



A

- action** A discrete function that is performed through a policy. Discrete functions include activate VTG, notification, VTG add participant, dial-out, and invite to VTG.
- activate VTG** An action that activates a preconfigured VTG, and then click Save. can also specify a duration. At the end of the specified duration, the VTG is deactivated. If no duration is specified, the VTG must be manually deactivated by the dispatcher from the VTG Management drawer in the Cisco Instant Connect Administration Console.
- activated** A state that indicates that the SIP (unicast) or multicast channel is fully operational. When a channel/VTG on the Dispatch Console is enabled and activated, all of the Dispatch Console buttons are operational.
- activating** A state that becomes effective when you click the **Activate** button on the Dispatch Console. The Activate button appears highlighted while the other Dispatch Console buttons remain in an inactive state as the system attempts to activate and connect.
- activation button** This button toggles activate and deactivate functionality on the Dispatch Console. Click this button on the Dispatch Console to activate a channel (to call out), and then click Save. click it again to deactivate the channel.
- active virtual talk group** A virtual talk group (VTG) becomes active when Cisco Instant Connect commits global resources, such as a multicast address and any necessary dial-in peers, so that the participants in the VTG can communicate with each other.
- Administration Console** The graphical user interface (GUI) in the Cisco Instant Connect server software through which authorized Cisco Instant Connect users can manage and configure Cisco Instant Connect resources, events and VTGs.
- alert tone** An audible tone, such as a siren, warble or chirp, that is used to attract the attention of a radio listener.
- alert tone buttons** Buttons on the Dispatch Console that can play out alert tones on one channel or multiple channels.
- all talk button** Allows you to simultaneously talk on all of the channels that you selected.
- autonomous system** A radio system under one administrative control, and then click Save. also known as a management domain. This system is usually mapped to an agency.

B

backward compatibility	The ability of newer radio equipment to operate within an older system infrastructure or to directly intercommunicate with an older radio unit. The term usually applies to digital radios that are also capable of analog signal transmission.
bandwidth	The difference between the highest and lowest frequencies that are available for network signals. The term also describes the rated throughput capacity of a specific network medium or protocol. Bandwidth specifies the frequency range that is necessary to convey a signal measured in units of hertz (Hz). For example, voice signals typically require approximately 7 kHz of bandwidth and data traffic typically requires approximately 50 kHz of bandwidth.
base station	A land station in the land mobile radio service. In the personal communication service, the common name for all the radio equipment that is located at one fixed location and used for serving one or several calls.

C

CAI	common air interface. The standard for the digital wireless communications medium that is employed for P25-compliant radio systems and equipment. The standard for P25 Phase I incorporates Frequency Division Multiple Access (FDMA) technology.
call	Radio terminology that defines a call as beginning at the moment that you press the transmit key and concluding when you release the transmit key. The term “per call” implies that some form of control causes the radio to select a specific frequency before it transmits audio. Some radios may be configured to automatically return to a predefined RF channel when the call ends.
call delay	The delay that occurs when there is no idle channel or facility available to immediately process a call that arrives at an automatic switching device.
call setup time	The time that is required to establish a circuit-switched call between users or terminals.
carrier	A wave that is suitable for modulation by an information-bearing signal.
CAS	channel associated signaling. The transmission of signaling information within the voice channel. CAS signaling often is referred to as robbed-bit signaling because user bandwidth is being robbed by the network for other purposes.
channel	A communication path that is wide enough to permit a single RF transmission. Multiple channels can be multiplexed over a single cable in certain environments. There are many different types of channels in Cisco Instant Connect. Channels can be dynamically or statically allocated. Channels may have one or more channel connections that define the source for the channel. <i>See</i> PTT channel.
channel capacity	The maximum possible information transfer rate through a channel, subject to specified constraints.
channel connection	One or more methods by which a content stream can be obtained. For instance, a particular channel may be found on several different multicast addresses in different locations and also on several different radios at different locations.
channel folder	A logical grouping of channels

