Cisco Universal Session and Resource Manager

Switched Digital Video 2.0:
The Next Generation of Applications and Solutions

Switched Digital Video (SDV) technology brings fundamental change in the way digital video is delivered over cable networks, enabling cable operators to offer a wider variety of programming while effectively managing valuable Hybrid Fiber Coaxial (HFC) network bandwidth.

With SDV, operators are delivering more high-definition (HD) programming today. SDV is the most bandwidth efficient tool for deploying incremental and long-tail HD programs.

Cisco's SDV solution employs industry-accepted standards-based architectures and interfaces to all network elements. This gives operators choice – both technically and economically.
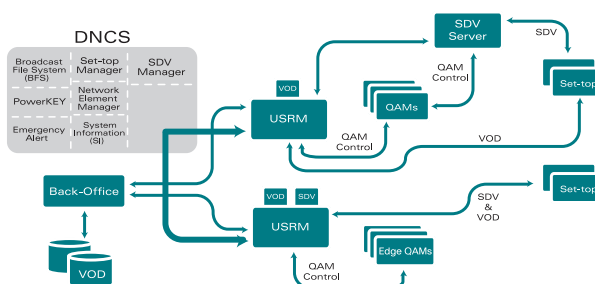
USRM – Delivering Switched Digital Video 2.0

Now, take an evolutionary step with Cisco's SDV solution, featuring the Universal Session and Resource Manager (USRM). USRM is our next-generation SDV platform, offering more applications, more power, more features, and the ability to enable more set-tops and QAMs. And, it is a software upgrade to the Cisco (formerly Scientific Atlanta) SDV Server.
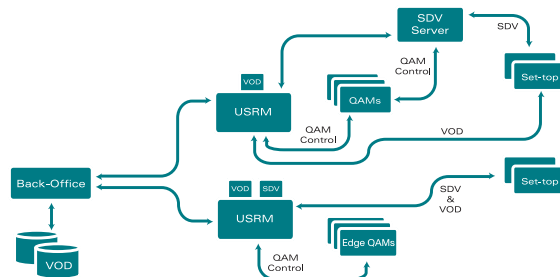
USRM technology is changing the landscape of SDV. With the power to extend and distribute the management of the video and data network control plane all the way to the edge – and the ability to be integrated into any SDV system – Cisco's USRM offers marked industry advantages.

Cisco Universal Session and Resource Manager

**USRM in a DNCS
Environment**

DNCS

Broadcast File System (BFS) · Set-top Manager · SDV Manager

PowerKEY · Network Element Manager

Emergency Alert · System Information (SI)

SDV Server · SDV

VOD · QAM Control · QAMs · Set-top

USRM · QAM Control · VOD

Back-Office

VOD

VOD · SDV · USRM · SDV & VOD · Set-top

Edge QAMs · QAM Control

**USRM in a non-DNCS
Environment**

SDV Server · SDV

QAM Control · Set-top

VOD · USRM · QAMs

QAM Control · VOD

Back-Office

VOD

VOD · SDV · USRM · SDV & VOD · Set-top

Edge QAMs · QAM Control

How does USRM Improve SDV performance?

The more powerful USRM base platform can be configured as an SDV Session Manager, an Edge Resource Manager, or a video-on-demand (VoD) Session Manager. These configurations are available individually, or in combinations to support various architectures and deployment models.

The Cisco USRM delivers a new level of SDV performance and features, such as more efficient QAM sharing, policy-based bandwidth assignment across services, and improved addressable advertising.

Cisco worked closely with cable operators to develop the USRM and take SDV to the next level – beyond just SDV session management to incorporate total edge resource management for an increased return on investment.

What makes Cisco USRM unique?

- Open standards-based architecture to help the industry move forward with successful SDV deployments and give operators economical choices
- A more powerful platform that enables more SDV set-tops and more QAMs
- Most efficient method to share QAMs across both VoD and SDV traffic

- Bi-lingual operation supports multiple client set-tops (Scientific Atlanta and Motorola, MPEG-2, MPEG-4, DOCSIS, etc.)
- Individual or combination software switches configure into SDV Session Manager, VoD Session Manager, and Edge Resource Manager
- Take full advantage of new programming service tiers, such as VoD, addressable advertising and DOCSIS data sharing
- Exceptional service velocity and scalability – via plug-in applications, USRM enables SDV, VoD, IP Multi-media Subsystems (IMS), and whatever else comes along
- Virtually unlimited channel capacity, as well as bandwidth for other applications such as data and voice, for a dynamic, future-flexible technology
- Supports latest service assurance tool sets
- Offered as an upgrade to existing SDV servers

A component of the Cisco IP Next-Generation Network (IP NGN) Service Exchange Framework (SEF) and a modular element of the Cisco open SDV platform, USRM is designed to operate at all levels of the network, and therefore, scales elegantly – from managing individual service groups to managing the largest headends.

Learn more

We welcome opportunity to explain how Cisco USRM software can add value to your SDV business. Contact us or visit www.scientificatlanta.com/sdv.

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