

CISCOEXPO 2008

BANCA DELLE MARCHE

**Il progetto della nuova rete trasmissiva
e l'adozione delle tecnologie video**

Direzione Centrale Tecnologia e Processi

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Giovanni Piersantelli



**Cisco Expo
2008**





La storia - Banca Marche nasce nel 1995 dalla fusione di tre casse di risparmio, Jesi, Pesaro e Macerata che si uniscono per creare una grande banca del territorio.

Struttura Societaria

- Banca Marche
- Carilo – Cassa di Risparmio di Loreto S.p.A.
- Focus Gestioni S.G.R. S.p.A.
- Medioleasing S.p.A.
- Banca delle Marche Gestione Internazionale Lux S.A.

Organico

Oggi Banca Marche conta **300** sportelli e oltre **3.000 dipendenti** che lavorano al servizio di circa **350.000 clienti**.

Banca Marche sviluppa la propria attività prevalentemente nelle Marche, territorio di tradizionale insediamento, ma allarga il proprio raggio di azione anche all'Italia centrale (Emilia Romagna, Abruzzo, Molise, Umbria, Lazio) dove intende fortemente ampliare la propria azione.





Tra i principali obiettivi che Banca Marche si pone, c'è quello di mantenere il proprio ruolo di banca di riferimento dello sviluppo regionale e di affermare i propri **"valori distintivi"** nelle regioni di più recente insediamento anche attraverso:

- ✓ l'adozione di un nuovo modello di filiale finalizzato a migliorare ulteriormente la relazione con la periferia e l'approccio commerciale con la clientela
- ✓ l'introduzione di tecnologie innovative in grado di supportare i nuovi modelli distributivi e le strategie di marketing, pubblicità e formazione digitale



Elementi digitali

- ✓ Video per la clientela (Video posizionato sopra le casse, survey point, info point)
- ✓ Video per il personale (staff channel)
- ✓ Navigatore (per gestione casse e consulenza)
- ✓ Video dimostrativo (navigazione interna della filiale)





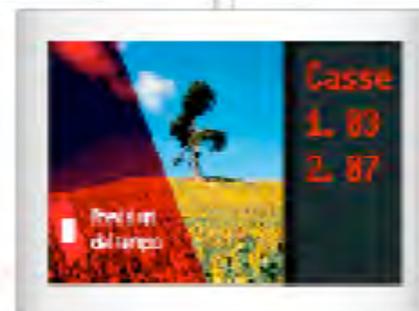
Obiettivi del nuovo modello di filiale:

- ✓ Consentire alla banca di integrare all'interno delle Filiali palinsesti di comunicazione digitale
- ✓ Migliorare le capacità di interazione con la clientela attraverso la gestione multimediale, interattiva e personalizzata di contenuti commerciali (informazione, pubblicità, promozione digitale di nuovi prodotti)
- ✓ Consentire la gestione di palinsesti personalizzati per segmento di clientela, location e fasce orarie
- ✓ Intrattenere e informare la clientela durante le attese in coda
- ✓ Supportare le attività di Internal Training e la comunicazione interna
- ✓ Staff Channel



Soluzioni:

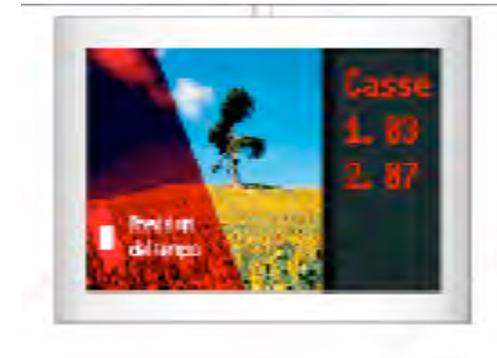
- ✓ **CISCO DIGITAL MEDIA PLAYER**: gestione, pubblicazione e riproduzione di contenuti digitali su schermi collegati in rete
- ✓ **CISCO WAAS** (Wide Area Application Services): ottimizzazione delle prestazioni e della larghezza di banda per tutte le applicazioni basate su protocollo TCP





CISCO Digital Media Player

- ✓ **Soluzione integrata** per la gestione, pubblicazione e riproduzione contenuti digitali su schermi collegati in rete
- ✓ **Semplicità di gestione:** permette di cambiare e configurare velocemente i contenuti da trasmettere
- ✓ **Personalizzazione:** consente la gestione di palinsesti personalizzati per clientela, location, orario
- ✓ **Flessibilità:** consente l'utilizzo di video a tutto schermo e di suddivisioni grafiche
- ✓ **Alta affidabilità**
- ✓ **Disponibilità di storage locale** per un'elevata disponibilità e un failover automatico



La rete di telecomunicazione assume un'importanza strategica diventando lo scenario tecnologico che consente l'avvento della multimedialità e della comunicazione digitale distribuita ai clienti, alle filiali e alle sedi remote.

Con la nuova infrastruttura è infatti possibile diffondere informazioni multimediali in ogni sede della banca, in modo interattivo e delocalizzato, per una fruizione sempre più personalizzata dell'informazione e della comunicazione.

- ✓ Realizzare vie di trasmissione più veloci
- ✓ Migliorare le prestazioni delle applicazioni lungo la rete WAN (**CISCO WAAS**)
- ✓ Predisporre un'infrastruttura in grado di supportare il traffico VOIP
- ✓ Supportare nuove modalità di informazione e di comunicazione con la clientela e con le filiali all'interno di un nuovo modello distributivo : Digital Communication, Staff Channel, Digital Signage, Merchandising, WIFI (**CISCO DIGITAL MEDIA PLAYER**)





Nell'ambito del progetto "Nuova Rete di Telecomunicazione" particolare rilevanza ha avuto per la banca il filone dedicato all'integrazione delle innovative modalità di **comunicazione digitale** all'interno del **nuovo modello di filiale**. La convergenza dei due progetti, "Nuova Rete di Telecomunicazione" e "Branding and Layout" delle filiali, ha consentito di ottenere notevoli benefici per il nuovo modello distributivo, finalizzato ad aumentare la percezione dei valori della banca presso la rete e la clientela anche attraverso azioni di branding e di comunicazione digitale.





Struttura rete filiale





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2008



Altre soluzioni

Sicuramente la videosorveglianza su IP



naturalmente con 



Agenda

Il contesto di riferimento e le esigenze di comunicazione

Video in azienda: perchè?

Video in azienda: come?

