Options for Seamless Integration of H.323 into Existing Video Networks

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Discussion Topics

Understanding the “new audience “

The new management requirements

The end users adoption of video system

Bit and bytes – technology integration

Summary

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Keys to seamless H.323 integration

Areas of focus

- Management
  - Administration of video network and applications
  - Configuration of video components
  - Maintenance of the network
- Use of video network
  - Users
  - Application
- The technology requirements

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The “new audience”

IT Managers

- H.323 deployment requires acceptance from IT professionals as well as A/V groups
- How will this solution integrate into my network?
- How does this solution affect other applications I have running?
- How do I manage video?

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Video management requirements

Ease of Deployment

- Installation
  - Need to have the ability to mass deploy H.323 systems (Desktop, Room, etc)
- Configuration
  - Configurations need to be easy, reproducible and remotely managed
- Availability
  - System needs to be available for use quick after purchase

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Video management requirements

Management

- Fault detection and recovery
  - Provide details on “events” on the video network
    - – Errors reported from hardware and software
  - SNMP Traps
    - – Error Levels (Information, Minor, Major, Critical)
  - Real time system analysis
    - – Which active conferences are affected
    - – Which pending conferences are affected

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Video management requirements

Management

- Quick diagnostics tools
  - Common tools across hardware vendors
  - “Smart” tools to help prevent future errors
    - What are the current faults and what
  - Manual over-ride of conference configurations
  - Detailed reports

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Video management requirements

Management

- Streamlined maintenance and automation
  - Automatically “bring up” video conferences
  - Call details about an active conference
  - Dynamic change parameters of a conference
  - Error Recovery
  - Distributed workload

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Video management requirements

Management

- Redundancy in networks and applications
  - Hardware redundancy
  - Software redundancy
  - Alternative paths

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Video management requirements

Management

- Network routing
  - Hardware layout and configurations
    - – Changing configurations on the fly
  - Bandwidth restrictions
  - Network element routing weights

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Can not only satisfy the IT managers…

What the “end user” thinks

- The system is to hard to use. Why can’t video be easier?
- Every room is different – no consistency.
- It is not reliable – sometimes it works and sometimes it doesn’t.
- Why do I need to learn something new?

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The final step…

Home Users

- Broadband availability
  - Continued debate if broadband will work
- Internet usage
  - Part of everyday life
- Work from home capabilities (VPN)
  - The ability to stay home and communicate with co-workers and clients

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End user requirements

Ease of use

- The user “experience” is crucial for seamless integration
- Needs to be simple “anyone can do it”
- Technology should be transparent to the end user
- Plug and Play

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End user requirements

Integration into applications

- Make it a part of everyday life
- Keep it simple
- Incorporate video into common applications
  - Microsoft Outlook
  - Lotus Notes
  - Other application

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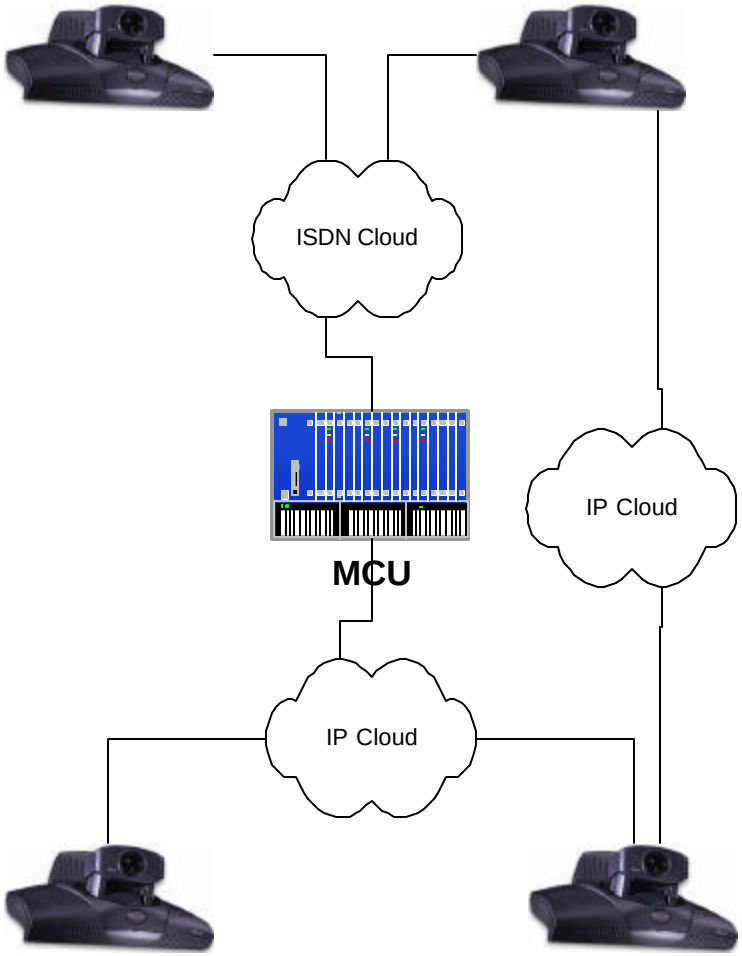
Bits and bytes - H.323 to H.320 gateways



