

Physical Security



Marty Knopert

Business Development Manager Physical Security

Video Surveillance over IP



Framework for Connected Real Estate

Transformation

Delivering space, technology and services differently

Convergence

Converging information, communication and building technologies

Foundation

Building the next generation building information network



What is Physical Security

- Physical Security is an aggregate word of electronic security solutions who are able to support us to monitoring assets.
- The most important parts are:
 - Video Surveillance (CCTV)
 - Electronic Access Control (EAC)
 - Intrusion Detection
 - Paging systems (safety)

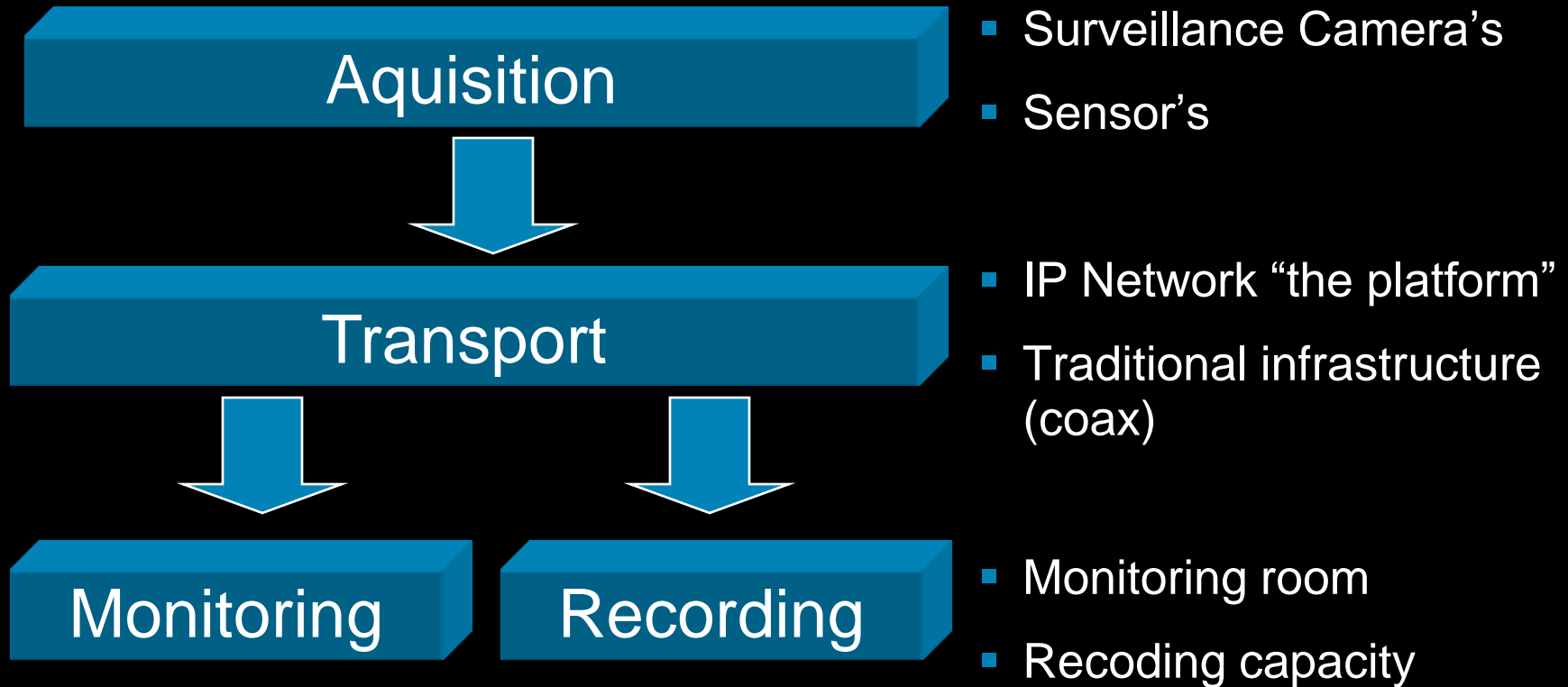
Cisco's Physical Security Approach

- Cisco has a solution for physical security issues
- The network as a platform is the foundation
- Complete integrated solutions are possible
- No silo's but converged systems
- Remote management for the whole solution

