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## Cisco Unified Communications Manager (CallManager) Dial Plan Deployment Guide

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#### CONTENTS

#### Preface 5

#### Introducing Cisco Unified Communications Manager (CallManager) Dial Plans 1-

Software Compatibility 1-1

Special Characters and Settings 1-1

Route Pattern Wildcards and Special Characters 1-2

Configuring Route Pattern Details for a non-NANP Dial Plan 1-2

#### Deploying Dial Plans for 4.2(3) and Earlier Releases 2-1

Dial Plans Path 2-1

Installing a Dial Plan on Cisco Unified Communications Manager 2-2

Upgrading a Dial Plan 2-2

Uninstalling a Dial Plan 2-3

#### Deploying Dial Plans for 5.0(1) and Later Releases 3-1

COP file Path 3-1

Installing COP file 3-2

#### Cisco Unified Communications Manager (CallManager) Dial Plans 4-1

Discard Digits Instructions 4-1

Tag Descriptions 4-2

Australian Numbering Plan 4-2

Discard Digits Instructions for AUNP 4-3

Tag Descriptions for AUNP 4-3

Belgium Numbering Plan 4-5

Discard Digits Instructions for BENP 4-5

Tag Descriptions for BENP 4-7

France Numbering Plan 4-8

Discard Digits Instructions for FRNP 4-8

Tag Descriptions for FRNP 4-12

Great Britain Numbering Plan 4-14

Discard Digits Instructions for GBNP 4-14

Tag Descriptions for GBNP 4-19

Greece Numbering Plan 4-21

Discard Digits Instructions for GRNP 4-21

rag Descriptions for GRINP 4-22	
Ireland Numbering Plan 4-24 Discard Digits Instructions for IENP Tag Descriptions for IENP 4-31	4-24
Japanese Numbering Plan 4-33 Discard Digits Instructions for JPNP Tag Descriptions for JPNP 4-34	4-33
Netherlands Numbering Plan <b>4-36</b> Discard Digits Instructions for NLNP Tag Descriptions for NLNP <b>4-37</b>	4-36
New Zealand Numbering Plan 4-39 Discard Digits Instructions for NZNP Tag Descriptions for NZNP 4-40	4-39
Portuguese Numbering Plan 4-42 Discard Digits Instructions for PTNP Tag Descriptions for PTNP 4-43	4-42
Russian Numbering Plan 4-44 Discard Digits Instructions for RUNP Tag Descriptions for RUNP 4-57	4-44
Singapore Numbering Plan 4-59 Discard Digits Instructions for SGNP Tag Descriptions for SGNP 4-60	4-59
Related Topics 4-61	



#### **Preface**

This preface describes the purpose, audience, organization, and conventions of this guide, and provides information on how to obtain related documentation.

The preface covers these topics:

- Purpose, page 5
- Audience, page 5
- Organization, page 5
- Related Documentation, page 6
- Conventions, page 6
- Obtaining Documentation and Submitting a Service Request, page 7
- Cisco Product Security Overview, page 7

### **Purpose**

The Cisco Unified Communications Manager (CallManager) Dial Plan Deployment Guide provides instructions to deploy Cisco Unified Communications Manager and Cisco Unified Communications Manager Dial Plans.

#### **Audience**

This document provides information for network administrators and engineers who are responsible for deploying dial plans on the Cisco Unified Communications Manager system. Deploying Cisco Unified Communications Manager Dial Plans requires knowledge of telephony and IP networking technology.

#### **Organization**

Table Table 1 provides the chapter layout of the guide.

Table 1 Layout of Cisco Unified Communications Manager Dial Plan Deployment Guide

Chapter	Description
Chapter 1, "Introducing Cisco Unified Communications Manager (CallManager) Dial Plans"	Provides an overview of Cisco Unified Communications Manager Dial Plans.
Chapter 2, "Deploying Dial Plans for 4.2(3) and Earlier Releases"	Describes the deployment of dial plans for 4.2(3) and earlier releases on the Windows machine.
Chapter 3, "Deploying Dial Plans for 5.0(1) and Later Releases"	Describes the deployment of dial plans for 5.x and later releases on the Linux machine.
Chapter 4, "Cisco Unified Communications Manager (CallManager) Dial Plans"	Details discard digits instructions and tag descriptions for various regions.

### **Related Documentation**

Refer to the following documentation for further information about Cisco Unified Communications Manager:

- Cisco Unified Communications Manager Administration Guide
- Cisco Unified Communications Manager System Guide
- Cisco Unified Communications Manager Features and Services Guide

#### **Conventions**

This document uses the following conventions:

Convention	Description
boldface font	Commands and keywords are in <b>boldface</b> .
italic font	Arguments for which you supply values are in italics.
string	A nonquoted set of characters. Do not use quotation marks around the string or the string will include the quotation marks.
screen font	Terminal sessions and information the system displays are in screen font.
boldface screen font	Information you must enter is in boldface screen font.

Notes use the following conventions:



Means reader take note.



Tip

Means the following information will help you solve a problem.



Means reader be careful. In this situation, you might perform an action that could result in equipment damage or loss of data.



Means the described action saves time. You can save time by performing the action described in the paragraph.



Means reader be warned. In this situation, you might perform an action that could result in bodily injury.

### **Obtaining Documentation and Submitting a Service Request**

For information on obtaining documentation, submitting a service request, and gathering additional information, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at:

http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html

Subscribe to the *What's New in Cisco Product Documentation* as a Really Simple Syndication (RSS) feed and set content to be delivered directly to your desktop using a reader application. The RSS feeds are a free service and Cisco currently supports RSS Version 2.0.

#### **Cisco Product Security Overview**

This product contains cryptographic features and is subject to United States and local country laws governing import, export, transfer and use. Delivery of Cisco cryptographic products does not imply third-party authority to import, export, distribute or use encryption. Importers, exporters, distributors and users are responsible for compliance with U.S. and local country laws. By using this product you agree to comply with applicable laws and regulations. If you are unable to comply with U.S. and local laws, return this product immediately.

Further information regarding U.S. export regulations may be found at http://www.access.gpo.gov/bis/ear/ear\_data.html.



CHAPTER

# **Introducing Cisco Unified Communications Manager (CallManager) Dial Plans**

The Cisco Unified Communications Manager Dial Plan specifies dial plan details for certain countries other than North America and describes deployment and installation of these dial plans. This guide describes route pattern wildcards, special characters, calling party transformation settings, and called party transformation settings that apply to dial plans. It also describes the Discard Digits Instructions (DDIs) and tags that dial plans of specific countries use.

### **Software Compatibility**

You can install and integrate dial plans with the following Cisco Unified Communications Manager (CallManager) versions:

- Cisco Unified Communications Manager (CallManager) 5.0 and later
- Cisco Unified CallManager 3.3(4) and later

### **Special Characters and Settings**

Cisco Unified Communications Manager Administration allows you to use special characters and settings to perform the following tasks:

- Allow a single route pattern to match a range of numbers
- Remove a portion of the dialed digit string
- Manipulate the appearance of the calling party number for outgoing calls
- Manipulate the dialed digits, or called party number, for outgoing calls

For more information on how to use special characters and settings, see the following topic:

• Route Pattern Wildcards and Special Characters, page 1-2

#### **Route Pattern Wildcards and Special Characters**

Route pattern wildcards and special characters allow a single route pattern to match a range of numbers (addresses). Use these wildcards and special characters also to build instructions that enable the Cisco Unified Communications Manager (CallManager) to manipulate a number before sending it to an adjacent system.

Table 1-1 describes the wildcards and special characters that Cisco Unified Communications Manager (CallManager) supports.

Table 1-1 Wildcards and Special Characters

Character	Description	Examples
X	The X wildcard matches with any single digit in the range 0 through 9.	The route pattern 9XXX routes or blocks all numbers in the range 9000 through 9999.
!	The exclamation point (!) wildcard matches one or more digits in the range 0 through 9.	The route pattern 91! routes or blocks all numbers in the range 910 through 9199999999999999999999999999999999999
	The square bracket ([]) characters enclose a range of values.	The route pattern 813510[012345] routes or blocks all numbers in the range 8135100 through 8135105.
۸	The circumflex (^) character, used with the square brackets, negates a range of values.	The route pattern 813510[^0-5] routes or blocks all numbers in the range 8135106 through 8135109.
-	The hyphen (-) character, used with the square brackets, denotes a range of values.	The route pattern 813510[0-5] routes or blocks all numbers in the range 8135100 through 8135105.
#	The octothorpe (#) character generally identifies the end of the dialing sequence. Ensure the # character is the last character in the pattern.	The route pattern 901181910555# routes or blocks an international number that is dialed from within the JANP. The # character after the last 5 identifies this digit as the last digit in the sequence.

## **Configuring Route Pattern Details for a non-NANP Dial Plan**

If you have installed a non-NANP dial plan on your Cisco Unified Communications Manager (CallManager) system, you can choose the required dial plan when you set up route pattern details in the Route Pattern Configuration window in Cisco Unified Communications Manager (CallManager).

Consider the following points when you configure route pattern details:

- 1. For a non-NANP dial plan, if you want to retain the settings at the Route Pattern level, make one of the following choices in the Route Pattern Configuration window:
  - **a.** Choose NANP in the Dial Plan field and choose None in the Discard Digits field. Choosing "None" DDI in the Discard Digits field represents the same as not choosing a dial plan.

**b.** Choose a non-NANP dial plan and choose No Digits in the Discard Digits field. (The default specifies No Digits.)

If you want to specify settings at the Route Group level that will override the Route Pattern settings, choose any dial plan in the Dial Plan field and choose the appropriate DDI in the Discard Digits field.

Configuring Route Pattern Details for a non-NANP Dial Plan



CHAPTER 2

## **Deploying Dial Plans for 4.2(3) and Earlier Releases**

This chapter provides instructions to deploy Cisco Unified Communications Manager Dial Plans on the Windows machine.



Skip this chapter if you are deploying dial plans on Cisco Unified Communications Manager (CallManager) release 5.0(1) or later.

#### **Dial Plans Path**

You can download dial plans for various releases of Cisco Unified Communications Manager from www.cisco.com. You can find dial plans that you can download, install, and integrate with Cisco Unified Communications Manager systems at the following URL:



This is not a hyperlink, you must copy and paste this text in the address field of your browser.

http://www.cisco.com/cisco/software/release.html?mdfid=278719042&flowid=5338&softwareid=282074292&os=Linux&release=3.1.7-PT&relind=AVAILABLE&rellifecycle=&reltype=latest

For details on how to download and install a dial plan from this location, see "Installing a Dial Plan on Cisco Unified Communications Manager" section on page 2-2.



You can install and integrate dial plans with Cisco Unified Communications Manager version 3.3(4) and later.

You need to know the following information to access and install the right file:

- IDP v.1 contains dial plan files for 5.x as well as the executables for Windows.
- IDP v.2 contains dial plan files for 6.x
- IDP v3 contains dial plan files for 7.x 9.x

## Installing a Dial Plan on Cisco Unified Communications Manager

Use the following procedure to install a dial plan on a Cisco Unified Communications Manager system.



A Dial Plan for a specific country is applicable only to that country and cannot be used in another country.

**Step 1** Locate the dial plan that you want to install by accessing the following URL on CCO:



This is not a hyperlink, you must copy and paste this text in the address field of your browser.

http://www.cisco.com/cisco/software/release.html?mdfid=278719042&flowid=5338&softwareid=282074292&os=Linux&release=3.1.7-PT&relind=AVAILABLE&rellifecycle=&reltype=latest

**Step 2** If you want to install the dial plan on a publisher server, launch the dial plan installable file on the publisher Cisco Unified Communications Manager system.

If you want to install the dial plan on a Cisco Unified Communications Manager cluster, launch the dial plan installable file on a subscriber server system.

Step 3 The installable file integrates the dial plan with Cisco Unified Communications Manager. The installable file copies an uninstall package and a ReadMe file for the dial plan in the following path on the Cisco Unified Communications Manager system:

C:\Program Files\Cisco\CallManager\IDP

The uninstall package provides a method to uninstall the dial plan. The ReadMe file contains details on the route filter tags and discard digit instructions that are configured in the dial plan.

Step 4 Choose Start > Settings > Control Panel > Administrative Tools > Services. Choose the CCM service and run this service to load the dial plan on to the Cisco Unified Communications Manager system.

### **Upgrading a Dial Plan**

If you have installed a non-NANP dial plan, you can upgrade the dial plan that is installed on your Cisco Unified Communications Manager system with an upgraded version of the dial plan.



Upgrading a dial plan will fail if you have configured one or more tags as a clause for a route filter in the existing version of the dial plan and the upgrade version does not contain these tags. After you upgrade to the new dial plan, the upgrade will list all such tags. You will need to disassociate these tags from the route filter and run the dial plan upgrade again on the Cisco Unified Communications Manager system.



Upgrading a dial plan will fail if you have associated one or more DDIs with Route Patterns/Translation Patterns/Route Lists in the existing version of the dial plan and the upgrade version does not contain these DDIs. The dial plan upgrade will list all such DDIs. You will need to disassociate these DDIs from Route Patterns/Translation Patterns/Route Lists and run the dial plan upgrade again on the Cisco Unified Communications Manager system.

Use the following procedure to upgrade an existing dial plan.

Step 1 Locate the dial plan upgrade version to which you want to upgrade by accessing the following URL on CCO:



This is not a hyperlink, you must copy and paste this text in the address field of your browser.

http://www.cisco.com/cisco/software/release.html?mdfid=278719042&flowid=5338&softwareid=282074292&os=Linux&release=3.1.7-PT&relind=AVAILABLE&rellifecycle=&reltype=latest

**Step 2** If you want to install the upgrade on a publisher server, launch the dial plan version installable file on the Cisco Unified Communications Manager publisher server.

If you want to install the upgrade on a Cisco Unified Communications Manager cluster, launch the dial plan version installable file on a subscriber server.

Step 3 The installable file integrates the upgrade with Cisco Unified Communications Manager. The installable file copies an uninstall package and a ReadMe file for the upgraded version in the following path on the Cisco Unified Communications Manager system:

C:\Program Files\Cisco\CallManager\IDP

Step 4 Choose Start > Settings > Control Panel > Administrative Tools > Services. Choose the CCM service and run this service to load the upgraded dial plan on the Cisco Unified Communications Manager system.



The readme files on the install page contain information specific to all the dial plans being posted on a particular day, and are not associated to any particular dial plan.

## **Uninstalling a Dial Plan**



Before you uninstall a dial plan, ensure that you remove the route patterns, translation patterns, route lists, and route filters that are configured in the dial plan on the Cisco Unified Communications Manager system.

Use the following procedure to uninstall a dial plan.

**Step 1** Run the dial plan uninstall package by using one of the following methods:

• Run the uninstall package from the following path:

C:\Program Files\Cisco\CallManager\IDP\ on a publisher system or a subscriber server.

• Choose **Start > Programs > < Dial Plan> > Uninstall** where < Dial Plan> represents the name of the dial plan that is installed.

The uninstall package runs and uninstalls the dial plan from the Cisco Unified Communications Manager system.

Step 2 Choose Start > Settings > Control Panel > Administrative Tools > Services. Choose the CCM service and run this service to load the dial plan on to the Cisco Unified Communications Manager system.



CHAPTER 3

## **Deploying Dial Plans for 5.0(1) and Later Releases**

This chapter provides instructions to deploy Cisco Unified Communications Manager (CallManager) Dial Plans on the Linux machine.



The information in this chapter is applicable to all 5.x, 6.x, 7.x, 8.x, and 9.x releases of Cisco Unified Communications Manager (CallManager).



Skip this chapter if you are deploying the dial plans on Cisco Unified CallManager release 4.2(3) or earlier.

