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Cisco announces 'next-generation' high-speed routing system

By Brandon Bailey

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It won't make your iPhone run faster right away, but Cisco Systems says its new generation of high-speed routing equipment — unveiled to much fanfare Tuesday — is designed to handle a rising tide of video and mobile data transmissions that is threatening to flood the Internet.

The giant San Jose networking company said its new routing system can potentially handle up to 322 terabits of data per second, or enough to let every person in China make a video call simultaneously.

"It's the foundation for the next generation of the Internet," CEO John Chambers said during a Web-cast held to introduce the CRS-3 Carrier Routing System, designed for telecommunications companies and other big corporate customers.

Chambers said the system, which AT&T is already using in field tests of a new high-speed Internet service, is key to Cisco's vision of a future where businesses and consumers communicate increasingly with mobile devices and video, which requires far more network capacity than simple text or still images.

Routers are the traffic cops of the Internet, steering packets of information to their intended destinations across vast and complex networks. Cisco said its new equipment can handle three times the volume of its previous system, introduced in 2004, and has 12 times the capacity of competing systems from other companies.

Analysts cautioned against reading too much into the China analogy, since that much traffic would completely overwhelm other components of existing networks. And in the continuing horse race of research and development, experts said it won't take long for Cisco's rivals to match or beat at least some of the new system's technical specifications.

Anticipating the Cisco news, rival Juniper Networks announced Monday that another telecommunications company, Verizon, has used Juniper's routing equipment in pilot deployments of networks operating at 100 gigabits per second, or the same speed as the AT&T field tests.

"We welcome Cisco to the 100GB club," Juniper Vice President Mike Marcellin said in a statement Tuesday.

Cisco's announcement also disappointed a few tech bloggers: Cisco had promised the news would "forever change the Internet," prompting speculation that it might unveil some revolutionary consumer product rather than an inherently less glamorous router.

But experts said Cisco's new system represents a solid advance for the industry. Cisco controls more than half of the core routing market, although its share has decreased slightly.

"The product is pretty significant, there's no doubt about that," said **Rajan Varadarajan**, senior analyst at **Primary Global Research**, which tracks the tech industry for investors. In particular, he noted that Cisco designed the routing system to work efficiently with other switching equipment and virtualized servers that Cisco sells for large data centers.

That could make it especially attractive for businesses that are building "cloud computing" facilities, or centralized computer operations that deliver software and information to employees and customers over the Internet, Varadarajan said.

As for Cisco's claim that the new system can handle 322 terabits per second, Varadarajan noted that it can only offer that capacity if a customer connects 72 "chassis," or individual devices, together. Juniper is expected to start selling devices with similar individual capacity in coming months.

In an interview, Cisco senior vice president Pankaj Patel acknowledged the new routers are just one of the elements required to build a network capable of providing the kind of high-speed service that Cisco envisions, in which millions of people will use smartphones and tablets to access video in the future. But he said the routers are a key component.

"This is the platform for how we'll supercharge the mobile Internet," Patel said.

Cisco did not say how much revenue it expects from the new routers, which are priced at \$90,000 each. The company said it sold nearly 5,000 of the previous version. Patel is general manager of Cisco's service provider business group, whose routers and other products contribute nearly a third of Cisco's \$36 billion in annual revenue.



Cisco announced its new high-speed routing system, the CRS-3, which it says has three times the capacity of its previous system. The company hopes it will serve as "the foundation for the next generation of the Internet." (courtesy Cisco Systems.)