Video surveillance over IP



System overview



3 Different systems (for CCTV)

- Analogue based CCTV systems

Analogue camera's attached on a embedded DVR system
DVR's are attached to the IP network

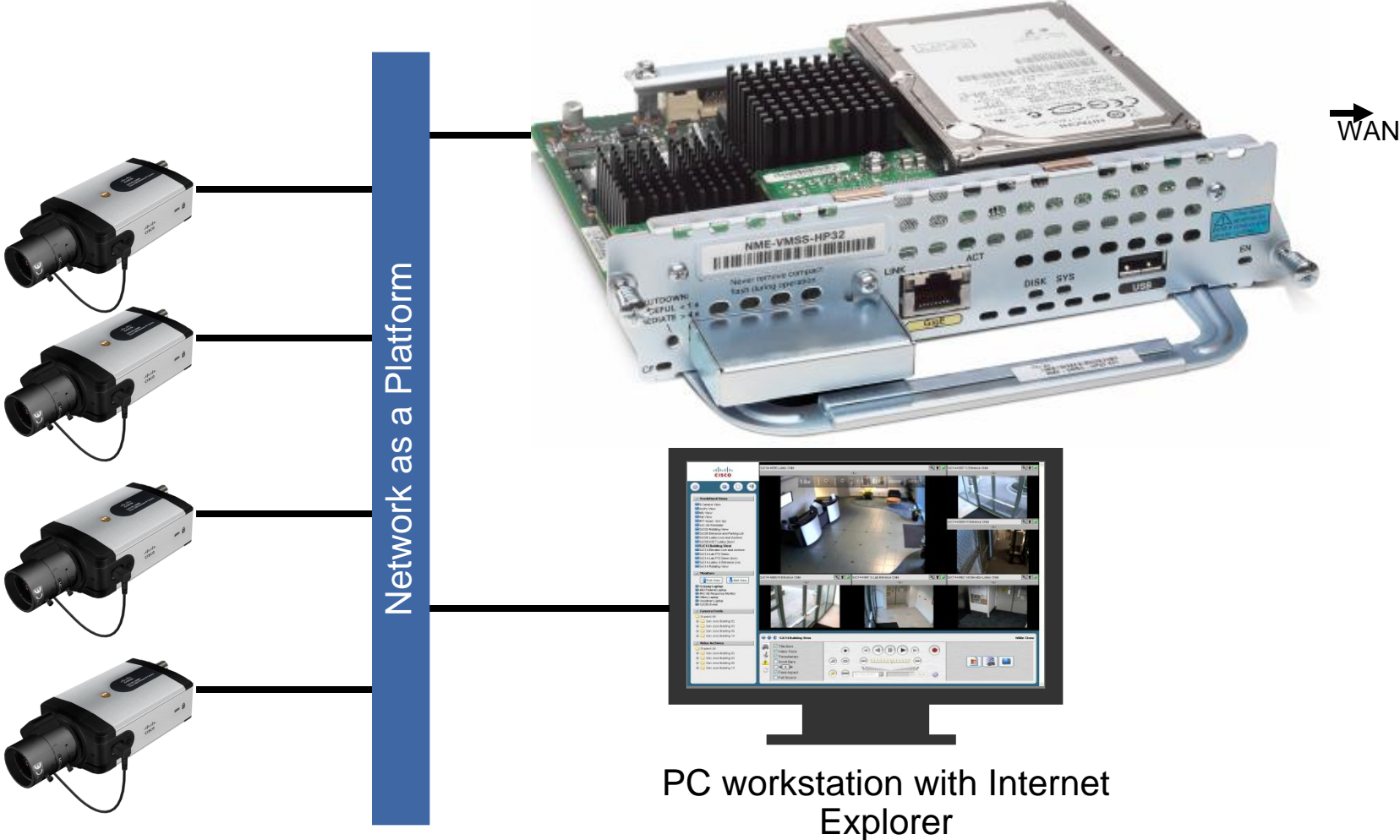
- Hybride systems

Analogue and IP camera's attached to an PC-based DVR
system attached to the IP network

