

Group id: 203

Assumptions:

1. Population of Lotus city 2000, so host size is 2048.
2. Since Brazil-China and Norway-Russia can not connect with the same router, that's why we made the network of Brazil-China with the USA and Norway-Russia with the Lotus Committee Router.
3. Since Russia and China are not in the same network, we are assuming that there exists only one server and we are assuming it to be in Russia's LAN network.
4. Lotus committee members can access superhero support web, we added dns server to the lotus committee lan.
5. Since there should be a floating path between Lotus and Russia via Norway, we are assuming it is, from Russia to Lotus via Norway.
6. We are assuming that our main priority is to connect the superhero networks to the lotus committee network.

VLSM Details:

Name	Host	+2	IP	H Bit	N Bit
China	1025	1027	2048	11	21
Lotus City	2000	2002	2048	11	21
Russia	511	513	1024	10	22
USA	434	436	512	9	23
Norway	297	299	512	9	23
Brazil	50	52	64	6	26
Lotus Committee	17	19	32	5	27
WAN 1	2	4	4	2	30

WAN 2	2	4	4	2	30
WAN 3	2	4	4	2	30
WAN 4	2	4	4	2	30
WAN 5	2	4	4	2	30
WAN 6	2	4	4	2	30
WAN 7	2	4	4	2	30

$$2048 + 2048 + 1024 + 512 + 512 + 64 + 32 + (4 \times 7) = 6268$$

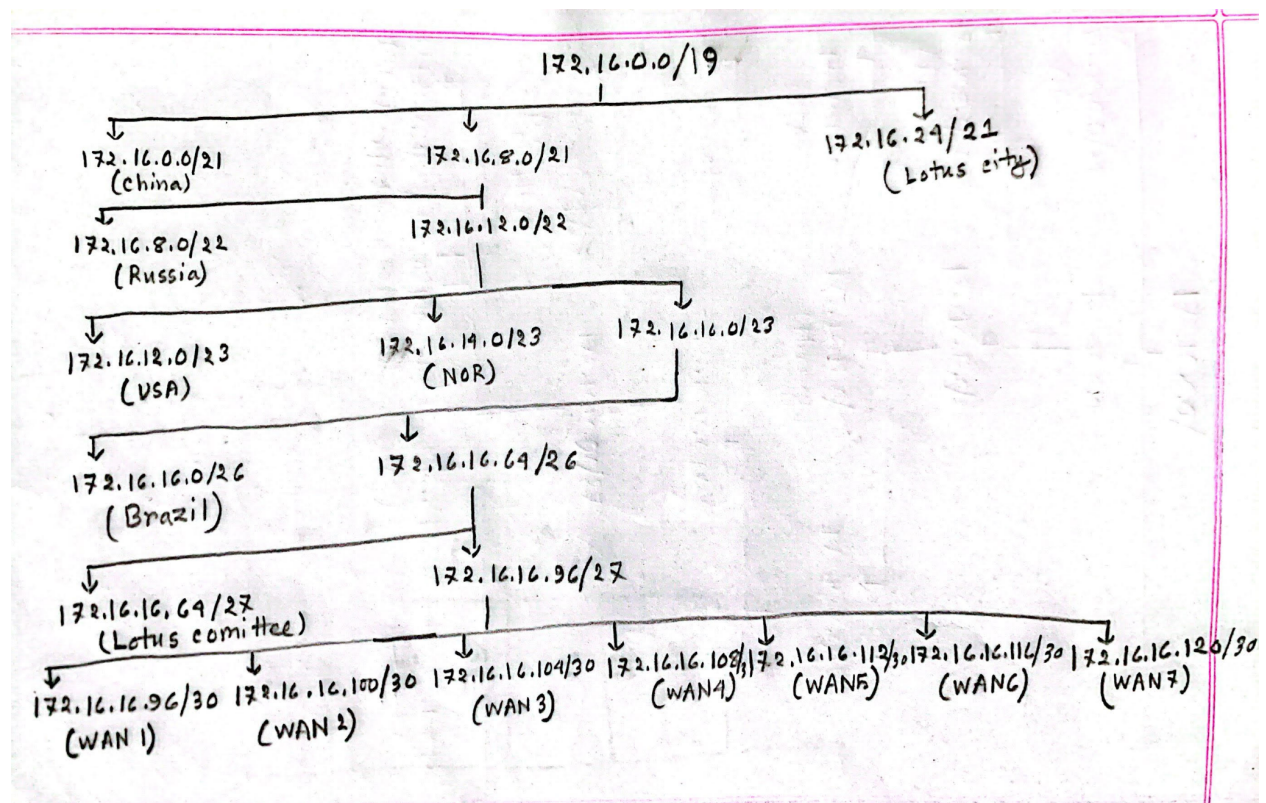
So, $2^x = 6268$

$$X = \log_2(6268)$$

$$X = 12.614$$

So, Number of total host 13

Now, Subnet mask initially $(32-13) = 19$



Addressing Table:

Device	Interface	IP Address	Subnet Mask	Default Gateway
Brazil	FastEthernet0/0	172.16.16.1	255.255.255.192	N/A
	Serial2/0	172.16.16.97	255.255.255.252	
China	FastEthernet0/0	172.16.0.1	255.255.248.0	N/A
	Serial2/0	172.16.17.102	255.255.255.252	
Norway	FastEthernet0/0	172.16.14.1	255.255.254.0	N/A
