HP ProCurve Networking

HP ProCurve and InMon solution brief: network visibility with sFlow

Introduction

InMon's sFlowTrend and Traffic Sentinel products provide HP ProCurve Networking customers with a detailed, real-time view of activity throughout their ProCurve networks, reducing network downtime, improving security, and providing a high quality of service.

As networks converge, problems in any part of the network can have a far-reaching impact on critical services and resources. It is an enormous challenge for network managers to identify and correct problems without clear information about the source and scope of the problem.

Industry-standard sFlow® traffic monitoring is built into the hardware of each ProCurve switch, allowing network management applications to obtain a detailed, real-time picture of network traffic. InMon's traffic management applications automatically discover and configure sFlow monitoring throughout the network to deliver a clear, actionable picture of network health.

Customer value

Network operators no longer need to "fly blind." The complete information provided by InMon's traffic management products eliminates guesswork, reduces downtime, and allows network services to operate efficiently.

Today's environment

Network convergence

All business functions are becoming reliant on a common networking infrastructure. Voice, video, e-mail, storage, and Web services share the same network, and any network problems can have a disastrous impact on business operations.

Security

Confidential information is exchanged over the network with employees and business partners. Any threat to the availability or security of the network can have severe financial consequences, impacting productivity and revenue, as well as creating legal liabilities.
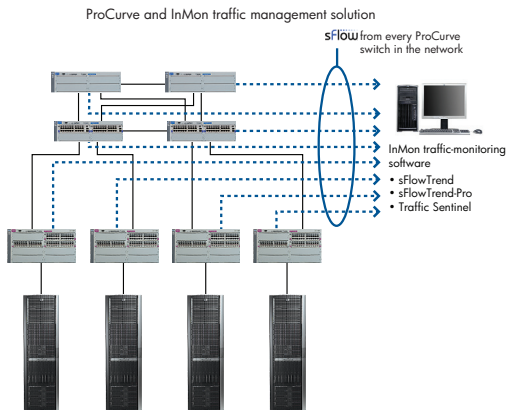
Complexity

Networks have become too large, too complex, and too important to manage by guesswork. Lack of information about network activity can interfere with efforts to provide effective, proactive management.

ProCurve/InMon solution

InMon and ProCurve have partnered to deliver industry-leading traffic management solutions. ProCurve has incorporated hardware-based sFlow monitoring throughout the product line, providing true end-to-end monitoring of network traffic. Most recently, InMon and ProCurve worked together to develop wireless sFlow, which extends network visibility into wireless networks.

InMon's traffic management applications automatically discover and configure sFlow monitoring throughout a ProCurve network, providing the rapid identification and resolution of any threat to the network (see figure 1).
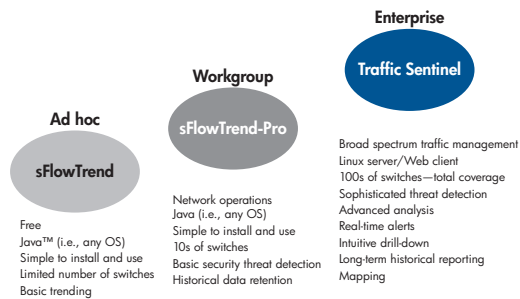
Figure 1. ProCurve and InMon traffic management solution

ProCurve and InMon traffic management solution

sFlow from every ProCurve switch in the network

InMon traffic-monitoring software
• sFlowTrend
• sFlowTrend-Pro
• Traffic Sentinel

InMon offers a full spectrum of solutions, ranging from sFlowTrend, a free troubleshooting tool, to Traffic Sentinel, an enterprise-class solution that can monitor the largest of networks.

Figure 2 shows the three sFlow traffic-monitoring products and their target markets and features.

