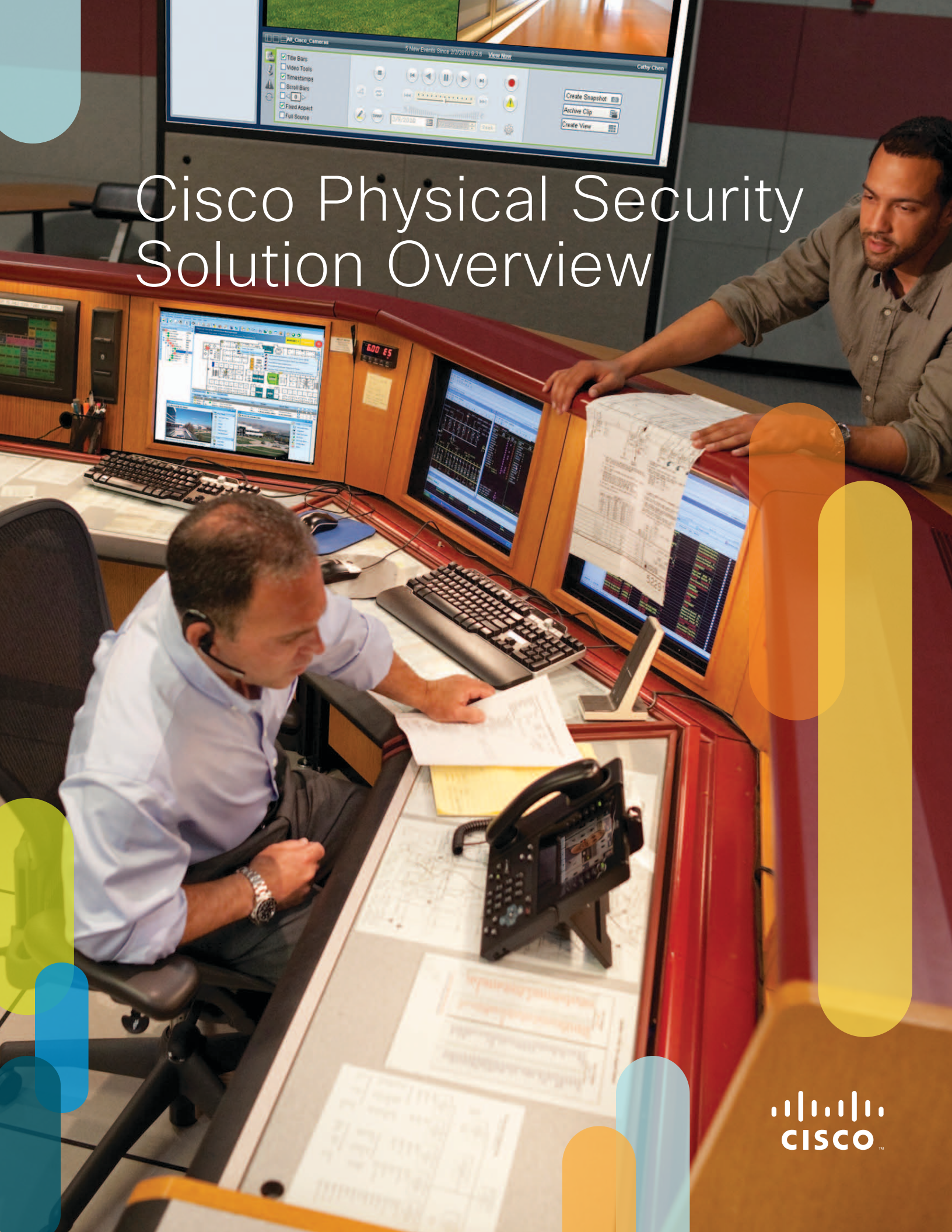# Cisco Physical Security Solution