

Stateless IPv4 over IPv6 in 5 minutes

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IPv6 mercenary

2011-11-01



Stateful IPv6 over IPv4

- 6PE/6VPE
- BGP tunneling
- LISP
- GRE
- Configured Tunnels RFC1933
- L2TP

Stateless IPv6 over IPv4

- Automatic tunnels RFC1933
- 6over4
- ISATAP
- 6to4
- 6rd
- Teredo

Full bleed image placeholder

- DS-Lite with A+P
- IPv4 over DS-lite

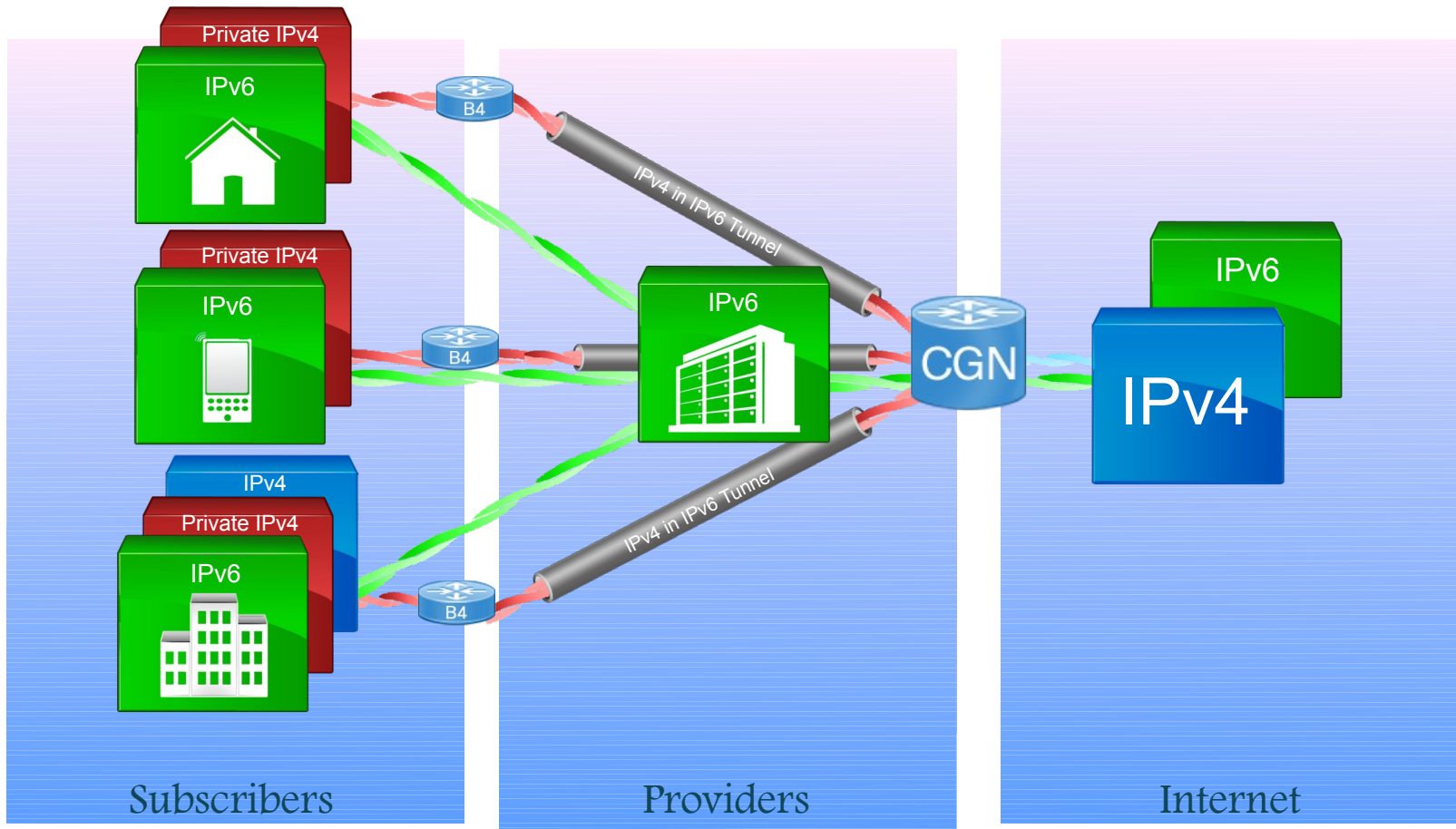
- DS-Lite
- L2TP
- GRE
- LISP

Stateful IPv4 over IPv6

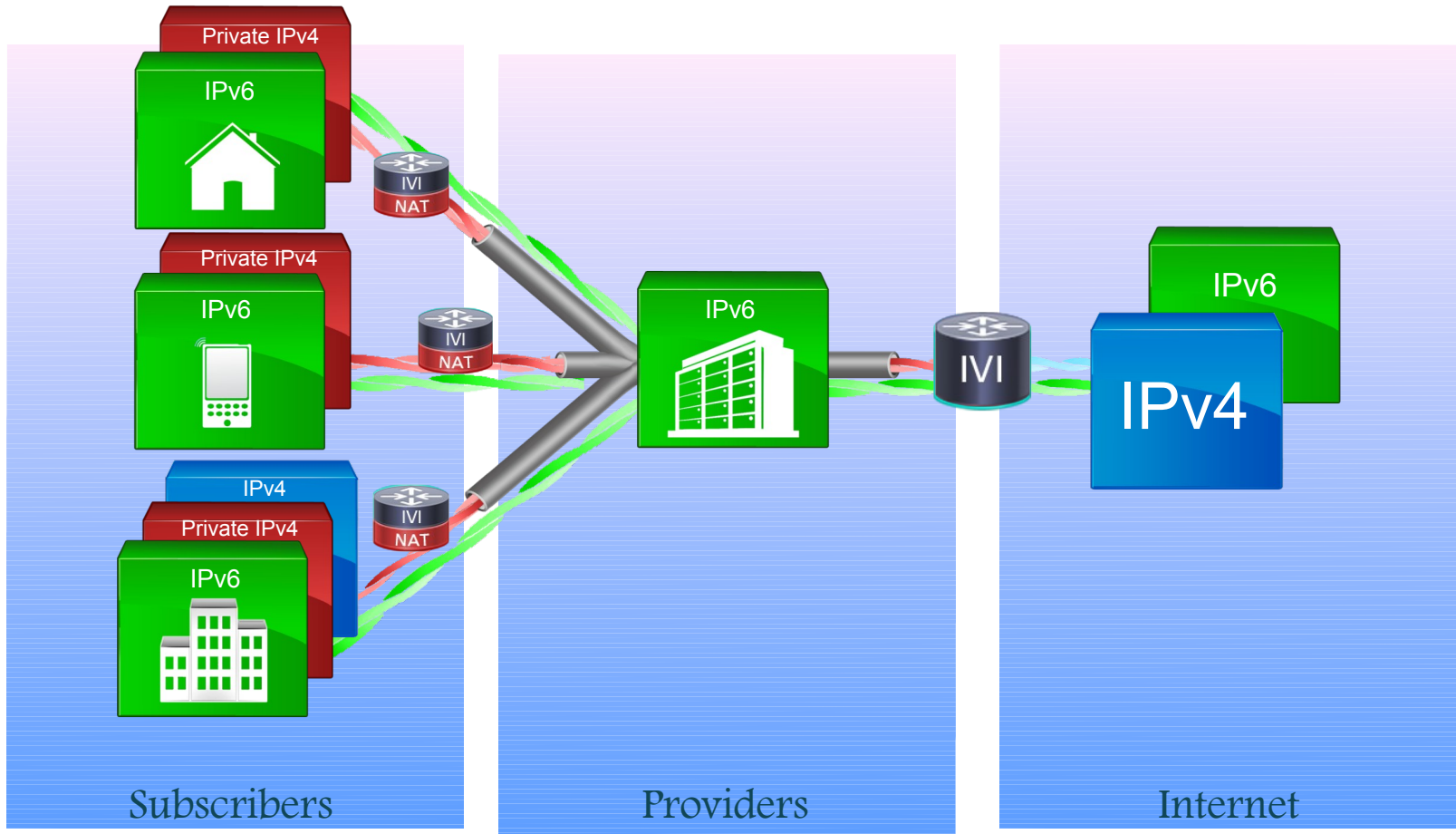
- dIVI
 - 4rd-T
 - 4rd-U
 - dIVI-pd
 - 4rd-E
 - Stateless 4over6
 - SA46T-AS
 - SD-NAT
- MAP(A+P)**