#### **COP file Path**

You can download dial plans for various releases of Cisco Unified Communications Manager from www.cisco.com. You can find the Cisco Option Package (COP) file that contains all the available dial plans that you can download, install, and integrate with Cisco Unified Communications Manager systems at the following URL:



This is not a hyperlink, you must copy and paste this text in the address field of your browser.

http://www.cisco.com/cisco/software/release.html?mdfid=278719042&flowid=5338&softwareid=282074292&os=Linux&release=3.1.7-PT&relind=AVAILABLE&rellifecycle=&reltype=latest

For details on how to install a COP file, see "Installing COP file" section on page 3-2.

You need to know the following information to access and install the right file:

- IDP v.1 contains dial plan files for 5.x as well as the executables for Windows.
- IDP v.2 contains dial plan files for 6.x
- IDP v3 contains dial plan files for 7.x, 8.x, and 9.x

For details on how to download and install a dial plan on Cisco Unified Communications Manager (CallManager), see the *Cisco Unified CallManager Administration Guide 5.0*.



You can install and integrate dial plans with Cisco Unified Communications Manager, version 5.0 and later.

#### **Installing COP file**

Each available dial plan for a release is packaged into an individual Dial Plan (DP) COP file and installed on the Cisco Unified Communications Manager System by using the File Transfer Protocol (FTP).

Use the following procedure to install DP COP file from Cisco Unified Communications Platform Administration window.



A Dial Plan for a specific country is applicable only to that country and cannot be used in another country.



The readme files on the install page contain information specific to all the dial plans being posted on a particular day, and are not associated to any particular dial plan.

**Step 1** From the Cisco Unified Communications Platform Administration window, choose **Software Upgrades > Install**.

The Software Installation/Upgrade window displays.

- Step 2 In the Source field, choose Remote File System.
- **Step 3** In the Directory field, enter the directory where the DP COP file is present.
- **Step 4** In the Remote Server field, enter the host name or IP address where DP COP file is located.
- **Step 5** In the Remote User and Remote Password fields, enter the user name and password.
- **Step 6** From the Transfer Protocol drop-down list box, choose an appropriate protocol.
- **Step 7** Click **Next**. The system checks for available options and upgrades.
- **Step 8** The window refreshes with a list of available software options and upgrades. From the Options/Upgrades drop-down list box, choose the DP COP file and, and click **Next**.



The DP COP file format is as follows: dp-ffr.[1-9]-[0-9]+.XX.cop.sgn. Example: dp-ffr.1-1-1.JP.cop.sgn for the Japanese dial plan. Here, the numbers stand for Communications Manager (CallManager) release number (1 for 5.x release, 2 for 6.x releases, and 3 for 7.x releases)—1 (constant number)—COP file release number.

The Installation File window opens which downloads the dial plan COP file.

**Step 9** In the next window, monitor the progress of the download, which includes the filename and the number of megabytes getting transferred.

When the download completes, the Checksum window displays.

**Step 10** Verify the checksum value against the checksum for the file that you downloaded shown on Cisco.com.



Caution

The two checksum values must match to ensure the authenticity and integrity of the upgrade file. If the checksum values do not match, download a fresh version of the file from Cisco.com and try the upgrade again.

A Warning window displays the current and upgrade software versions.

- Step 11 After determining that the checksum values match, click **Next** to proceed with the software upgrade.
- Step 12 A warning displays the DP COP file that you selected to install. Click Install.

The Install Status windows displays, which shows the Install log.

Step 13 When the installation completes, click Finish.



Note

On completion of installation, two directories get created on the Cisco Unified Communications Manager server: /usr/local/cm/idp/XXNP/ and /var/log/active/cm/trace/idp/XXNP. The IPT Platform Installation copies the dial plans files that are available in the DP COP to /usr/local/cm/idp/XXNP, where XX specifies the country code.



Note

After installing a 6.x or 7.x dial plan on its respective Cisco Unified Communications Manager version, you may see the installed version as 1.1(X) in the Cisco Unified Communications Manager box. Even though the dial plan version is 2.1(X) for 6.x, and 3.1(X) for 7.x, the version displayed after installation remains 1.X(Y). The first digit in this case, indicates the location where it is to be installed.



Note

Because Cisco Unified Communications Manager 5.0(4) requires signed dial plans, you cannot use the dial plans for Cisco Unified Communications Manager 5.0(2) with Cisco Unified Communications Manager 5.0(4). Make sure that you download the signed 5.0(4) COP files from CCO.



Note

You can download the COP file from CCO on to your machine and install it on Cisco Unified Communications Manager or Cisco Unified Communications Manager by using the preceding procedure. Alternately, you can download the COP file from CCO on to a Windows machine and access and install it on Cisco Unified Communications Manager by using the above procedure, if FTP server is configured on the Windows machine.



Note

Install the COP file first on the first node in the Cisco Unified Communications Manager or Cisco Unified Communications Manager cluster, and then on the subsequent nodes. You must install the COP files on all the nodes in the cluster.



When you upgrade from 4.0x to 5.0x, to retain the dial plan and the dial plan configurations, such as the route pattern/route filter that is associated to a dial plan, install the latest dial plans that are available on CCO.

Installing COP file



CHAPTER 4

# **Cisco Unified Communications Manager** (CallManager) Dial Plans

### **Discard Digits Instructions**

A discard digits instruction (DDI) removes a portion of the dialed digit string before passing the number on to the adjacent system. A DDI must remove portions of the digit string, for example, when an external access code is needed to route the call to the PSTN, but the PSTN switch does not expect that access code.



A Dial Plan for a specific country is applicable only to that country and cannot be used in another country.

See the following topics for information on DDIs that are used in the numbering plans for specific countries:

- Discard Digits Instructions for AUNP, page 4-3
- Discard Digits Instructions for BENP, page 4-5
- Discard Digits Instructions for FRNP, page 4-8
- Discard Digits Instructions for GBNP, page 4-14
- Discard Digits Instructions for GRNP, page 4-21
- Discard Digits Instructions for IENP, page 4-24
- Discard Digits Instructions for JPNP, page 4-33
- Discard Digits Instructions for NLNP, page 4-36
- Discard Digits Instructions for NZNP, page 4-39
- Discard Digits Instructions for PTNP, page 4-42
- Discard Digits Instructions for RUNP, page 4-44
- Discard Digits Instructions for SGNP, page 4-59

#### **Additional Information**

See the "Related Topics" section on page 4-61.

### **Tag Descriptions**

The tag represents the core component of a route filter. A tag applies a name to a subset of the dialed-digit string. For example, the NANP number 972-555-1234 comprises LOCAL-AREA-CODE (972), OFFICE-CODE (555), and SUBSCRIBER (1234) route filter tags.

Route filter tags require operators and can require additional values to decide which calls are filtered.

The values for route filter tag fields can contain the wildcard characters X, \*, #, [, ], -, ^, and the numbers 0 through 9. The descriptions in some tables in this guide, use the notations [2-9] and XXXX to represent actual digits. In this notation, [2-9] represents any single digit in the range 2 through 9, and X represents any single digit in the range 0 through 9. Therefore, the description "The three-digit area code in the form [2-9]XX" means that you can enter the actual digits 200 through 999, or all wildcards, or any mixture of actual digits and wildcards that results in a pattern with that range.

See the following topics for information on tags that are used in the numbering plans for specific countries:

- Tag Descriptions for AUNP, page 4-3
- Tag Descriptions for BENP, page 4-7
- Tag Descriptions for FRNP, page 4-12
- Tag Descriptions for GBNP, page 4-19
- Tag Descriptions for GRNP, page 4-22
- Tag Descriptions for IENP, page 4-31
- Tag Descriptions for JPNP, page 4-34
- Tag Descriptions for NLNP, page 4-37
- Tag Descriptions for NZNP, page 4-40
- Tag Descriptions for PTNP, page 4-43
- Tag Descriptions for RUNP, page 4-57
- Tag Descriptions for SGNP, page 4-60

#### **Additional Information**

See the "Related Topics" section on page 4-61.

#### **Australian Numbering Plan**

The following topics describe DDIs and tags that are used in the Australian Numbering Plan (AUNP).

- Discard Digits Instructions for AUNP, page 4-3
- Tag Descriptions for AUNP, page 4-3

#### **Discard Digits Instructions for AUNP**

Table 4-1 lists DDIs and describes the effects of applying each DDI to a dialed number. For information on other numbering plans, see the "Related Topics" section on page 4-61.

Table 4-1 DDIs for AUNP

DDI	Effect	Example
NoDigits	This DDI removes no digits.	Route pattern: 0.@
		Dialed digit string: 00883795211
		After applying DDI: 00883795211
PreDot	This DDI removes	Route pattern: 0.@
	Cisco Unified CallManager	Dialed digit string: 00883795211
	external access code	After applying DDI: 0883795211
PreAt	This DDI removes all digits prior to	Route pattern: 8.0@
	the AUNP portion of the route pattern, including	Dialed digit string: 800883795211
	Cisco Unified CallManager	After applying DDI: 0883795211
	external access code	
	PBX external access code	
Trailing-#	This DDI removes	Route pattern: 0.@
	End-of-dialing character for international calls	Dialed digit string: 000116563175666#
		After applying DDI:
		000116563175666
PreDot Trailing-#	This DDI removes	Route pattern: 0.@
	Cisco Unified CallManager	Dialed digit string: 000116563175306#
	external access code	After applying DDI: 00116563175306
	End-of-dialing character for international calls	
PreAt Trailing #	This DDI removes all digits prior to	Route pattern: 8.0@
-	the AUNP portion of the route pattern, including	Dialed digit string:
		8000116563175306#
	<ul> <li>Cisco Unified CallManager external access code</li> </ul>	After applying DDI: 00116563175306
	PBX external access code	
	End-of-dialing character for international call	

#### **Tag Descriptions for AUNP**

Table 4-2 lists and describes tags that are used in the AUNP. For information, see "Related Topics" section on page 4-61. For information on other numbering plans, see the "Related Topics" section on page 4-61.

Table 4-2 Tag Descriptions for AUNP

Tag	Description
AREA-CODE	This two-digit area code identifies the area code for long-distance calls. This code takes the form 0[2378].
CARRIER-SELECT	This tag specifies the access code that is used to select an alternative carrier for this call. This code takes the form 14[1-9]X.
COUNTRY-CODE	These one-, two-, or three-digit codes specify the destination country for international calls.
DIALUP-ACCESS	This tag represents the dialup access code for data services. This code takes the form 019.
DIALUP-SUBSCRIBER	This tag represents the remaining digits of a data service.
END-OF-DIALING	This single character identifies the end of the dialed-digit string. The # character serves as the end-of-dialing signal for international numbers that are dialed within the AUNP.
FREEPHONE-ACCESS	This tag specifies the four-digit access number for freephone calls. For Australia, either 180[01] or 180[2-9] represents the number.
FREEPHONE-SUBSCRIBER	This tag represents the digits that follow the freephone access code for freephone calls.
INTERNATIONAL-ACCESS	This four-digit access code specifies international dialing. The first two digits for international calls always specify 00, with the following digits dependent on the service. This code takes the form 001X or 009.
LOCALRATE-ACCESS	This tag specifies the access code that is used to determine nongeographic local rate calls. This code specifies 13 for Australia.
LOCALRATE-SUBSCRIBER	This tag represents the remaining digits of the local rate number.
MOBILE-ACCESS	This tag specifies the access code that is used to identify calls to mobile phones. In Australia, this code takes the form 04, 014, 015, 017, 018, or 019.
MOBILE-SUBSCRIBER	This tag represents the remaining digits of the mobile number.
NATIONAL-NUMBER	This tag specifies the nation-specific part of the digit string for an international call.
NATIONALRATE-ACCESS	This tag specifies the access code that is used to determine nongeographic national rate calls. This code specifies 1700 for Australia.
NATIONALRATE-SUBSCRIBER	This tag represents the remaining digits of the national rate number.
OPERATOR	This tag specifies the operator service number. This number specifies 1100 in Australia.

Table 4-2 Tag Descriptions for AUNP (continued)

Tag	Description
PAGING-ACCESS	This tag specifies the access code that is used to recognize calls to radio paging devices. This number specifies 016 for Australia.
PAGING-SUBSCRIBER	This tag represents the remaining digits of the radio paging number.
PERSONAL-ACCESS	This tag specifies the access code that is used to recognize calls to the personal number service. This number specifies 05 for Australia.
PERSONAL-SUBSCRIBER	This tag represents the remaining digits of the personal number service.
PREMIUM-ACCESS	This tag specifies the access code that is used to recognize calls to a premium rate service. This number specifies 190[12679] for Australia.
PREMIUM-SUBSCRIBER	This tag represents the remaining digits of a premium rate service.
SERVICE	This tag specifies the general services number. General service numbers and emergency numbers take the following form: 110[1-9]XX, 122[1235], 123[46], 12[45]!, 12711, 127[2-9]!, 199, 113XXX, 114XXXXX, 119X, 1830, 183[3-9], 18[59]XX, 188XX!, 197X!, 128XX!, and 000.
SPECIALRATE-ACCESS	This tag specifies the access code that is used to recognize calls to a special rate service. This number specifies 197 for Australia.
SPECIALRATE-SUBSCRIBER	This tag represents the remaining digits of a special rate service.
SUBSCRIBER	This tag specifies the eight-digit "local" number for geographic numbers. This number takes the form [3-9]XXXXXXX.

## **Belgium Numbering Plan**

The following topics describe DDIs and tags that are used in the Belgium Numbering Plan (BENP).

- Discard Digits Instructions for BENP, page 4-5
- Tag Descriptions for BENP, page 4-7

#### **Discard Digits Instructions for BENP**

Table 4-3 lists DDIs and describes the effects of applying each DDI to a dialed number. For information on other numbering plans, see the "Related Topics" section on page 4-61.

Table 4-3 DDIs for BENP

DDI	Effect	Example
NoDigits	This DDI removes no digits.	Route pattern: 9.@
		Dialed Digit String: 9023457891
		After applying DDI: 9023457891
PreDot	This DDI removes	Route pattern: 9.@
	Access code	Dialed digit string: 9023457891
		After applying DDI: 023457891
PreAt	This DDI removes	Route pattern: 8.9@
	• All digits that are prior to the	Dialed digit string: 89023457891
	BENP portion of the route pattern.	After applying DDI: 023457891
Trailing-#	This DDI removes	Route pattern: 9.@
	End-of-dialing character	Dialed digit string: 900314568901#
		After applying DDI: 900314568901
PreDot Trailing-#	This DDI removes	Route pattern: 9.@
	Access code	Dialed digit string: 900314568901#
	End-of-dialing character	After applying DDI: 00314568901
PreAt Trailing-#	This DDI removes	Route pattern: 8.9@
	All digits prior to the BENP	Dialed digit string: 8900314568901#
	portion of the route pattern	After applying DDI: 00314568901
	End-of-dialing character	
IntlTollBypass	This DDI removes	Route pattern: 9.@
	International access code	Dialed digit string: 90044208824000
		After applying DDI: 44208824000
PreDot IntlTollBypass	This DDI removes	Route pattern: 9.@
	Removes all digits before the dot	Dialed digit string: 90044208824000
		After applying DDI: 44208824000
PreAt IntlTollBypass	International access code  This DDI removes	Route pattern: 8.9@
TieAt IntiTolidypass		Dialed digit string: 890044208824000
	• Removes all digits that precede the @ sign in the routing pattern	
	International access code	After applying DDI: 44208824000
IntlTollBypass	This DDI removes	Route pattern: 9.@
Trailing-#	International access code	Dialed digit string: 90044208824000#
	• End-of-dialing character	After applying DDI: 944208824000
	1	11, 5

Table 4-3 DDIs for BENP (continued)

DDI	Effect	Example
PreDot IntlTollBypass	This DDI removes	Route pattern: 9.@
Trailing-#	All digits before the dot	Dialed digit string: 90044208824000#.
	International access code	After applying DDI: 44208824000
	End-of-dialing character	
PreAt IntlTollBypass	This DDI removes	Route pattern: 8.9@
Trailing-#	All digits that precede the @	Dialed digit string: 890044208824000#
	sign in the routing pattern	After applying DDI: 44208824000
	International access code	
	End-of-dialing character	

## **Tag Descriptions for BENP**

Table 4-4 lists and describes tags that are used in the BENP. For information on other numbering plans, see the "Related Topics" section on page 4-61.

