

Use of Default in the 'DFZ'

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<http://archive.psg.com/090709.janog-default.pdf>

A /25

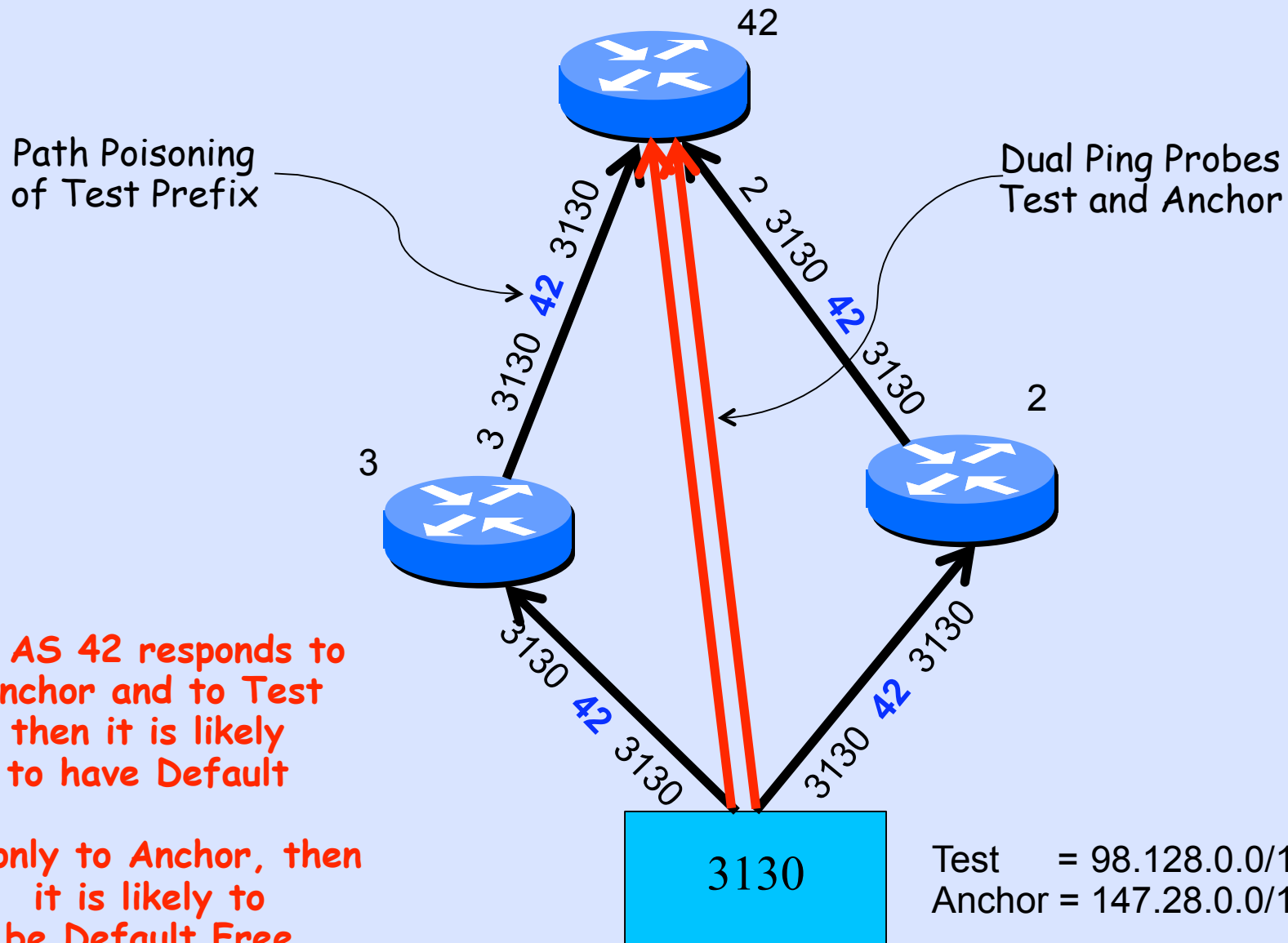
- We announced a /25 to NTT
- They passed it only to customers
- RV/RIS/... showed 15 ASs could see it

Whoops!

