

## EVENT FLASH

### Juniper Addresses Challenges at the Edge

Eve Griliches

#### IN THIS EVENT FLASH

This IDC Flash will discuss the business challenges service providers face today and how Juniper is addressing those challenges.

#### SITUATION OVERVIEW

Service providers are facing increasing business and technical challenges because they have broadened their product portfolio to offer voice, data, video, and multimedia applications, only to find that those applications use significantly more bandwidth than expected. Fierce competition effectively caps the price of these services, so in other words, even as subscribers utilize the network more, the average revenue per user (ARPU) does not scale linearly with the increasing bandwidth usage.

In situations like this, telecom equipment vendors must do all they can to provide breadth in their product portfolios — toolkits to serve a variety of protocols and features — as well as to address performance and scalability so that they can offer new and innovative revenue-generating services with operational efficiency. Juniper is leveraging its architectural integrity in a multitude of ways; some examples are the recently announced enhancements to its M-Series and MX-Series edge router portfolio, introduced as the "Intelligent Services Edge."

According to IDC, the MX product line has increased its revenue 228% from the first half of 2007 to the first half of 2008, arriving at a run rate of \$300 million a year, with over 250 customers in place. This rapid product ramp — the MX was introduced in 2007 — is largely attributable to service provider applications that require high GbE and 10GbE port density as well as Layer 2, Layer 3, and MPLS features. What's interesting is that the MX has also been deployed in high-end enterprise accounts for customers that are looking for carrier-class features because they rely on their network to be competitive. New features include support for non-Ethernet interfaces such as OC-48 and OC-192 interfaces on the MX, as well as the MS-DPC blade, a dedicated hardware service engine designed to deploy advanced services such as session border control (SBC), intrusion detection and prevention (IDP), and dynamic application awareness. Integration of the multimedia services gateway, IDP, and application awareness (DPI) eliminates service-specific network elements to create a revenue opportunity for the provider in the business VoIP and multimedia markets, without increasing operational complexity.

Support for subscriber management has also been introduced outside the E-Series and initially comes in two forms: PPPoE on the M-Series for business services and DHCP on the MX line that is optimized for residential video applications. And while the ability to support multiple combinations of services on one platform is not new, the flexibility of these services (they are modular, separately licensed, and JUNOS integrated) as well as the ability to deliver them quickly and predictably is an advantage. How has scale been added to the M-Series? Juniper has introduced the I-chip technology from the MX line into the M-Series, increasing performance, scale, and flexibility. Support for nonstop routing and in-service software upgrade (ISSU) has also been added to both the MX-Series and M-Series, improving system uptime and lengthening the value of investment customers have made in these product lines.

With the growing number of networks (residential, business, and video distribution) that need to run services, having a platform that integrates hardware for modular applications and can deliver new services in a fast and efficient manner is critical to all providers. Service integration via partners and customers leveraging the Partner Solution Development Platform (PSDP) has already brought new services to market faster than ever before. The latest partner application delivered on the PSDP is the Triveni Digital Video Analysis application. Triveni provides full IP and MPEG measurements conducted on video streams that allow customers the ability to quickly identify and troubleshoot problems. The ability to easily add MPEG analysis to the router reduces the time it takes to qualify and deploy video service monitoring and management, which speeds up service rollout, and eliminates standalone probes, which ultimately helps reduce operational expenditures.

New service and revenue opportunities can be created with the integration of policy and subscriber management, especially in the residential video markets. In addition, an application-aware engine can identify applications and apply a flexible policy throughout the system. When coupled with subscriber management, this allows a provider to enhance and ensure a single user's "quality of experience" as well as account and bill for it, increasing service breadth and revenue potential. It can also provide the ability to enhance, for example, peer-to-peer service, which is just one of the many differentiated services that can be offered. And by integrating security features such as stateful firewall, IPSec, and IDP, Juniper is assisting the provider in extending its managed services portfolio to now include "managed security."

Please contact the IDC Hotline at 800.343.4952, ext. 7988 (or +1.508.988.7988) or [sales@idc.com](mailto:sales@idc.com) for information on applying the price of this document toward the purchase of an IDC service or for information on additional copies or Web rights. Visit us on the Web at [www.idc.com](http://www.idc.com). To view a list of IDC offices worldwide, visit [www.idc.com/offices](http://www.idc.com/offices).

Copyright 2008 IDC. Reproduction is forbidden unless authorized. All rights reserved.

Filing Information: October 2008, IDC #214685, Volume: 1, Tab: Vendors

Telecommunications Equipment: Event Flash

As each of these applications, blades, and service engines are integrated into the MX-Series and M-Series, a level of operational efficiency is achieved because they are all operating on one software platform: JUNOS. Independent studies have found that deploying JUNOS reduces the time providers spend on operations tasks by 24%. When we spoke to Juniper's customers, we found that JUNOS does play a large part in their decision to add another Juniper product because it operates on the same software platform, which is a known and proven platform.

As part of this announcement, Juniper also highlighted the operational advantages its platforms offer in terms of reduced power and cooling across the MX-Series and M-Series product lines.

#### FUTURE OUTLOOK

There are multiple ways to address the growth in the residential, business, and video areas. Vendors can provide optimized products and optimized software on a per-product, per-software basis — all of which are new and different. Or, as in the case of Juniper's Intelligent Services Edge offering, vendors can enhance the scalability of their platforms to integrate new high-performance service engines, which can then selectively distribute new software features within a known and stable operating system. In general, these enhancements continue to provide Juniper's customers with exactly what they want — enhanced platforms, new features, and the operational efficiency to deliver services without strain on their network — which at this time is not only crucial but also timely.