User Friendly vNetworks

OVN

- Its 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