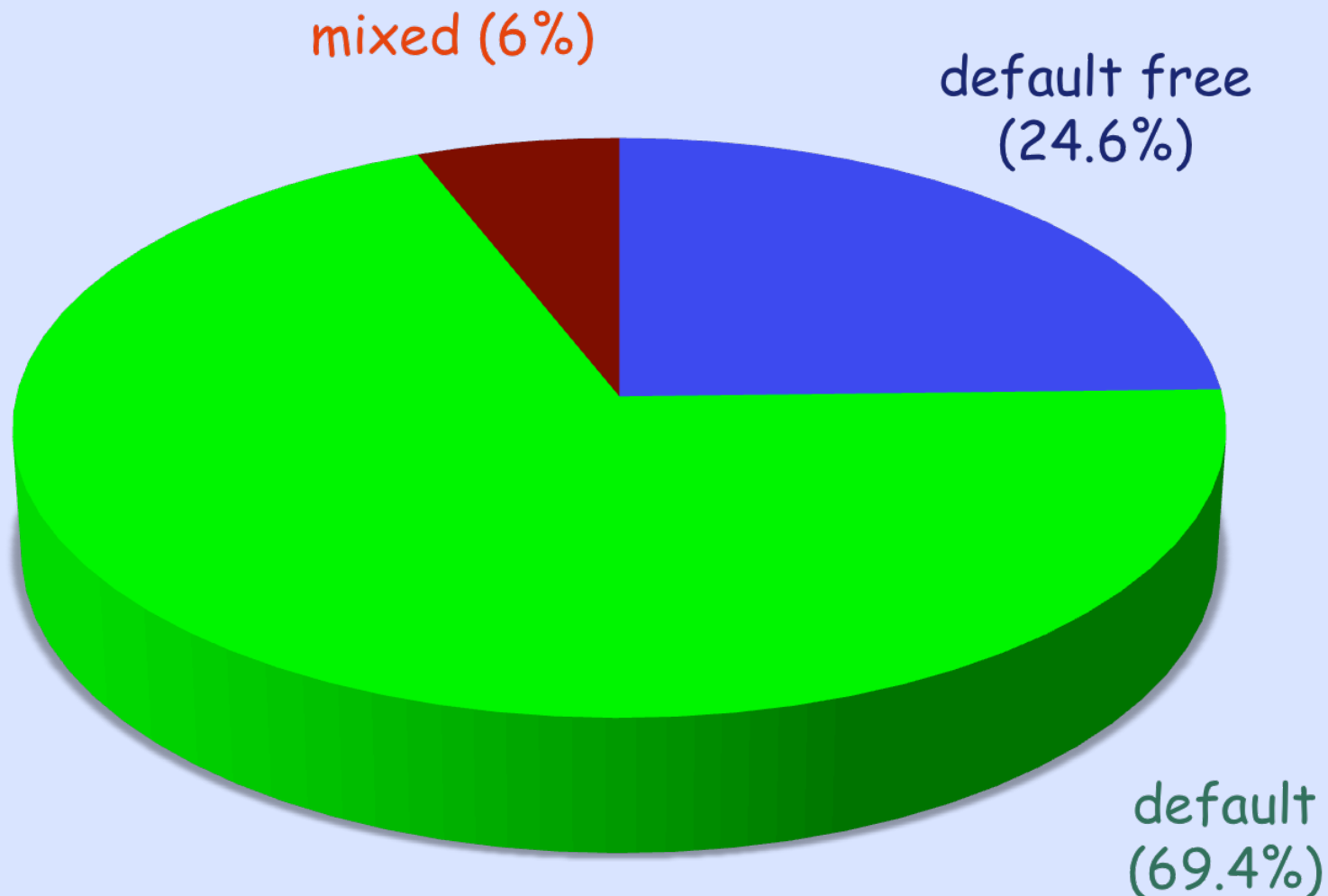
- We used ping from the /25 to 'all' ASs
- 1024 ASs could get packets back to us!
- Do they receive the BGP announcement and not show in Route Views / RIS?
- Do they default to someone who could see us?

How Much of This
was Due to Default
as Opposed to Poor
BGP Visibility?

Default Detection

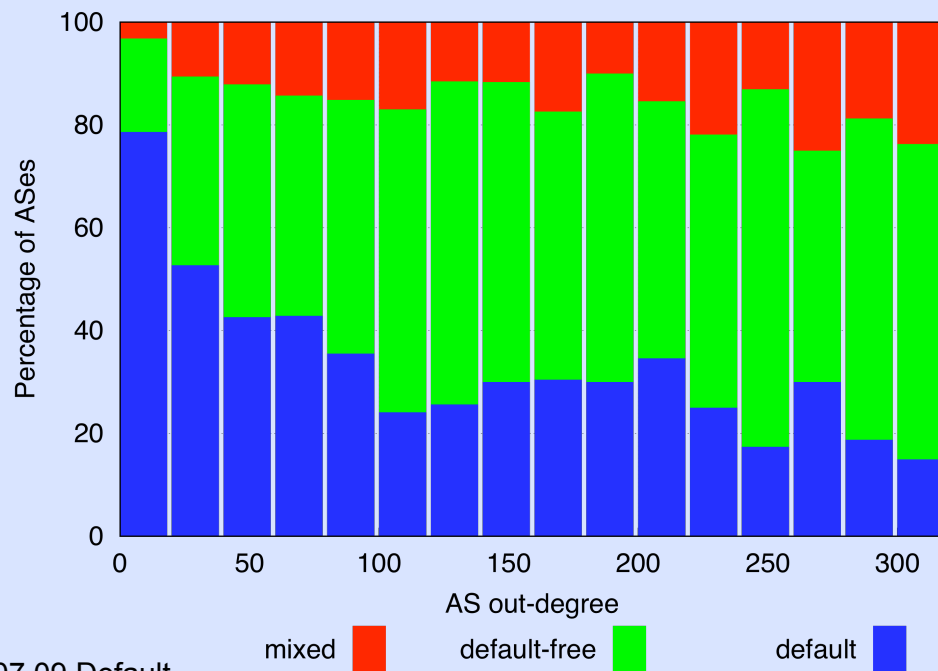


Defaults in /25-Experiment



Default Routing

	tested/total	default	default-free	mixed
stub	24,224/31,517	77.1%	19.3%	3.6%
small ISP	1,307/1,361	44.5%	42.2%	13.3%
large ISP	246/255	17.1%	60.6%	22.3%



Breakdown of default routing use as a function of AS out-degree

ASes with out-degree ≥ 300 are combined in the last value.

'Default Free Zone'

Ha Ha!

Our Glasses are Broken

- Looking in RV/RIS/... does not tell you if they can reach you
- Looking just in RV or RIS is as good (well bad) as hundreds of BGP feeds
- Researchers should be very wary of using RV/RIS data for many classes of analysis, e.g. AS topology, traffic
- Are Renesys presentations bogus?

Please Validate!

<http://psg.com/default/>