Figure 2. sFlow management software

Enterprise

Traffic Sentinel

Workgroup

sFlowTrend-Pro

Ad hoc

sFlowTrend

Free
Java™ (i.e., any OS)
Simple to install and use
Limited number of switches
Basic trending

Network operations
Java (i.e., any OS)
Simple to install and use
10s of switches
Basic security threat detection
Historical data retention

Broad spectrum traffic management
Linux server/Web client
100s of switches—total coverage
Sophisticated threat detection
Advanced analysis
Real-time alerts
Intuitive drill-down
Long-term historical reporting
Mapping

sFlowTrend

sFlowTrend provides a great way to try out the sFlow monitoring capabilities of your ProCurve switch (see figure 3). sFlowTrend is free and easy to install. You can get started at www.sflowtrend.com. Within minutes, you will be looking at real-time displays of the top users and applications that consume your network's bandwidth.

Figure 3. sFlowTrend network management software
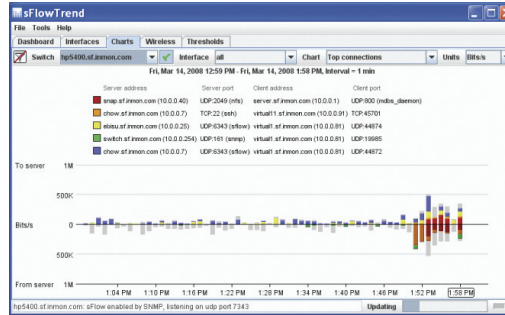
sFlowTrend-Pro

Building on the capabilities of sFlowTrend, sFlowTrend-Pro can simultaneously monitor tens of switches to provide a network-wide view of traffic. sFlowTrend-Pro is a cost-effective traffic management solution for smaller networks. Download a free evaluation version at www.sflowtrend-pro.com.

Traffic Sentinel

Traffic Sentinel is an enterprise-class product, providing network-wide coverage of even the largest networks (see figure 4). The software continuously monitors tens of thousands of switch ports and identifies and diagnoses network problems.

Figure 4. Traffic Sentinel network management software
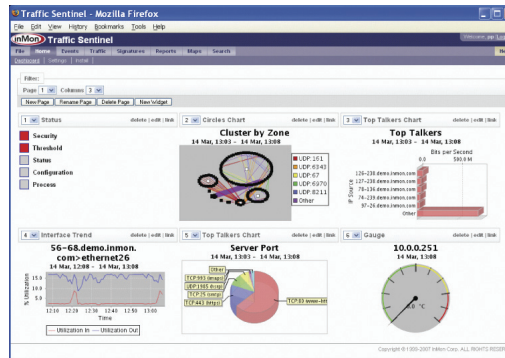
Customizable reporting and an extensive traffic database allow a wide range of network tasks to be addressed, including inventory management, anomaly detection, traffic accounting, and usage policy enforcement. Traffic Sentinel can be integrated with HP ProCurve Manager Plus to provide automated enforcement of usage policies.

Find out more and request a free evaluation copy of the software at www.trafficsentinel.com.

Key features/Benefits

Reduce downtime

"The network is slow" is one of the most difficult complaints for a network manager to address. Hours or days can be spent trying to isolate intermittent performance problems that may affect large numbers of network users.

Detailed, network-wide traffic monitoring rapidly identifies the root cause of problems wherever they occur. Continuous monitoring provides an early warning for many types of problems, allowing proactive measures to be taken before network services are affected.

Improve security

Network-wide surveillance deters inappropriate use and helps ensure that security policies can be enforced.

The scope and impact of security problems can be quickly assessed, and continuous traffic monitoring provides an independent record of activity that complements other security measures, resulting in in-depth security.

Lower total cost of ownership

ProCurve/InMon traffic management solutions provide better coverage at a fraction of the cost of alternative schemes. ProCurve switches build in monitoring that would otherwise require expensive probes. The scalability of sFlow and InMon's traffic management applications eliminates the complexity and cost of multi-tiered collector and analyzer alternatives.

