


Purview

Network-powered application analytics and optimization solution that captures and analyzes context-based application traffic to deliver meaningful intelligence



"We can measure application usage when a new service is offered and determine ROI"

"We are able to increase application response time thus increasing productivity"

"I have committed to increase productivity by 30% over 5 years using Purview"

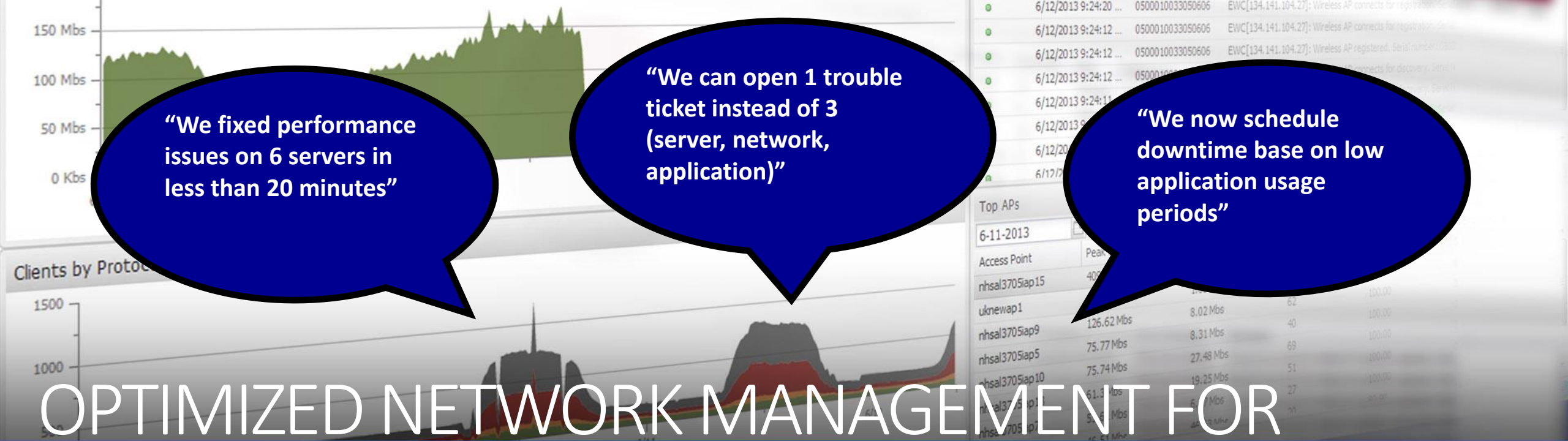
BUSINESS ANALYTICS

Measure strategic applications to assure adoption and productivity

Understand application usage to increase revenue

Profile users or groups for coaching and mentoring, in ANY line of business

Transform unknown or unrelated info into meaningful business intelligence

The background features a network management dashboard. On the left, there are two line graphs: the top one shows bandwidth usage in Mbps (0 to 150) over time, and the bottom one shows the number of clients by protocol (0 to 1500). On the right, there is a log window displaying system messages with timestamps and IP addresses. Below the log is a table titled 'Top APs' for the date 6-11-2013, listing various access points and their performance metrics.

“We fixed performance issues on 6 servers in less than 20 minutes”

“We can open 1 trouble ticket instead of 3 (server, network, application)”

“We now schedule downtime base on low application usage periods”

OPTIMIZED NETWORK MANAGEMENT FOR BETTER USER EXPERIENCE

Optimize network and server architecture for bandwidth-hungry applications

Streamline troubleshooting through application and network performance visibility

IT business planning for better scheduled maintenance & improved productivity

"We quickly located and eliminate rogue applications"

"I can now tell if students are using applications that meet our security requirements"

