

nGENIUS COLLECTOR



Delivers NetFlow and IP SLA-based data to the nGenius Performance Manager or nGenius Performance Manager for NetFlow

NetFlow-enabled routers and switches positioned throughout the network offer a good source of application utilization and conversation-level statistics that help IT organization optimize network performance. These Cisco devices can be configured to generate NetFlow datagrams to measure router interface utilization and IP SLA tests to analyze network performance and availability between switch and router or between IP SLA device and end points such as application servers. Many IT professionals today are looking for ways to take advantage of this data, while at the same time minimize the need to manually manipulate and analyze the resulting information.

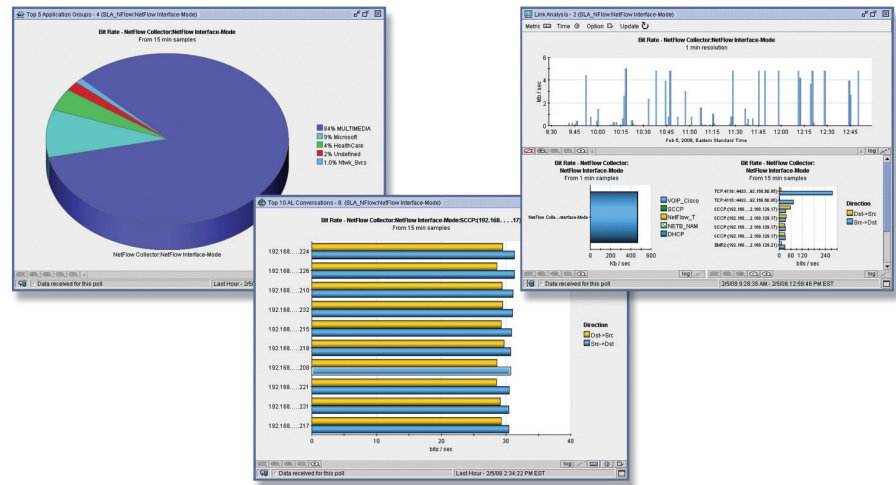
NetScout's nGenius Collectors work with nGenius analysis solutions by leveraging the unique CDM architecture to meet these goals. The system allows for the collection, analysis and display of NetFlow and IP SLA information, along with high-definition data received from NetScout nGenius Probes and nGenius AFMONs, to be displayed in unified views and reports. The nGenius Performance Management System presents the NetFlow and IP SLA data, including conversation information, in context with information from other sources across the network, minimizing the time needed to analyze the data.

Empowered by CDM

NetScout's Common Data Model (CDM) architecture allows traffic flow data from disparate network technologies, regardless of the location within the infrastructure, to be integrated into a common repository for consistent analysis, views and reports.

Strategic network deployments of nGenius Collectors

NetFlow- and IP SLA-enabled routers and switches can be configured to direct



nGenius Collectors are able to receive NetFlow datagrams and IP SLA test information. nGenius Performance Manager or nGenius Performance Manager for NetFlow displays this information in unified views and reports.

NetFlow datagrams and IP SLA test results to the nGenius Collector. By collecting and delivering NetFlow and IP SLA data to the nGenius Performance Manager, users are able to capitalize on their existing investment and minimize total cost of ownership.

How It Works

nGenius Collectors leverage NetFlow records, that include conversation information such as source and destination IP addresses, QoS levels, application port number and Autonomous System number. The nGenius Collector also has the ability to receive the results from various IP SLA tests by polling IP SLA enabled devices throughout the network. CDM technology is the underlying architecture that allows the nGenius Solution to poll, analyze and display the information in common format views and reports in the nGenius Performance Manager and nGenius Performance Manager for NetFlow.