	Serial2/0	172.16.16.110	255.255.255.252	
	Serial3/0	172.16.16.113	255.255.255.252	
USA	FastEthernet0/0	172.16.12.1	255.255.254.0	N/A
	Serial2/0	172.16.16.98	255.255.255.252	
	Serial3/0	172.16.16.101	255.255.255.252	
	Serial6/0	172.16.16.105	255.255.255.252	
Russia	FastEthernet0/0	172.16.8.1	255.255.252.0	N/A
	Serial2/0	172.16.16.114	255.255.255.252	
	Serial3/0	172.16.16.117	255.255.255.252	

Lotus Committee	FastEthernet0/0	172.16.16.65	255.255.255.224	N/A
	Serial2/0	172.16.16.106	255.255.255.252	
	Serial3/0	172.16.16.118	255.255.255.252	
	Serial6/0	172.16.16.109	255.255.255.252	
	Serial7/0	172.16.16.121	255.255.255.252	
Lotus	FastEthernet0/0	172.16.24.1	255.255.248.0	N/A
	Serial2/0	172.16.16.122	255.255.255.252	
Lotus committee DNS	FastEthernet0/0	172.16.16.67	255.255.255.224	172.16.16.65
PC1	FastEthernet0/0	172.16.16.66	255.255.255.224	172.16.16.65
PC2	FastEthernet0/0	172.16.16.3	255.255.255.192	172.16.16.1
PC3	FastEthernet0/0	172.16.0.4	255.255.248.0	172.16.0.1
PC4	FastEthernet0/0	172.16.8.3	255.255.252.0	172.16.8.1
PC5	FastEthernet0/0	172.16.14.3	255.255.254.0	172.16.14.1
PC6	FastEthernet0/0	172.16.12.3	255.255.254.0	172.16.12.1
Brazil DHCP	FastEthernet0/0	172.16.16.2	255.255.255.192	172.16.16.1
China DHCP	FastEthernet0/0	172.16.0.2	255.255.248.0	172.16.0.1
Norway DHCP	FastEthernet0/0	172.16.14.2	255.255.254.0	172.16.14.1
USA DHCP	FastEthernet0/0	172.16.12.2	255.255.254.0	172.16.12.1
Russia DHCP	FastEthernet0/0	172.16.8.2	255.255.252.0	172.16.8.1
Russia mail server	FastEthernet0/0	172.16.8.4	255.255.252.0	172.16.8.1
DNS Server	FastEthernet0/0	172.16.24.2	255.255.248.0	172.16.24.1
SuperHero Support Web	FastEthernet0/0	172.16.24.3	255.255.248.0	172.16.24.1