- Full IP video surveillance systems

IP camera's and encoders attached to the network an video is
recorded on NVR's (Network Video Recorders)

Simplified System overview



Cisco's Physical Security solution



Why choose for the Cisco solution

- Fully integrated within the network
- Integrated within the Connected Real Estate concept.
- Lower TCO costs
- Remote management of the solution(s)

What Cisco has to offer

- Complete line of IP camera's for fixed positions
 - SD (standard definition) wired & Wireless
 - HD (high definition) wired & wireless
- Open Software Platform for video management
 - Integrated within blades for the ISR
 - As a appliance with integrated storage (DAS)
 - Virtual matrix software for monitoring rooms
 - User friendly web portal for watching live and recorded video streams.



Cisco Video Surveillance IP Cameras



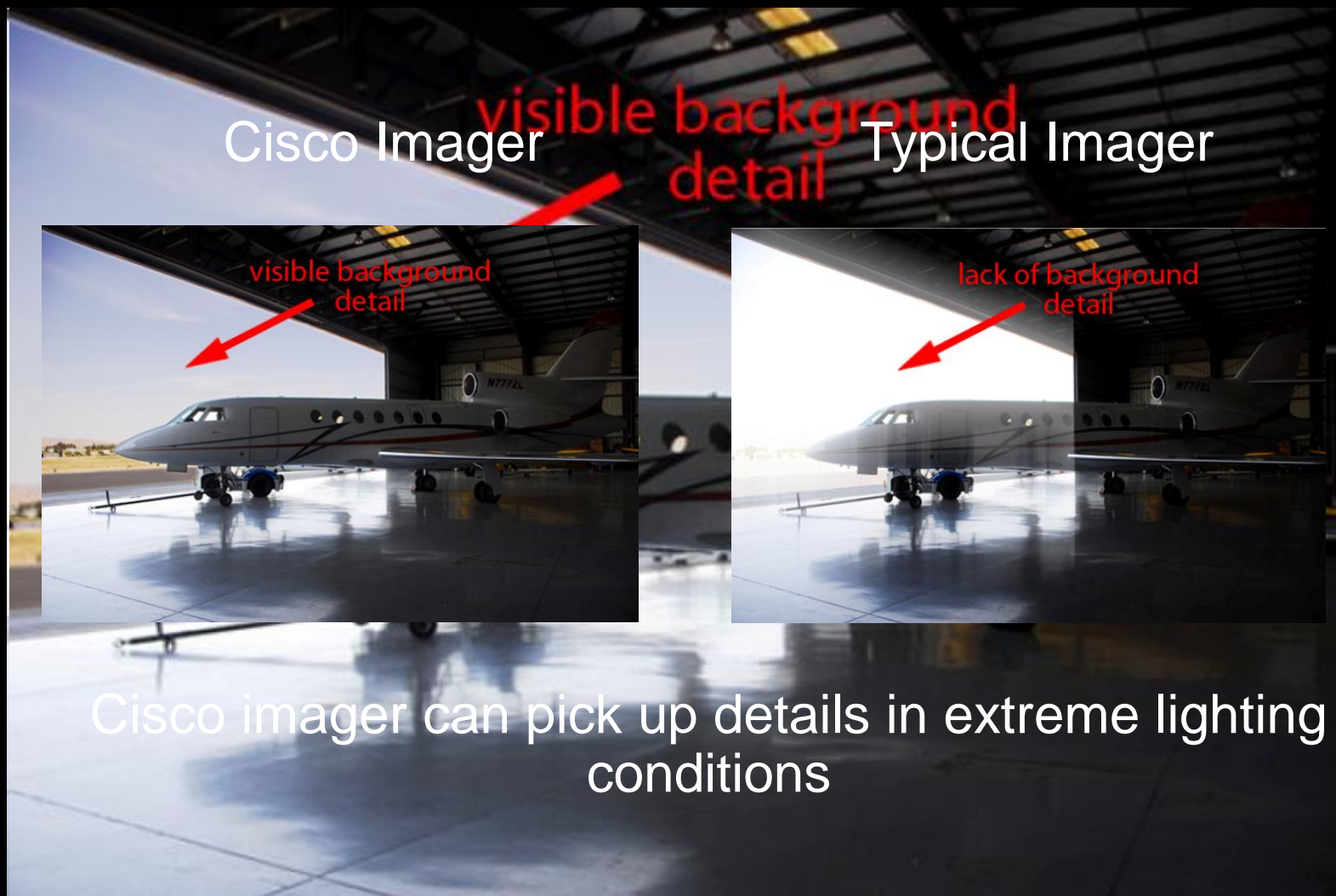
Cisco Video Surveillance IP Cameras

Perfect video within changeable light conditions

- Two Models:
 - Full High Definition (HD) (1080p)
 - Video Analytics Ready with optional High speed dedicated DSP
 - Standard Definition (SD) DVD Quality
 - Wired and Wireless
- Wide Dynamic Range
- Network & Security Features
 - Power over Ethernet, IEEE 802.3af
 - AES Encryption, Hardware Acceleration
 - 802.1x Authentication
 - MPEG-4 (SD)
 - H.264 (HD)



Wide dynamic Range





Video Surveillance Manager



Cisco Video Surveillance Manager

Capture

Manage

Archive

View

Distribute



Analog and IP Cameras



Video Management
(Media Server and Encoding Server)

- Video Collection
- Video Routing
- Storage & Retrieval
- Event management
- Rules Engine
