

# **Arista Networks EOS 4.18.3F Release Notes**

June 23, 2017 (Version 1.1)

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## EOS 4.18.3F Highlights

### New Platforms and Hardware

- DCS-7500R2-36CQ-LC
- DCS-7500R2-18CQ-LC
- DCS-7280SR2-48YC6
- DCS-7020TR-48

### Supported Features by Platform

Note entries in the 7500R and 7280R column with an '\*' is not yet supported on the 7500R2 and 7280SR2 series.

### Management and Monitoring Features

Feature	7500R Series	7500E Series	7280R Series	7280E Series	7150 Series	7010 Series	7050 Series	7050X Series	7250X Series	7300X Series
Industry Standard CLI	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
In-band management	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
SSH v2	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Telnet	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
IPv6 Access Control Lists (ingress)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
IPv6 Access Control Lists (egress)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Control-Plane Access Control Lists (CP-ACL)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
TACACS+ Authentication and Authorization	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
TACACS+ Accounting	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
RADIUS Authentication	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
RADIUS Accounting	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
RADIUS Authorization	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
RADIUS VRF	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
RADIUS over IPv6	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Management port isolation	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

DNS Client	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
NTP	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
NTPv6	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
IEEE 1588 PTP boundary clocks	NO	YES	NO	YES	YES	NO	NO	YES	YES	NO
IEEE 1588 PTP transparent clocks	NO	YES	NO	YES	YES	NO	NO	YES	YES	NO
<b>Feature</b>	<b>7500R Series</b>	<b>7500E Series</b>	<b>7280R Series</b>	<b>7280E Series</b>	<b>7150 Series</b>	<b>7010 Series</b>	<b>7050 Series</b>	<b>7050X Series</b>	<b>7250X Series</b>	<b>7300X Series</b>
SMPTE/AES	NO	YES	NO	YES	YES	NO	NO	YES	YES	NO
IEEE 802.1AB LLDP	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Syslog	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
File download via SCP, HTTP, HTTPS, FTP and TFTP	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Login and MOTD banners	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Interface range support	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Show reload cause	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Management to IPv6 addresses on VLAN and Management interfaces	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
VM on EOS	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
VM Tracer	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Locator LED	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Digital Optical Monitoring (DOM)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Zero Touch Provisioning (ZTP)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
ACL counters	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
ACL logging (Deny)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
ACL logging (Permit)	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO
CLI Scheduler	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Event Manager	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Event Monitor	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Tcpdump sessions	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
LANZ	YES	YES	YES	YES	YES	NO	NO	YES	YES	YES
LANZ queue sampling	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO
User-Configurable Hardware Control Plane Policing	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Management VRF	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

Role Based Access Control	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Time-stamping	Yes*	Yes	Yes*	Yes	YES	NO	NO	NO	NO	NO
Mirror to EOS	YES	YES	YES	YES	YES	NO	NO	NO	NO	NO
Ingress ACL filters for Mirror sessions	YES	YES	YES	YES	NO	NO	YES	YES	YES	YESi
Mirroring to GRE tunnel	YES	YES	YES	YES	NO	YES	YES	YES	YES	YES
<b>Feature</b>	<b>7500R Series</b>	<b>7500E Series</b>	<b>7280R Series</b>	<b>7280E Series</b>	<b>7150 Series</b>	<b>7010 Series</b>	<b>7050 Series</b>	<b>7050X Series</b>	<b>7250X Series</b>	<b>7300X Series</b>
Tap Aggregation	YES*	YES	YES*	YES	YES	NO	NO	NO	NO	NO
EOS API (eAPI)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
OpenFlow	NO	NO	NO	NO	NO	YES	YES	YES	NO	NO
DirectFlow	NO	NO	NO	NO	NO	YES	YES	YES	NO	NO
Accelerated Software Upgrade (ASU)	NO	NO	NO	NO	NO	NO	YES	YES	NO	NO
Leaf SSU - Hitless upgrade	NO	NO	NO	NO	NO	NO	NO	YES	NO	NO
Spine SSU - Maintenance Mode	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Path Tracer	NO	NO	NO	NO	NO	YES	YES	YES	YES	YES
MapReduce Tracer	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Configure Replace	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Config Session	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Bug Alerts	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
OpenConfig models	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

<b>Feature</b>	<b>7050X2 Series</b>	<b>7060X Series</b>	<b>7260X Series</b>	<b>7320X Series</b>	<b>7060X2 Series</b>	<b>7160 Series</b>	
Industry Standard CLI	YES	YES	YES	YES	YES	YES	
In band management	YES	YES	YES	YES	YES	YES	
SSH v2	YES	YES	YES	YES	YES	YES	
Telnet	YES	YES	YES	YES	YES	YES	
IPv6 Access Control Lists (Ingress)	YES	YES	YES	YES	YES	YES	
IPv6 Access Control Lists (Egress)	YES	YES	YES	YES	YES	NO	
Control-Plane Access Control Lists (CP-ACL)	YES	YES	YES	YES	YES	YES	
TACACS+ Authentication and Authorization (PAP)	YES	YES	YES	YES	YES	YES	
TACACS+ Accounting	YES	YES	YES	YES	YES	YES	