OPTIMIZED NETWORK MANAGEMENT FOR BETTER SECURITY

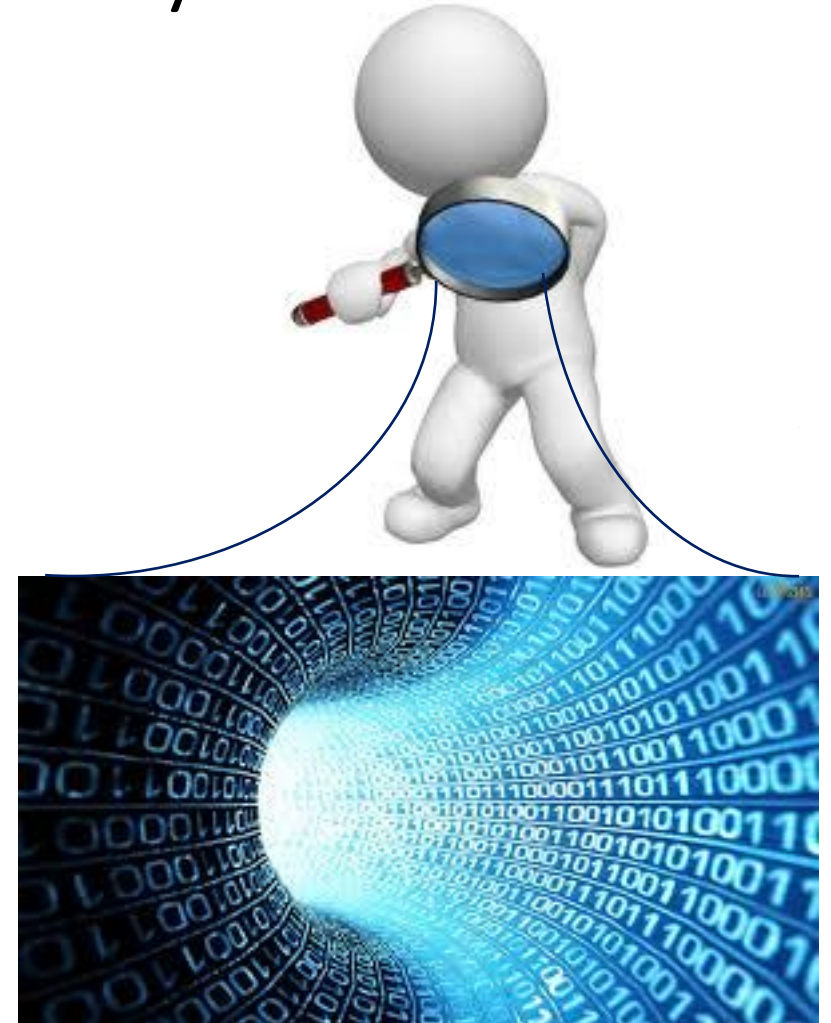
Understand shadow IT or unapproved applications

