Rough edges of current policies

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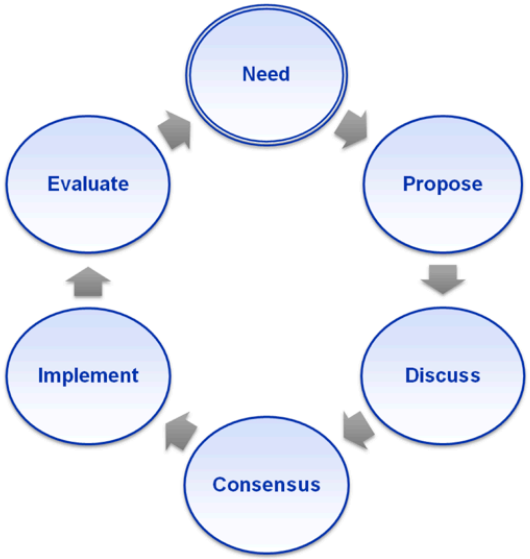
What is this all about?



Outline

Today: Presentation and Q&A

Tomorrow: Discussion about solutions

IPv4 vs IPv6 PI

Practical differences between IPv4 PI and IPv6 PI

IPv4 vs IPv6 PI

Policy text is mostly the same...

... but not entirely

IPv4 vs IPv6 PI

IPv4

Section 6.2 - “IP addresses used solely for the connection of an End User to a service provider (e.g. point-to-point links) are considered part of the service provider's infrastructure.”

Allows the use of PI for cable/dsl/etc providers

IPv4 vs IPv6 PI

IPv6

No section 6.2

Does state - “The PI assignment cannot be further assigned to other organisations.”

Does ***not*** allow cable/dsl/etc operators to use IPv6 PI

IPv4 vs IPv6 PI

Confusion

“We want to deploy IPv6 but can’t”

AS Number Policy

AS Number Policy

Policy text

"An Autonomous System (AS) is a group of IP networks run by one or more network operators with a *single, clearly defined routing policy*."

AS Number Policy

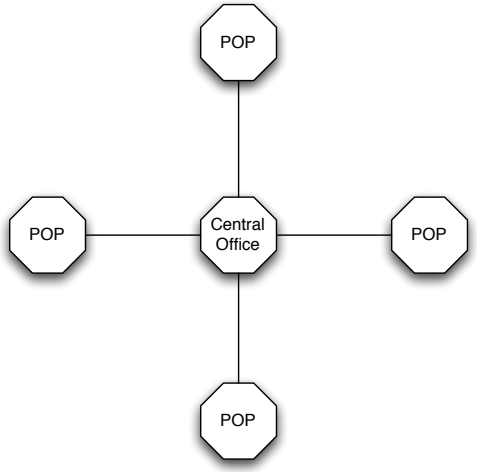
What is a routing policy?

AS Number Policy

No problem for the vast majority of cases

Requests for multiple AS Numbers for a single organisation are difficult to evaluate...

Central
Office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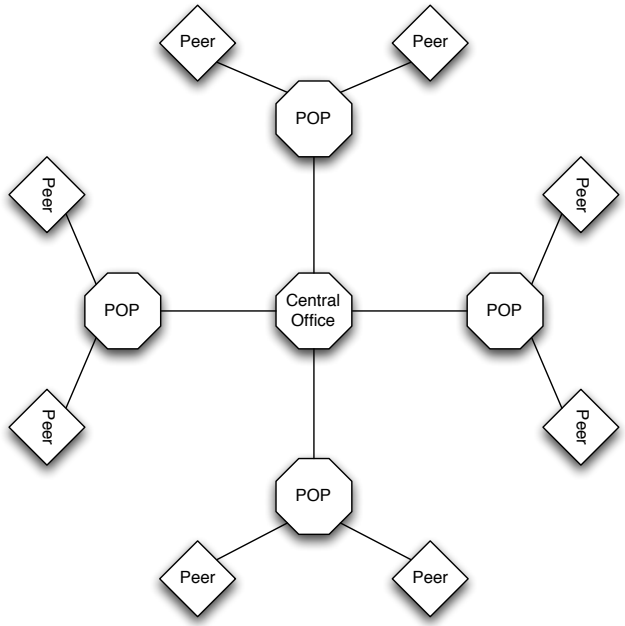
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AS Number Policy

RS Interpretation

A network under administrative control of one organisation is a single network requiring one AS Number

IPv4 Additional Allocations

The 80% rule

IPv4 Additional Allocations

- Policy text:
  - 5.3 - An LIR may receive an additional allocation when about eighty percent (80%) of ***all the address space*** currently allocated to it...
  - 5.4 - LIRs are still required to demonstrate about 80% usage for ***all their allocations***.

IPv4 Additional Allocations

Current RS interpretation:

All allocations must be around 80% usage

Some leniency applies

IPv4 Additional Allocations

Policy text is ambiguous

Next Steps

Sleep on it...

...discussion on Thursday