channel select check box	Provides the ability to select or deselect the specified channel on the Dispatch Console for audio transmission.
channel spacing	The distance from the center of one channel to the center of the next-adjacent-channel. Typically measured in kilohertz.
Cisco Instant Connect server	Provides the core functionality of the Cisco Instant Connect system. For information on supported platforms and operating systems, see <i>Cisco Instant Connect Compatibility Matrix</i> at http://www.cisco.com/en/US/products/ps6718/products_device_support_tables_list.html
Cisco Unified Communications Manager	The software-based call-processing component of the Cisco IP telephony solution. Cisco Unified Communications Manager extends enterprise telephony features and functions to packet telephony network devices, such as Cisco Unified IP Phones, media processing devices, VoIP gateways, and multimedia applications.
Cisco Unified Communications Manager Express	Provides call processing for Cisco Unified IP Phones as part of a converged voice and data solution that is empowered by a Cisco router. Offers key system and small private branch exchange (PBX) capabilities available within Cisco IOS software.
Cisco Unified IP Phone	A full-featured telephone that provides voice communication over an IP network. A user can participate in a PTT channel or VTG by using a Cisco Unified IP Phone as a PTT device.
Cisco Security Agent	Provides threat protection for server and desktop computing systems (endpoints) by identifying, preventing, and eliminating known and unknown security threats.
CLI	command-line interface. An interface that allows the user to interact with the operating system by entering commands and optional arguments.
codec	coder-decoder. 1. Integrated circuit device that typically uses pulse code modulation to transform analog signals into a digital bit stream and digital signals back into analog signals. 2. In Voice over IP, Voice over Frame Relay, and Voice over ATM, a DSP software algorithm that is used to compress/decompress speech or audio signals.
conference of conferences	A conference that consists of two or more VTGs.
conventional radio system	A non-trunked system that is similar to telephone party-line in that the user determines availability by listening for an open channel.
COR	carrier operated relay. An electrical signal that is used to signal when a radio is receiving traffic.
coverage	In radio communications, the geographical area that is within the range of, or that is covered by, a wireless radio system to enable service for radio communications. Also referred to as service delivery area.

D

delay time	The sum of waiting time and service time in a queue.
decrypt	Cryptographically restore ciphertext to the plaintext form it had before encryption.

decryption	Reverse application of an encryption algorithm to encrypted data, thereby restoring that data to its original, unencrypted state.
dial engine scripts	Scripts that the Cisco Instant Connect dial engine executes to provide the telephony user interface (TUI) for interaction with incoming and outgoing phone calls.
dial-in	A phone call that is dialed in to the policy engine.
dial-in floor control	A feature that allows one dial-in user, at a time, to talk in a VTG or a channel. The telephony user interface provides this dial-in floor control feature to support dial-in users. It does not provide support for floor control for other PTT users.
dial number	The phone number that is used by the policy engine and configured in the Dial Information pane in the Ops Views window. Dialing this number provides user access to the telephony user interface.
dial out invite	An action that invites selected user(s) to the selected VTG. A phone call that is dialed out by the policy engine to a phone user to invite the user in to a talk group.
dial peer	Addressable call endpoint. In Voice over IP, there are two kinds of dial peers: POTS and VoIP.
digit ID	A numeric identifier that is chosen by a Cisco Instant Connect user and stored in the user profile. Cisco Instant Connect uses this ID and a numeric password to authenticate a Cisco Unified IP Phone user.
digital modulation technique	A technique for placing a digital data sequence on a carrier signal for subsequent transmission through a channel.
discrete tone	Any tone that is sent without any summed or added tone. For example, adding a function tone with a low level guard tone may impact the recognition of the function tone. Contrast with mixed tones.
Dispatch Console	Standalone PC-based software application that provides PTT functionality so that users with a variety of communication devices can participate in an event.
dispatcher	The Cisco Instant Connect dispatcher is responsible for setting up the VTGs, activating the VTGs to begin conferences, and adding and/or removing participants in inactive VTG and active VTGs. The dispatcher also monitors the active VTGs and events, can mute and unmute Dispatch Console users, as necessary, and manages policies, which activate/deactivate VTGs based on specific criteria and designated intervals. Policy management activities include create/modify/delete policies, view policies, execute policies, and activate privileges.
DTMF	dual tone multi-frequency. The signal to the phone company that you generate when you press keys on a telephone keypad. With DTMF, each key that you press on your phone (0 through 9, '*' and '#') generates two tones of specific frequencies, and then click Save. one tone is generated from a high frequency group of tones and the other from a low frequency group. Voice gateways often strip these inband tones and present them out-of-band in SIP, H.323, or other messages.
dynamic radio channel (dynamic control)	The controls that are used to preset radio characteristics so that channels are available to clients.
dynamic regrouping	A trunking system feature that allows multiple radios to be placed upon a specific talk group without manual manipulation of the programming of the radios. Dynamic regrouping is initiated through a system control console and transmitted to the radio via the trunking systems control channel.