Help assure security compliance

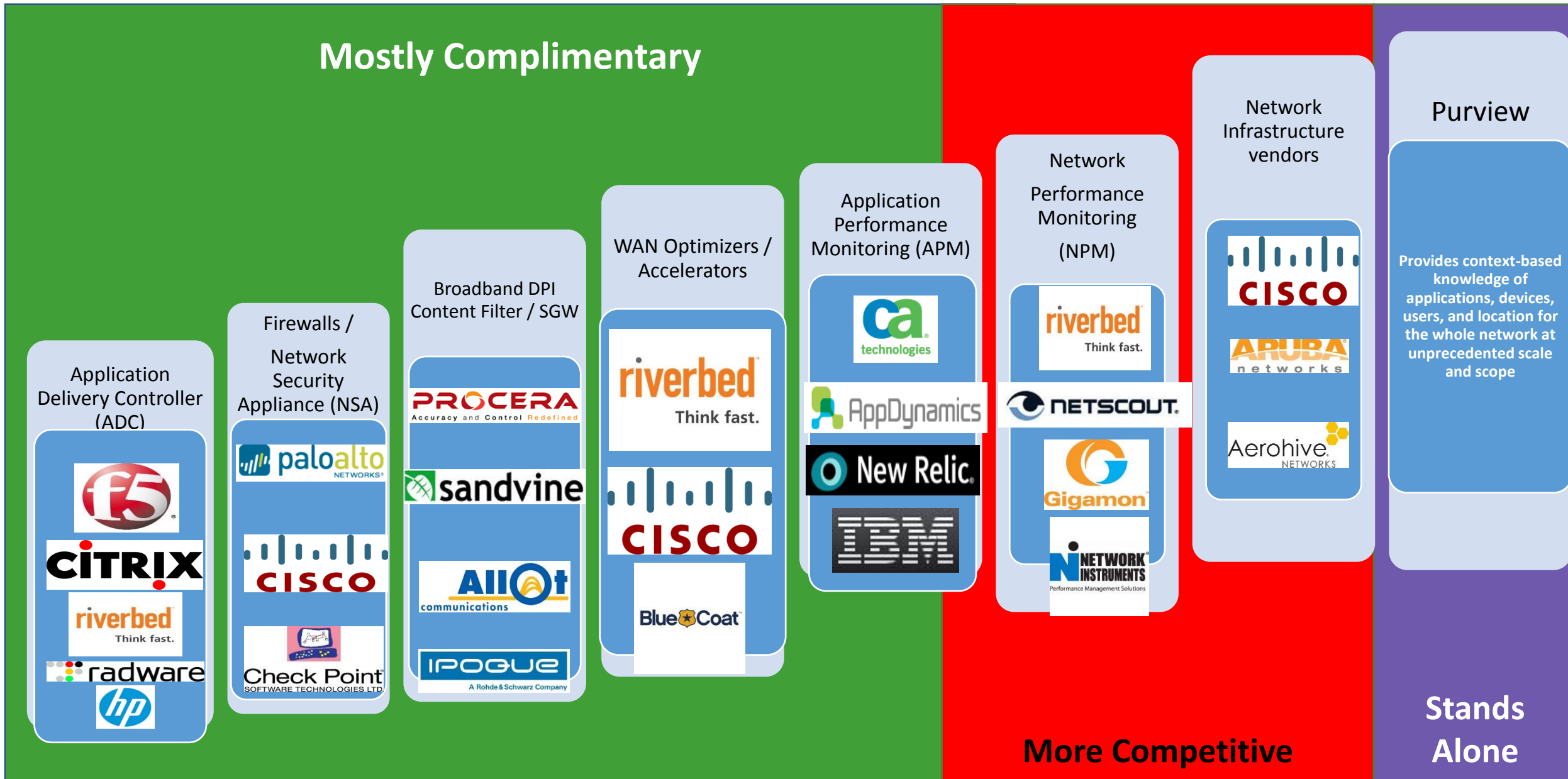
Detect malicious applications

Purview—Total Application Visibility & Control

- Provides 100% Application Layer Visibility & Control
- Scales to millions of flows
- Embedded directly in network infrastructure or overlay
- Classifies traffic at wire speed
- Application Response Time Measurement
- Role Based Access to Applications (eg Cloud Services)
- Bandwidth Usage Monitoring
- Efficient Troubleshooting



