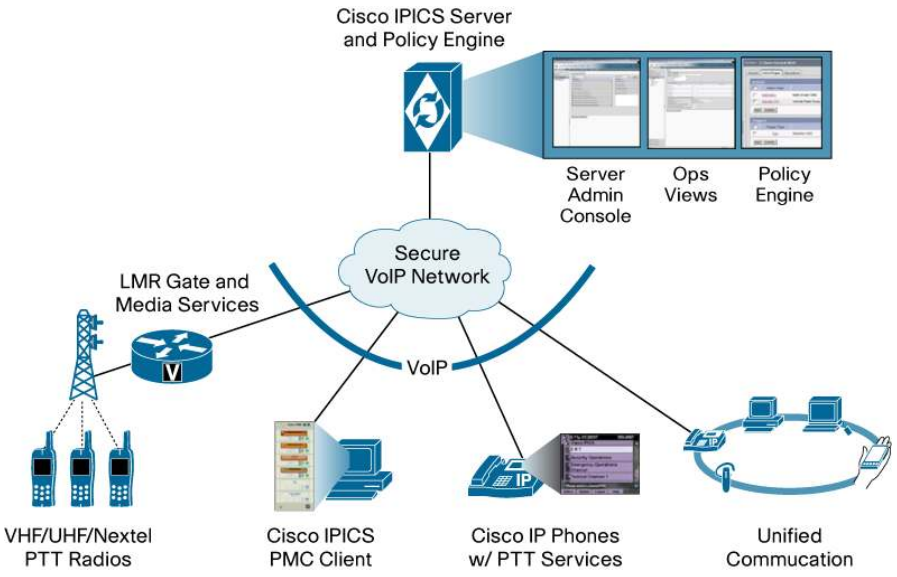
Cisco IPICS Release 2.2: Support for Sprint Nextel and EF Johnson Serial Radio Control

The Cisco® IP Interoperability and Collaboration System (IPICS) solution helps organizations streamline daily operations and rapidly respond to safety incidents and emergencies. Cisco IPICS helps to remove the communication barriers between disparate land mobile radio (LMR) systems, mobile phones, landline phones, voice-over-IP phones, and PC clients, building a standards-based interoperable communication network. IPICS supports an embedded policy engine so that when an incident occurs, users can be paged or emailed and can be automatically joined to a virtual push-to-talk conference. This further improves situation awareness and reduces response time.

Cisco IPICS provides flexible and scalable communications interoperability, enhancing the value of existing and new radios, telephony, and IP communications networks. It takes full advantage of open IP standards and the IP network infrastructure for greater resiliency, scaling, and security, and is part of a complete communications solution for organizations of all sizes (Figure 1).

Figure 1. Cisco IPICS



PC-Based Dispatch Console Serial Radio Control

Cisco IPICS Release 2.2 introduces the serial radio control feature, supporting remote control of EF Johnson radios and iDEN handsets (iDEN being the technology behind Sprint Nextel and other push-to-talk services). Users working from either the IPICS web-based administration console or the IPICS PC-based Dispatch Console Client (PMC) can remotely control radio functions such as secure transmit mode; scan, monitor, and change channels or talk groups; and initiate private (unit-to-unit) calls and dynamic group calls. With Cisco IPICS Release 2.2, the solution can also detect changes in radio state, including talker ID and emergency.

When combining these new features with existing Cisco IPICS radio integration capabilities, the IPICS solution provides a flexible dispatch platform that enables dynamic push-to-talk

communications between P25, SmartNet/SmartZone, and Sprint Nextel users, as well as any user joining from an IPICS PMC, IP phone, cell phone, wireline phone, or legacy LMR network. While many solutions deliver basic talk group and channel cross-connect capabilities, Cisco IPICS delivers true IP-based dispatch capabilities that are more flexible and cost effective than today's expensive legacy dispatch consoles.

Using IPICS serial radio control, dispatchers can initiate a Sprint Nextel dynamic group call, add a P25 talk group, and add telephony and PC users into a single ubiquitous push-to-talk channel, thereby eliminating traditional dispatch communication boundaries. These dispatch console features surpass even those found on many higher-priced legacy consoles.