La video comunicazione in tempo reale

Il coinvolgimento completo: telepresenza

Diffondere informazioni: desktop video e digital signage

La sicurezza fisica: videosorveglianza

Il ruolo della Rete

Conclusioni



Cisco Value Proposition For Physical Security

Cisco Expo
2008

Scalable and Secure



Local and remote policy-based access to video



Flexible



Smooth analog to IP migration, leverage existing investments



Interoperable



Standards-based architecture for easy integration



Network Convergence Experience & Expertise

Cisco Video Surveillance Portfolio

Cisco Expo
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Interoperability, Investment Protection, New Capabilities



Software

Viewing, Management, Virtual Matrix
Switching, Configuration, Customization
PC and Web Clients; Application Integration



Video Recording and Storage

IP & Analog
Event-tagged
Local, Remote, Internal, SAN, DAS



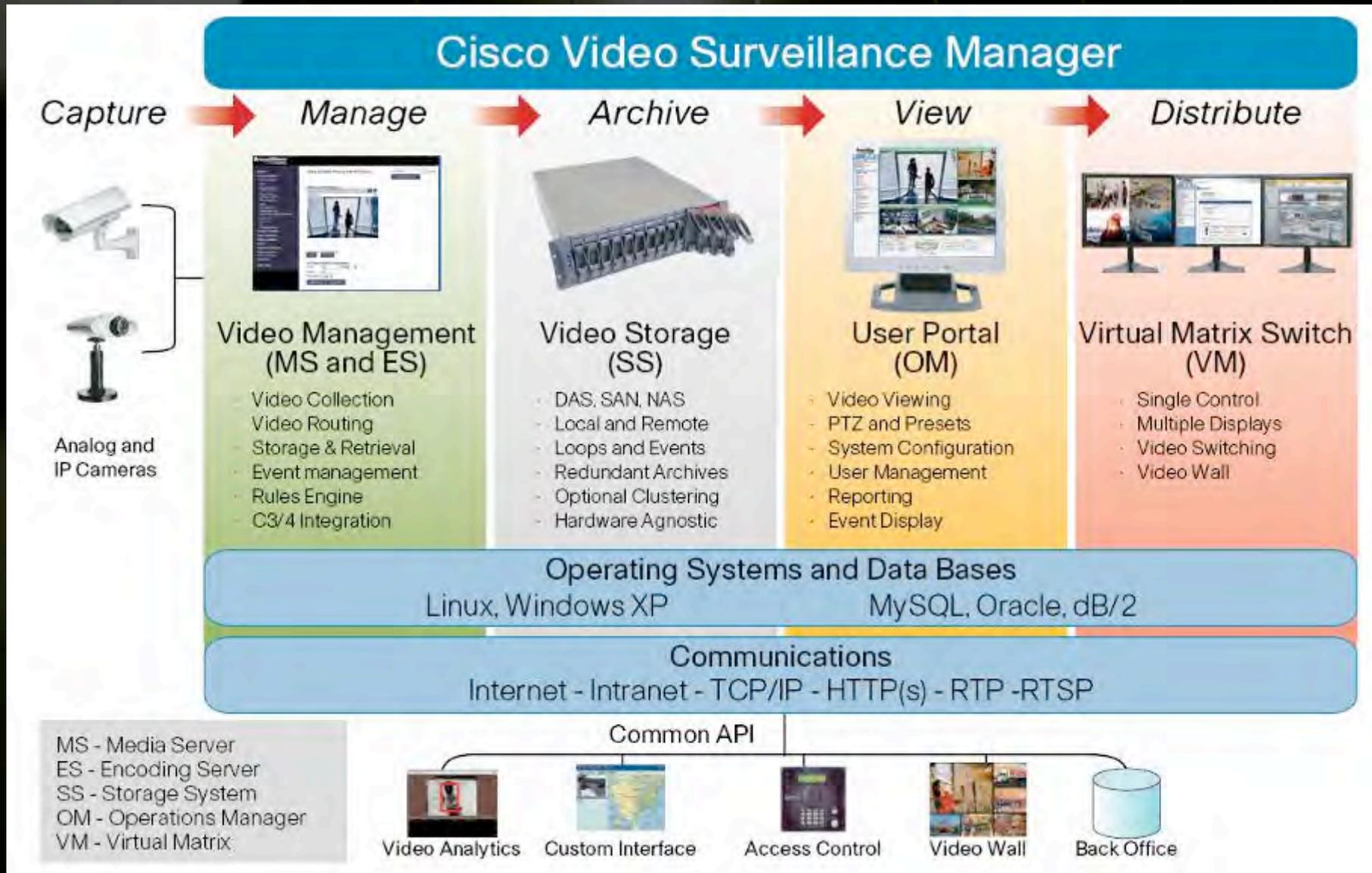
IP Gateways

Analog camera encoding
Analog display & control decoding
Standalone & Rackmount

Cisco VS Surveillance Manager

Web-based Management, Distribution, Viewing

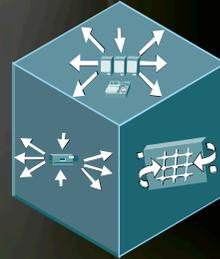
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Cisco Video Surveillance Manager Family Network-Centric, Browser-Based

Suite of Software Modules

Media Server
Encoding Server*
Operations Manager
Virtual Matrix

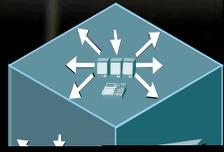


*Media Server SW with Encoder Cards

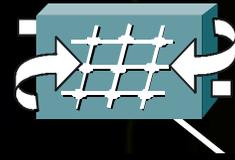
Remote & Multi-site Networked Video Surveillance Accessibility, Interoperability, Flexibility

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2008

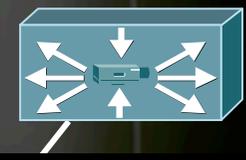
Single - Server
Cisco VS Software



Cisco VS
Virtual Matrix



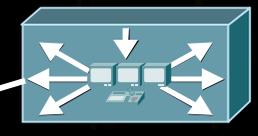
Cisco VS
Media Server



Cisco VS Storage
Or 3rd Party



Cisco VS
Operations Manager



C
S
IT-Cali
Flexib
Scalab

All in one Appliance
Cost-effective
Easy Operational Management

Cisco Video Surveillance Media Server

The Core Component of Video Surveillance Manager

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2008

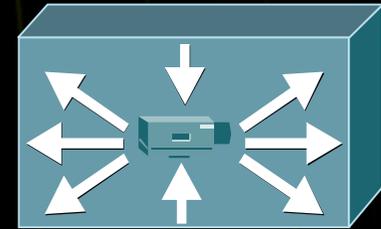
- Video “engine” –
Collects, manages, distributes, archives video

Powerful video management:

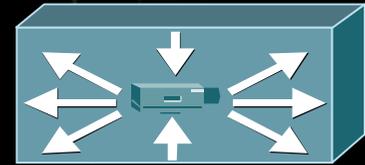
- Standards-based architecture provides the flexibility to use a broad range of cameras, codecs, viewing platforms, and network topologies
- Low-latency video with high-quality images, including megapixel camera video
- Simultaneous support for MJPEG, MPEG-2, and MPEG-4
- Unparalleled scalability in terms of number of sites, cameras, viewers, and storage

