

THE NP-2000 NETSENSORY PROFESSIONAL APPLIANCE CAN GIVE YOU THE UPPER HAND ON YOUR TOP TEN APPLICATION PERFORMANCE PROBLEMS IN UNDER 10 DAYS FOR LESS THAN \$10,000. ITS UNIQUE USER INTERFACE HELPS YOU SPOT PROBLEMS AND DRILL DOWN TO THE SOURCE WITH JUST A FEW CLICKS OF THE MOUSE.

TIRED OF BEING THE
USUAL SUSPECT?

6'

5'6"

5'

4'6"

4'

Defend yourself against
"THE NETWORK
IS SLOW"

It's NOT
the Network

PUTTING "LAYER 8" TO WORK: APPLICATION PERFORMANCE MANAGEMENT ON A REAL-WORLD BUDGET

Do you spend too much time tracking down application performance problems and defending yourself and your IT infrastructure against user complaints? Are you fed up with not being able to see what's going on with your network and applications? Tired of fighting fires with a budget that's barely sufficient for a bucket of water, let alone high-priced management tools?

What if there were a simply installed appliance that could give you the upper hand over your top 10 application performance problems, with a simple interface that gave you the answers you need with just a few mouse clicks? What if the appliance could do that within 10 days of installation? And what if it cost less than \$10,000?*

That's the promise of the NP-2000 NetSensory Professional appliance. It installs in less than an hour via a simple SPAN/mirror port or tap with no network impact and puts over 50 minute-by-minute performance and utilization metrics at your fingertips.

Rather than wasting your budget on hard-to-manage probe-based management solutions that never quite deliver the information you need, NetSensory Professional puts your network's "Layer 8"—the pattern-recognition supercomputer behind your eyes—to work instead. Its unique NetSensory Insights™—action guides that encapsulate best practices for common management tasks—present network hotspots and their business impact in a vivid step-by-step graphical format that makes data patterns jump out at you. You can track down application performance problems with just a few clicks of the mouse.

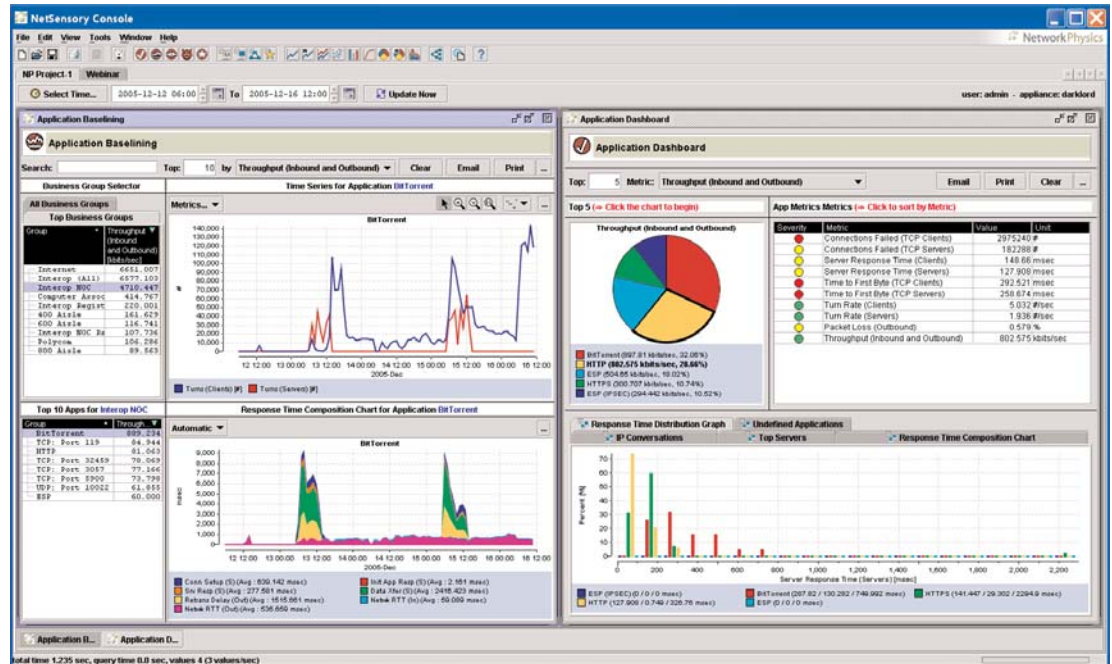
With NetSensory Professional, you get the answers you need, when you need them...and you've got budget left for those new business initiatives you never seem to have enough time for. So let's get started and see just how quickly NetSensory Professional can put you in command of your network and application performance. To illustrate the operation of the NP-2000 NetSensory Professional, we'll be using data collected by a NetSensory system during the Interop Conference in New York, December, 2005.

Installation—Plug and Play Application Performance Management

With NetSensory there's no need to worry about where you're going to put dozens of probes or agents, or how you're going to afford them or manage them, because the NetSensory flow-based technology extracts everything you need to know about your network and applications from the TCP/IP information carried by each packet. All you need to do is connect one of the traffic ports of the appliance to a SPAN/mirror port or tap at a point in your network that sees all your traffic—generally the last switch before your Internet access routers.

After you assign an IP address to the appliance for management purposes, the built-in Web Interface lets you complete the simple setup process and install the NetSensory Console—your graphical gateway into the system database and its rich collection of performance and utilization metrics—on your desktop or laptop computer. Less than an hour after taking the appliance out of the box, you're ready to take control of your network and application performance!

The NetSensory Management Console is a Java-based client-server application that serves as your graphical interface to the system database. It enables you to organize network performance, utilization, and end-user experience in terms of their business significance, using Business Groups and Applications. You can explore and analyze those data using the unique NetSensory Insights: step-by-step best-practice action guides that give you answers as fast as you can move your mouse.



Act One—Out-of-the-Box Insight

By the time you've installed the console on your desktop or laptop computer, the NP-2000 NetSensory Professional will already have collected several minutes of data from your network. It reads the TCP/IP headers on every packet mirrored to its traffic ports, analyzes the data, and then records one-minute averages for more than 50 performance and utilization metrics calculated from that data. The longer the appliance runs, the more you can see, and it can store network and application data for up to a year. You get real-time information for troubleshooting, and historical information for baselining, trending, planning, and service-level analysis.

Data Resolution	Typical Storage Interval
1 minute	7 days
5 minutes	30 days
1 hour	160 days
1 day	365 days

Metrics are captured in real-time and stored in the system database in one-minute intervals. Over time, this data is aggregated into larger intervals to allow for long-term data storage, as shown in the table. The aggregation rules may be customized, and storage intervals are dependent on the amount of network traffic: higher rates will result in shorter intervals.

