

## Managed Switch Required Feature Sets

- All flavors of Spanning Tree (802.1D, 802.1w, and 802.1s)
- Link Aggregation Control Protocol (802.3ad link aggregation)
- 802.1Q VLAN trunking with support for at least 16 VLANs
- IGMP snooping
- Forwarding table support for at least 2048 MAC addresses
- Simple Network Management Protocol (SNMP version 2)
- Secure Shell Console Access (SSH version 2)
- Network Time Protocol (NTP)
- Syslog
- Bridge PDU port guard (blocks Bridge Protocol Data Units (BPDUs) on ports that do not require BPDUs, preventing forged BPDU attacks)
- ARP Guard (block ARP replies whose MAC address inside the ARP reply is not in the forwarding as a MAC address on the origination port)
- DHCP Snooping (block DHCP OFFER from ports unless the port is configured to allow DHCP OFFER)

Switches that are believed to meet these requirements based on manufacturer product literature:

### Cisco Switches:

- Cisco 2960 series switches
- Cisco 3560 series switches (has layer 3 capabilities with IP Base Software; OSPF with IP Services SW)
- Cisco 3750 series switches (has layer 3 capabilities with IP Base Software; OSPF with IP Services SW)

### D-Link Switches:

- DES 30xx, 34xx, and 35xx switches (can't confirm ARP Guard and DHCP Snooping)
- DGS 31xx (has layer 3 capabilities, but only supports static routing)
- DGS 32xx and 34xx switches (can't confirm ARP Guard and DHCP Snooping)
- DGS 36xx (has layer 3 capabilities, including OSPF. Can't confirm ARP Guard)

### Dell Switches:

- Powerconnect 55xx (can't confirm ARP Guard)
- Powerconnect 62xx, 70xx (has layer 3 capabilities, including OSPF)

### Hewlett Packard Procurve Switches:

- 26xx series switches
- 29xx series switches
- 3500 series switches (has layer 3 capabilities, including OSPF with extra license)
- 3600 series switches (has layer 3 capabilities, including OSPF)
- 3800 series switches (has layer 3 capabilities, including OSPF)
- 5120 series switches (has layer 3 capabilities, but only supports static routing)
- 5500 series switches (has layer 3 capabilities, including OSPF)

## Huawei

Quidway S5300-LI

Quidway S5300-SI (has layer 3 capabilities, but only supports static routing)

Quidway S5300-EI and S5300-HI (has layer 3 capabilities, including OSPF)

Quidway S3300-SI (can't confirm NTP; has layer 3 capabilities, but only supports static routing)

Quidway S3300-EI and S3300-HI (can't confirm NTP; has layer 3 capabilities, including OSPF)