ALTO AND IPV4/IPV6 CO-EXISTENCE AND TRANSITION

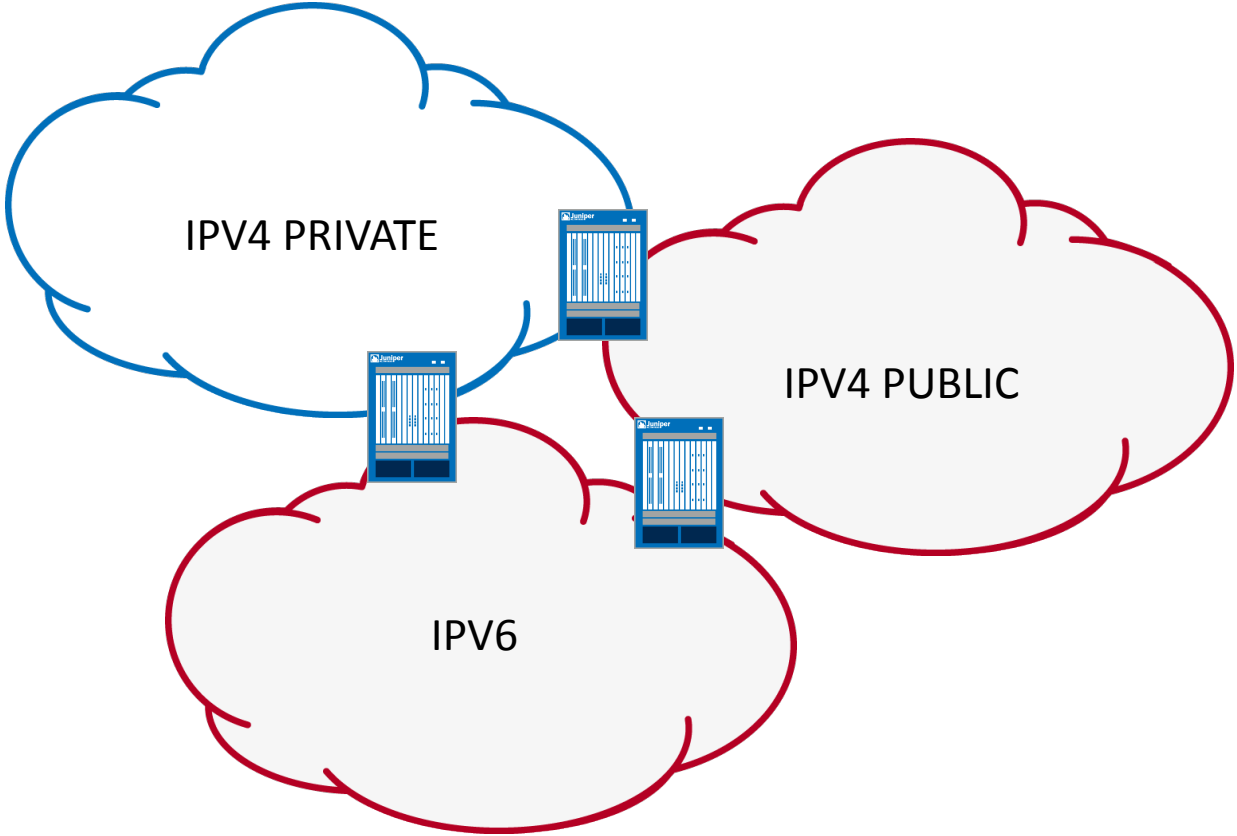RPENNO@JUNIPER.NET
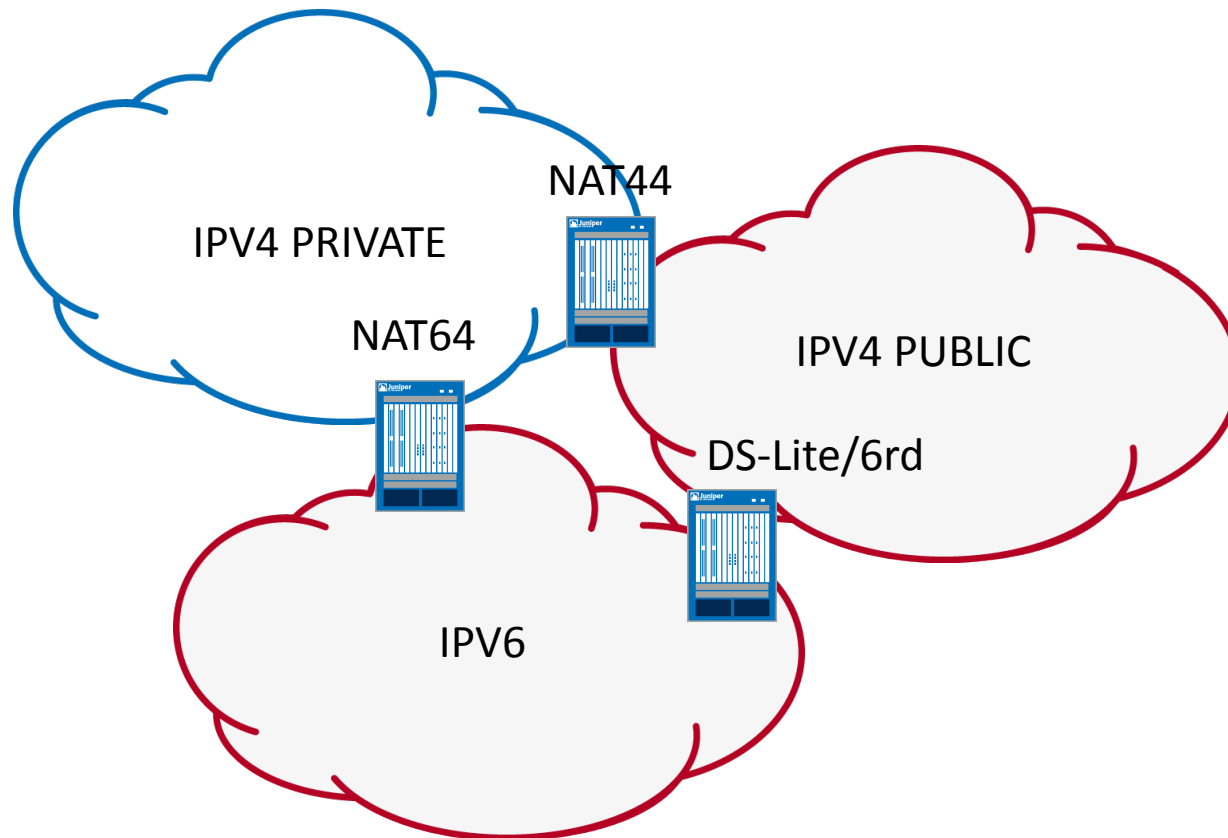
ALTO Interim Meeting - 2010

