

# Cisco TelePresence Readiness Assessment Manager 1.0

Cisco TelePresence is a new technology offering that delivers a unique "in person" experience over the network using advanced visual, audio, and interactive technologies. TelePresence delivers real-time, face-to-face interactions between people and places in their work and personal lives. The first product, the TelePresence Meeting Solution, creates a "room within a room" environment that uses life-size, high-definition resolution images with spatial and discrete audio to create a live, face-to-face meeting around a single virtual table.

The growing demand for the Cisco TelePresence solution indicates increasing user expectations for higher-quality communication. This makes the planning and design phase of a TelePresence network deployment a critical differentiator in TelePresence service rollouts and generates a need for a readiness assessment product.

The Cisco TelePresence Readiness Assessment Manager product plays a key role in predeployment network analysis or prior to an expansion of TelePresence service.

# **Product Overview**

Cisco TelePresence Readiness Assessment Manager 1.0 is a software product that assesses network paths prior to the deployment of TelePresence systems and prior to site extensions or TelePresence model upgrades.

Using Cisco TelePresence Readiness Assessment Manager, device and network issues can be proactively determined, assuring the expected rich quality and experience of TelePresence after its deployment. The benefits of TelePresence Readiness Assessment Manager include accelerated TelePresence deployment and reduction in effort and time through automation of the assessment process and consistent assessment criteria as well as reporting.

Cisco TelePresence Readiness Assessment Manager is a software product that is composed of central management software that runs on the Windows XP/Windows 2003 server or laptop platform and media traffic analysis agents that run on the Windows XP server or laptop platform.

To assess the network, Cisco TelePresence Readiness Assessment Manager offers a comprehensive set of features, including autodiscovery of network elements on paths between proposed TelePresence units, comprehensive best practice compliance analysis of network infrastructure, and simulation and analysis of the TelePresence video and audio traffic between the strategically deployable media traffic analysis software agents. The agents can be deployed at the sites where the proposed Cisco TelePresence units will be installed, and the performance utilization of the network resources determines the baseline. As a deliverable, Cisco TelePresence Readiness Assessment Manager generates two comprehensive assessment reports, the Executive (summary) report and the Detail (complete) report. The reports provide a comprehensive analysis of the network paths that are assessed. The analysis in the reports includes per path best practice analysis results for the devices, per path media quality characteristics, and the resource

utilization of the devices and the interfaces on the path. The reports provide this information using intuitive charts, graphs, and tables.

Cisco TelePresence Readiness Assessment Manager is positioned in the service delivery market for partners such as advanced services, customer advocacy, authorized technology partners, and certified system integrators. It is also positioned for self-assessment of the networks by TelePresence network administrators/consultants and network engineers.

Cisco TelePresence Readiness Assessment Manager is used during the planning and design phase of the TelePresence network. It can also be used to periodically assess and reassess the networks prior to expansion of TelePresence service or model upgrades.

#### Applications

Cisco TelePresence Readiness Assessment Manager addresses the following readiness assessment scenarios:

- · Predeployment network assessment
- · Reassessment while adding new or additional sites or upgrading a TelePresence model
- · Verification after configuration update

The deployment of Cisco TelePresence Readiness Assessment Manager includes installing the central software on the laptop with the recommended configuration. This central system must be connected to the network for network infrastructure assessment. To assess the network against the TelePresence traffic, at least two media traffic analysis agents need to be deployed. The Cisco TelePresence Readiness Assessment Manager media traffic analysis agents can be deployed onto a laptop and the laptop must be connected to the network where the proposed TelePresence room will be connected.





Figure 1 shows the deployment scenario for point-to-point network path assessment, including the CTS (Cisco TelePresence System) 3000 and related components. In a multipoint network path assessment scenario, the media traffic analysis agents (MTAAs) can be deployed on the multiple laptops at the sites and locations where the proposed TelePresence rooms will be deployed.

To effectively assess the network, the Cisco TelePresence Readiness Assessment Manager central system must have access to the devices on the network paths connecting the proposed TelePresence rooms and also to the MTAAs.

### **Features and Benefits**

Table 1 lists the features and benefits of Cisco TelePresence Readiness Assessment Manager 1.0.

Feature	Description/Benefits
Automated Network Path Discovery	1
Path discovery	Discovers the network elements on the path between proposed TelePresence sites or rooms
Automated Best Practice Compliance A	nalysis
Network infrastructure analysis using more than 25 best practice compliance rules	<ul> <li>Network design includes Layer 2, Layer 3, quality of service (QoS), Hot Standby Router Protocol (HSRP), IP addressing scheme, and so on</li> </ul>
Switch and line card recommendations	<ul> <li>Checks for the recommended line cards in the network path for the TelePresence deployment</li> </ul>
End-of-service (EOS)/end of life (EOL) analysis	Checks for EOS/EOL devices in the network path
TelePresence Traffic Simulation and An	alysis
Simulate and analyze the actual TelePresence traffic (considering more than 24 profiles).	<ul> <li>The simulation of actual TelePresence traffic analyzes network behavior and traffic characteristics accurately and helps ensure TelePresence quality and experience after the actual TelePresence deployment.</li> </ul>
	<ul> <li>Supports scheduled simultaneous synthetic tests with multiple agents</li> </ul>
	The software-based MTAAs can be downloadable from a Cisco TelePresence Readiness Assessment Manager central management server
	<ul> <li>MTAAs could be installed on the laptop, and laptops can be connected to the access switches at strategic locations</li> </ul>
	Determines whether the quality of the simulated traffic lies within the tolerance levels recommended for TelePresence traffic
MTAAs deployable at the strategic locations in the network	<ul> <li>Supports the AAC (Advanced Audio Codec) and H.264 codecs used in TelePresence</li> </ul>
	<ul> <li>Uses Network Time Protocol (NTP) for time synchronization</li> </ul>
	<ul> <li>Supports multiple profiles (more than 24) and offers a wide choice of traffic simulation (for example, 1080p/720p resolution, best/better/good quality, high/low motion, and CTS 3000/CTS 1000)</li> </ul>
	<ul> <li>Calculates quality metrics such as packet loss, jitter, and latency to determine the readiness of the path to carry TelePresence traffic with the expected quality</li> </ul>
Automated Resource Utilization Baselin	ing
Per path CPU, memory, and interface bandwidth utilization	Resource utilization for the devices on the network path helps determine the capacity bottlenecks in terms of resource allocations
Comprehensive Word Reports	•
Executive report	Contains the per network path summary of:
	<ul> <li>Compliance analysis: Compliant and noncompliant devices and severity of noncompliance</li> </ul>
	<ul> <li>TelePresence traffic analysis: Traffic quality metrics, recommended quality threshold violations, traffic details, and so on</li> </ul>
	<ul> <li>Performance utilization: Devices that experience resource utilization beyond the thresholds</li> </ul>
	Reports are Microsoft Word documents that assessors can modify or personalize by adding comments and recommendations.

