

Purview

NETWORK-POWERED APPLICATION ANALYTICS AND OPTIMIZATION

PURVIEW HIGHLIGHTS

Bridges IT operations with business analytics into a single integrated tool and does not require any overlay networks

Pervasive and highly scalable with no network performance degradation

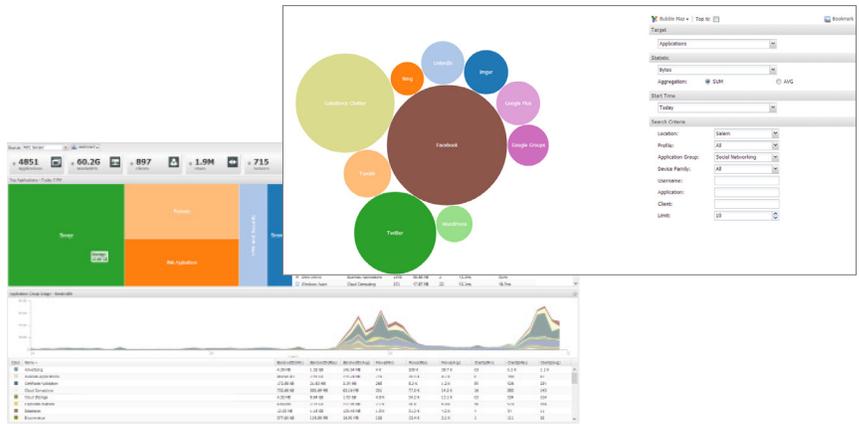
- Handles millions of flows
- Works at Tbit/s speeds
- Pervasive across the entire network
- Single architecture for edge, distribution, core, data center, and perimeter

Optional Contextual information, beyond the application—user, role, location, time, device

Open and customizable application fingerprints

Transport layer independent application detection and decoding

Application and network response time measurement and application context collection



Product Overview

Purview is a network powered application analytics and optimization solution that captures and analyzes context-based application traffic to deliver meaningful intelligence - about applications, users, locations and devices.

It is the Industry's first and only - patent pending - Solution to Transform the Network into a Strategic Business Asset - by enabling the mining of network-based business events and strategic information that help business leaders make faster and more effective decisions. It does this all from a centralized command control center that combines Network Management with Business Analytics, and at unprecedented scale (100M sessions) and scope.

From a business perspective, Purview provides data to show how applications are being used. This can be used to better understand customer behavior on the network, identify the level of user engagement, and to assure business application delivery to optimized the user experience. Additionally Purview can track application adoption to determine the return on invest associated with application deployments and also identify the potential for new and so far unknown ways to leverage application data from the network for new - revenue generating - services. These are just a few examples of the power of Purview, the possibilities are unlimited. Purview's in-depth view into the network and applications also provides valuable information for up front budget planning when implementing new applications for the business while also ensuring security compliance for approved applications.

From an IT perspective Purview provides visibility into network and application performance allowing IT to pinpoint and resolve performance issues in the infrastructure whether they are caused by the network, application, or server. This saves both time and money for the business when the critical applications are running at the best possible performance. By eliminating unnecessary application delay, users become more efficient and can focus on the important aspects of their jobs.



In cases where users report problems, Purview eliminates the typical finger pointing between the network, application, and server teams by providing actionable information. The detailed understanding of the network, applications, and behaviors are also critical in allowing IT to plan for events such as the least impactful maintenance windows in a 24 X 7 environment and new application rollouts. Additionally security monitoring tools can be fed additional application and user context directly from Purview in order to identify potential threats before they occur.

Purview's intelligence provides visibility and control of applications pervasively across the entire network infrastructure, from the wired or wireless edge all the way to the core and datacenter. This massively scalable solution works in mobile, public cloud and traditional network environments.

Purview uses deep packet inspection (DPI) technology with a rich set of application fingerprinting techniques to detect internally hosted applications (SAP, SOA traffic, Exchange, SQL, etc.), public cloud applications (Salesforce, Google, Email, YouTube, P2P, file sharing, etc.), and social media applications (Facebook, Twitter, etc.) at Layer 7 of the OSI model, enabling guarantees for a quality user experience for business critical applications.