Table 4-4 Tag Descriptions for BENP

Tag	Description
FREEPHONE-ACCESS	This tag specifies the four-digit access number for freephone calls. For Belgium, this number specifies 0800.
MOBILE-SUBSCRIBER	This tag specifies the six-digit mobile subscriber number.
PERSONAL-ACCESS	This tag specifies the four-digit access code, 0070, that is used to dial personal numbers.
SERVICE	This tag specifies three-digit or four-digit service codes such as 999 for emergency services or 100 for operator services.
SPECIALRATE-SUBSCRIBER	This tag designates six digits that are added to the special rate (077) subscriber number.
AREA-CODE	This tag specifies the one-, two-, or three- digit geographical area codes.
FREEPHONE-SUBSCRIBER	This tag specifies the five-digit freephone subscriber numbers that begin with 0800.
NATIONAL-NUMBER	This tag specifies the national portion of an international number.
PERSONAL-SUBSCRIBER	This tag specifies the five-digit personal subscriber number that begins with 0700.
SHAREDCOST-ACCESS	This tag specifies the access code for the shared cost 078 numbers.
SPLITCHARGE-ACCESS	This tag specifies the access code for the split cost 079 numbers.

Table 4-4 Tag Descriptions for BENP (continued)

Tag	Description
MOBILE-ACCESS	This tag specifies the four-digit mobile access codes, which are 0477, 0478, or 0479.
NATIONALRATE-SUBSCRIBER	This tag specifies the five-digit national rate subscriber number.
PREMIUM-SUSCRIBER	This tag specifies the five-digit premium rate subscriber number.
SPECIALRATE-ACCESS	This tag specifies the access code for special rate 077 numbers.
COUNTRY-CODE	This tag specifies the country code portion of the international number.
INTERNATIONAL-ACCESS	This tag specifies the two-digit access code for international dialing. For Belgium, this code specifies 00.
NATIONALRATE-ACCESS	This tag specifies the three-digit national rate access code that begins with 070.
PREMIUM-ACCESS	This tag specifies the access code that is used to recognize calls to a premium rate service. For Belgium, this code specifies 0900.
SHAREDCOST-SUBSCRIBER	This tag specifies the six-digit shared cost (078) subscriber numbers.
SPLITCHARGE-SUBSCRIBER	This tag specifies the six-digit split cost (079) subscriber numbers.
SUBSCRIBER	This tag specifies the six- or seven-digit subscriber numbers.

### **France Numbering Plan**

The following topics describe DDIs and tags that are used in the France Numbering Plan (FRNP).

- Discard Digits Instructions for FRNP, page 4-8
- Tag Descriptions for FRNP, page 4-12

#### **Discard Digits Instructions for FRNP**

Table 4-5 lists DDIs and describes the effects of applying each DDI to a dialed number. For information on other numbering plans, see the "Related Topics" section on page 4-61.

Table 4-5 DDIs for FRNP

DDI	Effect	Example
NoDigits	This DDI removes no digits.	Route Pattern: 9.@
		Dialed Digit String: 90158046000
		After Applying DDI: 90158046000
PreDot	This DDI removes	Route Pattern: 9.@
	Cisco Unified CallManager	Dialed Digit String: 90158046000
	external access code	After Applying DDI: 0158046000
PreAt	This DDI removes all digits that	Route Pattern: 8.9@
	are prior to the FRNP portion of the route pattern including	Dialed Digit String: 890158046000
	Cisco Unified CallManager	After Applying DDI: 0158046000
	external access code	
	PBX External access code	
Trailing-#	This DDI removes	Route Pattern: 9.@
	End-of-dialing character for	Dialed Digit String: 9003227045900#
	international calls	After Applying DDI: 9003227045900
PreDot Trailing-#	This DDI removes	Route Pattern: 9.@
	Cisco Unified CallManager	Dialed Digit String: 9003227045900#
	external access code	After Applying DDI: 003227045900
	End-of-dialing character	
PreAt Trailing-#	This DDI removes	Route Pattern: 8.9@
	• All digits prior to the FRNP	Dialed Digit String: 89003227045900#
	portion of the route pattern including Cisco Unified CallManager external access code and PBX external access code	After Applying DDI: 003227045900
	End-of-dialing character	
National->International	This DDI removes	Route Pattern: 9.@
	Long distance access code	Dialed Digit String: 90158046000
		After Applying DDI: 9158046000
PreDot	This DDI removes	Route Pattern: 9.@
National->International	Long distance access code	Dialed Digit String: 90158046000
	Cisco Unified CallManager external access code	After Applying DDI: 158046000

Table 4-5 DDIs for FRNP (continued)

DDI	Effect	Example
PreAt	This DDI removes	Route Pattern: 8.9@
National->International	Long distance access code	Dialed Digit String: 890158046000
	All digits prior to the FRNP portion of the route pattern including Cisco Unified CallManager external access code and PBX external access code	After Applying DDI: 158046000
National->International	This DDI removes	Route Pattern: 9.@
Trailing-#	• Long distance access code	Dialed Digit String: 90158046000#
	End-of-dialing character	After Applying DDI: 9158046000
PreDot	This DDI removes	Route Pattern: 9.@
National->International Trailing-#	• Long distance access code	Dialed Digit String: 90158046000#
Training #	Cisco Unified CallManager external access code	After Applying DDI: 158046000
	End-of-dialing character	
PreAt	This DDI removes	Route Pattern: 8.9@
National->International Trailing-#	• Long distance access code	Dialed Digit String: 890158046000
Halling-π	All digits prior to the FRNP portion of the route pattern including     Cisco Unified CallManager external access code and PBX external access code	After Applying DDI: 158046000
	• End-of-dialing character	
RemovesIntlAccess	This DDI removes	Route Pattern: 9.@
	• International access code	Dialed Digit String: 9003227045900
		After Applying DDI: 93227045900
PreDot	This DDI removes	Route Pattern: 9.@
RemovesIntlAccess	• International access code	Dialed Digit String: 9003227045900
	Cisco Unified CallManager external access code	After Applying DDI: 3227045900
PreAt	This DDI removes	Route Pattern: 8.9@
RemovesIntlAccess	International access code	Dialed Digit String: 89003227045900
	All digits prior to the FRNP portion of the route pattern including Cisco Unified CallManager external access code and PBX external access code	After Applying DDI: 3227045900

Table 4-5 DDIs for FRNP (continued)

DDI	Effect	Example
RemovesIntlAccess	This DDI removes	Route Pattern: 9.@
Trailing-#	International access code	Dialed Digit String: 9003227045900#
	• End-of-dialing digits	After Applying DDI: 3227045900
PreDot	This DDI removes	Route Pattern: 9.@
RemovesIntlAccess Trailing-#	• International access code	Dialed Digit String: 9003227045900
Truming "	Cisco Unified CallManager external Access code	After Applying DDI: 3227045900
	End-of-dialing digits	
PreAt	This DDI removes	Route Pattern: 8.9@
RemovesIntlAccess Trailing-#	International access code	Dialed Digit String: 89003227045900#
IIaIIIIig-#	All digits prior to the FRNP portion of the route pattern including     Cisco Unified CallManager external Access code and PBX external access code	After Applying DDI: 3227045900
	End-of-dialing digits	
International->National	This DDI removes	Route Pattern: 9.@
	International access code	Dialed Digit String: 9003227045900
	Country code	After Applying DDI: 927045900
PreDot International->National	This DDI removes	Route Pattern: 9.@
international->ivational	• International access code	Dialed Digit String: 9003227045900
	Country code	After Applying DDI: 27045900
	Cisco Unified CallManager external Access code	
PreAt	This DDI removes	Route Pattern: 8.9@
International->National	International access code	Dialed Digit String: 89003227045900
	Country code	After Applying DDI: 27045900
	All digits prior to the FRNP portion of the route pattern including     Cisco Unified CallManager external Access code and PBX external access code	
International->National	This DDI removes	Route Pattern: 9.@
Trailing-#	International access code	Dialed Digit String: 9003227045900#
	Country code	After Applying DDI: 927045900
	End-of-dialing character	

Table 4-5 DDIs for FRNP (continued)

DDI	Effect	Example
PreDot International->National	This DDI removes  • International access code	Route Pattern: 9.@ Dialed Digit String: 9003227045900#
Trailing-#	Country code	After Applying DDI: 27045900
	Cisco Unified CallManager external access code	
	End-of-dialing character	
PreAt	This DDI removes	Route Pattern: 8.9@
International->National Trailing-#	International access code	Dialed Digit String: 89003227045900#
Truming "	Country code	After Applying DDI: 27045900
	All digits prior to the FRNP portion of the route pattern including Cisco Unified CallManager external access code and PBX external access code	
	End-of-dialing character	

#### **Tag Descriptions for FRNP**

Table 4-6 lists and describes tags that are used in the FRNP. For information on other numbering plans, see the "Related Topics" section on page 4-61.

Table 4-6 Tag Descriptions for FRNP

Tag	Description
END-OF-DIALING	This single character identifies the end of the dialed-digit string. The # character serves as the end-of-dialing signal for international numbers that are dialed within the FRNP.
COUNTRY-CODE	This tag specifies the country code portion of the international number. For example: 1 for the United States, 31 for the Netherlands, 44 for the United Kingdom.
SHAREDCOST-SUBSCRIBER	This tag specifies the six-digit shared cost subscriber numbers.
DIALUP-SUBSCRIBER	This tag designates the subscriber number that is dialed after the dialup access code.
INTERNATIONAL-ACCESS	This tag specifies the two-digit access code for international dialing. For France, this code is 00.
MOBILE-ACCESS	This tag specifies the mobile access code. For France, this codes specifies 6.

Table 4-6 Tag Descriptions for FRNP (continued)

Tag	Description
NATIONAL-NUMBER	This tag specifies the national portion of an international number.
SHAREDCOST-ACCESS	This tag specifies the access code for the shared cost numbers. For France, this number takes the form 89X.
SPLITCHARGE-SUBSCRIBER	This tag specifies the six-digit split cost subscriber numbers.
AREA-CODE	This tag specifies the area code as dialed for calls. For France the area code equals 1, 2, 3, 4, or, 5.
CARRIER-SELECT	This tag specifies the access code to select the alternative IDD carriers in France and takes the form 16XX.
DIALUP-ACCESS	This tag designates the dialup access code ("internet providers-EPAK"). For France, this code takes the form 86X.
FREEPHONE-ACCESS	This tag designates the freephone access code, which takes the form 80X for France.
LONG-DISTANCE-ACCESS	This one-digit code identifies a direct-dialed, long-distance call. FRNP calls use 0 for this code.
MOBILE-SUBSCRIBER	This tag specifies the last eight digits of the mobile directory number.
SERVICE	This tag specifies two-, three-, or four-digit service codes (such as 12 for directory inquiries), excluding the emergency numbers 15, 17, 18, 112, 115.
SPECIALRATE-ACCESS	This tag designates three digits that specify a special rate charge call.
SPLITCHARGE-ACCESS	This tag specifies the access code for the split cost-numbers. For France, this number takes the form 81X or 82X.
SUBSCRIBER	This tag specifies the eight-digit subscriber number that is dialed after the area code.
FREEPHONE-SUBSCRIBER	This tag specifies the six-digit subscriber numbers that is dialed after the freephone access code.
ALTERNATE-CARRIER	This tag specifies a one-digit alternate carrier code instead of zero.
SPECIALRATE-SUBSCRIBER	This tag designates six digits that are added to the special rate access number.
VIRTUALCALLINGCARDS-ACCESS	This tag designates three digits that specify a virtual calling card call. For France, this code takes the form 84X.
VPN-SUBSCRIBER	This tag designates two digits that are added to the VPN access number.

Table 4-6 Tag Descriptions for FRNP (continued)

Tag	Description
VIRTUALCALLINGCARDS-SUBSCRIB ER	This tag designates the six digits that are added to the virtual calling card access number.
VPN-ACCESS	This tag designates three digits that specify a VPN access call. For France, this code takes the form 85X.

## **Great Britain Numbering Plan**

The following topics describe DDIs and tags that are used in the Great Britain Numbering Plan (GBNP).

- Discard Digits Instructions for GBNP, page 4-14
- Tag Descriptions for GBNP, page 4-19

#### **Discard Digits Instructions for GBNP**

Table 4-7 lists DDIs and describes the effects of applying each DDI to a dialed number. For information on other numbering plans, see the "Related Topics" section on page 4-61.

Table 4-7 DDIs for GBNP

DDI	Effect	Example
NoDigits	This DDI removes no digits.	Route pattern: 9.@
		Dialed Digit String: 902088244300
		After applying DDI: 902088244300
PreDot	This DDI removes	Route pattern: 9.@
	Access code	Dialed digit string: 902088244300
		After applying DDI: 02088244300
PreAt	This DDI removes	Route pattern: 8.9@
	• All digits that are prior to	Dialed digit string: 8902088244300
	the GBNP portion of the route pattern.	After applying DDI: 02088244300
Trailing-#	This DDI removes	Route pattern: 9.@
	End-of-dialing character	Dialed digit string: 9003227045900#
		After applying DDI: 9003227045900
PreDot Trailing-#	This DDI removes	Route pattern: 9.@
	Access code	Dialed digit string: 9003227045900#
	End-of-dialing character	After applying DDI: 003227045900

Table 4-7 DDIs for GBNP (continued)

DDI	Effect	Example
PreAt Trailing-#	This DDI removes	Route pattern: 8.9@
	• All digits prior to the	Dialed digit string: 89003227045900#
	GBNP portion of the route pattern	After applying DDI: 003227045900
	End-of-dialing character	
InternatDirectDial	This DDI removes	Route pattern: 9.@
	• International access code	Dialed digit string: 9003227045900
		After applying DDI: 93227045900
PreDot	This DDI removes	Route pattern: 9.@
InternatDirectDial	Access code	Dialed digit string: 9003227045900
	International access code	After applying DDI: 3227045900
PreAt InternatDirectDial	This DDI removes	Route pattern: 8.9@
	• All the digits prior to the	Dialed digit string: 003227045900
	GBNP portion of the route pattern	After applying DDI: 003227045900
	International access code	
InternatDirectDial	This DDI removes	Route pattern: 9.@
Trailing-#	International access code	Dialed digit string: 9003227045900#
	End-of-dialing character	After applying DDI: 93227045900
PreDot	This DDI removes	Route pattern: 9.@
InternatDirectDialTrailin g-#	• Access code	Dialed digit string: 9003227045900#
8 "	• International access code	After applying DDI: 3227045900
	End-of-dialing character	
PreAt	This DDI removes	Route pattern: 8.9@
InternatDirectDialTrailin g-#	• All the digits prior to the	Dialed digit string: 89003227045900#
g-n	GBNP portion of the route pattern	After applying DDI: 3227045900
	International access code	
	End-of-dialing character	
Internat->Nat	This DDI removes	Route pattern: 9.@
	• International access code	Dialed digit string: 9003227045900
	Country code	After applying DDI: 927045900
PreDot Internat->Nat	This DDI removes	Route pattern: 9.@
	• Access code	Dialed digit string: 9003227045900
	• International access code	After applying DDI: 27045900
	Country code	

Table 4-7 DDIs for GBNP (continued)