Overview
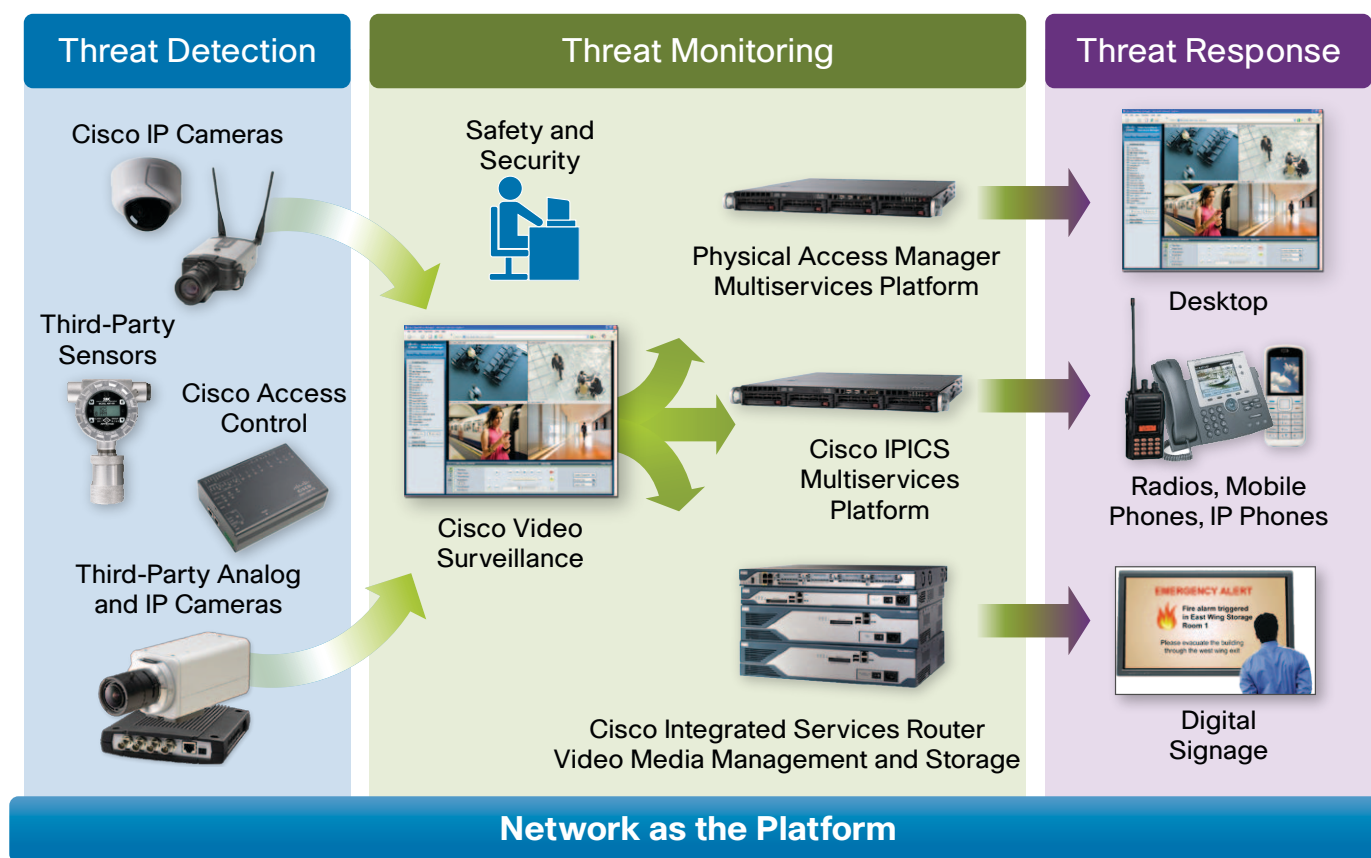
Executive Summary