Traffic management increases the effectiveness of network managers, providing the detailed information needed to fully exploit the advanced security and traffic-shaping capabilities of ProCurve switches. This eliminates unwanted traffic and helps prioritize mission-critical services.

Joint success stories

Here are some examples of how ProCurve and InMon work together to provide solutions that help real businesses to solve real problems and thereby gain a business advantage.

Managing a ProCurve wireless network—St. Francis High School

ProCurve and InMon Corporation jointly developed the wireless extensions for sFlow, extending the benefits of sFlow monitoring into wireless networks (see figure 5).

Figure 5. sFlowTrend monitoring a wireless network
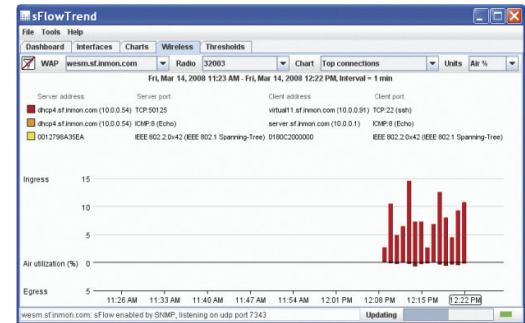
"We are excited about the benefits that wireless sFlow can bring to St. Francis High School for our wireless deployment," said Larry Steinke, director of technology for St. Francis High School in Mountain View, California. "The sFlow tools for troubleshooting, network visibility, and the detection of wireless-specific security threats will be key advantages in our mobility program and development."

Managing a large campus network—University of Utah Health Science Center

InMon's Traffic Sentinel is a proven solution for the largest networks. InMon has hundreds of customers throughout the world. Our traffic-monitoring technology is used in a variety of sectors, including enterprise business, service provider, education, healthcare, government, and media.

"The InMon Traffic Sentinel is the first network management tool that I have seen that gives us so much useful data. We monitor over 10,000 ports on a single server and we love it. When a user complains of slowness, we can immediately identify which user is causing the problem. Traffic Sentinel is the only way to monitor a switched environment," said Jason Traeden, network engineer, University of Utah Health Science Center.

Managing bandwidth—City College of San Francisco

Bandwidth-hogging applications such as YouTube and peer-to-peer file sharing can pose significant challenges if left unmanaged. InMon offers the visibility into network activity needed to take effective control and provide a high quality of service for critical network traffic.

"I've got to say that we are using Traffic Sentinel every day and are amazed at how much insight it gives into the actual use of our network," said Glen Van Lehn, network engineer, City College of San Francisco.

Supported devices

The key to network visibility is the built-in traffic-monitoring capabilities of HP ProCurve switches.

The following switches support the sFlow standard:

- ProCurve Switch 2610 Series
- ProCurve Switch 2800 Series
- ProCurve Switch 3400cl Series
- ProCurve Switch 3500yl Series
- ProCurve Switch 4200vl Series
- ProCurve Switch 5300xl Series
- ProCurve Switch 5400zl Series
- ProCurve Switch 6200yl Series
- ProCurve Switch 6400cl Series
- ProCurve Switch 8212zl
- ProCurve Routing Switch 9300m Series
- ProCurve Routing Switch 9408sl
- ProCurve Wireless Edge Services xl Module
- ProCurve Wireless Edge Services zl Module
- ProCurve Access Point 530

For a complete list of supported products, visit www.inmon.com.

For more information

ProCurve Networking product overviews:
www.hp.com/rnd/products/index.htm

ProCurve Networking convergence solutions:
www.hp.com/rnd/solutions/convergence.htm

ProCurve Networking Design Center
www.hp.com/rnd/design_center/index.htm

White papers:
www.hp.com/rnd/library/whitepapers.htm
(ProCurve Networking)

InMon corporate site:
www.InMon.com

InMon demo site:
http://demo.inmon.com

sFlow industry consortium
www.sflow.org

To find out more about ProCurve Networking products and solutions, please visit **www.procurve.com**