Configuring Direct, Static, Default routes

For router A (Arnor) configuring:

Directly connected network:

enable => conf t => int f0/0 => ip address 10.13.40.1 255.255.252.0

                 => int s1/0 =>ip address 10.13.46.34 255.255.255.252

                 => int s0/0 =>ip address 10.13.46.58 255.255.255.252

Static route:

en => conf t => ip route 10.13.46.36 255.255.255.252 s1/0

               ip route 10.13.44.0 255.255.255.0 s1/0

               ip route 10.13.32.0 255.255.252.0 s1/0

               ip route 10.13.46.40 255.255.255.252 s1/0

               ip route 10.13.45.0 255.255.255.0 s1/0

               ip route 10.13.46.52 255.255.255.252 s1/0

               ip route 10.13.46.0 255.255.255.224 s1/0

               ip route 10.13.46.44 255.255.255.252 s1/0

               ip route 10.13.46.44 255.255.255.252 s0/0

               ip route 10.13.0.0 255.255.224.0 s0/0

               ip route 10.13.0.0 255.255.224.0 s1/0

               ip route 10.13.46.48 255.255.255.252 s0/0

               ip route 10.13.46.48 255.255.255.252 s1/0

               ip route 10.13.36.0 255.255.252.0 s0/0

               ip route 10.13.36.0 255.255.252.0 s1/0

Default route:

enable => conf t => ip route 0.0.0.0 0.0.0.0 s1/0

For router R (Rohan) configuring:

Directly connected network:

enable => conf t => int f0/0 => ip address 10.13.46.1 255.255.255.224

=>int s1/0 =>ip address 10.13.46.54 255.255.255.252
=>int s0/0 =>ip address 10.13.46.57 255.255.255.252

Static route:

En => conf t => ip route 10.13.0.0 255.255.0.0 s0/0

=>ip route 10.13.0.0 255.255.0.0 s1/0

=>ip route 10.13.32.0 255.255.252.0 s0/0

=>ip route 10.13.32.0 255.255.252.0 s1/0

=>ip route 10.13.36.0 255.255.252.0 s0/0

=>ip route 10.13.36.0 255.255.252.0 s1/0

=>ip route 10.13.40.0 255.255.252.0 s0/0

=>ip route 10.13.40.0 255.255.252.0 s1/0

=>ip route 10.13.44.0 255.255.255.0 s1/0

=>ip route 10.13.45.0 255.255.255.0 s0/0

=>ip route 10.13.45.0 255.255.255.0 s1/0

=>ip route 10.13.46.32 255.255.255.252 s1/0

=>ip route 10.13.46.36 255.255.255.252 s0/0

=>ip route 10.13.46.36 255.255.255.252 s1/0

=>ip route 10.13.46.40 255.255.255.252 s0/0

=>ip route 10.13.46.40 255.255.255.252 s1/0

=>ip route 10.13.46.44 255.255.255.252 s0/0

=>ip route 10.13.46.44 255.255.255.252 s1/0

=>ip route 10.13.46.48 255.255.255.252 s0/0

=>ip route 10.13.46.48 255.255.255.252 s1/0

Default route:

enable => conf t => ip route 0.0.0.0 0.0.0.0 s1/0

For router G (Gordor) configuring:

Directly connected network:

enable => conf t => int f0/0 => ip address 10.13.45.1 255.255.255.0

=> int s1/0 => ip address 10.13.46.42 255.255.255.252

Static route:

enable => conf t => ip route 10.13.0.0 255.255.0.0 s1/0

⇨ ip route 10.13.46.36 255.255.255.252 s1/0

⇨ ip route 10.13.32.0 255.255.252.0 s1/0

⇨ ip route 10.13.44.0 255.255.255.0 s1/0

⇨ ip route 10.13.46.32 255.255.255.252 s1/0

⇨ ip route 10.13.46.52 255.255.255.252 s1/0

⇨ ip route 10.13.46.0 255.255.255.224 s1/0

⇨ ip route 10.13.46.44 255.255.255.252 s1/0

⇨ ip route 10.13.40.0 255.255.255.0 s1/0

⇨ ip route 10.13.46.48 255.255.255.252 s1/0

⇨ ip route 10.13.36.0 255.255.252.0 s1/0

For router M (Mordor) configuring:

Directly connected network:

enable => conf t => int f0/0 => ip address 10.13.0.1 255.255.224.0

        =>int s1/0 => ip address 10.13.46.46 255.255.255.252

Static route:

enable => conf t => ip route 10.13.44.0 255.255.255.0 s1/0

⇨ ip route 10.13.46.40 255.255.255.252 s1/0

⇨ ip route 10.13.45.0 255.255.255.0 s1/0

⇨ ip route 10.13.46.52 255.255.255.252 s1/0

⇨ ip route 10.13.46.56 255.255.255.252 s1/0

⇨ ip route 10.13.46.0 255.255.255.224 s1/0

⇨ ip route 10.13.46.32 255.255.255.252 s1/0

⇨ ip route 10.13.40.0 255.255.252.0 s1/0

⇨ ip route 10.13.46.36 255.255.255.252 s1/0

⇨ ip route 10.13.32.0 255.255.252.0 s1/0

⇨ ip route 10.13.46.48 255.255.255.252 s1/0

⇨ ip route 10.13.36.0 255.255.252.0 s1/0

Default route:

enable => conf t => ip route 0.0.0.0 0.0.0.0 s1/0

For router E (Eriador) configuring:

Directly connected network:

enable => conf t => int f0/0 => ip address 10.13.36.1 255.255.252.0

        => int s1/0 => ip address 10.13.46.50 255.255.255.252

        => int s0/0 => ip address 10.13.46.61 255.255.255.252

Default route:

enable => conf t => ip route 0.0.0.0 0.0.0.0 s1/0

For router C (Cardolan) configuring:

=> Directly connected network:

enable => conf t => int f0/0 => ip address 10.13.32.1 255.255.252.0

=>int s1/1 => ip address 10.13.46.38 255.255.255.252

=> int s0/0 => ip address 10.13.46.62 255.255.255.252

Default route:

enable => conf t => ip route 0.0.0.0 0.0.0.0 s1/1

For router S (Shire) configuring:

=> Directly connected network:

enable => conf t => int f0/0 => ip address 10.13.44.1 255.255.255.0

=> int s1/0 => ip address 10.13.46.33 255.255.255.252

=> int s1/1 => ip address 10.13.46.37 255.255.255.252

=> int s1/2 => ip address 10.13.46.41 255.255.255.252

=> int s1/3 => ip address 10.13.46.53 255.255.255.252

=> int s1/4 => ip address 10.13.46.49 255.255.255.252

=> int s1/5 => ip address 10.13.46.45 255.255.255.252

Static route:

enable => conf t => ip route 10.13.40.0 255.255.252.0 s1/0

⇨ ip route 10.13.32.0 255.255.252.0 s1/1

⇨ ip route 10.13.45.0 255.255.255.0 s1/2

⇨ ip route 10.13.46.0 255.255.255.224 s1/3

⇨ ip route 10.13.46.56 255.255.255.224 s1/3

⇨ ip route 10.13.36.0 255.255.252.0 s1/4

⇨ ip route 10.13.0.0 255.255.224.0 s1/5

Default route:

enable => conf t => ip route 0.0.0.0 0.0.0.0 s1/2

Configuring Floating routes

Router A:

Enable => conf t => ip route 10.13.46.0 255.255.255.224 s0/0 10

=>ip route 10.13.46.36 255.255.255.252 s0/0 10

Router R:

Enable => conf t => ip route 10.13.44.0 255.255.255.0 s0/0 10

=>ip route 10.13.40.0 255.255.252.0 s0/0 10

Configuring RIPv2

RIPv2 on E:

en => conf t => ip route 0.0.0.0 0.0.0.0 s1/0 => router rip => version 2 => no auto-summary

=>network 10.13.46.48 => network 10.13.46.60 => passive-interface f0/0 => default-information originate

=> end => copy run start

RIPv2 on C:

en => conf t => ip route 0.0.0.0 0.0.0.0 s1/1 => router rip => version 2 => no auto-summary

=>network 10.13.46.36 => network 10.13.46.60 => passive-interface f0/0 => default-information originate

=> end => copy run start