Monitoring and Troubleshooting
One Engineer’s rant

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packet loss hater, facebook
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Denial
What problem?
Why are you complaining?
This is easy!

This is your monitoring infrastructure
- SYSLOG server
- Reachability server
- graphing server

This is a series of tubes

This is your core

This is your aggregation layer

These are your servers
Troubleshooting Procedure

Intermittent packet loss

▪ Confirm the issue - ping
▪ Validate the path - traceroute
▪ Check counters - sh int
▪ Check SYSLOGs - sh log
▪ shutdown random ports - shut
▪ Call vendor - 1-800-helpme!
You’re right, that is easy!
But...
That’s not my network...
(probably not yours either)
I’m complaining because... It’s not that easy

These are my regions
These are my DC’s
I’m complaining because...
It’s not that easy

This is my backbone
More series of more tubes
This is my aggregation layer
These are my servers
These are my DC’s
These are my regions
Oh my...
Troubleshooting Procedure

Intermittent packet loss

- Confirm the issue - ping
- Validate the path - traceroute
- Check counters - sh int
- Check SYSLOGs - sh log
- shutdown random ports - shut
- Call vendor - Which one?? For which device??
It must be a network issue!
Acceptance
it’s broke...
Solutions?
Let’s do this!
Solutions
I got this

- TraceFlow/TracePath
- hping | ping v2?
- Full fabric monitoring
- BFD is cool
- More granular counters
- We need to poll more
- We need to poll less
- Let me pop the hood
Now what?
Want to help?
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