Why Cisco's tru2way Solution?

Open platforms take us one step closer to Cisco's vision of a connected world and new service possibilities. Tru2way™ moves cable service providers to open networks, hardware, and applications. Cisco® has been recognized as a leader and innovator in tru2way solutions, breaking down the walls that inhibit open technologies while encouraging collaboration. In fact, Cisco has led the industry in successful tru2way network architecture deployments. CableLabs® currently uses Cisco tru2way solutions as an industry benchmark for excellence.

The tru2way open, standardized architecture enables deployment of applications across the network, regardless of hardware design and eliminates the need to deploy different applications for multiple device types. Tru2way represents a prime opportunity for the escalating growth of advanced digital TV services, and Cisco is helping you take advantage of these opportunities by:

- Establishing a standard platform across set-top hardware, applications, headend and data transmission
- Leveraging tru2way standards that bridge multiple applications across multiple devices
- Participating in iTV service provider itaas' istart Developer Program, which enables application developers to build tru2way applications more easily and efficiently using the Cisco complete, end-to-end tru2way platform.
- Working with application developers to integrate revenue-generating applications that you can rapidly launch across your network
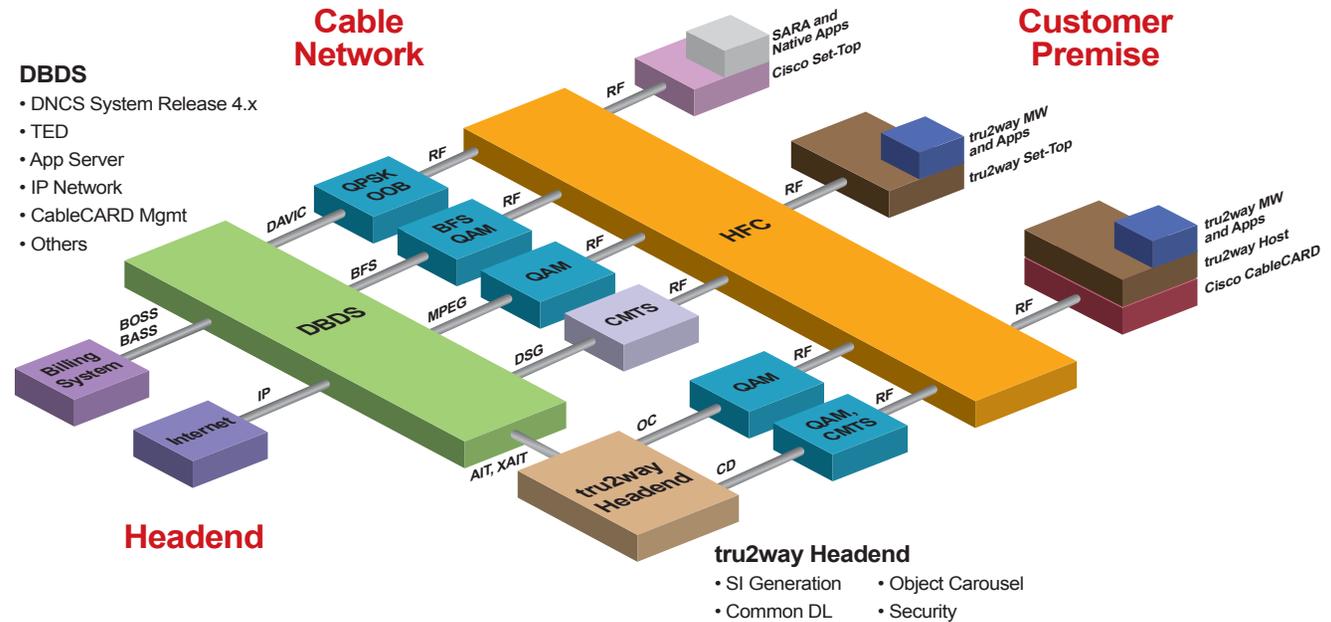- Rapid prototyping and deployment of next generation interactive video applications

Solution Components

The Cisco tru2way solution touches both the headend as well as the set-top.

