Motorola's Switched Digital Video Architecture — For More HD!

From the headend to the home, Motorola's Home & Networks Mobility business offers standards-based, end-to-end solutions that allow cable operators to deploy switched digital video services to reclaim bandwidth and deliver a wide range of high-definition (HD) content. The company offers a bandwidth efficiency solution that allows operators to create a broadcast-tar for content with wide appeal and switched "niche" to offer subscribers access to highly valued digital content channels without delivering those channels. This enables operators to deliver more of the HD content that consumers are demanding. Video-on-Demand (VOD), and availability of greater numbers of channels while offering consumers more choice in programming. When Motorolas professional services are engaged we can enable cable operators implement SDV following best practices and are engaged for the initial design to post deployment ensuring a smooth transition once launched.

Switched Digital Video Architecture

Motorola’s Switched Digital Video Architecture provides operators with the ability to switch Digital Video in a cost-effective manner.

**BigBand SDN Network Architecture**

BigBand Switched Digital Video (SDV) has been deployed, or is being deployed, by six of the top 10 cable operators in North America, passing over 16 million households. The company’s market-leading SDV solution helps operators reclaim the network spectrum needed for bandwidth-intensive services such as HDTV, long tail content, and personalized television. BigBand's end-to-end switched solution spans key headend and hub functionality, and includes acquisition, licensing, session management, and distribution. BigBand's solution is based on an open, standards-based architecture that allows cable operators to dole out video content as subscribers request it.

**Cisco's Open IP Architecture for Switched Digital Video**

Cisco is a leader in delivering the Open IP Architecture that enables cable operators to switch MPEG-4 video efficiently today and support next-generation services in the future. Cable operators have already deployed the architecture, developed through collaboration between industry leaders and Cisco. This open architecture is based on IP Multicast protocols and open interfaces to the QAM, SDV server, SDV manager, and the client. Benefits of an open platform include scalability, cost-effectiveness, and total SDV imaging. The company's SDV solution offers specific value-added features, including intelligent bandwidth management, seamless switching, and SDV revenue.

**Arris SDV Solutions**

Arris's SDV solution offers a bandwidth efficiency solution that allows operators to deploy switched digital video to reclaim bandwidth and deliver a wide range of high-definition (HD) content. The company offers a bandwidth efficiency solution that allows operators to create a broadcast-tar for content with wide appeal and switched "niche" to offer subscribers access to highly valued digital content channels without delivering those channels. This enables operators to deliver more of the HD content that consumers are demanding. Video-on-Demand (VOD), and availability of greater numbers of channels while offering consumers more choice in programming. When Motorolas professional services are engaged we can enable cable operators implement SDV following best practices and are engaged for the initial design to post deployment ensuring a smooth transition once launched.

**Harmonic’s End-to-End Video Delivery for SDV**

Harmonic's end-to-end video delivery platform for switched digital video (SDV) applications encompasses the ProStream 1000 stream processing platform for live encoding, the ProStream 2000 splice server, StreamLiner VOD servers, and the market-leading NSG universal edgeQAM. Compliant with industry standards, Harmonic's IP-based systems provide a clear demarcation between the video delivery platform and the SDV back office, enabling the cable operator to deploy best-of-breed components. The Harmonic SDV solution efficiently addresses the biggest issues faced in switched architectures — channel change time and video quality. GOP representation enables faster and more predictable channel change time, and the decoder-encodes capabilities of the ProStream 1000 lever- age Harmonic's outstanding video compression technology to deliver high quality video. The versatile Harmonic solution also makes it possible to reduce costs by leveraging the existing VOD architecture. The NSG 9000 edgeQAM can be shared between SDV and VOD sessions, and the ProStream 1000 can be used to feed the SDV network and video servers for network PVR, Start Over and Catch-Up TV applications.

**Motorola’s MPEG-4 Encoding Solutions**

Motorola’s MPEG-4 encoding solutions optimize networks to help operators increase available HFC bandwidth while continuing to capitalize on targeted advertising revenue streams. The company offers a bandwidth efficiency solution that allows operators to create a broadcast-tar for content with wide appeal and switched "niche" to offer subscribers access to highly valued digital content channels without delivering those channels. This enables operators to deliver more of the HD content that consumers are demanding. Video-on-Demand (VOD), and availability of greater numbers of channels while offering consumers more choice in programming. When Motorolas professional services are engaged we can enable cable operators implement SDV following best practices and are engaged for the initial design to post deployment ensuring a smooth transition once launched.

**Operations Monitoring and Management**

Operations Monitoring and Management (OM&M) solutions provide the next generation of headend management through enterprise-wide software that includes accounting, ad management, media management, and traffic management for headend and remote operations. The next generation of operations management is based on a distributed architecture with a cloud-based management server that is highly scalable and supports auto-scaling of headend or remote operations. This architecture is ideal for the cloud and virtualization environments prevalent today. The solution offers a "cloud native" architecture that is highly scalable, with auto-scaling and pay-as-you-go features.

**Picture This**

Harmonic’s StreamLiner and Arris Service Assurance Manager (SAM) are designed to help the cable operator optimize its digital video service delivery network. The StreamLiner product family provides an easy-to-use, scalable approach to switched digital video edge device resource management, session management, and session assurance. StreamLiner’s wide range of solutions enables operators to switch MPEG video efficiently today and support next-generation services in the future. StreamLiner’s solutions are based on a standards-based architecture that allows cable operators to dole out video content as subscribers request it.

**Flex Your SDV Advantage**

Flex Your SDV Advantage with Arris SDV Solutions. The Arris SDV solution offers a bandwidth efficiency solution that allows operators to deploy switched digital video to reclaim bandwidth and deliver a wide range of high-definition (HD) content. The company offers a bandwidth efficiency solution that allows operators to create a broadcast-tar for content with wide appeal and switched "niche" to offer subscribers access to highly valued digital content channels without delivering those channels. This enables operators to deliver more of the HD content that consumers are demanding. Video-on-Demand (VOD), and availability of greater numbers of channels while offering consumers more choice in programming. When Motorolas professional services are engaged we can enable cable operators implement SDV following best practices and are engaged for the initial design to post deployment ensuring a smooth transition once launched.