CCNP Route
BGP Challange

Broken Image

EIGRP as 65410

Loopback 11:
172.41.4.129/25

.4   R4   .4   172.41.41.0/24   .1   R1   .1   Loopback 0:
172.41.11.1/25

.4   .1

T1
192.168.34.0/24

T3
192.168.43.0/24

BGP AS 65410 (cnap.se)

BGP AS 65300 (tre.se)   VLAN 1:
172.32.12.0/24   .2   BGP AS 65200 (tele2.org)

.3

Loopback 6:
IPv6 only   .3   Tre   .3   Tele2   ::2   Loopback 6:
IPv6 only

::3

Loopback 3: 172.3.4.1/24   Loopback 2: 172.2.4.1/24

172.32.12.12/24
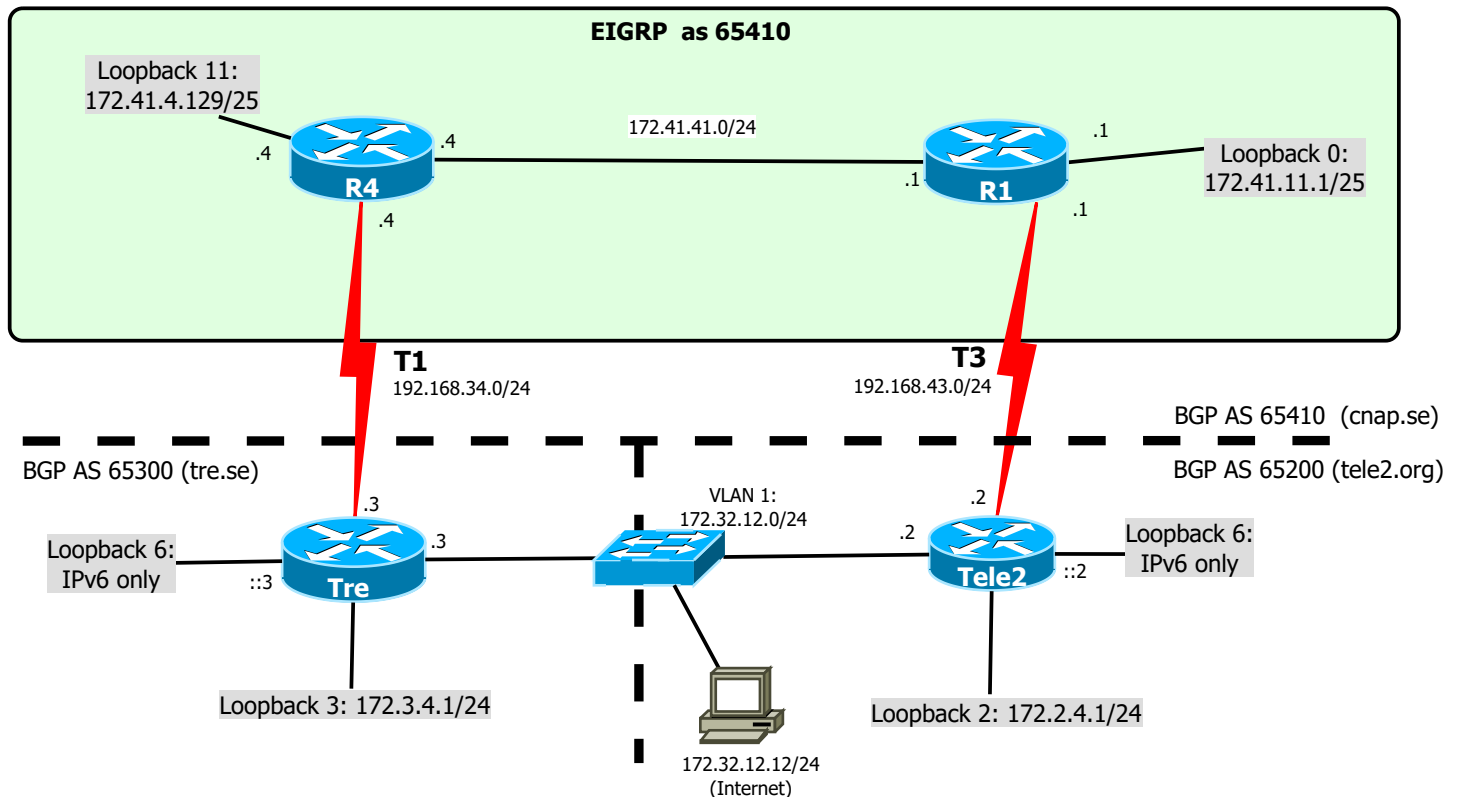(Internet)

** REQUIREMENTS
00. Do basic configuration: interface descriptions, no DNS lookup, synchronous logging
01. Do basic management: passwords (and, if applicable, users), ssh version 2, no telnet, no http
02. Configure according to the diagram shown above.

** EIGRP
03. Disable auto-summary in EIGRP.
04. Configure passive and non-passive interfaces for EIGRP as appropriate, including loopbacks.

** BGP
05. Configure iBGP in AS 65100
06. Configure eBGP peers between AS's 65410, 64300 and 65200
07. Make 'Tre' BGP-announce 172.3.0.0 /16
08. Make 'Tele2' announce 172.2.0.0 /16
09. Make both 'Tele2' and 'Tre' announce the 172.32.0.0/16 network
0A. Make R4 and R1 announce 172.41.0.0 /16 and nothing else (especially no default route)
0B. Make 'Tele2' and 'Tre' announce to R1/R4 a default gateway to them self;
    no default-information shuld be exchanged between Tele2 and tre;
    TIP: in 'Tele2' and 'Tre' use the command: `neighbor x.x.x.x default-originate`
0C. Comment all peers by using: `neighbor x.x.x.x description`

0D. Use Route-maps/Local-preference on R1 and R4 to prefer the other T# link
0E. Try to use MED route-maps on R1 and R4 to influate traffic to return on the other T# link
0F. Prepend local AS-number 5 times in AS-path of announcements over the T1 link

** IPv6
10. Make 'Tre' and 'Tele2' peer using IPv6
11. Make 'Tre' and 'Tele2' announce their ipv6-loopback networks
12. Comment by using   neighbor a:b::c:d description
13. test by using ping ... source ...

SOME CHECKPOINT
A) ping everything from everywhere
   - use ping ... source ...
B) No static routes, no redistribution
but static nul0 rules are OK like
   "ip route ???? ???? null 0"