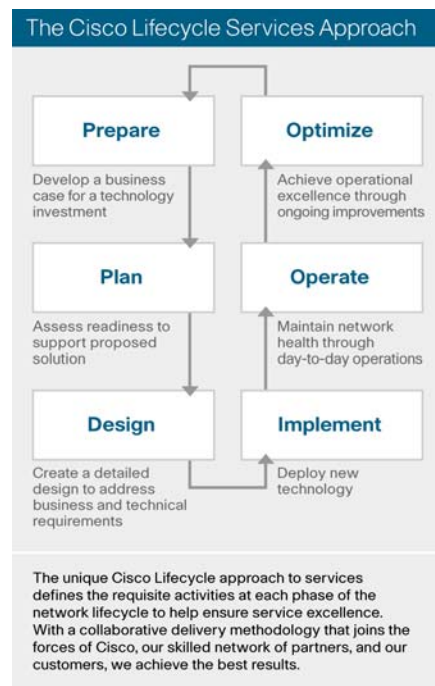


Cisco Services for Video Assurance Monitoring Solution (VAMS)



Opportunity

The media services landscape is changing rapidly. Service providers must deliver a versatile user experience that offers rich, personalized, on-demand, multimedia services. However, to achieve this vision, they must transform from being traditional providers of access-based services into all-inclusive experience providers that can offer voice, video, data, and mobility, or “quad-play,” services anywhere, any time. For service providers, becoming experience providers will create new revenue streams, increase their value to subscribers, and reduce customer turnover.

Challenges

At the core of this transformation is the ability to successfully deliver video entertainment over IP networks. Viewers demand a high-quality picture and crisp sound, especially when viewing the last seconds of a hallmark sporting event. There are many other

challenges in delivering video services. On the business front, service differentiation and time to market are critical to success. To reach those goals, service providers must achieve and maintain quality of service, build an open system so that third-party applications can be deployed easily, and achieve the necessary scale. Also, last-mile delivery constraints, which effectively limit the viability of offering some bandwidth-intensive services, should be carefully considered along with the operational challenges, including standard network operations, provisioning, security, customer care, and billing issues.

As the landscape is becoming increasingly competitive, video service providers are looking to improve customer retention and to reduce overall cost. A European Tier 1 service provider commented recently that the average cost of dealing with a single customer call could wipe out the profitability for that single customer for one year. Cable and IPTV providers are looking for methods to improve video quality, enable rapid fault isolation, and address those faults by using minimal resources and time.

Video Assurance Management Solution

Cisco Services can deliver an end-to-end Video Assurance Management Solution (VAMS) for service providers and help them provide superior quality video service to their subscribers. Cisco® VAMS provides the architecture for a flexible end-to-end assurance management platform for video. Cisco VAMS offers modular, extensible, fault management architecture, scaled for service provider broadcast TV services transported over IP networks. This standards-based solution enables real-time monitoring and management of multivendor, backbone, regional, and

aggregation networks for broadcast video transport. VAMS provides fast isolation of faults and diagnostics for video service assurance. This solution helps you reduce video service downtime, save troubleshooting time, reduce cost, and improve customer satisfaction. Additional information on the VAMS solution can be found at www.cisco.com/go/vams.

Cisco Services for VAMS

The Cisco Services VAMS Lifecycle Services portfolio addresses the comprehensive go-to-market needs of service providers. Early involvement from the Cisco Services team provides effective development and deployment of a flexible, adaptable VAMS solution. Cisco Services offers VAMS planning, design, and implementation services to meet service providers' needs. In addition, postdeployment services are available to help service providers operate and optimize their customized solutions.

Prepare and plan services:

- Video service operations assessment
- Scoping and planning workshop

Design and implement services:

- Network design
- Proof of concept
- Integration services

Operate and optimize services:

- Operations support
- Performance tuning and add-ons

Each of these services is described in the following sections.

Video Service Operations Assessment

In order to prepare for a VAMS deployment, service providers can choose to complete an operations support system and back-office review. The Cisco Services team provides a report that will identify and mitigate operational risks and processes that could affect video service reliability and manageability. The video service operations assessment includes:

- Order management mechanisms
- Workflow management mechanisms
- Inventory management strategy
- Service provisioning strategy
- Service activation mechanisms
- Fault management mechanisms
- Performance management mechanisms
- Billing strategy
- Staffing and expertise recommendations
- Existing system integration enhancement

The deliverable for this service is a comprehensive report about current video service operations, future state roadmap, and gap analysis.

Scoping and Planning Workshop

Every service provider has unique business, network, and operational support requirements. In order to obtain the highest value from a VAMS deployment, the scope for each potential VAMS deployment must be defined clearly to meet those requirements. In addition, a service provider can choose to create a program plan to roll out the VAMS solution scaling from a relatively simple probeless monitoring using Cisco Multicast Manager in a standalone mode to a nationwide deployment of probes with system integration that includes a full Cisco Multicast Manager, Cisco Active Network Abstraction (ANA), and Cisco Info Center implementation.

In order to extract the maximum value from the VAMS solution, every deployment must be configured and adjusted to the customer specific operational environment and network architecture. Items critical to a successful VAMS deployment include:

- Capturing and correlating the customer specific network devices, probes, and video service requirements (video quality, ad zones, channel lineup, and high-valued content)
- Planning and configuration within and across operational domains (headend, network operations center, and customer service)
- Setting and tuning alarm types and thresholds
- Designing and creating business rules for correlating, predicting, controlling, and correcting abnormal events

The deliverable is an overall project plan that is created to help manage the tasks, risk, problems, responsibilities, critical milestones, and resources required to implement VAMS solution into the production network.