Cisco Physical Security solutions provide broad network-centric capabilities in video surveillance, IP camera technology, electronic access control, and incident response. The solutions are part of Cisco's Smart+Connected Communities initiative, which focuses on improving the quality of life of citizens by helping to create a safe and secure living environment that is a foundation for supporting sustainable social, environmental, and economic growth. Cisco Physical Security solutions integrate with other Cisco and partner technologies to provide a unified interface that gives safety personnel a higher level of situational awareness and allows intelligent decisions to be made more quickly. Customers can build cost-effective, modular physical security solutions that are both best-in-class and interoperable.

The Challenge

Physical security is a top priority for many organizations and governments. To help create a safe and secure environment, security personnel develop plans, train staff, and implement systems such as surveillance cameras, access controls, and paging and radio systems. These investments help to protect against threats from man-made and natural disasters. What's more, they can be far more effective and can cost less to manage when tied together over an existing IP network. Benefits include earlier threat detection, faster response, and enhanced collaboration with local law enforcement organizations.

The Solution

Unlike non-integrated point products, Cisco solutions provide end-to-end support to quickly detect incidents and correlate and prioritize key information, enabling faster and more effective collaboration among incident response personnel. Using the network as an open, scalable platform for integrating security helps to increase operational flexibility, improve protection capabilities, and reduce both risk and cost of ownership.
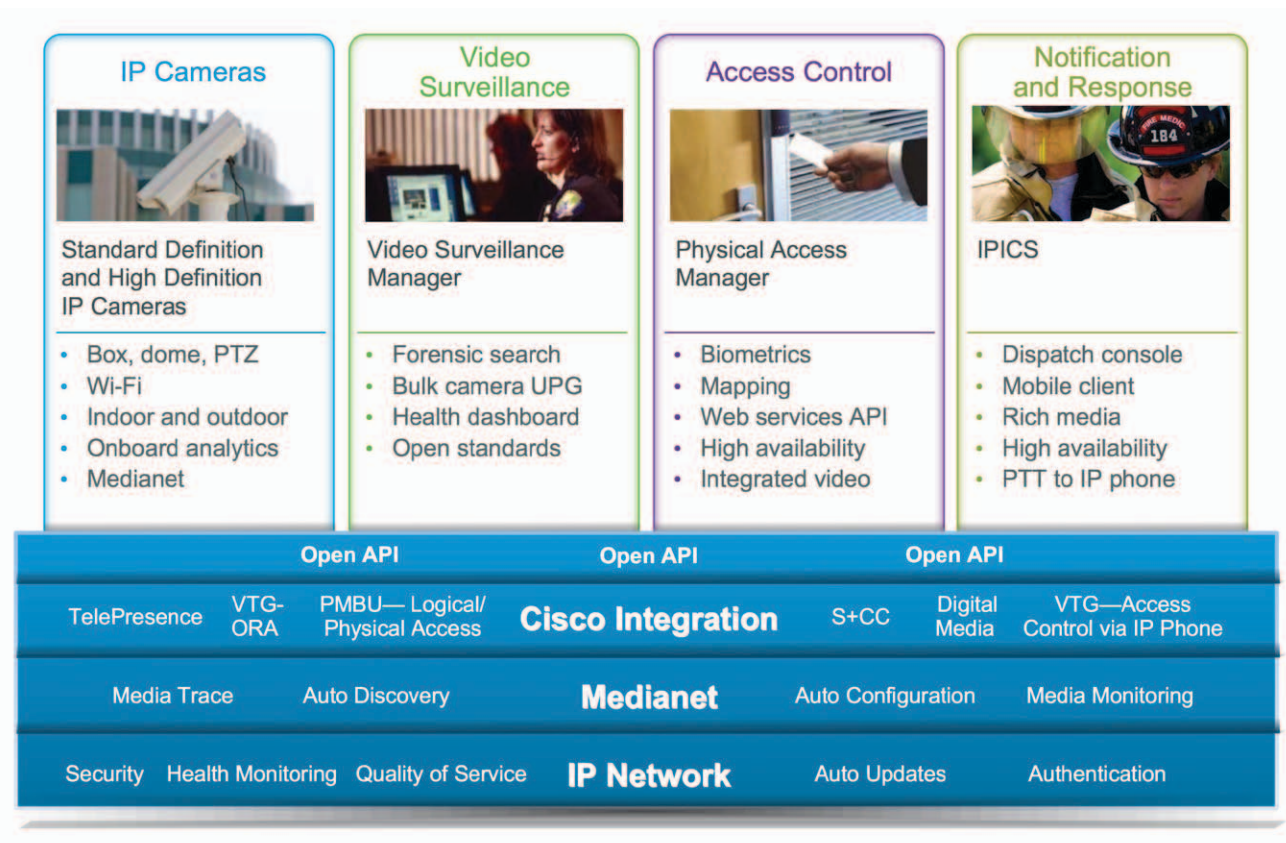

End-to-End Safety and Security Solutions

Cisco Physical Security Products

Cisco Video Surveillance IP Cameras

Cisco Video Surveillance IP Cameras are feature-rich digital cameras that enable surveillance in a wide variety of environments. Available in standard and high-definition, box and dome, wired and wireless, and stationery and pan-tilt-zoom (PTZ) versions, the cameras support MPEG-4 and H.264 and offer efficient network utilization while providing high-quality video.

Medianet Support: As part of Cisco's wider business video strategy to support medianet architecture, the Cisco Video Surveillance 4500 Series IP Cameras can now be automatically configured on an Ethernet switchport, dramatically reducing the time and expertise needed to deploy cameras.

Video Analytics: The 4500 cameras also provide video analytics capabilities for classifying and counting objects, and are able to detect camera tampering.

5000 Series: High-definition dome cameras with auto back focus and super low light

4000 Series: High-definition box cameras that support medianet and edge-based video analytics

2900 Series: Indoor and outdoor PTZ dome cameras with 360° continuous pan and 256 presets

2600 Series: Standard-definition box and dome cameras with motorized focus and zoom lens

2500 Wireless: Standard-definition wireless box cameras that support various network protocols

IP Video Surveillance Software

Cisco Video Surveillance solutions use the IP network to deliver and receive live and recorded video surveillance media. This solution is suited for multiple-site and remote-site IP video surveillance and provides excellent scalability, reliability, and bandwidth management.