E

E & M	<p>receive and transmit (or ear and mouth). As the analog interface between a radio and the LMR gateway, the E&M interface provides voice signals from radio channels, which are then mapped to IP multicast or unicast. The E&M interface provides the most common form of analog trunking.</p> <ol style="list-style-type: none"> 1. Trunking arrangement that is generally used for two-way switch-to-switch or switch-to-network connections. Cisco's analog E&M interface is an RJ-48 connector that allows connections to PBX trunk lines (tie lines). 2. A type of signaling that is traditionally used in the telecommunications industry. Indicates the use of a handset that corresponds to the ear (receiving) and mouth (transmitting) component of a telephone.
e-lead	The ear portion of the E & M interface. The e-lead is the receive path of the LMR gateway.
encipher	To convert plain text into an unintelligible form by using a cipher.
encode	To modify information into the required transmission format.
encryption	Application of a specific algorithm so as to alter the appearance of data and make it incomprehensible to unauthorized users.
event	An active VTG in the Cisco Instant Connect solution.

F

FDM	frequency-division multiplexing. Technique whereby information from multiple channels can be allocated bandwidth on a single wire based on frequency.
FDMA	frequency-division multiple access. A channel access method in which different conversations are separated onto different frequencies. FDMA is employed in narrowest bandwidth and multiple-licensed channel operations.
FLEXIm	Cisco software that enforces licensing on certain systems, and then click Save. FLEXIm ensures that Cisco Instant Connect software will work only on the supported and licensed hardware.
floor control	The standard mechanism for Push-to-Talk speaker arbitration.
frame	A logical grouping of information sent as a data link layer unit over a transmission medium. Often refers to the header and the trailer, used for synchronization and error control, that surround the user data contained in the unit. The terms cell, datagram, message, packet, and segment also describe logical information groupings at various layers of the OSI reference model.
frequency	For a periodic function, frequency represents the number of cycles or events per unit of time. Frequency is used in several different contexts. For example, transmission frequency (the band on which the radio sends signals) or the frequency of an audible signal measured in hertz (Hz). All tone control operations require audible tones that fall within a narrow band of a specific frequency and at a specific volume (amplitude).
frequency assignment	Assignment that is given to a radio station to use a radio frequency or radio frequency channel under specified conditions.

frequency hopping	The repeated switching of frequencies during radio transmission according to a specified algorithm, intended to minimize unauthorized interception or jamming of telecommunications.
frequency modulation	Modulation technique in which signals of different frequencies represent different data values.
frequency sharing	The assignment to or use of the same radio frequency by two or more stations that are separated geographically or that use the frequency at different times.
function tone	A tone that follows the high level guard tone and causes the radio to perform a specific function, such as selecting a new transmit frequency. Function tones are often referred to as F1, F2, F3, and so on. <i>See</i> preamble and high level guard tone.

G

gateway	Device that performs an application-layer conversion of information from one protocol stack to another. In Cisco Instant Connect, the gateway component includes LMR gateways, which functionality is usually installed as an additional feature in a supported Cisco router. LMR gateways provide voice interoperability between radio and non-radio networks by bridging radio frequencies to IP multicast streams.
GRE	generic routing encapsulation. Tunneling protocol that can encapsulate a wide variety of protocol packet types inside IP tunnels, creating a virtual point-to-point link to Cisco routers at remote points over an IP internetwork. By connecting multiprotocol subnetworks in a single-protocol backbone environment, IP tunneling that uses GRE allows network expansion across a single-protocol backbone environment. GRE is generally used to route multicast traffic between routers.
guard tone	The most common guard tones are the high level guard tone (HLGT) and the low level guard tone (LLGT). The HLGT is used to alert the radio that a function tone follows. The LLGT is used as a hold tone or keying tone. <i>See</i> tone keyed.

H

H.323	Defines a common set of codecs, call setup and negotiating procedures, and basic data transport methods to allow dissimilar communication devices to communicate with each other by using a standardized communication protocol.
high-band frequency	Refers to the higher frequency levels in the VHF band, typically 138-222 MHz.
HLGT	high level guard done. Also known as awake tone. This tone is set at high volume and is usually the first tone in a preamble. It is used to alert the radio that another tone, usually a function tone, will follow. <i>See</i> guard tone.
Hoot 'n' Holler (Hootie)	A communications system where the loudest and most recent talker or talkers are mixed into one multicast output stream. Also known as hootie, these networks provide “always on” multiuser conferences without requiring that users dial in to a conference. Cisco enables the Cisco Hoot 'n' Holler feature in specific Cisco IOS versions.