Network Design

During the design phase, Cisco Services provide high-level design and low-level design to the specified customer requirements and data. Cisco Network Consulting Engineers (NCEs) will create variety of plans and documents to guide activities such as configuration, deployment, and commissioning of the proposed system.

The network design phase includes the following activities:

- VAMS design development
- VAMS design validation and review
- VAMS implementation plan
- VAMS test plan development
- Probes placement methodology
- Network management for probes

The deliverables are high-level design (HLD) and low-level design (LLD) documents created with templates and other resources that take advantage of Cisco's accumulated experience with the end-to-end VAMS solution and with each subsystem.

Proof of Concept

Service providers might require validation of configurations and other settings by using a proof-of-concept lab. Proof-of-concept testing provides feedback to the design process and permits experimentation and testing that might not be possible on a production system. Proof-of-concept labs can test trial architectures to validate that designs drafted on paper will work in the field.

Cisco Services have a complete end-to-end VAMS environment with a headend, IP transport, last-mile, and home networking setup that could be made available to support a POC. Cisco Services can also provide engineering resources for POC testing at a customer site, if required. The POC testing is an optional service, and the scoping for this service can be provided on request.

The deliverable for this service is a POC lab execution report.

Integration Services

Cisco Services integrate systems without disrupting the existing network or creating points of vulnerability. Cisco configures and integrates system components and installs, configures, tests, and commissions the VAMS system. After installation, Cisco validates that its operational network is working as intended, validates system operations, and works to close gaps in staff skills.

The integration services include the following:

- Site readiness review
- Cisco Multicast Manager installation and configuration
- Discovery of the multicast devices
- Configure, test, and adjust critical flows and multicast thresholds
- Configure, test, and adjust MPEG thresholds (probes only); customer performs physical installation of probes
- Implementation and configuration of the ANA VAMS plug-in
- Implementation of Cisco Info Center plug-in (Cisco Info Center only)
- Test plan execution
- Provide as-builds documents and support onsite knowledge transfer

Operations Support

Cisco Services will take the lead to support service providers in the operations by defining standard operational processes (ITIL/eTOM) and drafting VAMS trouble identification and resolution procedures. System administration support is also available through a Cisco Services statement of work or Network Optimization Service (NOS) contract.

In case of any support issues, there will be central point of contact for service providers in order to make problem resolution easier. The Cisco Services team will work closely with other Cisco internal teams that are responsible for different VAMS components.

The deliverables for this service are standard operational processes (ITIL/eTOM) and VAMS trouble identification and resolution procedure documents.

Performance Tuning and Add-Ons

Deploying VAMS is an iterative process. Additional features or layers can also be added on in later phases as the service provider's requirements evolve. Cisco Services can assist with preparing additional rules or scripts that can fine-tune VAMS performance. Based on operational experience and requirements, Cisco Services can retune alarm thresholds and also adjust critical flows.

Cisco SP Base

Designed specifically for service providers, Cisco SP Base Support complements your internal resources with the expertise you need to maintain network availability. This service can also reduce risks for systems running mission-critical applications by delivering:

- Ongoing Cisco operating system software (OSS) updates that let you efficiently evolve your network infrastructure to meet changing business needs
- Rapid hardware and Cisco OS software technical problem resolution with 24-hour global Cisco Technical Assistance Center (TAC) access to an extensive team of expert technical engineers online or by telephone
- Knowledge transfer of Cisco expertise to enhance internal technical skill levels

Software Application Support

Cisco Software Application Support Services enhance the performance of Cisco application software to protect technology investments and keep business productivity high.

Cisco Software Application Support (SAS) includes the following services:

- Minor and maintenance application releases
- Timely resolution of technical issues with 24-hour access to support
- Access to the Cisco.com knowledge base to build in-house expertise

Cisco Software Application Support plus Upgrades (SASU) includes all SAS support services plus major application upgrades.

Benefits

Cisco Services for VAMS help you identify and address crucial technical and business issues before you spend time and resources creating a Video solution. As a result, you get a cost-effective, end-to-end infrastructure and support that meet your customers' needs and have the flexibility to adapt to new technologies and market requirements. Cisco Services for VAMS help you with:

- Integration strategy across the video network topology to help ensure smooth migration
- Customized design and configuration to meet the specific business requirements
- A stepwise implementation plan to minimize the effects on existing services
- Comprehensive rules and traps to maximize network availability
- Hardware optimization for maximum performance
- Training on all facets of VAMS operation to help ensure ability to manage and maintain the VAMS system

Why Cisco Services

Cisco is the worldwide leader in networking, with extensive experience in delivering IP Next-Generation Network (NGN) solutions. Cisco Services deliver comprehensive support encompassing the service provider's network lifecycle. Through a lifecycle approach to services, Cisco has developed consistent and proven methodologies to help service providers successfully deploy and operationalize their IP NGNs.

Cisco Services bring together primary capabilities such as people, processes, tools, labs, and partners to help ensure the success of your network and service transformation. These services

are customized to your needs and are delivered through an extensive global support infrastructure, which includes our award-winning TAC, Cisco Services resources, centers of excellence, IP NGN labs, and ecosystem partners. Through this partnership with the Cisco Services organization, you have access to an extremely large collection of certified IP experts with experience in managing large systems and network integration projects, globally.

With specialized tools, knowledge, methodologies, best practices, and a collaborative delivery model that combines Cisco's expertise with our partners' and customers' capabilities, we can achieve the best results. By using Cisco Services, you mitigate any risks, accelerate your time to market for new services, lower your cost, improve your customer experience through service assurance, and maximize the value of your investment.

Availability

Cisco Services for VAMS are available globally. Terms might vary by region.

For More Information

For more information about Cisco Services for VAMS, visit www.cisco.com/go/vams or contact your local Cisco account representative.

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