Smart Routing

Multipoint video calls include a MCU as a gateway

In Point to points the codec may dial direct based on policy's of the network

Least cost routing and more IP bandwidth then ISDN

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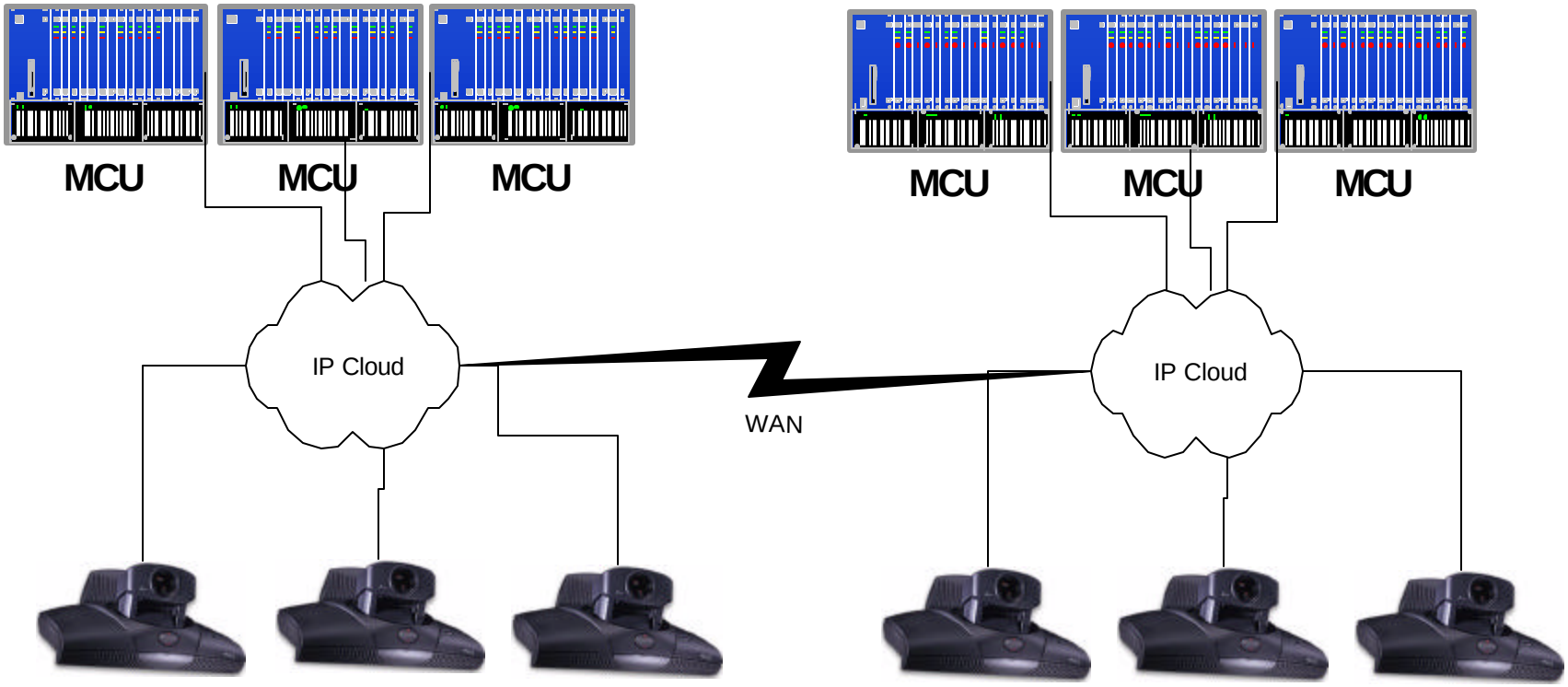
Virtual MCU



