

Date: November, 11th, 2008

Cisco introduces the ASR 9000 family

Cisco brings its new edge routers to the market, targeting operator requirements for stronger video support, fighting off commoditization by integrating more applications into the network, and firing back at Alcatel-Lucent's positioning of superior scalability.

The new ASR 9000 is slated for GA in 1Q09 and will use Cisco's IOS-XR operating system and Quantum Flow processor that was first introduced with the ASR1000. The ASR9000 is designed to support up to 400G per slot in future to reach a total capacity of up to 6.4Tbit in future.

The ASR9000 is being targeted at operator requirements for offering carrier class video services and for the aggregation and metro transport portion of Cisco's mobile backhaul solution. The system also supports IPoDWDM and advanced subscriber management, and is engineered for Cisco's "Quantum Flow Enabled" silicon services.

This announcement is consistent with Cisco's strategy to try and de-commoditize infrastructure and create competitive differentiation that play into its strengths by integrating **applications into the network**. Cisco had already begun to do this with the ASR1000 by integrating a wide range of service functionality including firewall, IP security virtual private networks (IPsec VPNs), deep-packet inspection (DPI) and Session Border Control (SBC) capabilities.

The release of the ASR9000 is coming none too soon; Cisco has been ceding market share to Alcatel-Lucent and facing positioning of far greater scalability and

carrier class features from that competitor. But Cisco is pushing the ASR9000 to market aggressively in response; initially, the focus at release is going to be on Ethernet interfaces - with legacy interfaces to be "added throughout the year" (2009).

The market has been expecting a replacement for the 7600, and got one - though Cisco as would be expected is positioning the ASR9000 as a complement to the 7600 for where greater scalability and features are required, and that the 7600 will merely be repurposed as the ASR9000s are implemented. The focus on video is to be expected, being in line with Cisco's "Non stop video experience to Any Screen" marketing campaign and projections that video will account for half of all network traffic by 2012. As for mobile backhaul, the ASR9000 is coming out in parallel with the timeframe for GA for Cisco's MWR2941, and together this gives Cisco a solution with greater scalability for the cell site, and a more efficient IP/MPLS aggregation and metro transport solution with support for redundant pseudowires. Cisco is still an emerging player in mobile backhaul solutions, but will have a stronger proposition to leverage by January. One source of differentiation it will try to leverage will be a full complement of synchronization technologies based on in-house development.

Cisco's announcement shortly follows the recent **Alcatel-Lucent** announcement of enhancements of its TPSDA architecture. Alcatel-Lucent's **Assured Linear TV Delivery** enables Fast Channel Changing (FCC) & Retransmission (RET), caches minutes of multicast channels close to the subscribers, and delivers unicast bursts to any STB that requests a channel change or retransmission. Alcatel-Lucent is also enabling Transport **Stream Ad Insertion**, with GA for these enhancements in 1H09.