Highlights

The nGenius® Collector with CDM Technology extends the superior functionality of the nGenius Performance Manager by:

- Utilizing NetFlow and/or IP SLA data collected from routers and switches to analyze and report on key network metrics
- Providing a high performance NetFlow collection device that works within the unified views of the nGenius Performance Management System
- Polling up to 500 IP SLA tests to measure the quality of a variety of applications and services including VoIP, DNS and DHCP
- Capitalizing on existing NetFlow data, minimizing total cost of ownership and extending the value of the investment made in infrastructure products

Key Features

Application Recognition

- Well-known TCP- and UDP-based applications
- User-defined, custom-developed applications
- Custom application port / server associations
- Complex applications using port-ranging and port-hopping

NetFlow Record Packet Capture and Decode

- Built-in capture mechanism in the *nGenius* Collector captures datagram from NetFlow-enabled routers
- Decodes for NetFlow v1,5,7,9
- Analyze NetFlow datagram's via packet capture

IP/SLA Tests Supported

- DHCP - Measures the round-trip time taken to discover a DHCP Server and obtain a lease
- DNS - Difference in time from when the client sends a DNS request to when it receives a reply
- ICMP Echo - Measures round trip time for how long it takes the target device to respond to an ICMP echo
- UDP Jitter (VoIP) - Measures round-trip delay; includes average jitter, or both jitter and MOS, and packet loss
- TCP Socket Connect - Difference in time from when the client sends the initial SYN to when the client sends the final ACK in the connect sequence
- Web Page Retrieval - Measures time to retrieve the specified Web page. Also measures the TCP connect time.

Monitored Objects

- NetFlow-enabled router interfaces
- QoS class monitoring
- Site monitoring supports remote site analysis

Data Collection

- Processes up to 2 million flows per minute
- 5000 NetFlow Interfaces
- Poll up to 500 IP SLA tests

Alarming and Event Identification

- Supports router interface alarming on NetFlow Router Interface, QoS and Site
- Supports rising, falling and time-over-threshold parameters

Data Granularity

- 1 minute NetFlow increments - dependant on router configuration
- 15 minute IP SLA increments
- Database supports historically logged data for applications, hosts and conversation flows
- 15 minute, hourly, daily, weekly, monthly and custom time range view selections
- Extendable data repository providing raw and summarized data for user-defined time durations.



Product Specifications

	Specification	Note
Rack Unit	1 Server Rack Unit (1U)	
Dimensions	Chassis: 20.5"D x 17"W x 1.72"H (52.1cm x 43.2cm x 4.4cm)	
Weight	18lbs. (8.2kg.)	
Management Port	RJ45	
nGenius Flow Director Port	RJ45*	*Used as a NetFlow datagram forward interface
Console Port	DB9F	
Environmental Specifications	Operating Temperature: 50° to 104°F (10° to 40°C)	
Operating Humidity: 5% - 95% (non-condensing)		
Power Requirements	100/240VAC, 4/2A, 60/50Hz, 200W	
Regulatory and Agency Approvals	Safety: UL, CSA, TUV, CE, VCI, AUSTEL	
EMI/EMC: FC15 Class A, CISPIR 22 Class A		
IP address	Static IP address	
File system (Windows platforms)	For Windows platforms, use an NTFS-formatted hard disk	
DirectX (Windows only)	Windows servers should run DirectX 8.1 or higher. In addition, all graphics hardware and drivers must fully support the appropriate DirectX version.	

About NetScout Systems

NetScout Systems provides advanced network and application service assurance solutions that deliver complete visibility into real-time, packet/flow-based operational intelligence. IT operators at the world's largest enterprises, government agencies, and service providers use the Sniffer and nGenius solutions to troubleshoot service degradations faster and more efficiently in order to reduce MTTR.

Our world-renowned Sniffer and nGenius solutions include:

- Intelligent Data Sources for high capacity, deep-packet recording and monitoring
- Analysis Software for real-time and historical network and application performance management, troubleshooting, capacity planning, and reporting
- Advanced Intelligence for early detection and in-depth analysis of complex or specialized application services

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Connectivity Specifications

Collector Type	Number of Monitoring Ports	Monitoring Interface Types	Taps and Cables
nGenius Collector	1	10/100/1000 Base-T: RJ45	Data collected via switch span port