Commands:

DHCP Configuration:

Router China

```
Router>enable
```

```
Router#
```

```
Router#configure terminal
```

Enter configuration commands, one per line. End with CNTL/Z.

```
Router(config)#interface FastEthernet0/0
```

```
Router(config-if)#
```

```
Router(config-if)#exit
```

```
Router(config)#interface FastEthernet0/0
```

```
Router(config-if)#ip address 172.16.0.1 255.255.0.0
```

```
Router(config-if)#ip address 172.16.0.1 255.255.248.0
```

```
Router(config-if)#
```

```
Router(config-if)#exit
```

```
Router(config)#interface FastEthernet0/0
```

```
Router(config-if)#ip address 172.16.0.1 255.255.248.0
```

```
Router(config-if)#no shutdown
```

```
Router(config-if)#
```

```
Router#en
```

```
Router#wr
```

Router Brazil

```
Router>enable
```

```
Router#
```

```
Router#configure terminal
```

Enter configuration commands, one per line. End with CNTL/Z.

```
Router(config)#interface FastEthernet0/0
```

```
Router(config-if)#
```

```
Router(config-if)#exit
Router(config)#interface FastEthernet0/0
Router(config-if)#ip address 172.16.16.1 255.255.0.0
Router(config-if)#ip address 172.16.16.1 255.255.255.192
Router(config-if)#no shutdown
Router(config-if)#
```

```
Router(config-if)#en
% Ambiguous command: "en"
Router(config)#exit
Router#
%SYS-5-CONFIG_I: Configured from console by console
en
Router#wr
Building configuration...
[OK]
Router#
```

```
Router USA
Router>enable
Router#
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface FastEthernet0/0
Router(config-if)#ip address 172.16.12.1 255.255.254.0
Router(config-if)#no shutdown
Router(config-if)#
```

```
Router(config)#exit
Router#
%SYS-5-CONFIG_I: Configured from console by console
```

```
Router#wr
Building configuration...
[OK]
```

```
Router Norway
Router>enable
Router#
Router#configure terminal
```

Enter configuration commands, one per line. End with CNTL/Z.

```
Router(config)#interface FastEthernet0/0
```

```
Router(config-if)#ip address 172.16.14.1 255.255.0.0
```

```
Router(config-if)#ip address 172.16.14.1 255.255.254.0
```

```
Router(config-if)#no shutdown
```

```
Router(config-if)#
```

```
Router(config-if)#exit
```

```
Router(config)#exit
```

```
Router#wr
```

```
Building configuration...
```

```
[OK]
```

```
Router Russia
```

```
Router>enable
```

```
Router#
```

```
Router#configure terminal
```

Enter configuration commands, one per line. End with CNTL/Z.

```
Router(config)#interface FastEthernet0/0
```

```
Router(config-if)#ip address 172.16.8.1 255.255.0.0
```

```
Router(config-if)#no ip address
```

```
Router(config-if)#
```

```
Router(config-if)#exit
```

```
Router(config)#interface FastEthernet0/0
```

```
Router(config-if)#
```

```
Router(config-if)#
```

```
Router(config-if)#exit
```

```
Router(config)#interface FastEthernet0/0
```

```
Router(config-if)#ip address 172.16.8.1 255.255.0.0
```

```
Router(config-if)#ip address 172.16.8.1 255.255.252.0
```

```
Router(config-if)#no shutdown
```

```
Router(config-if)#
```

```
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
```

```
Router(config-if)#exit
```

```
Router(config)#exit
```

```
Router#
```

```
%SYS-5-CONFIG_I: Configured from console by console
```

```
Router#wr
```

```
Building configuration...
```

```
[OK]
```

```
Router#
```

STARTING WAN Connection

WAN 1. BRAZIL->USA

Router>enable

Router#

Router#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#interface Serial2/0

Router(config-if)#ip address 172.16.16.97 255.255.255.192

Router(config-if)#ip address 172.16.16.97 255.255.255.252

Router(config-if)#no shutdown

Router(config-if)#

Router(config-if)#exit

Router(config)#interface Serial2/0

Router(config-if)#ip address 172.16.16.97 255.255.255.252

Router(config-if)#exit

Router(config)#exit

Router#

%SYS-5-CONFIG_I: Configured from console by console

wr

Building configuration...

