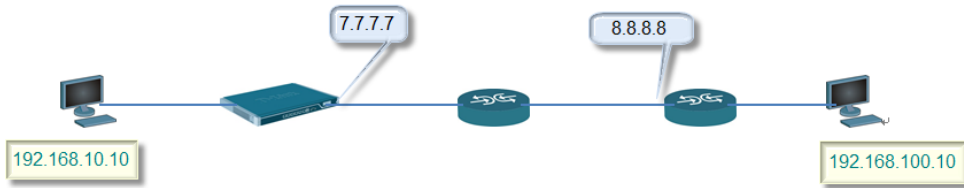


How to setup GRE tunnel with CISCO router

Topology:



CISCO model: router 2821

IOS version: 2800 Software (C2800NM-ADVSECURITYK9-M), Version 12.4(25f), RELEASE SOFTWARE (fc2)

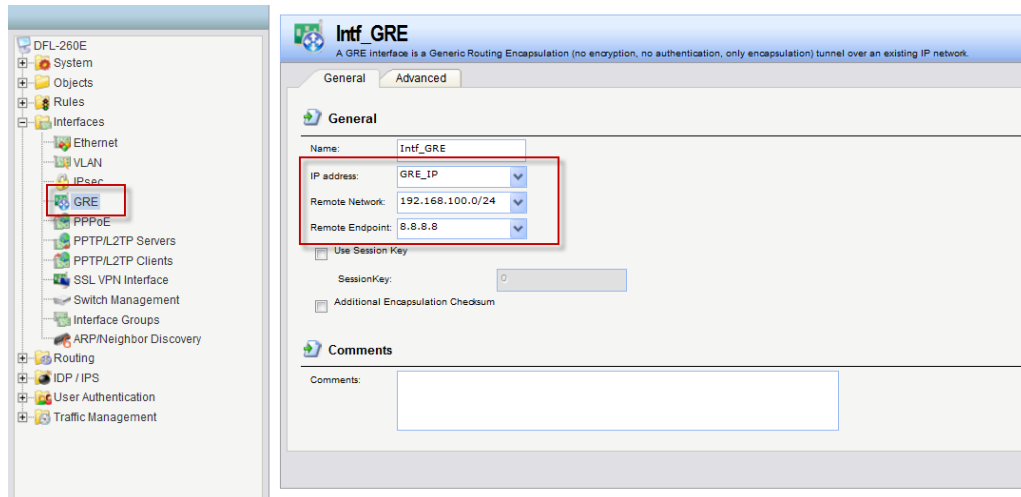
Setup:

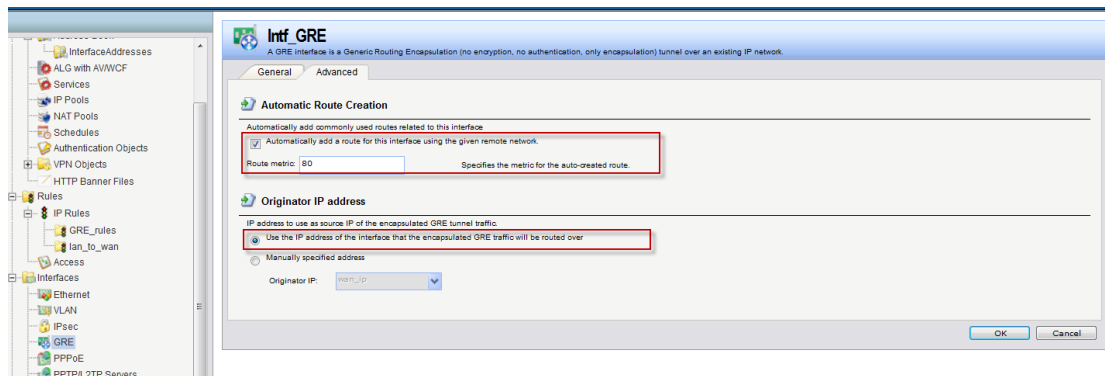
(1)

IP address: This is the IPv4 address of the inside of the tunnel on the local side. This cannot be left blank and must be given a value.