How Purview Compliments and Competes with Others



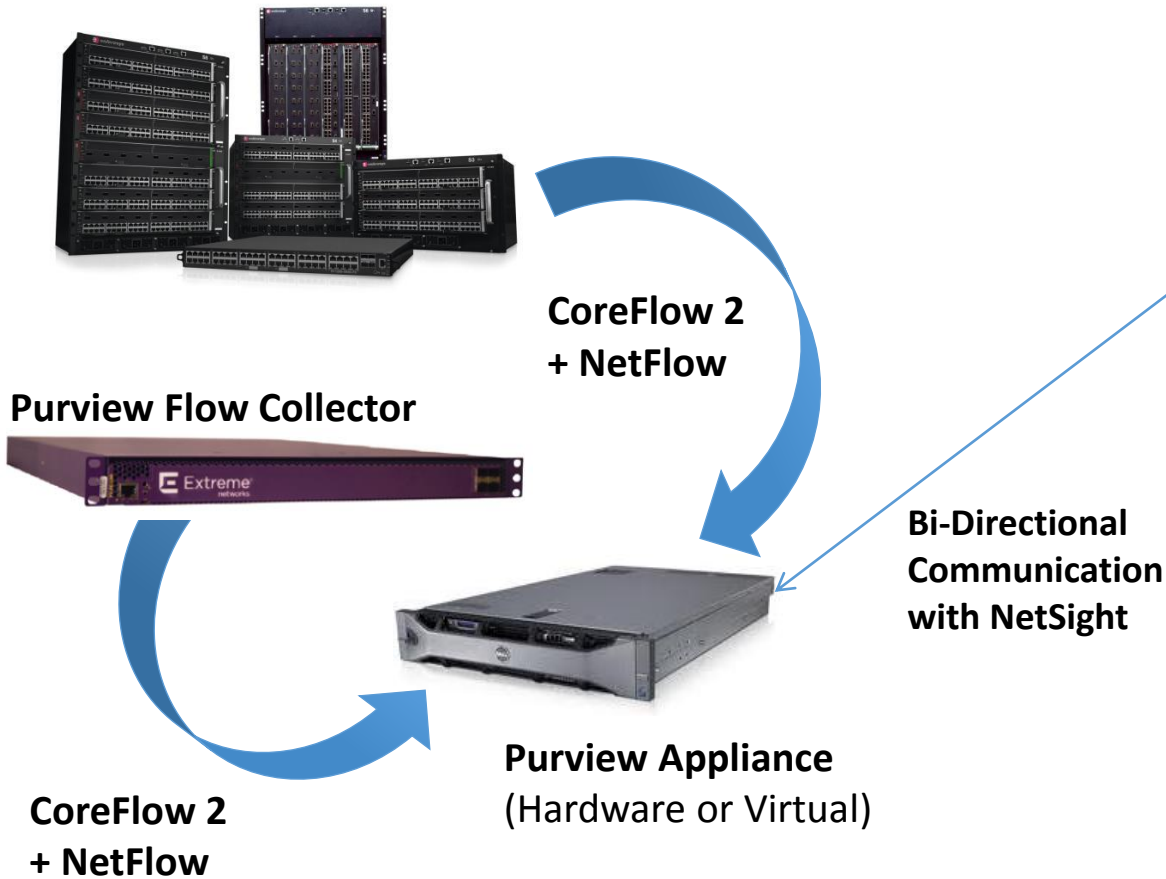
The Purview Difference

Application Visibility & Control at Layer 7

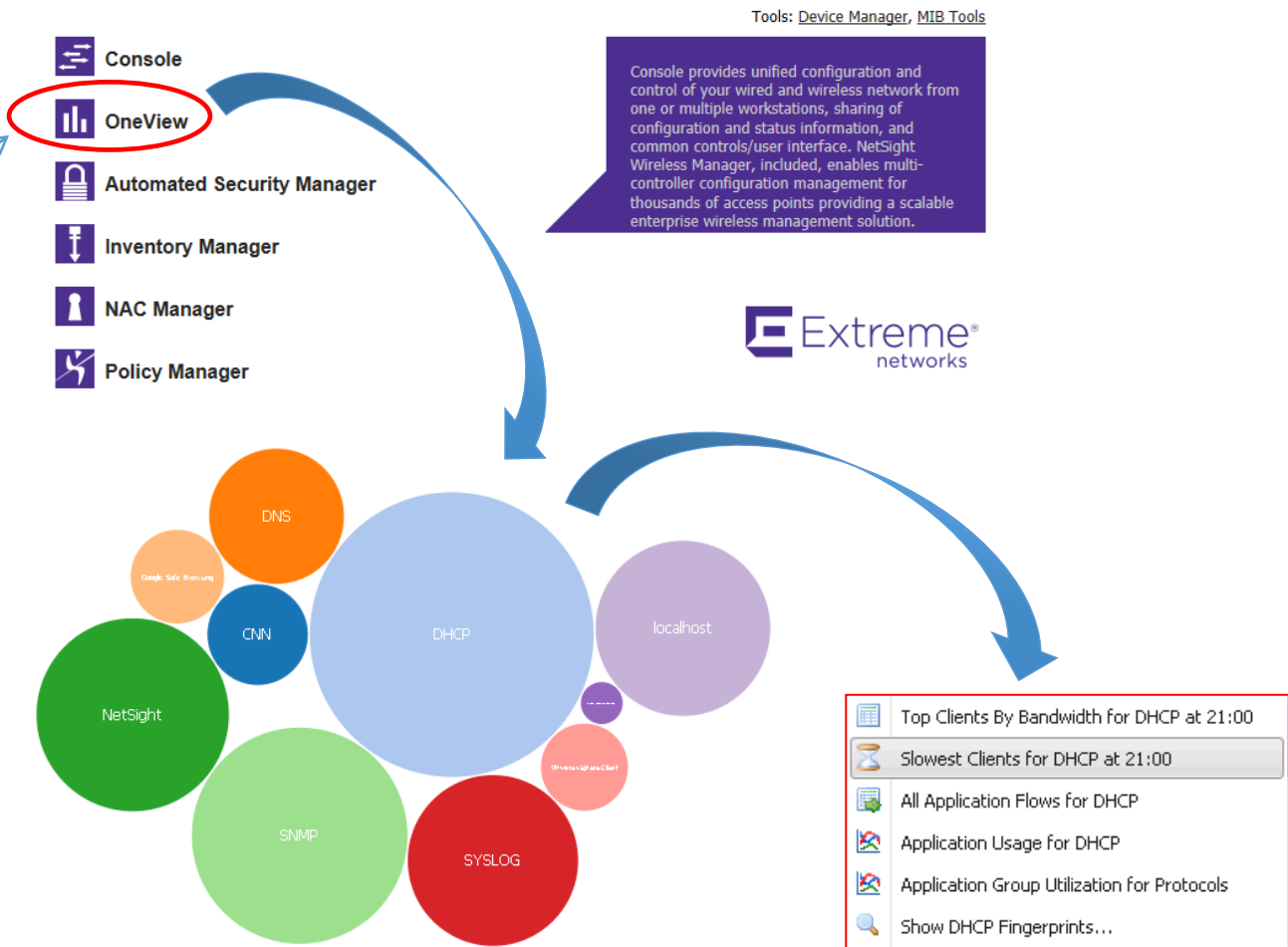
- Contextual information beyond the application
 - user, role, location, time, device & more
- Application and network performance tracking
- Open & customizable fingerprints
 - Over 13,000 fingerprints for over 7,000 applications
- Pervasive across the entire network infrastructure
- Port independent application decoding – true DPI at scale
- Single architecture for edge, distribution, core, data center, perimeter
- Tbit/s speeds with no switch performance impact with scalability to millions of flows

