

Cisco Physical Security for Retail Banking

Enabling a Collaborative Customer Experience

What You Will Learn

Physical security systems that effectively protect your assets, customers, and employees are central to your ability to compete and succeed. The Cisco® Physical Security for Retail Banking solution combines video surveillance, access control, and incident detection and response in a single, comprehensive solution. This document describes:

- The challenges posed by the aging, “siloesd” physical security systems on which most banks rely
- How Cisco Physical Security for Retail Banking can provide a more unified and intelligent solution
- Business benefits that go beyond security to improved efficiency and cost savings

Challenge

As prime targets for criminals, retail banks have always faced major inherent security challenges. But today, when banks are pressed to increase revenues, improve operational efficiency, and mitigate risk, defending against security threats is increasingly expensive. The primary culprit is a reliance on traditional surveillance and access control systems that are segregated, proprietary, and extremely costly to operate. Conventional bank security systems are:

- **Slow:** When banks rely on aging, analog video surveillance and access control systems, little automation or integration is possible. As a result, their incident response is based on manual, operator-driven monitoring and intervention, based on the ability of human beings to quickly recognize and respond to issues.
- **Siloesd:** Security systems for surveillance, access control, life and safety, paging, and more are typically proprietary, standalone systems. They are not easily interoperable, limiting their ability to support a coordinated incident response. And most physical security systems are deployed for a single facility, limiting a bank’s ability to manage security at multiple sites from a central location or to easily share video and security information.
- **Expensive:** Maintaining and operating aging, disparate analog systems requires significant manpower and expense at each bank location.

Because of these issues, physical security for retail banks has become an essential but constantly growing business cost. But what if security and surveillance could be a business enabler? Cisco has found a way to manage physical security so that it can actually reduce costs, improve employee productivity, and rationalize resources across dispersed branch locations, all while improving the effectiveness of incident detection and response. By linking video surveillance, access control, incident response, and other security technologies into a single, intelligent system, you can achieve all of this and unlock other benefits that extend far beyond security.

Cisco Physical Security for Retail Banking Solution

Cisco Physical Security for Retail Banking encompasses a comprehensive suite of IP video cameras and intelligent video surveillance, access control, and incident response solutions. It has six major components including hardware, applications, and services.

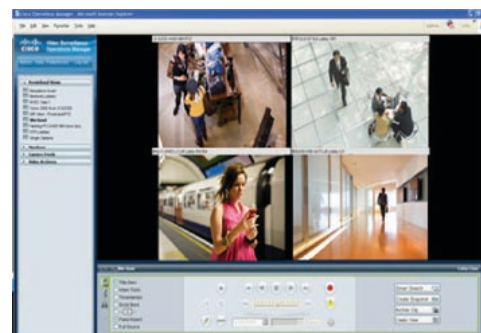
Cisco Video Surveillance IP Cameras are a broad portfolio of high-definition, standard-definition, and dome IP cameras. These cameras support:

- Anytime access to video from any location connected to the bank's network or the Internet
- Embedded security and networking features
- Day and night operation
- Motion detection and event notification
- Wireless capabilities
- Power over Ethernet (PoE) connectivity to simplify deployment by connecting and powering cameras with a single cable



Cisco Video Surveillance Manager provides a customized security and surveillance control system to meet the particular needs of your bank and branches. It lets you view and control live video from IP or IP encoder-connected analog cameras anywhere in your environment, as well as video from storage. The solution provides:

- Multisite and remote site video surveillance
- Intelligent video stream management, distribution, and archiving
- Low-latency, high-quality video streams
- Automatic event-based recording and video tagging
- An open, interoperable system that supports a broad range of cameras, video codecs, viewing platforms, and network topologies
- Comprehensive management of cameras, video servers, sites, and viewing interfaces
- Intelligent bandwidth management to deliver high-quality video streams over low-bandwidth branch connections (for example, its ability to stream and archive full 1080p-resolution high-definition video at 4 to 6 Mbps data rates is as much as 10 times more efficient than other solutions)



Cisco Physical Access Gateways connect door locks and card readers to the IP network and allow you to incorporate your existing physical security systems into your intelligent IP-based infrastructure. They provide:

- Control of up to thousands of doors
- Easy remote configuration through a built-in web server
- Support for offline operation if network connectivity is lost
- Ability to cache and encrypt up to 250,000 credentials per device
- Cisco Physical Access Manager is a comprehensive physical access management application that lets you configure hardware, enroll users, and monitor activity throughout the system. It provides:



- Support for a comprehensive list of access control policies
- Easy integration with other business IT systems, data stores, and third-party sensors
- Flexible reporting
- Ability to automatically link sensors to the relevant video feeds through built-in integration with Cisco Video Surveillance Manager

Cisco IP Interoperability and Collaboration System (IPICS) is an intelligent security resource management application that orchestrates media, resources, and information throughout your environment to optimize incident response activities. Cisco IPICS lets you automate communications to IP phones, push-to-talk media clients, radios, paging systems, and other communications systems across distributed locations and networks.

