Understand the Operational Status of Dial Peers on Cisco IOS Platforms

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Introduction

This document describes how to understand the operational status of dial peers on Cisco IOS® platforms.

Prerequisites

Requirements

Readers of this document should have knowledge of these topics:

- Understanding Dial Peers and Call Legs on Cisco IOS Platforms
- Understanding Inbound and Outbound Dial Peers on Cisco IOS Platforms

If Voice-Network (VoIP, VoFR, VoATM) and POTS dial-peers are not valid and in the "operational status", they are not considered for the Cisco IOS router/gateway inbound and outbound dial-peer matching process. In order to be considered valid/operational, dial-peers must meet one of these criteria:

1. **Destination-pattern** *and* a **voice-port** or **session target** is configured.
2. **Incoming called-number** is configured.
3. **Answer-address** is configured.

Components Used

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, ensure that you understand the potential impact of any command. This document is not restricted to specific software and hardware versions.

Conventions

For more information on document conventions, refer to the Cisco Technical Tips Conventions.

Invalid Dial-Peer Configurations

Based on the previous three rule criteria, this table displays examples of dial-peer configurations that are in the down operational status.

Dial Peer Examples

```
dial-peer voice 1 pots
 port 1/0:23

!--- Invalid dial-peer (rule 1): Has voice-port configured only.

!
dial-peer voice 2 pots
 destination-pattern 1T

!--- Invalid dial-peer (rule 1): Has destination-pattern configured only.

!
dial-peer voice 6 voip
 session target ipv4:172.16.13.111

!--- Invalid dial-peer (rule 1): Has session target configured only.

!
dial-peer voice 7 voip
 destination-pattern 83...

!--- Invalid dial-peer (rule 1): Has destination-pattern configured only.

!
```

Note: A dial-peer configuration statement without any subcommands is considered invalid by violation of 1, 2, and 3.

Valid Dial-Peer Configurations

Based on the previous three rule criteria, this table displays examples of dial-peer configurations that are in up operational status.

Valid Peer Examples

```
dial-peer voice 3 pots
  destination-pattern 1T
  port 1/0:23
  prefix 1

 !--- Valid dial-peer (rule 1): Has voice-port and destination-pattern configured.

 !
 dial-peer voice 4 pots
  incoming called-number 83.
```

```
!--- Valid dial-peer (rule 2): Has incoming called-number configured.

!
dial-peer voice 5 pots
 answer-address 408

!--- Valid dial-peer (rule 2): Has answer-address configured.


ss configured.
!
dial-peer voice 8 voip
 destination-pattern 83...
 session target ipv4:172.16.13.111

!--- Valid dial-peer (rule 1): Has session target and destination-pattern configured.

!
dial-peer voice 9 voip
 incoming called-number .

!--- Valid dial-peer (rule 2): Has incoming called-number configured.

!
dial-peer voice 10 voip
 answer-address 6666

!--- Valid dial-peer (rule 2): Has answer-address configured.

!
```

Note: Assume a dial-peer intended for inbound matching has an incoming **called-number** or an **answer-address** configured and a **destination-pattern** command is added. After you add the command **destination-pattern string** , the dial-peer goes operationally down. This is because the router maps a **destination-pattern** to an address (**session target**) or a voice-port (**port**) for outbound dial-peer matching purposes. In this scenario there is nothing to map to. For example, if you add a **destination-pattern** on dial-peer 4, 5, 9 and 10, they change their operational status to down.

Note: On dial-peer 4 and 5, if you remove the **destination-pattern** and add a **port** command, the dial-peers remain valid. Similarly if we remove the destination-pattern and add the **session-target** command on 9 and 10, they also remain operational.

Check the Dial-Peer Configuration

In order to check the validity of the dial peer configuration, use the Cisco IOS command **show dial-peer voice summary**.

Check the Dial-Peer Configuration

```
<#root>

2600#

show dial-peer voice summary

 dial-peer hunt 0
```

```
                                                        PASS
TAG TYPE   ADMIN OPER PREFIX   DEST-PATTERN     PREF THRU SESS-TARGET     PORT
  1 pots   up    down                          0                         1/0:23
  2 pots   up    down          1T              0
  3 pots   up    up   1        1T              0                         1/0:23
  4 pots   up    up                           0
  5 pots   up    up                           0
  6 voip   up    down                         0   syst ipv4:172.16.13.111
  7 voip   up    down          83...           0   syst
  8 voip   up    up            83...           0   syst ipv4:172.16.13.111
  9 voip   up    up                           0   syst
 10 voip   up    up                           0   syst
```