Physical Topology

Switching Infrastructure

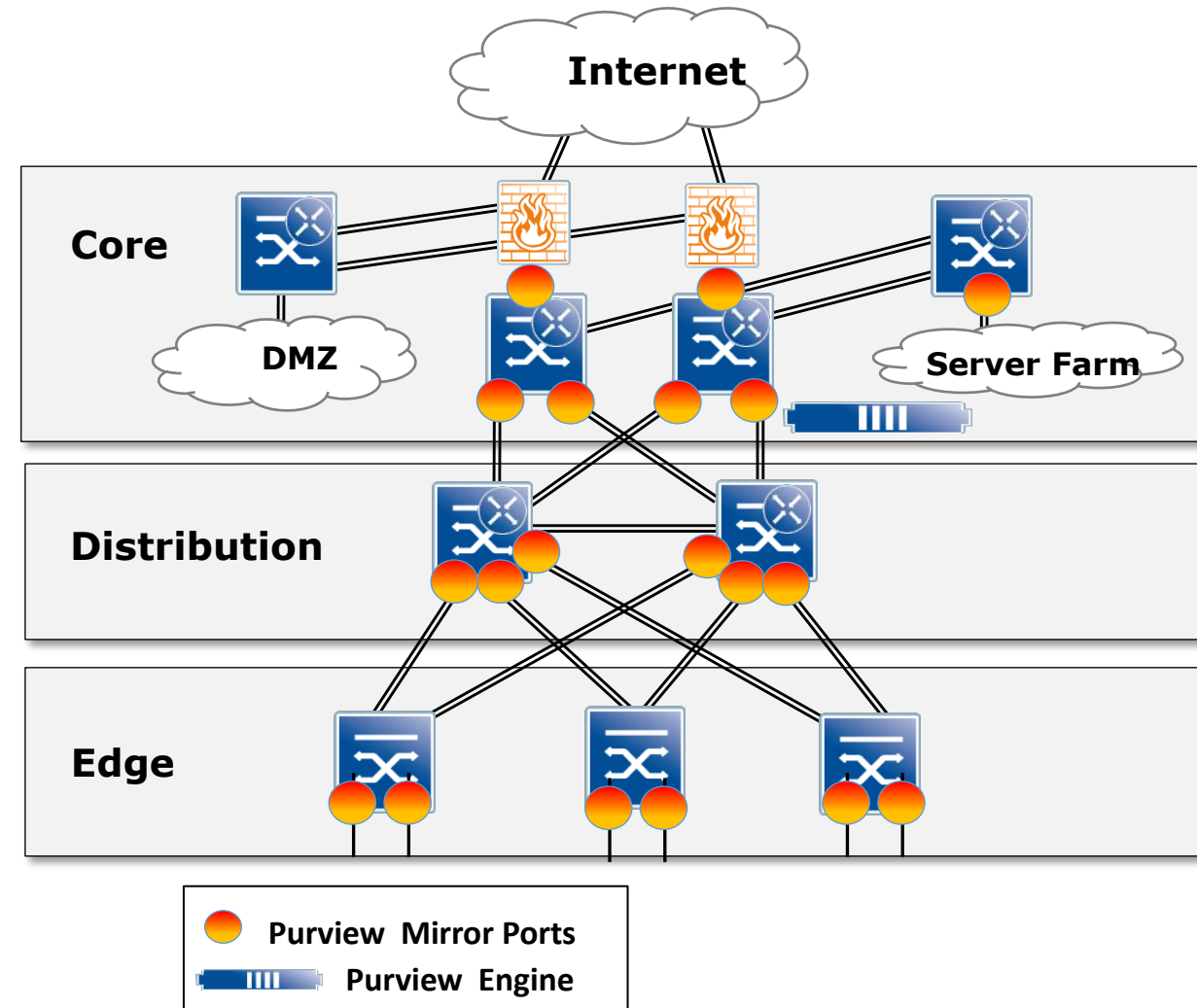


Extreme Networks NetSight is a key component of OneFabric Control Center that provides a set of integrated management capabilities. OneView is a web-based application. The other capabilities are Java applications launched from the web. These functions will install and run when you click on the icons or name on this page. In order to launch these applications you must have the Java Runtime Environment 1.6 or higher installed on your system. Go to [Getting Started](#) for help configuring and installing Java.

