China Telecom Enters New Era of Collaboration with Web Providers

“China Telecom is committed to facilitating and enhancing effective communication, exchange, and collaboration between web service providers and Chinese consumers and businesses.”

—Xu Jian Feng, Chief Technical Officer, China Telecom Research Institute

**In Brief**

The web, powered by online video consumption, is exploding in China, resulting in a tremendous increase in household bandwidth usage. In response, telecommunications companies and Internet service providers are teaming up to meet the demand. China Telecom, the nation’s largest telco, has the opportunity to penetrate this market and differentiate itself from other content delivery network (CDN) players, most of which provide substandard quality. Cisco is engaged in helping China Telecom identify and launch value-added services called CDN Plus, which will be built based on Service Node, Cisco’s telco-grade CDN technology.

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<th>Customer</th>
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<td>China Telecom</td>
<td>Service Provider</td>
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**Challenges**

- China is the hottest Internet market in the world, second only to the United States. Tudou, China’s largest video-sharing site, serves 55 million videos per day to 40 million users. IBSG analysis shows that per-household bandwidth use will increase fourfold in the next five years.
- Web service providers need to collaborate with telcos to manage runaway bandwidth costs while maintaining quality service to end users. End-user satisfaction is important not only to video providers, but to advertisers, who contribute heavily to web providers’ revenue and depend on end-user page views and clicks to get their messages across.
- To be successful, telco service providers need to offer web service providers more than just acceleration services. They also need value-added services such as metadata search, ad insertion, and content transcoding. This is the essence of Cisco’s engagement with China Telecom.
Solutions

- The Cisco Internet Business Solutions Group defined the next-generation CDN strategy for China Telecom, providing best-practice examples, business case, service identification and prioritization, high-level financial modeling, and quantification.
- IBSG also orchestrated ecosystem partnership building for a commercial trial, which is scheduled to start in early 2009, and helped lead efforts to obtain buy-in from all relevant stakeholders.
- Potential Cisco solutions include Service Node, Content Delivery System (CDS), Internet Data Center (IDC), and Entertainment Operating System (EOS).

Next Steps

- China Telecom plans to conduct a commercial pilot of CDN Plus in Shanghai using Cisco’s Service Node technology and involving three well-known web players—Tudou, Taobao, the leading Chinese e-commerce site; and Shanda, the largest Chinese online gaming site.
- The trial will cover up to 1.5 million users and is expected to bring initial incremental revenue of US$8 million to China Telecom within the first three years.

Projected Results / Benefits

- By offering a rich portfolio of CDN and value-added services that include accelerated web downloads, media streaming, metadata search, ad insertion, and content transcoding, China Telecom can potentially reap five-year cumulative revenue of US$500 million from a web video provider a quarter the size of YouTube—a leading global video-sharing site. The overall size of the CDN Plus opportunity for China Telecom is projected to be US$1.5 billion over a five-year period.
- Qualitative benefits for China Telecom include becoming the preferred telco for web service providers in China, having a future-proof web enablement strategy and platform, and better end-user experience.
- Qualitative benefits for web service providers include enhanced customer experience, securing cooperation of the largest telco in China, and becoming the preferred web media for advertisers.

Best Practices / Lessons Learned

- Close internal coordination among IBSG, the business unit, and the account team was needed to present a unified Cisco approach.
- External stakeholder management was required to push a new business model and/or solutions to multiple customer stakeholders, each with a potentially different view of what is being proposed.
- A commercial pilot, not just a technical trial, was required to demonstrate the benefits of new technology.
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