The NP-2000 Professional presents a unified view of network operations, gathering and displaying performance, utilization, and user-experience data from a single appliance via a single interface. These metrics are derived from TCP/IP packet header data.

Application Performance (Client & Server)	Network Performance (Inbound & Outbound)
Initial Application Response Time	Packet Loss
Client Reset Rate	Packet Retransmission Rate
Connection Duration	Retransmission Delay
Connection Rate	Retransmission Rate
Connection Request Rate	Round Trip Time
Connection Requests	Utilization (Inbound & Outbound)
Connection Setup Time	95th Percentile Throughput
Connections	Goodput
Connections Failed	Packet Payload
Connections Failed Rate	Packet Throughput
Data Transfer Time	Packet Traffic
Server Reset Rate	Payload
Server Response Time	Throughput
Time to First Byte	Traffic
Turn Rate	Transaction Throughput
Turns	Information
	Group
	Group Definition
	Group Membership
	Information

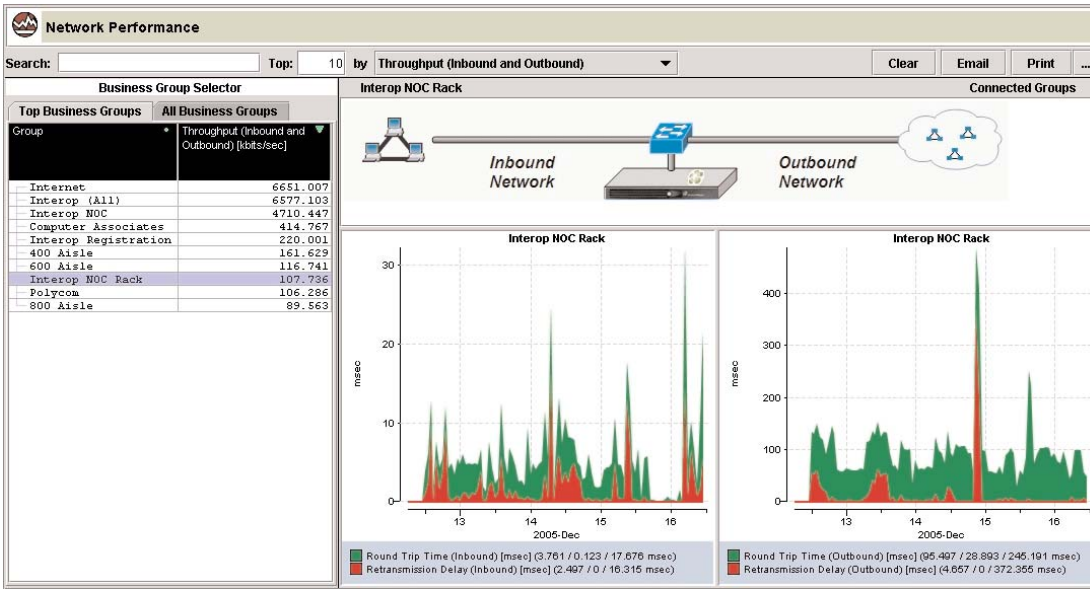
Insights Put “Layer 8” to Work

The number of metrics and their detail alone are enough to set the NP-2000 NetSensory Professional apart from the competition, but that's just the beginning of the power it puts at your fingertips. NetSensory presents all this data in a way that lets you bring the most powerful pattern-recognition computer in the world to bear on your network and application performance problems: the supercomputer behind your eyes.

Think about it: you take it for granted that you can instantly recognize at a distance the face of a friend you haven't seen for years, or notice that someone has moved something on your desk when you come back from a coffee break. Simple, right? But even multi-million dollar computers have a hard time with tasks like that, and there's no way you're going to fit something like that into your network and application management budget.

But with NetSensory, you don't have to. Instead, the NetSensory console presents network and application performance information to you in a graphical, workflow-based format using our unique NetSensory Insights. Insights organize the data in a way that makes patterns jump out at you, so you don't have to waste time poring over opaque protocol decodes or floods of device information.

As we'll see in the next section, some of this organization depends on your specification of Business Groups and Applications, but even before you undertake that simple task, the NP-2000 NetSensory Professional can tell you a lot about your network using our unique Application and Total Traffic Dashboard Insights.



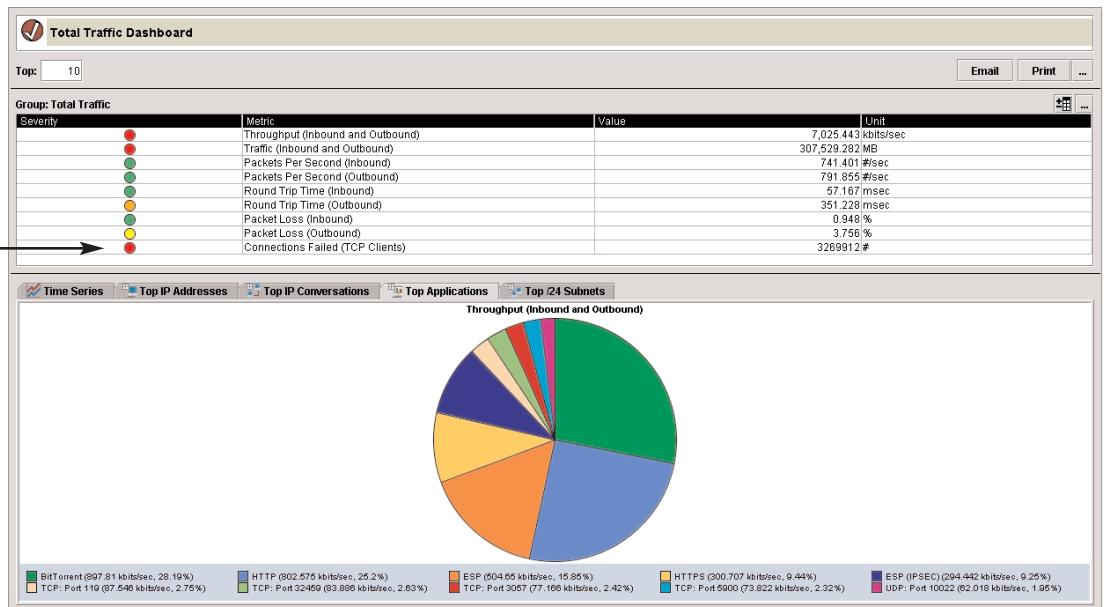
Insights are point-and-click action guides that encapsulate the best practices of network gurus at the world's top companies for a wide range of common management tasks. The NP-2000 NetSensory Professional ships with more than 20 Insights already installed, and new ones are easily downloaded from an Update Center maintained by Network Physics or your reseller. Ask your reseller about Custom Insights tailored for your exact needs!