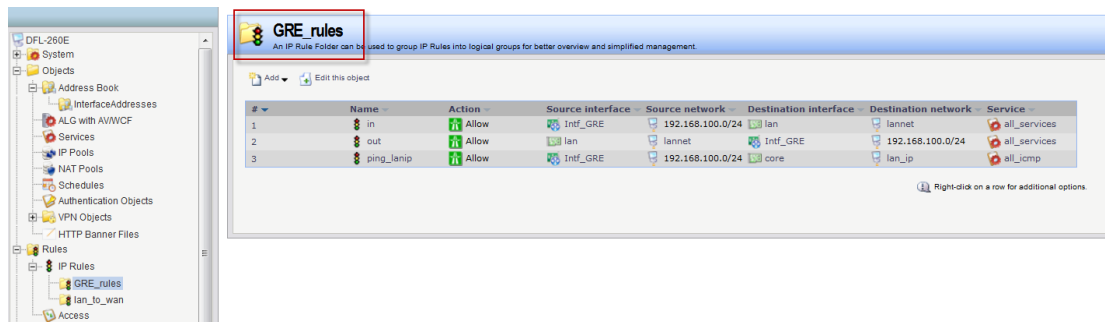
Remote network: The remote network which the GRE tunnel will connect with.

Remote endpoint: This is the IPv4 address of the remote device which the tunnel will connect with.





(2) Create IP rules for inbound and outbound traffics.



(3) I can ping IP address 192.168.100.10 from IP address 192.168.10.10

```

C:\Users\Administrator>ping 192.168.100.10

Pinging 192.168.100.10 with 32 bytes of data:
Reply from 192.168.100.10: bytes=32 time=1ms TTL=126
Reply from 192.168.100.10: bytes=32 time<1ms TTL=126
Reply from 192.168.100.10: bytes=32 time<1ms TTL=126
Reply from 192.168.100.10: bytes=32 time=34ms TTL=126

Ping statistics for 192.168.100.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 34ms, Average = 8ms
  
```

CISCO configuration:

Router#show flash:

-#- --length-- -----date/time----- path

```
1          901 Jun 4 2012 00:32:44 +00:00 dwc
2          2903 May 25 2010 01:47:50 +00:00 cpconfig-28xx.cfg
3      2938880 May 25 2010 01:48:04 +00:00 cpexpress.tar
4          1038 May 25 2010 01:48:12 +00:00 home.shtml
5      122880 May 25 2010 01:48:20 +00:00 home.tar
6      527849 May 25 2010 01:48:30 +00:00 128MB.sdf
7      1697952 May 25 2010 01:48:44 +00:00 securedesktop-ios-3.1.1.45-k9.pkg
8      415956 May 25 2010 01:48:56 +00:00 sslclient-win-1.1.4.176.pkg
9      22935360 Sep 6 2012 11:36:16 +00:00 c2800nm-advsecurityk9-mz.124-25f.bin
```

100077568 bytes available (28659712 bytes used)

Router#show run

Router#show running-config

Building configuration...

Current configuration : 848 bytes

!

version 12.4

service timestamps debug datetime msec

service timestamps log datetime msec

no service password-encryption

!

hostname Router

!

boot-start-marker

boot-end-marker

!

!

no aaa new-model

!

!

ip cef

ip auth-proxy max-nodata-conns 3

```
ip admission max-nodata-conns 3
!
!
!
!
!
!
!
!
!
!
!
!
interface Tunnel100
 ip address 192.168.1.2 255.255.255.0
 tunnel source 8.8.8.8
 tunnel destination 7.7.7.7
!
interface GigabitEthernet0/0
 ip address 8.8.8.8 255.255.255.0
 duplex auto
 speed auto
!
interface GigabitEthernet0/1
 ip address 192.168.100.1 255.255.255.0
 duplex auto
 speed auto
!
ip forward-protocol nd
ip route 0.0.0.0 0.0.0.0 8.8.8.254
ip route 192.168.10.0 255.255.255.0 Tunnel100
!
ip http server
no ip http secure-server
!
!
!
control-plane
```

```
!  
!  
!  
line con 0  
line aux 0  
line vty 0 4  
  login  
!  
scheduler allocate 20000 1000  
!  
end
```

Router#

Router#show ip interface brief

Interface	IP-Address	OK?	Method	Status	Protocol
GigabitEthernet0/0	8.8.8.8	YES	manual	up	up
GigabitEthernet0/1	192.168.100.1	YES	manual	up	up
Tunnel100	192.168.1.2	YES	manual	up	up

END