Prevent Domain Translation Messages after an Invalid Command Is Entered on a Router

Contents

Introduction

This document describes the domain translation messages that appear on a router after an invalid command is entered.

Prerequisites

Requirements

Cisco recommends that you have knowledge of these topics:

- Familiarity with Cisco IOS® Command Line Interface (CLI)

- Basic knowledge of Domain Name System (DNS)

Components Used

This document is not restricted to specific software and hardware versions.

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.

Conventions

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

Host to IP Address Translation

Understand Why "Translating" Messages Occur

By default, when a command in user or enable mode is entered into a router and this command or input is not recognized, the router believes that this is the host name of a device that the user attempts to reach via telnet. Therefore, the router tries to resolve the unrecognized command into an IP address with the use of an IP domain lookup. If no specific domain server has been configured on the router, the router issues a broadcast for the command to be translated into an IP address and the message "**Translating..... domain server (255.255.255.255)**" appears in the console. It can take several seconds for the router prompt to become available while the router waits for a response to its Domain Name System (DNS) broadcast.

Note: You can also use the transport preferred none command on the vty/con/aux lines and this prevents attempts by the router to resolve an invalid command into an IP address. The DNS information is available in the output of other commands. However, when you have to initiate a telnet session from the router, place the telnet keyword before the hostname, since the router does not telnet automatically when you type a hostname. Remember to add the ip name-server command to specify the address of the name server.

These next examples illustrate the typical behavior of a router when an input is not recognized, the same behavior is observed while operating in both user and enable mode:

User Mode

```
<#root>

R1>

xxxx

Translating "xxxx"...domain server (255.255.255.255)
(255.255.255.255)
Translating "xxxx"...domain server (255.255.255.255)
% Unknown command or computer name, or unable to find computer address
R1>
```

Enable Mode

```
<#root>

R1#

xxxx

Translating "xxxx"...domain server (255.255.255.255)
(255.255.255.255)
Translating "xxxx"...domain server (255.255.255.255)
% Unknown command or computer name, or unable to find computer address
R1#
```

Disable Host to IP Address Translation Feature

To prevent the "Translating..... domain server (255.255.255.255)" messages from appearing, you need to disable the default behavior of the router that attempts to resolve the invalid command into an IP address. Enter the **no ip domain lookup** command in the global configuration mode to disable this feature.

Note: On older Cisco IOS releases the syntax of the command was **no ip domain-lookup**.

Verify

To verify that the domain lookup is disabled, enter an unknown command into the router in user or enable mode. The user immediately receives a router prompt without an issue of a DNS broadcast. Here is an example:

```
<#root>

R1#

xxxx

% Unknown command or computer name, or unable to find computer address
R1#
```

Related Information

- **Cisco Technical Support & Downloads**