Rotating Through Dial Strings

Feature History

Release	Modification
12.2(8)T	This feature was introduced.

This document describes the Asynchronous Line Monitoring feature feature in Cisco IOS Release 12.2(8)T and includes the following sections:

Feature Overview

The Cisco IOS software allows multiple dial strings (telephone numbers) to be configured for outgoing calls. In previous releases of the Cisco IOS software, the dial string used for a particular outgoing call was always the first telephone number in the dial string list. It was not possible to customize the selection or otherwise participate in deciding which dial string should be used first. But in Cisco IOS Release 12.2(8)T, the Asynchronous Line Monitoring feature feature allows the order in which dial strings should be dialed to be specified.

Benefits

The Asynchronous Line Monitoring feature feature allows you to specify the dialing order when multiple dial strings are configured. Options for dialing order are as follows:

- Sequential—Dial using the first dial string configured in a list of multiple strings.

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- Round-robin—Dial using the dial string *following* the most recently successful dial string.

- Last successful call—Dial using the most recently successful dial string.

This feature takes advantage of information available from a previous call attempt, such as the call was unsuccessful or the line was busy, and thereby increases the rate of successful calls.

Related Documents

Additional information about configuring networks that can take advantage of the Asynchronous Line Monitoring feature feature can be found in the *Cisco IOS Dial Technologies Configuration Guide*, refer to the chapter "Configuring Peer-to-Peer DDR with Dialer Profiles" in the part "Dial-on-Demand Routing Configuration." In the same manual, also refer to the chapter "Configuring ISDN Caller ID Callback," in the part "Callback and Bandwidth Allocation Configuration."

Supported Platforms

- Cisco 1400 series
- Cisco 1600 series
- Cisco 1710
- Cisco 1720
- Cisco 1721
- Cisco 1750
- Cisco 1751
- Cisco 2400 series
- Cisco 2600 series
- Cisco 3620
- Cisco 3631
- Cisco 3640
- Cisco 3660
- Cisco 3725
- Cisco 3745
- Cisco 7100
- Cisco 7200
- Cisco 7500
- Cisco 7700
- Cisco 800 series
- Cisco 805
- Cisco 806
- Cisco 828
- Cisco MC3810

- Universal Route Module (URM)
- ubr7200

Determining Platform Support Through Feature Navigator

Cisco IOS software is packaged in feature sets that support specific platforms. To get updated information regarding platform support for this feature, access Feature Navigator. Feature Navigator dynamically updates the list of supported platforms as new platform support is added for the feature.

Feature Navigator is a web-based tool that enables you to quickly determine which Cisco IOS software images support a specific set of features and which features are supported in a specific Cisco IOS image.

To access Feature Navigator, you must have an account on Cisco.com. If you have forgotten or lost your account information, send a blank e-mail to cco-locksmith@cisco.com. An automatic check will verify that your e-mail address is registered with Cisco.com. If the check is successful, account details with a new random password will be e-mailed to you. Qualified users can establish an account on Cisco.com by following the directions at http://www.cisco.com/register.

Feature Navigator is updated regularly when major Cisco IOS software releases and technology releases occur. For the most current information, go to the Feature Navigator home page at the following URL:

http://www.cisco.com/go/fn

Supported Standards, MIBs, and RFCs

Standards

None

MIBs

None

To obtain lists of supported MIBs by platform and Cisco IOS release, and to download MIB modules, go to the Cisco MIB website on Cisco.com at the following URL:

http://www.cisco.com/public/sw-center/netmgmt/cmtk/mibs.shtml

RFCs

None

Prerequisites

The Asynchronous Line Monitoring feature feature is used in configurations that apply to both legacy dialers and dialer profiles. The dialing order you configure applies to dial strings configured on an interface by the **dialer string** and **dialer map** configuration commands. See the documents listed in the "Related Documents" section for more information about using these commands to configure dial strings.

Configuration Tasks

See the following sections for the configuration tasks for this feature. Each task in the list is identified as either required or optional.

- Configuring the Order of Dial Strings (required)
- Verifying Dial String Order (optional)

Configuring the Order of Dial Strings

To specify the order in which dial strings should be dialed, use the following command in interface configuration mode:

Command	Purpose
`Router(config-if)#` **`dialer order`** [**`sequential`** | **`round-robin`** | **`last-successful`**]	Specifies the dialing order when multiple dial strings are configured. Use one of the following optional keywords: • **sequential**—Starts dialing the first dial string configured in a list of multiple strings. • **round-robin**—Starts dialing using the dial string that occurs after the most recently successful dial string. • **last-successful**—Starts dialing using the most recently successful dial string.

The **dialer order** command keywords can be configured on a per-interface basis. You can use this command in interface configurations that apply to both legacy dialers and dialer profiles. See the "Configuration Examples" section to see how this command is used with both these dialer types.

Verifying Dial String Order

To verify that the dial string order is configured correctly, perform the following step:

Step 1   To check the dial string order configuration, enter the **show running-config interface** command with the appropriate interface type at the privileged EXEC prompt:

```
Router# show running-config interface dialer 1
Building configuration...

Current configuration : 96 bytes
!
interface Dialer1
 no ip address
 dialer pool 1
 dialer order round-robin
 no cdp enable
end
```

Check that a **dialer order** command is listed in the configuration displayed. If no **dialer order** command is listed, that indicates the default sequential dial string order is configured.

Step 2   To see a report of the call types, telephone numbers, and call duration, enter the **show isdn history** command at the privileged EXEC prompt:

```
Router# show isdn history
```

Troubleshooting Tips

To troubleshoot the Asynchronous Line Monitoring feature feature, use the **debug dialer** command in privileged EXEC mode.

Monitoring and Maintaining the Asynchronous Line Monitoring feature Feature

To monitor and maintain the Asynchronous Line Monitoring feature feature, use the EXEC commands included in the steps in the "Verifying Dial String Order" section.

Configuration Examples

This section provides the following configuration examples:

- Legacy Dialer with Multiple Dial Strings Example
- Dialer Profile Configuration with Multiple Dial Strings Example

Legacy Dialer with Multiple Dial Strings Example

The following example configures the dialing software to try the telephone number (dial string) of the last successful call when starting a new call, rather than the first telephone number in the list:

```
interface Serial0/0
 ip address 10.2.1.130 255.255.255.0
 encapsulation ppp
 dialer in-band
 dialer map ip 10.2.1.131 name jones1 modem-script test 5554004
 dialer map ip 10.2.1.131 name jones1 modem-script test 5554005
 dialer map ip 10.2.1.131 name jones1 modem-script test 5554006
 dialer-group 1
 dialer order last-successful
```

Dialer Profile Configuration with Multiple Dial Strings Example

The following example configures the dialing software to try the telephone number following the most recently used telephone number (dial string) when starting a new call, rather than the first telephone number in the list:

```
interface Dialer0
 ip address 10.1.1.130 255.255.255.0
 encapsulation ppp
 dialer pool 1
 dialer string 1904
 dialer string 1905
 dialer-group 1
```

```
dialer order round-robin
```

Command Reference

The following commands are introduced or modified in the feature or features documented in this module. For information about these commands, see the *Cisco IOS Dial Technologies Command Reference* at http://www.cisco.com/en/US/docs/ios/dial/command/reference/dia_book.html. For information about all Cisco IOS commands, go to the Command Lookup Tool at http://tools.cisco.com/Support/CLILookup or to the *Cisco IOS Master Commands List*

- **dialer order**