

Product Overview

The Centec V680 Series Switches are cost effective high performance switches for SDN/Openflow applications with Ethernet switching silicon CTC8180. Leveraging OVS, the V680 fully supports Openflow v1.4. With the powerful full-field matching ability and flexible editing capability, it is widely used in applications like DCI, security and radio/television broadcast.

V680 has ports with port speed of 1G/25G/100G.

The V680 Series Switches currently includes following configurations: V680-32C/V680-48Y8C/V680-48X8C/V680-24X4C.

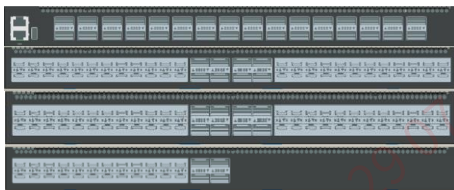


Figure 1 Centec V680 Series

Features

Technical highlights

- Standard 1RU pizza-box solution
- Up to 6.4Tbps switching capacity
- Low power consumption
- Up to 8K wildcard match flows with complete match field and stats
- Meter table with up to 1000 meter ID
- Support Group(all/select/indirect/fast failover)
- OpenFlow specification 1.0/1.2/1.3/1.4
- Support L2 to L4 complete matching fields
- Support Per flow multiple actions
- Support Hybrid mode(Traditional features + Openflow features)
- Support IPFIX

Layer 2 features

- Up to 52K L2 Forwarding Entries
- Support Jumbo Frames(9600 Bytes)
- Support 802.1w RSTP (Rapid Spanning Tree Protocol)
- Support 802.1Q VLAN (4094 VID)

Layer 3 features

- Support up to 8192 IPv4 Routes
- Support IPv4, ICMP, ARP
- Support OSPF

QoS features

- Support simple classification
- Support Traffic policing / Traffic shaping
- Support Congestion management(SP/WDRR/SP+WDRR scheduling)
- Support Congestion avoidance(TD、WRED)
- Support Traffic statistics

Security features

- DDoS attack protection
- CPU traffic protection
- Support RADIUS
- Support TACACS+
- Support G.8032
- Support CFM

Management

- 100/1000 Management Port
- RS-232 Serial Console Port
- USB Port
- SSHv1/v2
- Support AAA
- Support TFTP/FTP
- Support SNMPv1/v2/v3
- Support Syslog
- Industry Standard CLI
- Support WEB UI

Hybrid Features

- Support enable/disable Openflow on interface
- Support openflow mac learn

- Support Normal MPLS and Flex MPLS
- Support GRE/NVGRE/VXLAN Tunnel
- Support Bond
- Support Queue
- Support QinQ
- Support IPv4/IPv6 Transform
- Support MPLS-TP OAM
- Support UDF

Applications

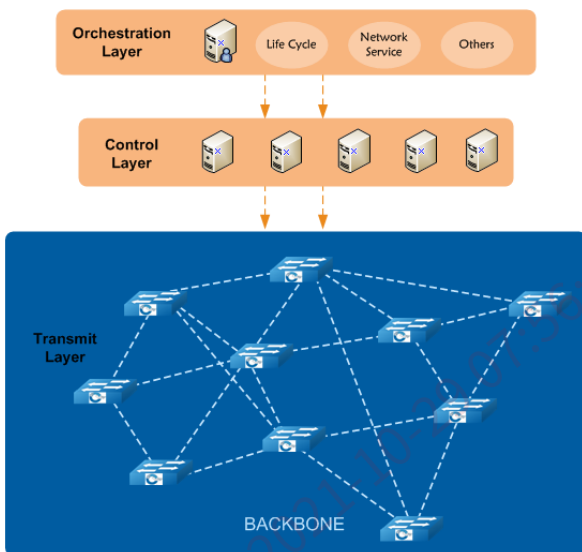


Figure 2 SD-DCI Application

Nowadays, most leased line service providers use traditional VPN technology to build their own backbone/metropolitan area network. However, it is slow to establish or change a connection with high construction costs. As the size of the network expands and the number of users grows quickly, it turns to be very inefficient for operation and fault management. Based on SDN switch, the SD-DCI solution provides a new, flexible and efficient way to help users greatly reduce construction and operational costs. Centec SDN switch is already deployed in several commercial SD-DCI networks.

Performance comparison

Product	V680-32C	V680-48Y8C	V680-48X8C	V680-24Y4C
Switch capability	4.8Tbps	4Tbps	2.56Tbps	2Tbps
Throughput	1024Mpps	1024Mpps	1024Mpps	1024Mpps
Forward Mode	Store and Forwarding / Cut Through			
Packet Cache	40MB			
Latency	700ns	700ns	700ns	700ns
Type of Power Supply	AC/DC	AC/DC	AC/DC	AC/DC
Max Power Draw	140W/160W	140W/160W	140W/160W	140W/160W

Ordering Info

Product	Description
V680-32C	Standard 1U 19" rack mountable 32 x 100GE QSFP28 Ports Modular pluggable FANs Dual Modular pluggable power supplies (Dual AC for default)
V680-48Y8C	Standard 1U 19" rack mountable 48 x 25GE SFP28 Ports 8 x 100GE QSFP28 Ports Modular pluggable FANs Dual Modular pluggable power supplies (Dual AC for default)
V680-48X8C	Standard 1U 19" rack mountable 48 x 10GE SFP+ Ports 8 x 100GE QSFP28 Ports Modular pluggable FANs Dual Modular pluggable power supplies (Dual AC for default)
V680-24Y4C	Standard 1U 19" rack mountable 24 x 25GE SFP28 Ports 4 x 100GE QSFP28 Ports Modular pluggable FANs Dual Modular pluggable power supplies (Dual AC for default)

Table 1 Ordering Info



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