



Create Agility with New World Services

The communications landscape is changing dramatically. Advances in technology have made online experiences much more consistent, accessible, richer in content, and above all, easier to use than ever before. As a result, a tremendous technological transformation is under way. By any measure, it's a **New World** in networking for service providers and their customers.

Cisco is leading the migration to the New World in ways that vendors whose roots are in the old world of circuit-oriented networks could not easily provide. Unlike traditional telecommunications suppliers, Cisco is positioned to help **service providers** not only to build intelligent networks, but also to create new business opportunities through value-added services.



“Research indicates that one in five
potential Internet users **resides in China.** This
incredible growth **is pushing** us to support **millions**
of users at the **highest** possible **speeds.”**

CHINA TELECOM

In the New World model, data is rapidly overtaking voice as the principal form of network traffic. This fundamental shift is creating a host of new demands and challenges for service providers, many of whom have already reached the point where data traffic has surpassed voice as the principal market driver affecting their business. The Internet and **IP-based internetworking** has become the foundation of the New World. And Cisco Systems has been responsible for creating and enhancing the frontiers of IP internetworking technology over the past decade.

The New World also creates momentum that changes the way that service providers do business. The traditional limitation of merely providing connections and lower-level transport services is giving way as service providers are called on to play a larger role in supporting network infrastructures for companies and individuals alike. This means hosting Internet applications, providing integrated data and voice systems, and offering new Internet access options ranging from dial to broadband throughout the public network infrastructure.



To remain competitive, service providers must continually keep up with increasing customer demands for new services. For example, Internet usage is skyrocketing in China, and it is necessary to maintain quality network performance and high access speeds while still accommodating incredible growth. Faced with this demand, **China Telecom**—China’s leading service provider—is moving fast to support millions of users at the highest possible speeds. Simultaneously, the provider is taking steps to meet future applications by building new services for IP-based voice and video applications such as IP telephony, videoconferencing, video on demand, and e-learning. By moving to a packet-based, New World architecture, China Telecom will be positioned to grow and provide advanced services far more quickly than is possible with a more traditional circuit-switched approach.

Cisco consultants are working in China to lend onsite expertise to China Telecom. This effort will have a major impact on Internet performance as a whole throughout the country. As China’s primary commercial network, ChinaNet connects the major cities, supporting 50 percent of all Internet users.

For individual **consumers**, the Internet provides a valuable communication tool that is used every day, at work and at home. It offers everyone easy access to information, resources, and other people through a simple online connection. And recent advances in technology allow for a richer Internet experience including multimedia, video, music, and animation.

“I can **now** get all the **information**

I need **at home** so easily.

Speed is no longer an **issue** compared

to a **dial-up connection**.

It absolutely **changes your life!**”

CONSUMER OF HIGH-SPEED
RESIDENTIAL INTERNET SERVICE
FROM US WEST
LESLIE DE VILLIERS

Individual consumers are increasingly using high-speed broadband access into the home to achieve the best Internet experience possible. “Broadband” is the term to describe high-speed access to data, voice, and video signals. With this capability, Web pages appear faster, audio and video files arrive quickly, and more than one person in a household can access the Internet at the same time. Broadband technologies such as cable, satellite, and digital subscriber line (DSL) bring information to the home, in any format, with quality results.

Cisco has a technology-licensing program intended to accelerate the availability of high-performance home Internet access devices. Look for the **Cisco NetWorks** logo, which appears on industry-leading products built for home use. It means that Cisco networking technologies have been implemented in that device to provide the best

Internet experience possible. In addition, consumers should connect with those service providers who are qualified under the **Cisco Powered Network** program. Within the program are those service providers who maintain a high level of network quality and use a significant level of Cisco equipment in their networks for reliable, secure Internet access that consumers can depend on.

In the months and years ahead, an Internet connection will become an even more integrated part of our lives. Today, many people have broadband access. Soon, we’ll be able to connect computers and other devices in our homes to form what Cisco calls a **“personal network.”** And in the future, we’ll be able to access the Internet wherever and whenever we want, using innovations such as touch screens in cars, mall kiosks, and portable Web slates. Connecting everyone and everything will help us manage, simplify, and enrich our lives.