Flexible archiving:

- Archives at different frame rates, durations, and locations
- Efficient redundant multi-site archiving for bandwidth conservation
- Loop- and event-based video and audio recording and clipping capabilities

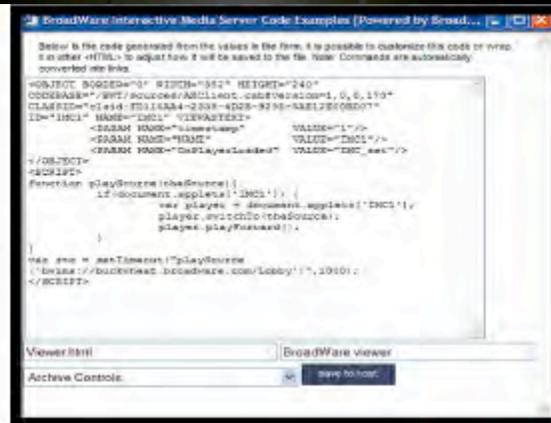


Cisco Video Surveillance Media Server URL Interface & automatic code generation tools



1. Enter Parameters

Parameters of the live or archived video source are entered into fields on a form-based code generator.



2. Generate Code

Clicking on "show code" automatically generates the required html for the selected client.

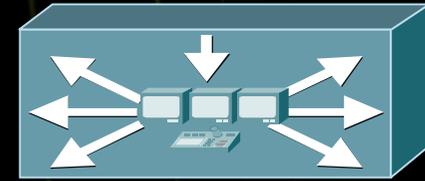


3. Embed Code

The generated code is pasted into a web page. When the page loads, the video appears at the specified quality, size, location and frame rate.

Operation Manager

Operator Mode – flexible video displays



Instant Replay

Allows users to instantly replay video. Users can pause live video, step forward and backward, and jump back to live viewing.



Repeat Segment Playback

Operator can define a segment of time in an archive to playback repeatedly.

Digital Zoom

Allows users to digitally zoom on live or archived video.



Video Enhancement

Allows users to enhance the video by adjusting the hue, saturation, contrast and brightness.

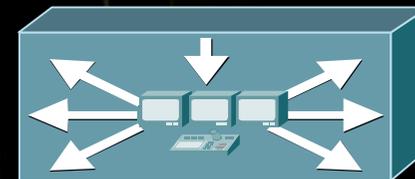


Operator Defined Views

Operator can define a view by specifying a layout and video feeds and then giving it a name.

Operations Manager

Administrator Mode –managing devices



- Intuitive, simple-to-use management console to set up and manage multiple servers, cameras, and encoders.
- Shared settings facilitate the duplication of common deployed data, and helps speed up the device setup.

Video Surveillance Operations Manager

Administrator - Camera Feeds

Super User

Camera Feeds

Create a New Child Feed
Help: List of Camera Feeds

Click the feed name to view the feed details. Parameters can be managed by clicking the applicable icons.

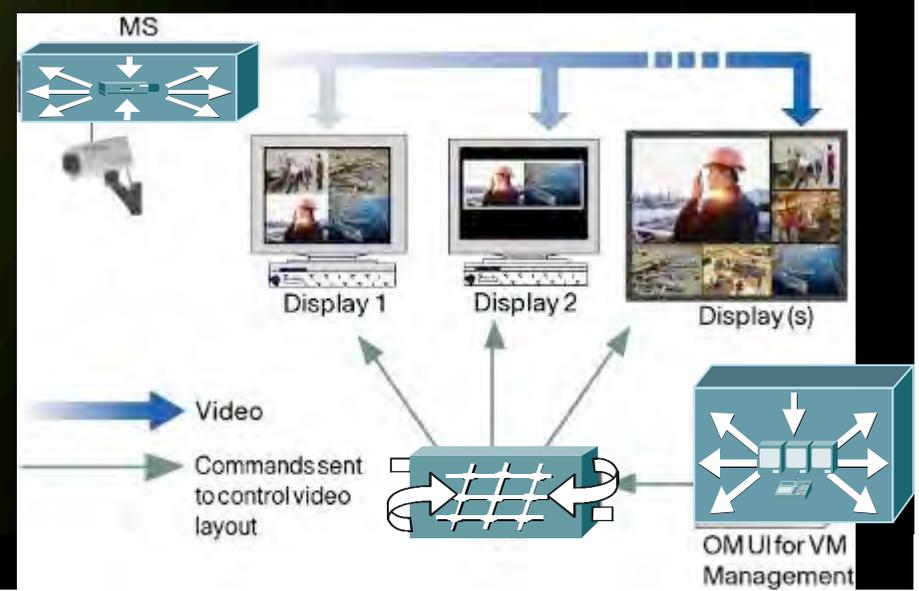
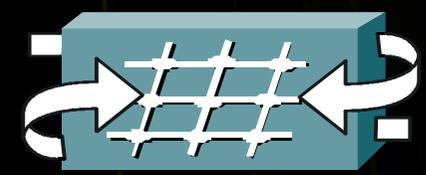
Preview	Feed Name	Server	Child	Media Type	F/B Rate	Quality	Actions
	Area 1	BRD5.4	No	jpeg	0.5	50	<input checked="" type="checkbox"/> <input type="checkbox"/>
	Police Area 1	BRD5.4	No	mpeg4-v	56	50	<input checked="" type="checkbox"/> <input type="checkbox"/>
	Station Platform	BRD5.4	No	jpeg	1	50	<input checked="" type="checkbox"/> <input type="checkbox"/>
	Airport Waiting Area	BRD5.4	No	jpeg	1	50	<input checked="" type="checkbox"/> <input type="checkbox"/>
	Police Area 2	BRD5.4	No	jpeg	1	50	<input checked="" type="checkbox"/> <input type="checkbox"/>
	Area 2	BRD5.4	No	jpeg	1	50	<input checked="" type="checkbox"/> <input type="checkbox"/>
	Entrance	BRD5.4	No	jpeg	1	50	<input checked="" type="checkbox"/> <input type="checkbox"/>

