IPv6 Trends
Worldwide Infrastructure Security Report & Arbor ATLAS

Steve Nash

RIPE66, Dublin

IPv6 Roll-Out Moves Forward

IPv6 Deployment Progress

- 80% of respondents either have IPv6 implemented or will do within the next 12 months
  - 24.1% have already <u>completed</u> their roll-out
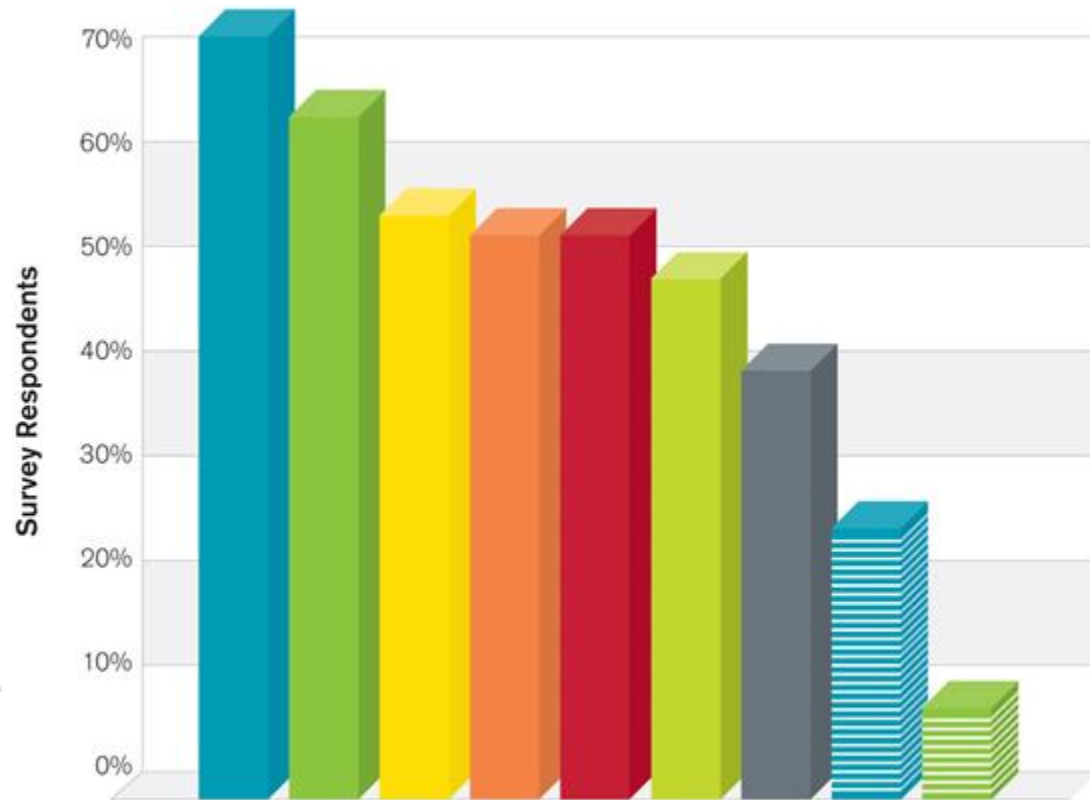
- **24%** Yes, deployment complete
- **54%** Yes, deployment in process
- **22%** No, but will be deploying soon

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IPv6 Threats and Concerns 2013

