Immediate Divert

Immediate Divert Overview

The Immediate Divert feature is a Unified Communications Manager supplementary service that allows you to immediately divert a call to a voicemail system. When Immediate Divert diverts a call, the line becomes available to make or receive new calls. Access the Immediate Divert feature by using the iDivert or Divert softkey on the IP phone.

Immediate Divert provides the following functions:

- Diverts a call to a voicemail system in the following manner:

    - Legacy iDivert diverts the call to the voice mailbox of the party that invokes the iDivert feature.

    - Enhanced iDivert diverts the call to either the voice mailbox of the party that invokes the iDivert feature or to the voice mailbox of the original called party.

- Diverts inbound calls that are in the Call Offering, Call on Hold, or Call Active states.

- Diverts outbound calls in the Call Active or Call on Hold states.

Note Although the Immediate Divert feature is not available to CTI applications, a CTI redirect operation exists that performs the same function as Immediate Divert. Application developers can use the CTI redirect operation to accomplish Immediate Divert.

Immediate Divert Prerequisites

- You must configure the voicemail profiles and hunt pilots.

  For information on how to configure voicemail profiles and hunt pilots, see System Configuration Guide for Cisco Unified Communications Manager

- The following devices support Immediate Divert:

  - Voice-messaging systems such as Cisco Unity Connection that use the Skinny Client Control Protocol (SCCP).

  - QSIG devices (QSIG-enabled H.323 devices, MGCP PRI QSIG T1 gateways, and MGCP PRI QSIG E1 gateways), depending on the setting of the Use Legacy Immediate Divert and Allow QSIG During iDivert clusterwide service parameters.

  - The following table lists the phones that use the Divert or iDivert softkey.

Table 1: Cisco Unified IP Phones That Use Immediate Divert Softkeys

Cisco Unified IP Phone Model	Divert Softkey	iDivert Softkey	What to configure in softkey template
Cisco Unified IP Phone 6900 Series (except 6901 and 6911)	X		iDivert
Cisco Unified IP Phone 7900 Series		X	iDivert
Cisco Unified IP Phone 8900 Series	X		Configured by default
Cisco Unified IP Phone 9900 Series	X		Configured by default

Note Cisco Unified IP Phones 8900 and 9900 series have the Divert softkey assigned by default.

Immediate Divert Configuration Task Flow

Before you begin

- Review Immediate Divert Prerequisites, on page 2.

Procedure

	Command or Action	Purpose
Step 1	Configure Immediate Divert Service Parameters, on page 3	Configure the service parameters to enable Immediate Divert across various devices and applications.
Step 2	Configure a Softkey Template for Immediate Divert, on page 4	Create and configure a softkey template and add the iDivert softkey to that template.
Step 3	To Associate a Softkey Template with a Common Device Configuration, on page 5, complete the following subtasks: • Add a Softkey Template to the Common Device Configuration, on page 6 • Associate a Common Device Configuration with a Phone, on page 6	**Optional**. To make the softkey template available to phones, you must complete either this step or the following step. Follow this step if your system uses a **Common Device Configuration** to apply configuration options to phones. This is the most commonly used method for making a softkey template available to phones.
Step 4	Associate a Softkey Template with a Phone, on page 7	**Optional**. Use this procedure either as an alternative to associating the softkey template with the Common Device Configuration, or in conjunction with the Common Device Configuration. Use this procedure in conjunction with the Common Device Configuration if you need assign a softkey template that overrides the assignment in the Common Device Configuration or any other default softkey assignment.

Configure Immediate Divert Service Parameters

Procedure

Step 1   From Cisco Unified CM Administration, choose **System** > **Service Parameters**.

Step 2   From the **Server** drop-down list, choose the server that is running the Cisco CallManager service.

Step 3   From the **Service** drop-down list, choose **Cisco CallManager**.

Step 4   Configure the relevant service parameters and click **Save**.