idle tone	The tone that a radio may deliver on the m-lead to signal the LMR gateway that there is no incoming traffic. When the idle tone is removed, the LMR gateway deems all signals to be valid voice traffic.
inactive VTG	A VTG that is stored for use. The Cisco Instant Connect server stores inactive VTGs with the information that you enter so that they can be automatically activated by a policy or manually activated by a dispatcher.
inband	Traffic that is sent inband is included in the same stream as the real-time traffic protocol (RTP). Inband signals can be encoded signals and RFC 2833 signals.
incident	An event that you identify in Cisco Instant Connect and for which various users can coordinate responses by using the Dispatch Console.
incident VTG	A talk group that consists of the users, channels, and radios that are associated with an incident.
incident management framework	A software framework that includes an adaptable GUI to facilitate resources, such as users, radio channels, cameras, and sensor information, for delivery that is based upon policy or incident needs.
informix linux group	Members of this group have full permission to Cisco Instant Connect server folders, files, and scripts that are related to the Informix database application. Members of this group include the informix and ipicsdba users.
informix user ID	<p>The Cisco Instant Connect Linux user that belongs to both the informix linux group, which includes full permission to the Cisco Instant Connect database server folders, files, and scripts, and the ipics linux group, which includes permission to Cisco Instant Connect application-related folders, files, and scripts. In addition, this user has full administrative permission to the Informix database instance. Cisco Instant Connect creates this Linux system user ID and generates the password during the software installation process. The password for this user ID never expires.</p> <p>To access the informix user, log in to the Cisco Instant Connect server by using the root user ID, and then click Save. then, enter su - informix (superuser from root).</p>
interference	The effect of unwanted energy due to one or a combination of emissions, radiation, or inductions upon reception in a radio communication system, manifested by any performance degradation, misinterpretation, or loss of information, which could be extracted in the absence of such unwanted energy.
interoperability	The capability of equipment manufactured by different vendors to communicate with each other successfully over a network.
invitation policy	A policy that can be invoked only through the telephony user interface and can include only the invite to VTG action. After joining a talk group, a user can access the breakout menu and invoke invitation policies. The talk group that this user has joined is the talk group that the invited users join.
invite to VTG	A version of the dial out invite action where users to be invited are preconfigured but the VTG that they are invited to depends on which VTG the invoker of the policy is dialed into.

ipicsadmin user ID	The Cisco Instant Connect Linux user that, as part of the ipics linux group, has full permission to the Cisco Instant Connect server folders, files, and scripts that are related to the Cisco Instant Connect application and database backup and restore operations. In addition, the ipicsadmin user has permission to read and write data from and/or to the Informix database. Cisco Instant Connect creates this Linux system user ID during the software installation process. The password for this user ID never expires.
ipicsdba user ID	The Cisco Instant Connect Linux user that belongs to both the informix linux group, which includes full permission to the Cisco Instant Connect database server folders, files, and scripts, and the ipics linux group, which includes permission to Cisco Instant Connect application-related folders, files, and scripts. In addition, the ipicsdba user has permission to read data, write data, create tables, and create databases in the Informix database instance. Cisco Instant Connect creates this Linux system user ID and generates the password during the software installation process. The password for this user ID never expires. To access the ipicsdba user, log in to the Cisco Instant Connect server by using the root user ID, and then click Save. then, enter su - ipicsdba (superuser from root).
ipics linux group	Members of this group have full permission to Cisco Instant Connect server folders, files, and scripts that are related to the Cisco Instant Connect application and database backup and restore operations. Members of this group include the ipicsadmin, ipicsdba, and informix users.
ipics user ID	The Cisco Instant Connect application-level user ID that can perform all administration-related tasks via the Cisco Instant Connect Administration Console. Cisco Instant Connect creates this web-based user ID during the software installation process.
IPSec	IP Security. A framework of open standards that provides data confidentiality, data integrity, and data authentication between participating peers. IPSec provides these security services at the IP layer. IPSec uses IKE to handle the negotiation of protocols and algorithms based on local policy and to generate the encryption and authentication keys to be used by IPSec. IPSec can protect one or more data flows between a pair of hosts, between a pair of security gateways, or between a security gateway and a host.

K

keepalive	A message that is sent by one network device to inform another network device that the virtual circuit between the two devices is still active.
key	The parameter that defines an encryption code or method. Key (a radio) causes the radio to transmit. <i>See</i> tone keyed.
kilohertz (kHz)	A unit of frequency that denotes one thousand Hz.

L

latch	The Dispatch Console functionality that allows a Cisco Instant Connect user to lock in a PTT channel.
linear modulation	A radio frequency transmission technique that provides the physical transport layer of a radio system. This technology is compatible in digital and analog system environments and supports channel bandwidths of 5 kHz to 50 kHz.

