

## Cable Operator Deploys Advanced tru2way Platform

Bright House Networks chose a Cisco tru2way solution to help deliver the next generation of advanced functions and applications.

EXECUTIVE SUMMARY
<p><b>BRIGHT HOUSE NETWORKS</b></p> <ul style="list-style-type: none"> <li>• Cable Operator</li> <li>• Multiple sites in United States</li> <li>• Number of Employees not available</li> </ul>
<p><b>BUSINESS CHALLENGE</b></p> <ul style="list-style-type: none"> <li>• Desire to retain industry-leadership position in delivery of advanced services</li> <li>• Commitment to deploying advanced program guide application as efficiently as possible</li> <li>• Need to meet regulatory requirement for separable security technology</li> </ul>
<p><b>NETWORK SOLUTION</b></p> <ul style="list-style-type: none"> <li>• Adopt OCAP/tru2way open standards across entire network footprint, using a best product in its category, end-to-end solution</li> <li>• Combine tru2way implementation with regulatory compliance efforts</li> </ul>
<p><b>RESULTS</b></p> <ul style="list-style-type: none"> <li>• Successful tru2way/EPG integration enabled rapid deployment of new consumer guide interface</li> <li>• 165,000 tru2way set-top boxes deployed to date, and steadily increasing</li> </ul>

### Challenge

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. Although it is a relatively new player in the cable space, it has swiftly established itself as an industry leader.

The OpenCable Application Platform (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 prior industry successes to emulate, Bright House Networks made the forward-thinking decision to transition to a tru2way-enabled network, beginning with their Orlando site.

Explaining the decision, Jeff Chen, Bright House Networks senior vice president of advanced technologies, says, "We look at tru2way as the future of our industry. 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 included:

- 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 U.S. Federal Communications Commission (FCC) had mandated a deadline of July 1, 2007, for operators to adopt separable security for set-top boxes (STBs) and televisions. 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 STBs to the subscriber base.

## Solution

Tru2way enables 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 STBs or TVs. This capability results in very significant savings and faster time-to-market for multiple service operators (MSOs), 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.

The initial project planning was undertaken in-house. However, Bright House Networks quickly brought Cisco in as an integral partner in the project. Cisco was chosen over other vendors for a variety of reasons, including:

- Because of the pre-existing relationship among Bright House Networks, Time Warner Cable, and Cisco, lines of communication and personal relationships were well established.
- Cisco had been very closely involved in creating the tru2way standards as a CableLabs partner, and was clearly committed to delivering comprehensive services and technologies to support the industry's transition to the new platform.
- Unlike other vendors offering only specific, focused products or services, Cisco offered end-to-end video services and technologies.
- Cisco is the recognized leader in crafting and pursuing the vision of the Connected Life (advanced, integrated, next-generation video and IP services delivered over media-aware networks using advanced bandwidth-optimization and content-virtualization strategies), of which tru2way technologies are a key component.
- Cisco's testing labs and procedures are capable of massive-scale pre-deployment testing to minimize service disruptions and unexpected problems during actual deployment.
- Cisco has unmatched experience and expertise in large-scale digital-video network architecture, integration, and deployment.

Cisco provided a great deal of training to Bright House engineering personnel, especially regarding the integration of the new tru2way head-end components into the existing infrastructure. Cisco also provided significant 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 bandwidth demand, Cisco helped Bright House to implement switched-digital video, digital content compression, and intelligent content routing technologies. Together these strategies significantly reduced bandwidth demand.

Despite extensive testing, the very large scale of the project meant that there were issues that only became evident during and after deployment to the customer base. Cisco's expertise and deep experience with large-scale video-delivery networks made it possible to rapidly identify and resolve these issues as they arose, minimizing service disruptions and schedule delays.

## Results

Because of the commitment by all parties to devoting all necessary resources to the project, the new tru2way infrastructure was successfully deployed in its first iteration. The OCAP Digital Navigator (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 will be much faster and more cost-effective than would have been possible before tru2way.

Bright House Networks, with Time Warner Cable, was successful in getting the entire company committed to the project, with a full understanding of the level of investment required for success. And when Cisco came on as partner, its personnel were quick to adopt the same level of commitment, responsiveness, and transparency that both organizations had achieved internally.

**“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. As we learned new things, we made sure that our people were able to address issues as they arose.”**

**—John Walsh, Bright House vice president of engineering in Orlando**

Cisco's contribution to the project is ongoing. Cisco remains a full partner in providing ongoing maintenance services, training, and support, as the system is refined for even greater efficiency and bandwidth optimization.

The primary lesson learned by all parties to the project is that tru2way implementation for MSOs requires a significant investment of time, money, and resources, and, arguably more important, a willingness on the part of all parties to make sacrifices and to commit themselves to 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.

In addition, success requires the contributions of a technology partner, such as Cisco, that is fully conversant with the tru2way standards and has experience with all aspects of large, complex video-delivery network design and deployment. Furthermore, the relationship between the operator and the partner must be open and actively communicative to help ensure effective collaboration and problem-solving in real time.

Finally, Bright House and Cisco both learned that MSO 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 MSOs 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. Success requires significant planning and preparation within the MSO at the corporate and site levels. It also requires having the right technology partner, such as Cisco, with the technological excellence and expertise to deliver innovative video solutions to the cable industry.

## For More Information

To find out more about the Cisco tru2way solution, go to:  
<http://www.cisco.com/go/tru2way>

### PRODUCT LIST

- CRS-1
- CMTS
- IRDs
- Digital Content Manager (DCM)  
position in delivery of advanced services
- Video Encoders
- Content Delivery System
- QAMs
- DNCS ver 4.x
- Axiom™ tru2way middleware
- Set-Top Boxes




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