- C3/4 Integration



Video Storage
(Storage Systems)

- DAS, SAN, NAS
- Local and Remote
- Loops and Events
- Redundant Archives
- Optional Clustering
- Hardware Agnostic



User Portal
(Operations Manager)

- Video Viewing
- PTZ and Presets
- System Configuration
- User Management
- Reporting
- Event Display



Virtual Matrix Switch
(Virtual Matrix)

- Single Control
- Multiple Displays
- Video Switching
- Video Wall

Common API



Video Analytics



Custom Interface



Access Control



Video Wall



Back Office

Video Surveillance Manager

- **Mediaserver (VSM)**

Core media platform manages direct sources and streams

Media server is also the network video recorder to store the videostreams.

- **Operation Manager (VSOM)**

Web portal for VSM manages servers, devices and users

- **Virtual Matrix**

Flexible delivery of live and recorded video for command centers and video walls

Video Surveillance Manager

- VSM is a universal open platform that's also prepared for other vendor IP surveillance camera's
 - AXIS, Sony, Panasonic, Bosch, Pelco e.a.
- Because of the open architecture of the software it is possible to build customized solution.
- Integration of Video Content Analyses into the HD camera's.
 - Video Content Analyses or License plate recognition

Cisco's Video surveillance manager is the platform

Video Surveillance Manager

- Linux-based server platform
- Hardware platforms
 - Intergrated Service Router module hardware.
Suitable for 16 or 32-channels (camera's) per module
 - Multi Service Platform everything in one box.
Suitable for 50 streams till 300 streams per server

Cisco Integrated Services Router (ISR)