DDI	Effect	Example
PreAt Internat->Nat	This DDI removes	Route pattern: 8.9@
	• All the digits prior to the GBNP portion of the route pattern	Dialed digit string: 89003227045900
		After applying DDI: 27045900
	• International access code	
	• Country code	
Internat->Nat Trailing-#	This DDI removes	Route pattern: 9.@
	• International access code	Dialed digit string: 9003227045900#
	• Country code	After applying DDI: 927045900
	• End-of-dialing character	
PreDot Internat->Nat	This DDI removes	Route pattern: 9.@
Trailing-#	• Access code	Dialed digit string: 9003227045900#
	• International access code	After applying DDI: 27045900
	• Country code	
	• End-of-dialing character	
PreAt Internat->Nat	This DDI removes	Route pattern: 8.9@
Trailing-#	• All digits prior to the GBNP portion of the route pattern	Dialed digit string: 89003227045900#
		After applying DDI: 27045900
	• International access code	
	• Country code	
	• End-of-dialing character	
Nat->Internat	This DDI removes	Route pattern: 9.@
	• Leading zero digit from	Dialed digit string: 902088244300
	geographic national numbers	After applying DDI: 92088244300
PreDot Nat->Internat	This DDI removes the following items from national numbers	Route pattern: 9.@
		Dialed digit string: 902088244300
	Access code	After applying DDI: 2088244300
	Leading zero digit	
PreAt Nat->Internat	This DDI removes	Route pattern: 8.9@
	• All the digits prior to the	Dialed digit string: 8902088244300
	GBNP portion of the route pattern	After applying DDI: 2088244300
	Leading zero digit	

Table 4-7 DDIs for GBNP (continued)

DDI	Effect	Example
Nat->Internat Trailing-#	This DDI removes	Route pattern: 9.@
	Leading zero digit from geographic national numbers	Dialed digit string: 902088244300# After applying DDI: 92088244300
	End-of-dialing character	
PreDot Nat->Internat Trailing-#	This DDI removes	Route pattern: 9.@
Halling-π	Access code	Dialed digit string: 902088244300#
	• Leading zero digit from national numbers	After applying DDI: 2088244300
	• End-of-dialing character	
PreAt Nat->Internat	This DDI removes	Route pattern: 8.9@
Trailing-#	• All the digits prior to the	Dialed digit string: 8902088244300#
	GBNP portion of the route pattern	After applying DDI: 2088244300
	<ul> <li>Leading zero digit</li> </ul>	
	• End-of-dialing character	
Mobile->Internat	This DDI removes	Route pattern: 9.@
	Leading zero digit from	Dialed digit string: 907973123456
	mobile telephone numbers	After applying DDI: 97973123456
PreDot Mobile->Internat	This DDI removes the	Route pattern: 9.@
	following items from mobile telephone numbers	Dialed digit string: 907973123456
	Access code	After applying DDI: 7973123456
	Leading zero digit	
PreAt Mobile->Internat	This DDI removes the	Route pattern: 8.9@
	following items from mobile	Dialed digit string: 8907973123456
	<ul><li>telephone numbers</li><li>All digits prior to the</li></ul>	After applying DDI: 7973123456
	GBNP portion of the route pattern	
	1	
Mobile > Internet	Leading zero digit  This DDI ramayas	Pouto pottorni 0 @
Mobile->Internat Trailing-#	This DDI removes	Route pattern: 9.@
O	Leading zero digit from mobile telephone numbers	Dialed digit string: 907973123456# After applying DDI: 97973123456
	End-of-dialing character	

Table 4-7 DDIs for GBNP (continued)

DDI	Effect	Example
PreDot Mobile->Internat	This DDI removes	Route pattern: 9.@
Trailing-#	• Access code	Dialed digit string: 907973123456#
	Leading zero digit from mobile telephone numbers	After applying DDI: 7973123456
	• End-of-dialing character	
PreAt Mobile->Internat	This DDI removes the	Route pattern: 8.9@
Trailing-#	following items from mobile telephone numbers	Dialed digit string: 8907973123456#
	All the digits prior to the GBNP portion of the route pattern	After applying DDI: 7973123456
	• Leading zero digit	
Nat->Local	This DDI removes the	Route pattern: 9.@
	following items from geographic national numbers	Dialed digit string: 901344770011
	Leading zero digit	After applying DDI: 9770011
	Area code	
PreDot Nat->Local	This DDI removes the	Route pattern: 9.@
	following items from geographic national numbers	Dialed digit string: 901344770011
	Access code	After applying DDI: 770011
	<ul> <li>Leading zero digit</li> </ul>	
	Area code	
PreAt Nat->Local	This DDI removes the	Route pattern: 8.9@
	following items from	Dialed digit string: 8901344770011
	geographic national numbers	After applying DDI: 770011
	• All the digits prior to the GBNP portion of the route pattern	
	Leading zero digit	
	Area code	
Nat->Local Trailing-#	This DDI removes the	Route pattern: 9.@
	following items from geographic national numbers	Dialed digit string: 901344770011#
	Leading zero digit	After applying DDI: 9770011
	<ul><li>Leading zero digit</li><li>Area code</li></ul>	
	<ul> <li>Area code</li> <li>End-of-dialing character</li> </ul>	
	End-of-draffing character	

Table 4-7 DDIs for GBNP (continued)

DDI	Effect	Example
PreDot Nat->Local Trailing-#	This DDI removes the following items from geographic national numbers  • Access code  • Leading zero digit  • Area code	Route pattern: 9.@  Dialed digit string: 901344770011#  After applying DDI: 770011
PreAt Nat->Local Trailing-#	This DDI removes the following items from geographic national numbers  • All digits prior to the GBNP portion of the route pattern  • Leading zero digit  • Area code	Route pattern: 8.9@ Dialed digit string: 8901344770011# After applying DDI: 770011

### **Tag Descriptions for GBNP**

Table 4-8 lists and describes tags that are used in the GBNP. For information on other numbering plans, see the "Related Topics" section on page 4-61.



Route filter tags are not used to adminster pricing. For up-to-date information on telecom rates for calls within the UK, refer to your local telecom provider.

Table 4-8 Tag Descriptions for GBNP

Tag	Description
INTERNATIONAL-ACCESS	This tag specifies the international access code, which is 00 in the United Kingdom.
LOCALRATE-ACCESS	This tag specifies the three-digit access codes, 842, 843, 844, or 845, for national services that are charged at special rates or business rates.
MOBILE-SUBSCRIBER	This tag specifies the six-digit mobile subscriber number.
NATIONAL-NUMBER	This tag specifies the national portion of an international number.
SERVICE	This tag specifies three-digit service codes such as 999 for emergency services or 100 for operator services.
PERSONAL-ACCESS	This tag specifies the two-digit access code, 70, that is used to dial personal numbers.
PAGING-SUBSCRIBER	This tag specifies the subscriber part of the pager number. Pager numbers begin with 76 plus an 8-digit subscriber number.

Table 4-8 Tag Descriptions for GBNP (continued)

Tag	Description
CORPORATE-NUMBER	This tag specifies the 10-digit corporate numbers that begin with 55.
FREEPHONE-NUMBER	This tag specifies the 9- or 10-digit freephone numbers that begin with 800, the 10- digits that begin with 808, and the 9- digits that begin with 500.
LOCAL-5-DIGIT	This tag specifies the five-digit local numbers.
LOCAL-7-DIGIT	This tag specifies the seven-digit local numbers.
BROADBAND-SERVICE	This tag specifies the 10-digit broadband service numbers that range from 91-99.
SPECIALRATE-ACCESS	This tag specifies the two-digit access code for special rate services that begin with 82 or 89.
AREA-CODE	This tag specifies the two-, three-, four-, or five-digit geographic area codes.
SUBSCRIBER	This tag specifies the five-, six-, seven-, or eight-digit subscriber numbers. Subscriber numbers are 4- or 5-digit long in the 16977 area code.
LOCALRATE-SUBSCRIBER	This tag specifies the seven-digit local rate subscriber number.
LOCAL-6-DIGIT	This tag specifies the six-digit local numbers.
LOCAL-8-DIGIT	This tag specifies the eight-digit local numbers.
COUNTRY-CODE	This tag specifies the one-, two-, or three-digit country codes.
PAGING-ACCESS	This tag specifies the four-digit paging service access code. 76XX represents this code with the exception of 7624, which is used for Mobile-access.
PERSONAL-SUBSCRIBER	This tag specifies the eight-digit personal subscriber number.
PREMIUM-RATE-NUMBER	This tag specifies the 10-digit premium rate numbers that begin with 90X and 91X.
DIRECTORY-SERVICE	This tag specifies the directory services number. 118XXX represents this number.
NATIONAL-ACCESS	This tag specifies the leading zero digit in all national and geographic numbers. 0 always represents this tag.
SPECIALRATE-SUBSCRIBER	This tag specifies the eight-digit special rate service number.
MOBILE-ACCESS	This tag specifies the four-digit mobile access codes, which are 74XX, 75XX, 7624, 77XX, 78XX, 79XX.
NATIONALRATE-ACCESS	This tag specifies the three-digit special rate or business rate access code that begins with 870, 871, 872, or 873.
NATIONALRATE-SUBSCRIBER	This tag specifies the seven-digit national rate service number.

Table 4-8 Tag Descriptions for GBNP (continued)

Tag	Description
VOIP-NUMBER	This tag specifies the broadband voice over IP number. These 10-digit numbers begin with 56.
LOCAL-4-DIGIT	This tag specifies the four-digit local numbers used in the 16977 area code.
NATIONAL-HELPLINES	This tag specifies the national helplines number. 116XXX represents this number.
UK-WIDE-ACCESS	This tag specifies the three-digit access codes, 30X, 33X, 34X or 37X, for UK-WIDE non-geographic numbers charged at geographic rates.
UK-WIDE-SUBSCRIBER	This tag specifies the seven-digit UK-WIDE subscriber number.

## **Greece Numbering Plan**

The following topics describe DDIs and tags that are used in the Greece Numbering Plan (GRNP).

- Discard Digits Instructions for GRNP, page 4-21
- Tag Descriptions for GRNP, page 4-22

#### **Discard Digits Instructions for GRNP**

Table 4-9 lists DDIs and describes the effects of applying each DDI to a dialed number. For information on other numbering plans, see the "Related Topics" section on page 4-61.

Table 4-9 DDIs for GRNP

DDI	Effect	Example
NoDigits	This DDI removes no digits.	Route pattern: 0.@
		Dialed Digit String: 02106381350
		After applying DDI: 02106381350
PreDot	This DDI removes	Route pattern: 0.@
	Cisco Unified CallManager	Dialed Digit String: 02106381350
external ac	external access code	After applying DDI: 2106381350
PreAt	This DDI removes all digits that are	Route pattern: 9.0@
	prior to the GRNP portion of the route pattern including	Dialed Digit String: 902106381350
• Cis	Cisco Unified CallManager external access code	After applying DDI: 2106381350
	PBX external access code	

Table 4-9 DDIs for GRNP (continued)

DDI	Effect	Example
Trailing-#	This DDI removes	Route pattern: 0.@
	End-of-dialing character for	Dialed digit string: 00014085264000#
	international calls	After applying DDI: 00014085264000
PreDot Trailing-#	This DDI removes	Route pattern: 0.@
	Cisco Unified CallManager	Dialed digit string: 00014085264000#
	external access code	After applying DDI: 0014085264000
	• End-of-dialing character	
PreAt Trailing-#	This DDI removes	Route pattern: 9.0@
	All digits prior to the GRNP	Dialed digit string: 900014085264000#
	portion of the route pattern including Cisco Unified	After applying DDI: 0014085264000
	CallManager external access code and PBX external access	
	code and PBX external access	
	End-of-dialing character	

### **Tag Descriptions for GRNP**

Table 4-10 lists and describes tags that are used in the GRNP. For information on other numbering plans, see the "Related Topics" section on page 4-61.

Table 4-10 Tag Descriptions for GRNP

Tag	Description	
AREA-CODE	This tag specifies the area code as dialed for calls within Athens Zone. Example:21.	
SUBSCRIBER	This tag specifies the eight-digit subscriber number that is dialed after the area code within Athens Zone. [0-2]XXXXXXX represents this number.	
AREA-CODE3	This tag specifies the three-digit area code as dialed for calls within Thessaloniki, Larissa, Kavala, Patra, Tripoli, and Heraklio Zones. 2[3-8]1 represents the tag.	
SUBSCRIBER7	This tag specifies the seven-digit subscriber number that is dialed after the area code within Thessaloniki, Larissa, Kavala, Patra, Tripoli, and Heraklio Zones. [0-2]XXXXXX represents this tag.	
AREA-CODE4	This tag specifies the four-digit area code as dialed for all national calls except Athens, Thessaloniki, Larissa, Kavala, Patra, Tripoli, and Heraklio Zones. 2[2-8][2-9[1-9] represents the tag.	

Table 4-10 Tag Descriptions for GRNP (continued)

Tag	Description
SUBSCRIBER6	This tag specifies six-digit subscriber number that is dialed after the area code except Athens, Thessaloniki, Larissa, Kavala, Patra, Tripoli, and Heraklio Zones. [0-2]XXXXX represents this tag.
CARRIER-SELECT	This tag specifies the four- or five-digit access code to select the alternative carriers in Greece. 17[2-9]X or 16[2-3]XX represents this tag.
INTERNATIONAL-ACCESS	This tag specifies the two-digit access code for international dialing. For Greece, this code is 00.
COUNTRY-CODE	This tag specifies the country code portion of the international number. For example: 1 for the United States, 31 for the Netherlands, 44 for the United Kingdom.
NATIONAL-NUMBER	This tag specifies the national portion of an international number.
END-OF-DIALING	This single character identifies the end of the dialed-digit string. The # character serves as the end-of-dialing signal for international numbers that are dialed within the GRNP.
DIALUP-ACCESS	This tag designates the dialup access code ("internet providers-EPAK"), which is 891 or 896 in Greece.
DIALUP-SUBSCRIBER	This tag designates the seven-digit subscriber number that is dialed after the dialup access code.
EMERGENCY	This tag designates 100, 108, 112, 166, 199 as emergency numbers, which will route as an urgent pattern (extend call as soon as these digits match).
FREEPHONE-ACCESS	This tag designates the freephone access access code, which is 800 in the Netherlands.
FREEPHONE-SUBSCRIBER	This tag specifies the seven-digit subscriber number that is dialed after the freephone access code.
LOCALRATE-SUBSCRIBER	This tag designates seven digits that are added to the local rate access number.
MOBILE-ACCESS	This tag specifies the three-digit mobile access codes. For Greece, this code takes the form 69[013456789].
MOBILE-SUBSCRIBER	This tag specifies the last seven digits of the mobile directory number.
PAGING-ACCESS	This tag designates the paging numbers ("pagers") access code, which is 692 in Greece.
PAGING-SUBSCRIBER	This tag designates the seven-digit subscriber number that is dialed after the paging access code.
PERSONAL-ACCESS	This tag specifies the two-digit personal number access code, which is 70 in Greece.

Table 4-10 Tag Descriptions for GRNP (continued)

Tag	Description
PERSONAL-SUBSCRIBER	This tag specifies the eight-digit personal subscriber number that is dialed after personal access code.
PREMIUM-ACCESS	This tag specifies the access code that is used to recognize calls to a premium rate service. For Greece, this code specifies 901 or 909.
SERVICE	This tag specifies three-digit or four-digit service codes (such as 131 for directory inquiries), excluding the emergency numbers 100, 108, 112, 166, and 199.
SERVICE5	This tag specifies five-digit or six-digit service codes.
VIRTUALCALLINGCARDS-ACCESS	This tag designates three digits that specify a virtual calling card call. For Greece, this code specifies 807.
VIRTUALCALLINGCARDS-SUBSCRIB ER	This tag designates the four digits that are added to the virtual calling card access number.
VPN-ACCESS	This tag designates a three-digit number that specifies a VPN access call. For Greece, this number specifies 50.
VPN-SUBSCRIBER	This tag designates the eight-digit subscriber number that is dialed after VPN access code.