Detail (complete) report	Contains the executive summary and detailed information on:	
	<ul> <li>Compliance analysis: List of compliant and noncompliant devices, issues, and recommendations</li> <li>TelePresence traffic analysis: Traffic quality metrics, recommended quality threshold violations, traffic details, daily and hourly charts showing graphs of quality metrics over time</li> </ul>	
		<ul> <li>Performance utilization: Devices that experience resource utilization beyond the thresholds, daily and hourly charts showing graphs of utilization metrics over time</li> </ul>
	<ul> <li>Detailed inventory report</li> <li>Questionnaire, user choices, and recommendations</li> </ul>	
		Reports are Microsoft Word documents that assessors can modify or personalize by adding comments and recommendations.
	Notifications	
	E-mail and pager notifications	Sends e-mail or pager notifications to the configured subscribers
	<ul> <li>Sends notifications upon completion of the major tasks in the workflow (for example, discovery, inventory collection, compliance, scheduled performance study, and scheduled traffic studies)</li> </ul>	
	<ul> <li>Helps assessors to focus on other tasks until Cisco TelePresence Readiness Assessment Manager completes the assigned tasks</li> </ul>	

# **Product Architecture**

Figure 2 shows the Cisco TelePresence Readiness Assessment Manager 1.0 product architecture.





# **Product Specifications**

Table 2 shows the product specifications for Cisco TelePresence Readiness Assessment Manager 1.0.

#### Table 2. Product Specifications

Product Area	Specifications
Product compatibility	Cisco routers, gateways, and switches
Software compatibility	Windows XP/2003 The user interface can be accessed using Microsoft Internet Explorer 6.0 on Windows 2003 and Windows XP platforms.
Protocols	Uses Simple Network Management Protocol (SNMP), Telnet/Secure Shell (SSH) Protocol to collect the information
Features and functions	Automatic path discovery, automated best practice analysis to comply with TelePresence recommendations, automated performance baselining, TelePresence traffic simulation and analysis, comprehensive reports

# System Requirements

Tables 3 and 4 list the system requirements for Cisco TelePresence Readiness Assessment Manager 1.0 solution deployment.

 Table 3.
 Cisco TelePresence Readiness Assessment Manager 1.0 Central Management System Requirements

Item	Requirements
Disk space	80 GB
Processor	2 GHz CPU
Hardware	Laptop or server
Memory	2 GB
Software	Windows 2003 Standard or Windows XP Professional with Service Pack 2

#### Table 4. Cisco TelePresence Readiness Assessment Manager 1.0 Media Traffic Analysis Agent System Requirements

Item	Requirements
Disk space	40 GB
Processor	2 GHz CPU
Hardware	Laptop
Memory	1 GB
Software	Windows XP Professional with Service Pack 2

#### **Ordering Information**

Cisco TelePresence Readiness Assessment Manager 1.0 can be licensed at different deployment scales and terms. Licensing is controlled by means of a license file. Network administrators can upgrade the license based on needs for additional TelePresence sites or to extend the term. Upgrading the license is simple. Users simply log in to the Cisco Website, procure a new license, and deploy it on the server.

The 1-year licenses are available for assessing networks with 5, 10 and 20 TelePresence conference rooms. The 3-month licenses are also available for assessing networks with 5 TelePresence conference rooms. Please refer to the Cisco TelePresence Readiness Assessment Manager 1.0 product bulletin for detailed ordering information.

To place an order, visit the Cisco Ordering Homepage.

#### Service and Support

Using the Cisco Lifecycle Services approach, Cisco and its partners provide a broad portfolio of end-to-end services and support that can help increase your network's business value and return on investment. This approach defines the minimum set of activities needed, by technology and by network complexity, to help you successfully deploy and operate Cisco technologies and optimize their performance throughout the lifecycle of your network.

Cisco offers a wide range of services programs to accelerate customer success. These innovative services programs are delivered through a unique combination of people, processes, tools, and partners, resulting in high levels of customer satisfaction. Cisco services help you to protect your network investment, optimize network operations, and prepare the network for new applications to extend network intelligence and the power of your business. For more information about Cisco services, see <u>Cisco Technical Support Services</u> or <u>Cisco Advanced Services</u>.

#### For More Information

For more information about Cisco TelePresence Readiness Assessment Manager 1.0, please visit <u>http://www.cisco.com/go/ctram</u>, contact your local account representative, or send an e-mail to the Cisco product marketing group at <u>ask-ipc-management@cisco.com</u>.



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