



# NAT—Ability to Use Route Maps with Static Translations

## Feature History

Release	Modification
12.2(4)T	This feature was introduced.
12.2(4)T2	Support for the Cisco 7500 series routers was added.

This document describes the NAT—Ability to Use Route Maps with Static Translations feature. It includes the following sections:

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## Feature Overview

Previous to this feature, route mapping was supported only with dynamic Network Address Translation (NAT) translation.

The NAT—Ability to Use Route Maps with Static Translations feature enables NAT multihoming capability with static address translations. Multihomed internal networks now can host common services such as the Internet and Domain Name System (DNS), which are accessed from different outside networks.



### Note

Network static support is not included in this feature.

## Benefits

- The ability to configure route map statements provides the option of using IP Security (IPsec) with NAT.

- Translation decisions can be made based on the destination IP address when static translation entries are used.

## Related Documents

- *Cisco IOS IP Command Reference, Volume 1 of 3: Addressing and Services*
- *Cisco IOS IP Configuration Guide*

## Supported Platforms

- Cisco 2500 series
- Cisco 2600 series
- Cisco 3620 router
- Cisco 3640 router
- Cisco 3660 router
- Cisco 7100 series
- Cisco 7200 series
- Cisco 7500 series

### 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](mailto: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 when major Cisco IOS software releases and technology releases occur. As of May 2001, Feature Navigator supports M, T, E, S, and ST releases. You can access Feature Navigator at the following URL:

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

## Supported Standards, MIBs, and RFCs

### Standards

No new or modified standards are supported by this feature.

### MIBs

No new or modified MIBs are supported by this feature.

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

No new or modified RFCs are supported by this feature.

## Configuration Tasks

See the following sections for configuration tasks for the NAT—Ability to Use Route Maps with Static Translations feature. Each task in the list is identified as either required or optional:

- Enabling Static NAT Route Mapping (required)
- Verifying Static NAT Route Mapping (optional)

### Enabling Static NAT Route Mapping

To enable route mapping with static NAT configurations, use the following command in global configuration mode:

Command	Purpose
Router(config)# <b>ip nat inside source</b> {list {access-list-number   access-list-name} pool pool-name [overload]   <b>static</b> local-ip global-ip <b>route-map</b> map-name}	Enables route mapping with static NAT translation configured on the NAT inside interface.

### Verifying Static NAT Route Mapping

To verify the static NAT route mapping configuration, use the following command in privileged EXEC mode:

Command	Purpose
Router# <b>show ip nat translations</b> [verbose]	Displays active NAT translations.

## Configuration Examples

This section provides the following configuration example:

- Enabling Static NAT Route Mapping

## Enabling Static NAT Route Mapping Example

The following example shows the use of route mapping with static NAT translations:

```
interface Ethernet3
 ip address 209.165.201.1 255.255.255.0
 ip nat outside
 media-type 10BaseT
!
interface Ethernet4
 ip address 209.165.201.5 255.255.255.0
 ip nat outside
 media-type 10BaseT
!
interface Ethernet5
 ip address 209.165.201.8 255.255.255.0
 ip nat inside
 ip policy route-map isp1
 media-type 10BaseT
!
router rip
 network 201.165.200.1
 network 201.165.200.29
!
 ip nat inside source static 209.165.201.10 192.68.1.21 route-map isp2
 ip nat inside source static 209.165.201.12 172.68.1.21 route-map isp1
 ip nat inside source static 209.165.201.23 192.68.1.11 route-map isp2
 ip nat inside source static 209.165.201.27 172.68.1.11 route-map isp1

 access-list 101 permit ip 209.165.201.228 0.0.0.255 172.0.0.0 0.255.255.255.
 access-list 102 permit ip 209.165.201.230 0.0.0.255 192.0.0.0 0.255.255.255
!
 route-map isp2 permit 10
 match ip address 102
 set ip next-hop 209.165.201.30
!
 route-map isp1 permit 10
 match ip address 101
 set ip next-hop 209.165.201.29
```

### Related Commands

Command	Description
<b>clear ip nat translation</b>	Clears dynamic NAT translations from the translation table.
<b>ip nat</b>	Designates that traffic originating from or destined for the interface is subject to NAT.
<b>ip nat inside destination</b>	Enables NAT of the inside destination address.
<b>ip nat outside source</b>	Enables NAT of the outside source address.
<b>ip nat pool</b>	Defines a pool of IP addresses for NAT.
<b>ip nat service</b>	Enables a port other than the default port.
<b>show ip nat statistics</b>	Displays NAT statistics.
<b>show ip nat translations</b>	Displays active NAT translations.