IPv6 Security Concerns
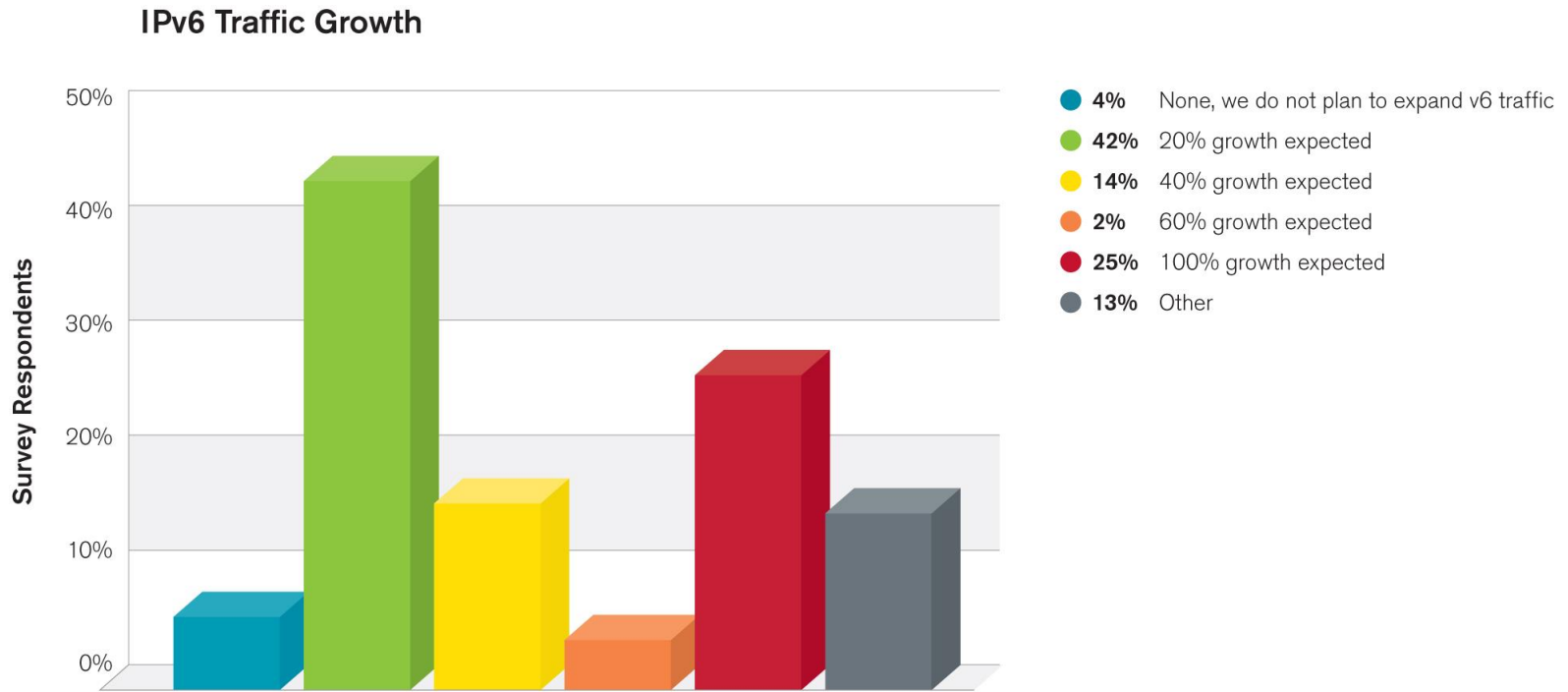

Survey Respondents

70%
60%
50%
40%
30%
20%
10%
0%

Source: Arbor Networks, Inc.

- **70%** Traffic floods/DDoS
- **62%** Misconfiguration
- **53%** Inadequate IPv4/IPv6 feature parity
- **51%** Stack implementation flaws
- **51%** Visibility, I cannot see the data today
- **47%** Botnets
- **38%** Host scanning
- **23%** Subscribers using IPv6 to bypass application rate limiting
- **6%** Other

