Cisco IPICS Dispatch Console

The Cisco IP Interoperability and Collaboration System (IPICS) solution simplifies daily radio dispatch operations, and allows organizations to rapidly respond to incidents, emergencies, and facility events.

IPICS dissolves communication silos between disparate land mobile radio systems and devices such as mobile phones, landline phones, IP phones, and PC clients-users. This supports interoperable communications among users of all devices, wherever they are located. IPICS provides flexible and scalable communication interoperability that enhances the value of existing and new radio, telephony, and IP communications networks.

Features and Benefits

The Cisco IPICS Dispatch Console is a state-of-the-art, end-to-end radio dispatching solution designed for mission-critical radio communications. The Dispatch Console client is the vital link between dispatchers and field personnel, helping coordinate field response and helping to ensure personnel safety. Built on IPICS technology, it extends existing push-to-talk (PTT) radio channels or broadcast networks, so that users with a variety of communication devices, such as landline phones, cell phones, IP phones, and satellite phones, can share information and participate in an event. The Dispatch Console simplifies daily operations, and allows organizations to respond to incidents and emergencies rapidly.

The Dispatch Console provides control of radio resources through an easy-to-use on-screen interface. It allows users to monitor and coordinate incident management responses for emergencies and day-to-day operations across multiple agencies, jurisdictions, departments, and incompatible radio systems.

Command and control tactical dispatchers do not have to rely on multiple portable radio units to dispatch from the field. Instead, they can be equipped with a laptop PC that provides full dispatch console functionality. An intuitive GUI provides access to the following radio features:

- Push to Talk (PTT)
- Select/unselect/deselect channels
- Select and unselect audio speakers
- On-screen volume controls
- Channel patching
- Receive and transmit on-screen indicators for channel activity
- Handset, headset, or desktop microphone operation
- Individual channel mute/all mute
- All talk
- Instant recall recording per channel
- Last call transmit
- Alert tones
- Channel multi-select

- Confirmation tones for trunked systems
- Unit ID/talker ID
- Emergency alert/acknowledge
- Coded/clear channels
- Loop prevention
- Frequency select
- Integrated 10-line telephone dialer
- Direct outbound dial
- Incident creation and management
- Serial radio control
- Local multicast operation
- Remote Session Initiation Protocol (SIP) operation
- P25 Supplemental Services (group calls, individual calls, emergency calls, call alert, radio check, radio detach, radio inhibit/uninhibit, radio unit monitor, short message, and status query)
- P25 clear/encryption selection

Figure 1. Cisco IPICS Dispatch Console

The Cisco IPICS Dispatch Console integrates with virtually any analog or digital radio system, to support dynamic PTT communications. It is compatible with almost any dispatch operation that requires radio interoperability, including public safety, homeland security, emergency operations centers, defense, and physical security environments.

The Dispatch Console also introduces rich media incident management support, giving dispatchers the power to consolidate information relating to an incident and instantly share it among participants. Incident Dispatch helps enable the sharing of multimedia data, including the following:

- Live video sent from surveillance cameras, access control gateways and mobile clients
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- Archived videos, such as Flip
- Photos
- Alarm monitoring
- Journal and live statuses
- Website links to resources, such as FEMA and hazardous material databases, standard operating procedures, and maps

When dispatch consoles reach their end-of life and parts become difficult to find, it is important to move to a state-of-the-art dispatch console that takes advantage of current technology and is ready for future advances. The Cisco IPICS Dispatch Console provides numerous benefits, including:

- **Comprehensive feature set**, supporting the features important to a dispatcher, on an IP-based application
- **Disaster recovery mobility**, as this PC-based application moves with the user anywhere there is an IP network, unlike a legacy dispatch console that stays where it is installed
- **Radio interoperability and beyond**, as it supports multi-agency talkgroups, talkgroups between disparate radios, and talkgroups that include radios, PCs, phones, cell phones, and IP phones
- **Rich media incident management**, as it moves beyond audio to support rich media talkgroups and a new generation of mobile endpoints
- **Integrated policy engine**, giving dispatchers a new set of tools that simplify notification and improve response time
- **Smooth evolution to P25, Tetra and other radio protocols**

The Cisco IPICS Dispatch Console comes in two versions; Silver and Platinum. The Silver version provides a simple user interface, and supports basic radio and incident dispatch functions. The Platinum version includes patch capabilities, integrated telephone, incident management, and policy management support.

