEDs

(2) Power LEDs

Software

Command Line Interface (CLI): Any terminal emulation software

Net Optics Web Manager: Any browser

Net Optics System Manager: Windows 98, Windows 2000, Windows XP

Available Base Models

GigaBit Multimode Fiber, SX, 62.5 µm

GigaBit Multimode Fiber, SX, 50 µm

GigaBit Singlemode Fiber, LX, 8.5 µm

Part Numbers

IPA-50SXx-SFP

IPA-SXx-SFP

IPA-LXx-SFP

Certifications

Fully RoHS compliant



Customer First!

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