

Avaya IP Flow Manager

Social media technology such as YouTube has changed the way people communicate, learn about the world and experience entertainment. Inevitably, these popular and pervasive technologies can affect the way individuals perform their day-to-day jobs. Not surprisingly, how and when employees use applications is an area of great concern to many companies.

Enterprises need to know if employees are using valuable network bandwidth for legitimate business purposes, entertainment or other personal activities, and how it affects the network, business processes and worker productivity. Applications, including collaboration and video conferencing, legitimately drive the need for more bandwidth and network expansion, but there are many other times when bandwidth is used inappropriately or inefficiently. So how do you get the real view of network usage — not only from a packet perspective, but also in terms of applications?

Avaya recognizes that effective and easy-to-use network management tools can help businesses improve efficiency, enhance productivity and make more informed decisions — while providing a smooth path to unified communications.

That's where the Avaya IP Flow Manager (IPFM) comes in.

The IPFM is a network management software tool that enables you to monitor, view and diagnose problems at the application level, and

then use this valuable data to make informed decisions about your network.

Full Network Monitoring

The IPFM was designed to work in conjunction with Avaya's Ethernet Routing Switch (ERS) portfolio, which includes the ERS 8600, ERS 8300, ERS 5600, ERS 5500 and ERS 4500. Data is collected via the ERS, on a per-port basis, and forwarded to the IPFM, which then performs monitoring, analysis and presentation of application issues and usage.

Convenient web browser access

With its user-friendly interface and built-in intelligence, the IPFM eliminates the need for manual collection of data and analysis of that data at a central site. Through the IPFM, administrators can access and analyze data quickly and easily through a web browser — anywhere, at any time. The IPFM supports Internet Explorer and Mozilla Firefox.



AVAYA'S UNIFIED COMMUNICATIONS MANAGEMENT

The IP Flow Manager is an integral part of the Avaya Unified Communications Management (UCM) solution. This solution leads the industry in offering comprehensive, integrated management capabilities across data and voice over both wired and wireless networks. Solution benefits include:

- Sharing of information across applications helping reduce data entry and the potential for errors
- Web-based, centralized authentication with single sign-on helping ensure easy and secure access to all management applications
- Easy-to-use templates and wizards easing the ramp up on new technologies
- Common look and feel across applications helping decrease the learning curve for IT personnel
- Application co-residency allowing applications to be hosted on the same servers

Valuable visibility into your network

The IPFM gives you better visibility and insight into how unified communications is implemented and used in the network, and by whom. For example, if users start to complain about poor voice quality, the IPFM enables you to look into other application usage that might be contributing to the degradation in voice quality. Through an easy-to-read 'dashboard' and convenient top 10 lists, the IPFM provides details of where excessive bandwidth usage is occurring and who is using it. For instance, if there is higher than usual HTTP traffic, the information allows your IT team to proactively take steps to resolve the issue.

Thresholding capabilities for network usage

The IPFM offers innovative thresholding and automatic notification features that enable you to keep an eye on your network without the need to constantly watch your monitor and review reports. Using pre-defined filters,

your network administrator sets thresholds for specified applications such as file transfer protocol (FTP). If, at any time, FTP traffic exceeds a certain percentage, the appropriate personnel will receive an automatic notification as requested. For instance, notifications could be sent to the upper-end network management station (e.g., Avaya Visualization Performance and Fault Manager and HP OpenView) and via email to the administrator. The thresholding capability enables network personnel to resolve issues before they affect the network, rather than after the fact, helping minimize or eliminate the impact on productivity.

Packet capture for network analysis

The packet capture and analysis execution capability enables network managers to perform a much deeper analysis of network problems. This feature, which is supported on the Ethernet Routing Switch 8600 only, provides managers with visibility into all traffic passing through a port on the ERS 8600.

Accelerated decision making and effective planning

As soon as you've determined which applications are problematic, you can take steps to resolve the issues. Problem resolution could include re-provisioning the quality of service parameters in your network. With IP Flow Manager, you can give applications that are bandwidth-sensitive, such as FTP, lower priority than other applications such as video conferencing or Voice over IP (VoIP).

Greater visibility into applications can also help network planners make crucial decisions about network redesign and expansion. If the IPFM indicates that employees located in Dallas are frequently accessing files in another city thousands of miles away, it's a good indicator that the network needs some fine-tuning.