The Total Traffic Dashboard

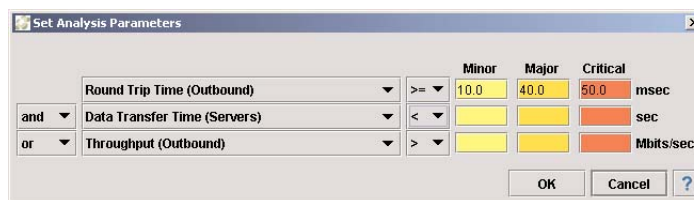
Right out of the box, the Total Traffic Dashboard shows you key performance indicators for your network traffic. You can see at a glance the overall

performance of your network and applications and its most active users or resources.

Note the high reading for "Connections Failed" at the bottom of the metric table. This is a sign of a worm attack—something the NP-2000 NetSensory Professional can spot right out of the box, without any "signature" programming or other configuration. We'll see later how easy it was to track this down.



By right-clicking on any of the Severity indicator lights, you can quickly set thresholds for your particular network.



In the lower pane of the Insight, you may select a time series for the selected metric, tables of the top IP addresses, IP conversations, or /24 prefixes by throughput, or a pie chart of the top pre-defined

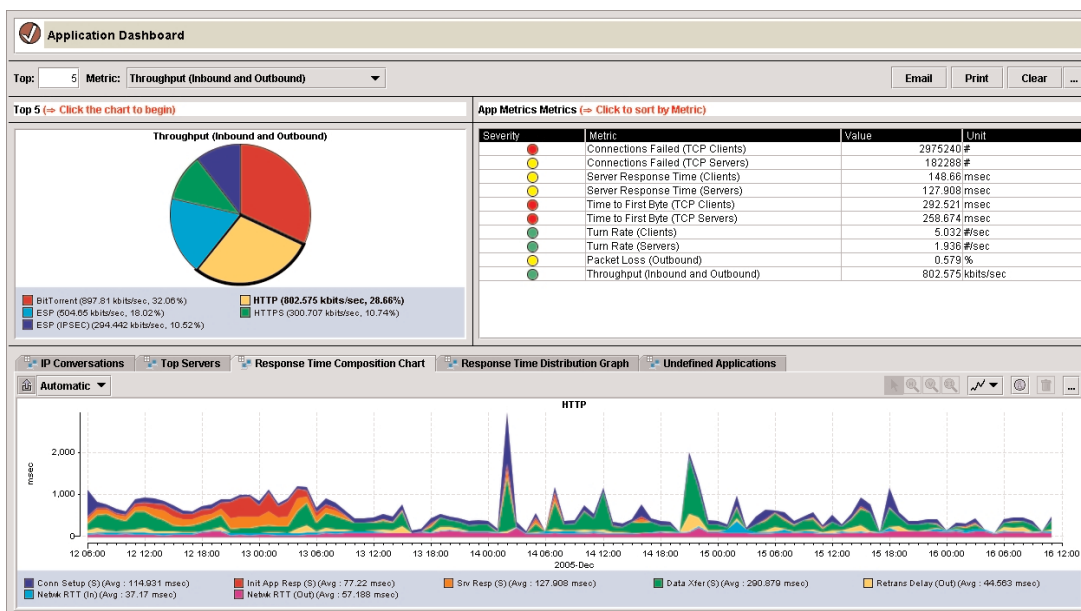
Applications by throughput (as illustrated). The number of each of these that is displayed can be changed using the Top field in the upper left-hand corner of the Insight.

The Application Dashboard

In a similar fashion, the Application Dashboard shows you key performance indicators for pre-defined applications such as HTTP and allows you to set

thresholds for them. In addition, you can select which metric is used to select the top applications.

The Response Time Composition Chart (bottom pane) breaks total application response time (an accurate barometer of user experience) into network and server components so you can quickly see the likely source of problems. For instance, here we can see that before the Interop show actually began, while the network was being started up, HTTP applications were seeing some server problems (red and orange). But after the network was up and running, spikes in response time overall were due more to the amount of data transmitted (green: Data Transfer Time), although late on the 14th we can see a spike in packet loss (yellow), as well. Throughout the show, network latency (magenta and turquoise) remained fairly low and constant.



In the lower pane of this Insight, you may select the top IP conversations or servers involved, display the top undefined applications as an aid to defining those you'll wish to track in more details, or a Response Time Composition Chart (time-series or distribution) of the selected application.

What Does It All Mean? Business Groups and Applications

NetSensory Business Groups and Applications show you the business meaning of performance and utilization measurements.

Although the NP-2000 Professional can deliver a lot of information about your network and applications right out of the box, the real key to its power lies in how it displays critical metrics in terms of their importance to you and your company. This makes it easy to prioritize your response to problems.

To do that, it needs a little information about the logical structure of your network, which you can easily supply by specifying Business Groups and User-Defined Applications. And, once you do this, NetSensory automatically starts gathering more in-depth information at a higher granularity for those groups and applications and storing it for a longer time. In effect, it focuses on keeping the data that's important to you for solving problems and getting your job done!

Business Groups

Business Groups are simply sets of IP addresses representing important resources on your network—anything from server clusters or data centers to a branch office or customer site to an individual user. You can create them using the Business Group Manager, or, as is most common, importing them from your already-existing spreadsheet of IP address

assignments. You may further organize Business Groups in Business Group Containers, which can themselves contain other Business Group Containers, making it possible to represent the most complex business-network relationships in an unlimited hierarchy. The NP-2000 Professional may be configured with up to 100 Business Groups.

At Interop, Business Groups represent each exhibitor booth, various aisles on the show floor, and important network resources such as the NOC, wireless networks, and even the Internet.