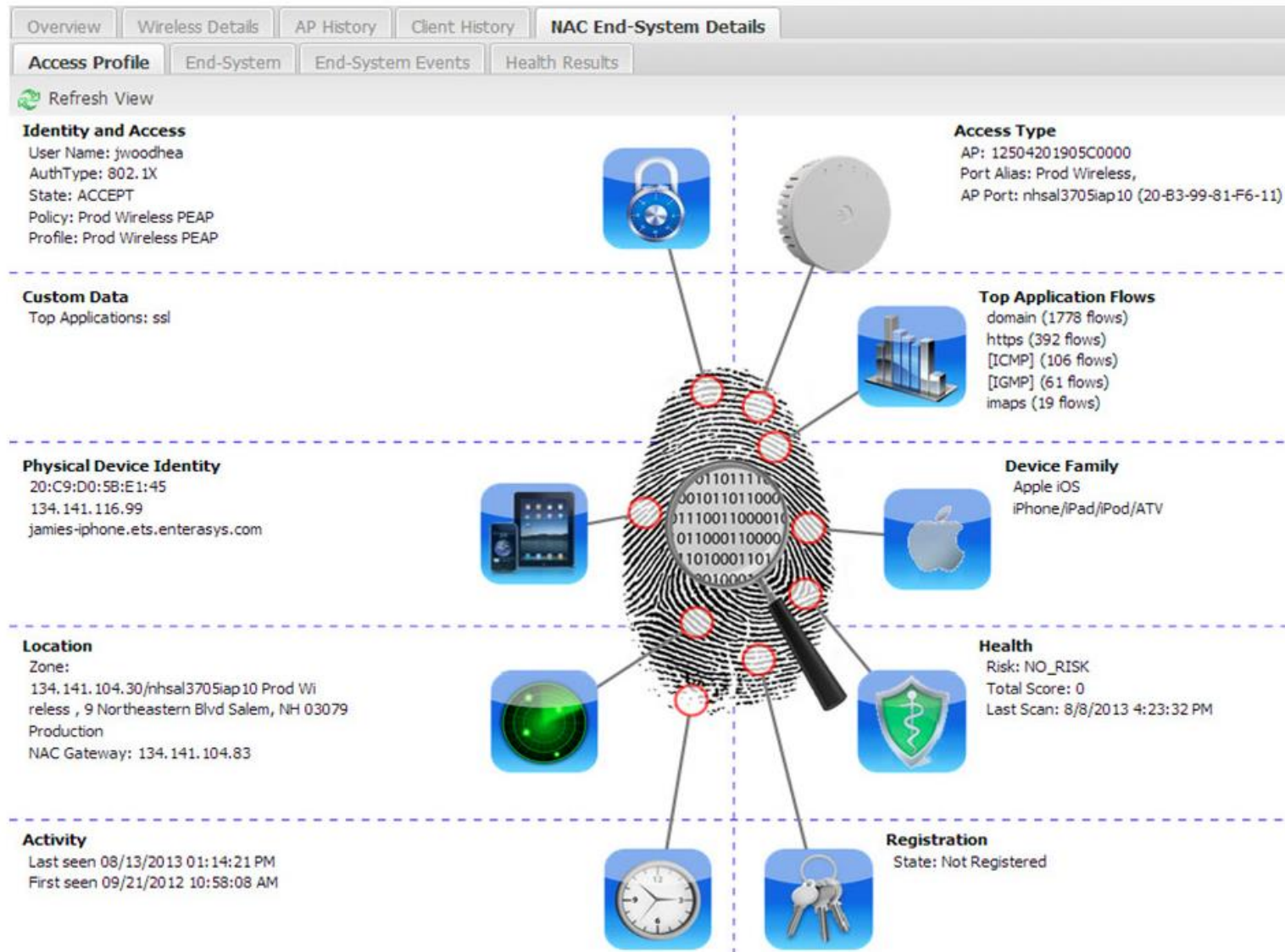


Deployment Models

- Access
 - Application visibility on access communications (typically covers most user traffic)
- Distribution
 - Achieve application visibility for all communications except those that are resident only in the core
- Core
 - Application visibility for all communications that involve the core
 - Include high-bandwidth applications such as storage backup runs
- Data Center
 - Multi-sensor + Multi-NetSight deployment to scale with massive data communications
- Pervasive
 - Multiple traffic domains with Purview coverage for all domains
 - Multi-sensor + Multi-NetSight deployment
 - Avoids duplication of flows across traffic domain selections



Built-in fingerprinting



Meta Data Definition

The screenshot displays the NetSight Administrator web interface. The top navigation bar includes tabs for Search, Reports, Maps, Devices, Policy, Alarms and Events, Identity and Access, Applications, Wireless, Administration, and Help. The 'Applications' tab is active, showing a table of application flows. A blue arrow points from a specific flow entry to a detailed HTTP request metadata panel on the right.

Application Flows Table:

| Flows | Client Address | Server Address | Server Port | Application | Application Group |
|-------|-----------------|-----------------|---------------|-------------------------------|------------------------------|
| 9 | 172.26.70.100 | 23.63.99.224 | http | Windows Update | Software Updates |
| 38 | 10.11.12.11 | 96.7.49.66 | domain | DNS | Protocols |
| 1 | 10.11.12.11 | 173.194.20.238 | http | Google Update | Software Updates |
| 6 | 182.151.213.178 | 10.11.12.12 | ms-wbt-server | MSRDP | Protocols |
| 8 | 10.11.12.12 | 173.194.112.193 | https | Google Safe Browsing | VPN and Security |
| 3 | 10.11.12.55 | 173.194.112.195 | https | Google Safe Browsing | VPN and Security |
| 8 | 10.11.12.55 | 173.194.112.196 | https | Google Safe Browsing | VPN and Security |
| 2 | 10.11.12.11 | 23.63.98.35 | http | Windows Update | Software Updates |
| 18 | 10.11.12.5 | 23.67.255.203 | http | Turner | News and Information |
| 18 | 172.26.70.100 | 23.67.255.203 | http | Turner | News and Information |
| 4 | 10.11.12.5 | 173.194.112.233 | https | Google Safe Browsing | VPN and Security |
| 4 | 172.26.70.100 | 173.194.112.233 | https | Google Safe Browsing | VPN and Security |
| 3 | 10.11.12.11 | 192.16.16.5 | domain | DNS | Protocols |
| 1 | 10.11.12.10 | 134.170.51.190 | https | Windows Update | Software Updates |
| 10 | 10.11.12.5 | 92.123.83.70 | https | Apple | Web Content Services |
| 14 | 10.11.12.5 | 92.123.81.109 | http | Apple Captive Network Dete... | Real Time and Cloud Commu... |
| 2 | 10.11.12.5 | 17.167.193.162 | https | Apple | Web Content Services |

