

## Cisco IPICS Policy Engine

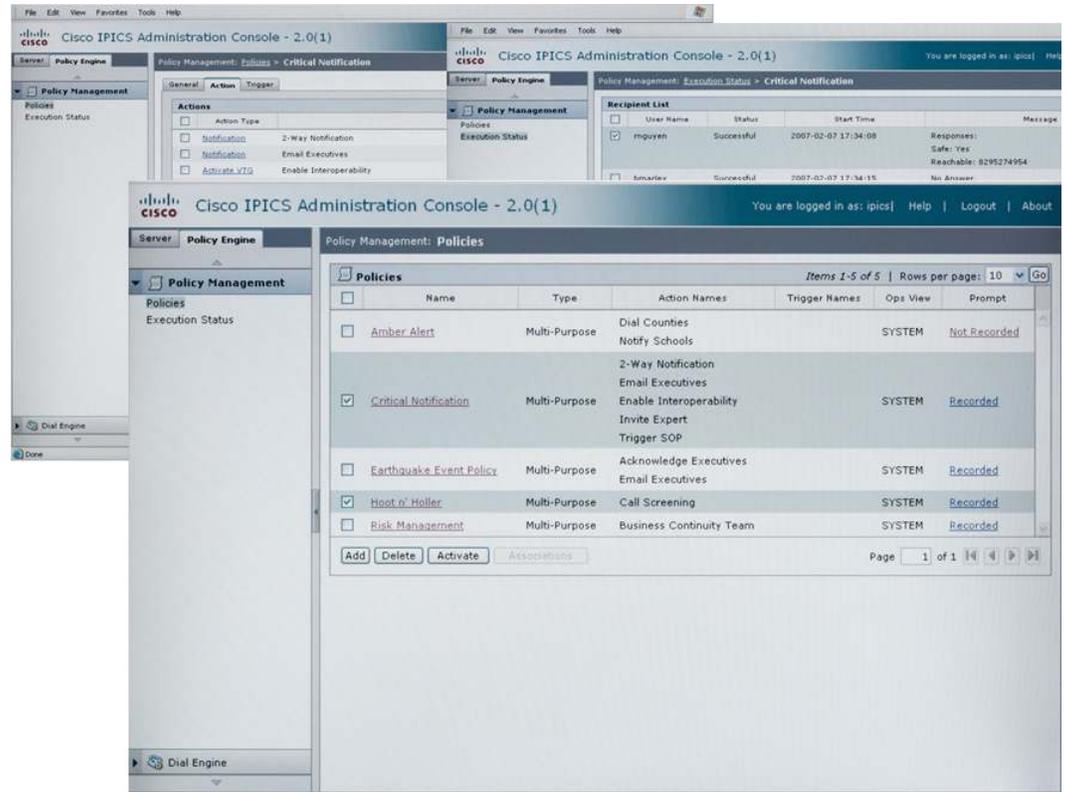
### Product Overview

Cisco® IPICS Policy Engine enables operations managers to create policies for standard operating procedures—including talk group establishment and user notification—and then activate those policies with a single click. Cisco IPICS Policy Engine also enables public switched telephone network (PSTN) dial-in and dial-out.

Capabilities include:

- **Policy definition:** The agency defines its policies using an intuitive, Web-based interface (Figure 1). Policies reflect standard operating procedures, including which groups need to communicate, when, and on what devices. A fire department, for example, might define separate policies for residential fires, hazmat response, and methamphetamine lab fires (Figure 1). The policy includes notification methods for each individual, including radio, cell phone, PSTN phone, Cisco Unified IP phone, Cisco IPICS Push-to-Talk Management Center (PMC) client, pager, e-mail, or Short Message Service (SMS) text message. (Some notification methods require a Simple Mail Transfer Protocol [SMTP] gateway.)
- **One-click policy invocation:** When an incident occurs, the dispatcher or Cisco IPICS administrator can activate the policy from any Web browser—in the command center, another building, or even from home. Dispatchers who do not have access to the Web can activate the policy from a phone by dialing a number and then entering the code for that policy. Policies can also be activated automatically at a certain time of day—when an agency conducts a drill, for example. When the policy is activated, the Cisco IPICS Policy Engine automatically:
  - Notifies each participant
  - Sets up a virtual talk group; personnel who dial in with cell phones or PSTN phones enter an authentication code; the policy can stipulate that certain participants be included in listen-only mode
- **Notification tracking:** The Cisco IPICS Policy Engine keeps a record of notification status so that the dispatcher can determine which people were reached and are available. For example, personnel might enter “1” on their keypads if they are available or “2” if they are not available. Real-time notification tracking helps incident commanders determine whether more personnel are needed from outside the area.

