

VLSM ADDRESS TABLE

Name	Host	Needed	Given	Host bit	Network bit	Network address
Cintra	1000	2002	2048	11	21	192.168.192.0/21
Aedrin	800	1602	2048	11	21	192.168.208.0/21
Kaedwen	784	1570	2048	11	21	192.168.212.0/21
Kovir	519	1040	2048	11	21	192.168.220.0/21
Renedia	401	804	1024	10	22	192.168.216.0/22
Temeria	302	606	1024	10	22	192.168.200.0/22
Wan1	2	8	8	3	29	192.168.224.0/29
Wan2	2	8	8	3	29	192.168.224.8/29
wan3	2	8	8	3	29	192.168.224.16/29

Wan4	2	8	8	3	29	192.168.224 .24/29
Wan5	2	8	8	3	29	192.168.224 .32/29
Wan6	2	8	8	3	29	192.168.224 .40/29
wan7	2	8	8	3	29	192.168.224 .48/29
Wan8	2	8	8	3	29	192.168.248 .0/29

IP ADDRESS TABLE

Devices	Interface	Pv4 Address	Subnet Mask	Default Gateway
Cintra	S0/0	92.168.224.11	255.255.255.248	N/A
	S1/0	92.168.224.17	55.255.255.248	N/A
	G3/0	92.168.192.1	255.255.248.0	N/A
Aderin	S0/0	92.168.224.57	55.255.255.248	N/A

	S1/0	92.168.224.33	55.255.255.248	N/A
	S2/0	92.168.224.27	55.255.255.248	N/A
	G3/0	92.168.208.1	255.255.248.0	N/A
Kovir	S0/0	92.168.224.59	55.255.255.248	N/A
	S1/0	92.168.224.51	55.255.255.248	N/A
	S2/0	92.168.224.43	55.255.255.248	N/A
	G3/0	92.168.220.1	255.255.252.0	N/A
Kaedwen	S0/0	92.168.248.43	55.255.255.248	N/A
	S1/0	92.168.248.83	55.255.255.248	N/A
	S2/0	92.168.248.35	55.255.255.248	N/A
	G3/0	92.168.212.1	255.255.252.0	N/A
Redenia	S0/0	92.168.224.9	55.255.255.248	N/A
	S1/0	92.168.224.49	55.255.255.248	N/A
	S2/0	92.168.224.1	55.255.255.248	N/A
	G3/0	92.168.216.1	255.255.252.0	N/A

Temiria	S1/0	92.168.224.19	55.255.255.248	N/A
	s0/0	92.168.224.57	55.255.255.248	N/A
	S2/0	92.168.224.25	55.255.255.248	N/A
	G3/0	92.168.220.1	255.255.252.0	N/A
Web server	F0	2.168.192.252	255.255.252.0	192.168.192.1
/ DNS Server	F0	2.168.192.254	255.255.248.0	192.168.192.1
Mail Server	F0	DHCP Assign	255.255.248.0	192.168.200.1
PC0	F0	92.168.212.3	255.255.252.0	192.168.212.1
PC1	F0	92.168.212.5	255.255.252.0	192.168.212.1
PC2	F0	92.168.192.3	255.255.248.0	192.168.192.1
PC3	F0	92.168.192.5	255.255.248.0	192.168.192.1
PC4	F0	92.168.220.3	255.255.252.0	192.168.220.1
PC5	F0	92.168.220.5	255.255.252.0	192.168.220.1
PC6	F0	92.168.200.3	255.255.248.0	192.168.200.1
PC7	F0	92.168.200.5	255.255.248.0	192.168.200.1

PC8	F0	92.168.208.3	255.255.252.0	192.168.208.1
PC9	F0	92.168.208.5	255.255.252.0	192.168.208.1
PC10	F0	92.168.216.3	255.255.252.0	192.168.216.1
PC11	F0	92.168.216.5	255.255.252.0	192.168.216.1

Cintra Router :

Cintra>en

Cintra#conf t

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

Cintra(config)#int s0/0

Cintra(config-if)#ip address 192.168.224.11 255.255.255.248

Cintra(config-if)#clock rate 2000000

Cintra(config-if)#int s1/0

Cintra(config-if)#ip address 192.168.224.17 255.255.255.248

Cintra(config-if)#clock rate 2000000

This command applies only to DCE interfaces

Cintra(config-if)#int s2/0

Cintra(config-if)#no ip address

Cintra(config-if)#clock rate 2000000

Cintra(config-if)#no shut down

Cintra(config)#int g 3/0

Cintra(config-if)#ip address 192.168.192.1 255.255.248.0

Cintra(config-if)#no shut down

Cintra(config-if)#end

Cintra#

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

Cintra#copy run start

Destination filename [startup-config]?

Building configuration...