Name	Description	Definition	Origin	Modified By	Last Modified	Edited
FSecure website	Internet site (SS)	193.110.109.55	global	admin	2005-12-13 15:2...	
Gigamon	Booth362	130.128.40.170-130.128.40...	global	admin	2005-12-12 12:1...	
Gigamon Systems website	Internet site (SS)	66.55.39.194	global	admin	2005-12-13 15:1...	
Google	Internet site	15169	global	admin	2005-12-13 11:1...	
Hotmail	Internet site	208.172.158.182	global	admin	2005-12-13 11:1...	
HP AS 71	Internet (entire HP AS)	71	global	admin	2005-12-13 15:0...	
HP website	Internet site (Speede...	192.6.165.40	global	admin	2005-12-13 15:0...	
Idealstor	Booth249	130.128.40.100-130.128.40...	global	admin	2005-12-12 12:1...	
Identita	Booth441-10	130.128.40.252-130.128.41.7	global	admin	2005-12-12 12:1...	
ILOC	Booth751	130.128.60.130-130.128.60...	global	admin	2005-12-12 12:1...	
Internet	Internet IP addresses...	172.32.0.0-192.167.255.25...	global	admin	2005-12-12 12:0...	
Interop (All)		130.128.0.0/16	global	dbarker	2005-12-12 12:3...	
Interop NOC	NOC	130.128.1.1-130.128.1.255	global	admin	2005-12-12 12:1...	

Identify	Business Group Definition	Business Group Container Definition	Container Tree
Name: Interop NOC Description: NOC Classification: Business Group Status: <input checked="" type="radio"/> Active <input type="radio"/> Inactive			
New	Delete	Apply	OK Close ?

Applications

Using the Application Manager, you can define three different kinds of applications:

- **Standard Application:** a set of TCP or UDP ports, or any non-TCP-non-UDP application, such as ICMP, OSPF-IGP, or ESP. NetSensory comes with many such applications already defined, such as HTTP, FTP, and the like.
- **Server Application:** a set of TCP or UDP ports tied to a specific set of IP addresses. This is useful for applications such as Microsoft Exchange that use ephemeral ports, which might be confused with other standard applications also using a port in the ephemeral range.

- **Web Application:** a TCP application (generally port 80 or 8080) tied to a specific set of IP addresses that is accessed using one or more unique URLs. Web applications are used to track web-enabled applications. The NP-2000 Professional may be configured with up to 20 web applications.

Furthermore, NetSensory V5.0 features the industry's first real-time turn tracking, enabling it to deliver detailed metrics about enterprise applications such as SAP that use persistent connections, and furnish an accurate barometer of transaction performance without the cost of deep packet inspection.

At Interop, defined applications included the Interop registration servers, where people signed up for the conference, as well as well-known Internet sites, such as Google and Yahoo searches.

Name	Description	Definition	Origin	Modified By	Last Modified	Edited
FSecure website	Internet site (SS)	193.110.109.55	global	admin	2005-12-13 15:2...	
Gigamon	Booth362	130.128.40.170-130.128.40...	global	admin	2005-12-12 12:1...	
Gigamon Systems website	Internet site (SS)	66.55.39.194	global	admin	2005-12-13 15:1...	
Google	Internet site	15169	global	admin	2005-12-13 11:1...	
Hotmail	Internet site	208.172.158.182	global	admin	2005-12-13 11:1...	
HP AS 71	Internet (entire HP AS)	71	global	admin	2005-12-13 15:0...	
HP website	Internet site (Speede...	192.6.165.40	global	admin	2005-12-13 15:0...	
Idealstor	Booth249	130.128.40.100-130.128.40...	global	admin	2005-12-12 12:1...	
Identita	Booth441-10	130.128.40.252-130.128.41.7	global	admin	2005-12-12 12:1...	
ILOC	Booth751	130.128.60.130-130.128.60...	global	admin	2005-12-12 12:1...	
Internet	Internet IP addresses...	172.32.0.0-192.167.255.25...	global	admin	2005-12-12 12:0...	
Interop (All)		130.128.0.0/16	global	dbarker	2005-12-12 12:3...	
Interop NOC	NOC	130.128.1.1-130.128.1.255	global	admin	2005-12-12 12:1...	

Identify	Business Group Definition	Business Group Container Definition	Container Tree
Name: Interop NOC Description: NOC Classification: Business Group Status: <input checked="" type="radio"/> Active <input type="radio"/> Inactive			
New	Delete	Apply	OK Close ?

Using Insights: Questions, Answers, Now!

NetSensory Insights are point-and-click action guides that encapsulate best practices for the tasks involved in assuring the integrity, performance, and security of your application infrastructure. They enable you to accomplish complex tasks as fast as you can move your mouse

Insights are organized into five categories, representing the natural overall workflow of application performance management:

Audit—Assess your application infrastructure. What’s really on your network? Who’s talking to whom? Understand the structure of your network and prepare for network transitions.

Baseline—Spot trends and establish what’s normal and what’s not: latency, load, response time, chattiness, and more. Get a handle on what to expect from branch offices, data centers, server clusters, partners, customers, and other business resources.

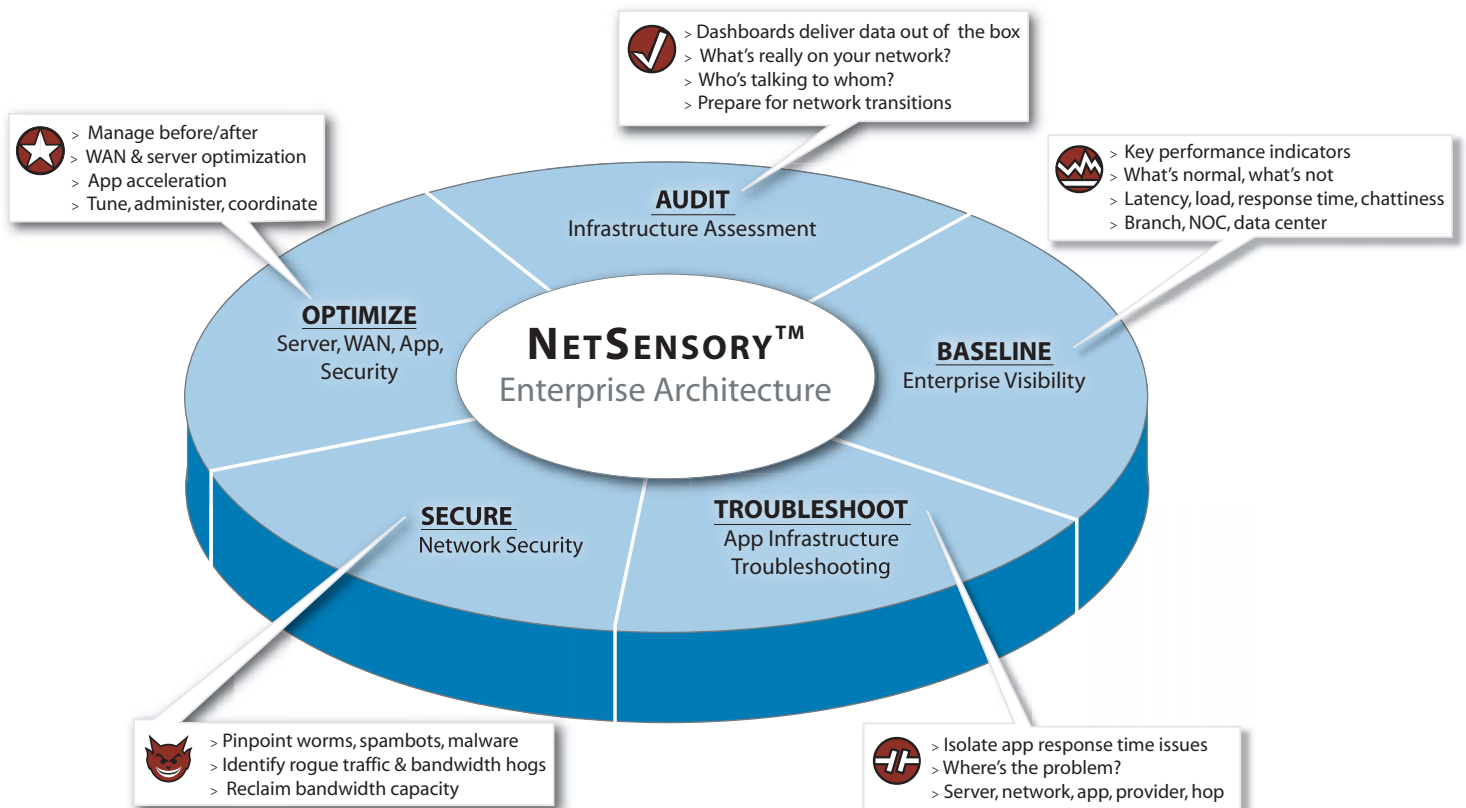
Troubleshoot—Isolate application response time issues: where’s the problem, what applications are affected, which users, what’s the business impact? Drill down to the problem source: server, network, or application.