## **Ireland Numbering Plan**

The following topics describe DDIs and tags that are used in the Ireland Numbering Plan (IENP).

- Discard Digits Instructions for IENP, page 4-24
- Tag Descriptions for IENP, page 4-31

### **Discard Digits Instructions for IENP**

Table 4-11 lists DDIs and describes the effects of applying each DDI to a dialed number. For information on other numbering plans, see the "Related Topics" section on page 4-61.

Table 4-11 DDIs for IENP

DDI	Effect	Example
NoDigits	This DDI removes no digits.	Route pattern: 9.@
		Dialed Digit String: 9018192700
		After applying DDI: 9018192700
PreDot	This DDI removes	Route pattern: 9.@
	Cisco Unified CallManager	Dialed Digit String: 9018192700
	external access code	After applying DDI: 018192700

Table 4-11 DDIs for IENP (continued)

DDI	Effect	Example
PreAt	This DDI removes all digits that are	Route pattern: 8.9@
	prior to the IENP portion of the route pattern including	Dialed Digit String: 89018192700
	Cisco Unified CallManager external access code	After applying DDI: 018192700
	PBX external access code	
Trailing-#	This DDI removes	Route pattern: 9.@
	• End-of-dialing character for	Dialed digit string: 9003227045900#
	international calls	After applying DDI: 9003227045900
PreDot Trailing-#	This DDI removes	Route pattern: 9.@
	Cisco Unified CallManager	Dialed digit string: 9003227045900#
	external access code	After applying DDI: 003227045900
	End-of-dialing character	
PreAt Trailing-#	This DDI removes	Route pattern: 8.9@
	• All digits prior to the IENP portion of the route pattern	Dialed digit string: 89003227045900#
	including Cisco Unified CallManager external access code and PBX external access code	After applying DDI: 003227045900
	End-of-dialing character	
Nat->Local	This DDI removes	Route pattern: 9.@
	National access code	Dialed digit string: 902266551
	Area code	After applying DDI: 966551
PreDot Nat->Local	This DDI removes	Route pattern: 9.@
	National access code	Dialed digit string: 902266551
	Cisco Unified CallManager external access code	After applying DDI: 66551
	Area code	
PreAtNat->Local	This DDI removes	Route pattern: 8.9
	National access code	Dialed digit string: 8902266551
	Area code	After applying DDI: 966551
	All digits prior to the IENP portion of the route pattern including Cisco Unified CallManager external access code and PBX external access code	

Table 4-11 DDIs for IENP (continued)

DDI	Effect	Example
Nat->Local Trailing-#	This DDI removes	Route Pattern: 9.@
	National access code	Dialed Digits: 902266551#
	• Area code	After Applying DDI: 966551
	End-of-dialing character	
PreDot Nat->Local	This DDI removes	Route Pattern: 9.@
Trailing-#	National Access code	Dialed Digits: 902266551#
	Area code	After Applying DDI: 66551
	Cisco Unified CallManager external access code	
	End-of-dialing character	
PreAt Nat->Local	This DDI removes	Route Pattern: 8.9@
Trailing-#	National Access code	Dialed Digits: 8902266551#
	Area code	After Applying DDI: 966551
	All digits prior to the IENP portion of the route pattern including     Cisco Unified CallManager external access code and PBX external access code	
	End-of-dialing character	
Nat->International	This DDI removes	Route Pattern: 9.@
	National access code	Dialed Digits: 9018192700
		After Applying DDI: 918192700
PreDot	This DDI removes	Route Pattern: 9.@
Nat->International	National access code	Dialed Digits: 9018192700
	Cisco Unified CallManager external Access code	After Applying DDI: 18192700
PreAt Nat->International	This DDI removes	Route Pattern: 8.9@
	National access code	Dialed Digits: 89018192700
	All digits prior to the IENP portion of the route pattern including Cisco Unified CallManager external access code and PBX external access code	After Applying DDI: 18192700
Nat->International	This DDI removes	Route Pattern: 9.@
Trailing-#	National access code	Dialed Digits: 9018192700#
	End-of-dialing character	After Applying DDI: 918192700

Table 4-11 DDIs for IENP (continued)

DDI	Effect	Example
PreDot	This DDI removes	Route Pattern: 9.@
Nat->International Trailing-#	National access code	Dialed Digits: 9018192700#
Haming-π	Cisco Unified CallManager external access code	After Applying DDI: 18192700
	• End-of-dialing character	
PreAt Nat->International	This DDI removes	Route Pattern: 8.9@
Trailing-#	National access code	Dialed Digits: 89018192700#
	All digits prior to the IENP portion of the route pattern including Cisco Unified CallManager external access code and PBX external access code	After Applying DDI: 18192700
	End-of-dialing character	
International->National	This DDI removes	Route Pattern: 9.@
	• International access code	Dialed Digits: 9003227045900
	Country Code	After Applying DDI: 927045900
PreDot	This DDI removes	Route Pattern: 9.@
International->National	• International access code	Dialed Digits: 9003227045900
	Country Code	After Applying DDI: 27045900
	Cisco Unified CallManager external access code	
PreAt	This DDI removes	Route Pattern: 8.9@
International->National	• International access code	Dialed Digits: 89003227045900
	Country Code	After Applying DDI: 27045900
	All digits prior to the IENP portion of the route pattern including Cisco Unified CallManager external access code and PBX external access code	
International->National	This DDI removes	Route Pattern: 9.@
Trailing-#	• International access code	Dialed Digits: 9003227045900#
	Country Code	After Applying DDI: 927045900
	• End-of-dialing character	

Table 4-11 DDIs for IENP (continued)

DDI	Effect	Example
PreDot	This DDI removes	Route Pattern: 9.@
International->National	International access code	Dialed Digits: 9003227045900#
Trailing-#	Country Code	After Applying DDI: 27045900
	Cisco Unified CallManager external access code	
	End-of-dialing character	
PreAt	This DDI removes	Route Pattern: 8.9@
International->National Trailing-#	• International access code	Dialed Digits: 89003227045900#
Haimig-π	Country Code	After Applying DDI: 27045900
	All digits prior to the IENP portion of the route pattern including Cisco Unified CallManager external access code and PBX external access codes	
	• End-of-dialing character	
InternationalDirectDial	This DDI removes	Route Pattern: 9.@
	• International access code	Dialed Digits: 9003227045900
		After Applying DDI: 93227045900
PreDot	This DDI removes	Route Pattern: 9.@
InternationalDirectDial	• International access code	Dialed Digits: 9003227045900
	Cisco Unified CallManager external access code	After Applying DDI: 3227045900
PreAt	This DDI removes	Route Pattern: 8.9@
InternationalDirectDial	• International access code	Dialed Digits: 89003227045900
	All digits prior to the IENP portion of the route pattern including Cisco Unified CallManager external access code and PBX external access codes	After Applying DDI: 3227045900
InternationalDirectDial	This DDI removes	Route Pattern: 9.@
Trailing-#	• International access code	Dialed Digits: 9003227045900#
	End-of-dialing character	After Applying DDI: 93227045900
PreDot	This DDI removes	Route Pattern: 9.@
InternationalDirectDial Trailing-#	• International access code	Dialed Digits: 9003227045900#
11aiiiig-#	Cisco Unified CallManager external access code	After Applying DDI: 3227045900
	End-of-dialing character	

Table 4-11 DDIs for IENP (continued)

DDI	Effect	Example
PreAt	This DDI removes	Route Pattern: 8.9@
InternationalDirectDial Trailing-#	International access code	Dialed Digits: 89003227045900#
Training "	All digits prior to the IENP portion of the route pattern including Cisco Unified CallManager external access code and PBX external access codes	After Applying DDI: 3227045900
	• End of dialing character	
Mobile->Internat	This DDI removes	Route Pattern: 9.@
	National access code from	Dialed Digits: 90836655443
	Mobile numbers	After Applying DDI: 9836655443
PreDot Mobile->Internat	This DDI removes	Route Pattern: 9.@
	National access code	Dialed Digits: 90836655443
	Cisco Unified CallManager external access code	After Applying DDI: 836655443
PreAt Mobile->Internat	This DDI removes	Route Pattern: 8.9@
	National access code	Dialed Digits: 890836655443
	All digits prior to the IENP portion of the route pattern including Cisco Unified CallManager external access code and PBX external access codes	After Applying DDI: 836655443
Mobile->Internat	This DDI removes	Route Pattern: 9.@
Trailing-#	National access code	Dialed Digits: 90836655443#
	The end-of-dialing character	After Applying DDI: 9836655443
PreDot Mobile->Internat	This DDI removes	Route Pattern: 9.@
Trailing-#	National access code	Dialed Digits: 90836655443#
	Cisco Unified CallManager external access code	After Applying DDI: 836655443
	• The end of dialing character	

Table 4-11 DDIs for IENP (continued)

DDI	Effect	Example
PreAt Mobile->Internat	This DDI removes	Route Pattern: 8.9@
Trailing-#	National access code	Dialed Digits: 890836655443#
	All digits prior to the IENP portion of the route pattern including Cisco Unified CallManager external access code and PBX external access codes	After Applying DDI: 836655443
	The end of dialing character	
NI->International	This DDI removes	Route Pattern: 9.@
	Northern Ireland access code	Dialed Digits: 904877665544
		After Applying DDI: 977665544
PreDot NI->International	This DDI removes	Route Pattern: 9.@
	Northern Ireland access code	Dialed Digits: 904877665544
	Cisco Unified CallManager external access code	After Applying DDI: 77665544
PreAt NI->International	This DDI removes	Route Pattern: 8.9@
	Northern Ireland access code	Dialed Digits: 8904877665544
	All digits prior to the IENP portion of the route pattern including Cisco Unified CallManager external access code and PBX external access codes	After Applying DDI: 77665544
NI->International	This DDI removes	Route Pattern: 9.@
Trailing-#	Northern Ireland access code	Dialed Digits: 904877665544#
	End-of-dialing character	After Applying DDI: 977665544

Table 4-11 DDIs for IENP (continued)

DDI	Effect	Example
PreDot NI->International	This DDI remove	Route Pattern: 9.@
Trailing-#	Northern Ireland access code	Dialed Digits: 904877665544#
	Cisco Unified CallManager external access code	After Applying DDI: 77665544
	End-of-dialing character	
PreAt NI->International	This DDI removes	Route Pattern: 8.9@
Trailing-#	Northern Ireland access code	Dialed Digits: 8904877665544#
	All digits prior to the IENP portion of the route pattern including Cisco Unified CallManager external access code and PBX external access codes	After Applying DDI: 77665544
	End of dialing character	

### **Tag Descriptions for IENP**

Table 4-12 lists and describes tags that are used in the IENP. For information on other numbering plans, see the "Related Topics" section on page 4-61.

Table 4-12 Tag Descriptions for IENP

Tag	Description
VOIP-ACCESS	This tag specifies the broadband voice IP access code. For Ireland, this code specifies 76.
END-OF-DIALING	This single character identifies the end of the dialed-digit string. The # character serves as the end-of-dialing signal for international numbers that are dialed within the IENP.
AREA-CODE	This tag specifies the area code as dialed for calls. Example:21.
FREEPHONE-ACCESS	This tag designates the freephone access code, which is 1800 and 1801 for Ireland.
FREEPHONE-SUBSCRIBER	This tag specifies the six-digit subscriber numbers that is dialed after the freephone access code.
INTERNATIONAL-ACCESS	This tag specifies the two-digit access code for international dialing. For Ireland, this code is 00.
MOBILE-ACCESS	This tag specifies the two-digit mobile access codes. For Ireland, these codes are 83, 84, 85, 86, and 87.
MOBILE-SUBSCRIBER	This tag specifies the last seven digits of the mobile directory number.
NATIONAL-NUMBER	This tag specifies the national portion of an international number.

Table 4-12 Tag Descriptions for IENP (continued)

Tag	Description
OPERATOR	This tag specifies the operator service number, which is 10.
PAGING-ACCESS	This tag designates the paging numbers ("pagers") access code, which is 821 and 822 in Ireland.
PAGING-SUBSCRIBER	This tag designates the six-digit subscriber number that is dialed after the paging access code.
PERSONAL-ACCESS	This tag specifies the three-digit personal number access code, which is 700 in Ireland.
PERSONAL-SUBSCRIBER	This tag specifies the six-digit subscriber number that is dialed after personal access code.
PREMIUM-ACCESS	This tag specifies the access code that is used to recognize calls to a premium rate service. For Ireland, this code of the form 15XX.
PREMIUM-SUBSCRIBER	This tag designates the six-digit subscriber number that is dialed after the premium access code
SERVICE	This tag specifies three-, four-, or six-digit service codes, excluding the emergency numbers 999, 112.
SHAREDCOST-ACCESS	This tag specifies the access code for the shared cost numbers. This code specifies 1850 and 1890 for Ireland.
SHAREDCOST-SUBSCRIBER	This tag specifies the six-digit shared cost subscriber numbers.
SUBSCRIBER	This tag specifies the five-, six-, or seven-digit subscriber number that is dialed after the area code.
VIRTUALCALLINGCARDS-ACCESS	This tag designates three digits that specify a virtual calling card call. For Ireland, this code is 818.
VIRTUALCALLINGCARDS-SUBSCRIB ER	This tag designates the six digits that are added to the virtual calling card access number.
LOCAL-5-DIGIT	This tag specifies the five-digit local numbers.
LOCAL-6-DIGIT	This tag specifies the six-digit local numbers.
LOCAL-7-DIGIT	This tag specifies the seven-digit local numbers.
NATIONAL-ACCESS	This tag specifies the leading zero digit in all national and geographic numbers. 0 always represents this tag.
DIALUP-ACCESS	This tag designates the dialup access code ("internet providers-EPAK"), which is 1891, 1892, or 1893 in Ireland.
DIALUP-SUBSCRIBER	This tag designates the subscriber number that is dialed after the dialup access code.
MAILBOX-ACCESS	This tag designates the mailbox access code. For Ireland, this code specifies 80.
NI-ACCESS	This tag designates the Northern Ireland access code. For Ireland, this code specifies 48.

Table 4-12 Tag Descriptions for IENP (continued)

Tag	Description
NI-SUBSCRIBER	This tag specifies the Northern Ireland subscriber number that is dialed after Northern Ireland access code.
COUNTRY-CODE	This tag specifies the country code portion of the international number. For example: 1 for the United States, 31 for the Netherlands, 44 for the United Kingdom.
VOIP-SUBSCRIBER	This tag represents the voice IP subscriber number that is dialed after the voice IP access code.

## **Japanese Numbering Plan**

The following topics describe the DDIs and tags that are used in the JPNP.

- Discard Digits Instructions for JPNP, page 4-33
- Tag Descriptions for JPNP, page 4-34

#### **Discard Digits Instructions for JPNP**

Table 4-13 lists DDIs and describes the effects of applying each DDI to a dialed number. For information on other numbering plans, see the "Related Topics" section on page 4-61.



JPNP does not support nine digit number regions (0460XXXXX and 0578XXXXX), hence the customer cannot make calls to these regions. To resolve this issue, the Cisco Unified CallManager adminstrator must add the following route patterns: 0578XXXXX and 0460XXXXX. The adminstrator must ensure that the Urgent Priority check box is checked.