[OK]

Cintra#

cintra>en

cintra#conf t

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

cintra(config)#router rip

cintra(config-router)#version 2

cintra(config-router)#passive-interface g3/0

cintra(config-router)#network 192.0.0.0

cintra(config-router)#no auto-summary

cintra(config-router)#!

cintra(config-router)#ip classless

^

% Invalid input detected at '^' marker.

```
cintra(config-router)#ip route 192.168.208.0 255.255.252.0 Serial0/0
cintra(config)#ip route 192.168.200.0 255.255.252.0 Serial1/0
cintra(config)#ip route 192.168.216.0 255.255.252.0 Serial0/0
cintra(config)#!
cintra(config)#ip flow-export version 9
cintra(config)#no cdp run
cintra(config)#line con 0
cintra(config-line)#line vty 0 4
cintra(config-line)#login
% Login disabled on line 132, until 'password' is set
% Login disabled on line 133, until 'password' is set
% Login disabled on line 134, until 'password' is set
% Login disabled on line 135, until 'password' is set
% Login disabled on line 136, until 'password' is set
cintra(config-line)#end
cintra#
%SYS-5-CONFIG_I: Configured from console by console
```

```
cintra#copy run start
Destination filename [startup-config]?
Building configuration...
[OK]
cintra#
```

Aedrin

Router>en

Router#conf t

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

```
Router(config)#hostname adrin
```

```
adrin(config)#int s 0/0
```

```
adrin(config-if)#ip address 192.168.224.57 255.255.255.248
```

```
adrin(config-if)#clock rate 2000000
```

This command applies only to DCE interfaces

```
adrin(config-if)#int s1/0
```

```
adrin(config-if)#ip address 192.168.224.33 255.255.255.248
```

```
adrin(config-if)#clock rate 2000000
```

```
adrin(config-if)#int s 2/0
```

```
adrin(config-if)#ip address 192.168.224.27 255.255.255.248
```

```
adrin(config-if)#clock rate 2000000
```

This command applies only to DCE interfaces

```
adrin(config-if)#int g 3/0
```

```
adrin(config-if)#ip address 192.168.208.1 255.255.248.0
```

```
adrin(config-if)#no shut
```

```
adrin(config-if)#
```

```
%LINK-5-CHANGED: Interface GigabitEthernet3/0, changed state to up
```

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet3/0, changed state to up
```



```
adrin(config-if)#end
```

```
adrin#
```

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

```
adrin#copy run start
```

```
Destination filename [startup-config]?
```

```
Building configuration...
```

```
[OK]
```

```
adrin#
```

```
Kovir
```

```
Router>en
```

```
Router#conf t
```

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

```
Router(config)#hostname kovir
```

```
kovir(config)#int s 0/0
```

```
kovir(config-if)#ip address 192.168.224.59 255.255.255.248
```

```
kovir(config-if)#clock rate 2000000
```

```
This command applies only to DCE interfaces
```

```
kovir(config-if)#int s1/0
```

```
kovir(config-if)#ip address 192.168.224.51 255.255.255.248
```

```
kovir(config-if)#clock rate 2000000
```

```
kovir(config-if)#int s2/0
```

```
kovir(config-if)#ip address 192.168.224.43 255.255.255.248
```

```
kovir(config-if)#clock rate 2000000
```

```
kovir(config-if)#int g3/0
kovir(config-if)#ip address 192.168.220.1 255.255.252.0
kovir(config-if)#no shut
```

```
kovir(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet3/0, changed state to up
```

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet3/0, changed
state to up
```

```
kovir(config-if)#end
kovir#
%SYS-5-CONFIG_: Configured from console by console
```

```
kovir#copy run start
Destination filename [startup-config]?
Building configuration...
[OK]
kovir#
kovir#
```

Kaedwen

```
Router>en
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#hostname kaedwen
kaedwen(config)#int s0/0
kaedwen(config-if)#Router>en
^
% Invalid input detected at '^' marker.
```

```
kaedwen(config-if)#Router#conf t
^
% Invalid input detected at '^' marker.
```

```
kaedwen(config-if)#Enter configuration commands, one per line. End with CNTL/Z.
^
% Invalid input detected at '^' marker.
```

```
kaedwen(config-if)#Router(config)#hostname kovir
```

```
^
```

```
% Invalid input detected at '^' marker.
```

```
kaedwen(config-if)#kovir(config)#int s 0/0
```

```
^
```

```
% Invalid input detected at '^' marker.
```

```
kaedwen(config-if)#ip address 192.168.248.43 255.255.255.248
```

```
kaedwen(config-if)#clock rate 2000000
```

```
This command applies only to DCE interfaces
```

```
kaedwen(config-if)#no shut
```

```
kaedwen(config-if)#
```

```
%LINK-5-CHANGED: Interface Serial0/0, changed state to up
```

```
kaedwen(config-if)#
```