Table 2: Service Parameter Fields for Immediate Divert

Field	Description
Call Park Display Timer	Enter a number from 0 to 100 (inclusive) to control the timer for the Immediate Divert text display on the IP phones. Set this timer for the server or for each server in a cluster that has the Cisco CallManager service and Immediate Divert configured. The default value for this service parameter is 10 seconds.

Field	Description
Use Legacy Immediate Divert	Select one of the following options from the drop-down list: • **True**—The user that invokes the iDivert feature can divert an incoming call only to his own voice mailbox. This is the default setting. • **False**—Immediate Divert allows diversion of an incoming call to either the voice mailbox of the original called party or to the voice mailbox of the user that invokes the iDivert feature.
Allow QSIG During iDivert	Select one of the following options from the drop-down list: • **True**—Immediate Divert diverts calls to voicemail systems that can be reached over QSIG, SIP, and QSIG-enabled H.323 devices. • **False**—Immediate Divert does not support access to voicemail systems over QSIG or SIP trunks. This is the default setting.
Immediate Divert User Response Timer	Enter a number from 5 to 30 (inclusive) to determine the time given to the iDivert softkey user to choose the party to whom to divert a call. If the user does not choose a party, the call remains connected. The default value for this service parameter is 5 seconds.

Configure a Softkey Template for Immediate Divert

To divert incoming calls or outgoing calls, configure a softkey template and assign the iDivert softkey to that template. You can configure the iDivert softkey in the following call states:

- Connected

- On hold

- Ring in

Immediate Divert supports the following call states:

- For incoming calls:

    - Call offering (shown as Ring In on the softkey template).

    - Call on hold

    - Call active

- For outgoing calls:

    - Call on hold

    - Call active

Procedure

Step 1	From Cisco Unified CM Administration, choose **Device** > **Device Settings** > **Softkey Template**.
Step 2	Perform the following steps to create a new softkey template; otherwise, proceed to the next step.

    a) Click **Add New**.

    b) Select a default template and click **Copy**.

    c) Enter a new name for the template in the **Softkey Template Name** field.

    d) Click **Save**.

Step 3	Perform the following steps to add softkeys to an existing template.

    a) Click **Find** and enter the search criteria.

    b) Select the required existing template.

Step 4	Check the **Default Softkey Template** check box to designate this softkey template as the default softkey template.

> **Note** If you designate a softkey template as the default softkey template, you cannot delete it unless you first remove the default designation.

Step 5	Choose **Configure Softkey Layout** from the **Related Links** drop-down list in the upper right corner and click **Go**.
Step 6	From the **Select a Call State to Configure** drop-down list, choose the call state for which you want the softkey to display.
Step 7	From the **Unselected Softkeys** list, choose the softkey to add and click the right arrow to move the softkey to the **Selected Softkeys** list. Use the up and down arrows to change the position of the new softkey.
Step 8	Repeat the previous step to display the softkey in additional call states.
Step 9	Click **Save**.
Step 10	Perform one of the following tasks:

- Click **Apply Config** if you modified a template that is already associated with devices to restart the devices.
- If you created a new softkey template, associate the template with the devices and then restart them. For more information, see *Add a Softkey Template to a Common Device Configuration* and *Associate a Softkey Template with a Phone* sections.

Associate a Softkey Template with a Common Device Configuration

Optional. There are two ways to associate a softkey template with a phone:

- Add the softkey template to the **Phone Configuration**.

- Add the softkey template to the **Common Device Configuration**.

The procedures in this section describe how to associate the softkey template with a **Common Device Configuration**. Follow these procedures if your system uses a **Common Device Configuration** to apply configuration options to phones. This is the most commonly used method for making a softkey template available to phones.

To use the alternative method, see Associate a Softkey Template with a Phone, on page 7

Procedure

	Command or Action	Purpose
Step 1	Add a Softkey Template to the Common Device Configuration, on page 6	
Step 2	Associate a Common Device Configuration with a Phone, on page 6	

Add a Softkey Template to the Common Device Configuration

Procedure

Step 1 From Cisco Unified CM Administration, choose **Device** > **Device Settings** > **Common Device Configuration**.