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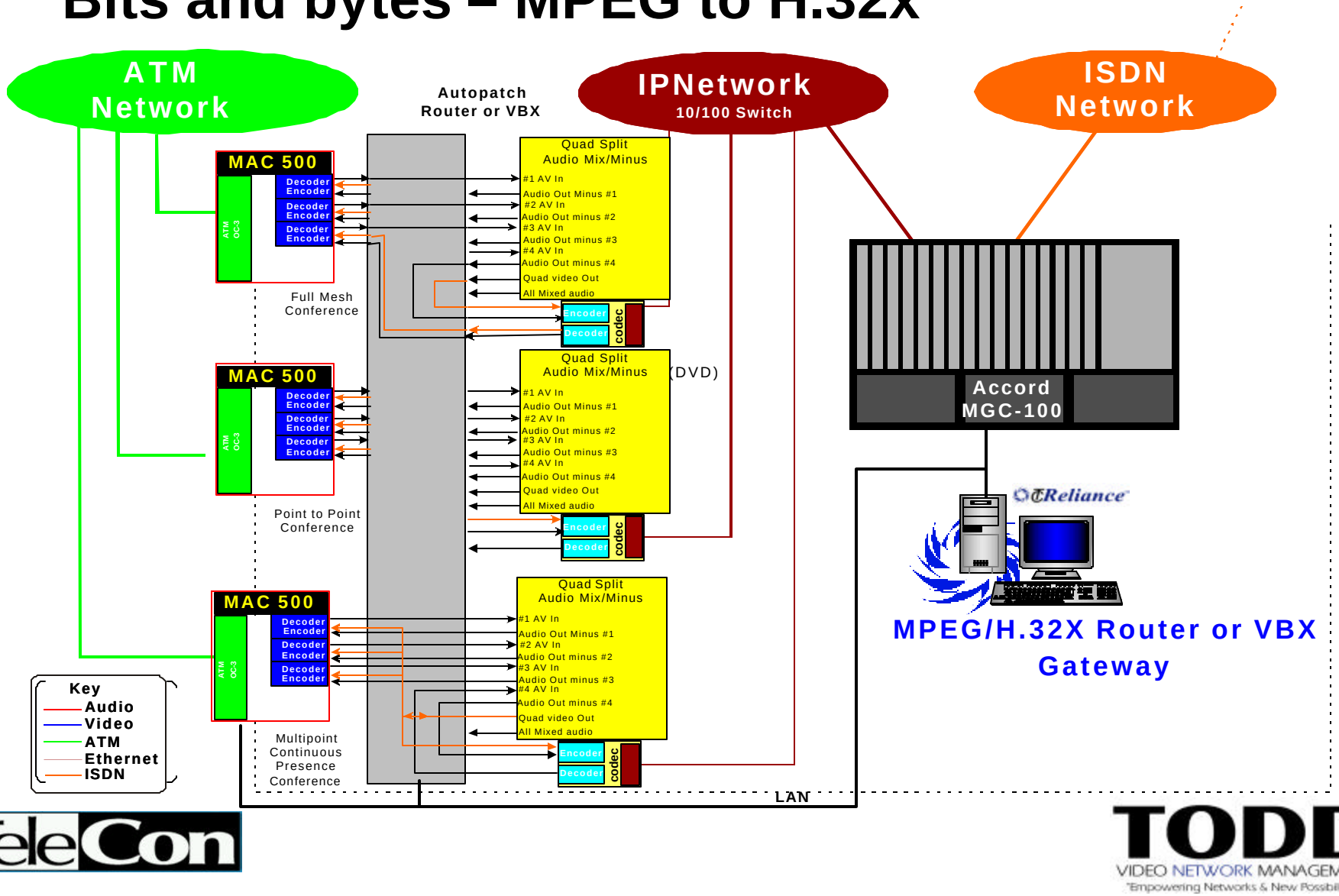
Bits and bytes – MPEG to H.32x