HTTP Request Metadata Panel:

- URI = /cnn/.e/img/3.0/weather/weatherIcon_19.png
- Referer = http://edition.cnn.com/videos/2015/02/03/orig-danger-railway-crossings-uk.british-transport-police/video/playlists/trending-video/
- Content-Type = image/png
- User-Agent = Mozilla/5.0 (Windows NT 5.1; rv:35.0) Gecko/20100101 Firefox/35.0
- Host = i.cdn.turner.com
- Server = Apache
- Method = GET
- Date = Thu, 05 Feb 2015 07:32:04 GMT
- Accept-Encoding = gzip, deflate
- RequestVersion = HTTP/1.1
- Accept-Language = "en-GB,en;q=0.5"
- Cache-Control = "max-age=312540679"
- ClientOS = Windows XP
- Accept-Ranges = bytes
- Expires = Tue, 31 Dec 2024 16:23:23 GMT
- Last-Modified = Wed, 15 Jan 2014 20:01:13 GMT
- Accept = "image/png,image/*;q=0.8,*/*;q=0.5"
- StatusCode = 200
- Content-Length = 1801
- Flow_HostName = i.cdn.turner.com
- Connection = keep-alive
- ResponsePhrase = OK
- ClientOSFamily = Windows
- ServerIP = 23.67.255.203

Max Rows: Range[1 - 1000] 100 Reset Aggregate Flows: 33 Days 13:56:22 (Current Load: 2.481 fps / Peak 4.324 fps)

[NetSight Administrator/root] Last Updated: 2015/02/08 20:09:30 Uptime: 68 Days 11:41:35

Alarms: 0 1 34 0

Dashboard

Reports

Browser

Application Flows

Fingerprints

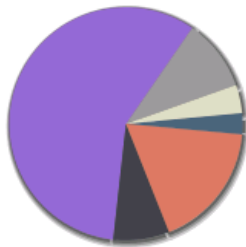
Configuration

AppId-01 ▾

Dashboard ▾



Top Application Groups - Today 18

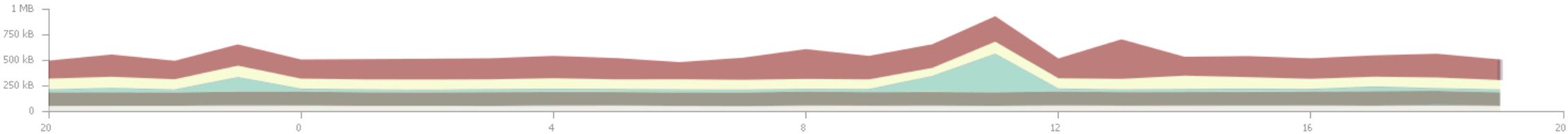


- All Others
- Business Applications
- News and Information
- Protocols
- VPN and Security
- Web Applications

| Application | Group | Flows | Bytes | Clients | Network Response | Application Response |
|-----------------------|-----------------------|-------|-----------|---------|------------------|----------------------|
| DHCP | Protocols | 120 | 397.32 kB | 1 | | |
| SNMP | Protocols | 242 | 301.01 kB | 2 | | |
| localhost | Web Applications | 70 | 162.84 kB | 1 | 0.18ms | 0.42ms |
| CNN | News and Information | 131 | 132.70 kB | 2 | 50.7ms | 51.1ms |
| Google Safe Browsing | VPN and Security | 39 | 83.99 kB | 2 | 2.75ms | 3.05ms |
| Mozilla | Web Applications | 14 | 55.91 kB | 1 | 83.5ms | 84.3ms |
| VMware vSphere Client | Business Applications | 98 | 52.03 kB | 1 | 0.25ms | 0.12ms |