IP FLOW MANAGEMENT AT A GLANCE

IP Flow Manager is the collection of IP packet data for the purpose of application performance, trending, accounting and behavior. Avaya has adopted the standard IPFIX (RFC3917) method to collect IP flow data. The Avaya IP Flow Manager supports the IPFIX, NetFlow v9 and NetFlow v5 methods of IP flow data collection.

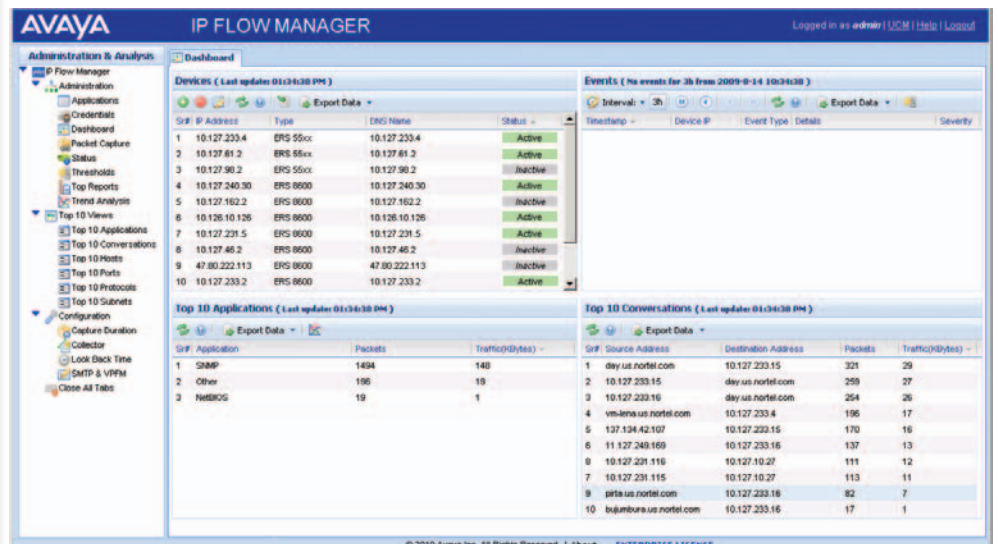


Figure 1. IPFM Dashboard

Through the IPFM, you also have insight into how individuals use certain applications and access different servers, which can help you to determine future planning requirements. For instance, if the IPFM indicates that there is extremely high phone activity in a certain location, your network administrator could respond by adding a call server to that location, which would lead to better and faster service.

Heterogeneous network support

The IPFM works in multi-vendor switching environments and will interoperate with devices supporting IPFIX and/or NetFlow v5 or v9.

Flexible licensing options

The IPFM is licensed on a device basis instead of an interface basis, and is available at three licensing levels.

- **Base License:** Includes software, manuals and support for one server and up to four IPFIX-enabled devices
- **Incremental License:** Paper license to add support to the Base License for one IPFIX-enabled device
- **Enterprise License:** Paper license to add support to the Base License for six IPFIX-enabled devices; and allows a maximum support of 50 IPFIX-enabled devices

