A quick overview of DS-lite/AFTR

João Damas

ISC

How does it work?

Host 192.0.0.2

B4 IPv6

ISP core

IPv6

AFTR

Concentrator

NAT

Internet

IPv4 Host
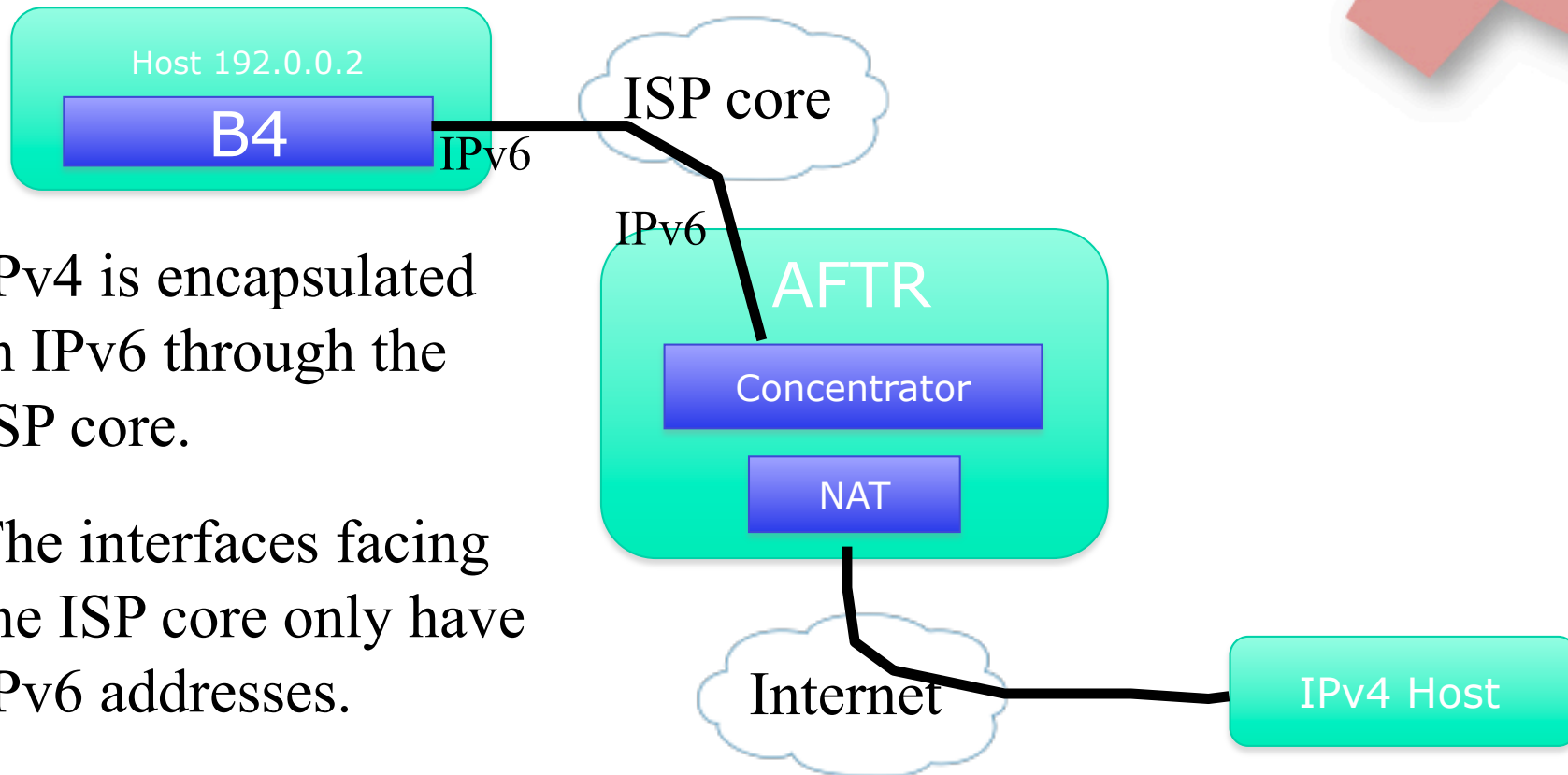
IPv4 is encapsulated in IPv6 through the ISP core.

