

Dial-Peer Configuration Commands

This chapter describes the commands used to configure dial peers. There are two types of dial peers: local and remote, with different protocol types supported for each. Table 10-1 lists the dial-peer configuration commands and the protocol types that support them.

Table 10-1 Dial-Peer Commands

Dial-Peer Command	POTS	VoFR	VoATM	VoHDLC
alt-dial	X	X	X	X
destination-pattern	X	X	X	X
forward-digits	X			
port	X			
preference	X	X	X	X
prefix	X			
session target		X	X	X
shutdown	X	X	X	X

destination-pattern

To specify either the prefix or the full E.164 telephone number (depending on your dial plan) to be used for a dial peer, use the **destination-pattern** dial-peer configuration command. Use the **no** form of this command to disable the configured prefix or telephone number.

destination-pattern *string*[**t**]
no destination-pattern

Syntax Description

<i>string</i>	Series of digits that specify the E.164 or private dialing plan telephone number. Valid entries are the digits 0 through 9, the letters A through D, and the following special characters: <ul style="list-style-type: none"> • The asterisk (*) and pound sign (#) that appear on standard touch-tone dial pads. • Comma (,), which inserts a pause between digits. • Period (.), which matches any entered digit (this character is used as a wildcard). The plus sign (+) is not supported on the Cisco MC3810.
t	Control character indicating that the destination-pattern value is a variable length dial string.

Defaults

No destination pattern is specified.

Command Mode

Dial-peer configuration

Command History

Release	Modification
11.3(1) T	This command was first introduced.

Usage Guidelines

Use the **destination-pattern** command to define the E.164 telephone number for this dial peer.

This pattern is used to match dialed digits to a dial peer. The dial peer is then used to complete the call. When a router receives voice data, it compares the called number (the full E.164 telephone number) in the packet header with the number configured as the destination pattern for the voice-telephony peer. The router then strips out the left-justified numbers corresponding to the destination pattern. If you have configured a prefix, the prefix is appended to the front of the remaining numbers, creating a dial string, which the router then dials. If all numbers in the destination pattern are stripped-out, the user receives a dial tone.

There are certain areas in the world (for example, in certain European countries) where valid telephone numbers can vary in length. Use the optional control character **t** to indicate that a particular **destination-pattern** value is a variable-length dial-string. In this case, the system does not match the dialed numbers until the interdigit timeout value has expired.

destination-pattern

Note The Cisco IOS software does not check the validity of the E.164 telephone number; it accepts any series of digits as a valid number.

Examples

The following example configures the E.164 telephone number, “555-7922,” for a dial peer:

```
dial-peer voice 10 pots
destination-pattern 5557922
```

Related Commands

Command	Description
prefix	Specifies the prefix of the dialed digits for a dial peer.
timeouts interdigit	Configures the interdigit timeout value for a voice port.

forward-digits

To specify that digits be forwarded for voice calls on the Cisco MC3810, use the **forward-digits** dial-peer configuration command. Use the **no** form of this command to restore the default value.

```
forward-digits {num-digit | all | implicit}
no forward-digits {num-digit | all | implicit}
```

Syntax Description

<i>num-digit</i>	The number of digits to be forwarded. If the number of digits is greater than the length of a destination phone number, the length of the destination number is used. The valid range is 0 to 32. Setting the value to 0 is equivalent to entering no forward digits (the default).
all	Forward all digits. If all is entered, the full length of the destination pattern is used.
implicit	Exactly matched digits are not forwarded. Only digits matched by the wildcard pattern are forwarded.

Defaults

No digits are forwarded.

Command Mode

Dial-peer configuration

Command History

Release	Modification
11.3(1) MA	This command was first introduced.
12.0(2) T	The implicit option was added.
12.0(4) T	This command was modified to support ISDN PRI QSIG signaling calls.

Usage Guidelines

This command applies only to the Cisco MC3810.

Forwarded digits are always right-justified so that extra leading digits are stripped.

