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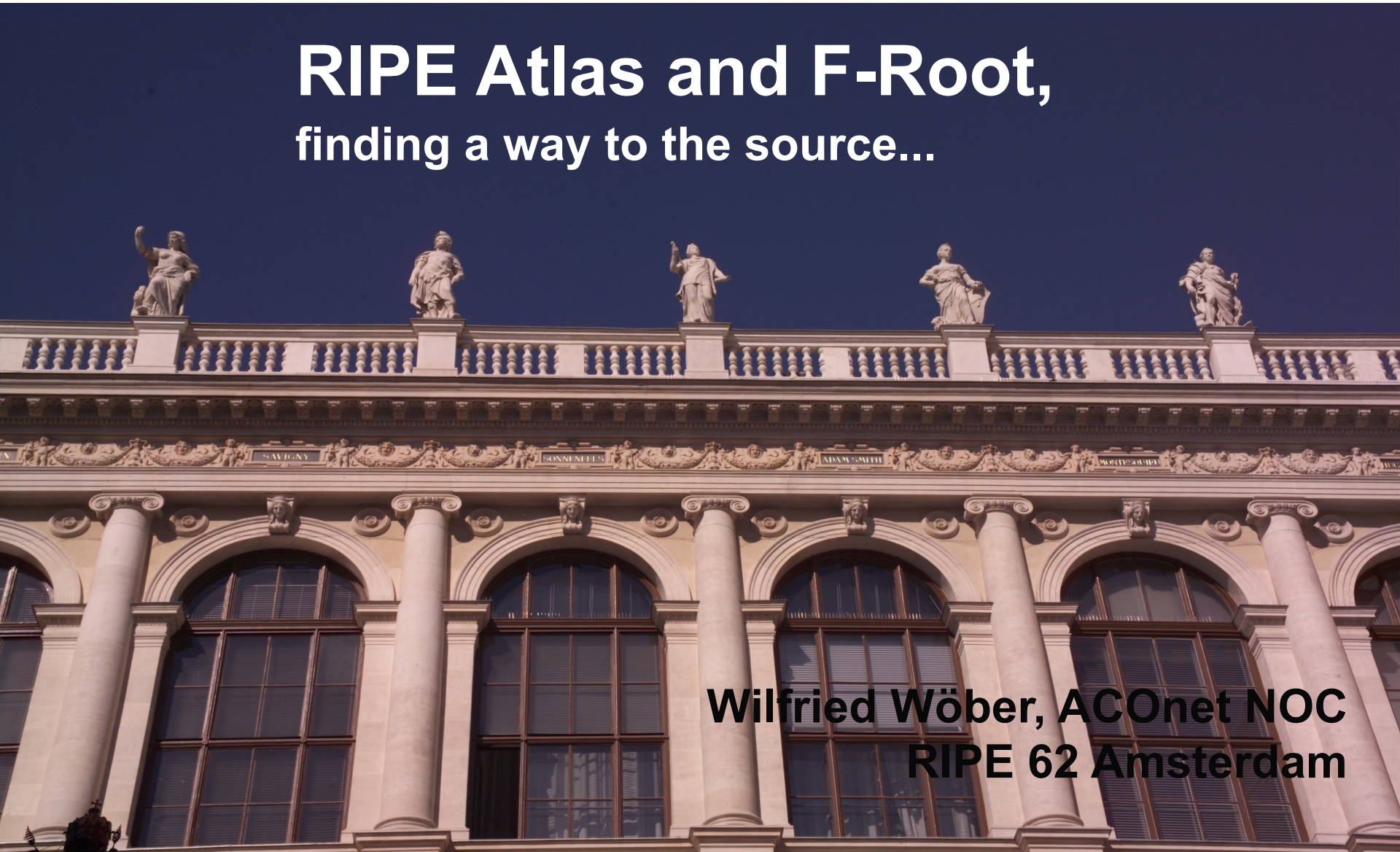
RIPE Atlas and F-Root,

finding a way to the source...