The interfaces facing the ISP core only have IPv6 addresses.

How does it work?

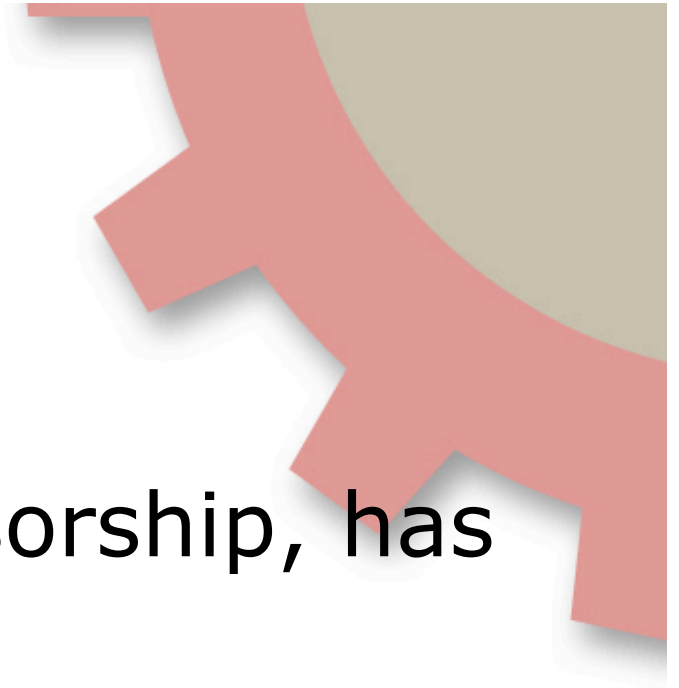DHCPv6 at the ISP configures the B4 elements with addresses and informs them of the addresses for the AFTR router.

The tunnel concentrator acts as a softwire hub, knowing which softwire "interface" the packets come in and where to send the replies.
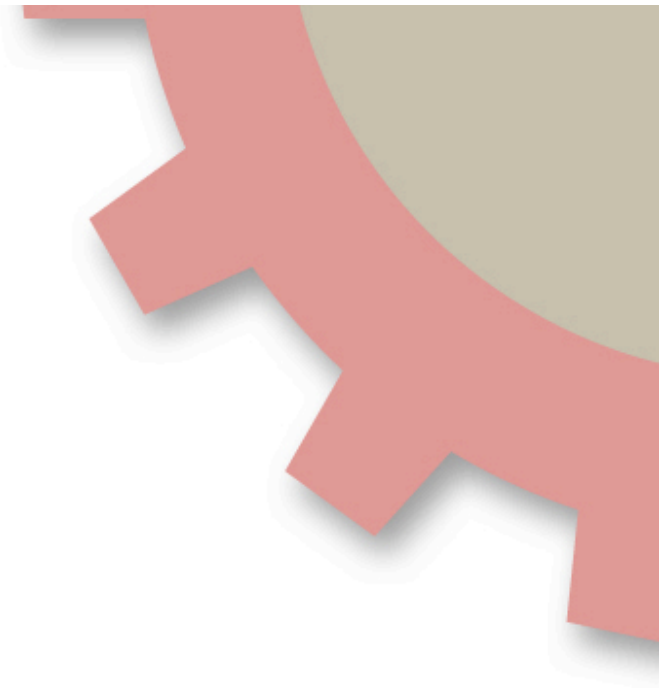
The CG NAT holds all the public IPv4 addresses and shares them between all ISP customers (sharing the TCP ports as well)

Implementation

- ISC, with Comcast sponsorship, has released:
  - Software for a B4 function (runs on OpenWRT)
  - Software for the AFTR NAT function
  - Extended version of DHCPv6 with necessary new options

http://www.isc.org/software/aftr