Purview is enabled by the CoreFlow2 ASIC, in Extreme S-Series and/or K-Series switches, which identifies new flows and sends a few packets for every new flow to the Purview engine where the application fingerprinting takes place and is then combined with non-sampled NetFlow data collected from the CoreFlow2 powered switch for the duration of the flow, which allows the Purview engine to process traffic at unprecedented scale with no performance degradation to the network itself. The Purview Engine determines the application, extracts application context information such as URL, certificate information, browser version, device hardware and OS, measures response times, aggregates the data, adds additional context derived from identity and

access control (optional) like user, role, device type and identity, location, and then sends it to OneFabric Control Center (NetSight) for storage and reporting. This set of contextual data provides a full understanding of the applications running on the network, who's using the application, the devices being used, and where they are located within the network.

Management and Reporting with OneFabric Control Center

OneFabric Control Center provides complete management and reporting for Purview. All data is aggregated in OneFabric Control Center where it is presented in multiple easy to use dashboards that provide drill-down capability to detailed reports. Dashboards are available for high-level summaries as well as vertical specific providing information critical to even more specific business verticals. In addition to dashboards, a series of reports such as TopN for applications, groups, clients, etc. are available and can also be scheduled to run on a regular basis and available in pdf format.

Additional contextual information is integrated with Purview data in OneFabric Control Center. For example, when Extreme Network Access Control is also in use, information such as user, role, device type, and location are integrated with the application flows. Further, taking advantage of the OneFabric Connect API and SDN architecture, allows simple integration with other IT applications such as analytics or Big Data processing engines via XML/SOAP as well as real time notifications using syslog.

Hardware Based Data and Statistics Collection with CoreFlow2

By taking advantage of the CoreFlow2 ASIC for flow mirroring and collection, Purview is able to achieve massive scale and pervasive deployments across the entire infrastructure without impacting network performance. The CoreFlow2-based switches can be deployed at any layer of the network and used to gather flows from any location. This allows deployments that are pervasive throughout the network or in simplified cases, using deployments such as datacenter, core, or at internet access points only.

In any deployment, a single switch using CoreFlow2 ASICs is capable of supporting up to 100 million flows at 2.56 Tbit/second. The Purview architecture, taking advantage of the Purview mirror and the high scalability of hardware-collected flow statistics, provides high scalability, all without impacting network performance.

Transport Layer Independent Application Fingerprinting

Purview includes over 13,000 application fingerprints and new fingerprints are continually added. Application detection does not stop with signature based fingerprints though. To detect applications that try to obscure themselves (like P2P and others) Purview also includes heuristics (behavioral detection) based fingerprints to ensure the applications are detected

appropriately. Through its robust fingerprinting technology, Purview is able to identify an application regardless of whether they run on well known ports or use non-standard ports.

Purview's fingerprints and application groups are open and customizable allowing our customers, partners, and professional services teams to create new fingerprints and application groups to handle custom applications, specific reporting requirements and other needs. For example, many government organization run custom applications that they do not wish to share fingerprint information for. With the customization capabilities, they are able to manage these applications.

Application Details, Response Times and Context

In addition to simply identifying the application, Purview also collects application details, provides response time measurements and also extracts context. For example, Purview provides visibility into both the network and application response time for each application flow. This is key information when problems arise so IT can quickly differentiate between network transport performance issues and application issues. In addition, context is collected for each application flow using http, https, SIP, and several others. This context provides granular details on individual application flows such as exact URL, the browser and OS being used on the client machine, and more.

Specifications

PURVIEW ENGINE

The Purview engine is available as a hardware-based appliance or a virtual appliance. Virtual appliances operate on VMware and are included with NetSight Advanced providing additional deployment flexibility while providing cost savings from using existing hardware.