Cisco Threat Mitigation Services complement the rest of the Cisco Physical Security for Retail Banking solution with comprehensive services delivered by Cisco and leading global security service provider NSSC. These services can:

- Assess the vulnerability of your branch locations
- Evaluate your existing physical security systems and processes to identify vulnerabilities
- Provide expert system design, process design, and security force training

Business Benefits

Cisco Physical Security for Retail Banking is a comprehensive security solution for retail banks that boosts protection of your assets and customers, lowers operational costs, and improves return on investment (ROI) of your physical security systems. It delivers broad capabilities in video surveillance, electronic access control, and incident response through groundbreaking applications that converge voice, data, and physical security systems into a single, pre-integrated solution.

Cisco Physical Security for Retail Banking uses the IP network you already have in place as a flexible platform to build more collaborative and integrated physical security systems, while preserving your existing investments in analog-based technology. As you converge physical security infrastructures and operations into a single IP-based platform, your security personnel gain rapid access to relevant information across all security systems and the ability to make faster, better decisions. Cisco Physical Security for Retail Banking lets you:

- **Empower security personnel:** By converging previously siloed security systems into a networked, IP-based solution, you can make voice, video, and data available to anyone who needs it in real time, regardless of where people are located. Bank executives, security personnel, and local responders can obtain and share information for a faster, more collaborative response.
- **Enhance the effectiveness of security systems:** Because it is a standards-based IP system, Cisco Physical Security for Retail Banking is interoperable with many systems and devices. You can combine security and communications components from multiple vendors to provide security personnel with the most powerful tools available for identifying and responding to threats.
- **Improve security while protecting existing investments:** Cisco's IP-based security platform extends the value of your investment in Cisco network infrastructure at your branch locations. With the ability to integrate deployed analog surveillance and access control technologies, it also allows you to enhance your existing physical security systems without having to replace them.
- **Build a flexible physical security infrastructure:** As an open, standards-based IP platform, Cisco Physical Security for Retail Banking can grow and adapt to new technologies, processes, and threats over time. It allows you to evolve your security systems incrementally and provides long-term investment protection.

- **Realize powerful new capabilities beyond security:** Cisco Physical Security for Retail Banking extends your security and surveillance systems to support other business applications. For example, with its analytics package, you can use the same video cameras that are protecting your banks to analyze traffic patterns in branches and evaluate customer service and marketing initiatives. This type of creative use can significantly improve the return on your physical security investment.

Cisco Physical Security for Retail Banking encompasses:

- **Threat Detection:** An IP-based physical security solution connects your existing access control systems (such as door locks and card readers) to the IP network and supports integration with a wide range of sensors. It lets you capture video from all fixed or mobile sources, including Cisco IP video cameras and more than 500 third-party IP video and analog closed-circuit TV cameras. The intelligent Cisco Video Surveillance Manager application automatically detects suspicious events.
- **Threat Monitoring:** The solution lets you remotely control the angle, zoom, focus, and resolution of video cameras from anywhere. This enables you to monitor dozens or hundreds of branch locations in real time from a central security command center. The solution integrates video surveillance with other systems, such as door controls and the Human Resources database to automatically identify potential incidents (such as a fired employee trying to enter a locked facility) and alert security personnel. IP-based surveillance also lets you archive video to a central data center for instant access by anyone in the organization who requires it, whether to review a suspicious event or provide evidence for an investigation.
- **Threat Response:** The solution lets you instantly route and filter video streams to onsite personnel, your command center, and local law enforcement responders. You can also use the Cisco IP Interoperability and Collaboration System (IPICS) to create rules to trigger automatic responses to specific events. For example, if the system detects a break-in after hours, it can immediately begin pushing alerts and video footage to all relevant bank executives, security personnel, and local responders. As an open, IP-based system, Cisco Physical Security for Retail Banking supports real-time information-sharing and collaboration across PCs, IP phones, cell phones, handheld radios, and even digital signage systems.