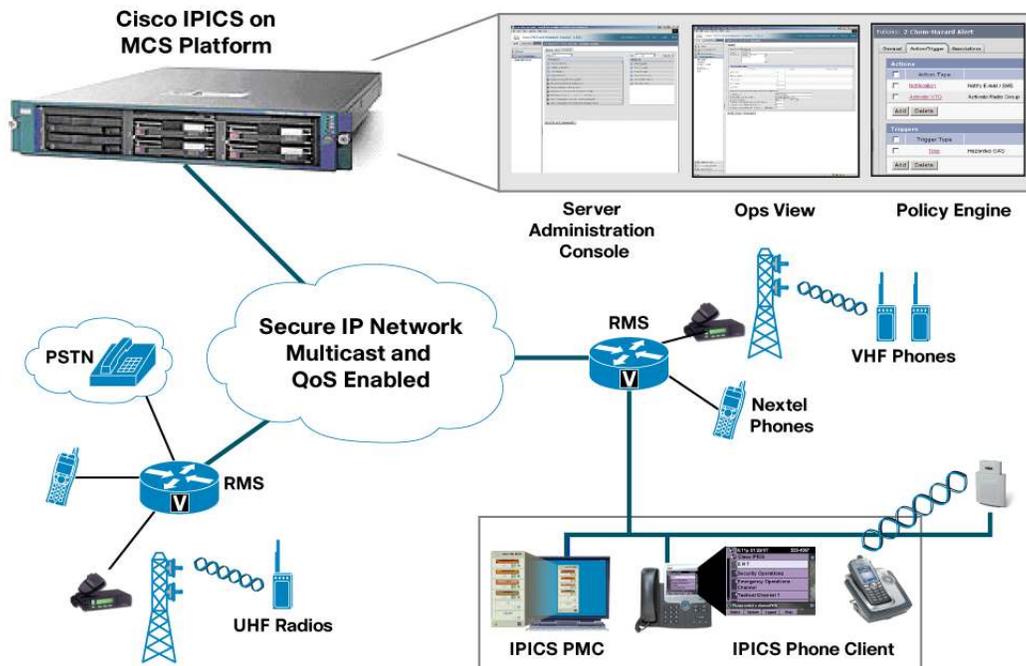
**Figure 1.** One-Button Activation of Predefined Incident Communications Plans



The Cisco IPICS Policy Engine was designed to meet stringent security requirements. Before admitting callers to a virtual talk group, the policy engine validates that they are calling from a phone number that has been added to the system, and then authenticates the user based on a password. Organizations that want to override the security features to patch in one-time participants—such as an expert on a certain type of hazmat spill or infectious disease—can customize Cisco IPICS Policy Engine to meet the need.

Cisco IPICS Policy Engine is an integral component of Cisco IPICS, an intelligent resource management tool that controls media and information. Other components of Cisco IPICS include Cisco IPICS Operational Views (OpsViews), Cisco IPICS PMC, Land Mobile Radio (LMR) gateways, Router Media Service (RMS), and Cisco Unified IP phones. Figure 2 shows the role of Cisco IPICS Policy Engine within the Cisco IPICS architecture.

**Figure 2.** Cisco IPICS Components



## Applications

### Extending Access Outside the Radio Range

With the ability to dial out to PSTN phones and cell phones, dispatchers can patch in personnel who are outside of radio range, including off-duty personnel and Department of Homeland Security agencies such as the FBI and Drug Enforcement Administration.