Table 4-13 DDIs for JPNP

DDI	Effect	Example
NoDigits	This DDI removes no digits.	Route pattern: 0.@
		Dialed digit string: 00203571000
		After applying DDI: 00203571000
PreDot	This DDI removes	Route pattern: 0.1611@
	Cisco Unified CallManager	Dialed digit string: 016110203571000
	external access code	After applying DDI: 16110203571000
PreAt	This DDI removes all digits prior to the	Route pattern: 0.1611@
	NLNP portion of the route pattern, including	Dialed digit string: 016110203571000
	Cisco Unified CallManager external access code	After applying DDI: 0203571000
	PBX external access code	

Table 4-13 DDIs for JPNP (continued)

DDI	Effect	Example
Trailing-#	This DDI removes	Route pattern: 0.1611@
	End-of-dialing character for	Dialed digit string: 016110081910555#
		After applying DDI: 016110081910555
PreDot Trailing-#	This DDI removes	Route pattern: 0.1611@
	Cisco Unified CallManager external access code	Dialed digit string: 016110081910555#
		After applying DDI: 16110081910555
	End-of-dialing character for international calls	
PreAt Trailing-#	This DDI removes all digits prior to the JANP portion of the route pattern, including	Route pattern: 0.1611@
		Dialed digit string: 016110081910555#
	Cisco Unified CallManager external access code	After applying DDI: 0081910555
	PBX external access code	
	End-of-dialing character for international calls	

## **Tag Descriptions for JPNP**

Table 4-14 lists and describes tags that are used in the Japanese Numbering Plan (JPNP). For information on other numbering plans, see the "Related Topics" section on page 4-61.

Table 4-14 Tag Descriptions for JPNP

Tags	Description	
00XX-CARRIER-CODE	This tag specifies the two- to four-digit carrier code for 00XX/002XX/0091XX carrier specified calls.	
00XX-CARRIER-SELECT	This tag specifies the carrier selecting code in the form 00 for 00XX/002XX/0091XX carrier specified call selector.	
00XX-CARRIER-SUBSCRIBER	This tag specifies the Carrier specified call subscriber.	
0AB0-SERVICE-ACCESS	This tag sepcifies 0AB0 service codes excluding 0120 and 0800.	
	Note Some valid service access numbers can match with 0+3/4 digit area codes unexpectedly.	
0AB0-SERVICE-NUMBER	This tag specifies the six-digit service numbers for 0AB0 services.	
nDIGIT-AREA-CODE	Where $n = 1, 2, 3$ , or 4. These one-, two-, three-, or four-digit codes identify the area code for long-distance calls.	
COUNTRY-CODE	The one-, two-, or three-digit code used to specify the destination country for international calls.	

Table 4-14 Tag Descriptions for JPNP (continued)

Tags	Description
nDIGIT-OFFICE-CODE	Where $n = 1, 2, 3$ , or 4. These one-, two-, three-, or four-digit codes identify the local calls or long distance calls in conjunction with one-, two-, three-, or four-digit area codes.
AREA-CODE-FOR-9DIGIT-LONG DISTANCE AREA	Specific area code/office code combinations for 9 digit long distance call regions. To be obsolete at 2007.
CARRIER-SELECT	This tag specifies the legacy carrier select code 001 for international call to choose a specific carrier.
END-OF-DIALING	This single character identifies the end of the dialed-digit string. The # character serves as the end-of-dialing signal for international and long-distance-service numbers that are dialed within the JPNP.
FREEPHONE-120-ACCESS	This tag specifies the access code of free phone service in the form of 0120.
FREE-PHONE-0120-SERVICE- NUMBER	This tag specifies the six-digit service number for 0120 free phone.
FREEPHONE-800-ACCESS	This tag specifies the access code of free phone service in the form of 800.
FREE-PHONE-0800-SERVICE- NUMBER	This tag specifies the seven-digit service number for 0800 free phone.
INTERNATIONAL-ACCESS	This three-digit access code specifies international dialing. Calls that originate in Japan use 010 for this code.
LONG-DISTANCE-ACCESS	This one-digit code identifies a direct-dialed, long-distance call. JANP calls use 0 for this code.
MOBILE-ACCESS	This three-digit area code in the form 0[27-9]0 identifies the mobile access code.
MOBILE-SUBSCRIBER	This tag specifies the last eight digits of mobile directory number in the form XXXXXXXX.
NATIONAL-NUMBER	This single character identifies the nation-specific part of the digit string for an international call.
SERVICE	This three-digit code in the form 1XX designates services such as 110/119 for emergency.
SPECIAL-SERVICE-ACCESS	This tag specifies # for #XXXX special service access.
SPECIAL-SERVICE-CODE	This tag specifies the four-digit service code for #XXXX special services.
SUBSCRIBER	This tag specifies the four-digit subscriber code.
VOIP-050-ACCESS	This three-digit area code in the form 050 identifies the mobile access code.
VOIP-050-SUBSCRIBER	This tag specifies the 17 digit VOIP call subscriber.
WEATHER-FORECAST-SERVICE	Thsi tag specifies the weather forcast service 177, which can be used with a certain area code to access regional weather forcast service.

# **Netherlands Numbering Plan**

The following topics describe DDIs and tags that are used in the Netherlands Numbering Plan (NLNP).

- Discard Digits Instructions for NLNP, page 4-36
- Tag Descriptions for NLNP, page 4-37

#### **Discard Digits Instructions for NLNP**

Table 4-15 lists DDIs and describes the effects of applying each DDI to a dialed number. For information on other numbering plans, see the "Related Topics" section on page 4-61.

Table 4-15 DDIs for NLNP

DDI	Effect	Example
NoDigits	This DDI removes no digits.	Route pattern: 0.@ Dialed digit string: 00203571000 After applying DDI: 00203571000
PreDot	This DDI removes  • Cisco Unified CallManager external access code	Route pattern: 0.1611@ Dialed digit string: 016110203571000 After applying DDI: 16110203571000
PreAt	This DDI removes all digits prior to the NLNP portion of the route pattern, including  • Cisco Unified CallManager external access code  • PBX external access code	Route pattern: 0.1611@ Dialed digit string: 016110203571000 After applying DDI: 0203571000
Trailing-#	This DDI removes  • End-of-dialing character for international calls	Route pattern: 0.1611@ Dialed digit string: 016110081910555# After applying DDI: 016110081910555

Table 4-15 DDIs for NLNP (continued)

DDI	Effect	Example
PreDot Trailing-#	This DDI removes	Route pattern: 0.1611@
	<ul> <li>Cisco Unified CallManager external access code</li> <li>End-of-dialing character for international calls</li> </ul>	Dialed digit string: 016110081910555# After applying DDI: 16110081910555
PreAt Trailing-#	This DDI removes all digits prior to the NLNP portion of the route pattern, including  • Cisco Unified CallManager external access code  • PBX external access code  • End-of-dialing character for international calls	Route pattern: 0.1611@ Dialed digit string: 016110081910555# After applying DDI: 0081910555

### **Tag Descriptions for NLNP**

Table 4-16 lists and describes tags that are used in the Netherlands Numbering Plan (NLNP). For information on other numbering plans, see the "Related Topics" section on page 4-61.

Table 4-16 Tag Descriptions for NLNP

Tags	Description
END-OF-DIALING	This tag designates the "#" digit that is used to indicate end-of-dialing for international calls.
NATIONAL-NUMBER	This tag designates the national-number part of international calls, which is basically everything dialed after the country-code.
AREA-CODE	This tag designates the area code ("netnummer") as dialed for national calls. The area code includes the leading 0. Example: 020 for Amsterdam, 070 for The Hague.
COUNTRY-CODE	This tag designates the country code ("landnummer") of international calls. Example: 1 for US, 32 for Belgium, 44 for England.
DIALUP-SUBSCRIBER	This tag designates the subscriber number that is dialed after the dialup access code.
DIALUP-ACCESS	This tag designates the dialup access code ("internet providers"), which is 067 in the Netherlands.
INTERNATIONAL-ACCESS	This tag designates the international access code, which is 00 in the Netherlands.
SUBSCRIBER	This tag designates the subscriber number that is dialed after the area code (can be 6 or 7 digits).

Table 4-16 Tag Descriptions for NLNP (continued)

Tags	Description
SUBSCRIBER6	This tag designates the 4-digit area codes in the Netherlands that use a six-digit local subscriber number and is used for calls that are dialed locally (so without an area code).  Cisco Unified CallManager must recognize whether the route pattern is sent to a six- or seven-digit subscriber area. For a six-digit area, add a filter "SUBSCRIBER7 DOES-NOT-EXIST" to remove the seven-digit subscriber number definition. If you do not add this filter, local calls will only extend after T302 timer expires because both six- and seven-digit subscriber numbers are assumed to be valid.
SUBSCRIBER7	This tag designates the three-digit area codes in the Netherlands that use a seven-digit local subscriber number and is used for calls that are dialed locally (so without an area code). Cisco Unified CallManager must recognize whether the route pattern is sent to a six- or seven-digit subscriber area.
	For a seven-digit area, add a filter "SUBSCRIBER6 DOES-NOT-EXIST" to remove the six-digit subscriber number definition.
	If you do not add this filter, local calls may extend with six digits if the user dials slowly and the T302 timer expires because both 6- and seven-digit subscriber numbers are assumed to be valid.
PERSONAL-SUBSCRIBER	This tag designates the subscriber number that is dialed after the personal access code.
PERSONAL-ACCESS	This tag designates the personal numbers ("persoonlijke nummers") access code, which is 087 in the Netherlands.
PAGING-SUBSCRIBER	This tag designates the subscriber number that is dialed after the paging access code.
PAGING-ACCESS	This tag designates the paging numbers ("piepers" and "buzzers") access code, which is 066 in the Netherlands.
FREEPHONE-SUBSCRIBER	This tag designates the subscriber number that is dialed after the freephone access code (can be four or seven digits).
FREEPHONE-ACCESS	This tag designates the freephone access ("gratis nummers") access code, which is 0800 in the Netherlands.
PREMIUM-SUBSCRIBER	This tag designates the subscriber number that is dialed after the premium access code (can be four or seven digits).
PREMIUM-ACCESS	This tag designates the premium access ("betaalde nummers") access code, which is 0900, 0906, or 090 in the Netherlands.
	Example: To disallow 0906 and/or 0909 premium entertainment numbers, create a route pattern blocking patterns that matches the filter "PREMIUM ACCESS == 090[69]".
MOBILE-SUBSCRIBER	This tag designates the seven-digit subscriber number that is dialed after the mobile access code.

Table 4-16 Tag Descriptions for NLNP (continued)

Tags	Description
MOBILE-ACCESS	This tag designates the mobile access ("mobiele nummers") access code, which is 061, 062, 063, 064, or 065 in the Netherlands.
SERVICE	This tag designates 11x and 12xx service numbers (like 118 directory inquiries), excluding the 112 emergency number.
VOICEMAIL-ACCESS	This tag designates the voicemail access ("voicemail diensten") access code, which is 084 in the Netherlands.
VOICEMAIL-SUBSCRIBER	This tag designates the subscriber number that is dialed after the voicemail access code (can be four or seven digits).
EMERGENCY	This tag designates the 112 emergency number, which will route as an urgent pattern (extend call as soon as these digits match).

## **New Zealand Numbering Plan**

The following topics describe DDIs and tags that are used in the New Zealand Numbering Plan (NZNP).

- Discard Digits Instructions for NZNP, page 4-39
- Tag Descriptions for NZNP, page 4-40

#### **Discard Digits Instructions for NZNP**

Table 4-17 lists DDIs and describes the effects of applying each DDI to a dialed number. For information on other numbering plans, see the "Related Topics" section on page 4-61.

Table 4-17 DDIs for NZNP

DDI	Effect	Example
NoDigits	This DDI removes no digits.	Route pattern: 0.@
		Dialed digit string: 00883795211
		After applying DDI: 00883795211
PreDot	This DDI removes	Route pattern: 0.@
	Cisco Unified CallManager	Dialed digit string: 00883795211
	external access code	After applying DDI: 0883795211
PreAt	This DDI removes all digits prior to the	Route pattern: 8.0@
	NZNP portion of the route pattern, including	Dialed digit string: 800883795211
	Cisco Unified CallManager external access code	After applying DDI: 0883795211
	PBX external access code	

Table 4-17 DDIs for NZNP (continued)

DDI	Effect	Example
Trailing-#	This DDI removes	Route pattern: 0.@
	• End-of-dialing character for international calls	Dialed digit string: 000116563175666#
		After applying DDI: 000116563175666
PreDot Trailing-#	This DDI removes	Route pattern: 0.@
	Cisco Unified CallManager external access code	Dialed digit string: 000116563175306#
	• End-of-dialing character for international calls	After applying DDI: 00116563175306
PreAt Trailing #	This DDI removes all digits prior to the	Route pattern: 8.0@
	NZNP portion of the route pattern, including	Dialed digit string: 8000116563175306#
	Cisco Unified CallManager external access code	After applying DDI: 00116563175306
	• PBX external access code	
	End-of-dialing character for international call	

### **Tag Descriptions for NZNP**

Table 4-18 lists and describes tags that are used in the NZNP. For information on other numbering plans, see the "Related Topics" section on page 4-61.

Table 4-18 Tag Descriptions for NZNP

Tag	Description
AREA-CODE	This two-digit area code in the form 0[34679] identifies the area code for long-distance calls.
CARRIER-SELECT	This tag specifies the access code that is used to select an alternative carrier for this call and takes the form 05[1-9] or 050 or 0505.
COUNTRY-CODE	These one-, two-, or three-digit codes specify the destination country for international calls.
END-OF-DIALING	This single character identifies the end of the dialed-digit string. The # character specifies the end-of-dialing signal for international numbers that are dialed within the NZNP.
FREEPHONE-ACCESS	This tag specifies the four-digit access number for freephone calls. For New Zealand, this number is either 0508 or 0800.
FREEPHONE-SUBSCRIBER	This tag represents the digits following the freephone access code for freephone calls.

Table 4-18 Tag Descriptions for NZNP (continued)

Tag	Description	
INTERNATIONAL-ACCESS	This tag specifies the two-digit access code for international dialing. For New Zealand, this code is 00.	
MOBILE-ACCESS	This tag specifies the access code that is used to identify calls that are made to mobile phones. In New Zealand, this code takes the form 020, 021[012], 021[3-9], 025[01345789], 025[26],027,029.	
MOBILE-SUBSCRIBER	This tag represents the remaining digits of the mobile number.	
NATIONAL-NUMBER	This tag specifies the nation-specific part of the digit string for an international call.	
OPERATOR	This tag specifies the operator code. In New Zealand, this code specifies 018 for local and 010 for international calls.	
PAGING-ACCESS	This tag specifies the access code that is used to recognize calls to radio paging devices. For New Zealand, this code is 026 and 083.	
PAGING-SUBSCRIBER	This tag represents the remaining digits of the radio paging number.	
PREMIUM-ACCESS	This tag specifies the access code that is used to recognize calls to a premium rate service. For New Zealand, this code is 0900.	
PREMIUM-SUBSCRIBER	This tag represents the remaining digits of a premium rate service.	
SERVICE	This tag represents the general service and emergency numbers. These numbers takes the form 111, 1XX, 1[346], 017, 19[67], 502XXX.	
SUBSCRIBER	This tag specifies the eight-digit "local" number for geographic numbers. This number takes the form XXXXXXXX.	

# **Portuguese Numbering Plan**

The following topics describe DDIs and tags that are used in the Portuguese Numbering Plan (PTNP).

- Discard Digits Instructions for PTNP, page 4-42
- Tag Descriptions for PTNP, page 4-43

#### **Discard Digits Instructions for PTNP**

Table 4-19 lists DDIs and describes the effects of applying each DDI to a dialed number. For information on other numbering plans, see the "Related Topics" section on page 4-61.

