

Cisco IPICS Server

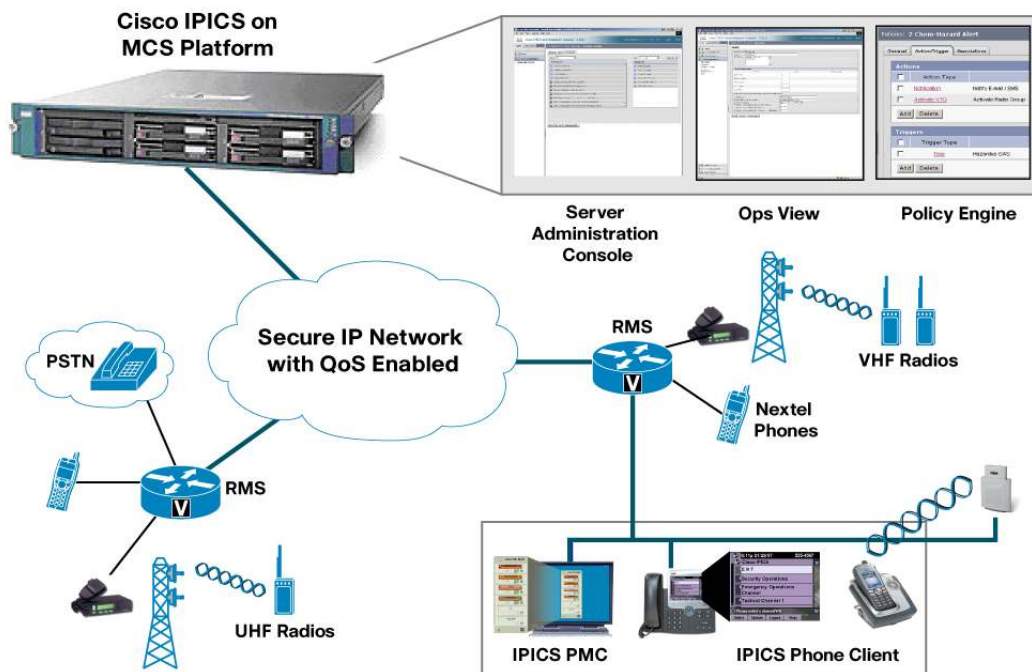
The Cisco® IP Interoperability and Collaboration System (Cisco IPICS) portfolio of products and applications streamlines daily operations and allows organizations to rapidly respond to incidents or emergencies. It dissolves communications silos between disparate Land Mobile Radio systems and devices such as mobile phones, landline phones, IP phones, and PC clients—users can communicate with whatever device they have, from wherever they are. Users can be paged or emailed with the status of an event, and can be automatically called and invited to join a virtual conference, further improving situation awareness and reducing response time. Cisco IPICS provides flexible and scalable communications interoperability, enhancing the value of existing and new radio, telephony, and IP communications networks.

The Cisco IPICS Server is the conductor of the Cisco IPICS system. Agency personnel use the Cisco IPICS Administration Console, a Web-based graphical user interface, to dynamically manage system resources and orchestrate interoperable communications. The Cisco IPICS Server is used to create virtual talk groups (VTGs) to facilitate Push-to-Talk (PTT) communications between users of multiple types and technologies of Land Mobile Radios with users of PCs, landline phones, cellular and Nextel phones, and Cisco Unified IP phones. This function delivers critical communications interoperability between, and beyond, the boundaries of traditional systems.

The Cisco IPICS Server is a security-enhanced, Linux-based platform installed on select Cisco 7800 Series Media Convergence Servers, a family of proven and reliable hardware platforms that you can deploy in mobile command units or in headquarters, branch offices, or operations centers. Other Cisco IPICS system components include the Cisco IPICS Push-to-Talk Management Center (PMC), Cisco IPICS Phone Client, Cisco IPICS Operational Views (Ops Views), Cisco Land Mobile Radio (LMR) gateways, Router Media Service (RMS), and Session Initiation Protocol (SIP) telephony gateways.