Tru2way Digital Network Control System

Cisco Digital Network Control System (DNCS) headend software:

- Is configured to deliver tru2way applications to the set-top device
- Facilitates seamless addition of tru2way applications and network components, saving development time and money

Cisco's tru2way Solution Works Within the Existing Cable Network and Plant

- Has been tested extensively within Cisco network architecture and is fully compatible with the Scientific Atlanta Resident Application (SARA) interactive program guide and set-tops
- Is used as a basis for tru2way industry testing

Tru2way Middleware Platform

Cisco's tru2way middleware, Axiom™, is the foundation behind our tru2way technology solution. Axiom recalibrates differences in hardware platforms and operating systems to provide a common execution for tru2way technology applications. And with its built-in DVR, HD, SATA, and home networking drive product support, you save time and money in development and testing. By eliminating the differences in multiple hardware platforms and operating systems, Cisco's tru2way middleware platform establishes a common execution for tru2way solutions, including:

- Support for all advanced set-top capabilities for delivery of new services that increase revenue
- A simple solution to get your site to tru2way standards

- Integration with our current architecture and future applications
- Reliability based on extensive experience in middleware application development
- Rigorous testing and optimization, reducing maintenance and service issues

Why Choose Cisco tru2way Middleware?

- We have extensively tested this software within the complete Cisco video network architecture
- CableLabs is using Digital Network Control System (DNCS) System Release 4.0 software as a basis for tru2way technology industry testing
- We uphold the same level of superior service and reliability that you have come to expect from Cisco

Tru2way-Capable Set-Tops

Cisco offers a comprehensive family of next-generation tru2way set-tops ranging from sophisticated HD-DVRs that can securely distribute content throughout the home to standard-definition digital-only interactive models that support basic tier and video-on-demand (VoD) programming. Cisco's next-generation, tru2way-capable set-top portfolio features:

- **Axiom Middleware** – Will support tru2way applications, such as service navigators and games. The Digital Living Network Alliance (DLNA) software framework for multiple media operability is also available.
  - **M-Card™ Interface** – Multi-stream CableCARD™ (M-Card) module for separable security with optional tru2way support
  - **DSG** – Enables command and control signaling between the set-top and service provider network. Video-over-DOCSIS® 2.0 with downstream channel bonding is also available (optional software)

- **Network Utilization Enhancements**
  - **1 GHz Tuning** – Allows service providers to expand network bandwidth
  - **MPEG-4 (H.264) Codec** – Video compression technology at about half the data rate of MPEG-2, and higher video quality. It can be applied with Switched Digital Video (SDV) or VoD mode, or Internet video content on TV

- **Multimedia over Coax Alliance (MoCA™) Configuration Options**
  - **MoCA** creates a common standard for distributing digital video and entertainment through existing coaxial cable in the home

How tru2way Works in the Application Environment

- Tru2way technology provides the foundation for the next generation of more open cable television software platforms
- Tru2way technology abstracts system differences, making new application development and deployment easier
- Tru2way uses common Java language and the tru2way technology application program interfaces (APIs)
  - No need for proprietary APIs
  - Standard language, more tools available, more developers, less management problems
  - Tru2way technology will work on any platform with a certified tru2way technology implementation

Cisco tru2way Solution Benefits

Tru2way technology provides service providers and programmers opportunity to develop services, faster:

- Improved electronic program guides
- New interactive television applications, such as:
  - Personalized weather forecasts
  - Caller ID
  - Multiple camera angles
  - T-commerce through gaming, voting
  - One-touch access to personalized information

Learn More

With the Cisco tru2way solution, your site can:

- Launch interactive applications regardless of set-top device, television hardware, system software
- Write an interactive application just once and then port it across the network
- Generate more revenue with application options
- Encounter fewer hardware restrictions
- Establish a more robust application platform

Cisco offers a complete tru2way solution that includes middleware, DNCS, and set-tops for an end-to-end package that scales to help your site grow today and into the future

For more information, visit us at: www.cisco.com/go/tru2way