View Title

Cisco Video Surveillance Virtual Matrix

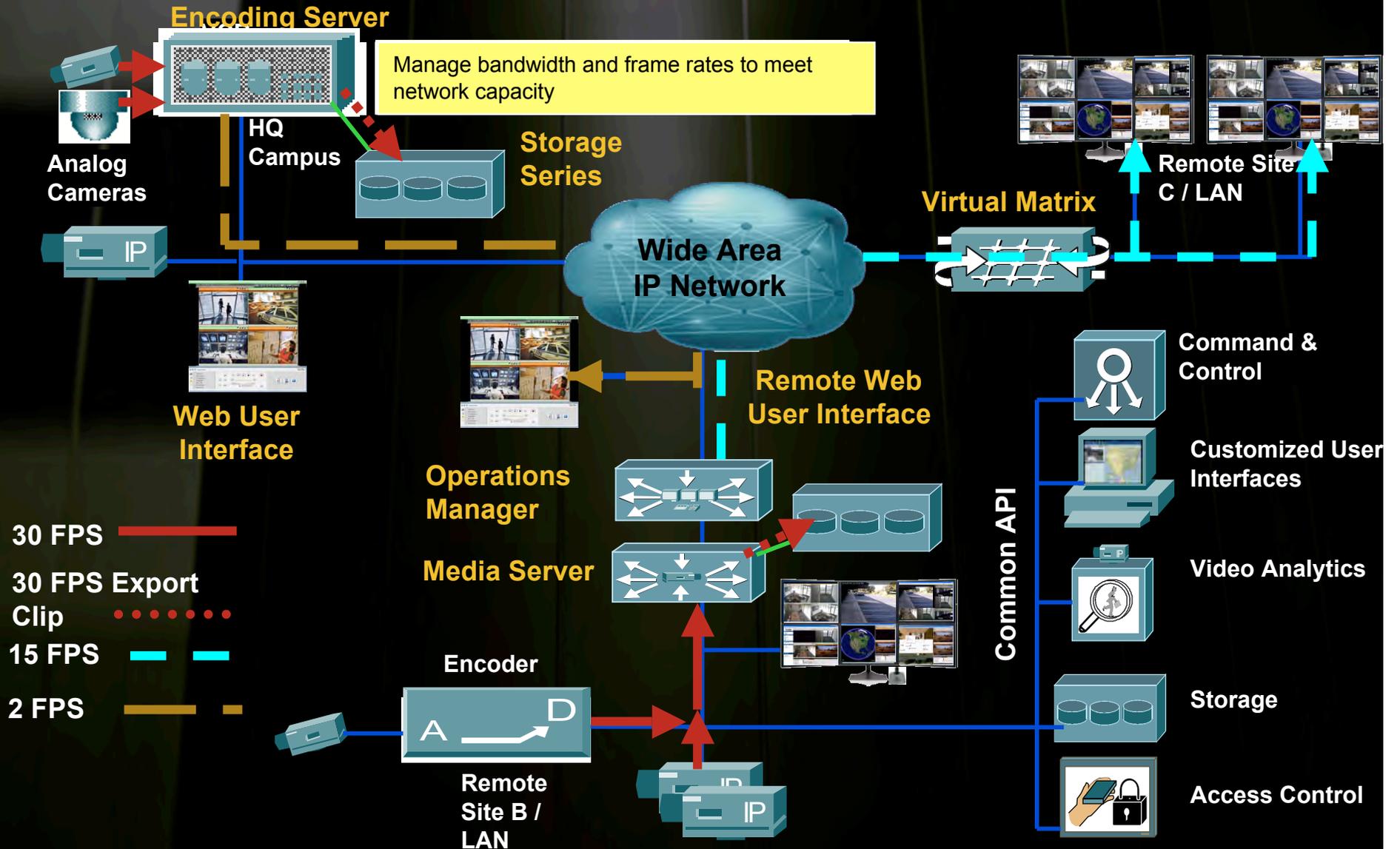
- Controls an infinite number of video displays on network
- Live & Archive video
- Distributes to Video Wall
- Event/Action

Push video to remote screens



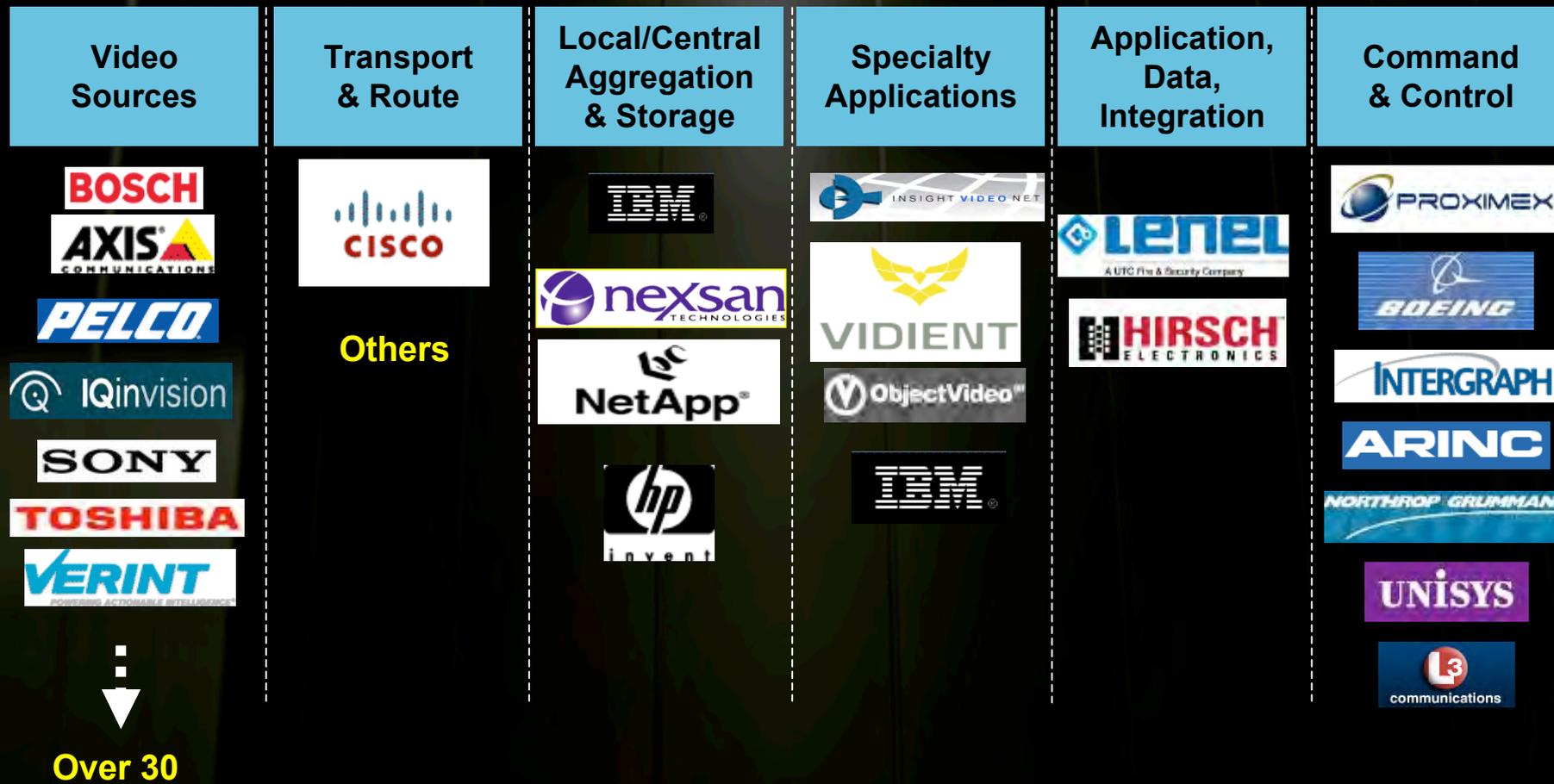
Cisco Video Surveillance Manager Traffic Flow