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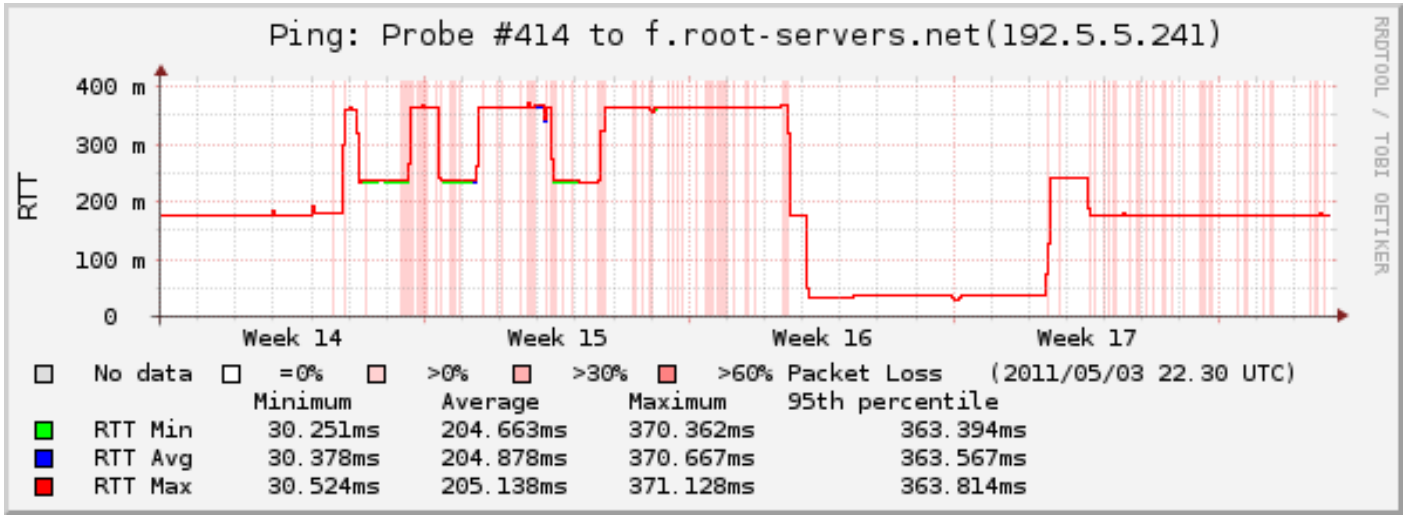
Atlas Probe, Anycasting and Finding the Way to F...

Just a snapshot and trying to spark discussion ☺

Anycasting helps with availability and performance, isn‘t it?

but,

if it doesn‘t - what now?



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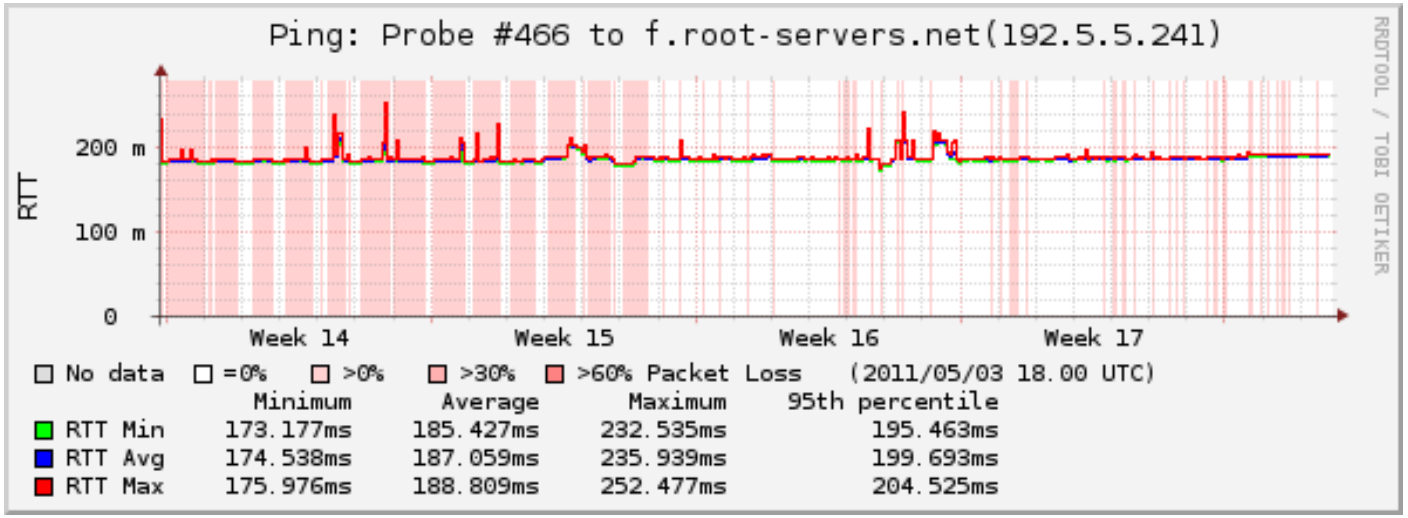
Q: What does it look like from a different vantage point?