LLGT	low level guard tone. This tone is used as a hold tone or keying tone. <i>See</i> guard tone.
LMR	<p>Land Mobile Radio. A Land Mobile Radio (LMR) system is a collection of portable and stationary radio units that are designed to communicate with each other over predefined frequencies. They are deployed wherever organizations need to have instant communication between geographically dispersed and mobile personnel.</p> <p>This term is often used interchangeably between a handheld or vehicle-mounted device and a stationary transmitter. Stationary devices are typically referred to as base stations.</p> <p>Cisco Instant Connect leverages the Cisco Hoot 'n' Holler feature, which is enabled in specific Cisco IOS versions, to provide radio integration into the Cisco Instant Connect solution. LMR is integrated by providing an ear and mouth (E&M) interface to a radio or other PTT devices, such as Nextel phones. Configured as a voice port, this interface provides the appropriate electrical interface to the radio. You configure this voice port with a connection trunk entry that corresponds to a VoIP dial peer, which in turn associates the connection to a multicast address. This configuration allows you to configure a corresponding channel in Cisco Instant Connect, using the same multicast address, which enables Cisco Instant Connect to provide communication paths between the desired endpoints.</p>
LMR gateway	Land Mobile Radio gateway. Refers to the router E&M interface that converts IP traffic from digital to analog for use by radios.
location	In Cisco Instant Connect, location signifies reachability, and then click Save. meaning, channels or users who are associated with the same location can communicate with each other without additional network configuration. Location may refer to a physical or virtual location, as defined in the server.
low-band frequency	Lower frequency levels in the VHF band, typically 25–50 MHz.
<hr/>	
M	
megahertz (MHz)	A unit of frequency denoting one million Hz.
mixed tone	Two tones that are mixed together. DTMF is an example of a mixed tone. To be transmitted properly, tone signals must be mixed with the LLGT. <i>See</i> DTMF.
m-lead	The mouth portion of the E&M interface. The m-lead is the transmit path of the LMR gateway.
Mobile Client	Standalone application that runs on an Apple iPhone, provides access to an incident VTG and supporting media, and allows users to add journals, videos and pictures to an incident.
modulation	The process, or result of the process, of varying a characteristic of a carrier in accordance with an information-bearing signal.
multicast	Single packets that are copied by the network and sent to a specific subset of network addresses. Multicast refers to communications that are sent between a single sender and multiple recipients on a network.
multicast address	A single address that may refer to multiple network devices.
multicast address/port	Cisco Instant Connect uses this type of connection to enable the Dispatch Console to directly tune in to the multicast channel. Multicast address/port combinations are also used by gateways and UMS components.

multicast pool	Multicast IP addresses that are defined as part of a multicast pool. Cisco Instant Connect allocates a multicast address from this pool of resources when a dispatcher activates a VTG.
multiplexing	The combination of two or more information channels on to a common transmission medium. In electrical communications, the two basic forms of multiplexing are time-division multiplexing (TDM) and frequency-division multiplexing (FDM).
multipurpose policy	A policy that can include any of the supported actions, and then click Save. may be invoked through the telephony user interface or the Cisco Instant Connect Administration Console.
multiselect buttons	Provides the ability to select or deselect all channels on the Dispatch Console for audio transmission.
mute	The functionality that enables a dispatcher to mute an Dispatch Console user from talking or transmitting voice on one or more channels. The dispatcher can mute the microphone of the user or both the microphone and the speaker.
mutual aid channel	A national or regional channel that has been set aside for use only in mutual aid interoperability situations. Restrictions and guidelines governing usage usually apply.

N

narrowband channels	Channels that occupy less than 20 kHz.
National Public Safety Planning Advisory Committee	The committee that was established to conduct nationwide planning and allocation for the 821–824 MHz and 866–869 MHz bands.
National Telecommunication and Information Administration	The United States executive branch agency that serves as the principal advisor to the president on telecommunications and information policies and that is responsible for managing the federal government's use of the radio spectrum.
near end	The device or devices that are physically connected to the Ethernet or an RS-232 link. Compare with far end, which refers to devices on the other side of the broadcast. A base station that is connected to an LMR gateway is a near end device while a handheld radio that receives over-the-air signals from the base station is a far end device.
network	An interconnection of communications entities.
NAT	Network Address Translation. Provides a mechanism for translating addresses that are not globally unique into globally routable addresses for connection to the Internet.

not activated	A VTG state that becomes effective when the Activate button is clicked a second time (to deactivate the channel) or if the connection terminates. No Dispatch Console buttons appear highlighted.
notification	<p>An action that notifies selected user(s) via email, SMS, pager, or phone. The necessary IDs and phone numbers are configured in the communication preferences for each user. Notifications that are sent via the phone require user authentication before the notification prompt is heard.</p> <p>An email, SMS, pager, or phone call that is placed to a user for the purpose of sending a notification message.</p>

