

# PICOS Open vSwitch Command Reference

Pica8 PicOS software leverages Open vSwitch, a production quality, multi-layer virtual switch licensed under the open source Apache 2.0 license. OVS runs as a process within PicOS. The OpenFlow protocol is driven by the Open Networking Foundation ([ONF](#)), a leader in software-defined networking (SDN). The OpenFlow protocol governs three essential components of SDN, including an OpenFlow physical switch, an OpenFlow virtual switch to manage virtual machines, and an OpenFlow controller to organize all network pieces.

## Organization

This document presents OVS commands arranged in three major sections:

- **ovsappctl**: Utility for querying and controlling **ovs-vswitchd** (Open vSwitch daemon)
- **ovs-ofctl**: OpenFlow switch management utility
- **ovsvsctl**: Utility for configuring and controlling **ovs-vswitchd** (Open vSwitch daemon)

## Additional Resources

For detailed information about Open vSwitch, OpenFlow, and command usage, visit the following web sites:

- [Open vSwitch Advanced Features Tutorial](#)
- [Open vSwitch](#)
- [OpenFlow](#)

### ovsappctl Commands

- [ovs-appctl Common Commands](#)
- [ovs-appctl Target Commands](#)

### ovsofctl Commands

- [ovs-ofctl Common Commands](#)
- [ovs-ofctl dump-meters <bridge>](#)

### ovsvsctl Commands

- [Bridge Commands](#)
- [Port Commands](#)
- [Controller commands](#)
- [Database commands](#)
- [Interface commands](#)
- [Mirror Commands](#)
- [NetFlow Commands](#)
- [Open vSwitch commands](#)
- [Match-mode Command](#)
- [QoS\\_queue Commands](#)
- [sFlow commands](#)
- [Cos-map Command](#)
- [Egress-mode Command](#)
- [Set-flow-counter-mode Command](#)
- [Combinated-mode Command](#)
- [DSCP Commands](#)