Together, these capabilities provide unified command and control of your physical security operations and support faster, better-coordinated response to any security threat. Consider the following examples of how Cisco Physical Security for Retail Banking can improve threat detection and response:

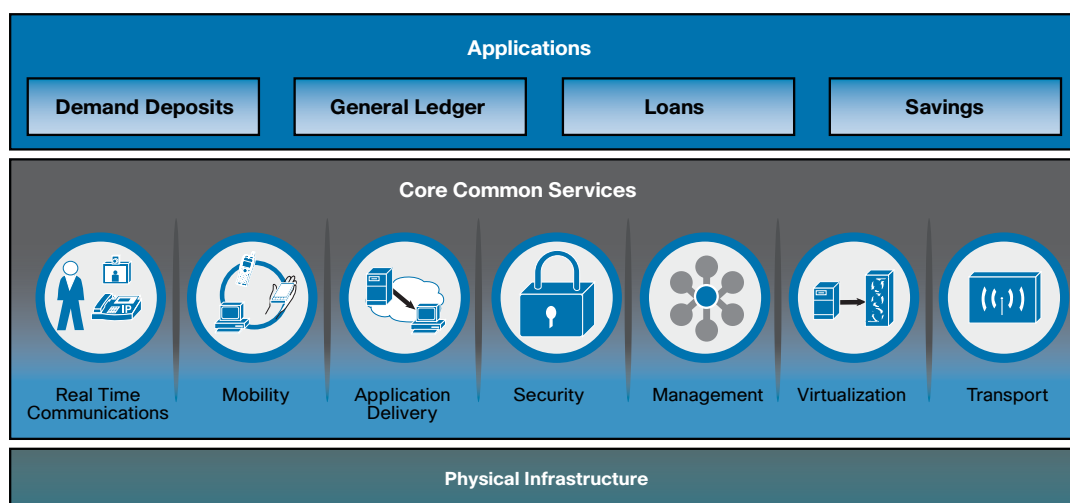
- A gas sensor recognizes a leak and triggers automatic incident notification to the IP phones of key personnel.
- A third-party gunshot sensor recognizes that a gun has been fired in a branch location. The security system immediately alerts bank security personnel and local law enforcement, and automatically activates a building evacuation plan. Evacuation instructions are sent to all employees on their IP phones and broadcast to customers on digital signs.
- An employee activates a silent alarm indicating a crime in progress. Live video surveillance footage is immediately pushed out to handheld appliances and mobile phones of security personnel and local law enforcement.
- Video analytics software monitors traffic on the branch floor and sends text alerts to bank staff when a customer is unattended.

A Common Services Architecture

Your network plays a central and vital role in your business. It is the platform that connects all the components of the IT infrastructure that supports your customers, employees, applications, and services. A well-designed network architecture protects your business profitability and helps ensure that your business strategy and IT investments are aligned.

The Cisco common services framework is an open framework for all network-based services used by enterprise applications. This framework includes the applications that support your organization's processes, the core common network services (such as security and wireless mobility) that those applications employ, and the physical infrastructure that delivers them (Figure 1). By maintaining a pool of core common services to support all applications, this model provides an adaptable and efficient technology platform for your business. For example, instead of individual applications such as video surveillance, loan origination, and digital signage operating as self-contained entities, a Cisco network architecture delivers all applications over a common infrastructure, drawing on common resources for security, mobility, and other services.

Figure 1. Cisco Common Services Framework



By building your IT platform upon a network architecture that dynamically and intelligently invokes common services as required, you can help ensure optimal performance of all applications, reduce operating expenses, embed security throughout your entire infrastructure, and make the most of your technology investments.

Why Cisco?

The Cisco Physical Security for Retail Banking solution is part of the Cisco Collaborative Customer Experience solution portfolio, a suite of next-generation business solutions designed for retail banks. Collaborative Customer Experience solutions combine technologies from industry-leading partners in the financial services industry with proven Cisco networking and communications technologies to provide a pre-integrated, robust retail banking solution. Cisco can provide:

- Proven expertise in converged voice, video, and data networking to provide interoperability and functionality in physical security systems
- A groundbreaking open API model that allows the solution to interoperate with thousands of third-party cameras, sensors, and applications and provides a true “best-of-breed” solution
- Tight integration of security applications, devices, and your IP network to enable more effective event monitoring, collaboration, and incident response
- Intelligence that extends throughout your security infrastructure to automate incident detection and response
- Integration of existing security systems and devices in your branch locations to protect your investment

For More Information

For more information about Cisco Physical Security for Retail Banking, visit <http://www.cisco.com/go/psforrb> or contact your local Cisco account representative.



Americas Headquarters
Cisco Systems, Inc.
San Jose, CA

Asia Pacific Headquarters
Cisco Systems (USA) Pte. Ltd.
Singapore

Europe Headquarters
Cisco Systems International BV
Amsterdam, The Netherlands

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