For QSIG ISDN connections, entering **forward-digits all** implies that all of the digits of the called party number are sent to the ISDN connection. When you enter **forward-digits num-digit** and enter a number from 1 to 32, the number of digits specified (right justified) of the called part number are sent to the ISDN connection. When you enter **forward-digits implicit**, the number of matched digits matching the wildcard for the called party number are sent to the ISDN connection. For example, if the called part number is 51234, the digits sent to the ISDN connection are 1234.

forward-digits

Examples

The following example configures forward digits for a POTS dial peer on a Cisco MC3810:

```
dial-peer voice 1 pots
 destination-pattern 8...
 forward-digits all
```

Related Commands

Command	Description
destination-pattern	Defines the prefix or the full E.164 telephone number to be used for a dial peer.

port

To associate a POTS dial peer with a specific voice port, use the **port** dial-peer configuration command. Use the **no** form of this command to restore the default.

```
port slot/port
no port
```

Syntax Description

<i>slot</i>	Slot number where the voice interface card is installed. Valid entries are 1 or 0.
<i>port</i>	(Cisco MC3810) Voice port number. Valid entries are the following: <ul style="list-style-type: none"> • Analog voice ports: 1-6 • Digital voice ports: <ul style="list-style-type: none"> T1: 1-24 E1: 1-15, and 16-31

Defaults

No dial peers are associated with the voice port.

Command Mode

Dial-peer configuration

Command History

Release	Modification
11.3(1) T	This command was first introduced.

Usage Guidelines

Use the **port** configuration command to associate the designated voice port with the selected POTS dial peer.

Examples

The following example associates a Cisco MC3810 dial peer with voice port 1/1:

```
dial-peer voice 10 pots
port 1/1
```

Related Commands

Command	Description
dial-peer voice	Enters dial-peer configuration mode and specifies the method of voice-related encapsulation.
voice-group	Configures a list of timeslots for voice Channel Associated Signaling (CAS) on a T1/E1 controller.

preference

To indicate the preferred selection order of a dial peer within a hunt group, use the **preference** dial-peer configuration command. Use the **no** form of this command to remove the preference value on the voice port.

preference *value*
no preference *value*

Syntax Description

value An integer value from 0 to 10 in order of decreasing preference. The default value is 0 (highest preference).

Defaults

0 (highest preference)

Command Mode

Dial-peer configuration

Command History

Release	Modification
11.3(1) MA	This command was first introduced.

Usage Guidelines

This command applies to POTS dial peers, VoFR dial peers, VoATM dial peers, and VoHDLIC dial peers on the Cisco MC3810.

Setting the preference is useful in selecting the desired dial peer when multiple dial peers are matched for a dial string.

Note If POTS and voice-network dial peers are mixed in the same hunt group, the POTS dial peers must have priority over the voice-network dial peers.

Examples

The following example configures POTS dial peer 10 to a preference of 1 and VoFR dial peer 20 to a preference of 2:

```
dial-peer voice 10 pots
  preference 1

dial-peer voice 20 vofr
  preference 2
```

Related Commands

Command	Description
destination-pattern	Specifies either the prefix or the full E.164 telephone number for a dial peer.
session target	Specifies a network-specific address for a dial peer.

prefix

To specify the prefix of the dialed digits for a dial peer, use the **prefix** dial-peer configuration command. Use the **no** form of this command to disable this feature.

prefix *string*
no prefix

Syntax Description

string Integers representing the prefix of the telephone number associated with the specified dial peer. Valid numbers are 0 through 9, and a comma (.). Use a comma to include a pause in the prefix.

Defaults

No prefix is specified.

Command Mode

Dial-peer configuration

Command History

Release	Modification
11.3(1) T	This command was first introduced.

Usage Guidelines

Use the **prefix** command to specify a prefix for a specific dial peer. When an outgoing call is initiated to this dial peer, the **prefix** *string* value is sent to the telephony interface first, before the telephone number associated with the dial peer.

If you want to configure different prefixes for dialed numbers on the same interface, you need to configure different dial peers.

Examples

The following example specifies a prefix of “9” and then a pause:

```
dial-peer voice 10 pots
  prefix 9,
```

Related Commands

Command	Description
destination-pattern	Specifies either the prefix or the full E.164 telephone number to be a dial peer.

session target

To configure a network-specific address for a dial peer, use the **session target** dial-peer configuration command. Use the **no** form of this command to disable this feature.