Secure—Find the stuff that’s not supposed to be there: worms, spambots, malware, anomalous file transfers, etc. Track down rogue traffic and bandwidth hogs, reclaim bandwidth capacity.

Optimize—Manage network transitions before and after: WAN & server optimization, application acceleration, server consolidation, firewall upgrade. Measure the improvement and prove that it was worth it.

These are not, of course, tasks you do just once. As illustrated by the “ABTSO” wheel, below, these tasks are part of a recurring process. For instance, once you’ve optimized a given part of your infrastructure, you have to audit and baseline the result to make sure it keeps on working as expected even as your network changes—and, of course, the work of troubleshooting and securing your network never stops.

In the following sections, we’ll demonstrate how much faster Insights enable you to do each of these tasks by looking in detail at an example of each of the five types.



NetSensory Audit Insights enable you to profile the performance and usage of your network. These Insights can help you prepare for network transitions, such as server or data center consolidation, establishing new offices, moving existing installations, and similar initiatives.

The Audit Insights included with the NetSensory Professional 5.0 are:

Application Dashboard—shows you key performance indicators for pre-defined applications such as HTTP and allows you to set thresholds for them. See Page 5, above.

Application Discovery—discover overall application usage on the network, the users and servers of those applications, and the users and servers they're connected to.

Business Group Audit—visualize the topology of your network in terms of which Business Groups are communicating with a specific Business Group. Discover the top applications, Member IPs, and Connected IPs for those communications. Especially useful for discovering unexpected connectivity or the lack of expected connectivity.

Subnet Audit—a useful Insight for discovering /24 subnets that may qualify to be Business Groups.

Total Traffic Dashboard—shows you key performance indicators for your network traffic. See Page 4, above.

Unassigned Ports Discovery—identify traffic on TCP/UDP ports that do not have an application definition assigned to them. Since more data is available for user-defined applications than undefined applications, this is a way to make sure you're collecting data about important applications on your network, as well as to identify unwanted or unexpected applications.

Business Group Audit

Display only Business Groups with a given string in their description: e.g. only groups in the "Northeast" region.

Select from top N Business Groups or from all Business Groups, ranked by any metric.

Choose how many items to display in each pane (top N).

Choose one of 50 different metrics by which to rank displayed items.

Visualize relationships between Business Groups. See at a glance who's talking to whom and relative value of selected metric (arrow thickness) between groups.

STEP 1

The screenshot shows the 'Business Group Audit' interface. At the top, there is a search bar and a dropdown menu set to 'Throughput (Inbound and Outbound)'. Below this is the 'Business Group Selector' table, which lists various business groups and their throughput. To the right is a 'Topology of Connected Groups for Interop NOC' diagram showing connections between different groups like Microsoft.com, Avaya website, and others. At the bottom, there are three summary tables: 'Top 10 Apps for Interop NOC', 'Top 10 Member IPs of Interop NOC', and 'Top 10 Connected IPs to Interop NOC'.

Business Group Selector	
Group	Throughput (Inbound and Outbound) [kbits/sec]
Internet	6651.007
Interop (All)	6577.103
Interop NOC	4710.447
Computer Associates	414.767
Interop Registration	220.001
400 Aisle	161.629
600 Aisle	116.741
Interop NOC Rack	107.736
Polycom	106.286
800 Aisle	89.563

Group	Throughput (Inbound and Outbound) [kbits/sec]
BitTorrent	889.234
TCP: Port 119	84.944
HTTP	81.063
TCP: Port 32459	78.069
TCP: Port 3057	77.166
TCP: Port 5900	73.798
UDP: Port 10022	61.855
ESP	60.000

Information	Throughput (Inbound and Outbound) [kbits/sec]
130.128.1.249	3314.471
130.128.1.138	765.488
130.128.1.250	245.808
130.128.1.228	92.326
130.128.1.141	79.753
130.128.1.122	39.008
130.128.1.196	33.710
130.128.1.247	24.360
130.128.1.167	21.561
130.128.1.15	21.335

Information	Throughput (Inbound and Outbound) [kbits/sec]
136.204.224.215	81.874
sn-nd1.vsrv-sjc.supernews.net	79.400
findatix.Stanford.EDU	73.807
65.200.128.14	52.023
c-67-191-241-33.hsdl.ga.comcast...	45.558
usvgvlsh.emc.com	26.545
hoefnix.Stanford.EDU	22.675
c-24-8-45-208.hsdl.co.comcast.net	16.839
ool-18b951e5.dyn.optonline.net	15.335
222.96.207.47	13.976

Top N applications used by members of the Business Group, ranked by selected metric.

Top N member IPs (addresses within the Business Group) ranked by selected metric.