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Integration & Interoperability

Cisco ICE Ecosystem System & Application Providers



Cisco Portfolio Convergence

The Best of All Worlds

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Innovation

Application Integration



Software
Convergence

Recording
Convergence

Device Integration

Encoder
Support



Interoperability

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Next Generation Enterprise Architecture

Enterprise Communications Fabric

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Unified
Communications



Voice

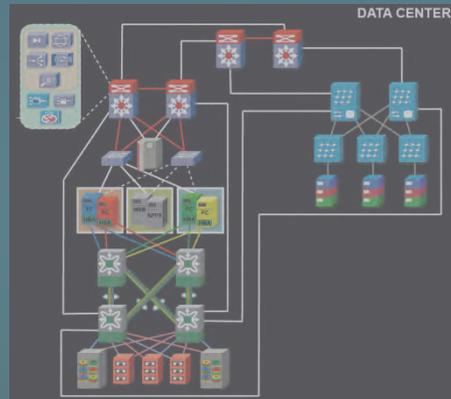


Video

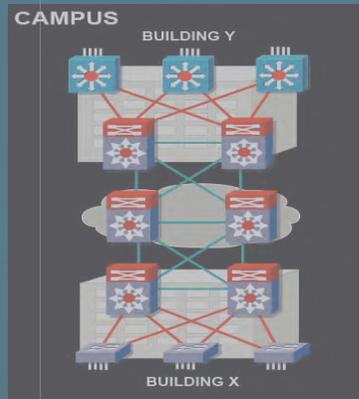


Web 2.0

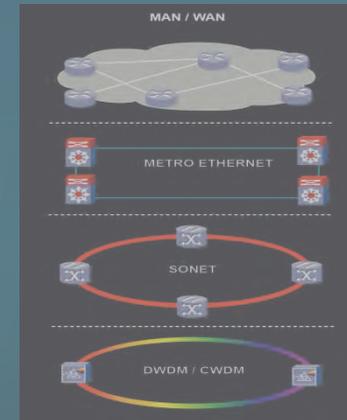
Collaboration



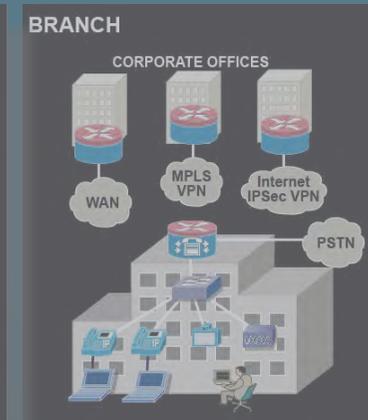
Data Center
Applications
Delivery Fabric



Campus
Communications
Fabric



Branch and WAN
Services Fabric



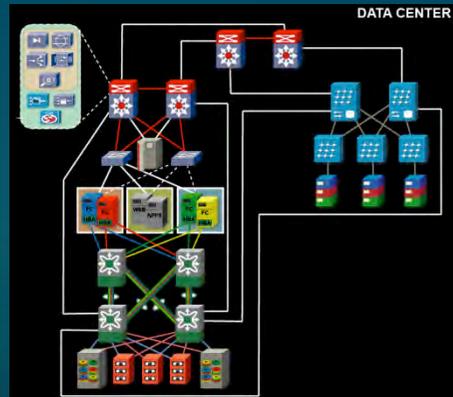
Video Ready Network Enabling Enterprise Video Services

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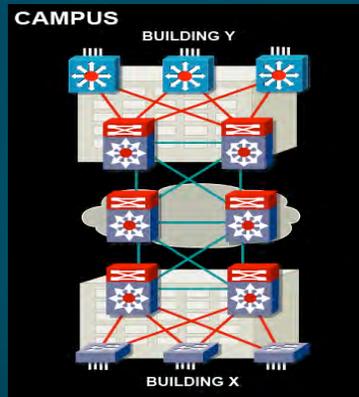
Insuring the Experience



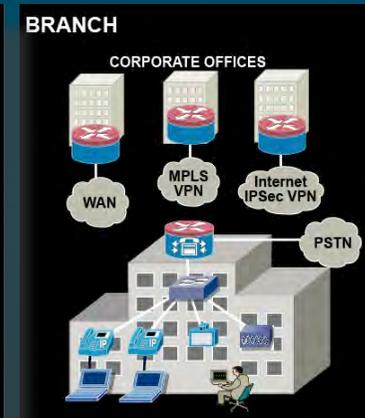
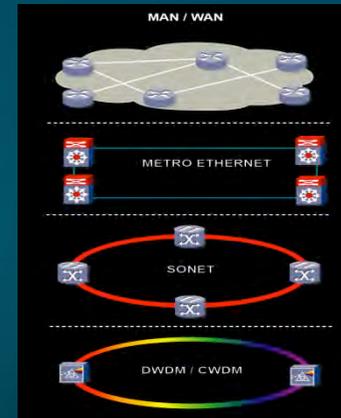
Video Solutions