PURVIEW ENGINE APPLIANCE

Physical Specifications
Height: 1.75" (4.45 cm) - 1U
Length: 27.95" (70.9 cm)
Width 16.93" (43 cm)
Weight 31.8 lbs (14.4 kg)

POWER

Wattage: 750 Watt (max), each power supply
Voltage: 110/240 VAC;
Frequency 47- 63Hz

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature: 10° to 35°C (50° to 95°F)
Storage Temperature: -40° to 70°C (-40° to 158°F)
Operating Humidity: 5% to 90% (noncondensing)

STANDARDS COMPLIANCE

Regulatory/Safety:
UL60950 - CSA 60950 (USA/Canada)
EN60950 (Europe)
IEC60950 (International)
CB Certificate & Report, IEC60950
GS Certification (Germany)
GOST R 50377-92 - Certification (Russia)
Ukraine Certification (Ukraine)
CE - Low Voltage Directive 2006/95/EC (Europe)
IRAM Certification (Argentina)

EMISSIONS/IMMUNITY:

FCC/ICES-003 - Emissions (USA/Canada)
CISPR 22 - Emissions (International)
EN55022 - Emissions (Europe)
EN55024 - Immunity (Europe)
EN61000-3-2 - Harmonics (Europe)
EN61000-3-3 - Voltage Flicker (Europe)
CE - EMC Directive 2004/108 EC (Europe)
VCCI Emissions (Japan)
AS/NZS 3548 Emissions (Australia/New Zealand)
BSMI CNS13438 Emissions (Taiwan)
GOST R 29216-91 Emissions (Russia)
GOST R 50628-95 Immunity (Russia)
Ukraine Certification (Ukraine)
KC Certification (Korea)

Purview Engine Virtual Appliance

Packaged in the .OVA file format defined by VMware and must be deployed on a VMware ESX™ 4.0, 4.1, 5.0, 5.1, or 5.5 server or ESXi™ 4.0, 4.1, 5.0, 5.1, or 5.5 server with a vSphere™ 4.0, 4.1, 5.0, 5.1, or 5.5 client.

Virtual appliance requires 24 GB of memory, twenty-four CPUs, two network adapters, and 2 TB of thick-provisioned hard drive space.

Ordering Information

Extreme Networks' Purview provides various size licenses to match your organizational needs. The Purview engine can be installed as either a hardware or virtual appliance where the virtual appliances are included in NetSight Advanced. The Purview solution requires NetSight Advanced licensing outlined in the NetSight datasheet as well as at least one CoreFlow2 device in the infrastructure such as an S-Series or K-Series switch. Please refer to the NetSight, S-Series, and/or K-Series datasheets for specifications and ordering information.

Additional NetSight information can be found at:

[Extreme Networks Website](#)

Additional information on CoreFlow2 devices can be found at:

[Extreme Networks Website](#)

PURVIEW APPLIANCE	
Part Number	Description
PV-A-300	Purview Appliance - Hardware Only, up to 1M Flows/Minute
PV-A-300-10G-UG	10 Gbps NIC upgrade for PV-A-300

PURVIEW LICENSES	
Part Number	Description
PV-FPM-100K	Purview License - Visibility for 100K Flows/Minute
PV-FPM-500K	Purview License - Visibility for 500K Flows/Minute
PV-FPM-1M	Purview License - Visibility for 1M Flows/Minute
PV-FPM-3M	Purview License - Visibility for 3M Flows/Minute

Warranty

As a customer-centric company, Extreme is committed to providing quality products and solutions. In the event that one of our products fails due to a defect, we have developed a comprehensive warranty that protects you and provides a simple way to get your product repaired or media replaced as soon as possible.

The Purview appliance comes with a one year warranty against manufacturing defects. Software warranties are ninety (90) days and cover defects in media only. For full warranty terms and conditions please go to [Extreme Networks Website](#).

Service and Support

Extreme Networks provides comprehensive service offerings that range from Professional Services to design, deploy and optimize customer networks, customized technical training, to service and support tailored to individual customer needs. Please contact your Extreme account executive for more information about Extreme Service and Support.



<http://www.ExtremeNetworks.com/contact> / Phone +1-408-579-2800

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