Stateless IPv4 over IPv6

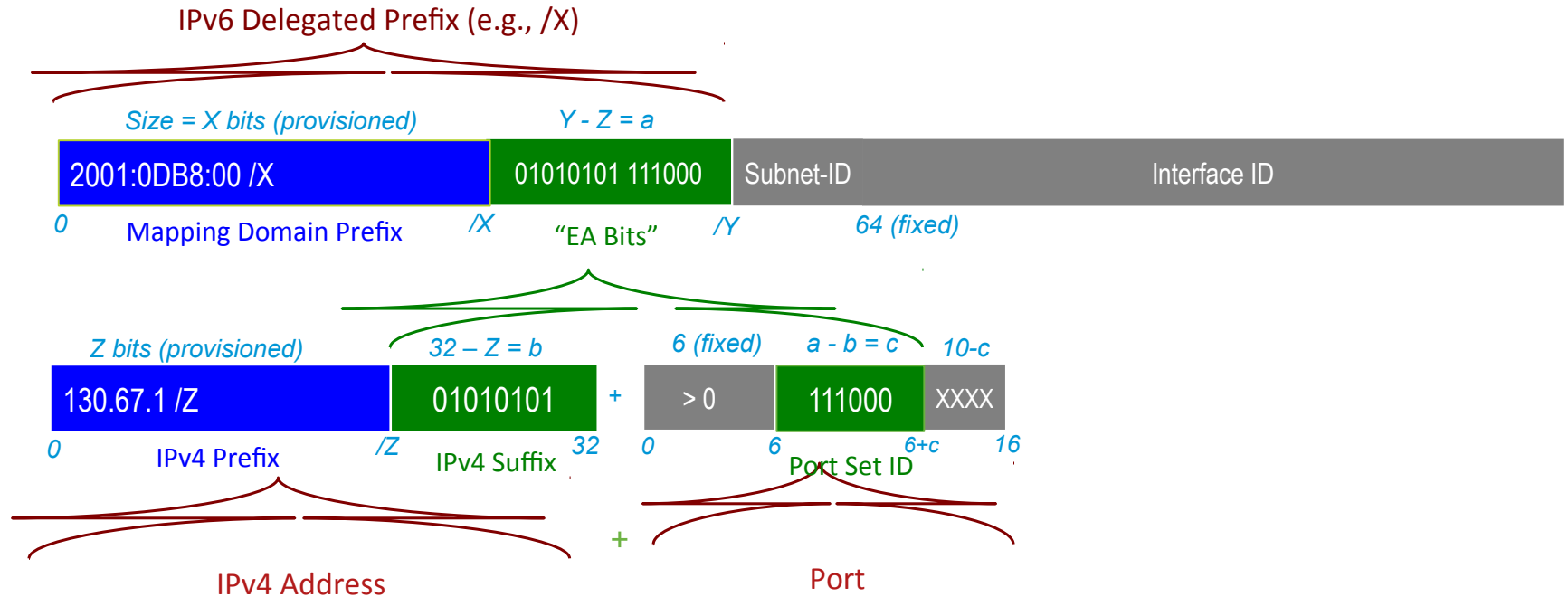
Dual Stack Lite (DS-Lite)