**Data Center
Applications
Delivery Fabric**



**Campus
Communications
Fabric**

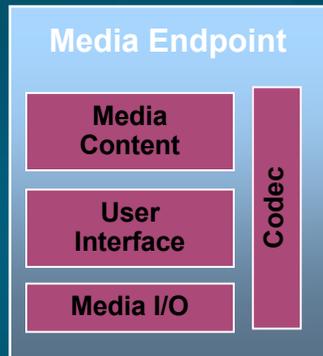


**Branch and WAN
Services Fabric**

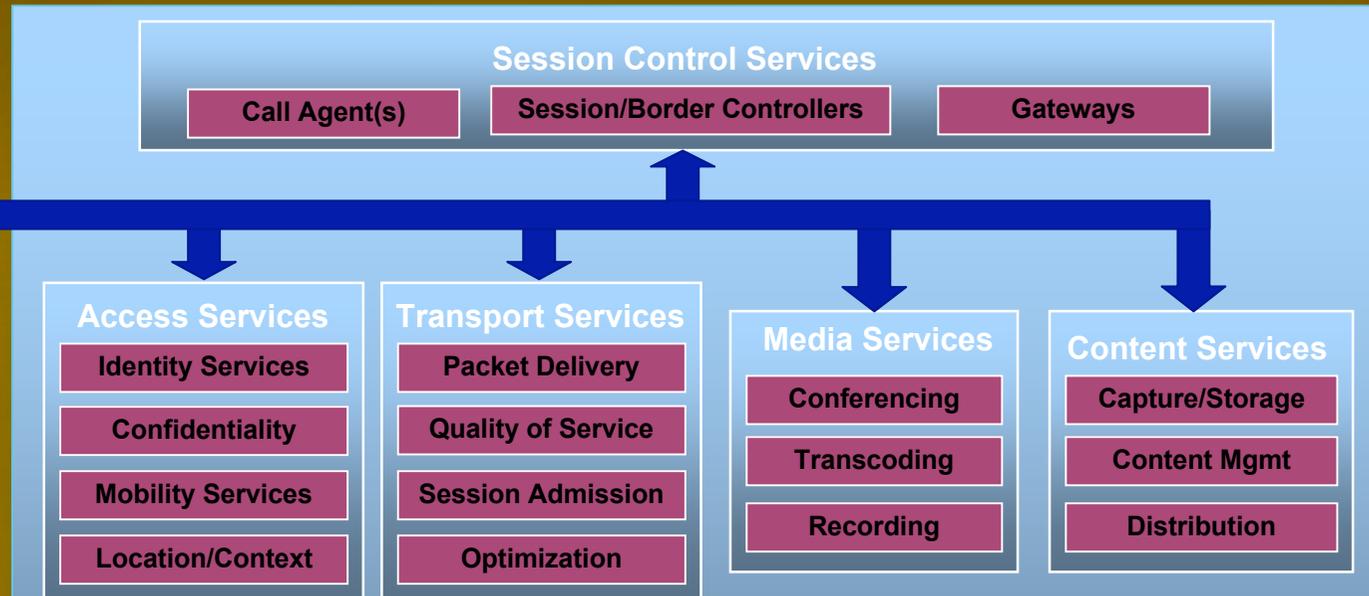
Video Ready Network Architecture

Cisco Expo 2008

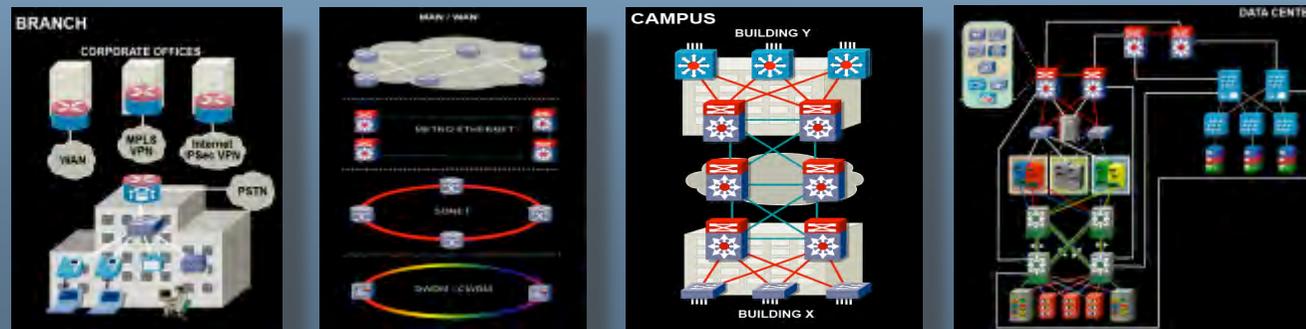
Clients



Video Network Services



High Availability Network Design



PIN's, Best practices and Products

PIN's	Best Practices	Products
Video Ready Branch	<ul style="list-style-type: none"> • HA strategy w/ centralized and localized services • Have a survival strategy • Robust QoS service policies • Application optimization services • Insuring wanted/limiting unwanted bandwidth consumers • Local caching, Conferencing, Transcoding, gateway resources as needed • Authentication of endpoints and users • Encryption • High-speed WiFi 	<ul style="list-style-type: none"> • Cisco ISR 3800 • Cisco ISR 2800 • Cisco Aironet AP's • Video Ports and DSP's • ACNS WAE & NM's • WAAS WAE & NM's • IPSec DSP's • IPVC Video Gateways • IPVC "small" MCU • IOS Security
Video Ready WAN	<ul style="list-style-type: none"> • Aggregation points to OC3/OC12 • Sub-second convergence • Branches to DS3 or higher • Capacity and traffic engineering • Multiple/diverse WAN connections • PfR for intelligent path routing of applications • Robust QoS service policies • Insuring wanted/limiting unwanted bandwidth consumers (PISA) • Encryption • SLAs from SPs 	<ul style="list-style-type: none"> • Cisco 7600 • ASR 1000 • GSR 12000 • CRS-1 • SCE 1000

PIN's, Best practices and Products (cont)

PIN's	Best Practices	Products
Video Ready Datacenter	<ul style="list-style-type: none"> • Video Storage and Distribution • Centralized Services • Optimization • Confidentiality • Mobility & B2B 	<ul style="list-style-type: none"> • MDS 9000 • Catalyst 6500 • C6K ACE and Security Blades • IPVC MCU's and Gateways • Telepresence MPTS • WAAS • ACNS • IP2IP & Gatekeeper • SCE 1000
Video Ready Campus	<ul style="list-style-type: none"> • GigE access & 10GigE distribution/core • Access layer protection robust QoS policies • QoS trust boundaries • High-Speed WiFi • NAC • Encryption 	<ul style="list-style-type: none"> • Catalyst 6500 • Catalyst 4500 • Catalyst 3750 • C6K Security and WiFi Service Blades • NAC Appliance • Cisco Aironet AP's • IPVC "small" MCU

Cisco is just leading this...

