

AT&T Video Share Gives Wireless Callers Streaming Video Capability

IMS-based end-user service is first of its kind in the United States

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The last few years have seen a global race by major telecommunications carriers to field new services to supplement traditional revenue streams. As a result, the industry has staked high hopes on the promise of IP Multimedia Subsystems – or IMS.

This technology has established itself as a framework for a common infrastructure that supports enhanced communications services by integrating multimedia service bundles for premium content and entertainment services. Although some fixed-service providers have already rolled out IMS-based fixed applications (see Side Bar), the promise of IMS for mobile applications has been mostly theoretical. This is because of the absence of commercially deployed mobile services that are fully based on this technology. But the theoretical benefits of IMS are about to become more concrete.

On July 22, 2007, AT&T rolled out a service called Video Share to nearly 160 markets, leveraging the carrier's high-speed 3G Universal Mobile Telecommunications System/High-speed Downlink Packet Access (UMTS/HSDPA) network.

Video Share enables one-way, live streaming video feeds that can be seen by users during a two-way conversation. Beginning with a normal wireless phone call, customers can add a live video stream to a session by clicking on a single button (Figure 1). Once a Video Share call is initiated, the service allows customers to switch the direction of the video stream during the same phone call. The service is the first of its kind in the United States.

Video Share a Key Development in AT&T's Mobile Data Services

Video Share is an important milestone in AT&T's strategy to attract new subscribers interested in unique communications features. It holds a great deal of promise in driving increases in traffic to AT&T's 3G mobile data network. It also will serve as a key differentiator, distinguishing AT&T's network offerings from those of its competitors.

Figure 1: Current AT&T Video Share handsets



Today there are ten handsets from Samsung and LG Electronics that support Video Share services. Because of how easy it is to use, and the range of terminals already available to support the service, AT&T expects subscribers to be rapidly attracted to a new category of service that delivers a unique user experience superior to alternatives such as Multimedia Messaging Service (MMS) or 3G video-telephony.

With this application, AT&T now can differentiate itself from the competition. AT&T can use its core network infrastructure and 3G UMTS/HSDPA network to deliver a service that other mobile service providers cannot match.

The most important element – and what makes this service unique – cannot be seen by the end users. It is the IMS platform put in place by Alcatel-Lucent for AT&T. IMS is a standardized network architecture that enables the delivery of an unlimited number of multimedia communication services. By deploying the first true IMS-based end-user service, AT&T can deliver attractive and differentiated service to its subscribers and position itself to quickly roll out more services, providing Video Share with new potential features (such as combined multi-screen TV/PC/mobile phone service delivery). The company also has an opportunity to leverage these capabilities to extend service offerings to other domains (by combining the capability with vertical applications, social networking sites, user generated content, etc.).

The flexibility and openness of IMS allows AT&T to blend multiple services to create a wide range of new, innovative IP-based applications over the next several years.

On June 19, 2007, AT&T announced¹ services like Video Share will be accessible over mobile, TV and Internet screens to “enable AT&T customers to seamlessly access services and content over both wireless and wireline network connections.”

IMS a key weapon in the battle for customer ownership

The ability to launch new profitable services is critical for service providers, which must rapidly and effectively counter competitive threats, reduce customer churn and compete for customer ownership.

IMS paves the way for the introduction of carrier class Voice over Internet Protocol (VoIP) services, a critical element in the convergence of fixed and mobile domains. It also provides the connectivity that enables Session Initiation Protocol (SIP)-capable terminals and multimedia devices to establish IP sessions among one another to support a wide variety of advanced IP multimedia services. These include video sharing and other applications such as content sharing, push to talk, push to view, instant messaging and active phone book with presence.

IMS brings a unique application environment that can provide services to the end users independent of the access that is used (e.g. DSL, 3G, WiMAX). New services can be developed, implemented and deployed once and can then be delivered independently to a variety of access methods and devices. In addition, all services and applications developed with IMS can share the same service delivery environment, including application servers and a unique set of back-office systems such as subscription and subscriber data management and payment platform.

Originally developed for mobile service providers by the Third Generation Partnership Project (3GPP) standards body, IMS has been adopted and endorsed by the European Telecommunications Standards Institute/Telecoms & Internet Converged Services & Protocols for Advanced Networks (ETSI/TISPAN) standards body, which focuses on developing the definitions and interfaces necessary to support fixed world service delivery requirements. This standardization guarantees interoperability of the networks and offers a viable response to alternative service providers (such as Skype, MSN, Yahoo, Google, etc.) who threaten traditional operators' value propositions.