[OK]

Router#

USA-> BRAZIL

Router>enable

Router#

Router#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#interface Serial2/0

Router(config-if)#

%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0, changed state to up

ip address 172.16.16.98 255.255.254.0

Router(config-if)#ip address 172.16.16.98 255.255.255.252

Router(config-if)#ip address 172.16.16.98 255.255.255.252

Router(config-if)#exit

Router(config)#exit

Router#

%SYS-5-CONFIG_I: Configured from console by console


```
Router#wr
Building configuration...
[OK]
Router#
```

WAN 2 USA->CHINA

```
Router#
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface Serial2/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface Serial3/0
Router(config-if)#ip address 172.16.16.101 255.255.255.252
Router(config-if)#ip address 172.16.16.101 255.255.255.252
Router(config-if)#exit
Router(config)#exit
Router#
%SYS-5-CONFIG_I: Configured from console by console
```

```
Router#wr
Building configuration...
[OK]
Router#
```

CHINA->USA

```
Router>enable
Router#
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface Serial2/0
Router(config-if)#ip address 172.16.16.102 255.255.248.0
Router(config-if)#ip address 172.16.16.102 255.255.255.252
Router(config-if)#no shutdown
Router(config-if)#
%LINK-5-CHANGED: Interface Serial2/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0, changed state to up

Router(config-if)#exit
Router(config)#exit
Router#
```

%SYS-5-CONFIG_I: Configured from console by console

```
Router#wr
Building configuration...
[OK]
Router#
```

WAN 3 USA-> LOTUS COMMITTEE

```
Router#
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface Serial3/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface Serial6/0
Router(config-if)#ip address 172.16.16.105 255.255.255.252
Router(config-if)#ip address 172.16.16.105 255.255.255.252
Router(config-if)#exit
Router(config)#exit
Router#
%SYS-5-CONFIG_I: Configured from console by console
```

```
Router#wr
Building configuration...
[OK]
Router#
```

LOTUS COMMITTEE-> USA

```
Router>enable
Router#
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface Serial2/0
Router(config-if)#ip address 172.16.16.106 255.255.255.252
Router(config-if)#no shutdown
Router(config-if)#
%LINK-5-CHANGED: Interface Serial2/0, changed state to up
```

```
Router(config-if)#
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0, changed state to up
exit
Router(config)#exit
Router#
```

%SYS-5-CONFIG_I: Configured from console by console

```
Router#wr
Building configuration...
[OK]
Router#
```

WAN 4 LOTUS COMITTE->NORWAY

```
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface Serial2/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface Serial6/0
Router(config-if)#ip address 172.16.16.109 255.255.255.252
Router(config-if)#no shutdown
Router(config-if)#exit
Router(config)#exit
Router#
```

%SYS-5-CONFIG_I: Configured from console by console

```
wr
Building configuration...
[OK]
Router#
```

NORWAY->LOTUS COMITTEE

```
Router>enable
Router#
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface Serial2/0
Router(config-if)#no ip address
Router(config-if)#
Router(config-if)#
Router(config-if)#
Router(config-if)#exit
Router(config)#interface Serial2/0
Router(config-if)#ip address 172.16.16.110 255.255.254.0
Router(config-if)#ip address 172.16.16.110 255.255.255.252
Router(config-if)#
Router(config-if)#
Router(config-if)#exit
Router(config)#interface Serial2/0
Router(config-if)#exit
```

```
Router(config)#exit
Router#
%SYS-5-CONFIG_I: Configured from console by console
```

```
Router#wr
Building configuration...
[OK]
Router#
```

