

An Enterprise SDN controller

(this is not about Google!)



Standard disclaimer

- This is a public research project in collaboration with REANNZ, NZ
- This is Josh's view as a research, not necessarily Google's view
- I am not discussing what Google is doing, just REANNZ :-)

Even the CEO can use it



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 Follow

Our office network is currently running on @REANNZ developed #SDN controller - who else out there can say they are using SDN in production?

Goal: actually use SDN

- Trust business traffic to it
- Integrate it with NMS
- Support IPv6
- Upskill operations staff and developers by making them use it (dogfood)

Spoiler alert (code location)

- <https://github.com/openvapour/valve>

Integration with NMS

- Do we need SNMP? No.
 - The state of art in NMS is bytes in and out on interfaces, and sFlow
 - Controller pushes stats directly into NMS (Graphite, via the Carbon API)

Some lessons learned

- Switches might be “tick box” OpenFlow compliant but are incomplete or crashy (missing feedback loop to the implementor - how are they to know)?
- Need to relearn the (annoying but not that expensive) network device implementation knowledge that has been proprietary until now
- Hard part is getting realization that it is simple

Synth!

<https://www.youtube.com/watch?v=cMK7UrqQbQE>