As the overall solution director, the Cisco IPICS Server manages user security, user privileges, and radio assignments so that radio resources are available to the right people at the right time. The IPICS PMC provides the IP-based dispatch interface from which dispatchers gain access to the new Sprint Nextel and EF Johnson serial radio control capabilities. The IP network provides the infrastructure that removes boundaries between the different radio networks, essentially creating a new LMR push-to-talk system that supports P25, Sprint Nextel, SmartNet/SmartZone, and analog and digital radios (e.g., UHF, VHF, 700–800 MHz), as well as new nontraditional telephony users.

Product Features and Benefits

Sprint Nextel Serial Radio Control (Figure 2)

- Channel / talk group select
- Private unit-to-unit call
- Dynamic group call
- Talker ID
- Radio reserve
- Call alert
- Traffic indicator

Figure 2. Sprint Nextel Serial Radio Control Interface

EF Johnson Serial Radio Control (Figure 3)

Note: Specific feature support depends upon the radio network.

- Channel / talk group select
- Control of the following radio controls:
  - Monitor
  - Repeater/talkaround
  - Scan
  - Secure Transmit Mode
  - Emergency
  - Transmit power
- Talker ID
- Emergency detection
- Radio reserve
- Transmit/receive traffic indicator

Figure 3. EF Johnson Serial Radio Control Interface

Product Specifications

Software on CD for new Cisco IPICS 2.2 Server installations includes:

- Cisco IPICS Operating System
- Cisco IPICS Server Software with the following components:
  - Cisco IPICS Administration Console
  - Cisco IPICS PMC
  - Cisco Security Agent

For performance specifications and a complete list of supported hardware and software, refer to the Cisco IPICS Compatibility Matrix at http://www.cisco.com/en/US/products/ps7026/tsd_products_support_series_home.html.

Cisco IPICS Server is also supported on mobile platforms, through a Cisco certified systems integrator. For additional details, please contact your Cisco sales representative or refer to the Cisco IPICS Mobile Platform at-a-glance at http://www.cisco.com/en/US/prod/collateral/ps6712/ps6718/product_data_sheet0900aecd80603289.pdf

Licensing Information

The Cisco IPICS serial radio control feature requires a channel / radio port license for each serial controlled radio (Table 1).

Ordering Information

The Cisco IPICS Server base software includes support for Cisco IPICS PMC clients, Cisco IPICS phone clients for Cisco Unified IP Phones, channel ports, virtual talk groups (VTGs), operational views, and the new serial radio control feature. As your organization's needs evolve, you can purchase additional licenses to grow and scale deployments as needed.

Table 1 gives ordering information for the Cisco IPICS Server base software and individual components. Additional value bundles of these components are available. To place an order, visit the Cisco Ordering Home Page. To download software, visit the Cisco Software Center.

Table 1. Ordering Information

Product Name	Part Number
Cisco IPICS Release 2.2 software and licenses, including licenses for: • 50 Cisco IPICS VTGs • 4 Cisco IPICS Channel/Radio Ports • 4 Cisco IPICS PMC Clients • 10 Cisco IPICS IP Phone Clients • 2 Cisco IPICS Operational Views	CIS-IPICS2.0-K9(=)
Cisco IPICS Policy Engine for Cisco IPICS Release 2.2 or later	CIS-IPICS-PM1-K9(=)
Cisco IPICS Policy Engine Dial Port for Cisco IPICS Release 2.2 or later	CIS-VIP-DIAL(=
Cisco IPICS VTG for Cisco IPICS Release 2.2 or later	CIS-VIP-VTG(=)
Cisco IPICS Channel/Radio Port for Cisco IPICS Release 2.2 or later	CIS-VIP-CHNL(=)
Cisco IPICS IP Phone Client License for Cisco IPICS Release 2.2 or later	CIS-PHN(=)
Cisco IPICS PMC Client for Cisco IPICS Release 2.2 or later	CIS-PMC-K9(=)
Cisco IPICS Operational Views for IPICS Release 2.2 or later	CIS-OPSVIEW2(=)

Service and Support

Using the Cisco Lifecycle Services approach, Cisco and its partners provide a broad portfolio of end-to-end services and support that can help increase the business value and return on investment for your network. This approach defines the minimum set of activities needed, by technology and by network complexity, to help you successfully deploy and operate Cisco technologies and optimize their performance throughout the lifecycle of your network.

For More Information

For more information about Cisco IPICS, visit http://www.cisco.com/go/ipics or contact your local Cisco account representative.

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