

Cisco Video Assurance Management Solution

Pankaj Gupta, Senior Marketing Manager, Cisco and
Asha Kalyur, Marketing Manager, Cisco discuss the challenges facing
operators in ensuring that consumers get good quality video experience

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Asha Kalyur is the Marketing Manager for IPTV/Video Solutions in Cisco System's service provider marketing group. She has an in-depth knowledge of market technologies and the service provider solutions. Previously, Ms. Kalyur was a lead software engineer for the CRS-1 platform and Voice over IP technologies in Cisco. She holds an MS and a BS in Computer Science.

Q: What is happening in the area of Video Assurance Service Delivery?

A: Most of the service providers are transitioning to becoming experience providers. They want to provide a complete assured quality of experience rather than just a piece of it. When they deliver video they want to make sure that they deliver excellent quality of experience to their customers, otherwise the consumers will switch to other service providers, and in turn SP will lose revenue and customers. Service providers also need to make sure that their operational expenses are low and have low response times for isolating and fixing problems. Service providers want to reduce the number of calls to the operations centres while providing good quality of experience to consumers, because just a few calls to an operations centre from a customer can wipe out most of their profits for a year.

Q: What are the challenges in this space?

A: Video is a very visual experience and it is a very engaging experience. It is not like your radio where you can listen to it, while driving to work.

Telecom operators, broadcasters, and satellite operators are all delivering more and more video services to end consumers today. Video is a complex, performance-sensitive service that requires a network to provide excellent quality of experience to its customers. To assure excellent service quality, service providers delivering video services need powerful End-to-End video assurance systems.

There are several fragmented solutions for video assurance management today. Each vendor is addressing only a small sub-section of the overall experience delivery. The uniqueness of the Cisco solution is that it is a complete

end-to-end service delivery assurance architecture for video services, from the video headend, or the video broadcaster, all the way to the set top boxes at home.

Consumers don't care where the problem in the network is, whether it is in the headend or at the set top box or any where in between. Only thing that the consumer cares about is consistent delivery of quality of experience.

Q: How do you differentiate Cisco from other vendors?

A: If you look at the end-to-end video service delivery, there are multiple building blocks. Most of the vendors in this market place have a compartmentalised approach or a very narrow focus. Some vendors do video assurance for a specific network segment; for example they help monitor only the headend network or only the transport network or just the home network. Most vendors do not have a complete end-to-end video assurance solution across the network from the headend to home.

Cisco offers the Cisco Video Assurance Management Solution (VAMS), a truly End-to-End comprehensive video management architecture for video services from the headend all the way to home. This standards-based solution enables real-time, monitoring, trouble shooting and management of end to end video services. Its modular and integrated architecture helps to promote flexibility and growth to accommodate the service provider's needs.

Q: What is the Cisco Video Assurance Management Solution?

A: In response to the challenges of IP video assurance, Cisco offers Video Assurance Management Solution

► (VAMS); a modular, end to end, extensible architecture, designed for assuring video services over IP networks. This standards-based solution enables real-time monitoring and troubleshooting of end to end service delivery.

Cisco VAMS provides extensive fault analysis capabilities for rapid detection, isolation, and root-cause correlation. Its Manager of Managers feature helps operators to focus on important network events, offering a combination of alarm reduction rules, filtering, customizable alarm viewing, and partitioning.

This solution is comprised of many building blocks for end to end service assurance, highlighting a few of them here:

- Cisco Multicast Manager maps multicast groups to actual broadcast channel names, which helps operations centers to troubleshoot issues affecting broadcast channels being carried by multicast groups quickly and effectively. Cisco Multicast Manager monitors and troubleshoots the video transport layer and multicast flows, collecting event and fault information from network elements and video probes distributed throughout the network.
- Cisco Info Center is the Manager of Managers from which operators view video service status, collecting traps from the many Cisco VAMS applications and components.
- Cisco Active Network Abstraction (ANA) is the abstraction and mediation layer between the IP network and OSS applications that supports aggregation and correlation of events in the IP network.
- Cisco Headend Management solution offers a comprehensive headend management system which enables broadcasters and network operators to reduce operational costs and ensure highest quality of experience for their customers.
- Third-party video probes are placed at demarcation points throughout the network. Information from the probes enables the Cisco VAMS to identify, isolate, and troubleshoot video quality problems. Upon testing and validation, the extensible Cisco VAMS can receive data from and communicate with any RFC 4455-compliant

video probe in the market.

Q: Who is using this solution today?

A: Many components of Cisco VAMS are deployed globally by a variety of Service Providers including Telco's delivering IPTV services, MSOs, Satellite Service Providers, and Broadcasters. We are very excited that service providers are using Cisco VAMS to deliver quality consumer video experience.

Q: Just how important is video assurance?

A: Cisco has a lot of expertise and experience in the video and IP space. Some of our research numbers show that 83 percent of the calls made by consumers are all about poor video quality.

Of that, 25 percent of the new installs have a call in the very first month. And as many as 80 percent of new digital customers who have a service call within a year, disconnect within that same year!

Video assurance is one of the key requirements for Service Providers. Video service providers need service assurance systems that help them detect, isolate,

troubleshoot, and resolve video quality issues quickly and efficiently. Service Providers are looking to reduce the number of truck rolls, reduce the number of service calls, increase their customer loyalty, reduce customer churn, and deliver assured video experience to their customers. This is a big challenge!

A simple example of the complexity of video assurance: a single packet loss can lead to many video frame losses because of the way video is compressed. With the exponential growth of video service needs, the importance of video assurance is becoming an ever critical component to gain customer satisfaction.

There are a lot of point solutions in the market place today which help monitor only parts of the network but Cisco's differentiator is the end-to-end Video Assurance Management Solution.