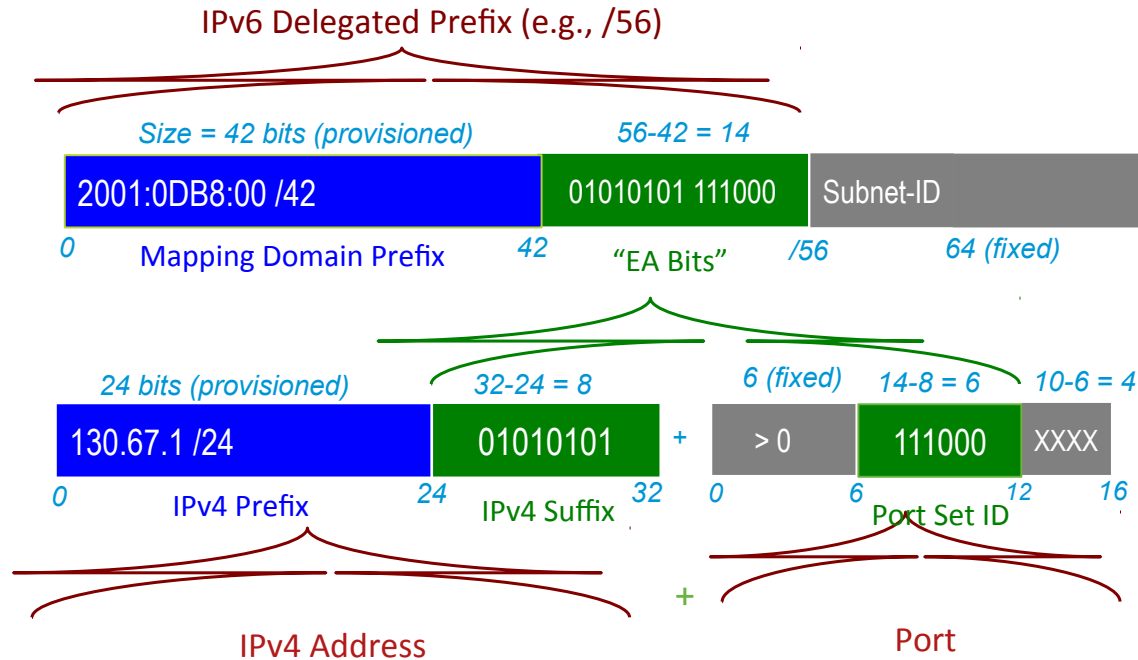
IPv6 Residual Deployment (4rd)



- IPv6 → IPv4 + Port Mapping



- IPv6 → IPv4 + Port Mapping



130.67.1.85/38

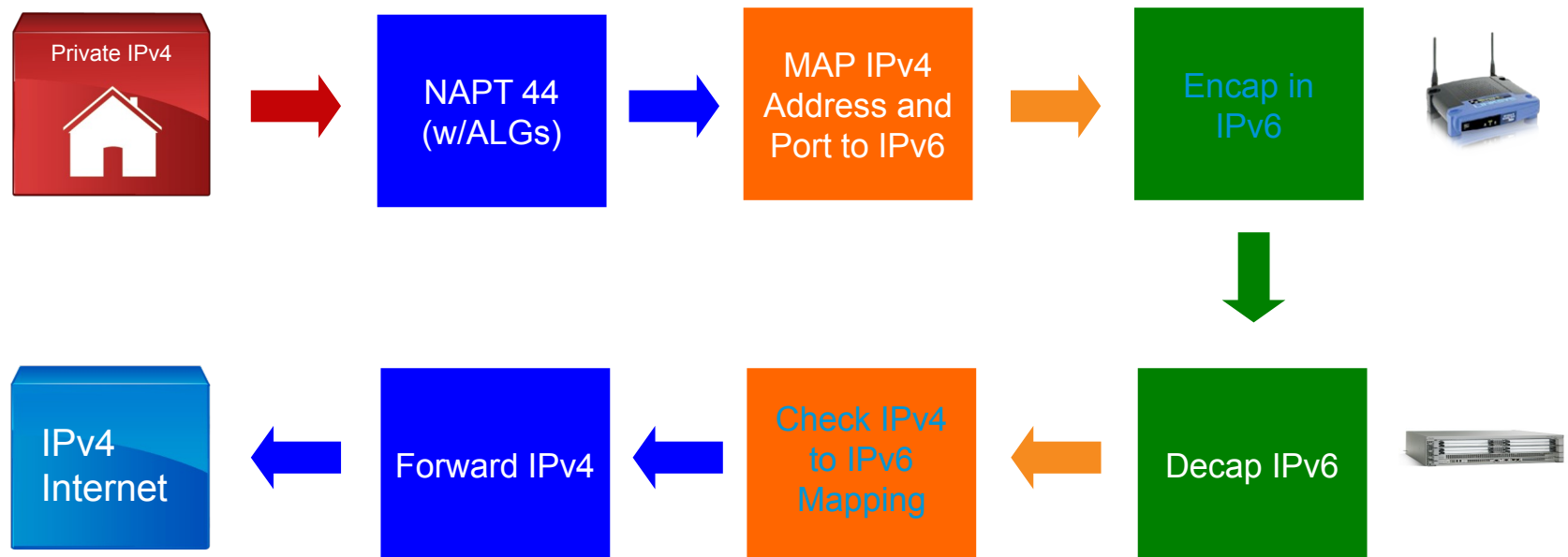
For this Example...