RADIUS Authentication	YES	YES	YES	YES	YES	YES	
RADIUS Accounting	YES	YES	YES	YES	YES	YES	
RADIUS Authorization	YES	YES	YES	YES	YES	YES	
Management port isolation	YES	YES	YES	YES	YES	YES	
DNS Client	YES	YES	YES	YES	YES	YES	
NTP	YES	YES	YES	YES	YES	YES	
<b>Feature</b>	<b>7050X2 Series</b>	<b>7060X Series</b>	<b>7260X Series</b>	<b>7320X Series</b>	<b>7060X2 Series</b>	<b>7160 Series</b>	
NTPv6	YES	YES	YES	YES	YES	YES	
IEEE 1588 PTP boundary clock	YES	NO	NO	NO	NO	NO	
IEEE 1588 PTP transparent clock	YES	NO	NO	NO	NO	NO	
SMPTE/AES	NO	NO	NO	NO	NO	NO	
IEEE 802.1AB LLDP	YES	YES	YES	YES	YES	YES	
Syslog	YES	YES	YES	YES	YES	YES	
File download via FTP, HTTP, HTTPS, FTP and TFTP	YES	YES	YES	YES	YES	YES	
Login and MOTD banners	YES	YES	YES	YES	YES	YES	
Interface range support	YES	YES	YES	YES	YES	YES	
Show reload cause	YES	YES	YES	YES	YES	YES	
Management to IPv6 addresses on VLAN and Management interfaces	YES	YES	YES	YES	YES	YES	
VM on EOS	YES	YES	YES	YES	YES	YES	
VMTracer	YES	YES	YES	YES	YES	YES	
SSH Host Keys	YES	YES	YES	YES	YES	YES	
Locator LED	YES	YES	YES	YES	YES	YES	
Digital Optical Monitoring (DOM)	YES	YES	YES	YES	YES	YES	
Zero Touch Provisioning (ZTP)	YES	YES	YES	YES	YES	YES	
ACL counters	YES	YES	YES	YES	YES	YES	
ACL logging(Deny)	YES	YES	YES	YES	YES	YES	
ACL logging(Permit)	NO	NO	NO	NO	NO	YES	
CLI Scheduler	YES	YES	YES	YES	YES	YES	
Event Manager	YES	YES	YES	YES	YES	YES	

Event Monitor	YES	YES	YES	YES	YES	YES	
Tcpdump sessions	YES	YES	YES	YES	YES	YES	
LANZ (Latency Analyzer )	YES	YES	YES	YES	YES	NO	
LANZ queue Sampling	NO	NO	NO	NO	NO	NO	
User-Configurable Hardware Control Plane Policing	YES	YES	YES	YES	YES	NO	
Management VRF	YES	YES	YES	YES	YES	YES	
<b>Feature</b>	<b>7050X2 Series</b>	<b>7060X Series</b>	<b>7260X Series</b>	<b>7320X Series</b>	<b>7060X2 Series</b>	<b>7160 Series</b>	
Role Based Access Control	YES	YES	YES	YES	YES	YES	
Time-stamping	NO	NO	NO	NO	NO	NO	
Mirror to EOS	NO	NO	NO	NO	NO	YES	
ACL Filters for Mirror Sessions	NO	NO	NO	NO	NO	NO	
TAP Aggregation	NO	NO	NO	NO	NO	NO	
EOS API (eAPI)	YES	YES	YES	YES	YES	YES	
Openflow	NO	YES	NO	NO	YES	NO	
DirectFlow	NO	YES	NO	NO	YES	NO	
Leaf SSU - Hitless Upgrade	NO	NO	NO	NO	NO	NO	
Spine SSU - Maintenance mode	YES	YES	YES	YES	YES	YES	
Path Tracer	NO	YES	YES	YES	YES	NO	
MapReduce Tracer with YARN Support	YES	YES	YES	YES	YES	YES	
Configure Replace	YES	YES	YES	YES	YES	YES	
Config Session	YES	YES	YES	YES	YES	YES	
Mirroring to GRE tunnel	YES	YES	YES	YES	YES	NO	
Bug Alerts	YES	YES	YES	YES	YES	YES	
OpenConfig models	YES	YES	YES	YES	YES	YES	



## SNMP MIBs

(All MIB support is read-only unless otherwise noted)