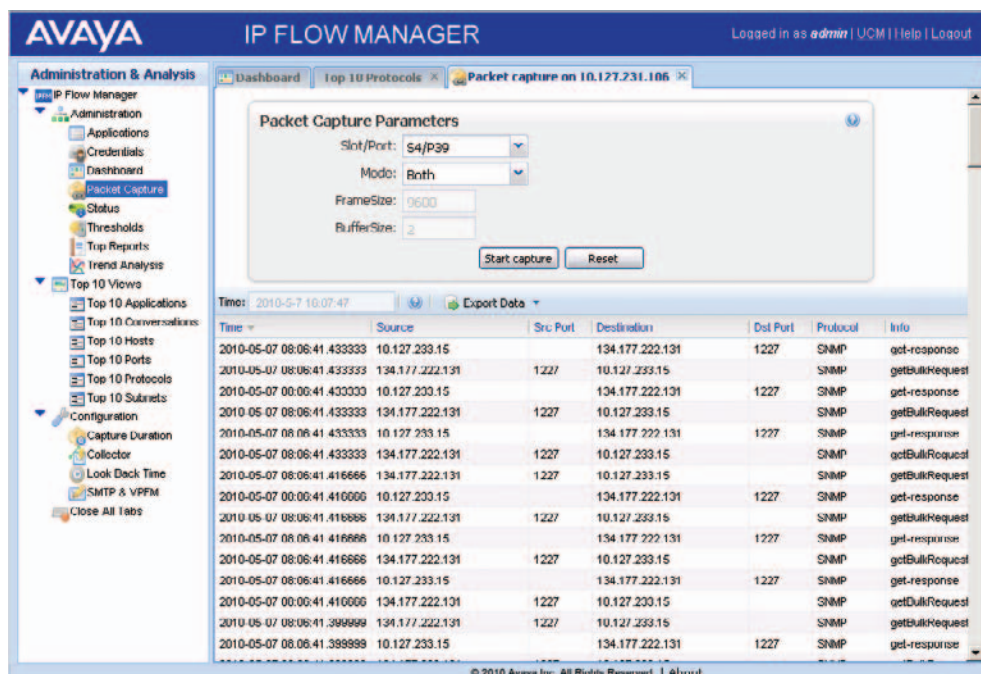


Figure 2. Ethernet Routing Switch 8600 packet capture and decode using the IPFM

AVAYA IPFM HIGHLIGHTS

- **Exceptional visibility** into application behavior and performance rather than just packet performance
- **Faster diagnosis** of application performance issues and problem solving
- **Accelerated decision-making** during network and application growth planning and implementation
- **Insight, analysis and trending** of application use and user behavior across the network

Summary

The Avaya IPFM is a powerful UCM network management software tool that displays your network in a different and valuable way. Through increased visibility to application traffic, you can diagnose and resolve network problems faster and make more informed decisions about how and when to grow your network.

Learn More

To learn more about Avaya Unified Communications Management solutions and Avaya IP Flow Manager, contact your Avaya Account Manager or Avaya Authorized Partner. Or, visit us online at avaya.com.

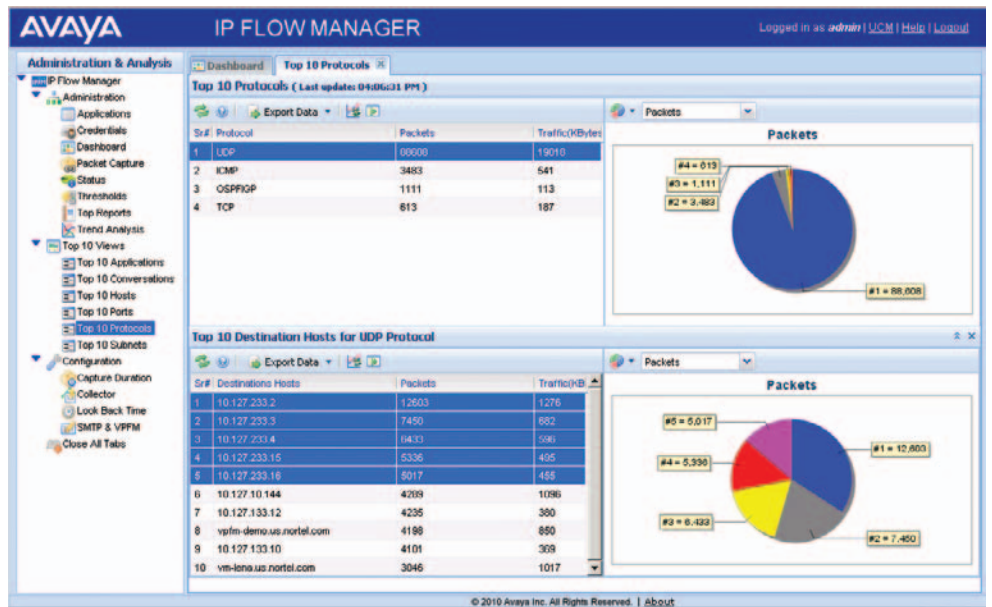


Figure 3. Detailed protocol analysis

About Avaya

Avaya is a global provider of business collaboration and communications solutions, providing unified communications, contact centers, data solutions and related services to companies of all sizes around the world. For more information please visit www.avaya.com.

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References to Avaya include the Nortel Enterprise business, which was acquired as of December 18, 2009.

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