What does this mean for the end user? IMS' unique technology, which relies on IP and SIP, offers end users an unlimited set of innovative applications featuring rich multimedia and multiparty communications. In addition, end users have access to the same consistent set of applications and

1 <http://www.att.com/gen/press-room?pid=4800&cdvn=news&newsarticleid=23983>

services regardless of the access and device used. They can thus choose to communicate according to their own needs and are not limited by the capacity of their access network and terminal. In short, IMS enables the type of true user-centricity that is so critical to success in the rapidly developing communications marketplace.

With respect to a user's reach-ability, end users can communicate (voice, video, share data) with their friends using a mobile phone, a PC connected via DSL or laptop with WiMAX. All correspondents are connected with the device and access of their choice.

IMS is thus the key enabler to accelerate services transformation.

Alcatel-Lucent at AT&T

Video Share is the first AT&T service to be delivered on the company's next-generation network platform, which is based on Alcatel-Lucent's IMS solution, the exclusive provider to AT&T of this technology.

AT&T has deployed Alcatel-Lucent's Session Manager, including 3GPP's functions Call Session Control Function (CSCF), Breakout Gateway Control Function (BGCF) and Smart Common Input Method (SCIM) and the 1430 Unified Home Subscriber Server (HSS) for subscription management. Most of these elements are involved in the Video Share service, with the HSS performing authentication and the session manager performing the SIP session control for video streaming and for the billing.

In addition, the Video Share service leverages the mobile broadband capabilities of AT&T's 3G UMTS/HSDPA network, for which Alcatel-Lucent is a major supplier.

Alcatel-Lucent is participating with AT&T as a supplier and system integrator for AT&T's U-Verse IPTV roll out. As service providers begin testing the market with Triple Play offerings, many are realizing they will need to offer innovative new user-centric applications to compete and win. Alcatel-Lucent's Triple Play applications and IMS platforms are designed to enhance the end-user experience, bridging the social and communications potential of Triple Play more tightly with the entertainment potential of IPTV.

These applications are important examples of Alcatel-Lucent's IMS solution for fixed service providers in action. The applications are designed to address consumer demand for:

- More personal content
- The ability to share community content, and
- The opportunity to communicate with friends or family in remote locations

With the power of IMS, the Alcatel-Lucent solutions allow service providers to quickly develop, test and launch innovative user-centric applications over a range of access methods. It not only helps generate new revenues from new services, but also keeps costs in check with a staged migration from today's circuit-based Public Switched Telephone Network to a full packet-based network.

Communication anywhere, anytime with AT&T's Video Share and beyond

AT&T is now in the unique position to offer an attractive service that enables consumers to freely stream videos anywhere, anytime with other subscribers of the service.

Video Share for Vertical Applications

While the consumer segment is the initial target for the launch, SIP protocol brings the flexibility to extend services to other segments. Business applications are the next logical step. As it is, a video sharing-enabled handset can find its place in the pocket or the briefcase of real estate or insurance agents, plumbers, mechanics, retailers and others.

Should AT&T choose to add more features for business markets, IMS offers an unprecedented platform for developing attractive vertical applications, combining video sharing with presence, messaging, convergence of fixed-mobile voice communication, reach-ability management and more. These services offer AT&T opportunities to attract more users, develop new revenues and reduce churn by using IMS to develop both general purpose applications and tailored offerings for specific vertical industries. ☒

BT delivers innovative end-user applications enabled by Alcatel-Lucent IMS technology

In the last two years, BT has launched several innovative residential applications for its customers: BT Broadband Talk, BT Broadband Talk Softphone and BT Broadband Talk Video. These three services allow consumers to access Voice over Internet Protocol (VoIP) services using their PC, their residential phone or a video-enabled residential terminal. Thanks to IMS technology from Alcatel-Lucent, BT can deploy innovative services that are competitive with leading Internet-based services, while offering users significantly more functionality. For example, BT Broadband Talk Softphone offers more than just PC-based VoIP. It provides a truly converged multi-media communication experience that allows consumers to make free phone calls to other BT Broadband Talk Softphone users, while also allowing them to connect webcams and use instant messaging.

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