THE PROBLEM

- We are running out of IPv4
- Today there are already three address families on the Internet: IPv6, IPv4-Private and IPv4-Public
- Most of the co-existence tools involve some kind of NAT
  - NAT moves into the network
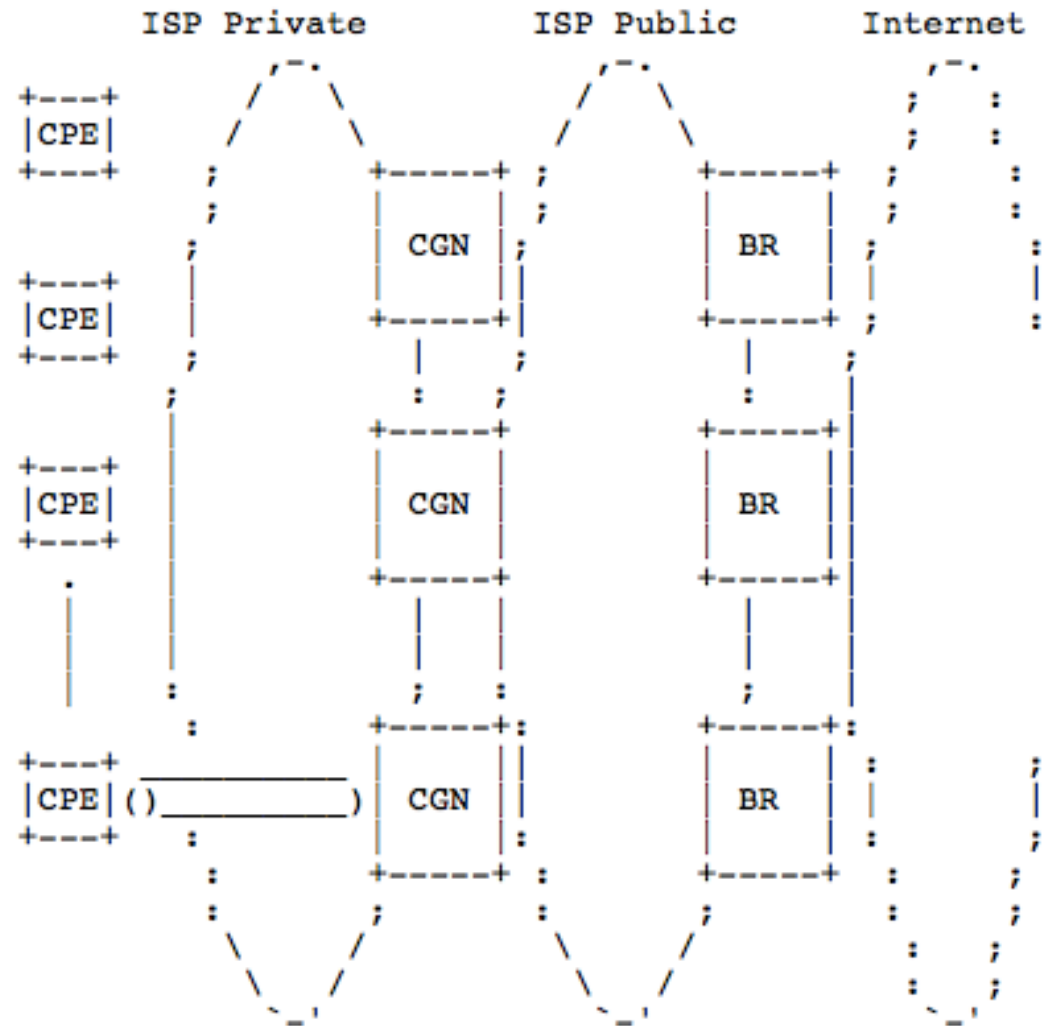- Other techniques involves creating a overlay

MULTIPLE ADDRESS FAMILIES

Different Transition Techniques

Reference Architecture

Discussion Points

- Placement of ALTO Server
  - ALTO Server in ISP's Public Network
  - ALTO Server in ISP's Private Network
  - Overlays
- Network Map
- Cost map
  - Hairpinning, internal vs. Public
- Endpoint Property/Cost
- Map redistribution