Top N Connected IPs (addresses outside the Business Group talking to addresses inside it) ranked by selected metric.

NetSensory Baseline Insights help you establish a baseline for your network: what's normal? They help you establish norms for latency, load, response time, or any other of the 50+ metrics recorded by the NetSensory Professional for any groups or applications of concern. And in many cases you can diagnose the cause of poor performance, as well!

The Baseline Insights included with the NetSensory Professional are:

Application Baselining—baseline the performance of the applications in a Business Group.

Network Performance—check latency and packet loss on your WAN and LAN.

Trending Custom—compare application performance between arbitrary time ranges.

Trending Yesterday/Last Week/Last Month—compare application performance for one day against the same day a month ago.

Application Baselining

Display only Business Groups with a given string in their description: e.g. only groups in the "Northeast" region.

Select from top N Business Groups or from all Business Groups, ranked by any metric.

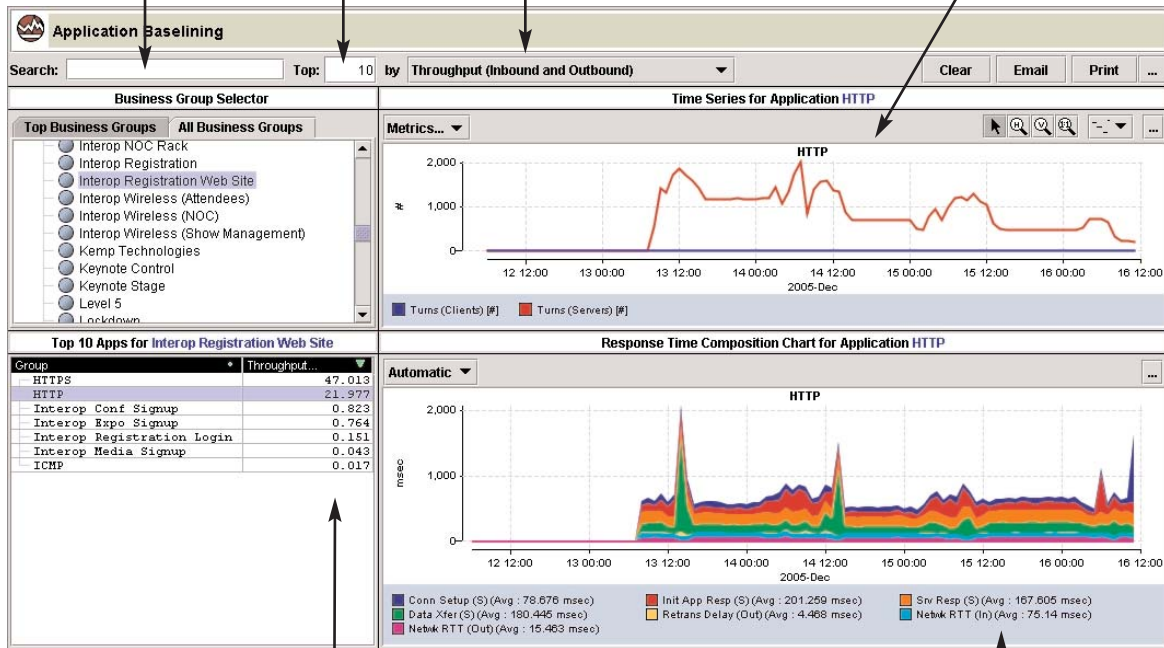
Choose how many items to display in each pane (top N).

Choose one of 50 different metrics by which to rank displayed items. (Default: Throughput Inbound and Outbound).

See Server and Client turn activity: an accurate barometer of transaction activity.

STEP 1

STEP 2



Select an application used by members of the Business Group to baseline.

Top N applications used by members of the Business Group ranked by selected metric.

Breakdown the user experience into server and network components, see at a glance where to look for problems.

For instance, this application is server-bound (red & orange); the network (blue & turquoise) is fine. Check for load balancer or server overload problems.

NetSensory Troubleshooting Insights help you quickly track down the cause of application response time problems: server, application, network, ISP, route, or other causes. Since NetSensory presents performance, utilization, and other metrics in the context of Business Groups—server clusters, data centers, user communities, and other business entities—you will always know who's affected and therefore how critical the problem is.

The Troubleshooting Insights included with the NetSensory Professional are:

Bandwidth Hogs—find high-bandwidth activity on the network and identify the applications, servers, and users involved.

High Network Latency—find Business Groups experiencing high network latency and identify the applications, users, and server affected.

High Packet Loss—find Business Groups experiencing high packet loss and identify the applications, users, and server affected.

Slow Servers—find servers with high Server Response Time and identify the applications and users affected.

Bandwidth Hogs

Display only Business Groups with a given string in their description: e.g. only groups in the "Northeast" region.

Select from top N Business Groups or from all Business Groups, ranked by Throughput (default).

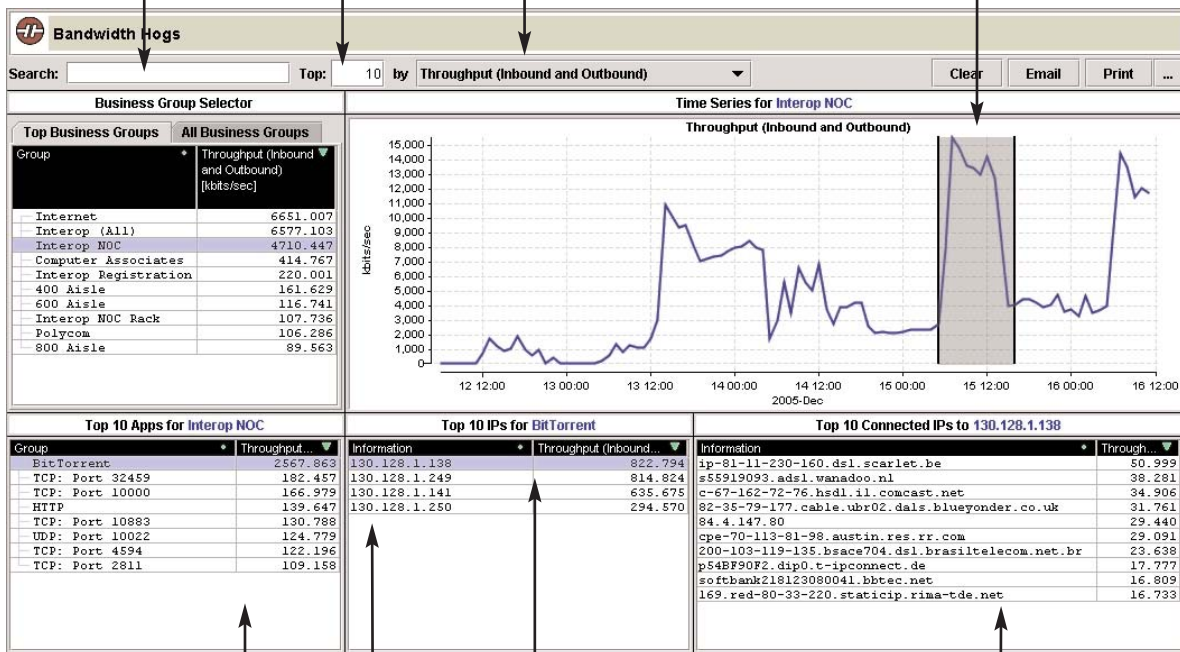
Choose how many items to display in each pane (top N).