Step 2 Perform the following steps to create a new Common Device Configuration and associate the softkey template with it; otherwise, proceed to the next step.

a) Click **Add New**.

b) Enter a name for the Common Device Configuration in the **Name** field.

c) Click **Save**.

Step 3 Perform the following steps to add the softkey template to an existing Common Device Configuration.

a) Click **Find** and enter the search criteria.

b) Click an existing Common Device Configuration.

Step 4 In the **Softkey Template** drop-down list, choose the softkey template that contains the softkey that you want to make available.

Step 5 Click **Save**.

Step 6 Perform one of the following tasks:

- If you modified a Common Device Configuration that is already associated with devices, click **Apply Config** to restart the devices.
- If you created a new Common Device Configuration, associate the configuration with devices and then restart them.

Associate a Common Device Configuration with a Phone

Procedure

Step 1 From Cisco Unified CM Administration, choose **Device** > **Phone**.

Step 2 Click **Find** and select the phone device to add the softkey template.

Step 3 From the **Common Device Configuration** drop-down list, choose the common device configuration that contains the new softkey template.

Step 4 Click **Save**.

Step 5 Click **Reset** to update the phone settings.

Associate a Softkey Template with a Phone

Optional. Use this procedure as an alternative to associating the softkey template with the Common Device Configuration. This procedure also works in conjunction with the Common Device Configuration. You can use it when you need to assign a softkey template that overrides the assignment in the Common Device Configuration or any other default softkey assignment.

Before you begin

Procedure

Step 1 From Cisco Unified CM Administration, choose **Device** > **Phone**.

Step 2 Click **Find** to select the phone to add the softkey template.

Step 3 From the **Softkey Template** drop-down list, choose the template that contains the new softkey.

Step 4 Click **Save**.

Immediate Divert Interactions

Feature	Interaction
Multilevel Precedence and Preemption (MLPP)	Immediate Divert diverts calls to voice-messaging mailboxes regardless of the type of call (for example, a precedence call). When Alternate Party Diversion (call precedence) is activated, Call Forward No Answer (CFNA) gets deactivated.
Call Forward	When the Forward No Answer setting on the Directory Number Configuration window is not configured, Call Forward uses the clusterwide CFNA timer service parameter, Forward No Answer Timer. If a user presses the iDivert softkey at the same time as the call is being forwarded, the call gets diverted to an assigned call forward directory number (because the timer was too short), not the voice-messaging mailbox. To resolve this situation, set the CFNA timer service parameter to enough time (for example, 60 seconds).
Call Detail Records (CDR)	Immediate Divert uses the immediate divert code number in the **Onbehalf** of fields (for example, joinOnbehalfOf and lastRedirectRediectOnBehalfOf) in CDR.

Feature	Interaction
Call Park and Directed Call Park	When user A calls user B, and user B parks the call; user B retrieves the call and then decides to send the call to a voice-messaging mailbox by pressing the iDivert or Divert softkey. User A receives the voice-messaging mailbox greeting of user B.
Conference	When a conference participant presses the iDivert softkey, the remaining conference participants receive the voice-messaging mailbox greeting of the immediate divert initiator. Conference types include Ad Hoc, Meet-Me, Barge, cBarge, and Join.
Hunt List	For calls that reach the phone directly through a hunt list pilot (as part of the hunting algorithms), the iDivert softkey appears dimmed if the Use Legacy Immediate Divert clusterwide service parameter is set to True; otherwise, it does not appear dimmed. For calls that do not reach the phone directly through a hunt list pilot (as part of the hunting algorithms), the iDivert softkey does not appear dimmed when the Use Legacy Immediate Divert clusterwide service parameter is set to True or False. **Note** For Jabber in desk phone mode, iDivert feature redirection to VM is done through CTI application where 'Use Legacy Immediate Divert' parameter will not take effect and HP number will be sent as diversion info to Voice mail servers.
Auto Call Pickup	If the Use Legacy Immediate Divert clusterwide service parameter is set to False, and the Auto Call Pickup Enabled clusterwide service parameter is set to True, and a user of call pickup group uses call pickup to answer a call, the IP phone display will not present any choices to the user when the iDivert softkey is pressed.