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IPv6 Growth

IPv6 Traffic Growth

Legend:
- 4% None, we do not plan to expand v6 traffic
- 42% 20% growth expected
- 14% 40% growth expected
- 2% 60% growth expected
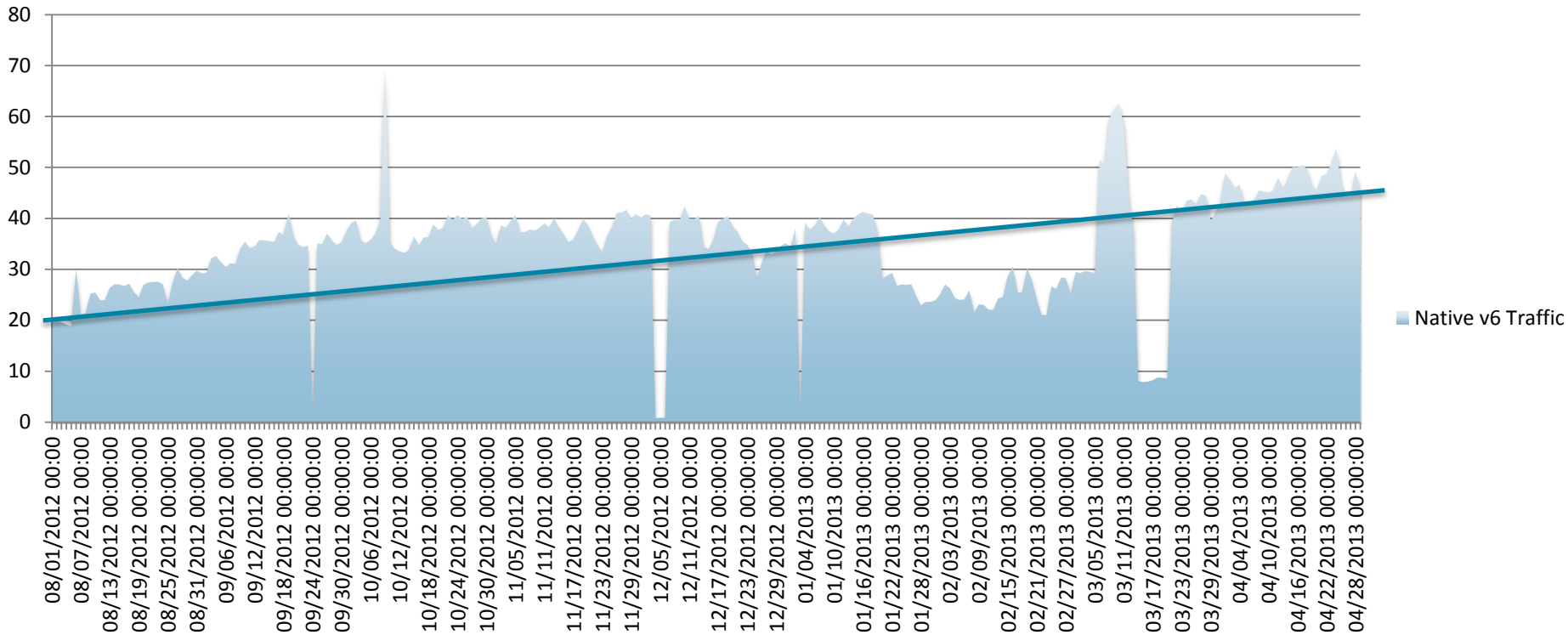- 25% 100% growth expected
- 13% Other

Source: Arbor Networks, Inc.

- Nearly half of respondents only anticipate 20% growth in IPv6 traffic volume over next twelve months

- One quarter expect more than 100%

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ATLAS : IPv6 Visibility, World-Wide

Native IPv6 Traffic World-Wide, Gbps

ATLAS data shows that IPv6 is growing at more than 100% per year,
but is still only 0.2% of IPv4 traffic

Summary for RIPE66

- Arbor sees 45Tbps of IPv4 Globally from 265 Ops
  - About 80 in RIPE
- Less than 1Gbps of Native IPv6 reported from RIPE region
  - across 25 v6 Operators
  - 55 are not reporting any NativeIPv6
- Is this because Instrumentation is not seen as a key part of 'rollout'?

- WISR
  - http://www.arbornetworks.com/research

Thank You

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