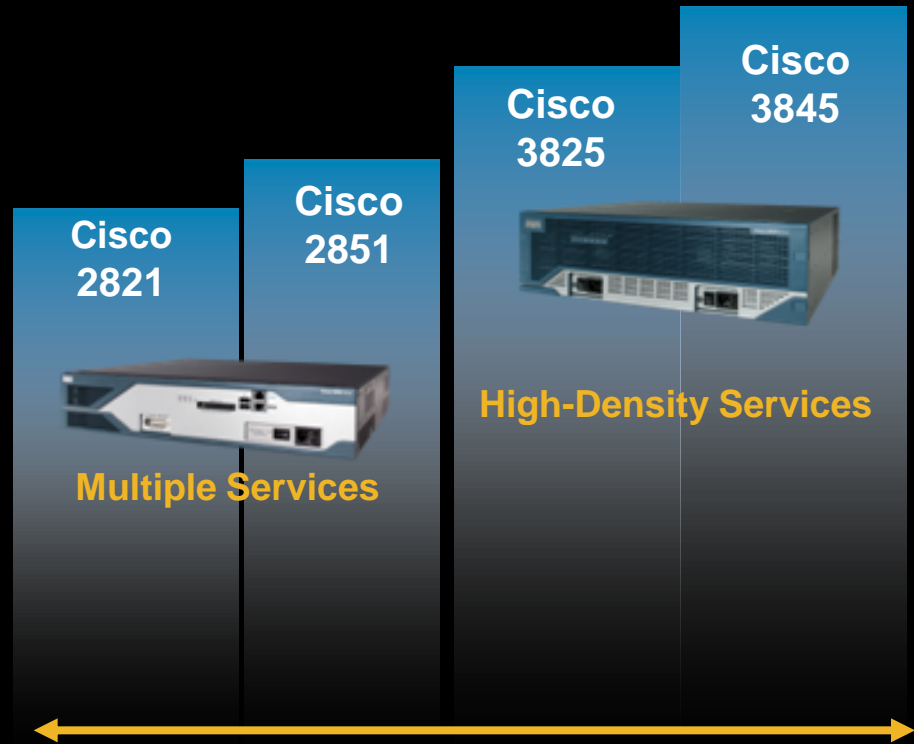


Analoge videomodule voor integratie van bestaande analoge camera's



Video surveillance manager en lokale opslagcapaciteit

Cisco IP Video Surveillance Solution



Multiservices Platforms



- **19" 1RU server**
- **Max 4TB internal diskcapacity**
- **"hot swappable" disks**
- **Suitable for max 50 videostreams**
- **Complete appliance for storage and videomanagement**
- **Example: Disk capacity of 4TB**
 - 12 days of 24hrs.**
 - 12 Images per second per camera**
 - 50 camera's**
 - Note: 50% movement**

Multi Services Platforms



- 19" 2RU server
 - Max 12TB internal diskstorage
 - "hot swappable" disks
 - RAID-5 (fault tolerant)
 - Redundant powersupply (option)
 - Suitable for max 300 videostreams
 - Complete appliance for storage and videomanagement
-
- **Example: Diskstorage of 12TB**
 - 12 days of 24hrs.
 - 12 Images per second per camera
 - 150 camera's
 - Note: 50% movement

Multi Services Platforms



- 19" 4HE server
 - Max 24TB internal diskcapacity
 - "hot swappable" disks
 - RAID-5 (fault tolerant)
 - Redundant powersupply (option)
 - Suitable for max 300 videostreams
 - Complete appliance for storage and videomanagement
-
- Example: Diskcapacity of 24TB
 - 12 days of 24hrs.
 - 12 Images per Second per camera
 - 300 camera's
 - Note: 50% movement



Cisco Access Control Product Overview



Cisco Physical Access Control Overview

A Comprehensive Solution for Electronic Access Control
Leverages IP infrastructure, integrates with other Physical Security applications



