



What Is a Cisco Integrated Services Router?

Cisco Systems® is redefining best-in-class enterprise routing with a new series of routers optimized for secure, wire-speed delivery of concurrent data, voice, and video services.

Founded on 20 years of leadership and innovation, Cisco® Integrated Services Routers intelligently embed data, security, and voice services into a single, resilient system for fast, scalable delivery of mission-critical business applications.

With up to five times service densities, up to nine times performance, and up to four times the memory of previous routers, Cisco Integrated Services Routers are the first to provide both the performance and reliable packet delivery necessary to scale real-time applications for all customers, from small businesses to large enterprises, and managed service providers.

How Can the Cisco Integrated Services Router Improve My Communications Experience?

According to research, what people say and how they say it comprise 45 percent of the total impression of an average conversation—the remaining 55 percent comes from body language. Therefore, voice-only meetings are significantly less effective than live video communications. Video services enable an organization to reduce the costs and inconvenience of travel, speed the decision-making process, focus attention on the matter being discussed, help bridge cultural and language barriers, and ultimately make an organization more effective.

As key components of the Cisco Unified Communications systems, Cisco Integrated Services Routers include a compelling set of embedded video services.

As the first company to offer a converged voice, video, security, and data solution engineered from the beginning for wire-speed concurrent services, Cisco delivers

to customers of all sizes the unified communications and security services and densities they need, specifically sized for their data requirements.

Cisco Integrated Services Router platforms embed video functions directly inside the router, enabling customers to deploy advanced services simply by installing digital signal processors (DSPs) for video gateways. For video call processing, customers can enable the company's award-winning Cisco Unified CallManager Express solution as part of Cisco IOS® Software, and easily reconfigure the same software at any time to support Cisco Survivable Remote Site Telephony (SRST) for centralized call processing with Cisco Unified CallManager, the industry's leading solution for enterprise-class unified communications with video.

New Integrated Systems Architecture

Cisco Integrated Services Routers use a high-performance, integrated systems architecture that maximizes flexibility, helping customers tailor network services to specific, evolving needs.

Embedded Functions

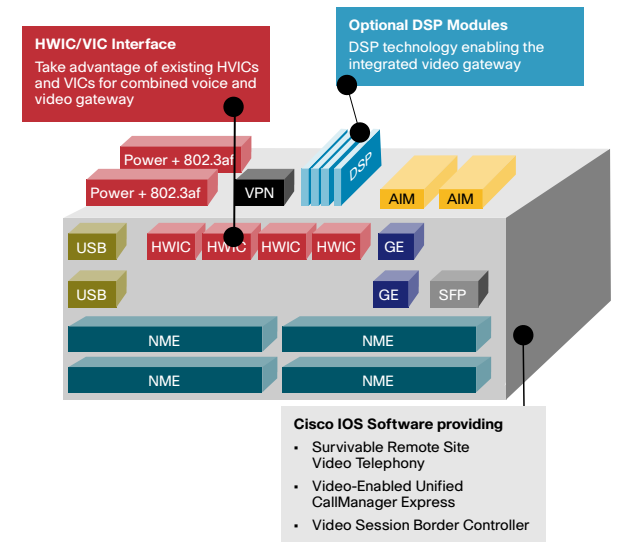
- High-performance centralized processor
- Voice and video capabilities woven into motherboard fabric
- Connectivity options (Fast Ethernet, Gigabit Ethernet, USB, console, and auxiliary ports)

Modular Motherboard Functions

- DSPs, Power over Ethernet, and multifunction advanced integration modules (AIMs)

High-Performance Intelligent Interfaces

- Mission-specific service modules and WAN interfaces



Integrated Services Routers Video Services

Video services on the integrated services router platforms consist of video-enabled Cisco Unified CallManager Express, Cisco Unified Survivable Remote Site Telephony with Integrated ISDN Video Gateway, and Cisco Video Session Border Controller. The Cisco Integrated Services Router platforms are ideal platforms for implementing video services in enterprise branch offices and small and medium-sized businesses. Their ability to deliver wire-speed video services is the result of a high-performing processor, innovative analog and Basic Rate Interface (BRI) interface capabilities, embedded modular DSPs, and advanced video telephony services such as Cisco Unified CallManager Express. With room for services growth and scalable options for integrated modularity, Cisco Integrated Services Router platforms are the platforms for video services that protect future investments.



More Concurrent Services

This new architecture allows more security services to run concurrently at wire speed with data, voice, and video routing, helping ensure greater security for your network, endpoint workstations, and information. With wire-speed performance, there is no compromise when video and additional services are “turned on”. This capability helps organizations roll out video services to new and existing systems.

Video-Enabled Cisco Unified CallManager Express

Cisco Unified CallManager Express provides call processing for Cisco IP phones for small- or branch-office environments. It enables the large portfolio of Cisco Integrated Services Routers to deliver unified communications features that are commonly used by business users to meet the voice and video communications requirements of the small or medium-sized office.

Cisco Unified CallManager Express enables the deployment of a cost-effective, highly reliable communications system using a single Cisco Integrated Services Router using Cisco IOS Software.

IP telephony is currently undergoing tremendous growth, accelerated by access to value-added features and applications only IP telephony can provide to the end user. Additionally, the cost benefits of converging data, voice, and video onto a single network are adding to the rapid acceptance of this technology. Because it is

integrated into a router, the video-enabled Cisco Unified CallManager Express enhances the advantages of convergence.

Cisco Unified Survivable Remote Site Video Telephony

The Cisco Unified Communications system uses Cisco Unified CallManager in combination with Cisco Unified Survivable Remote Site Telephony (SRST), which is embedded within Cisco IOS Software, to help provide high-availability IP telephony to branch offices. When access to Cisco Unified CallManager from the branch office is impeded, for example, as a result of a WAN link failure, Cisco Unified SRST provides voice and video telephony backup services to help ensure that the branch office has continuous telephony service over the Cisco network infrastructure deployed in the branch. To provide the video survivability services, an ISDN H.320 video gateway function has been added to the existing voice DSP and interface technology on the integrated services router platform. This new gateway function allows for video calls to use the existing ISDN interfaces for simultaneous and ISDN video functions. The enhanced reliability provided by Cisco Unified SRST makes the Cisco Unified Communications system a cost-effective solution to help ensure telephony operation to all users in an organization, whether they are located in the headquarters or in a branch office.

Video Service for the Cisco Session Border Controller

The Cisco Multiservice IP-to-IP Gateway is a session border controller (SBC) that interconnects independent IP networks for data, voice, and video transport. SBCs are critical components for scaling networks from islands within a single customer network to an end-to-end IP community. The Cisco Multiservice IP-to-IP Gateway is an integrated Cisco IOS Software application that runs on the Cisco 2800 Series and 3800 Series Integrated Services Routers (ISRs).

Why Cisco?

Cisco Integrated Services Routers extend integrated services to businesses of all sizes and redefine best-in-class enterprise routing with new products engineered for secure, wire-speed delivery of concurrent data, voice, and video services.

For More Information

<http://www.cisco.com/go/routing>