Examples

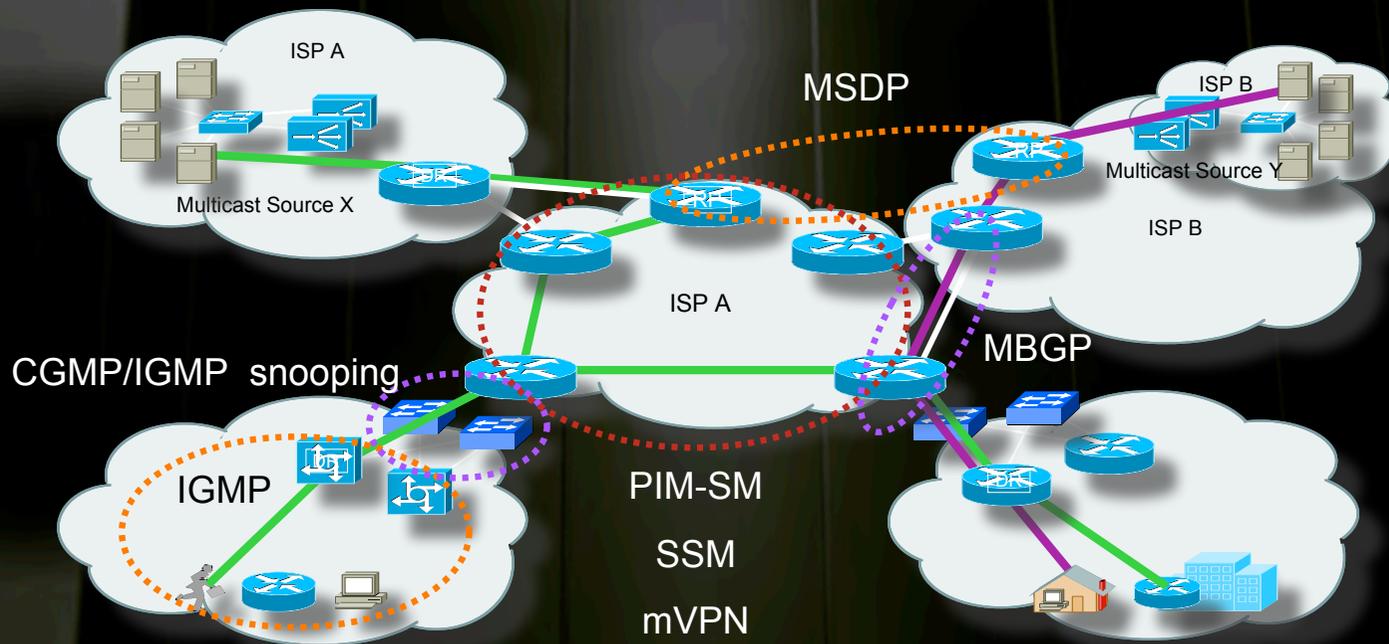
- Network Video Fabric
 - Granular QoS
 - Multicast
 - Streaming Infrastructure
 - Fast ReRouting and Performance Routing
 - IPSLA
- Video solutions as a combination of Applications, Network Services and Clients

QoS Different Video Application In Our Networks

Classification and Marking Design: RFC 4594

Application	L3 Classification		IETF RFC
	PHB	DSCP	
Network Control	CS6	48	RFC 2474
VoIP Telephony	EF	46	RFC 3246
Call Signaling	CS5	40	RFC 2474
Multimedia Conferencing	AF41	34	RFC 2597
Real-Time Interactive	CS4	32	RFC 2474
Multimedia Streaming	AF31	26	RFC 2597
Broadcast Video	CS3	24	RFC 2474
Low-Latency Data	AF21	18	RFC 2597
OAM	CS2	16	RFC 2474
High-Throughput Data	AF11	10	RFC 2597
Best Effort	DF	0	RFC 2474
Low-Priority Data	CS1	8	RFC 3662

Multicast Intelligence



Campus Multicast

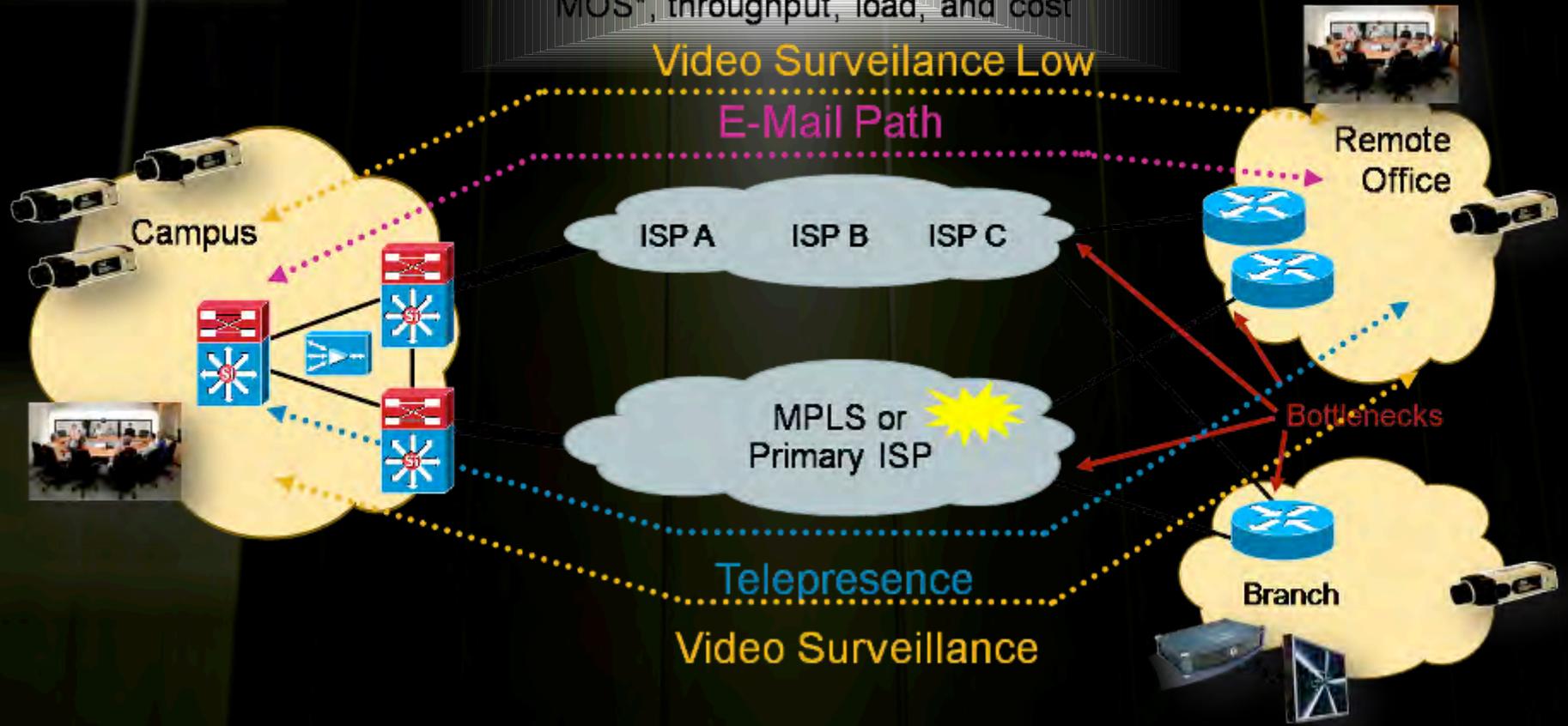
- End Stations (hosts-to-routers):
 - IGMP
- Switches (Layer 2 Optimization):
 - IGMP Snooping, CGMP and RGMP
- Routers (Multicast Forwarding Protocol):
 - PIM Sparse Mode or Bi-Dir