- **Hardware:**

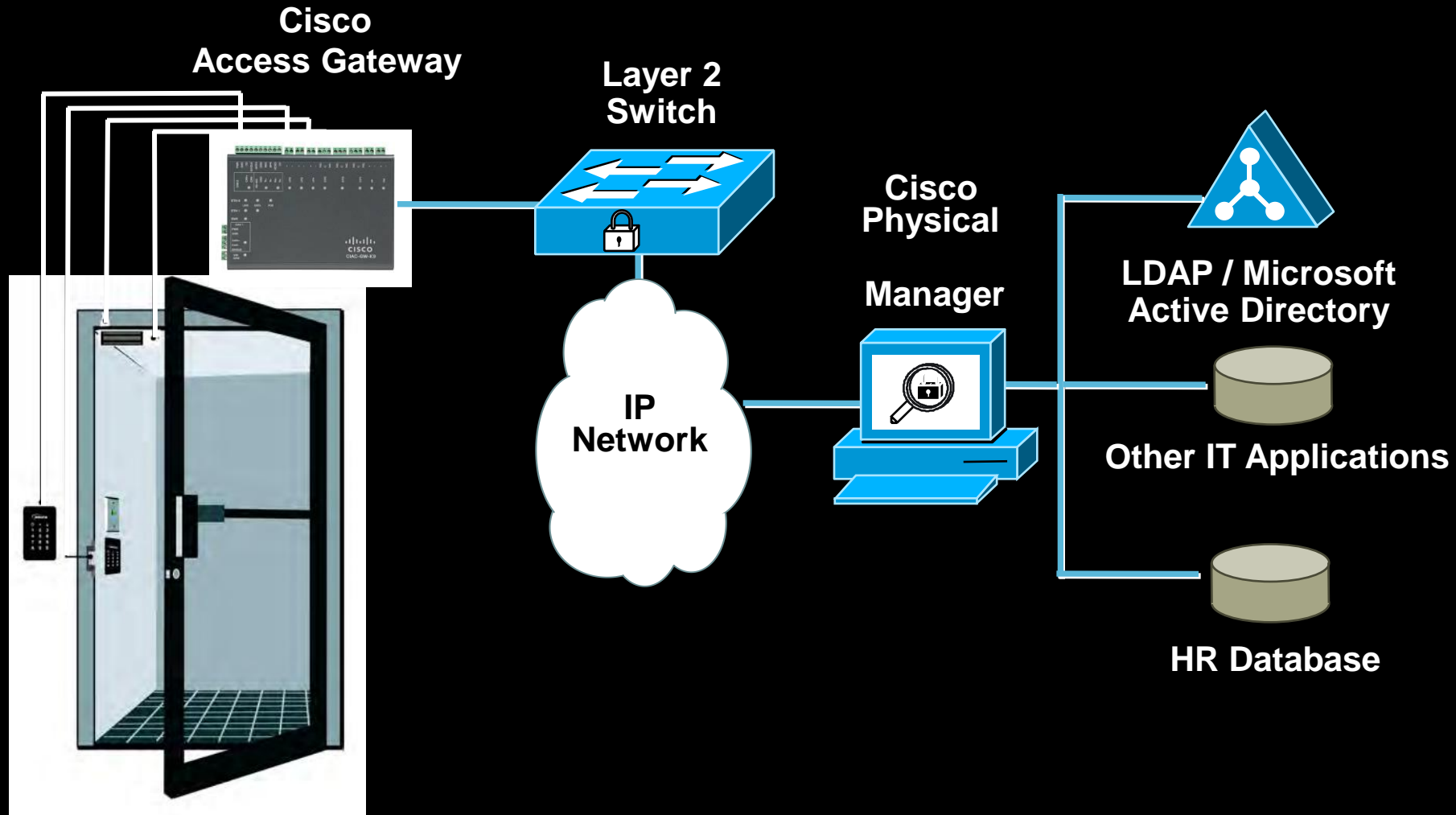
Cisco Access Gateway connects existing door hardware (readers, locks etc.) to the network

Additional doors can be managed by connecting expansion modules to the Access Gateway

- **Software**

Cisco Physical Access Manager (Cisco PAM) is a Management Appliance for configuration, monitoring and report generation.

Deployment Architecture



Summary

- Full line of camerabody's in SD en HD quality
- Different hardware platforms
 - Based on the ISR
 - Multiservices platforms
- Access control fully integrated with the VSM
- Video Surveillance Manager as the hart of the system
 - Open platform that is suitable for other vendors IP camera's
 - Integration with Security Management Software platforms

Q&A





CISCO