26 = 64 port sets
per IPv4 Address

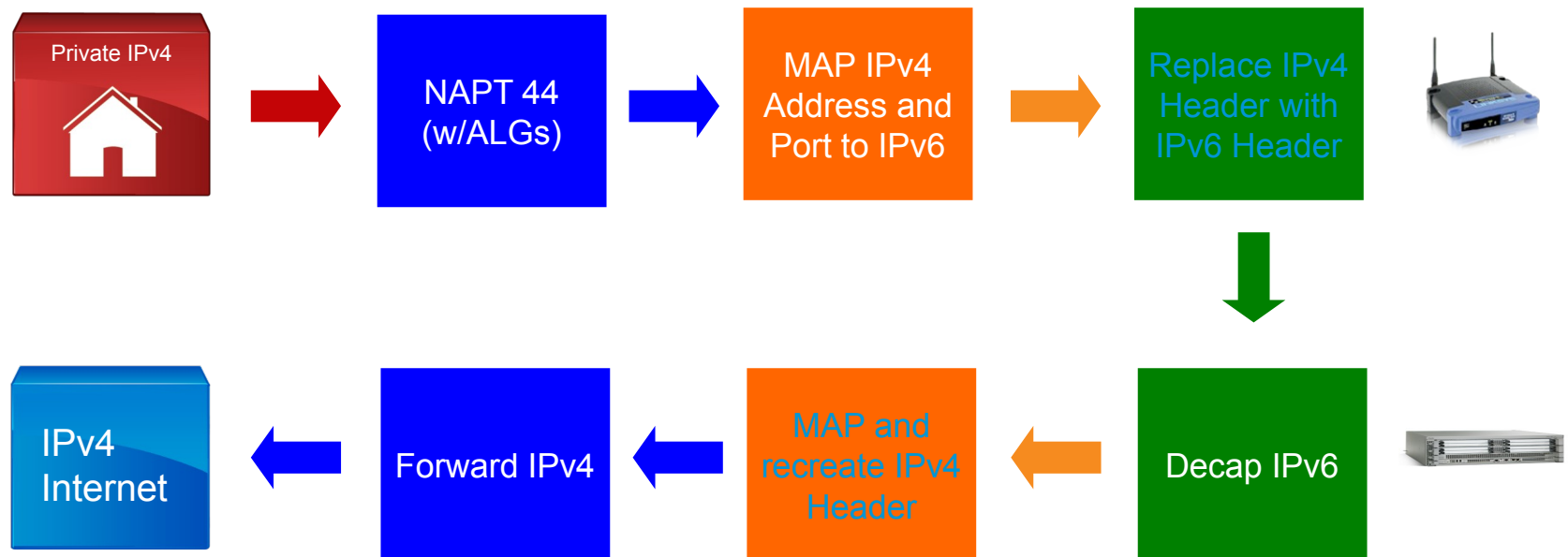
Ports 0-1023 skipped,
each CPE gets
216/26 - 24 = 1008 ports