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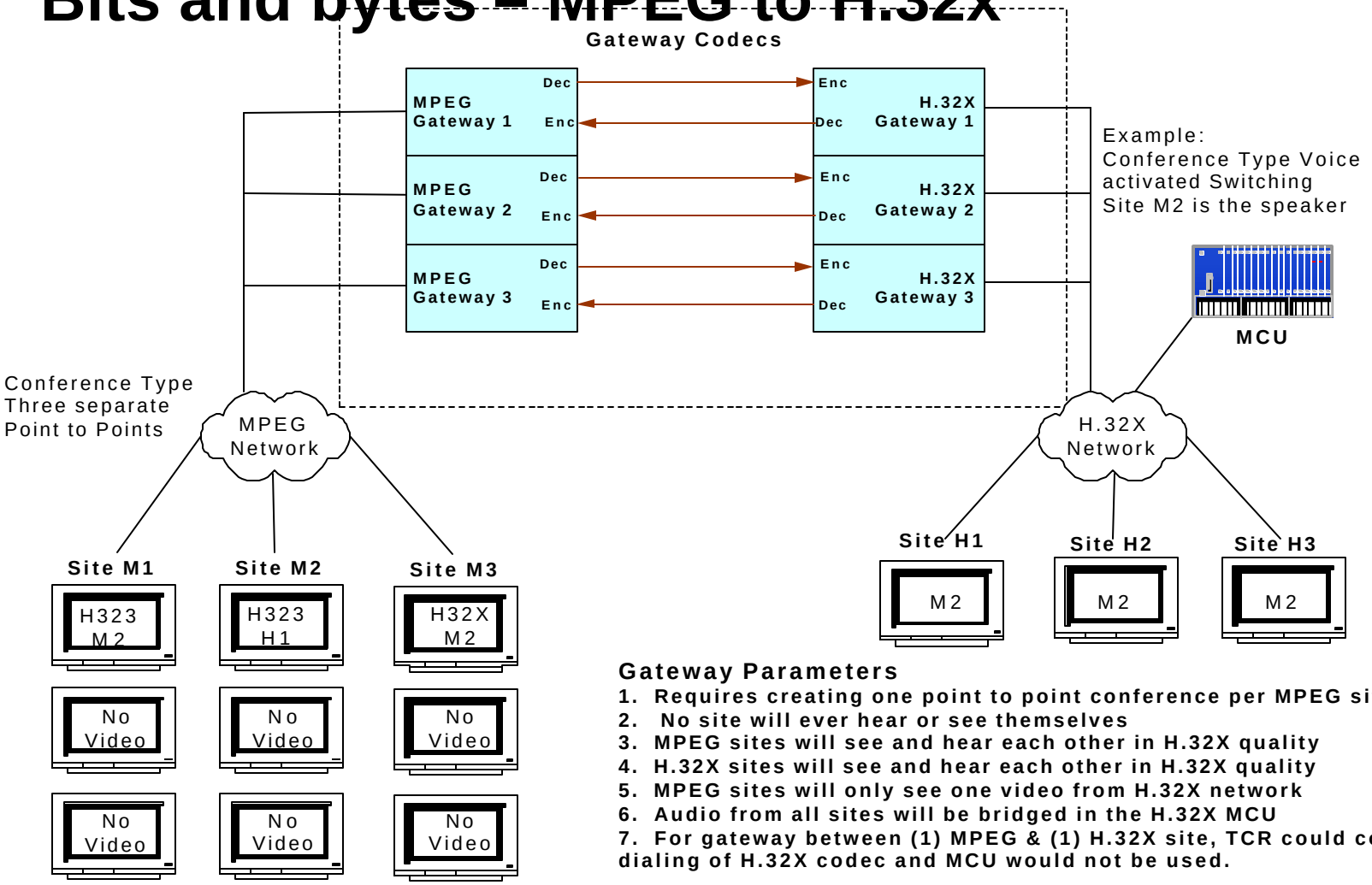
Bits and bytes – MPEG to H.32x



Gateway Parameters

1. Requires creating one point to point conference per MPEG site
2. No site will ever hear or see themselves
3. MPEG sites will see and hear each other in H.32X quality
4. H.32X sites will see and hear each other in H.32X quality
5. MPEG sites will only see one video from H.32X network
6. Audio from all sites will be bridged in the H.32X MCU
7. For gateway between (1) MPEG & (1) H.32X site, TCR could control dialing of H.32X codec and MCU would not be used.

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Summary

- Identify the users of a video network
- Identify how the network will be used and the application requirements
- Integrate the applications into the video network for IT managers as well as end users
- Choose the technology that meets your needs

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