User Friendly vNetworks
OVN

- It's a powerful virtual networking tool
- Provides in-kernel conntrack integration and ACLs
- NAT, DHCP, Load Balancing, logical switching and logical routing
Abstraction

- OVN is great. However, there is room for improvement in terms of abstraction.
- Keep the users insulated from the DBs
- **Extend** the formatting options to the service commands.
- **Northbound**: Logical switches & router commands, NAT, DHCP, etc.
- **Southbound**: Chassis, Port Bindings and Logical Flow table commands.
Special Consideration: Logical Flows

- Logical Flows are an incredibly powerful abstraction used in the OVN implementation.
- Could see more to understand the pipeline or to talk more about the logical network elements.
- Useful when the data plane starts to become more complex.
- ovn-trace does this with incredible elegance.
Befriend the user

- For any typical network configuration, OVN has many components that tie up together.

- The current implementation does little help for a quick-and-easy summary/representation of the components northbound and southbound.

- Debugging a faulty network configuration becomes tedious.
Motivation

- Because OVN is such a powerful tool and is becoming more powerful with the complete integration with Kubernetes, P4.

- Because of its virtual networking capabilities OVN can handle the coming innovations much faster.

- It’d be productive to handle the necessary user friendliness now, before it starts to require immediate attention.
Thanks