One IPv4 /24 serves
2(6+8) ≈ 16,384 (vs. ≈ 256)
subscribers

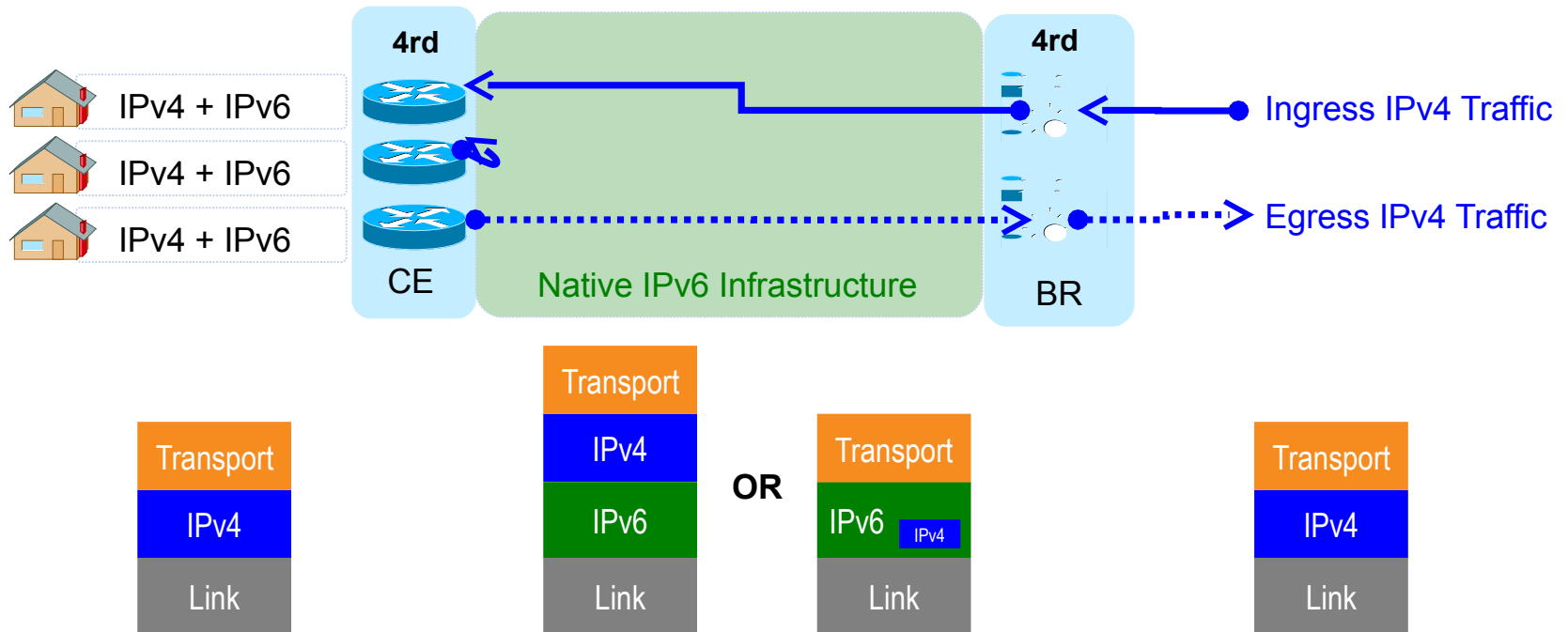
Encapsulation Forwarding Architecture



Translation Forwarding Architecture



Encapsulation or Translation – Boils down to 20 bytes



Please

Read

<http://tools.ietf.org/html/draft-mdt-softwire-mapping-address-and-port>

Come talk to me at the bar!

Ask Questions?