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/0, changed state to up
```

```
kaedwen(config-if)#int s1/0
```

```
kaedwen(config-if)#ip address 192.168.248.83 255.255.255.248
```

```
kaedwen(config-if)#clock rate 2000000
```

```
kaedwen(config-if)#no shut
```

```
%LINK-5-CHANGED: Interface Serial1/0, changed state to down
```

```
kaedwen(config-if)#
```

```
kaedwen(config-if)#int s2/0
```

```
kaedwen(config-if)#ip address 192.168.248.83 255.255.255.248
```

```
% 192.168.248.80 overlaps with Serial1/0
```

```
kaedwen(config-if)#ip address 192.168.248.35 255.255.255.248
```

```
kaedwen(config-if)#clock rate 2000000
```

```
kaedwen(config-if)#no shut
```

```
kaedwen(config-if)#
```

```
%LINK-5-CHANGED: Interface Serial2/0, changed state to up
```

```
kaedwen(config-if)#int g3/0
```

```
kaedwen(config-if)#ip address
```

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

% Incomplete command.

kaedwen(config-if)#int g3/0

kaedwen(config-if)#ip address 192.168.212.1 255.255.252.0

kaedwen(config-if)#no shut

kaedwen(config-if)#

%LINK-5-CHANGED: Interface GigabitEthernet3/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet3/0, changed state to up

kaedwen(config-if)#end

kaedwen#

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

kaedwen#copy run start

Destination filename [startup-config]?

Building configuration...

[OK]

kaedwen#

Redenia

Router>en

Router#conf t

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

Router(config)#hostnmae redenia

^

% Invalid input detected at '^' marker.

Router(config)#hostname redenia

```
redenia(config)#int s0/0
```

```
redenia(config-if)#ip address 192.168.224.9 255.255.255.248
```

```
redenia(config-if)#clock rate 2000000
```

This command applies only to DCE interfaces

```
redenia(config-if)#no shut
```

```
redenia(config-if)#
```

```
%LINK-5-CHANGED: Interface Serial0/0, changed state to up
```

```
redenia(config-if)#int
```

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/0, changed state to up
```

```
^
```

```
% Invalid input detected at '^' marker.
```

```
redenia(config-if)#int s1/0
```

```
redenia(config-if)#ip address 192.168.224.49 255.255.255.248
```

```
redenia(config-if)#clock rate 2000000
```

```
redenia(config-if)#no shut
```

```
%LINK-5-CHANGED: Interface Serial1/0, changed state to down
```

```
redenia(config-if)#
```

```
redenia(config-if)#int s2/0
```

```
redenia(config-if)#ip address 192.168.224.1 255.255.255.248
```

```
redenia(config-if)#clock rate 2000000
```

```
redenia(config-if)#no shut
```

```
redenia(config-if)#
```

```
%LINK-5-CHANGED: Interface Serial2/0, changed state to up
```

```
redenia(config-if)#
```

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

```
redenia(config-if)#int g3/0
```

```
redenia(config-if)#ip address 192.168.216.1 255.255.252.0
```

```
redenia(config-if)#no shut
```

```
redenia(config-if)#
```

```
%LINK-5-CHANGED: Interface GigabitEthernet3/0, changed state to up
```

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet3/0, changed state to up
```

```
redenia(config-if)#end
```

```
redenia#
```

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

```
redenia#copy run start
```

```
Destination filename [startup-config]?
```

```
Building configuration...
```

```
[OK]
```

```
redenia#
```

```
Temeria
```

```
Router>en
```

```
Router#conf t
```

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

```
Router(config)#hostname temeria
```

```
temeria(config)#int s1/0
```

```
temeria(config-if)#ip address 192.168.224.19 255.255.255.248
```

```
temeria(config-if)#clock rate 2000000
```

```
This command applies only to DCE interfaces
```

```
temeria(config-if)#no shut
```

```
temeria(config-if)#
```

```
%LINK-5-CHANGED: Interface Serial1/0, changed state to up
```

```
temeria(config-if)#int
```

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial1/0, changed state to up
```

```
^
```

```
% Invalid input detected at '^' marker.
```

```
temeria(config-if)#int s0/0
```

```
temeria(config-if)#ip address 192.168.224.57 255.255.255.248
```

```
temeria(config-if)#clock rate 2000000
```

This command applies only to DCE interfaces

```
temeria(config-if)#no shut
```

```
temeria(config-if)#
```

```
%LINK-5-CHANGED: Interface Serial0/0, changed state to up
```

```
temeria(config-if)#
```

```
temeria(config-if)#int s2/0
```

```
temeria(config-if)#
```

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/0, changed state to up
```

```
temeria(config-if)#int s2/0
```

```
temeria(config-if)#ip address 192.168.224.25 255.255.255.248
```

```
temeria(config-if)#clock rate 2000000
```

This command applies only to DCE interfaces

