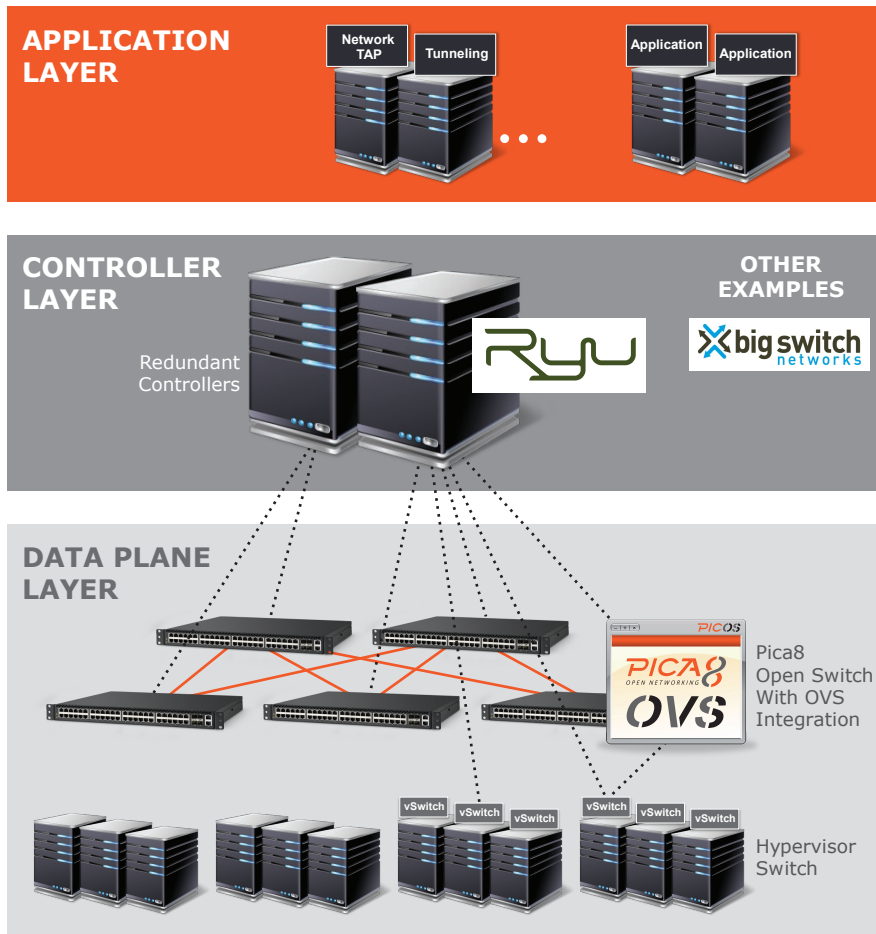


Open Systems for Software Defined Networking (SDN)

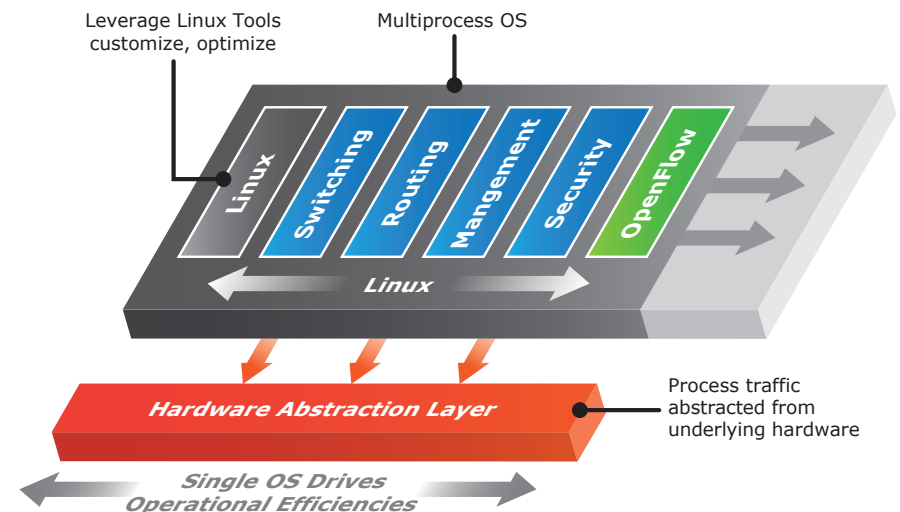


The First Hardware Agnostic, Open Network Operating System

Pica8™ is the first in the world to offer hardware-agnostic open switches. A pioneer in software-defined networking (SDN), we pair high-performance, white box switch hardware with PicOS: our hardware-agnostic, open network operating system that supports standards-based Layer 2 / Layer 3 protocols and Industry-leading OpenFlow* 1.3. In one complete package, Pica8 provides the physical switch, comprehensive switching and routing features, and the fulfilled promise of open networking.