WAN 5 NORWAY-> RUSSIA

```
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface Serial2/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface Serial3/0
Router(config-if)#ip address 172.16.16.113 255.255.255.252
Router(config-if)#ip address 172.16.16.113 255.255.255.252
Router(config-if)#exit
Router(config)#exit
Router#
%SYS-5-CONFIG_I: Configured from console by console
wr
Building configuration...
[OK]
Router#
```

RUSSIA->NORWAY

```
Router>enable
Router#
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface Serial2/0
Router(config-if)#
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0, changed state to up
ip address 172.16.16.114 255.255.252.0
Router(config-if)#ip address 172.16.16.114 255.255.255.252
Router(config-if)#exit
Router(config)#exit
Router#
%SYS-5-CONFIG_I: Configured from console by console

Router#wr
```

Building configuration...

[OK]

Router#

WAN 6 RUSSIA->LOTUS COMMITTEE

Router>enable

Router#

Router#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#interface Serial3/0

Router(config-if)#

Router(config-if)#exit

Router(config)#interface Serial3/0

Router(config-if)#ip address 172.16.16.117 255.255.255.252

Router(config-if)#ip address 172.16.16.117 255.255.255.252

Router(config-if)#exit

Router(config)#exit

Router#

%SYS-5-CONFIG_I: Configured from console by console

Router#wr

Building configuration...

[OK]

Router#

LOTUS COMITTE->RUSSIA

Router#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#interface Serial3/0

Router(config-if)#ip address 172.16.16.118 255.255.255.252

Router(config-if)#

Router(config-if)#exit

Router(config)#interface Serial3/0

Router(config-if)#ip address 172.16.16.118 255.255.255.252

Router(config-if)#no shutdown

Router(config-if)#

%LINK-5-CHANGED: Interface Serial3/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial3/0, changed state to up

Router(config-if)#exit

Router(config)#exit

Router#
%SYS-5-CONFIG_I: Configured from console by console

Router#wr
Building configuration...
[OK]
Router#

WAN 7 LOTUS COMMITTEE->LOTUS

Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface Serial7/0
Router(config-if)#ip address 172.16.16.121 255.255.255.252
Router(config-if)#ip address 172.16.16.121 255.255.255.252
Router(config-if)#no shutdown
Router(config-if)#exit
Router(config)#exit
Router#
%SYS-5-CONFIG_I: Configured from console by console

Router#wr

LOTUS->LOTUS COMITTEE

Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface Serial2/0
Router(config-if)#no shutdown
Router(config-if)#
%LINK-5-CHANGED: Interface Serial2/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0, changed state to up
Router(config-if)#ip address 172.16.16.122 255.255.255.252
Router(config-if)#exit
Router(config)#exit
Router#
%SYS-5-CONFIG_I: Configured from console by console

Router#wr
Building configuration...
[OK]
Router#

LOTUS COMITEE ROUTER IP ASSIGN

Router>enable

Router#

Router#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#interface FastEthernet0/0

Router(config-if)#ip address 172.16.16.65 255.255.255.252

Router(config-if)#ip address 172.16.16.65 255.255.255.224

Router(config-if)#no shutdown

Router(config-if)#

%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up

Router(config-if)#exit

Router(config)#exit

Router#

%SYS-5-CONFIG_I: Configured from console by console

Router#wr

Building configuration...

[OK]

Router#

Lotus ip

Router>enable

Router#

Router#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#interface FastEthernet0/0

Router(config-if)#

Router(config-if)#exit

Router(config)#interface FastEthernet0/0

Router(config-if)#ip address 172.16.16.1 255.255.255.224

Router(config-if)#no shutdown

Router(config-if)#

%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up

Router(config-if)#exit

Router(config)#exit

Router#

%SYS-5-CONFIG_I: Configured from console by console

Router#wr

Building configuration...

