



## NAT—Support for NetMeeting Directory

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This feature module describes the Cisco IOS Network Address Translation (NAT) support for NetMeeting Directory and includes the following sections:

- Feature Overview
- Supported Platforms
- Supported Standards, MIBs, and RFCs

### Feature Overview

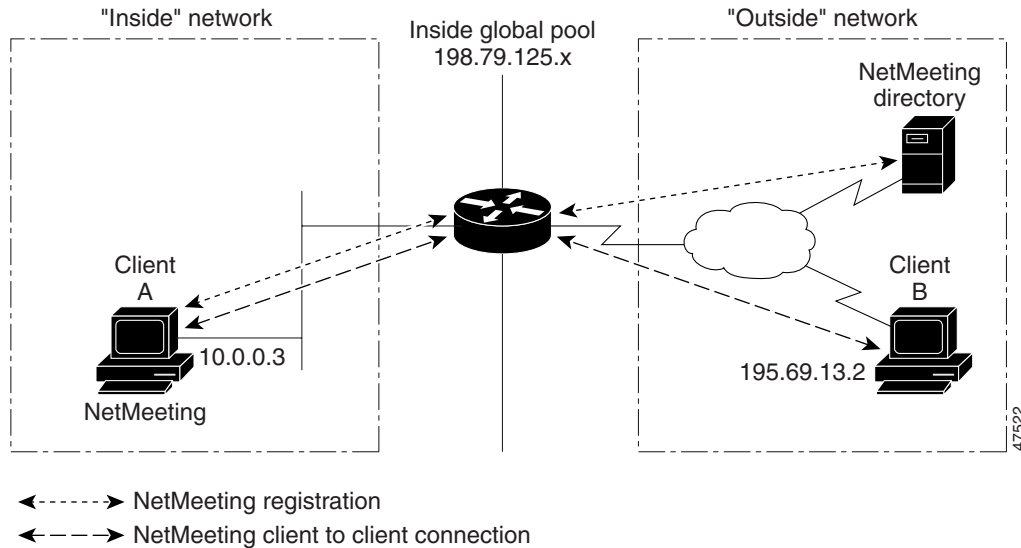
Microsoft NetMeeting is a Windows-based application that enables multiuser interaction and collaboration from a single PC over the Internet or an intranet to perform the following functions:

- Connect directly with one another if the destination IP address of the other client is known
- Connect with another client by selecting clients from a directory (Internet Locator Service or ILS) maintained by NetMeeting of registered NetMeeting clients
- Search for other NetMeeting clients not in the same directory

Previously, the only support for NetMeeting within Cisco IOS NAT was direct user-to-user connectivity through a NAT router. This enhancement provides support for the NetMeeting Directory feature, which is built into NetMeeting.

Figure 1 shows the NetMeeting Directory located on the “outside” and that the NAT translation is “Inside to Outside.”

**Figure 1 Cisco IOS NAT Support for NetMeeting**



The following steps occur in Cisco IOS NAT support for NetMeeting:

1. NetMeeting Client A at 10.0.0.3 initiates a registration with the NetMeeting Directory.
2. Cisco IOS NAT gets the packet and checks it against the configured translation rules. If there is a match, it will detect the fact that this is a NetMeeting Directory packet on TCP Port 389 and check for NetMeeting registration information that includes the imbedded "10.0.0.3" IP address of the "inside" host. When it finds the embedded IP address, it translates this address to the first available IP address from the inside global pool 198.79.125.x.

The NetMeeting registration process continues after the translation. The information provided by the NetMeeting Directory will now include the translated IP address 192.79.125.x.

3. NetMeeting Client B registers with the NetMeeting Directory with its public IP address 195.69.13.2 and gets a list of known NetMeeting clients, which includes NetMeeting Client A at IP address 198.79.125.14.
4. NetMeeting Client B selects NetMeeting Client A from the list of known users provided by the NetMeeting Directory and double-clicks on the user name to initiate a call. NetMeeting first connects with the NetMeeting Directory to verify that the information about Client A is current. NetMeeting Directory verifies the requested user in its database and if found, downloads the current information back to Client B. If the information is no longer current and Client A is no longer a registered user in the directory, Client B is informed and the connection to Client A is terminated.
5. NetMeeting on Client B proceeds to initiate a connection with NetMeeting on Client A. The request gets routed to the Cisco IOS NAT router.
6. The Cisco IOS NAT router sees the request and matches the destination IP address against the NAT translation table. It will find an entry for 198.79.125.14 that maps to the inside local address of 10.0.0.3 and NAT will perform the translation and pass the packet to be routed to the local host.

## Benefits

- The NetMeeting Directory enables users to request a connection by name instead of IP address.
- Use of the NetMeeting Directory makes NetMeeting more usable for customers.
- Internet service providers and enterprise customers can deploy a scalable solution with NetMeeting and NAT.

## Related Documents

- *Cisco IOS IP and IP Routing Configuration Guide*, Release 12.1
- *Cisco IOS IP and IP Routing Command Reference*, Release 12.1

## Supported Platforms

- Catalyst 5000 family switches with an installed Route Switch Module
- Catalyst 6000 family switches with an installed Multi Layer Switch Feature Card
- Catalyst 8500 series
- Lightstream 1010 series
- Cisco 800 series
- Cisco 1000 series
- Cisco 1400 series
- Cisco 1500 series
- Cisco 1700 series
- Cisco 2500 series
- Cisco 3600 series
- Cisco 4000 series
- Cisco AS5300 access server
- Cisco AS5400 universal access server
- Cisco AS5800 universal access server
- Cisco 6400 series
- Cisco 7000 series
- Cisco 7100 series
- Cisco 7200 series
- Cisco 8500 series
- Cisco 12000 series
- Cisco uBR7200

## 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 web site on Cisco Connection Online (CCO) at <http://www.cisco.com/public/sw-center/netmgmt/cmtk/mibs.shtml>.

### RFCs

No new or modified RFCs are supported by this feature.

## Configuration Tasks

None

## Configuration Examples

None

## Command Reference

None