The command appears in the following forms in Cisco IOS Release 11.3

For Cisco MC3810 Voice over Frame Relay dial peers:

```
session target interface {FR-ATM interface | Serial interface dlc}
no session target interface {FR-ATM interface | Serial interface dlc}
```

For Cisco MC3810 Voice over ATM dial peers:

```
session target interface Serial 2 vcd
no session target interface Serial 2 vcd
```

For Cisco MC3810 Voice over HDLC dial peers:

```
session target interface serial-port-number
no session target interface serial-port-number
```

The command appears in the following forms in Cisco IOS Release 12.0

For Cisco MC3810 Voice over Frame Relay dial peers:

```
session target interface dlc [cid]
no session target
```

For Cisco MC3810 Voice over ATM dial peers:

```
session target interface pvc {name | vpi/vci | vci}
no session target
```

For Cisco MC3810 Voice over HDLC dial peers:

```
session target interface
no session target
```

Syntax Description

For Cisco MC3810 Voice over Frame Relay dial peers:

<i>interface</i>	Interface type and interface number on the Cisco MC3810. For the range of valid interface numbers for the selected interface type, enter a ? character after the interface type.
<i>dlci</i>	Frame Relay DLCI. The valid range is 16 to 1007.
<i>cid</i>	Subchannel ID for the Frame Relay DLCI. The valid range is 4 to 255.

For Cisco MC3810 Voice over ATM dial peers:

<i>interface</i>	Interface type and interface number on the Cisco MC3810. The only valid number is 0.
pvc	The specific ATM permanent virtual circuit (PVC) for this dial peer.
<i>name</i>	The PVC name.
<i>vpi/vci</i>	ATM network virtual path identifier (VPI) and virtual channel identifier (VCI) of this PVC.
<i>vci</i>	ATM network virtual channel identifier (VCI) of this PVC.

For Cisco MC3810 Voice over HDLC dial peers:

<i>interface</i>	Interface type and interface number associated with this dial peer.
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Defaults

Enabled with no IP address or domain name defined.

Command Mode

Dial-peer configuration

Command History

Release	Modification
11.3(1) T	This command was first introduced.
11.3(1) MA	Support was added for VoFR, VoATM, and VoHDLC dial peers on the Cisco MC38110.
12.0(3) XG	The <i>cid</i> option was added.

Usage Guidelines

Use the **session target** command to specify a network-specific address or domain name for a dial peer. Whether you select a network-specific address or a domain name depends on the session protocol you select.

Examples

The following example configures a session target for Voice over Frame Relay with a session target on serial port1 and a DLCI of 200:

```
dial-peer voice 11 vofr
destination-pattern 13102221111
session target Serial1 200
```

(With Cisco IOS Releases earlier than 12.0) The following example configures a session target for Voice over ATM. The session target is sent to ATM interface Serial 2 with a VCD of 20.

```
dial-peer voice 12 voatm
destination-pattern 13102221111
session target atm Serial 2 vcd 20
```

(With Cisco IOS Release 12.0 and later) The following example configures a session target for Voice over ATM. The session target is sent to ATM interface 0, and is for a PVC with a VCI of 20.

```
dial-peer voice 12 voatm
destination-pattern 13102221111
session target atm0 pvc 20
```

The following example configures a session target on serial port 0 for Voice over HDLC:

```
dial-peer voice 13 vohdlc
destination-pattern 13102221111
session target serial0
```

Related Commands

Command	Description
called-number	Enables an incoming VoFR call leg to be bridged to the correct POTS call leg.
codec (dial-peer)	Specifies the voice coder rate of speech for a dial peer.
cptone	Specifies a regional tone, ring, and cadence setting for an analog voice port.
destination-pattern	Specifies either the prefix or the full E.164 telephone number to be used for a dial peer.
dtmf-relay	Enables the DSP to generate FRF.11 Annex A frames for a dial peer.
preference	Indicates the preferred selection order of a dial peer within a hunt group.
session protocol	Establishes a VoFR protocol for calls between the local and the remote routers via the packet network.
signal-type	Sets the signaling type to be used when connecting to a dial peer.

shutdown

To change the administrative state of a dial peer from up to down, use the **shutdown** dial-peer configuration command. Use the **no** form of this command to change the administrative state of this dial peer from down to up.

shutdown
no shutdown

Syntax Description

This command has no arguments or keywords.

Defaults

The administrative state of the dial peer is up.

Command Mode

Dial-peer configuration

Command History

Release	Modification
11.3(1) T	This command was first introduced.

Usage Guidelines

When a dial peer is shut down, you cannot initiate calls to that dial peer.

Examples

The following example changes the administrative state of voice telephony dial peer 10 to down:

```
configure terminal
dial-peer voice 10 pots
shutdown
```

