Product Overview

The Centec V580 Series Switches are cost effective high performance switches for SDN/Openflow applications. It is designed based on Centec's fourth generation Ethernet switching silicon CTC8096. Leveraging OVS, the V580 fully supports Openflow v1.3. With the powerful full-field matching ability and flexible editing capability, it is widely used in applications like DCI, security and radio/ television broadcast.

V580 has large capacity and high density ports with port speed of 1G/ 10G/ 40G/ 100G.

The V580 Series Switches currently includes five configurations: V580-20Q4Z/ V580-48X2Q4Z/ V580-48X6Q/ V580-32X2Q/ V580-32X

Figure 1 Centec V580 Series

Features

Technical highlights

- Standard 1RU pizza-box solution
- Up to 2.4Tbps switching capacity
- Low power consumption
- Up to 4K wildcard match flows with complete match field and stats
- Meter table with up to 1100 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 32K 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 8K 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 use SSL to connect the controller

Reliability

- Support G.8032
- Support CFM

Management

- 100/1000 Management Port
- RS-232 Serial Console Port
- USB Port
- SSHv1/v2
- Support AAA
- Support TFPT/FTP
- Support SNMPv1/v2/v3

- Support Syslog
- Industry Standard CLI
- Support WEB UI
- Support Rmon

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
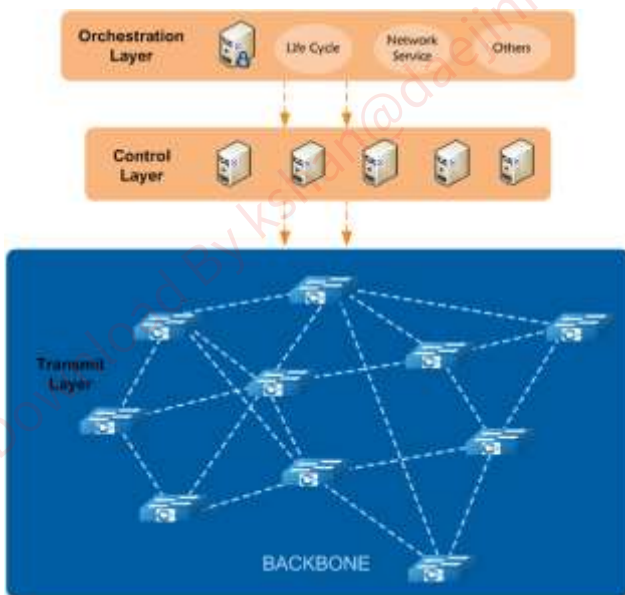- Support MPLS-TP OAM
- Support UDF

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.

Ordering Info

Product	Description
V580-20Q4Z	• 20x40GbE QSFP+ • 4x100GbE QSFP28 • Front-to-rear airflow • Dual AC power supplies
V580-48X2Q4Z	• 48x10GbE SFP+ • 2x40GbE QSFP+ • 4x100GbE QSFP28 • Front-to-rear airflow • Dual AC power supplies
V580-48X6Q	• 48x10GbE SFP+ • 6x40GbE QSFP+ • Front-to-rear airflow • Dual AC power supplies
V580-32X2Q	• 32x10GbE SFP+ • 2x40GbE QSFP+ • Front-to-rear airflow • Dual AC power supplies
V580-32X	• 32x10GbE SFP+ • Front-to-rear airflow • Dual AC power supplies

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