Choose one of 50 different metrics by which to rank displayed items. (Default for Bandwidth Hogs: Throughput Inbound and Outbound).

Click-sweep to zero in on suspicious spike in throughput (i.e., select time range).

STEP 1

STEP 2



STEP 3

STEP 4

Select the top application involved in the selected time range.

Select Member IP to see who it is connecting to.

(Ask your reseller about integrating this with DHCP or NBTstat to identify users!)

See exactly where the selected IP address is connecting.

Top N applications used by members of the Business Group during selected time range, ranked by selected metric.

See the top Member IPs of the selected Business Group responsible for high-throughput application activity. For instance, here just four users are using the practical equivalent of two T-1s for BitTorrent!

Security Insights help you quickly isolate and disinfect computers under attack by worms, and identify rogue applications or illicit activity and the users responsible.

The Security Insight included with the NetSensory Professional is:

Worm Hunt—identify Business Groups showing possible worm activity or DOS zombies. Isolate the applications involved and the servers and users affected.

This Insight doesn't require any "signature" programming because all worms exhibit the same behavior once they infect a computer. They scan the network for new victims, but because they don't "understand" the structure of the network, they mostly try to connect to non-existent addresses, generating failed connections. This means that NetSensory can detect Day-Zero attacks!

Worm Hunt

Display only Business Groups with a given string in their description: e.g. only groups in the "Northeast" region.

Select from top N Business Groups or from all Business Groups, ranked by Failed Connections (default).

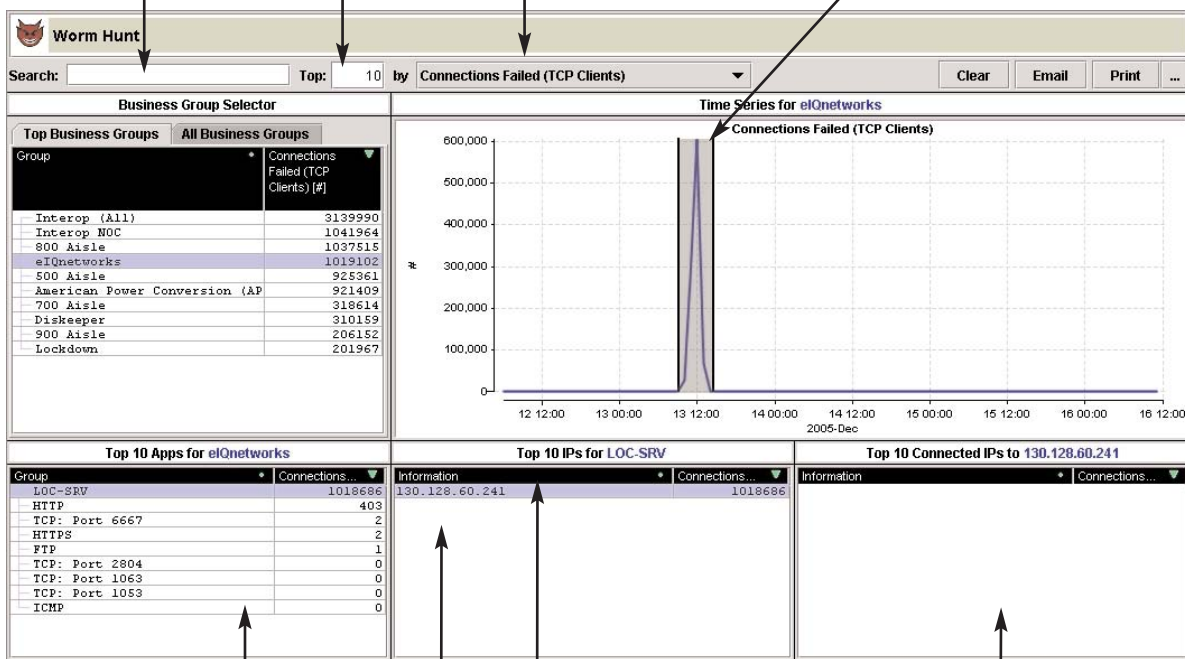
Choose how many items to display in each pane (top N).

Choose one of 50 different metrics by which to rank displayed items. (Default for Worm Hunt: Failed Connections).

Click-sweep to zero in on suspicious spike in Failed Connections (i.e., select time range)

STEP 2

STEP 1



STEP 3

Select the application responsible for the most Failed Connections in the selected time range.

Here it's LOC-SRV (TCP Port 135): the Blaster Worm!

STEP 4

Select an infected Member IP to see who it is trying to infect. (Ask your reseller about integrating this with DHCP or NBTstat to identify users!)

See exactly what other addresses the infected IP address is trying to connect to. In this case the IP addresses have been topped out due to low throughput, indicating no success on the worm's part. A successful infection would show up here.

Top N applications ranked by Failed Connections.

See the infected IP addresses in the selected Business Group. For instance, here it's just one computer, probably a "road warrior" connecting his or her laptop to the network during a lunch break, to check email.

With the money you save with the NP-2000 NetSensory Professional, you have the budget for optimizing your application infrastructure. Where do you start?

That's what NetSensory Optimize Insights are for. They help you tune, manage, and administer any infrastructure change, including WAN optimization, application acceleration, server consolidation, or simply an adjustment to a load balancer or firewall. Baseline and compare application performance, before and after the change, to prove that you made things better. Clearly and independently demonstrate the business benefits.

The Optimize Insights included with the NetSensory Professional include:

Application Chatter—identify chatty applications (many turns with small payload), measure their performance, and check what kind of optimization might be appropriate.

Application Optimization - Before and After Comparison—compare application performance between any two time periods for a selected metric.

Application Performance - Before and After - RTCC—compare application performance between any two time periods using the Response Time Composition Chart.