### Automating Notification Processes

Cisco IPICS Policy Engine replaces manual notification processes, which often require a dispatcher to refer to a binder or database to identify the appropriate participants and then call each one sequentially. Automating notification shortens the time needed to assemble the response team.

### Activating an Incident-Response Policy Remotely

An authorized dispatcher or incident commander can activate a preestablished policy—including notification and talk group establishment—from any Web browser or phone.

### Enabling Notification Even if the Radio Channel Is Overloaded

The Cisco IPICS Policy Engine provides guaranteed message delivery using multiple channels, including cell phones, paging, and e-mail, enabling first responders to share crucial incident details with command even if the radio channel is overloaded during an emergency.

### Enabling Silent Notification and Message

When personnel need to operate silently, they can continue to send and receive communication from command using SMS text messaging.

## Including Agencies Not Connected to the IP Network

Personnel from agencies that are not connected to the IP network, including emergency medical services (EMS), can join the channel using a PSTN phone or cell phone. They simply dial the number of the channel and then enter a code to authenticate. This capability enables interagency collaboration on coordinated events even if the infrastructure has not been previously set up.

## Features and Benefits

Primary benefits of the Cisco IPICS Policy Engine follow:

- Enhancing policy management and compliance with standard operating procedures: An authorized administrator, dispatcher, or operator can use a single, intuitive Web interface, from any connected PC, to create, modify, and activate policies and check their execution status.
- Automating manual notification processes: With the click of a single button, the operations manager or dispatcher can initiate notification policies such as sending e-mail to 100 users and dialing 50 others.
- Facilitating multiagency collaboration: Dispatchers can patch in personnel using any radio system, IP phones, the Cisco IPICS PMC client, cell phones, and PSTN phones.
- Supporting distributed command and control: The dispatcher can activate policies from any Web browser or preauthorized phone.
- Accelerating notification: Policies can stipulate notification through automatic dialing, e-mail, SMS messages, or pager notification, all initiated at the same time.

Other features and benefits appear in Table 1.

**Table 1.** Features and Benefits

Features	Benefits
<b>Integrated telephony user interface (TUI)</b>	Enables personnel using PSTN phones and cell phones to join virtual talk groups
<b>Unified interface for notification, virtual talk group activation, dial-out, and adding participants</b>	Simplifies operations and reduces training requirements
<b>Real-time presence information for virtual talk groups</b>	Provides an audit trail of user activities on the Cisco IPICS Policy Engine and included dial engine, accessible from the Cisco IPICS Administration Console
<b>Virtual talk group management controls</b>	Enables more efficient communications by allowing dispatcher or incident commander to moderate virtual talk groups by muting, un-muting, and terminating dial-in call sessions
<b>User notification preferences: device, phone number, and so on</b>	Improves the speed and efficiency of user notification
<b>Queued and pool-based simultaneous and critical notification capability</b>	Accelerates notification; note that e-mail, SMS, and pager-based notification requires an SMTP gateway
<b>Session Initiation Protocol (SIP) support</b>	Protects investment by ensuring interoperability with current and future SIP-compliant network components, including Cisco Unified CallManager and Cisco Unified CallManager Express
<b>Spoken name prompt used with PSTN dial-in and dial-out</b>	Increases security by asking personnel who join talk groups with cell phones or PSTN phones to confirm their identity after entering their authentication code
<b>Dual tone multifrequency (DTMF)-based policy triggers</b>	Allows dispatchers to trigger predefined policies using a phone
<b>Support for custom scripts</b>	Enables customized security or notification requirements, with assistance from Cisco Advanced Services or Cisco Advanced Technology Partners