Cisco Video Surveillance Media Server: The core component of Cisco Video Surveillance Manager, Media Server is a highly scalable and reliable video management platform that manages, replicates, distributes, and archives video streams.

Cisco Video Surveillance Operations Manager: This web-based user interface authenticates and manages access to video feeds. It is a centralized administration tool for the management of Media Servers, cameras, encoders, and viewers.

Cisco Video Surveillance Media Virtual Matrix: Virtual Matrix monitors video feeds in command-center and other 24-hour monitoring environments. It allows operators to control the video being displayed on multiple local and remote digital monitors.

Cisco Physical Security Operations Manager: This scalable command-and-control-style operator console unifies management and operations of Cisco Video Surveillance Manager, Cisco Physical Access Manager, and Cisco IPICS.

VSS Alloy for Cisco Video Surveillance Manager: Designed for the education market, this Solution Plus product provides an intuitive user interface with integrated mapping interface and video paging.

Cisco Physical Access Control

The Cisco Physical Access Control solution is scalable and flexible, able to manage from one to several thousand doors. Customers can combine modules to customize solutions, and can manage the entire system remotely. This solution easily integrates with Cisco Video Surveillance Manager and can use IP network services.

Cisco Physical Access Gateway: This intelligent, distributed processing networking edge device is the primary module to connect door hardware, such as locks and readers, to the network. Accessory modules are available to handle additional doors and input/outputs.

Cisco Physical Access Manager: This management application is used to configure hardware, monitor activity, enroll users, and integrate with IT applications and data stores.

Cisco IP Interoperability and Collaboration System

Cisco IP Interoperability and Collaboration System (IPICS) is a comprehensive IP-based dispatch and incident response solution. By sending radio traffic over an IP network, Cisco IPICS cost-effectively enables public safety personnel to exchange information when they are using incompatible radios. Cisco IPICS allows push-to-talk communications on radio handsets, networks, laptop and PC clients, telephones, and mobile phones, improving response times and resource collaboration.

Cisco IPICS Dispatch Console: An IP-based radio dispatch solution for mission-critical radio communications, the console empowers public safety officials to consolidate incident-related information and instantly share the information using voice, video, and data.

Cisco IPICS Mobile Client: This smartphone application complements a radio by giving the responder access to an incident talk group and all supporting media, such as current incident status, video, and pictures.

Cisco Physical Security Multiservices Platform

The Multiservices Platform servers enable the deployment and management of physical security services such as video surveillance, access control, and incident response communications. The server suite includes 1-RU and 2-RU models and provides benefits such as high storage density, system resiliency, and hardware diagnostics. An optional encoder card is also available, providing up to 16 analog video inputs with full-frame rate at D1 resolution.

IP Cameras

Standard Definition and High Definition IP Cameras

- Box, dome, PTZ
- Wi-Fi
- Indoor and outdoor
- Onboard analytics
- Medianet

Video Surveillance

Video Surveillance Manager

- Forensic search
- Bulk camera UPG
- Health dashboard
- Open standards

Access Control

Physical Access Manager

- Biometrics
- Mapping
- Web services API
- High availability
- Integrated video

Notification and Response

IPICS

- Dispatch console
- Mobile client
- Rich media
- High availability
- PTT to IP phone

Open API   Open API   Open API

TelePresence | VTG-ORA | PMBU— Logical/Physical Access | **Cisco Integration** | S+CC | Digital Media | VTG—Access Control via IP Phone

Media Trace | Auto Discovery | **Medianet** | Auto Configuration | Media Monitoring

Security | Health Monitoring | Quality of Service | **IP Network** | Auto Updates | Authentication

Cisco Physical Security Solution Portfolio

Why Cisco

Combining video surveillance, access control, and incident response, Cisco Physical Security solutions are easy to manage and easy to support. And because they're based on open standards, you can easily integrate Cisco solutions with products from Cisco partners to meet your specific requirements. With deployments in industries such as education, municipalities, transportation, airports and ports, retail, healthcare, and more, Cisco Physical Security solutions meet the uncompromising needs of today's safety and security professionals.

For More Information

For more information about Cisco Physical Security solutions, visit http://www.cisco.com/go/physec or contact your local Cisco account representative.

For more information about Business Video, visit http://www.cisco.com/go/businessvideo

For more information about Smart + Connected Communities, visit http://www.cisco.com/go/smartconnectedcommunities

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