[OK]

dynamic route from USA to china, brazil

Router>en

Router#conf t

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#router rip

Router(config-router)#version 2

Router(config-router)#no auto-summary

Router(config-router)#network 172.16.16.0

Router(config-router)#network 172.16.0.0

Router(config-router)#passive-interface fa0/0

Router(config-router)#passive-interface se6/0

Router(config-router)#end

Router#

%SYS-5-CONFIG_I: Configured from console by console

Router#wr

Building configuration...

[OK]

Router#

Dynamic route from brazil to USA

Router>enable

Router#


```
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface FastEthernet0/0
Router(config-if)#ip address 172.16.16.1 255.255.255.192
Router(config-if)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console
```

```
Router#en
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#router rip
Router(config-router)#version 2
Router(config-router)#no auto-summary
Router(config-router)#network 172.16.12.0
Router(config-router)#passive-interface fa0/0
Router(config-router)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console
```

```
Router#wr
Building configuration...
[OK]
Router#
```

dynamic from china to usa

```
Router>en
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#router rip
Router(config-router)#version 2
Router(config-router)#no auto-summary
Router(config-router)#network 172.16.12.0
Router(config-router)#passive-interface fa0/0
Router(config-router)#end
```

Directly attached from usa to lotus committee

```
Router>en
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#ip route 172.16.16.64 255.255.255.224 se6/0
Router(config)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console
wr
Building configuration...
[OK]
Router#
```

Directly attached from lotus committee to usa

```
Router>en
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#ip route 172.16.12.0 255.255.254.0 se2/0
Router(config)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console
wr
Building configuration...
[OK]
```

Recursive brazil to lotus committee

```
en
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#ip route 172.16.16.64 255.255.255.224 172.16.16.98
Router(config)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console
wr
Building configuration...
[OK]
```

Recursive Lotus to Brazil

```
en
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#ip route 172.16.16.0 255.255.255.192 172.16.16.105
Router(config)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console
wr
Building configuration...
[OK]
Router#
```

Recursive from china to lotus

```
Router#en
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#no ip route 172.16.16.64 255.255.255.224 se2/0
Router(config)#ip route 172.16.16.64 255.255.255.224 172.16.16.101
Router(config)#end
```

Recursive lotus to china

```
Router#en
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#ip route 172.16.0.0 255.255.248.0 172.16.16.105
Router(config)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console
wr
Building configuration...
[OK]
Router#
```

Directly attached from Lotus committee to lotus

```
Router>en
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#ip route 172.16.16.0 255.255.255.224 se7/0
Router(config)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console
wr
Building configuration...
```

Directly attached from Lotus to lotus committee

```
Router>en
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#ip route 172.16.16.64 255.255.255.224 se2/0
Router(config)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console
wr
Building configuration...
[OK]
Router#
```

directly attached from norway to lotus committee

```
Router>en
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#ip route 172.16.16.64 255.255.255.224 se2/0
Router(config)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console
```

wr
Building configuration...
[OK]

directly attached FROM lotus committee to norway

```
Router>en
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#ip route 172.16.16.64 255.255.255.224 se2/0
Router(config)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console
wr
Building configuration...
[OK]
```

directly attached lotus committee to russia

```
Router#en
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#ip route 172.16.8.0 255.255.252.0 se3/0
Router(config)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console
wr
Building configuration...
[OK]
Router#
```

directly attached russia to lotus committee

```
en
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#ip route 172.16.16.64 255.255.255.224 se3/0
Router(config)#end
Router#
```

%SYS-5-CONFIG_I: Configured from console by console

wr

Building configuration...

[OK]

Router#

Recursive from norway to lotus

Router>en

Router#conf t

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#ip route 172.16.16.0 255.255.255.224 172.16.16.109

Router(config)#end

Router#

%SYS-5-CONFIG_I: Configured from console by console

wr

Building configuration...