O

offline mode	When the connection to the server goes offline, the Dispatch Console enters offline mode. Offline mode enables continuous communication during periods of server downtime. Using offline mode requires at least one successful login to the server.
operator	The Cisco Instant Connect operator is responsible for setting up and managing users, configuring access privileges, and assigning user roles and ops views.
ops view	operational view. A Cisco Instant Connect feature that provides the ability to organize users, user groups, channels, channel groups, VTGs, and policies into different user-definable views across multiple organizations or agencies that normally would not share resources. While ops views are maintained separately by the Cisco Instant Connect system administrator or ops view administrator, this functionality also allows multiple entities to use one Cisco Instant Connect server to enable resource sharing across multiple ops views, according to business need.
ops view administrator	The ops view administrator capabilities include managing and monitoring the activity logs that are filtered by ops views and accessible in the Administration Console (Administration > Activity Log Management) window.
OTAR	over-the-air re-keying. Provides the ability to update or modify over radio frequency the encryption keys that are programmed in a mobile or portable radio.

P

packet	A logical grouping of information that includes a header that contains control information. Usually also includes user data.
packet switching	The process of routing and transferring data by using addressed packets so that a channel is occupied during the transmission of the packet only. Upon completion of the transmission, the channel is made available for the transfer of other traffic.
PIM	Protocol Independent Multicast. Multicast routing architecture that allows the addition of IP multicast routing on existing IP networks. PIM is unicast routing protocol independent and can be operated in two modes: PIM dense mode and PIM sparse mode.

PIM dense mode	One of the two PIM operational modes. PIM dense mode is data-driven and resembles typical multicast routing protocols. Packets are forwarded on all outgoing interfaces until pruning and truncation occurs. In dense mode, receivers are densely populated, and it is assumed that the downstream networks want to receive and will probably use the datagrams that are forwarded to them. The cost of using dense mode is its default flooding behavior. Sometimes called dense mode PIM or PIM DM.
PIM sparse mode	One of the two PIM operational modes. PIM sparse mode tries to constrain data distribution so that a minimal number of routers in the network receive it. Packets are sent only if they are explicitly requested at the RP (rendezvous point). In sparse mode, receivers are widely distributed, and the assumption is that downstream networks will not necessarily use the datagrams that are sent to them. The cost of using sparse mode is its reliance on the periodic refreshing of explicit join messages and its need for RPs. Sometimes called sparse mode PIM or PIM SM.
policy	Policies include one or more actions that execute sequentially and can be manually activated via the Cisco Instant Connect Administration Console or the telephony user interface. Cisco Instant Connect provides support for multiple policy types.
Policy engine	Integrated with the Cisco Instant Connect server, this component enables telephony dial functionality and is responsible for the management and execution of policies and user notifications.
policy channel	A channel that can be set up by the dispatcher and configured as a designated channel, and then click Save. that is, a channel that is always open to enable your interaction with the dispatcher.
policy execution status	An indicator of policy execution success or failure. The Cisco Instant Connect Administration Console provides a status for each action under a policy,
portalization	A web programming paradigm for customizing the interface and functionality of a client application.
preamble	The sequence of tones that precede a transmission. The preamble generally includes the HLGT and the function tone.
protocol	A set of unique rules that specify a sequence of actions that are necessary to perform a communications function.
PTT	Push-to-talk. A signal to a radio transmitter that causes the transmission of radio frequency energy. The action that keys a radio or causes the radio to transmit. On the Cisco router, the e-lead, or key tone, is used to signal the radio to transmit.
PTT channel	A channel consists of a single unidirectional or bidirectional path for sending and/or receiving signals. In the Cisco Instant Connect solution, a channel represents one LMR gateway port that maps to a conventional radio physical radio frequency (RF) channel.
PTT channel button	The button on the Dispatch Console that you click with your mouse, or push, and hold to talk. You can use the latch functionality on this button to talk on one or more channels at the same time.
PTT channel group	A logical grouping of available PTT channels that can be used for categorization.

Q

QoS	quality of service. A measurement of performance for a transmission system, including transmission quality and service availability.
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- queue** Represents a set of items that are arranged in sequence. Queues are used to store events occurring at random times and to service them according to a prescribed discipline that may be fixed or adaptive.
- queuing delay** In a radio communication system, the queuing delay specifies the time between the completion of signaling by the call originator and the arrival of a permission to transmit to the call originator.

