ALTO AND IPV4/IPV6 CO-EXISTENCE AND TRANSITION

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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
MULTIPLE ADDRESS FAMILIES

IPV4 PRIVATE

IPV4 PUBLIC

IPV6
Different NAT flavors

- IPV4 PRIVATE
- NAT64
- IPV4 PUBLIC
- NAT44
- IPV6
- NAT64

(Regions diagram showing various network configurations with NAT flavors.)
NAT moves to the EDGE/CORE

IPv4 Private

IPv4 Public

IPv6

NAT44

NAT64

NAT64
Summary

• Placement of ALTO Server
• Map redistribution
• Normalization of maps
• Registration
• Cost maps
  – Hairpinning, internal vs. Public