```
temeria(config-if)#no shut
```

```
temeria(config-if)#
```

```
%LINK-5-CHANGED: Interface Serial2/0, changed state to up
```

```
temeria(config-if)#
```

```
temeria(config-if)#
```

```
temeria(config-if)#
```

```
temeria(config-if)#int g3/
```

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

```
^
```

```
% Invalid input detected at '^' marker.
```

```
temeria(config-if)#int g3/0
```

```
temeria(config-if)#ip address 192.168.220.1 255.255.252.0
```

```
temeria(config-if)#no shut
```

```
temeria(config-if)#
```

```
%LINK-5-CHANGED: Interface GigabitEthernet3/0, changed state to up
```

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet3/0, changed state to up
```

```
temeria(config-if)#end
```


temeria#

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

temeria#copy run start

Destination filename [startup-config]?

Building configuration...

[OK]

temeria#

Kovir_DHCP

en

kovir#conf t

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

kovir(config)#ip dhcp excluded-address 192.168.220.1

kovir(config)#ip dhcp excluded-address 192.168.220.2

kovir(config)#ip dhcp excluded-address 192.168.220.4

kovir(config)#ip dhcp excluded-address 192.168.220.6

kovir(config)#ip dhcp excluded-address 192.168.220.8

kovir(config)#ip dhcp excluded-address 192.168.220.10

kovir(config)#ip dhcp pool kovir_lan

kovir(dhcp-config)#default-router 192.168.220.1

kovir(dhcp-config)#network 192.168.220.0 255.255.252.0

kovir(dhcp-config)#dns-server 192.168.192.254

kovir(dhcp-config)#exit

kovir(config)#exit

kovir#copy run start

Destination filename [startup-config]?

Building configuration...

[OK]

kovir#

Temeria_DHCP

temeria#conf t

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

```
temeria(config)#ip dhcp excluded-address 192.168.200.1
temeria(config)#ip dhcp excluded-address 192.168.200.2
temeria(config)#ip dhcp excluded-address 192.168.200.4
temeria(config)#ip dhcp excluded-address 192.168.200.6
temeria(config)#ip dhcp excluded-address 192.168.200.8
temeria(config)#ip dhcp excluded-address 192.168.200.10
temeria(config)#ip dhcp pool Temeria_lan
temeria(dhcp-config)#default-router 192.168.200.1
temeria(dhcp-config)#network 192.168.200.0 255.255.252.0
temeria(dhcp-config)#exit
temeria(config)#exit
temeria#copy run start
Destination filename [startup-config]?
Building configuration...
[OK]
temeria#
```

Redemia_DHCp

```
redenia(config)#ip dhcp excluded-address 192.168.216.1
redenia(config)#ip dhcp excluded-address 192.168.216.2
redenia(config)#ip dhcp excluded-address 192.168.216.4
redenia(config)#ip dhcp excluded-address 192.168.216.6
redenia(config)#ip dhcp excluded-address 192.168.216.8
redenia(config)#ip dhcp excluded-address 192.168.216.10
redenia(config)#default-router 192.168.216.1
^
% Invalid input detected at '^' marker.

redenia(config)#ip dhcp pool Redemia_Lan
redenia(dhcp-config)#default-router 192.168.216.1
redenia(dhcp-config)#network 192.168.216.0 255.255.252.0
redenia(dhcp-config)#dns-server 192.168.192.254
redenia(dhcp-config)#exit
redenia(config)#exit
redenia#cop
%SYS-5-CONFIG_I: Configured from console by console
y run start
Destination filename [startup-config]?
```

Building configuration...

[OK]

redenia#

Kaedwen_DHCP

kaedwen>enable

kaedwen#

kaedwen#configure terminal

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

kaedwen(config)#

kaedwen(config)#

?Bad filename

%Error parsing filename (Bad file number)

kaedwen(config)#ip dhcp excluded-address 192.168.212.1

kaedwen(config)#ip dhcp excluded-address 192.168.212.2

kaedwen(config)#ip dhcp excluded-address 192.168.212.4

kaedwen(config)#ip dhcp excluded-address 192.168.212.6

kaedwen(config)#ip dhcp excluded-address 192.168.212.8

kaedwen(config)#ip dhcp excluded-address 192.168.212.10

kaedwen(config)#ip dhcp pool kaedwen_lan

kaedwen(dhcp-config)#default-router 192.168.212.1

kaedwen(dhcp-config)#network 192.168.212.0 255.255.252.0

kaedwen(dhcp-config)#dns-server 192.168.192.254

kaedwen(dhcp-config)#exit

kaedwen(config)#exit

kaedwen#

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

kaedwen#copy run start

Destination filename [startup-config]?