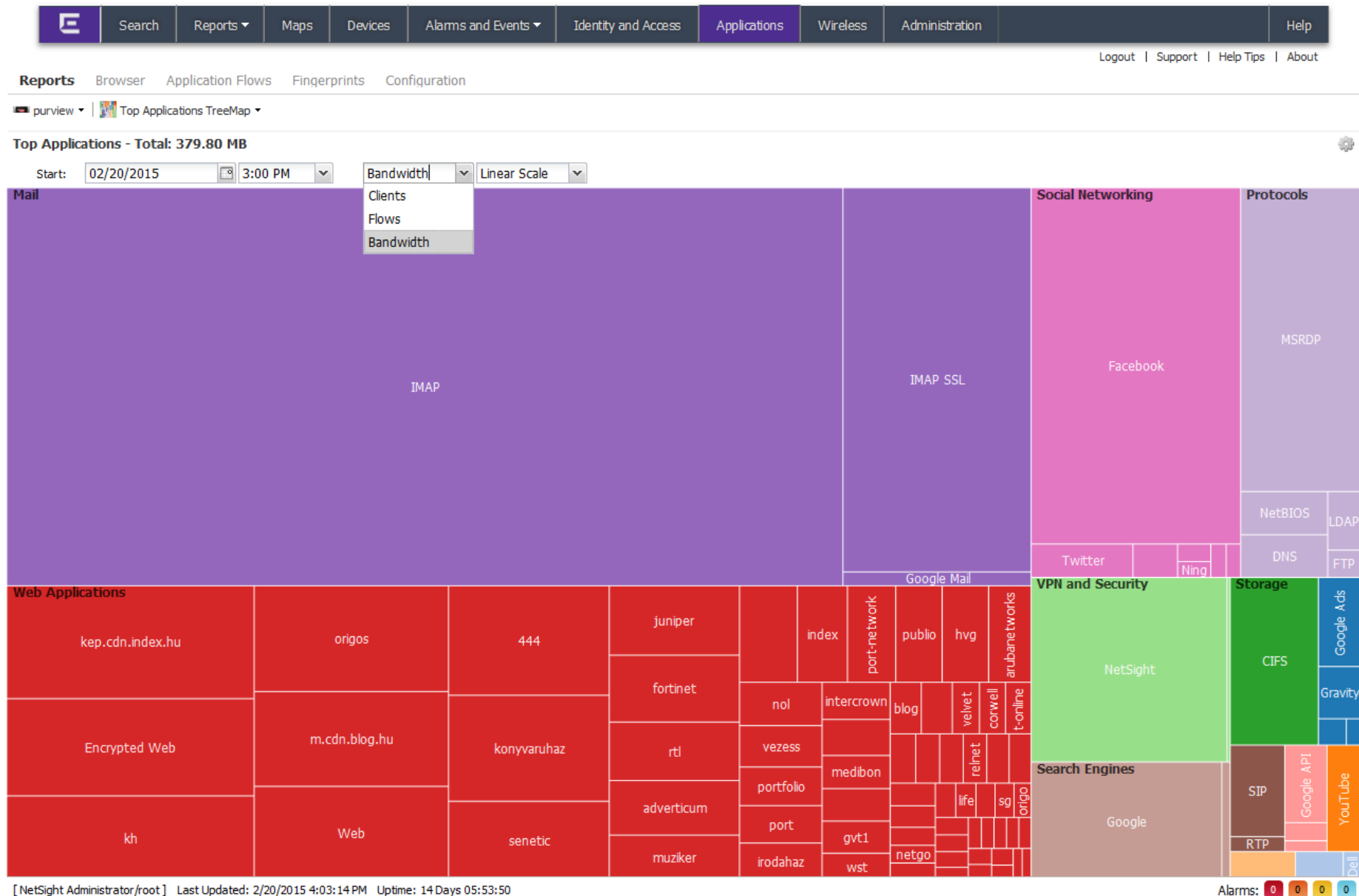
Application Group Usage - Bandwidth

Start: 02/07/2015 8:00 PM ▾ # Days: 1 ▾ Bandwidth ▾



| Name | Bandwidth(Min) | Bandwidth(Max) | Bandwidth(Avg) | Flows(Min) | Flows(Max) | Flows(Avg) | Clients(Min) | Clients(Max) | Clients(Avg) |
|----------------------|----------------|----------------|----------------|------------|------------|------------|--------------|--------------|--------------|
| Protocols | 766.25 kB | 1.14 MB | 806.64 kB | 969 | 1.1 K | 996 | 12 | 13 | 12 |
| Web Applications | 168.19 kB | 387.90 kB | 218.96 kB | 128 | 171 | 142 | 4 | 4 | 4 |
| News and Information | 129.96 kB | 141.37 kB | 132.44 kB | 123 | 184 | 152 | 2 | 2 | 2 |
| VPN and Security | 78.73 kB | 129.96 kB | 100.38 kB | 34 | 52 | 44 | 2 | 4 | 2 |

Dashboard – Top Applications Tree View



Thank you!