R

- radio channel** Represents an assigned band of frequencies sufficient for radio communication. The bandwidth of a radio channel depends upon the type of transmission and its frequency tolerance.
- radio control service** The logical element in the Cisco Instant Connect system that can tune a radio to the desired channel without manual intervention. Refers to a serial control entity.
- radio equipment** Any equipment or interconnected system or subsystem of equipment (both transmission and reception) that is used to communicate over a distance by modulating and radiating electromagnetic waves in space without artificial guide. This equipment does not include microwave, satellite, or cellular telephone equipment.
- receive indicator** The indicator on the Dispatch Console that blinks green when traffic is being received.
- remote connection** Cisco Instant Connect uses this type of connection to provide SIP-based trunking into the UMS component, which is directly tuned into the multicast channel.
- RF** radio frequency. Any frequency within the electromagnetic spectrum that is normally associated with radio wave propagation. RF generally refers to wireless communications with frequencies below 300 GHz.
- RFC 2833** The Internet Engineering Task Force (IETF) specification that describes how to carry DTMF signaling, other tone signals, and telephony events in RTP packets. Using RFC 2833 a packet can be compactly composed to play a series of tones, including DTMF, in a specific sequence that includes specified durations and volume levels.
- RF repeater** An analog device that amplifies an input signal regardless of its nature (analog or digital). Also, a digital device that amplifies, reshapes, retimes, or performs a combination of any of these functions on a digital input signal for retransmission.
- root user ID** The Cisco Instant Connect Linux user that has access to all files in the Cisco Instant Connect server. Strong passwords are enforced and Linux operating system password expiration rules apply to this user ID.
- RTP** Real-Time Transport Protocol. Commonly used with IP networks to provide end-to-end network transport functions for applications that transmit real-time data, such as audio, video, or simulation data, over multicast or unicast network services.
- RTCP** Real-time Transport Control Protocol. The standard for notifying senders and receivers of important events or transmission statistics. The most common forms of RTCP are the sender report and the receiver report.

S

scanning	A subscriber unit feature that automatically allows a radio to change channels or talk groups to enable a user to listen to conversations that are occurring on different channels or talk groups.
script prompts	The audio prompts that the dial engine scripts play out during execution and which callers hear when they are interacting with the telephony user interface.
secure channel	<p>A channel that is connected to a radio that provides secure (encrypted or scrambled) communications on the Common Air Interface (CAI) side of the radio. (The level of security that is configured in the data network determines the security of the communications between the LMR gateway and a network attached device, such as an Dispatch Console or Cisco Unified IP Phone.)</p> <p>An attribute that is set in the server to indicate that a channel is secure. A PTT channel that is configured as secure cannot be combined with unsecure channels in a VTG.</p>
serial controlled radio	A type of control for a radio that uses out-of-band signaling (usually RS-232). <i>See</i> radio control service.
service delivery area	<i>See</i> coverage.
signal	The detectable transmitted energy that carries information from a transmitter to a receiver.
speaker arbitration	The procedure that is used to determine the active audio stream in a Push-to-Talk system.
spectrum	<p>The usable radio frequencies in the electromagnetic distribution. The following frequencies have been allocated to the public safety community:</p> <ul style="list-style-type: none">High HF 25–29.99 MHzLow VHF 30–50 MHzHigh VHF 150–174 MHzLow UHF 406.1–420/450–470 MHzUHF TV Sharing 470–512 MHz700 MHz 764–776/794–806 MHz800 MHz 806–824/851–869 MHz.
spoken names	The recorded names that are used for entities, such as channels, channel groups, VTGs, users, user groups, ops views, and policies. The names can be recorded through the policy engine or externally-recorded .wav files that can be uploaded into the system.
squelch	An electric circuit that stops input to a radio receiver when the signal being received is too weak to be anything but noise.
statically configured tone control	Every stream of data that flows to the LMR gateway can be applied with a preamble and/or guard tone by using a static configuration in the LMR gateway. When traffic is sent on a multicast address, the radio automatically switches (because of the preamble) to the specific radio channel that is requested by the tone control sequence.
stored VTG	Also referred to as inactive VTG.
subchannel	A channel that shares the same multicast address as another channel or channels. These multiple source streams (channels) may be present on a single radio channel. On the Dispatch Console, you access these channels by pressing the channel selector buttons on the radio channel.

subscriber unit	A mobile or portable radio unit that is used in a radio system.
system administrator	The Cisco Instant Connect system administrator is responsible for installing and setting up Cisco Instant Connect resources, such as servers, routers, multicast addresses, locations, and PTT channels. The system administrator also creates ops views, manages the Cisco Instant Connect licenses and Dispatch Console versions, and monitors the status of the system and its users via the activity log files.
system architecture	The design principles, physical structure, and functional organization of a land mobile radio system. Architectures may include single site, multi-site, simulcast, multicast, or voting receiver systems.