Cisco IPICS is a systems-level, network-based solution for voice interoperability. It takes full advantage of open IP standards and 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 Solution

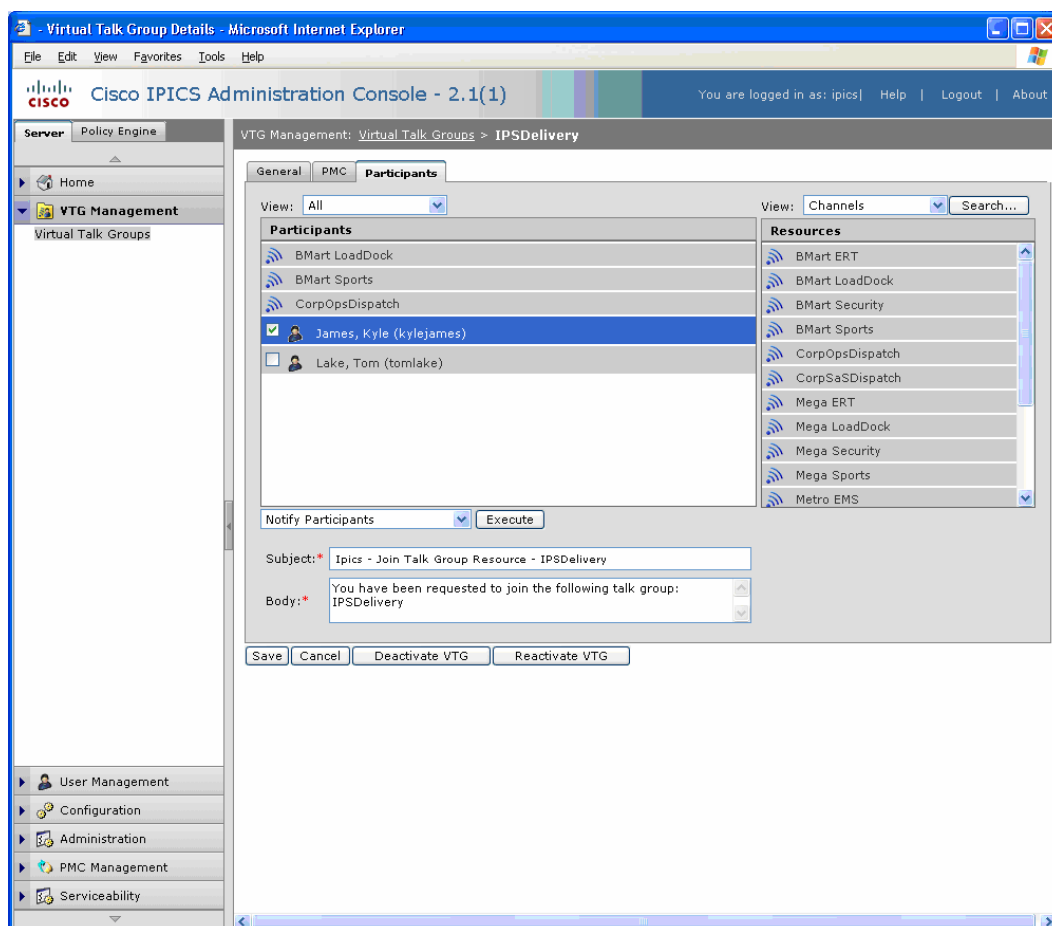


Product Features and Benefits

- **Enhanced incident management:** The Cisco IPICS Server Administration Console provides a Web-enabled, easy-to-use interface for orchestrating communications across devices, technologies and locations (Figure 2). The dispatcher can combine resources, including users and channels, to create Virtual Talk Groups (VTGs) and can quickly add or remove resources depending on incident status. For example, a VTG can combine an 800MHz Project 25 digital radio channel with a VHF analog radio channel, several PC-based Cisco IPICS PMC users, and several Cisco IPICS IP phone users. When the Cisco IPICS Policy Engine is used, telephone participants can also be included in the VTG, and the dispatcher can send notifications and automatically call and invite VTG participants on an as-needed basis.
- **Role-based management:** The Cisco IPICS Server provides compartmentalized functions for personnel who need to perform different roles. When you are added to the system, you are assigned a role that defines your access privileges. You can change your profile at any time. The following roles, including an “all roles” assignment, are supported:
 - **System administrator:** The system administrator configures the server and its features, manages Cisco IPICS licenses and PMC versions, creates operational views, and monitors the status of the system and its users through the activity log files. The system administrator can administer all resources in the Cisco IPICS system.
 - **Operational views administrator:** The operational views administrator facilitates sharing of system resources and information across ownership and organizational boundaries. When two or more agencies, jurisdictions, locations, or departments need to collaborate, the operational views administrator enables each participating entity to maintain control of its resources.

- Operator: The operator is responsible for setting up, defining, and managing users, assigning user roles and access privileges, establishing predefined VTGs, and setting up policies to automate standard operating procedures for VTG activation and user notification.
- Dispatcher: The dispatcher uses the administration console to set up and activate VTGs to direct and coordinate communications for daily operations and during an event.
- User: Users represent individuals who need to communicate from any endpoint technology, including radios, PCs, IP phones, and public switched telephone network (PSTN) phones. While you are associated with system resources by the dispatcher, you can access the server to set up personal login information, download the PMC application, and specify communications preferences, such as telephone numbers, e-mail addresses, and preferred methods of contact. When necessary, you can be authorized to become a system administrator, operator, or dispatcher.