Minimum PC Requirements: Audio Only

Microsoft Windows XP Professional (SP3)

Microsoft Windows 7 Professional or Enterprise

Up to four active channels:

- 800 MHz Pentium III, including Mobile Pentium
- 512 MB RAM 1 GB free space
- Network Interface Card (NIC)

Up to six active channels:

- 1.5 GHz Pentium IV, including Mobile Pentium
- 512 MB RAM, 1 GB free space
- NIC

Up to 50 active channels:

- 3.2 GHz Pentium IV, including Mobile Pentium
- 2 GB RAM 1 GB free space
- NIC

Minimum PC Requirements-Audio and Video

Microsoft Windows XP Professional (SP2)

Microsoft Windows 7 Professional or Enterprise

Up to six active channels and four video streams:

- CPU: Intel Core 2 Quad Q9650-3.0 GHz (HP xw4600 Workstation w/4 cores
- Memory: 4 GB DDR2 (3.5 GB usable)
- Graphics: ATI 4850 1 GB

Up to 36 active channels/six video:

- CPU: Intel Core 4 Quad Q9650-3.0 GHz (HP xw4600 Workstation w/8 cores-or equivalent
- Memory: 4 GB DDR2 (3.5 GB usable)
- Graphics: ATI 4850 1 GB

Licensing Information

The Cisco IPICS server checks the license count for concurrent Cisco IPICS Dispatch Console license usage. Each Dispatch Console client logged into the IPICS server consumes a license. If one user logs in to multiple Dispatch Console sessions from different PCs, that user will consume multiple licenses (one for each session). This means that the Dispatch Console can be installed on as many PCs as needed, and the licensing is based upon the sessions that are in use at any given time.

Ordering Information

Organizations can broadly deploy and install Cisco IPICS Dispatch Console clients on user PCs. As organization needs evolve, additional licenses can be purchased and added, thereby allowing customers to grow and scale deployments over time.

To place an order, visit the Cisco Ordering Homepage.

Table 1.   Ordering Information

Part Number	Description
CIS-IPICS-VM	Order this for a virtualized version of the IPICS system and structure all software as options to this part number.
CIS-CON4.0-SIL	Cisco Dispatch Console Silver License. Order one for each dispatch position option to a 1 RU MSP (CPS-MSP-1RU-K9) or a 2 RU MSP (CPS-MSP-2RU-K9) or as an option to the CIS-IPICS-VM.
CIS-CON4.0-PLA	Cisco Dispatch Console Platinum License. Order one for each dispatch position option to a 1 RU MSP (CPS-MSP-1RU-K9) or a 2 RU MSP (CPS-MSP-2RU-K9), or as an option to the CIS-IPICS-VM.
CIS-IPICS4.X-UG	Cisco Dispatch Console Silver Upgrade License. Order this as option to a 1 RU MSP (CPS-MSP-1RU-K9) or a 2-RU MSP (CPS-MSP-2RU-K9), or as an option to the CIS-IPICS-VM.
CIS-NATIVE-IDC	Native Dispatch Position for end-to-end P25 encryption. Order one for each desired dispatch position to have end-to-end encryption. Order this as an option to a 1 RU MSP (CPS-MSP-1RU-K9) or a 2 RU MSP (CPS-MSP-2RU-K9), or as an option to the CIS-IPICS-VM.

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 your network's business value and return on investment (ROI). 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 account representative.