Immediate Divert Restrictions

Restriction	Description
Voice Mail Profile	When you use QSIG integration with your voicemail system, a voicemail profile that includes either a voicemail pilot or a voicemail mask or both should leave the **Make this the default Voice Mail Profile for the System** check box unchecked. Ensure the default Voice Mail Profile setting is always set to No Voice Mail.
Call Forward All (CFA) and Call Forward Busy (CFB)	When Call Forward All (CFA) and Call Forward Busy (CFB) are activated, the system does not support Immediate Divert (CFA and CFB have precedence over Immediate Divert).

Restriction	Description
Busy Voicemail System	The iDivert detects a busy condition on the voicemail ports, when iDivert reaches a voicemail system over a local or SCCP connection.
	Note Immediate Divert cannot divert a call to a busy voicemail port; voicemail ports can exist as members of a route or hunt list.
	The call cannot divert to a busy voicemail system, but the original call gets maintained. The phone displays "Busy" message on which iDivert was invoked to indicate that the call was not diverted.
	When a voicemail system is reached over a QSIG or SIP trunk, iDivert can be detected, but the call does not get maintained. When the **Allow QSIG During iDivert clusterwide** service parameter is set to **True**, or the **Use Legacy Immediate Divert clusterwide** service parameter is set to **False**, Immediate Divert supports access to voicemail systems that can be reached over QSIG or SIP trunks. When the **Allow QSIG During iDivert clusterwide** service parameter is set to **False**, and the **Use Legacy Immediate Divert clusterwide** service parameter is set to **True**, Immediate Divert does not support access to voicemail systems over QSIG or SIP trunks.
Malicious Caller ID	System does not support using Malicious Caller ID and Immediate Divert features together.
Forward No Answer Timeout	A race condition in connection with the Forward No Answer Timeout exists when you press the iDivert softkey. For example, if a manager presses the iDivert softkey immediately after the Forward No Answer timeout, call forward forwards the call to a preconfigured directory number. However, if the manager presses the iDivert softkey before the Forward No Answer timeout, immediate divert diverts the call to the voice-messaging mailbox of the manager.
Calling Parties and Called Parties	The calling parties and called parties can divert the call to their voice mailboxes if both simultaneously press the iDivert softkey.
Conference Types	When one participant in a conference presses the iDivert softkey, all remaining participants receive an outgoing greeting of the participant who pressed iDivert. Conference types include Meet-Me, Ad Hoc, cBarge, and Join.
Split or Join Operation	If the last action on a call was Auto Pickup, Call Transfer, Call Park, Call Park Reversion, Conference, Meet-Me Conference, or any application that performs a split or join operation, enhanced iDivert does not present a screen to a called party to choose the voice mailbox. Instead, enhanced iDivert immediately diverts the call to the voice mailbox that is associated with the called party.

Immediate Divert Troubleshooting

Key is not active

The phone displays this message when the user presses iDivert:

Key is not active

The voice-messaging profile of the user who pressed iDivert does not have a voice-messaging pilot.

Configure a voice-messaging pilot in the user voice-messaging profile.

Temporary Failure

The phone displays this message when the user presses iDivert:

Temporary Failure

The voice-messaging system does not work, or a network problem exists.

Troubleshoot your voice-messaging system. See troubleshooting or voice-messaging documentation.

Busy

The phone displays this message when the user presses iDivert:

Busy

This message means that the voice-messaging system is busy.

Configure more voice-messaging ports or try again.