As a plain commercial DSL customer, there‘s a bit more stability

but,

someone or something is eating my packets?



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Q: What does a traceroute look like?

„normally“ I can see a box in California:

```
16 isc-level3-ge.sanjose2.Level3.net (4.68.111.62)
              179.985 ms  180.073 ms  177.457 ms
17 f.root-servers.net (192.5.5.241)
              175.199 ms  176.809 ms  174.638 ms
```

„alternatively“:

```
GÉANT -> Internet2 -> US-Westcoast -> Panama City ->
   somewhere in Venezuela -> São Paulo(?)
```

but there should be a (much) shorter link
from GÉANT -> redCLARA -> São Paulo?

still, we are talking some 200 ms, give or take...

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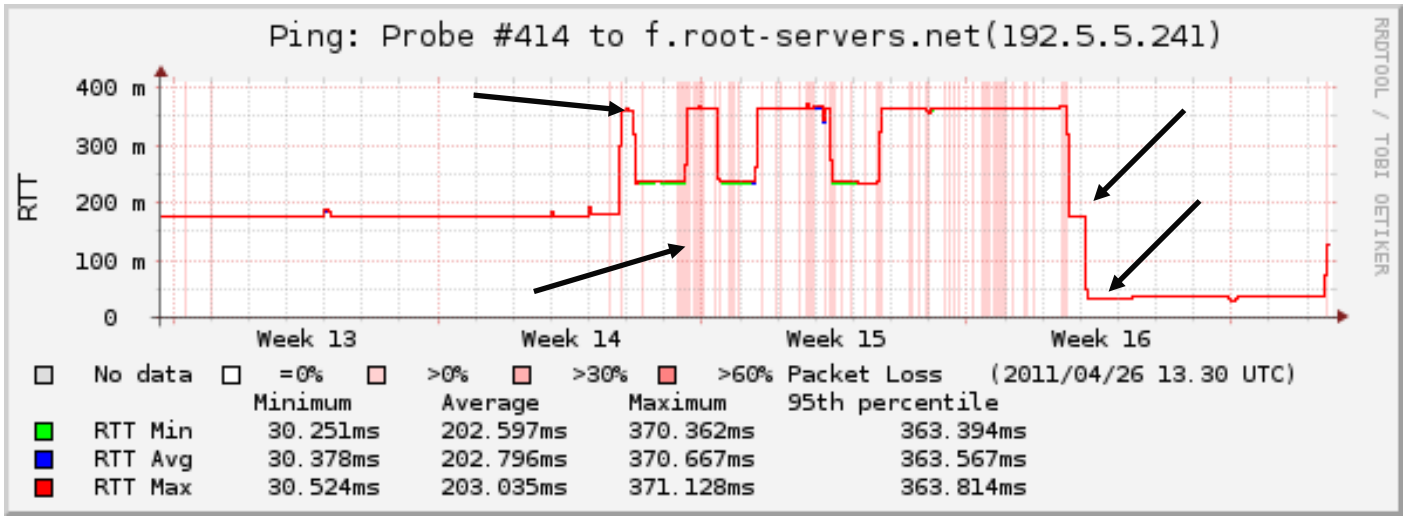
Atlas Probe, Anycasting and Finding the Way to F...

The real fun starts with the flap to 350+ ms, plus packet drop!



Early in week 16 it briefly gets back to „normal“,

but then the RTT drops to less than 50ms (for about a week)!

So, obviously, there‘s an ‚F-Box‘ box pretty close to our neck of the woods? Who‘s hiding it, then?

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Some initial findings:

The box in California we usually see via Level3 lives in a prefix of /23

The instance we see via the NREN paths lives in a (more specific) prefix of /24

It is not trivial to identify a particular instance of a Root Server, within an anycast cloud, that supplies an answer!

Is it even useful to accept a route to a Root Server at an RTT of 350+ ms?

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Atlas Probe, Anycasting and Finding the Way to F...

Some questions to you:

Has anyone else seen similar weirdness with (other instances of) Root Servers?

Is it an issue in the first place, given the expected (sane) behaviour of the DNS System?

I may be barking at the wrong tree to begin with – and should rather get a life?

Any other suggestions?

Thank you!