Challenges in IPv6 Deployment

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Basic Strategy to Deploy IPv6

• Create awareness
• Make an inventory
• Deploy to new products and services
• Change existing products
• Discontinue IPv4 only services?
Don’t Remove IPv4

• IPv4 and IPv6 are not compatible

• “Transitioning” to IPv6, means adding IPv6

• Do not change or remove the working IPv4
Awareness
Make Sure Everybody Knows

• Usually the technical people know
  - That is not enough

• Management has to pay the bill

• Sales and support need to prepare as well
Customers?

• Some people are afraid they might ask for it

• They should prepare as well

• Better if they here truth from you
Replacing Equipment

• Chances are some of your equipment does not support IPv6

• Sooner or later you have to replace it

• Stop adding IPv4-only devices
Ripe-501 IPv6 Requirements

• BCP that describes what to ask for

• Useful for tenders and RFPs

• Adopted by a number of governments
Buy IPv6 Ready Equipment

• Make sure purchasing department understands why

• Use clear requirements, refer to standards

• Better return on investment
New Deployments Are Easy

• Everything should support IPv6

• Growth expected beyond IPv4 run out

• So you deploy IPv6
What If You Are Alone?

• The world still uses IPv4

• Your customers need IPv4

• IPv6 only network is not an option right now
Workarounds
Tunneling

• Transport IPv6 using IPv4 packets

• You don’t need to upgrade everything right now

• Still depends on IPv4
Translation

• Translate IPv6 into IPv4 and vice versa

• Option for IPv6 only greenfield deployments

• Can be used as a front end to your IPv4 services
IPv4 Address Sharing

- IPv4 will run out very soon

- IPv6 deployment will probably take longer

- You need to bridge the gap using LSN/CGN/NAT444
Summary
Money
Lack of Market Pressure

• Customers aren’t asking for IPv6

• Makes it hard to justify investments

• Eventually you need to
Return on Investment

• Everybody is running out of time

• Alternatives like CGN cost money as well

• How long will they last?
Questions?