Learn about Stub Domain

How computers on the Stub Domain can be connected to External networks. The following article The network administrator will introduce you to the mechanism of operation on Stub Domain.

In the previous sections Network Administrator introduced what **NAT (Network address translation)** is, how to configure **NAT, Dynamic NAT (dynamic NAT)** and **Overloading NAT to** work. The following article The network administrator will introduce you to Stub Domain. How computers on the **Stub Domain** can be connected to **External networks** .

1. How can computers on the Stub Domain be connected to External networks ?

Source computer A

1. IP address: 192.168.32.10
1. Computer port (port): 400
1. IP Address NAT Router: 215.37.32.203
1. Port number (Port number) The NAT router specifies: 1

Source B computer

1. IP address: 192.168.32.13
1. Computer port (port): 50
1. IP address NAT Router: 192.168.32.13
1. Number of NAT Router ports specified: 2

Source C computer

1. IP address: 192.168.32.15
1. Computer port (port): 3750
1. IP Address NAT Router: 215.37.32.203
1. Number of NAT Router ports specified: 3

Source computer D

1. IP address: 192.168.32.18
1. Computer port (port): 206
1. IP Address Router: 215.37.32.203
1. Number of NAT Router ports specified: 4

The NAT router stores **the IP address** and port number of each computer. The **NAT router** will then replace the **IP address** with a valid **public IP address** and port number (port number) corresponding to the location in the source computer's packet and gateway. Therefore, any **External Network** network sees **the IP address** of the **NAT router** and the **route** r port number as the source address - the computer information on each packet.

See also: Understanding the operation mechanism of NAT (Network Address Translation) (Part 1)

Also some of your computers on the **Domain Stub** can use **Private IP addresses** . You can create an **IP** access list to tell the router which computers in the network require **NAT** . All other **IP addresses** going through will not need to be compiled.

Some **simultaneous translations** are supported by **Router** by specifying the amount of **DRAM** (Dynamic Random Access Memory).

When processing a specific address, the compiled address table only takes about 160 bytes. Theoretically a 4 MB DRAM **router** can handle 26,214 simultaneous translations.

The IANA has limited the scope of specific **IP addresses** used as **non-routable IP** addresses, internal network addresses. These **IP addresses** are considered **Private IP addresses** (for more information you can refer to R **FC 1918: Address Allocation for Private Internets**).

Any company or agency cannot register ownership of **a Private IP address** or use these **Private IP addresses** on a public computer. **Router** is designed to remove **Private IP addresses.** This means that a packet on a computer that has **a private IP address** can access the destination computer with **a public IP address** , but **the**

private IP address will be discarded by the **router** .

See also: Understanding NAT configuration (part 2)

2. The range of 3 IP address classes used to connect to the network:

Scope 1 : Class A - 10.0.0.0 through 10.255.255.255

Range 2 : Class B - 172.16.0.0 via 172.31.255.255

Scope 3: Class C - 192.168.0.0 through 192.168.255.255

Although each subclass has a different scope, you do not need to use any specific subclass within the internal network (**Internal Network**). It is a good way to significantly reduce **IP address** conflicts.