



Configuring Network Address Translation Features Roadmap

This roadmap lists the features documented in the Network Address Translation modules and maps the features to the modules in which they appear.

Roadmap History

This module was first published on May 2, 2005, and last updated on November 19, 2008.

Features and Release Support

Table 1 lists Network Address Translation feature support for the following Cisco IOS software release trains:

- [Cisco IOS Releases 12.2T, 12.3, 12.3T, 12.4, and 12.4T](#)

Only features that were introduced or modified in Cisco IOS Release 12.2 (1) or a later release appear in the table. *Not all features may be supported in your Cisco IOS software release.*

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Note

Table 1 lists only the Cisco IOS software release that introduced support for a given feature in a given Cisco IOS software release train. Unless noted otherwise, subsequent releases of that Cisco IOS software release train also support that feature.



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Table 1 Supported Network Address Translation Features

Release	Feature Name	Feature Description	Where Documented
Cisco IOS Releases 12.2T, 12.3, 12.3T, 12.4, and 12.4T			
12.2(2)T	NAT Support for H.323 v2 RAS	Cisco IOS NAT supports all H.225 and H.245 message types, including those sent in the RAS protocol.	Using Application Level Gateways with NAT
12.2(4)T 12.2(4)T2	NAT—Static Mapping Support with HSRP for High Availability	Static mapping support for HSRP allows the option of having only the HSRP active router respond to an incoming ARP for a router configured with a NAT address.	Configuring NAT for High Availability
12.2(4)T 12.2(4)T2	NAT - Translation of External IP addresses only	Using the NAT translation of external IP address only feature, NAT can be configured to ignore all embedded IP addresses for any application and traffic type.	Configuring NAT for IP Address Conservation
12.2.(4)T	NAT-Ability to Use Route Maps with Static Translation	The dynamic translation command can specify a route map to be processed instead of an access-list. A route map allows you to match any combination of access-list, next-hop IP address, and output interface to determine which pool to use. The ability to use route maps with static translations enables NAT multihoming capability with static address translations.	Configuring NAT for IP Address Conservation
12.2(8)T	NAT Support for SIP feature	NAT Support for SIP adds the ability to deploy Cisco IOS NAT between VoIP solutions based on SIP.	Using Application Level Gateways with NAT
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12.2(13)T	Support for IPSec ESP Through NAT	IPSec ESP Through NAT provides the ability to support multiple concurrent IP Security (IPSec) Encapsulating Security Payload (ESP) tunnels or connections through a Cisco IOS Network Address Translation (NAT) device configured in Overload or Port Address Translation (PAT) mode.	Using Application Level Gateways with NAT
12.2(13)T	Network Address Translation (NAT) Integration with MPLS VPNs	This feature allows multiple Multiprotocol Label Switching (MPLS) Virtual Private Networks (VPNs) to be configured on a single device to work together.	Integrating NAT with MPLS VPNs
12.2(13)T	NAT Stateful Failover of Network Address Translation	The NAT Stateful Failover of Network Address Translation feature represents Phase 1 of the stateful failover capability. It introduces support for two or more network address translators to function as a translation group.	Configuring NAT for High Availability
12.2(15)T	The NAT Support for IPSec ESP— Phase II feature	The NAT Support for IPSec ESP— Phase II feature provides support for Internet Key Exchange (IKE) and ESP without encapsulation in tunnel mode through a Cisco IOS router configured with NAPT.	Using Application Level Gateways with NAT

Table 1 Supported Network Address Translation Features (continued)

Release	Feature Name	Feature Description	Where Documented
12.3(4)T	Rate Limiting NAT Translation	The Rate Limiting NAT Translation feature provides the ability to limit the maximum number of concurrent network address translation (NAT) operations on a router. In addition to giving users more control over how NAT addresses are used, the Rate Limiting NAT Translation feature can be used to limit the effects of viruses, worms, and denial-of-service attacks.	Configuring NAT for IP Address Conservation
12.3(7)T	NAT-Static IP Support	The NAT - Static IP Support feature provides support for users with static IP addresses, enabling those users to establish an IP session in a Public Wireless LAN environment.	Configuring NAT for IP Address Conservation
12.3(7)T	NAT RTSP Support Using NBAR	The Real Time Streaming Protocol (RTSP) is a client-server multimedia presentation control protocol that supports multimedia application delivery. Some of the applications that use RTSP include Windows Media Services (WMS) by Microsoft, QuickTime by Apple Computer, and RealSystem G2 by RealNetworks.	Configuring NAT for IP Address Conservation
12.3(7)T	NAT Stateful Failover for Asymmetric Outside-to-Inside ALG Support	The NAT Stateful Failover for Asymmetric Outside-to-Inside and Application Layer Gateway (ALG) Support feature improves the ability to handle asymmetric paths by allowing multiple routing paths from outside-to-inside, and per-packet load balancing. This feature also provides seamless failover translated IP sessions with traffic that includes embedded IP addressing such as Voice over IP, FTP, and Domain Name System (DNS) applications.	Configuring NAT for High Availability
12.3(11)T	NAT H.245 Tunneling Support	The NAT H.245 Tunneling Support feature allows H.245 tunneling in H.323 Application Level Gateways (ALGs)	Using Application Level Gateways with NAT
12.3(13)T	NAT Default Inside Server	The NAT Default Inside Server feature provides for the need to forward packets from the outside to a specified inside local address.	Configuring NAT for IP Address Conservation
12.3(14)T	NAT Virtual Interface (NVI)	The NAT Virtual Interface (NVI) feature removes the requirement to configure an interface as either Network Address Translation (NAT) inside or NAT outside. An interface can be configured to use NAT or not use NAT.	Configuring NAT for IP Address Conservation
12.3(14)T	NAT Routemaps Outside-to-Inside Support	The NAT Routemaps Outside-to-Inside Support feature enables the deployment of a NAT routemap configuration that will allow IP sessions to be initiated from the outside to the inside.	Configuring NAT for IP Address Conservation

