EVENT FLASH

Verizon Rolling Out MoCA
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IN THIS EVENT FLASH

This IDC Flash looks at Verizon's decision to use a gateway with IP-over-coax home networking technology from the Multimedia over Coax Alliance (MoCA).

SITUATION OVERVIEW

Television service providers have been waiting for an inexpensive, secure, and effective home networking technology to move digital commercial video around the home among the home's various devices, including PCs, set-top boxes, and televisions. On June 28, 2006, Verizon became the first major U.S. service provider to announce a rollout of consumer devices with IP-over-coax technology from the Multimedia over Coax Alliance, choosing a gateway from Actintec for Verizon's FIOS fiber-to-the-premises service. While Coxsys and CopperGate have had some wins with tier 2 providers, the Verizon announcement catapults MoCA ahead.

Verizon previously used a D-Link router for its FIOS service. Now, Verizon customers who sign up for FiOS service will receive the new Actintec gateway, and existing FIOS customers can receive the new gateway upon request. Along with MoCa networking technology, the new gateway also includes standard 802.11g wireless networking. While Verizon announced only one vendor, Actintec, for this gateway, it is likely to sign up at least one other supplier next year. The new gateway involves higher bill-of-materials costs because of the higher processing performance and memory requirements of MoCA, but Verizon said it did not double the cost of the D-Link gateway.

Coax promises television service providers the ability to deliver multiple streams of high-definition video around the home using a clean, secure, and preexisting set of wiring in the home. Some wired solutions, such as those using power lines and phone lines, lack the capacity and reliability necessary for high-throughput applications, while wired Ethernet requires expensive retrofitting. Current standard wireless Ethernet solutions lack the necessary quality of service, ease of use, ease of installation, and capacity.

The knock against IP over coax has been that it doesn’t have the ubiquity of power outlets or the flexibility of wireless solutions and, as an industry standard, it remains up in the air. All of these conditions remain true. Verizon has made an industry-leading decision by going with MoCA, a solution that is more expensive than other IP-over-coax contenders but promises a higher payoff in the long run. A key differentiator of the MoCA technology, which was primarily developed by Entropic, is that it gives service providers the ability to run multiple simultaneous logical subnets on different channels, essentially enabling multiple home networks in a single home. This means that a service provider can have one home network dedicated exclusively to its own commercial video content and another home network given over to the subscriber, all running out of the same gateway. In choosing MoCA, Verizon also cited inconsistent performance from competing IP-over-coax technologies when it comes to a diverse range of coax environments, as might be encountered by a large-scale deployment.

Going with MoCa now for its FIOS rollout saves Verizon the cost of stringing Ethernet from the optical network terminal (ONT) located on the outside wall of the subscriber's home into the subscriber's home to the gateway. These cost savings are balanced by higher costs in both the gateway and the ONT, which will also have MoCA built in. Would the costs of the gateway have been lower if Verizon had waited for an IP-over-coax standard to emerge? Yes. Would it have been nice for Verizon to be able to wait for 802.11n to standardize instead of being forced to go with an 802.11g gateway, with its lower throughput and range? Of course. But Verizon is paying the price of being the leader and could not wait any longer. The 802.11n standard is at least 18 months away from a point at which a service provider can confidently deploy it on a large scale. An IP-over-coax standard might never emerge without the commitment of a service provider the size of Verizon.

Meanwhile, AT&T and others sit on the fence and may benefit from Verizon's leadership as Coaxsys and CopperGate feel the pressure to keep up with MoCA.

FUTURE OUTLOOK

None of the major home networking vendors in the retail channel offer MoCA-powered network adapters, and Verizon said that it does not currently plan to offer them, so consumers will not be able to connect their own PCs and other network devices to the gateway using coax. However, if Verizon's FiOS initiative takes off, this may be the boost the retail home network equipment manufacturers need. To date, vendors such as Linksys, NETGEAR, and D-Link have had limited success with their power line networking equipment in the United States. Wireless networking technology has met the needs of most home networking users to be able to surf the Internet and do other basic PC networking applications from anywhere in their homes. As more intensive
home networking applications, such as VoIP, audio streaming, and video streaming, emerge, consumers may require a more reliable networking technology, and the 802.11n specification may or may not meet these reliability requirements.

Verizon's choice of MoCA does not anoint a victor in the war over the IP-over-coax standard. Rather, this marks the beginning of the last battle. The service provider channel will choose the winner here because the winner will pave the way for networked entertainment using its set-top boxes to distribute video throughout the home. Home network equipment manufacturers in the retail channel will follow the lead of the service providers when it comes to choosing an IP-over-coax product. The number of top-tier service providers is, obviously, limited, and Verizon being off the table puts significant pressure on MoCA's competitors. Other service provider members of the MoCA organization include Cox Communications and Comcast as promoters and AT&T as an associate. AT&T has appeared to back away from MoCA recently, but its motivation for that is unclear. Many leading equipment manufacturers, including Linksys, Toshiba, and Panasonic in the retail channel and 2Wire, Alcatel, Siemens, and Westell in the service provider channel, have also aligned with MoCA, although none have actually sold MoCA-based products. Motorola is both a MoCA promoter and an investor in rival CopperGate.