Cisco on Cisco
Streaming Video Seminar

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# Streaming Video Seminar Agenda

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Cisco Communication Challenge

Cisco comprises:

- 50,000 employees, 400 offices, 80 countries, 26 different time zones, more than 50 languages
- 26,000 contract employees
- 35,000 channel partners
- Four main lines of business: Service Provider, Enterprise, Commercial, Consumer
- 34 engineering business units with 14 product divisions
- 14,000 engineers in 46 countries
- Nine manufacturing divisions (12 annual initiatives) comprising 34 teams
- Nine technology divisions
Cisco Communication Challenge (cont.)

- Cisco product line
  25,000 SKU numbers
  1 to 2 new products introduced per week

- Cisco programs and initiatives
  20 annual marketing campaigns
  8 to 10 strategic initiatives and dozens of projects
  Approximately 20 sales programs
  Five HR initiatives per year
Rich Media Communication Solutions

- **Live Video/TV**
  - Real-time video delivered to user desktops
  - Interactivity via the question function

- **Video on Demand**
  - Video synced with slides and transcripts
  - Available anytime, anywhere

- **Video Conferencing**
  - Real-time video to facilitate live meetings and information exchange

- **Web Conferencing**
  - Real-time information exchange and near real-time file sharing

- **Audio Conferencing**
  - Audio over the network to enable audio conferencing, IP telephony, and audio on demand
Cisco TelePresence 1000
1:1 and Executive Applications

- Four seats at the virtual table
- Two seats per side
- Works within smaller, existing environments
- Streamlined design
Cisco TelePresence 3000
Large Team Meetings

- Twelve seats at the virtual table
- Six seats per side
- Purpose-built room
Cisco TV and Video on Demand (VoD)

Strategic/Executive to Tactical/Process

- 40–60 new live events per month
- 300–400 new VoDs per month
- Four studios (San Jose; London; Raleigh, North Carolina; and Sydney)
- Dozens of self-service VoD stations worldwide; more than 10,000 laptop cameras deployed
- CEO John Chambers has personal mini-studio in San Jose headquarters building
Live Broadcasts

- 40 to 60 live broadcasts per month; average 250 viewers per broadcast
- Used for executive communications, product introductions, training, competitive updates, and more
- Hosted in a Cisco studio or other venue
- Can feature multiple presenters and presentations
- Can solicit live Q&As from event viewers
- Delivered internally and externally
- Studios used for live broadcasts and VoD production
Live Broadcasts

- High impact
  Real-time nature underscores the importance or timeliness of a message and drives audience attendance.

- Global reach for anywhere, anytime viewing
  Every live broadcast also becomes a VoD so viewers can watch anytime, anywhere.

- Interactivity
  Viewers can ask questions using a web interface. All presenters receive a list of viewer questions after the broadcast.

- Appropriate for large audiences
  Ideal for audiences with more than 50 attendees.

- Metrics
  Viewers can be surveyed and tracked after the broadcast.
Video on Demand

- 300 to 400 modules created per month
- Created from live events or independently
- Can include multiple presenters and presentations
- Ideal for viewers who cannot attend a live event
- Delivered internally and externally
Return on Investment

Evolution, Not Revolution

Corporate Communications
Learning and Alignment
Business Performance

Utilization

- 1997: $47 Million
- 2000: $149 Million
- 2003: Hundreds of Millions
- Today: Hundreds of Millions

Wave 3—BCS:
Enabler of mission-critical process transformation
- Access to virtual experts
- New product rollouts
- Increased sales productivity
- Regulatory compliance
- Research and development
- Supply-chain management
- Customer technical support

Business Impact

- Web communication
- Video on demand
- Videoconferencing
- Live video events
Facilities
Studio Locations Worldwide

Cisco Studios Worldwide

San Jose, RTP, and Singapore

Bedfont Lakes, UK, Tokyo, Sydney

RMC Studio Facilities, Cisco TV, and VoD

CiscoTV and VoD capabilities (client funded)
Large Studio
Small Studio
Self-Provisioned VoD Authoring
Remote Broadcasts – IP Backhaul
Organization
Overall Organization

Rich Media Communications
- Client Services
- Production Services
- Studio Services

Corporate IT Services
- Rich Media Services
Client Services

- Promotes use of rich media applications, including live event and VoD production
- Identifies business processes that can be improved by using rich media applications
- Monitors and evaluates rich media usage at Cisco
Production Services

- Handles production requests for live events and VoDs
- Evaluates production requirements and coordinates resources
- Works with clients and studio services to plan and produce events
- Sets policies and procedures for live event and VoD production and deployment
- Manages external video production and VoD processing vendors
Studio Services

- Plans, provisions, and maintains all studio systems, including general infrastructure, A/V gear, control systems, encoders, and publishing systems
- Works with IT Rich Media Services team to plan and implement new technologies and standards
- Provides direct systems support for live event and VoD productions
Rich Media Services

- Plans, provisions, and supports all underlying network and systems infrastructure
- Works with other IT organizations to ensure rich media applications are integral to the overall IT architecture
- Provides Tier 2 and Tier 3 client support for rich media applications
Technologies
Cisco Digital Media System

Media Creation

Digital Media Encoder 1000

Digital Media Encoder 2000

Media Management

Digital Media Manager

Video Portal Enabler

Digital Signage Enabler

Media Delivery

Cisco Video Portal

Digital Media Player

One integrated platform for desktop video and digital signage
### Cisco Digital Media System—Product Portfolio Overview

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<th>Media Management</th>
<th>Media Distribution</th>
<th>Media Access</th>
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<td>Digital Media Encoders</td>
<td>Content Author</td>
<td>Multicast-enabled WAN: Satellite</td>
<td>Cisco Digital Media Players</td>
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<td>In-house Creation</td>
<td>Cisco Digital Media Manager</td>
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<td>On-premise, Remote location</td>
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<td>Third-Party Content Provider or Creative Agency</td>
<td>Network Admin</td>
<td>Cisco VSAT NM and ISR</td>
<td>Cisco Video Portal</td>
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<td>Outsourced Content</td>
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<td>Corporate Offices, At-home Desktop Users</td>
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- **Media Creation**: Digital Media Encoders, In-house Creation, Third-Party Content Provider or Creative Agency, Outsourced Content
- **Media Management**: Content Author, Cisco Digital Media Manager, Network Admin
- **Media Distribution**: Multicast-enabled WAN: Satellite, Cisco VSAT NM and ISR
- **Media Access**: Cisco Digital Media Players, On-premise, Remote location, Cisco Video Portal, Corporate Offices, At-home Desktop Users
Cisco Digital Media System—Integration into the Network

Branch Office

Portal and Content Replication

Network Administrator

Central Distribution Manager (CDM)

Data Center

Content Routers

End Users

Portal and Content Replication

Root WAE WAE Series

Content Author

Content Routers

WAE Series

Video Portal Appliance

Digital Media Encoder

SiSi

WAN
Remote access VPN links cannot support multicast; the VPN concentrator splits the multicast traffic into live unicast streams sent along individual secure VPN tunnels across the Internet.
VoD On-Demand Access

- **Tier 1**: San Jose and RTP
  - Management, routing, and acquisition
- **Tier 2**: 13 major sites
  - Content distribution and serving
- **Tier 3**: All other sites
  - Edge caching and limited prepositioning