Table 1 Supported Network Address Translation Features (continued)

Release	Feature Name	Feature Description	Where Documented
12.4(2)T	NAT Optimized SIP Media Path with SDP	The NAT Optimized SIP Media Path with SDP feature allows the creation of a shorter path for Session Initiation Protocol (SIP) media channels by distributing endpoint IP addressing information with Session Descriptor Protocol (SDP) of SIP messages. This feature allows endpoints to communicate directly by using standard routing and eliminates the need for them to traverse through upstream NAT routers.	NAT Optimized SIP Media Path with SDP
12.4(2)T	NAT Optimized SIP Media Path Without SDP	The NAT Optimized SIP Media Path Without SDP feature provides the ability to optimize the media path taken by a SIP VoIP session when NAT is used. NAT forces the VoIP traffic to take at least one extra hop in the network, which usually results in several additional hops being added to the path between two IP hosts.	NAT Optimized SIP Media Path Without SDP
12.4(3), 12.4(4)T	Scalability of Stateful NAT	The Scalability for Stateful NAT feature allows Stateful Network Address Translation (SNAT) to control the Hot Standby Router Protocol (HSRP) state change until the NAT information is completely exchanged. The ability to change the default TCP mode to User Datagram Protocol (UDP) mode, and the ability to disable asymmetric queuing have been added. When UDP mode is used, SNAT will send messages over UDP mode using a proprietary acknowledgement/retransmit mechanism.	Scalability of Stateful NAT
12.4(6)T	NAT ARP Ping	The ARP Ping feature enables the NAT entry and the secure ARP entry to not be deleted when the static IP client exists in the network where the IP address is unchanged after authentication.	Configuring NAT for IP Address Conservation
12.4(6)T	NAT SCCP Fragmentation Support	The NAT SCCP Fragmentation Support feature prevents skinny control message exchanges from failing in a TCP segmentation scenario because the NAT skinny ALG is able to reassemble the skinny control messages. A fragmented payload that requires an IP or port translation will no longer be dropped.	Using Application Level Gateways with NAT

Table 1 Supported Network Address Translation Features (continued)

Release	Feature Name	Feature Description	Where Documented
12.4(9)T	Cisco IOS Hosted NAT Traversal for Session Border Controller Phase-1	The Cisco IOS Hosted NAT Traversal for Session Border Controller feature provides support for transparency with the use of a proxy device on the NAT outside domain.	Configuring Hosted NAT Traversal for Session Border Controller
12.4(9)T	NAT as SIP Session Border Controller Support for Address-Only Fields	The NAT as SIP Session Border Controller Support for Address-Only Fields feature provides support for the translation of SIP address-only fields.	Configuring Hosted NAT Traversal for Session Border Controller
12.4(9)T	NAT as SIP Session Border Controller Media Flow	The NAT as SIP Session border Controller Media Flow feature provides support for media flow around for RTP/RTCP exchanges between phones on the inside domain of the SBC.	Configuring Hosted NAT Traversal for Session Border Controller
12.4(11)T	User Defined Source Port Ranges for PAT	The User Defined Source Port Ranges for PAT feature enables the specification of source port ranges for Port Address Translation (PAT) for Session Initiation Protocol (SIP), H.323, and Skinny Real-Time Transport Protocol (RTP) and RTP Control Protocol (RTCP).	User Defined Source Port Ranges for PAT
12.4(15)T	Hosted NAT Support for Session Border Controller Phase-2	The Hosted NAT Support for Session Border Controller Phase-2 feature adds registration throttling, media flow through, and SNAT support.	Configuring Hosted NAT Traversal for Session Border Controller

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