Figure 2. Cisco IPICS Server Administration Console, Showing the Participants and Resources Assigned to a VTG and the Ability to Execute a Notification to VTG Members



- License management: The administrator uses the Web-based interface of the server to manage Cisco IPICS feature licenses and to support upgrades or feature additions. Your organization can install the Cisco IPICS PMC Client and Cisco IPICS Phone Client on all devices, and yet pay only for the maximum number of client applications that it uses at any given time. The Cisco IPICS Server supports new features and modules through software upgrades.

- Centralized administration of Cisco IPICS PMC Clients and Cisco IPICS Phone Clients: Administrators can remotely update all users' client software with configuration changes, new information or resources, and modified privileges. Centralized administration avoids the time and expense of dispatching IT personnel to the field to update the software, simplifies version control and distribution, and accelerates service changes.
- Audit trail and log reports: The Cisco IPICS Server provides an audit trail for analysis, critique, and operations management. Detailed activity logging allows administrators to determine which user actions were performed and when they were performed.
- Powerful and easy-to-use Web interface: Authorized personnel can access the Cisco IPICS Server from any location by using a supported browser and a network connection.
- Systemwide status and serviceability: The administration console includes the serviceability dashboard, which shows Cisco IPICS system and resource information at a glance. To service the system, you can use built-in diagnostic tools, as well as a powerful database archival and retrieval tool for local or offsite recovery. You can manage the server hardware platform with standard network management tools, including the Simple Network Management Protocol (SNMP) with the associated MIB.
- Support for real-world deployments: The Cisco IPICS solution supports satellite networks and other high-latency, low-bandwidth networks, treating them as if they were local resources.
- Secure deployment: Security features of the Cisco IPICS Server application include a hardened Cisco Linux operating system, strong passwords, password expiration, and user account lockout after the maximum number of invalid login attempts. Cisco Security Agent software, installed on the server, detects anomalous application behavior that could indicate a security breach.
- Extensibility: You can extend Cisco IPICS Server functions at any time by adding modular components, including the Cisco IPICS Policy Engine, dial ports, and Cisco IPICS Operational Views. Refer to the Cisco IPICS product data sheets for more information.

Product Specifications

Software on CD for new Cisco IPICS 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 hardware and software supported for use with Cisco IPICS, 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 refer to the Cisco IPICS Mobile Platform at-a-glance at: http://www.cisco.com/application/pdf/en/us/guest/products/ps6718/c1650/cdccont_0900aecd80603289.pdf and contact your Cisco sales representative.

Licensing Information

Cisco IPICS has a flexible and easy-to-use integrated license management interface to manage licenses that are currently available, and includes an upgrade mechanism to facilitate expansion of current features and addition of new features. Supported feature licensing includes:

- Number of available Cisco IPICS Operational Views
- Cisco IPICS Policy Engine
- Number of enabled channel and radio ports
- Number of simultaneous-use VTGs
- Number of simultaneous-use dial ports
- Number of simultaneous-use Cisco IPICS PMCs (based on active sessions)
- Number of simultaneous-use Cisco IPICS IP Phone Clients (based on active sessions)

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, VTGs, and operational views. As your organization's needs evolve, you can purchase additional seat licenses or interoperability ports and add them to the system as upgrades, allowing your organization 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 2.1 Server software and licenses, including licenses for: <ul style="list-style-type: none"> • 50 Cisco IPICS Virtual Talk Groups • 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 2.1 or Higher	CIS-IPICS-PM1-K9(=)
Cisco IPICS Policy Engine Dial Port for Cisco IPICS 2.1 or Higher	CIS-VIP-DIAL(=)
Cisco IPICS Virtual Talk Group (VTG) for Cisco IPICS 2.1 or Higher	CIS-VIP-VTG(=)
Cisco IPICS Channel/Radio Port for Cisco IPICS 2.1 or Higher	CIS-VIP-CHNL(=)
Cisco IPICS IP Phone Client License for Cisco IPICS 2.1 or Higher	CIS-PHN(=)
Cisco IPICS PMC Client for Cisco IPICS 2.1 or Higher	CIS-PMC-K9(=)
Cisco IPICS Operational Views for IPICS 2.1 or Higher	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 the Cisco IPICS product and solution, visit:
<http://www.cisco.com/go/ipics> or contact your local Cisco account representative.



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