Table 4-19 DDIs for PTNP

DDI	Effect	Example
NoDigits	This DDI removes no digits.	Route pattern: 0.@
		Dialed digit string: 0214468700
		After applying DDI: 0214468700
PreDot	This DDI removes	Route pattern: 0.0@
	Cisco Unified CallManager	Dialed digit string: 00214468700
	external access code	After applying DDI: 0214468700
PreAt	This DDI removes all digits prior to	Route pattern: 0.0@
	the PTNP portion of the route pattern, including	Dialed digit string: 00214468700
	Cisco Unified CallManager	After applying DDI: 214468700
	external access code	
	PBX external access code	
Trailing-#	This DDI removes	Route pattern: 0.@
	End-of-dialing character for international calls	Dialed digit string: 0214468700#
		After applying DDI: 0214468700
PreDot Trailing-#	This DDI removes	Route pattern: 0.0@
	Cisco Unified CallManager external access code	Dialed digit string: 00214468700#
		After applying DDI: 0214468700
	<ul> <li>End-of-dialing character for international calls</li> </ul>	
PreAt Trailing #	This DDI removes all digits prior to	Route pattern: 0.0@
	the PTNP portion of the route pattern, including	Dialed digit string: 00214468700#
	Cisco Unified CallManager external access code	After applying DDI: 214468700
	PBX external access code	
	End-of-dialing character for international call	

### **Tag Descriptions for PTNP**

Table 4-20 lists and describes tags that are used in the PTNP. For information on other numbering plans, see the "Related Topics" section on page 4-61.

Table 4-20 Tag Descriptions for PTNP

Tag	Description	
SUBSCRIBER	This tag specifies the nine-digit directory number in the form 2XXXXXXXX.	
END-OF-DIALING	This single character identifies the end of the dialed-digit string. The # character serves as the end-of-dialing signal for international numbers that, however, are dialed within the PTNP.	
NATIONAL-NUMBER	This tag specifies the nation-specific part of the digit string for an international call.	
COUNTRY-CODE	These one-, two-, or three-digit codes specify the destination country for international calls.	
DIALUP-SUBSCRIBER	This tag designates the two-digits that are added to the dialup access number.	
DIALUP-ACCESS	This tag designates the two digits that specify the dialup call.	
INTERNATIONAL-ACCESS	This two-digit access code specifies international dialing. Calls that originate in Portugal use 00 for this code.	
VIRTUALCALLINGCARDS-SUBSCR IBER	This tag designates the six digits that are added to the virtual calling card access number.	
VIRTUALCALLINGCARDS-ACCESS	This tag designates three digits that specify a virtual calling card call.	
VPN-SUBSCRIBER	This tag designates two digits that are added to the VPN access number.	
VPN-ACCESS	This tag designates three digits that specify a VPN access call.	
PERSONAL-SUBSCRIBER	This tag designates six digits that are added to the personal access number.	
PERSONAL-ACCESS	This tag designates three digits that specify a personal access call.	
SPECIALRATE-SUBSCRIBER	This tag designates six digits that are added to the special rate access number.	
SPECIALRATE-ACCESS	This tag designates three digits that specify a special rate charge call.	
LOCALRATE-SUBSCRIBER	This tag designates six digits that are added to the local rate access number.	
LOCALRATE-ACCESS	This tag designates three digits that specify a local rate charge call.	
NATIONALRATE-SUBSCRIBER	This tag designates six digits that are added to the national rate access number.	

Table 4-20 Tag Descriptions for PTNP (continued)

Tag	Description
NATIONALRATE-ACCESS	This tag designates three digits that specify a national rate charge call.
FREEPHONE-SUBSCRIBER	This tag designates six digits that are added to the free phone access number.
FREEPHONE-ACCESS	This tag designates three digits that specify a free charge call.
MOBILE-SUBSCRIBER	This tag designates seven digits that are added to the mobile access number.
MOBILE-ACCESS	This tag designates two digits that specify the mobile operator.
SERVICE	This three or four-digit code, starting with one, designates services such as 112 for emergency.

## **Russian Numbering Plan**

The following topics describe DDIs and tags that are used in the Russian Numbering Plan (RUNP).

- Discard Digits Instructions for RUNP, page 4-44
- Tag Descriptions for RUNP, page 4-57

#### **Discard Digits Instructions for RUNP**

Table 4-21 lists DDIs and describes the effects of applying each DDI to a dialed number. For information on other numbering plans, see the "Related Topics" section on page 4-61.

Table 4-21 DDIs for RUNP

DDI	Effect	Example
NoDigits	This DDI removes no digits.	Route pattern: 9.0@ Dialed digit string: 9080959611410 After applying DDI: 9080959611410
PreDot	This DDI removes all digits prior to the dot in the route pattern, including  • Cisco Unified CallManager external access code	Route pattern: 9.0@ Dialed digit string: 9080959611410 After applying DDI: 080959611410

Table 4-21 DDIs for RUNP (continued)

DDI	Effect	Example
PreAt	This DDI removes all digits prior to the RUNP portion of the route pattern (prior to @ sign in the pattern), including	Route pattern: 9.0@
		Dialed digit string: 9.080959611410
	Cisco Unified CallManager external access code	After applying DDI: 80959611410
	PBX external access code	
Trailing-#	This DDI removes	Route pattern: 9.0@
	End-of-dialing character	Dialed digit string: 9081031203573500#
		After applying DDI: 9081031203573500
PreDot Trailing-#	This DDI removes	Route pattern: 9.0@
	Cisco Unified CallManager external access code	Dialed digit string: 9081031203573500#
	End-of-dialing character	After applying DDI: 081031203573500
PreAt Trailing #	This DDI removes all digits prior to the RUNP portion of the route pattern, including  Cisco Unified CallManager external access code  PBX external access code	Route pattern: 9.0@
		Dialed digit string: 9081031203573500#
		After applying DDI: 81031203573500
	• End-of-dialing character	
Intl Access 8-10	This DDI extracts a national number along	Route pattern: 9.0@
	<ul><li>with the country code. This DDI removes</li><li>International access code (8-10)</li></ul>	Dialed digit string: 9081031203573500
		After applying DDI: 9031203573500
PreDot Intl Access	This DDI extracts a national number along	Route pattern: 9.0@
8-10	<ul><li>with the country code. This DDI removes</li><li>Cisco Unified CallManager external</li></ul>	Dialed digit string: 9081031203573500
	<ul><li>access code</li><li>International access code</li></ul>	After applying DDI: 031203573500
PreAt Intl Access 8-10	This DDI removes all digits prior to the	Route pattern: 9.0@
	RUNP portion of the route pattern, including	Dialed digit string:
	Cisco Unified CallManager external     access code	9081031203573500
	access code  • PRV external access code	After applying DDI: 31203573500
	PBX external access code	
	International access code	

Table 4-21 DDIs for RUNP (continued)

DDI	Effect	Example
Intl Access 8-10	This DDI removes	Route pattern: 9.0@
Trailing-#	<ul><li>International access code (8-10)</li><li>End-of-dialing character</li></ul>	Dialed digit string: 9081031203573500#
		After applying DDI: 9031203573500
PreDot Intl Access	This DDI extracts a national number along	Route pattern: 9.0@
8-10 Trailing-#	<ul><li>with the country code. This DDI removes</li><li>Cisco Unified CallManager external</li></ul>	Dialed digit string: 9081031203573500#
	access code	After applying DDI:
	International access code	031203573500#
	End-of-dialing character	
PreAt Intl Access	This DDI removes all digits prior to the	Route pattern: 9.0@
8-10 Trailing-#	RUNP portion of the route pattern, including	Dialed digit string:
	Cisco Unified CallManager external access code	9081031203573500#
	PBX external access code	After applying DDI: 31203573500
	International access code	
	End-of-dialing character	
Long Dist -> 7D	This DDI extracts a seven-digit local number	Route pattern: 9.0@
Long Dist > 7D	from the long-distance number along with	Dialed digit string:
	the Cisco Unified CallManager external	9080959611410
	access code and PBX access code. This DDI removes	After applying DDI: 909611410
	• Long-distance direct-dialing access code (8)	
	Area code	
PreDot Long Dist	This DDI extracts a seven-digit local number	Route pattern: 9.0@
-> 7D	from the long-distance number along with the PBX access code. This DDI removes	Dialed digit string: 9080959611410
	Cisco Unified CallManager external access code	After applying DDI: 09611410
	• Long-distance direct-dialing access code (8)	
. <u></u> .	Area code	

Table 4-21 DDIs for RUNP (continued)

DDI	Effect	Example
PreAt Long Dist -> 7D	This DDI removes all digits prior to the RUNP portion of the route pattern, including	Route pattern: 9.0@
70	Cisco Unified CallManager external	Dialed digit string: 9080959611410
	access code	After applying DDI: 9611410
	PBX external access code	
	• Long-distance direct-dialing access code (8)	
	Area code	
Long Dist -> 7D	This DDI extracts a seven-digit local number	Route pattern: 9.0@
Trailing-#	from the long-distance number, along with the Cisco Unified CallManager external access code and PBX access code. This DDI	Dialed digit string: 9080959611410#
	removes	After applying DDI: 909611410
	• Long-distance direct-dialing access code (8)	
	Area code	
	End-of-dialing character	
PreDot Long Dist	This DDI removes	Route pattern: 9.0@
-> 7D Trailing-#	Cisco Unified CallManager external access code	Dialed digit string: 9080959611410#
	• Long-distance direct-dialing access code (8)	After applying DDI: 09611410
	Area code	
	End-of-dialing character	
PreAt Long Dist ->	This DDI removes all digits prior to the	Route pattern: 9.0@
7D Trailing-#	RUNP portion of the route pattern, including	Dialed digit string:
	Cisco Unified CallManager external access code	9080959611410# After applying DDI: 9611410
	PBX external access code	
	• Long-distance direct-dialing access code (8)	
	Area code	
	End-of-dialing character	

Table 4-21 DDIs for RUNP (continued)

DDI	Effect	Example
Long Dist -> 6D	This DDI extracts a six-digit local number	Route pattern: 9.0@
	from the long-distance number along with Cisco Unified CallManager external access code and PBX access code. This DDI	Dialed digit string: 9080962123456
	removes	After applying DDI: 90123456
	• Long-distance direct-dialing access code (8)	
	Area code	
	• 'A' zone digit	
PreDot Long Dist	This DDI extracts a six-digit local number	Route pattern: 9.0@
-> 6D	from the long-distance number along with PBX access code. This DDI removes	Dialed digit string: 9080962123456
	Cisco Unified CallManager external access code	After applying DDI: 0123456
	• Long-distance direct-dialing access code (8)	
	Area code	
	• 'A' zone digit	
PreAt Long Dist ->	This DDI removes all digits prior to the	Route pattern: 9.0@
6D	RUNP portion of the route pattern, including	Dialed digit string:
	Cisco Unified CallManager external access code	9080962123456
	PBX external access code	After applying DDI: 123456
	• Long-distance direct-dialing access code (8)	
	Area code	
	• 'A' zone digit	
Long Dist -> 6D	This DDI extracts a six-digit local number	Route pattern: 9.0@
Trailing-#	from the long-distance number along with Cisco Unified CallManager external access	Dialed digit string: 9080962123456#
	code and PBX access code. This DDI removes	After applying DDI: 90123456
	Long-distance direct-dialing access	Theor applying DDI. 70123 100
	code (8)	
	Area code	
	• 'A' zone digit	
	End-of-dialing character	

Table 4-21 DDIs for RUNP (continued)

DDI	Effect	Example
PreDot Long Dist -> 6D Trailing-#	This DDI removes	Route pattern: 9.0@
	Cisco Unified CallManager external access code	Dialed digit string: 9080962123456#
	• Long-distance direct-dialing access code (8)	After applying DDI: 0123456
	Area code	
	• 'A' zone digit	
	End-of-dialing character	
PreAt Long Dist -> 6D Trailing-#	This DDI removes all digits prior to the RUNP portion of the route pattern, including	Route pattern: 9.0@ Dialed digit string:
	Cisco Unified CallManager external access code	9080962123456# After applying DDI: 123456
	PBX external access code	Ther applying DDI. 123 is o
	• Long-distance direct-dialing access code (8)	
	• 'A' zone digit	
	Area code	
	End-of-dialing character	
Long Dist -> 5D	This DDI extracts a five-digit local number from a long-distance number. This DDI creates a five-digit local number from an 11-digit dialed number (that is counted, including the access code). This DDI removes	Route pattern: 9.@ Dialed digit string: 988472255640 After applying DDI: 955640
	• Long-distance direct-dialing access code (8)	
	Area code	
	• 'A' and 'B' zone digits	
PreDot Long Dist -> 5D	This DDI extracts a five-digit local number from a long-distance number. It also removes the digits that precede the dot in the routing pattern. This DDI creates a five-digit local number from a 11-digit dialed number (that is counted, including with access code). This DDI removes	Route pattern: 9.0@ Dialed digit string: 9088472255640 After applying DDI: 055640
	Cisco Unified CallManager external access code	
	• Long-distance direct-dialing access code (8)	
	Area code	
	• 'A' and 'B' zone digits	

Table 4-21 DDIs for RUNP (continued)

DDI	Effect	Example
PreAt Long Dist ->	This DDI extracts a five-digit local number	Route pattern: 9.0@
5D	from a long-distance number. It also removes the digits that precede the @ sign in	Dialed digit string: 9088472255640
	the routing pattern. This DDI creates a five-digit local number from a 11-digit dialed number (that is counted, with the access code). This DDI removes	After applying DDI: 55640
	Cisco Unified CallManager external access code	
	PBX external access code	
	• Long-distance direct-dialing access code (8)	
	Area code	
	• 'A' and 'B' zone digits	
Long Dist -> 5D	This DDI extracts a five-digit local number	Route pattern: 9.0@
Trailing-#	from long-distance number. This DDI creates a five-digit local number from a	Dialed digit string: 9088472255640#
	11-digit dialed number (that is counted with the access code). This DDI removes	After applying DDI: 9055640
	<ul> <li>Long-distance direct-dialing access code (8)</li> </ul>	
	Area code	
	• 'A' and 'B' zone digits	
	End-of-dialing character for international calls	
PreDot Long Dist -> 5D Trailing-#	This DDI extracts a five-digit local number from long-distance number. It also removes the digits that precede the dot in the routing	Route pattern: 9.0@ Dialed digit string: 9088472255640#
	pattern. This DDI creates a five-digit local number from a 11-digit (that is counted, including the access code) dialed number. This DDI removes	After applying DDI: 055640
	Cisco Unified CallManager external access code	
	• Long-distance direct-dialing access code (8)	
	Area code	
	• 'A' and 'B' zone digits	
	End-of-dialing character for international calls	

Table 4-21 DDIs for RUNP (continued)

DDI	Effect	Example
PreAt Long Dist -> 5D Trailing-#	This DDI extracts a five -digit local number from long-distance number. It also removes the digits that precede the at sign in the	Route pattern: 9.0@ Dialed digit string: 9088472255640#
	routing pattern and the trailing # sign. This DDI creates a five-digit local number from a 11-digit dialed number (that is counted, with the access code). This DDI removes	After applying DDI: 55640
	Cisco Unified CallManager external access code	
	PBX external access code	
	• Long-distance direct-dialing access code (8)	
	Area code	
	• 'A' and 'B' zone digits	
	• End-of-dialing character for international calls	
Intl -> National	This DDI extracts the national number	Route pattern: 9.0@
number	portion of the dialed number. This DDI removes	Dialed digit string: 9081031203573500
	• International access code (8-10)	After applying DDI: 90203573500
	Country code	
PreDot Intl -> National number	This DDI extracts a national number of the dialed number and removes digits that	Route pattern: 9.0@
rvational number	precede the '.' sign. This DDI removes	Dialed digit string: 9081031203573500
	Cisco Unified CallManager external access code	After applying DDI: 0203573500
	• International access code (8-10)	
	Country code	
PreAt Intl ->	This DDI removes all digits prior to the	Route pattern: 9.0@
National number	<ul><li>RUNP portion of the route pattern, including</li><li>Cisco Unified CallManager external access code</li></ul>	Dialed digit string: 9081031203573500
		After applying DDI: 203573500
	PBX external access code	Tittel applying DDI. 2000/0000
	• International access code (8-10)	
	Country code	

