# Cisco Medianet Readiness Assessment Service



## Understand your medianet capabilities with an in-depth assessment of the network infrastructure and its ability to support video applications.

### Challenge

Business video is an increasingly important part of the daily operations of successful organizations and is integral to rich media applications. Business video can save money through increased productivity and transform the way people work, learn, communicate, and share. Business video services can play a critical role in fortifying physical safety and security, facilitating effective collaboration and communication both internally and externally, and extending training and education to more people and locations. While video-based interactions share the familiarity of face-to-face interactions, the acceptance of business video is still dependent on the ease and quality of the video experience for users. Rich media applications using video must meet user needs and expectations, regardless of their location, the device they are using, or the content they are accessing.

IT groups are tasked with specifying and implementing the network requirements that will support video for rich media applications addressing a broad range of organization needs: communication, collaboration, education, and the physical protection of people and assets. Your company must carefully consider video traffic and its effects on network bandwidth. As Table 1 illustrates, each video-based application has its own sensitivity to delay, jitter, and packet loss. Without careful consideration of overall network effects and performance, end-user experience, and the need for secure mobile access to high-quality video, you might not realize the full potential of these applications.

**Table 1.** Network Requirements (by Video Type)

| Metric | Video Collaboration | Digital Signage | Cisco TelePresence | Video Surveillance |
|---|---|---|---|---|
| Latency (seconds) | 150 | 200 | 150 | 300 |
| Jitter (milliseconds) | 30 | 10 | 10 | 10 |
| Packet loss | 1% | 0.05% | 0.05% | 0.05% |

Achieving the goal of pervasive video—true any-to-any video capabilities—will be an evolutionary process for your company. The foundation for this process is developing a medianet architecture that provides the following crucial attributes for business video:

- Providing a high-quality media experience to any device on the network to help promote user acceptance and adoption

- Optimizing bandwidth use and efficiency

- Simplifying the deployment and operation of various media and applications

- Ensuring security and reliability

- Addressing integration and nondisruption of existing mission-critical business applications

- Building in the scalability to expand applications over time

- Reducing the overall total cost of ownership

The starting point for creating a medianet architecture that meets all of these requirements is the Cisco® Medianet Readiness Assessment Service. This service helps you map the journey by ensuring that your network infrastructure will provide the desired high-quality media experience to any device on the network. The Cisco Medianet Readiness Assessment Service will also help accelerate deployment and maximize the investment return of your business video investments.

## Solution

The Cisco Medianet Readiness Assessment Service is a comprehensive service offering that provides an in-depth assessment of your current network infrastructure and its ability to support high-performance rich media applications. Cisco experts complete an in-depth analysis to assess your ability to deploy a medianet architecture. The assessment service encompasses the prepare and plan phases of Cisco lifecycle services and covers all of the issues necessary to create a detailed design prior to deployment. Some of these issues include:

- **Quality of service (QoS):** The Cisco Medianet Readiness Assessment Service assesses overall QoS standards and checks the consistency of these standards against the existing network and best practices.

- **High availability:** The Cisco Medianet Readiness Assessment Service checks for high availability and redundancy in the infrastructure design to make sure that the proposed design provides the optimal reconvergence time for applications.

- **Security:** The Cisco Medianet Readiness Assessment evaluates your overall security strategy and standards and provides recommendations and guidelines for video security.

- **Bandwidth:** Some video applications have a traffic model with a single or a few video sources transmitting to many simultaneous viewers. The Cisco Medianet Readiness Assessment recommends deployment of bandwidth-optimization techniques to minimize bandwidth requirements, and IP multicast and stream splitting to provide efficient distribution across the network.

- **Visibility and monitoring:** The assessment evaluates operational tools and monitoring functionalities within the existing environment, identifying gaps and providing recommendations and guidelines to prepare the operations staff for meeting SLA guarantees for video applications.

The Cisco Medianet Readiness Assessment Service (Table 2) includes analysis of the following coverage areas:

- The Medianet Infrastructure Assessment includes hardware and software checks (campus, data center, branch, WAN), medianet infrastructure design, QoS, performance, security, and SLAs.

- The Medianet Applications Assessment includes enterprise video collaboration, Cisco TelePresence®, DMS and digital signage, IP video surveillance, and third-party applications.

**Table 2.**     Activities and Deliverables

| Activities | Description |
|---|---|
| Information collection and network profiling | Interviewing stakeholders to evaluate business requirements and the current and planned network implementation, including hardware, software, network design, network links, and applications; each of these areas is evaluated against Cisco best practices and requirements for a video-ready network. |
| Network audit, data collection | Active monitoring of the network and obtaining details of the network devices, bandwidth utilization, QoS statistics, and device performance. |
| Bandwidth and device utilization, QoS statistics | Network traffic monitoring and SLA measurement tools are used to collect bandwidth, device utilization, and packet loss/jitter/latency statistics. These statistics also measure existing traffic in order to assess performance during periods of high network activity interleaved with mission-critical traffic. Peak hour utilization of bandwidth and device resources is also calculated and tabulated. |
| Predeployment SLA assessment | Traffic simulation tools inject sample video flows into the network and collect SLA statistics. The sample video flows simulate various video applications such as Cisco TelePresence, high-definition and standard-definition video collaboration, and live streaming video. Based on this assessment, a gap analysis of the current network and a media-ready network SLA is developed. |
| Reporting and recommendation | The data obtained is analyzed and tabulated. Assessment summaries, identified gaps, and detailed remediation recommendations are consolidated and documented in a report that includes the following focus areas: overall readiness, hardware and software, quality of service, performance, infrastructure design, and network service levels. |

## Readiness Beyond the Wired Network

The Cisco Mobility Readiness Assessment Service can be purchased as a complementary service to the Medianet Readiness Assessment Service. The Mobility Readiness Assessment helps you understand the readiness of your current wireless LAN infrastructure to quickly and cost-effectively design and deploy a mobile solution that successfully extends rich voice, video, and data communications

across diverse mobile applications, devices, and networks. The assessment recommends modifications to support the proposed video solution, such as wireless LAN architecture modifications, RF design improvements, and wireless device and mobility service configuration updates. For more information about the Mobility Readiness Assessment Service, visit www.cisco.com/en/US/services/ps2961/ps6899/ps8306/Mobility_Readiness_Assessment_SO_Final-0401a.pdf.

## Benefits

The Cisco Medianet Readiness Assessment helps you:

- Address all of the hurdles presented by rich media applications, including QoS, SLAs, bandwidth, security, and high availability

- Assess network readiness and identify gaps with proven methodologies to help reduce deployment costs and delays

- Manage risk with expert guidance early in the development of your medianet architecture

- Achieve higher end-user satisfaction to help speed the adoption and return on investment of your innovative business video solutions

## Why Cisco Services

Realize the full business value of your technology investments with smart, personalized services from Cisco and our partners. Backed by deep networking expertise and a broad ecosystem of partners, Cisco Services enable you to successfully plan, build, and run your network as a powerful business platform. Whether you are looking to quickly seize new opportunities to meet rising customer expectations, improve operational efficiency to lower costs, mitigate risk, or accelerate growth, we have a service that can help you.

## Availability and Ordering Information

The Cisco Medianet Readiness Assessment Service is available globally. Details might vary by region.

## For More Information

For more information about the Cisco Medianet Readiness Assessment Service or other Cisco Services, visit www.cisco.com/go/mra or contact your Cisco service account manager.

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