



Cisco IOS Voice Commands: O

This chapter contains the commands to configure and maintain Cisco IOS voice applications. The commands are presented in alphabetical order. Some commands required for configuring voice may be found in other Cisco IOS command references. Use the command reference master index or search online to find these commands.

For detailed information on how to configure these applications and features, refer to the *Cisco IOS Voice Configuration Guide*.

operation

To select a specific cabling scheme for E&M ports, use the **operation** command in voice-port configuration mode. To restore the default, use the **no** form of this command.

operation {2-wire | 4-wire}

no operation {2-wire | 4-wire}

Syntax Description

2-wire	Two-wire E&M cabling scheme.
4-wire	Four-wire E&M cabling scheme.

Defaults

2-wire E&M cabling scheme

Command Modes

Voice-port configuration

Command History

Release	Modification
11.3(1)T	This command was introduced on the Cisco 3600 series.
11.3(1)MA	This command was implemented on the Cisco MC3810.

Usage Guidelines

This command affects only voice traffic. Signaling is independent of 2-wire versus 4-wire settings. If the wrong cable scheme is specified, the user might get voice traffic in only one direction.

Using this command on a voice port changes the operation of both voice ports on a VPM card. The voice port must be shut down and then opened again for the new value to take effect.

This command is not applicable to FXS or FXO interfaces because they are, by definition, 2-wire interfaces.

On the Cisco MC3810, this command applies only to the analog voice module (AVM).

Examples

The following example specifies that an E&M port on the Cisco 3600 series router uses a 4-wire cabling scheme:

```
voice-port 1/0/0
 operation 4-wire
```

The following example specifies that an E&M port on the Cisco MC3810 uses a 2-wire cabling scheme:

```
voice-port 1/1
 operation 2-wire
```

outbound retry-interval

To define the retry period for attempting to establish the outbound relationship between border elements, use the **outbound retry-interval** command in Annex G neighbor service configuration mode. To disable the command, use the **no** form of this command.

outbound retry-interval *interval*

no outbound retry-interval

Syntax Description	<i>interval</i>	Amount of time, in seconds, to establish the outbound relationship. Range is from 1 to 65535. The default is 30.
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Defaults	30 seconds
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Command Modes	Annex G neighbor service configuration
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Command History	Release	Modification
	12.2(11)T	This command was introduced.

Usage Guidelines

Service relationships are defined to be unidirectional. When a service relationship is established between border element A and border element B, A is entitled to send requests to B and expect responses. For B to send requests to A and expect responses, a second service relationship must be established. From A's perspective, the service relationship it establishes with B is designated as the "outbound" service relationship.

Use this command to set the retry period for attempting to bring up the outbound relationship between border elements.

Examples

The following example shows how to set the retry interval to 300 seconds (5 minutes):

```
Router(config-nxg-neigh-svc)# outbound retry-interval 300
```

Related Commands	Command	Description
	access-policy	Requires that a neighbor be explicitly configured.
	inbound ttl	Sets the inbound time-to-live value.
	retry interval	Defines the time between delivery attempts.
	retry window	Defines the total time that a border element will attempt delivery.
	service-relationship	Establishes a service relationship between two border elements.
	shutdown	Enables or disables the border element.

output attenuation

To configure a specific output attenuation value, use the **output attenuation** command in voice-port configuration mode. To disable the selected output attenuation value, use the **no** form of this command.

output attenuation *decibels*

no output attenuation

Syntax Description	<i>decibels</i>	Attenuation, in decibels, at the transmit side (from the router to the central office) of the interface. Range is from -6 to 14. The default is 0.
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Defaults	For FXO, FXS, and E&M ports: 0
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Command Modes	Voice-port configuration
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Command History	Release	Modification
	11.3(1)T	This command was introduced on the Cisco 3600 series.
11.3(1)MA	This command was implemented on the Cisco MC3810.	

Usage Guidelines	<p>A system-wide loss plan must be implemented using both the input gain and output attenuation commands. Other equipment (including PBXs) in the system must be considered when creating a loss plan. The default value for this command assumes that a standard transmission loss plan is in effect, meaning that there must be an attenuation of -6 dB between phones. Connections are implemented to provide -6 dB of attenuation when the input gain and output attenuation commands are configured with the default value of 0 dB.</p>
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To decrease the gain of a signal to the Public Switched Telephone Network (PSTN), enter a positive dB value with the **output attenuation** command. To increase the signal strength in this voice-path direction, enter a negative dB value with the **output attenuation** command. If the voice level is too high, you can decrease the volume by either decreasing the input gain or increasing the output attenuation.

You can increase the gain of a signal coming into the router. If the voice level is too low, you can increase the input gain by using the **input gain** command.

Examples	<p>On the Cisco 3600 series router, the following example configures a 3-dB loss to be inserted at the transmit side (from the router toward the central office) of the interface:</p>
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```
voice-port 1/0/0
 output attenuation 3
```

On the Cisco AS5300, the following example configures a 3-dB gain to be inserted at the transmit side (from the router toward the central office) of the interface:

```
voice-port 0:D
 output attenuation -3
```

On the Cisco MC3810, the following example configures a 6-dB loss to be inserted at the transmit side (from the router toward the central office) of the interface:

```
voice-port 1/1
 output attenuation 6
```

Related Commands

Command	Description
input gain	Configures a specific input gain value for a voice port.