Table 4-21 DDIs for RUNP (continued)

DDI	Effect	Example
Intl -> National	This DDI extracts the National number	Route pattern: 9.0@
number Trailing-#	portion of the dialed number. This DDI removes	Dialed digit string: 9081031203573500#
	• International access code (8-10)	After applying DDI: 90203573500
	Country code	
	• End-of-dialing character for international calls	
PreDot Intl ->	This DDI extracts a national number of the	Route pattern: 9.0@
National number Trailing-#	dialed number and removes the digits that precede the '.' sign. This DDI removes	Dialed digit string: 9081031203573500#
	Cisco Unified CallManager external access code	After applying DDI: 0203573500
	• International access code (8-10)	
	Country code	
	• End-of-dialing character for international calls	
PreAt Intl ->	This DDI removes all digits prior to the	Route pattern: 9.0@
National number Trailing-#	RUNP portion of the route pattern, including	Dialed digit string:
6	Cisco Unified CallManager external access code	9081031203573500#
	PBX external access code	After applying DDI: 203573500
	• International access code (8-10)	
	Country code	
	• End-of-dialing character for international calls	
Interzone->5D	This DDI extracts a five-digit local number	Route pattern: 9.0@
	from the dialed number for interzone calls. This DDI removes	Dialed digit string: 90827512345
	<ul> <li>Long-distance direct-dialing access code (8)</li> </ul>	After applying DDI: 9012345
	• Interzone calls access code (2)	
	• 'A' and 'B' zone digits	

Table 4-21 DDIs for RUNP (continued)

DDI	Effect	Example
PreDot	This DDI extracts a five-digit local number from the dialed number for interzone calls and also removes digits that precede the '.'	Route pattern: 9.0@
Interzone->5D		Dialed digit string: 90827512345
	sign. This DDI removes	After applying DDI: 012345
	Cisco Unified CallManager external access code	
	• Long-distance direct-dialing access code (8)	
	• Interzone calls access code (2)	
	• 'A' and 'B' zone digits	
PreAt	This DDI removes all digits prior to the	Route pattern: 9.0@
Interzone->5D	RUNP portion of the route pattern, including	Dialed digit string: 90827512345
	Cisco Unified CallManager external access code	After applying DDI: 12345
	PBX external access code	
	• Long-distance direct-dialing access code (8)	
	• Interzone calls access code (2)	
	• 'A' and 'B' zone digits	
Interzone->5D	This DDI extracts a five-digit local number from the dialed number for interzone calls. This DDI removes	Route pattern: 9.0@
Trailing-#		Dialed digit string: 90827512345#
	Long-distance direct-dialing access code (8)	After applying DDI: 9012345
	• Interzone calls access code (2)	
	• 'A' and 'B' zone digits	
	End-of-dialing character	
PreDot Interzone->5D Trailing-#	This DDI extracts a five-digit local number from the dialed number for interzone calls and also removes digits that precede the '.' sign. This DDI removes	Route pattern: 9.0@ Dialed digit string: 90827512345# After applying DDI: 012345
	Cisco Unified CallManager external access code	
	• Long-distance direct-dialing access code (8)	
	• Interzone calls access code (2)	
	• 'A' and 'B' zone digits	
	End-of-dialing character	

Table 4-21 DDIs for RUNP (continued)

DDI	Effect	Example
PreAt Interzone->5D Trailing-#	This DDI removes all digits prior to the RUNP portion of the route pattern, including	Route pattern: 9.0@ Dialed digit string: 90827512345#
C	<ul> <li>Cisco Unified CallManager external access code</li> </ul>	After applying DDI: 12345
	PBX external access code	
	• Long-distance direct-dialing access code (8)	
	• Interzone calls access code (2)	
	• 'A' and 'B' zone digits	
	End-of-dialing character	
Interzone->6D	This DDI extracts a six-digit local number	Route pattern: 9.0@
	from the dialed number for interzone calls. This DDI removes	Dialed digit string: 90827612345
	Long-distance direct-dialing access code (8)	After applying DDI: 90612345
	Interzone calls access code (2)	
	'A' zone digit	
PreDot	This DDI extracts a six-digit local number	Route pattern: 9.0@
Interzone->6D	from the dialed number for interzone calls and also removes digits that precede the '.'	Dialed digit string: 90827612345
	sign. This DDI removes	After applying DDI: 0612345
	Cisco Unified CallManager external access code	
	• Long-distance direct-dialing access code (8)	
	• Interzone calls access code (2)	
	• 'A' zone digit	
PreAt	This DDI removes all digits prior to the	Route pattern: 9.0@
Interzone->6D	RUNP portion of the route pattern, including	Dialed digit string: 90827612345
	<ul> <li>Cisco Unified CallManager external access code</li> </ul>	After applying DDI: 612345
	PBX external access code	
	• Long-distance direct-dialing access code (8)	
	• Interzone calls access code (2)	
	• 'A' and 'B' zone digits	

Table 4-21 DDIs for RUNP (continued)

DDI	Effect	Example
Interzone->6D Trailing-#	This DDI extracts a five-digit local number from the dialed number for interzone calls. This DDI removes  • Long-distance direct-dialing access code (8)  • Interzone calls access code (2)	Route pattern: 9.0@ Dialed digit string: 90827612345# After applying DDI: 90612345
	<ul><li> 'A' zone digit</li><li> End-of-dialing character</li></ul>	
PreDot Interzone->6D Trailing-#	This DDI extracts a five-digit local number from the dialed number for interzone calls and also removes digits that precede the '.' sign. This DDI removes  • Cisco Unified CallManager external	Route pattern: 9.0@ Dialed digit string: 90827512345# After applying DDI: 012345
	<ul> <li>access code</li> <li>Long-distance direct-dialing access code (8)</li> <li>Interzone calls access code (2)</li> <li>'A' zone digit</li> <li>End-of-dialing character</li> </ul>	
PreAt Interzone->6D Trailing-#	This DDI removes all digits prior to the RUNP portion of the route pattern, including  Cisco Unified CallManager external access code  PBX external access code  Long-distance direct-dialing access code (8)  Interzone calls access code (2)  'A' zone digit  End-of-dialing character	Route pattern: 9.0@ Dialed digit string: 90827612345# After applying DDI: 612345
Interzone->7D	This DDI extracts a seven-digit local number from the dialed number for interzone calls. This DDI removes  • Long-distance direct-dialing access code (8)  • Interzone calls access code (2)	Route pattern: 9.0@ Dialed digit string: 9081234567 After applying DDI: 901234567

Table 4-21 DDIs for RUNP (continued)

DDI	Effect	Example
PreDot Interzone->7D	This DDI extracts a six-digit local number from the dialed number for interzone calls and also removes digits that precede the '.' sign. This DDI removes  • Cisco Unified CallManager external	Route pattern: 9.0@ Dialed digit string: 90821234567 After applying DDI: 01234567
	<ul> <li>access code</li> <li>Long-distance direct-dialing access code (8)</li> <li>Interzone calls access code (2)</li> <li>'A' zone digit</li> </ul>	
PreAt Interzone->7D	This DDI removes all digits prior to the RUNP portion of the route pattern, including  Cisco Unified CallManager external access code  PBX external access code  Long-distance direct-dialing access code (8)  Interzone calls access code (2)  'A' and 'B' zone digits	Route pattern: 9.0@ Dialed digit string: 90821234567 After applying DDI: 1234567

Table 4-21 DDIs for RUNP (continued)

DDI	Effect	Example
Interzone->7D Trailing-#	This DDI extracts a five-digit local number from the dialed number for interzone calls. This DDI removes	Route pattern: 9.0@ Dialed digit string: 90821234567#
	• Long-distance direct-dialing access code (8)	After applying DDI: 901234567
	• Interzone calls access code (2)	
	• 'A' zone digit	
	End-of-dialing character	
PreDot	This DDI extracts a five-digit local number	Route pattern: 9.0@
Interzone->7D Trailing-#	from the dialed number for interzone calls and also removes digits that precede the '.'	Dialed digit string: 90821234567#
	sign. This DDI removes	After applying DDI: 01234567
	Cisco Unified CallManager external access code	
	• Long-distance direct-dialing access code (8)	
	• Interzone calls access code (2)	
	• 'A' zone digit	
	End-of-dialing character	
PreAt	This DDI removes all digits prior to the	Route pattern: 9.0@
Interzone->7D Trailing-#	RUNP portion of the route pattern, including	Dialed digit string: 90821234567#
Truming "	Cisco Unified CallManager external access code	After applying DDI: 1234567
	PBX external access code	
	• Long-distance direct-dialing access code (8)	
	• Interzone calls access code (2)	
	• 'A' zone digit	
	End-of-dialing character	

### **Tag Descriptions for RUNP**

Table 4-22 lists and describes tags that are used in the RUNP. For information on other numbering plans, see the "Related Topics" section on page 4-61.

Table 4-22 Tag Descriptions for RUNP

Tag	Description
AREA-CODE	This three-digit area code in the form [03-9]XX identifies the area code for long-distance calls.
COUNTRY-CODE	These one-, two-, or three-digit codes specify the destination country for international calls.
NATIONAL-NUMBER	This tag specifies the nation-specific part of the digit string for an international call.
SUBSCRIBER	This tag specifies the subscriber number in case of five-digit subscriber numbers or the last five digits of a subscriber number in case of six- or seven-digit numbers in long distance dialing. The pattern for this tag is XXXXX.
ZONE-ACCESS	This one-digit code identifies zone dialing. For this code within the Russian Federation, 2 is used.
В	This one-digit tag applies in long-distance or zone dialing. It represents the second digit of the intrazone code (according to the definitions of the numbering plan in the Russian Federation). If the local subscriber number is a six-digit number, it represents the first digit of the six-digit subscriber number (for example, bxxxxx). If the subscriber number is a seven-digit number, it represents the second digit of the subscriber number (for example, abxxxxx).
SUBSCRIBER5	This tag specifies the five-digit subscriber number in the form [1-79]XXXX. It applies in local calls within areas that have five-digit local numbers.
SUBSCRIBER6	This tag specifies the six-digit subscriber number in form of [1-79]XXXXX. It applies in local calls within areas that have six-digit local numbers.
INTERNATIONAL-ACCESS	This three-digit access code specifies international dialing. Calls that originate in the Russian Federation use 810 for this code.
SERVICE	This one-digit code identifies a particular emergency service in emergency calls within the Russian Federation. It can specify a digit from 1 to 4 that would correspond to a particular emergency service in the emergency number in the format 0[1-4].
A	This one-digit tag, which is used in long-distance or zone dialing, represents the first digit of the intrazone code (according to the definitions of numbering plan in the Russian Federation). If the subscriber number is a seven-digit number, this digit specifies the second digit of the subscriber number (for example, abxxxxx). If the subscriber number is a five-digit or six-digit number, A will equal two.
SUBSCRIBER7	This tag specifies the seven-digit subscriber number in the form [1-79]xxxxxx. It applies in local calls within areas that have seven-digit local numbers.

Table 4-22 Tag Descriptions for RUNP (continued)

Tag	Description
ZERO-PREFIX	This one-digit prefix applies for emergency dialing. Within the Russian Federation, 0 applies for this prefix.
LONG-DISTANCE-ACCESS	This one-digit access code specifies long-distance dialing. Calls that originate in the Russian Federation use 8 for this code.

## **Singapore Numbering Plan**

The following topics describe DDIs and tags that are used in the Singapore Numbering Plan (SGNP).

- Discard Digits Instructions for SGNP, page 4-59
- Tag Descriptions for SGNP, page 4-60

#### **Discard Digits Instructions for SGNP**

Table 4-23 lists DDIs and describes the effects of applying each DDI to a dialed number. For information on other numbering plans, see the "Related Topics" section on page 4-61.

Table 4-23 DDIs for SGNP

DDI	Effect	Example
NoDigits	This DDI removes no digits.	Route pattern: 9.@
		Dialed digit string: 990115711
		After applying DDI: 990115711
PreDot	This DDI removes	Route pattern: 9.@
	Cisco Unified CallManager	Dialed digit string: 990115711
	external access code	After applying DDI: 990115711
PreAt	This DDI removes all digits prior to	Route pattern: 8.9@
	the SGNP portion of the route pattern, including	Dialed digit string: 8990115711
	Cisco Unified CallManager	After applying DDI: 90115711
	external access code	
	PBX external access code	
Trailing-#	This DDI removes	Route pattern: 9.@
•	End-of-dialing character for	Dialed digit string: 900161883795211#
	international calls	After applying DDI: 900161883795211

Table 4-23 DDIs for SGNP (continued)

DDI	Effect	Example
PreDot Trailing-#	This DDI removes	Route pattern: 9.@
	Cisco Unified CallManager	Dialed digit string: 900861883795211#
	external access code	After applying DDI: 00861883795211
	<ul> <li>End-of-dialing character for international calls</li> </ul>	
PreAt Trailing #	This DDI removes all digits prior to	Route pattern: 8.9@
the SGNP portion of the route pattern, including  • Cisco Unified CallManager external access code	-	Dialed digit string: 8900261883795211#
	Cisco Unified CallManager	After applying DDI: 00261883795211
	PBX external access code	
	End-of-dialing character for international call	

### **Tag Descriptions for SGNP**

Table 4-24 lists and describes tags that are used in the SGNP. For information on other numbering plans, see the "Related Topics" section on page 4-61.

Table 4-24 Tag Descriptions for SGNP

Tag	Description
SUBSCRIBER	This tag specifies the eight-digit directory number for geographic numbers of the form 6XXXXXXX.
END-OF-DIALING	This single character identifies the end of the dialed-digit string. The # character serves as the end-of-dialing signal for international numbers that are dialed within the SGNP.
NATIONAL-NUMBER	This tag specifies the nation-specific part of the digit string for an international call.
COUNTRY-CODE	These one-, two-, or three-digit codes specify the destination country for international calls.
INTERNATIONAL-ACCESS	This three-digit access code specifies international dialing. The first digit for international calls is always 0, and the following digits depend on the carrier. Examples of carriers include SingTel, Starhub, M1, and so on.
CARRIER-SELECT	This tag specifies the access code to select the alternative IDD carriers in Singapore and takes the form 15XX or 15XXX.
FREEPHONE-SUBSCRIBER	This tag specifies the last seven digits of the freephone number.
FREEPHONE-ACCESS	This tag specifies the four-digit access number for freephone calls. For Singapore this number is 1800.

Table 4-24 Tag Descriptions for SGNP (continued)

Tag	Description
PREMIUM-SUBSCRIBER	This tag specifies the last seven digits of the premium rate number.
PREMIUM-ACCESS	This tag specifies the four-digit access number for premium rate calls. For Singapore this number is 1900.
MOBILE-SUBSCRIBER	This tag represents the seven digits of the handphone number that follows the mobile access code.
MOBILE-ACCESS	This tag specifies the first digit of the handphone number. In Singapore this number is eight or nine.
SERVICE	This tag specifies the service numbers. The following forms apply for service numbers: 1[136-9]XX, 100 for directory enquires, and 99X or 112 for emergency services.
OPERATOR	This tag specifies the operator service numbers. Operator services use the form 10XX.

# **Related Topics**

- Introducing Cisco Unified Communications Manager (CallManager) Dial Plans, page 1-1
- Deploying Dial Plans for Release 5.x 9.x, page 3-1
- Deploying Dial Plans for 4.2(3) and Earlier Releases, page 2-1
- Special Characters and Settings, page 1-1
- Route Pattern Wildcards and Special Characters, page 1-2
- Discard Digits Instructions, page 4-1
- Tag Descriptions, page 4-2

Related Topics