T

talk group	A VTG or a channel. A subgroup of radio users who share a common functional responsibility and, under normal circumstances, only coordinate actions among themselves and do not require radio interface with other subgroups.
TCP	Transmission Control Protocol. A connection-oriented transport layer protocol that provides reliable full-duplex data transmission. TCP is part of the TCP/IP protocol stack.
TDMA	time division multiple access. Type of multiplexing where two or more channels of information are transmitted over the same link by allocating a different time interval (“slot” or “slice”) for the transmission of each channel, and then click Save. that is, the channels take turns to use the link.
terminal	A device capable of sending, receiving, or sending and receiving information over a communications channel.
throughput	The number of bits, characters, or blocks passing through a data communications system, or a portion of that system.
TIA/EIA-102 standards	A joint effort between government and industry to develop voice and data technical standards for the next generation of public safety radios.
tone control	The process of using inband tone sequences to change the behavior of a radio endpoint. An inband tone can be used to control functions, such as modifying (retuning) the radio frequency (RF channel), changing the transmit power level, and monitoring a channel. The most basic form of tone control (tone keyed) is used to key the radio. With the Cisco Instant Connect solution, the radio that is being controlled is directly connected to the LMR gateway E&M leads.
tone frequency	A specific form of a function tone. The tone that is used to signal the radio to select a frequency. These audible tone frequencies are generated in the router and combined in a specific sequence to perform a tone control function.
tone keyed	A tone keyed radio requires the presence of a specific tone on the incoming analog (e-lead) port. Without this tone, the radio cannot transmit. The tone is generally used to prevent spurious transmission that may occur because of injected noise.
tone signaling	Any form of over-the-air audible signals that are intended to terminate at the far end. Examples include alerting tones, DTMF tones, and paging tones.
transmit indicator	On the ID, this indicator blinks red when traffic is being transmitted.

trigger	A time-based event that invokes a policy on a scheduled basis, without manual intervention.
trunk	A physical and logical connection between two switches across which network traffic travels. In telephony, a trunk is a phone line between two central offices (COs) or between a CO and a PBX.
trunked (system)	Systems with full feature sets in which all aspects of radio operation, including RF channel selection and access, are centrally managed.
trunked radio system	Integrates multiple channel pairs into a single system. When a user wants to transmit a message, the trunked system automatically selects a currently unused channel pair and assigns it to the user, decreasing the probability of having to wait for a free channel.
TUI	telephony user interface. The telephony interface that the dial engine provides to enable callers to perform tasks, such as joining talk groups and invoking policies.
tune (a radio)	To change the current send and receive frequencies on a radio. This task is usually accomplished via a preset with some form of radio control.

U

user	The Cisco Instant Connect user may set up personal login information, download the Dispatch Console application, and specify communication preferences that are used to configure audio devices. By using a predefined user ID and profile, the user can participate in PTT channels and VTGs by using the Dispatch Console, supported models of Cisco Unified IP Phones, and the Public Switched Telephone Network (PSTN) via the telephony dial functionality of the Cisco Instant Connect IP policy engine. Users may have one or more Cisco Instant Connect roles, such as system administrator, ops view administrator, operator or dispatcher.
unicast	Specifies point-to-point transmission, or a message sent to a single network destination.

V

VAD	Voice Activity Detection. When VAD is enabled on a voice port or on a dial peer, only audible speech is transmitted over the network. When VAD is enabled on Cisco Instant Connect, the Dispatch Console only sends voice traffic when it detects your voice.
virtual channel	A virtual channel is similar to a channel but a radio system may not be attached. By creating a virtual channel, participants who do not use physical handheld radios to call into a VTG become enabled by using the Dispatch Console application or a supported Cisco Unified IP Phone model.
voice interoperability	Voice interoperability enables disparate equipment and networks to successfully communicate with each other.
voice replay	A feature that allows the Dispatch Console user to replay buffered audio on a per channel basis.
VoIP	Voice over Internet Protocol. By digitalizing and packetizing voice streams, VoIP provides the capability to carry voice calls over an IP network with POTS-like functionality, reliability, and voice quality.

volume indicator	The volume indicator on the Dispatch Console that shows the current volume level on the channel in a graphical format.
volume up/down buttons	The buttons on the Dispatch Console that let you control the volume level.
VOX	Voice-operated transmit. A keying relay that is actuated by sound or voice energy above a certain threshold and sensed by a connected acousto-electric transducer. VOX uses voice energy to key a transmitter, eliminating the need for push-to-talk operation.
VTG	virtual talk group. A VTG can contain any combination of channels, channel groups, users, and user groups. A VTG can also contain other VTGs.
VTG add participant	An action that adds selected participant(s) to the selected VTG.

W

wavelength	The representation of a signal as a plot of amplitude versus time.
wideband channel	Channels that occupy more than 20 kHz.