## Product Specifications

**Table 2.** Product specifications for Cisco IPICS Policy Engine

Item	Specification
<b>Product compatibility</b>	Linux operating system and Cisco IPICS Server 2.0
<b>Software compatibility</b>	Cisco IPICS 2.0(1)
<b>Protocols</b>	SIP trunk, SMTP, and HTTPS
<b>Components</b>	E-mail subsystem Dial-engine subsystem: requires a SIP trunk
<b>Connectivity</b>	Through Cisco IPICS 2.0(1) server on an IP standards-based network
<b>Performance</b>	Refer to the Cisco IPICS 2.0(1) performance
<b>Programming interfaces</b>	Customizable interfaces for the policy engine and dial engine are available through selected system integrators, Cisco IPICS Technology Developer Program partners, and Cisco Advanced Services

### System Requirements

Cisco IPICS Policy Engine is a licensed component of the Cisco IPICS 2.0(1) server. The system requirements are same as those for the Cisco IPICS 2.0(1) server.

### Ordering Information

The Cisco IPICS 2.0 with the policy engine can be ordered through the Cisco products and services ordering site. To download the software, go to the Cisco Software Center. Table 3 gives ordering information.

**Table 3.** Ordering Information

Product Name	Part Number
<b>Cisco IPICS Policy Manager for IPICS 2.0(1) and four Dial Licenses (enables Policy Engine on Cisco IPICS server)</b>	CIS-IPICS-PM1-K9
<b>Cisco IPICS Policy Engine Dial Port</b>	CIS-VIP-DIAL
<b>Cisco IPICS Policy Engine Dial Port—10 Pack</b>	CIS-VIP-DIAL-10
<b>Cisco IPICS Policy Engine Dial Port—50 Pack</b>	CIS-VIP-DIAL-50
<b>Cisco IPICS Policy Manager Update, 1 Year Subscription</b>	CIS-PM1-SUB

### 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.

Contact your Cisco representative to engage with Cisco Advanced Services or Cisco Advanced Technology Partners for customization, deployment, training, and support.

### For More Information

For more information about the Cisco IPICS products and solution, go to <http://www.cisco.com/go/ipics> or contact your local Cisco account representative.



**Americas Headquarters**  
 Cisco Systems, Inc.  
 170 West Tasman Drive  
 San Jose, CA 95134-1706  
 USA  
[www.cisco.com](http://www.cisco.com)  
 Tel: 408 526-4000  
 800 553-NETS (6387)  
 Fax: 408 527-0883

**Asia Pacific Headquarters**  
 Cisco Systems, Inc.  
 168 Robinson Road  
 #28-01 Capital Tower  
 Singapore 068912  
[www.cisco.com](http://www.cisco.com)  
 Tel: +65 6317 7777  
 Fax: +65 6317 7799

**Europe Headquarters**  
 Cisco Systems International BV  
 Haarlerbergpark  
 Haarlerbergweg 13-19  
 1101 CH Amsterdam  
 The Netherlands  
[www-europe.cisco.com](http://www-europe.cisco.com)  
 Tel: +31 0 800 020 0791  
 Fax: +31 0 20 357 1100

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at [www.cisco.com/go/offices](http://www.cisco.com/go/offices).

©2007 Cisco Systems, Inc. All rights reserved. CCVP, the Cisco logo, and the Cisco Square Bridge logo are trademarks of Cisco Systems, Inc.; Changing the Way We Work, Live, Play, and Learn is a service mark of Cisco Systems, Inc.; and Access Registrar, Aironet, BPX, Catalyst, CCDA, CCDP, CCIE, CCIP, CCNA, CCNP, CCSP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, Cisco Press, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Cisco Unity, Enterprise/Solver, EtherChannel, EtherFast, EtherSwitch, Fast Step, Follow Me Browsing, FormShare, GigaDrive, GigaStack, HomeLink, Internet Quotient, IOS, iPhone, IP/TV, iQ Expertise, the iQ logo, iQ Net Readiness Scorecard, iQuick Study, LightStream, Linksys, MeetingPlace, MGX, Networking Academy, Network Registrar, Packet, PIX, ProConnect, RateMUX, ScriptShare, SlideCast, SMARTnet, StackWise, The Fastest Way to Increase Your Internet Quotient, and TransPath are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the United States and certain other countries.

All other trademarks mentioned in this document or Website are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (0701R)