Emerging Multimedia Solution

Zhou Xueren

Broadband is growing so fast, and the bandwidth available to subscribers is increasing day by day. But the question is how to deliver more attractive broadband services. Is it through Web2.0 or Web 3.0? Wherever you go, video related services will dominate the future of value-added services on broadband.

Following its emergence and commercialization in 1980s by privately run Internet Service Providers (ISPs) and its expansion in popularity in 1990s, the Internet has had a drastic impact on culture and commerce, including the use of near instant communication by e-mail, text based discussion forums and the World Wide Web. This is called Web 1.0, which features typical static web page and e-mail.

Web 2.0 was first coined in 2004 to describe the new way the Internet was moving from read-only pages to more user-interactive, social involvement sites. Terry Flew, in his 3rd edition of New Media described the differences between Web 1.0 and Web 2.0 as "move from personal websites to blogs and blog site aggregation, from publishing to participation, from web content as the outcome of large up-front investment to an ongoing and interactive process, and from content management systems to links based on tagging". According to Wikipedia, Web 2.0 is a term describing changing

trends in the use of World Wide Web technology and web design that aims to enhance creativity, secure information sharing, collaboration and functionality of the web. These Web 2.0 concepts have led to the development and evolution of web-based communities and its hosted services, such as social-networking sites, video sharing sites, wikis, blogs, and folksonomies. MSN, blog, Google are some typical features.

Following the introduction of Web 2.0 as a description of the recent evolution of the Web, the term Web 3.0 has been introduced to hypothesize about a future wave of Internet innovation. Views on the next stage of the World Wide Web's evolution vary greatly. Some believe that emerging technologies such as the Semantic Web will transform the way the Web is used and lead to new possibilities in artificial intelligence; others suggest increases in Internet connection speeds, modular web applications, and advances in computer graphics will play the key role in the evolution of the World Wide Web. Here is a list of key features of Web 3.0:

■ Convergence of telecommunication and Internet
■ Support of multiple terminals
■ Cloud computing and artificial intelligence technology
■ Personalized, filtered, digested and synthesized intelligent Web application
■ Manageable and participant profitable SNS
■ Video stream dominated services

As for the aforementioned evolution, video stream services will be the keys of broadband value in near future. How to meet this tide has become a major concern of service providers.

With technology intelligence, ZTE raised a brand new Unified Video Delivery Solution (UVDS) that integrates IPTV, Mobile Video, VCS, Video Monitoring, and Web Video.

As shown in Figure 1, all services are divided into session related services controlled by a SIP server and content delivery related services with unified Content Distribution Network (CDN). There are three highlights in the solution:

Unified service management

The unified user profile facilitates service management, helping to reduce OPEX.

Unified service delivery system

It allows more services to be converged, thus improving ARPU. The converged services can be:

■ Enhanced VCS: it can converge VCS and IPTV system, allowing you to participate in a meeting via VCT, SIP video phone, STB, MP, and even PC; while in the meeting, the chairman can discuss the topic with participants by playing IPTV channel or VOD contents;
■ IPTV and Mobile Video convergence services such as Television-Mobile Partner (TV-MP) and Position Shift TV (PSTV): in TV-MP, subscribers can view and book a program and watch it on a STB at home; in PSTV, while watching a program, you can push it to your mobile phone to continue due to some urgent reasons;
■ Public monitoring services: traffic control, city crime or emergency control, and banking system monitoring can be operated by a single operator;
■ Private monitoring services such as E-guard service, baby care and family monitoring: in case of fire, the E-guard service will send you an SMS to your mobile set and you can watch what happened and take urgent measures to control the fire;
■ Video sharing from variable access devices such as mobile set and PC.

Unified CDN

It can be shared by IPTV, Mobile Video and Video Monitoring in an optimal way, thus reducing CAPEX.

Multimedia stream will dominate the emerging semantic web, and ZTE UVDS will bridge you to the future with its state-of-the-art technology. ZTE TECHNOLOGIES
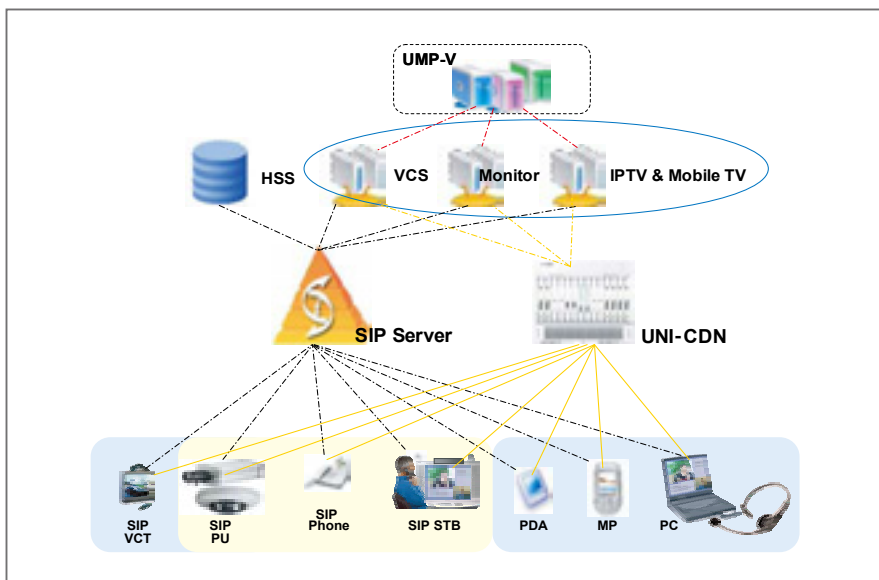

Figure 1   ZTE UVDS