What makes PicOS open?

- **PicOS is hardware agnostic:** because of PicOS's hardware abstraction layer, the operating system is not tightly coupled to any switching ASIC, CPU or memory hardware. We continue to expand our ODM partners, offering a portfolio of pre-qualified white box, bare metal switches to select from
- **Debian Linux is exposed,** so you can use your existing tools (such as Puppet, Chef or CFEngine) for hands-free provisioning and myriad APIs through the Debian-Linux environment, helping you personalize Pica8 switches to support your open network
- **PicOS supports OpenFlow 1.3,** through Open vSwitch (OVS) v1.10 integration: OVS runs as a process within PicOS, providing the OpenFlow interface for external programmability



* Only OpenFlow features available in hardware are supported, to ensure optimum performance

Pica8™ Open Switch Quick Reference Guide



P-3290



P-3295



P-3930



P-3922

PERFORMANCE				
Switch Fabric Capacity	176 Gbps	176 Gbps	1.28 Tbps	1.28 Tbps
Forwarding Capacity (Mpps)	132	132	960	960
Forwarding Options	Store-and-Forward / Cut-Through	Store-and-Forward / Cut-Through	Store-and-Forward / Cut-Through	Store-and-Forward / Cut-Through
Packet Buffer Memory (MB)	4	4	9	9
Latency	1 µs (64 Byte Frames)	1 µs (64 Byte Frames)	1 µs (64 Byte Frames)	900 ns (64 Byte Frames)
PORTS				
48-Port Base Unit	10/100/1000BASE-T	10/100/1000BASE-T	100/1000/10GBASE-T	1 GbE (SFP) or 10 GbE (SFP+)
Uplink Options	4 x 1 GbE (SFP) or 4 x 10 GbE (SFP+)	4 x 1 GbE (SFP) or 4 x 10 GbE (SFP+)	16 x 10 GbE (QSFP+ to SFP+) or 4 x 40 GbE (QSFP+)	16 x 10 GbE (QSFP+ to SFP+) or 4 x 40 GbE (QSFP+)
SFP+ / QSFP+ Options	SR, LR, LRM, CR4	SR, LR, LRM, CR4	LRM, SR, LR / CR4, SR4, LR4	LRM, SR, LR / CR4, SR4, LR4
Console Port	1 x RJ45 Serial	1 x RJ45 Serial	1 x RJ45 Serial	1 x RJ45 Serial
Management port	2 x 10/100/1000BASE-T	1 x 10/100/1000BASE-T	1 x 10/100/1000BASE-T	1 x 10/100/1000BASE-T
FEATURES				
Maximum MAC address	32K	32K	128K	128K
Maximum VLANs	4,094	4,094	4,094	4,094
Link Aggregation (Groups/Ports)	24/8	24/8	24/8	24/8
Jumbo Frames (Bytes)	9,216	9,216	9,216	9,216
Maximum Routes	12,000	12,000	12,000	12,000
Spanning Tree	STP/RSTP/MSTP	STP/RSTP/MSTP	STP/RSTP/MSTP	STP/RSTP/MSTP
IPv4 Routing	RIP, OSPFv2/ECMP, Static	RIP, OSPFv2/ECMP, Static	RIP, OSPFv2/ECMP, Static	RIP, OSPFv2/ECMP, Static
IPv6 Routing	RIPng, OSPFv3, Static	RIPng, OSPFv3, Static	RIPng, OSPFv3, Static	RIPng, OSPFv3, Static
Multicast Routing	PIM-SM, IGMP, IGMP-Snooping	PIM-SM, IGMP, IGMP-Snooping	PIM-SM, IGMP, IGMP-Snooping	PIM-SM, IGMP, IGMP-Snooping
OPENFLOW				
Open vSwitch	v1.10	v1.10	v1.10	v1.10
MPLS over OVS	–	–	Yes	Yes
GRE tunneling	Yes	Yes	Yes	Yes
HARDWARE				
Height (RU)	1	1	1	1
Air Flow	Front to Back	Front to Back / Back to Front	Front to Back / Back to Front	Front to Back / Back to Front
Hot-Swappable Redundant Power	–	Yes	Yes	Yes
Power Source	AC	AC	AC	AC

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