CCNP

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Physical/Data-Link Layer and Basic Access

CSMA/CD

Hardware Components (Data Plane)

- Line Cards
- Swtich Fabric
- Forwarding Engine

Memory for Packet Lookup

- Adjacency Information Base
- Forwarding Information Base

Switching Methods (Software Logic for Forwarding)

- Process Switching
- Fast Switching
- CEF

Configuration Layer

SDM templates

Switching technologies

- 802.1Q (VLAN tagging)
- 802.1D (STP)
- 802.1W (RSTP)
- 802.1S (MSTP)
- VTP
- DTP
- EtherChannels

IPv4 and IPv6 Overview

NAT

DHCP

DNS

Static and Dynamic Routing Overview

VRF

OSPF

IGRP/EIGRP

BGP

Multicast

 \mathbf{QoS}