Smart City Launches an IPTV Video Offering

Florida telco Smart City saw an opportunity to compete in the video arena and launched service into select master-planned communities using IPTV technology

By Rick Sailor ■ *Amino Technologies*

Smart City has deep roots in telephone and broadband data, with a significant presence in the convention, hospitality and planned community markets. It may have the most unusual history of any independent phone company in the US. When the Bell telephone company dynasty was split in the 1980s, the Houston Astros started their own phone company to serve the Astrodome.

The company combined the best in telephone technology with hospitality flair at the dome and nearby Astrohall. The concept of integrating telephone technology with hospitality caught on and the company quickly expanded to serve many other convention centers. The company was acquired in the mid-90s by what would later be named Smart City.

In 2001, Smart City bought the innovative Central Florida phone company that served Disney World and its surrounding area, including the master-planned community of Celebration that Disney had created. Today, the company operates as both an ILEC and CLEC and has become a full-service communications and entertainment service provider delivering connections and content to residential, business and hospitality customers.

Smart City's stated goal is not simply to stay ahead of the technology curve, but to enable communities with technologies that provide simplicity, connectivity and productivity, with the purpose of

Amino's latest, the AmiNET125 set-top "box," enables additional services such as video conferencing, gaming and VoIP. Its programmable DSP codec can accommodate future applications. It can also bring Internet TV from the PC to TV using Windows Media 9 and the Opera browser. Providers can offer it in a range of lollypop colors.

making them intelligent places to live, work and play.

A New Challenge: IPTV

Company leaders saw IPTV as an opportunity to add a new revenue stream to its business model and compete more effectively with larger service providers that were beginning to offer TV services. In 2006 the company decided to embark on a new venture: providing customers access to video through an IP-based delivery model.

"IPTV was the best choice for Smart City," explains Tim Carroll, director of marketing and product management for Smart City. "State laws, at the time of our decision, made the entry into delivering cable television services very difficult. The laws have changed since – but at that time, telecommunication companies had to get every individual municipality to grant a franchise, each having its own set of requirements. It was quite an expensive and time-consuming process. The ability to deliver video via IP allowed Smart City to move fast and bypass some of the initial hurdles, not to mention some of the inherent advantages of an IPTV offer."

Smart City signed with one of the leading developers in the nation and quickly launched IPTV service to two communities, one in the North Orlando area and another south of Orlando. The initial deployment used BPON technology, but since has been upgraded to GPON, leveraging the bandwidth advantages of fiber to the premises (FTTP). The 175 video and audio digital channels available at the time of service launch grew to more than 200 within two months. Initially, standard-definition TV service was offered to one com-

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munity and both standard and high-definition service to the other. Today, both communities enjoy 100 percent digital SD and HD programming.

In determining the technology platform, Smart City chose Tut Systems (now Motorola) for the majority of its headend equipment, Minerva for the IP-based middleware and Latens for conditional access.

Conditional access software is what ensures that video content is distributed only to authorized subscribers. Historically, content security has been a major issue for IPTV. Because IPTV is still a new and unfamiliar technology, many content providers have been reluctant to negotiate agreements with telcos unless they could be assured that strong security measures were in place. By using software from Latens, one of the leaders in dynamic, software-based conditional access for the secure delivery of content to IP devices and television set-top boxes, Smart City would be able to obtain content from network providers.

Middleware is the software that provides the onscreen channel guide and gets the signal to the viewer's screen. Minerva is a leading player in the North American IPTV middleware market, offering a complete software platform to manage the delivery of advanced television services over broadband networks. Its software has been used successfully in a number of IPTV deployments.

After selecting various components for the content origination and distribution of video service, Smart City set out to find best-of-breed IP-based set-top boxes (STBs) while having a competitive price point. Smart City chose Amino's set-top boxes, which had already been used in several other IPTV deployments in the US market.

For service deployment, Amino had already ported Minerva Networks' iTVManager video services management software to its AmiNET110, 120 and 500 STBs. The iTVManager cli-

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ent module running on the AmiNET appliances can provide access to video services including live television, video-on-demand (VOD), near-VOD, pay-per-view, Internet access and e-mail.

Amino also provides advanced features that are used by Smart City today. In order to provide an exceptional high definition experience, the Amino's AmiNET130 is used in both communities. Furthermore, in order to compete effectively with cable and satellite TV providers, Smart City deployed set-top boxes that are PVR-capable, with features such as recording multiple programs while live programs are playing;

pausing live TV; and easily scheduling recordings through program guides.

A Succesful Implementation

Video services were rolled out to the trial communities in November 2006. "Initial service deployment had some challenges as we were running MPEG-2 in a BPON environment; however, once we moved to GPON we saw a tremendous improvement in service. The high-definition viewing experience we have today is simply unmatched in the MSO and DBS world as we leverage our 185+ Mbps bandwidth to the home," Carroll comments. "No doubt, Amino was responsive, skilled and helped us fulfill our business requirements quickly."

As a result of the successful implementation, the IT team at Smart City can now support Minerva and the IP protocol across its fiber backbone, which allows the company to leverage the power of its high-bandwidth network to deliver advanced new video services to consumers.

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Based on the initial success of its Amino implementations, Smart City intends to roll out to other communities in Central Florida. The company is also enthusiastic about deploying the next generation of Amino STBs to accommodate its customers' demands for HD/PVR capability as well as the multiroom-type functionality of the AmiNET530.

Smart City plans to enable other Minerva interactivity capability shortly to enrich the customer's TV platform experience. In fact, it is in final testing of a TV Internet portal using the Amino wireless keyboard, as well as other some other really cool customer applications. **BBP**

About the Author

Rick Sailor brings 35 years of experience in the telecommunications industry to his role as VP Americas for Amino Communications, LLC. During his career, Rick has been responsible for the successful business development of several manufacturing telecommunications companies, interfacing with sales and account management teams focused on independent telcos and RBOCs.