

Case Study

Bright House Deploys tru2way

Successfully implementing tru2way requires significant planning and preparation.

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Bright House Networks is a U.S.-based cable operation jointly run by Time Warner Cable and Advance/Newhouse, with sites located across the country. It has been quick to embrace advanced technologies, such as caller ID on TV, video on demand (VOD), and enhanced television (ETV) services such as Start Over.

Since 2005, Cisco has partnered with Bright House and Time Warner Cable in transitioning to a tru2way-enabled network infrastructure. In July 2007, Bright House Networks deployed its first tru2way set-tops with separable security and shortly thereafter launched its first tru2way application offering—the tru2way electronic programming guide (EPG), or OpenCable Application Platform (OCAP) Digital Navigator (ODN). Bright House initially deployed ODN in its Orlando, FL, site. Cisco was particularly involved in solution development, trials, rollout plans, and beta-testing phases of the deployment. The project is ongoing.

Background

OCAP specifications developed by CableLabs establish an open, standardized platform for advanced, interactive cable applications; tru2way is the consumer-focused trade name for OCAP technologies and products. Despite a lack of industry successes

to emulate, Bright House Networks decided to transition to a tru2way-enabled network, beginning with its Orlando site.

“We look at tru2way as the future of our industry,” said Jeff Chen, Bright House senior vice president of advanced technologies. “You have to do it. And if you look at the benefits that the tru2way platform is expected to bring to us, it’s justified to invest the time and money to go forward with it.”

Other considerations influenced the decision as well. Bright House, with Time Warner Cable, was positioned as a national leader in providing next-generation, interactive video services to consumers; early tru2way implementation would help maintain that industry position.

Both organizations had committed to deploying an advanced digital programming guide application, which would have been far more costly in the legacy environment. Because tru2way was seen as inevitable, the best course of action was to undertake the tru2way transition and develop the program guide as a tru2way application.

The FCC had mandated a deadline of July 1, 2007, for operators to adopt separable security for set-top boxes and TV sets. Therefore, it made good sense to couple separable-security compliance with tru2way implementation because each initiative on its own would require installing a new generation of set-tops to the subscriber base.

Tru2way is designed to enable operators to develop innovative applications once and port them to their entire footprint. New, interactive applications work equally well with any vendor's tru2way-enabled set-tops or TV sets.

This capability results in significant savings and faster time to market for cable operators, who previously had to reproduce application development, testing, and installation for every possible end-user configuration. It also allows both operators and consumers to choose from a much wider variety of end-user hardware.

Planning

Before beginning the execution phase of the project, Bright House undertook a thorough planning process. Rather than conducting the planning solely from an engineering and operational perspective, and then informing other divisions of the tasks they would need to accomplish, Bright House used an open planning process that involved all company divisions from the outset.

The decision helped minimize the number of unplanned-for issues that arose during project execution. For example, the customer-service department was able to foresee the need for a thorough training process for its personnel, and for a top-to-bottom re-structuring of its processes and scripts for issue escalation and resolution. Had the planning been done purely from an engineering perspective, the time and resources needed for this might have been significantly underestimated.

The inclusive and collaborative planning process ensured that each division of the company fully understood the importance of its role in the process and was able to take ownership and responsibility for accomplishing its share of project tasks. In addition, the process served to create lines of communication and a shared vocabulary to ensure effective collaboration and information sharing. This turned out to be valuable during the deployment process because it ensured that emerging challenges and unexpected complications could be communicated and addressed most effectively.

Bright House brought Cisco in as a partner in the project early on to provide training to Bright House engineering personnel, especially regarding the integration of the tru2way headend components into the existing infrastructure; and support for the training of customer- and technical-service personnel, developing scripts and procedures for routing and escalating subscriber issues.

To prepare for the expected increase in network capacity, Cisco also helped Bright House to implement switched digital video (SDV), digital content compression, and intelligent content routing technologies.

Despite extensive pre-deployment testing (automation, functional, performance, robustness/stability, and scale testing), the very large scale of the project meant that certain issues became evident only during and after deployment to the customer base. Experience with large-scale video delivery networks made it possible for the project partners to identify and resolve these issues as they arose, minimizing service disruptions and schedule delays.

Success

Commitment by all parties to the project led to the new tru2way infrastructure's having been successfully deployed in its first iteration. The ODN application was deployed to more than 165,000 subscribers, with the number continuing to increase.

Other next-generation video services are in active development. Because of the success of Bright House's tru2way implementation, the development and deployment of new services are expected to be much faster and more cost-effective than would have been possible before tru2way.

Teamwork and training played a key role in project success. "During the first six months, there were a lot of communications required among the engineering teams, field operations, call centers, and across the greater Central Florida division with Tampa," said John Walsh, Bright House vice president of engineering in Orlando. "As we learned new things, we made sure that our people were able to address issues as they arose."

The primary lesson learned by all parties to the project so far is that tru2way implementation for cable operators requires a significant investment of time, money and resources, as well as a willingness to sacrifice for the project's success. Operators who undertake tru2way implementation with this understanding, and with full buy-in from all stakeholders, both internal and external, will avoid frustrations and delays, minimize budget overruns, and retain customer satisfaction with service reliability.


Success also requires the contributions of technology partners fully conversant with the tru2way standards and experienced with all aspects of large, complex video-delivery network design and deployment. Bright House and Cisco both learned that tru2way implementation is challenging and costly, requiring significant internal coordination, effort, and commitment to success.

Next steps

Bright House Networks is now moving forward with plans to deploy tru2way to other sites in its footprint, including Tampa and Indianapolis. It also has developed more applications on the tru2way platform, such as caller ID on TV and "My Account on Demand."

Other cable operators who wish to position themselves to deliver the next generation of applications and services should consider that tru2way is only one part of the process. tru2way, for instance, paves the way for deploying applications written in Enhanced TV Binary Interchange Format (EBIF), CableLabs' specified messaging and signaling engine for future, enhanced and interactive video services.

"EBIF is a specification that we are fully behind," said Bright House SVP Chen. "One of the great things about tru2way is that it supports EBIF seamlessly."

Commitment to such standards will help position cable operators to deliver more of the interactive and personalized experiences that consumers, trained by the Internet, increasingly expect in all corners of their lives. 

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