Application Chatter

Display only Business Groups with a given string in their description: e.g. only groups in the "Northeast" region.

Select from top N Business Groups or from all Business Groups, ranked by Turns (default).

Choose how many items to display in each pane (top N).

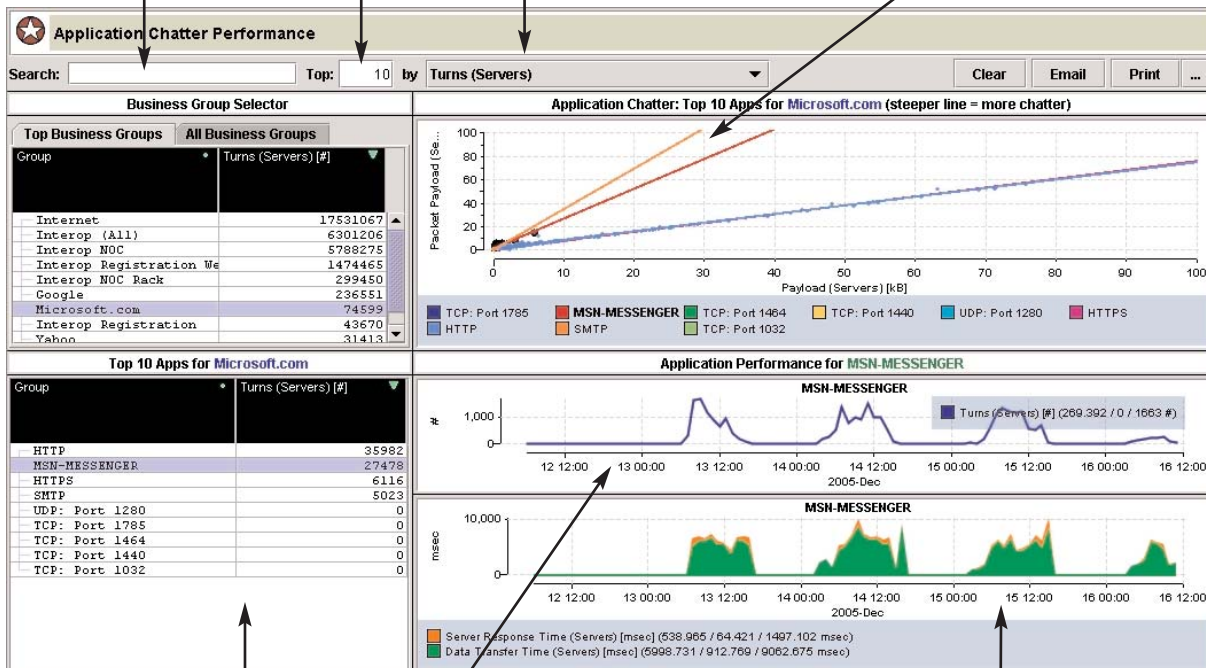
Choose one of 50 different metrics by which to rank displayed items. (Default for Application Chatter: Turns).

Visualize which applications are chattiest: that is, which use the most packets (Packet Payload) per kilobyte (Payload) to deliver data. The steeper the line, the chattier the application and, therefore, the more likely to benefit from some form of optimization.

STEP 1

STEP 3

STEP 2



Select a particularly chatty application to analyze.

See a timeline of turns activity for the selected application, indicating the level of transaction processing taking place.

Visualize Server Response Time vs. Data Transfer Time.

If Server Response Time is high, then there may be a need for server optimization such as an upgrade, load-balancing, or application tuning. This is not the case here.

If Data Transfer Time is high, then the application is likely a candidate for some form of WAN/TCP optimization or data compression, as is the case here.

Top N applications ranked by Turns (a good barometer of transaction activity).

Going on From Here

The next step is up to you. Your reseller will be happy to install the NP-2000 NetSensory Professional in your network, so you can see for yourself what it can do for you.

We've done no more here than give you a taste of the power of NetSensory. There are many more Insights available, and your reseller can create customized Insights tailored to your exact needs. As time goes on, the NetSensory system will hold more and more data about performance and utilization of your network and applications—up to a year's worth, depending on configuration and total network throughput. Your baselines will get steadily more accurate, you'll have a better sense of service levels, and you'll be able to plan better for new network initiatives, such as server consolidation, branch office expansion, or WAN optimization.

But NetSensory has even more to offer. The NP-500 or NP-2000 NetSensory Enterprise takes everything you've seen here and adds web reporting, alerting and advanced troubleshooting, ISP & route quality analysis, 3rd-party integration, and more. With the NP-Director, you can coordinate up to 20 Enterprise appliances to get a global overview of networks of up to 10-15 Gbps.

Best of all, you can try the NP-2000 NetSensory Enterprise for free in your own network. Just ask your reseller for a "Try Before You Buy" license key to turn on full Enterprise functionality for 30 days.

NetSensory Product Line	NP-2000 NetSensory Professional	NP-500 NetSensory Enterprise	NP-2000 NetSensory Enterprise
Target Organization	Mid-Size Organization	Distributed Enterprise Branch Office	Distributed Enterprise Data Center
Network Visibility—Application Discovery: Top Talkers and Conversations	Yes	Yes	Yes
Business Visibility	Yes	Yes	Yes
Real-Time Troubleshooting of Application and Network Problems	Yes	Yes	Yes
Application Performance Baselineing, Trending, and Profiling	Yes	Yes	Yes
Network Performance Baselineing and Trending	Yes	Yes	Yes
Change Management and Impact Analysis	Yes	Yes	Yes
Worm Discovery and Isolation of Infected Hosts	Yes	Yes	Yes
Business Group Scale	100 Business Groups	1500 Business Groups	1500 Business Groups
Advanced Application Support—URL's	20 URL Applications	> 20 URL Applications	> 20 URL Applications
Total Throughput	750 MBPS*	20 MBPS**	750 MBPS*
Web-Based Reporting	No	Yes	Yes
Advanced Troubleshooting (Auto-Traceroute, IP Topology, Adhoc Charts and Tables, Packet Capture) and Alerts/Dashboard	No	Yes	Yes
Internet/BGP/AS Support	No	Yes	Yes
Integration: SNMP, Syslog, Email Alert Output, Integration Manager	No	Yes	Yes
Manageable by the NetSensory Director	No	Yes	Yes

*Based on 120,000 pps. Actual throughput is dependent on average packet size and system configuration. See the NP-2000 NetSensory Enterprise System Description for details.

**Based on 12,000 pps. Actual throughput is dependent on average packet size and system configuration. See the NP-2000 NetSensory Enterprise System Description for details.