Inter-Domain Multicast

- Multicast routing across domains:
 - MBGP
- Multicast Source Discovery:
 - MSDP with PIM-SM
- Source Specific Multicast (SSM)
- Multicast VPN (mVPN)

Performance Routing and Fast ReRouting

Optimize by:
Reachability, delay, loss, jitter*,
MOS*, throughput, load, and cost



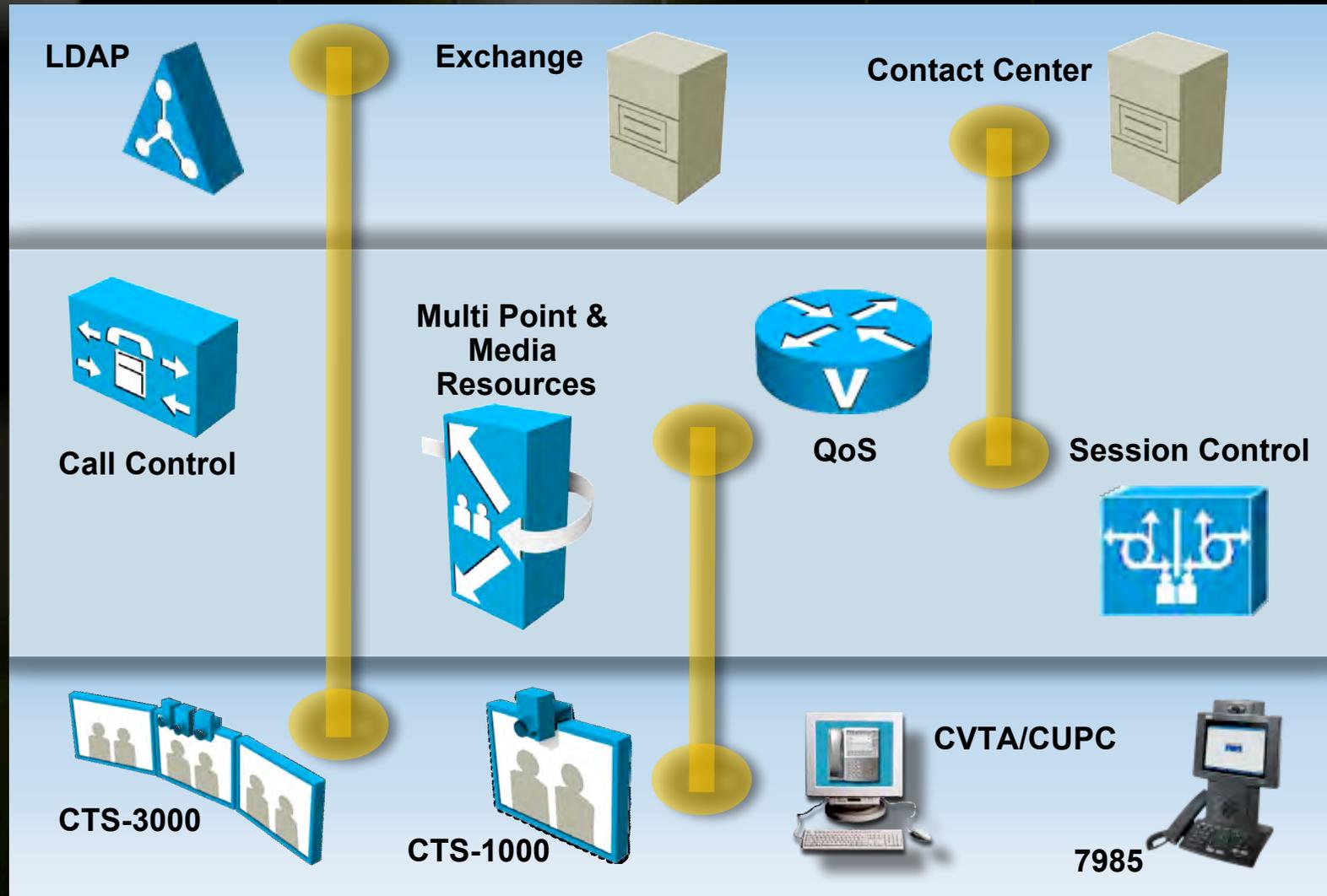
Video as Combination of Apps, Network Services and Clients

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Apps

Network

End Points



Video-Ready Network

Only Cisco can deliver...

- **Robust Video Applications**
Video Applications
Coding, Decoding, Conferencing and Transcoding services
- **Integrated with Network Infrastructure Foundation Services to Deliver High-Quality Video Experiences**
Quality of Experience (QoS, session admission control)
Packet Delivery Optimization
Network Resiliency (high availability, fast convergence)
Security (encryption, firewall traversal)
Access Services (identity, entitlement)
Presence, Location and Context Aware Networking
Provisioning and Ongoing Service Assurance Management



Network Video Services

Caching/Streaming

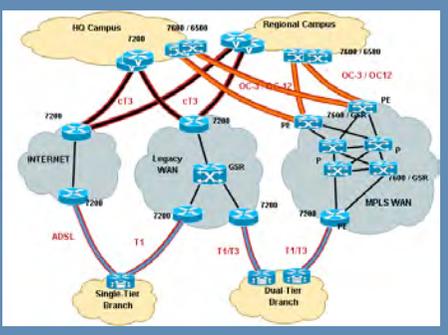
Media Processing

Signaling, QoS, Multicast

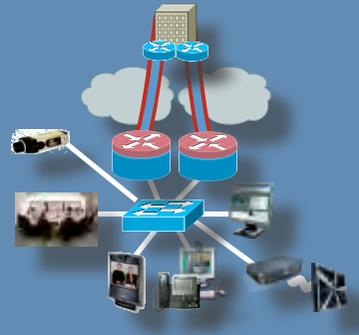
Campus Video Architecture



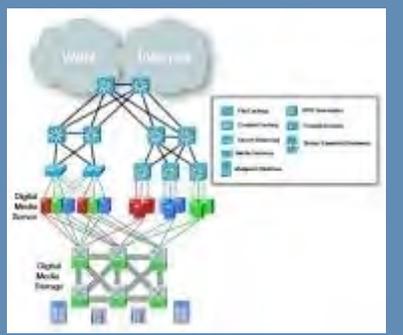
WAN Video Architecture



Branch Video Architecture



Datacenter Video Architecture



Agenda

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Applicazioni Video Enterprise

Desktop Video Digital Signage

31+ Miliardi di Flussi nel
2006

Mercato: \$2B+ nel 2010



Collaborazione Desktop Interattiva

Rich Media
Collaboration



Cisco TelePresence

Next-Gen Collaboration
con coinvolgimento
pieno



Videosorveglianza

Mercato: \$1.3 B nel 2009
in Europa



Infrastruttura

Infrastruttura di Rete
ottimizzata per Video
Delivery



**La Piattaforma per la
Human Network**