[OK]

Recursive from lotus to norway

Router#conf t

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#ip route 172.16.14.0 255.255.254.0 172.16.16.121

Router(config)#end

Router#

%SYS-5-CONFIG_I: Configured from console by console

wr

Building configuration...

[OK]

Recursive Russia to Lotus

Router>en

Router#conf t

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#ip route 172.16.16.0 255.255.255.224 172.16.16.118

Router(config)#end

```
Router#
%SYS-5-CONFIG_I: Configured from console by console
wr
Building configuration...
[OK]
Router#
```

Recursive lotus to russia

```
en
conf t
Router(config)#ip route 172.16.8.0 255.255.252.0 172.16.16.121
Router(config)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console
wr
Building configuration...
[OK]
Router#
```

Recursive usa to norway

```
Router>
Router>en
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#ip route 172.16.14.0 255.255.54.0 172.16.16.106
%Inconsistent address and mask
Router(config)#ip route 172.16.14.0 255.255.254.0 172.16.16.106
Router(config)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console
wr
Building configuration...
[OK]
Router#
```

Recursive norway to usa

```
en
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#ip route 172.16.12.0 255.255.254.0 172.16.16.109
Router(config)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console
wr
Building configuration...
[OK]
Router#
```

Recursive china to norway

```
en
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#ip route 172.16.14.0 255.255.254.0 172.16.16.101
Router(config)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console
wr
Building configuration...
[OK]
Router#
```

Recursive norway to china

```
Router#
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#ip route 172.16.0.0 255.255.248.0 172.16.16.109
Router(config)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console
wr
```


Building configuration...

[OK]

Router#

Recursive Russia to USA

Router>en

Router#conf t

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#ip route 172.16.12.0 255.255.254.0 172.16.16.118

Router(config)#end

Router#

%SYS-5-CONFIG_I: Configured from console by console

wr

Building configuration...

[OK]

Router#

Recursive USA to Russia

en

Router#conf t

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#ip route 172.16.8.0 255.255.252.0 172.16.16.106

Router(config)#end

Router#

%SYS-5-CONFIG_I: Configured from console by console

wr

Building configuration...

[OK]

Recursive china to Russia

Router#en

Router#conf t

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#ip route 172.16.8.0 255.255.252.0 172.16.16.101

Router(config)#end

Router#

%SYS-5-CONFIG_I: Configured from console by console

wr

Building configuration...

[OK]

Router#

Recursive Russia to china

Router>en

Router#conf t

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#ip route 172.16.0.0 255.255.248.0 172.16.16.118

Router(config)#end

Router#

%SYS-5-CONFIG_I: Configured from console by console

wr

Building configuration...

[OK]

Router#

Recursive Brazil to norway

Router>en

Router#conf t

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#ip route 172.16.14.0 255.255.254.0 172.16.16.98

Router(config)#end

Router#

%SYS-5-CONFIG_I: Configured from console by console

wr

Building configuration...

[OK]

Router#

Recursive norway to brazil

Router>en

Router#conf t

Enter configuration commands, one per line. End with CNTL/Z.

```
Router(config)#ip route 172.16.16.0 255.255.255.192 172.16.16.109
Router(config)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console
wr
Building configuration...
[OK]
Router#
```

direct betwnn norway and russia

```
Router>en
```

norway

```
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#ip route 172.16.8.0 255.255.252.0 se3/0
Router(config)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console
wr
Building configuration...
[OK]
Router#
```

russia

```
Router(config)#ip route 172.16.14.0 255.255.254.0 se2/0
Router(config)#end
```

float between rusia and lotus through norway recursively

lotus

```
Router>en
```

```
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#ip route 172.16.8.0 255.255.252.0 172.16.16.121 25
Router(config)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console
wr
Building configuration...
[OK]
Router#
```

```
ruusia
#ip route 172.16.24.0 255.255.248.0 172.16.16.113 25
```