Feature	7500R Series	7500E Series	7280R Series	7280E Series	7150 Series	7010 Series	7050 Series	7050X Series	7250X Series	7300X Series
SNMPv2, SNMPv3	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
RFC 3635 EtherLike-MIB (obsoletes RFCs 1650, 2358, 2665)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
RFC 3418 SNMPv2-MIB (obsoletes RFCs 1450, 1907)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
RFC 2863 IF-MIB (obsoletes RFCs 1229, 1573, 2233) (ifAdminStatus and ifAlias are writeable)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
RFC 2864 IF-INVERTED-STACK-MIB	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
RFC 2096 IP-FORWARD-MIB (obsoletes RFC 1354)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
ARISTA-SW-IP-FORWARD-MIB (IPv4 only)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
RFC 4363 Q-BRIDGE-MIB (dot1qPvid and dot1qPortAcceptableFrameTypes are writeable for ports in switchport access or trunk mode)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
RFC 4188 BRIDGE-MIB	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
ARISTA-BRIDGE-EXT-MIB	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
RFC 2013 UDP-MIB (obsoletes RFC 1213)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
RFC 2012 TCP-MIB (obsoletes RFC 1213)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
RFC 2011 IP-MIB (obsoletes RFC 1213)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

ipAddressTable and ipAddressPrefixTable from RFC 4293										
Feature	7500R Series	7500E Series	7280R Series	7280E Series	7150 Series	7010 Series	7050 Series	7050X Series	7250X Series	7300X Series
HOST-RESOURCES-MIB	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
LLDP-MIB	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
LLDP-EXT-DOT1-MIB	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
LLDP-EXT-DOT3-MIB	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
ENTITY-MIB	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
ENTITY-SENSOR-MIB	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
ENTITY-STATE-MIB	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
RMON-MIB (rmonEtherStatsGroup)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
RMON2-MIB (rmon1EthernetEnhancementGroup)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
HC-RMON-MIB (etherStatsHighCapacityGroup)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
RFC 3636 MAU-MIB (ifMauDefaultType and ifMauAutoNegStatus are writeable)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
SNMP-TLS-TM-MIB (RFC 6353 )	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
SNMP-TSM-MIB (RFC 5591)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
ARISTA-ACL-MIB	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
ARISTA-QUEUE-MIB	YES	YES	YES	YES	NO	YES	YES	YES	YES	YES
RFC 4273 BGP4-MIB	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
RFC 4750 OSPF-MIB	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
ARISTA-CONFIG-COPY-MIB	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
ARISTA-CONFIG-MAN-MIB	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
ARISTA-REDUNDANCY-MIB	YES	YES	NO	NO	NO	NO	NO	NO	NO	YES
MSDP-MIB	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
PIM-MIB	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
IGMP-MIB	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
IPMROUTE-STD-MIB	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

VRRPv2-MIB (RFC 2787)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
ARISTA-QOS-MIB	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
ARISTA-ENTITY-SENSOR-MIB	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
ARISTA-BGP4V2-MIB	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
ARISTA-VRF-MIB	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
ARISTA-DAEMON-MIB	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
ARISTA-ECN-COUNTER-MIB	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO

Feature	7050X2 Series	7060X Series	7260X Series	7320X Series	7060X2 Series	7160 Series
SNMPv2, SNMPv3	YES	YES	YES	YES	YES	YES
RFC 3635 EtherLike-MIB (obsoletes RFCs 1650, 2358, 2665)	YES	YES	YES	YES	YES	YES
RFC 3418 SNMPv2-MIB (obsoletes RFCs 1450, 1907)	YES	YES	YES	YES	YES	YES
RFC 2863 IF-MIB (obsoletes RFCs 1229, 1573, 2233)	YES	YES	YES	YES	YES	YES
RFC 2864 IF-INVERTED-STACK-MIB	YES	YES	YES	YES	YES	YES
RFC 2096 IP-FORWARD-MIB (obsoletes RFC 1354)	YES	YES	YES	YES	YES	YES
ARISTA-SW-IP-FORWARD-MIB (IPv4 only)	YES	YES	YES	YES	YES	YES
RFC 4363 Q-BRIDGE-MIB	YES	YES	YES	YES	YES	YES
RFC 4188 BRIDGE-MIB	YES	YES	YES	YES	YES	YES
ARISTA-BRIDGE-EXT-MIB	YES	YES	YES	YES	YES	YES
RFC 2013 UDP-MIB (obsoletes RFC 1213)	YES	YES	YES	YES	YES	YES
RFC 2012 TCP-MIB (obsoletes RFC 1213)	YES	YES	YES	YES	YES	YES
RFC 2011 IP-MIB (obsoletes RFC 1213)	YES	YES	YES	YES	YES	YES
HOST-RESOURCES-MIB	YES	YES	YES	YES	YES	YES

LLDP-MIB	YES	YES	YES	YES	YES	YES
LLDP-EXT-DOT1-MIB	YES	YES	YES	YES	YES	YES
LLDP-EXT-DOT3-MIB	YES	YES	YES	YES	YES	YES
ENTITY-MIB	YES	YES	YES	YES	YES	YES
<b>Feature</b>	<b>7050X2 Series</b>	<b>7060X Series</b>	<b>7260X Series</b>	<b>7320X Series</b>	<b>7060X2 Series</b>	<b>7160 Series</b>
ENTITY-SENSOR-MIB	YES	YES	YES	YES	YES	YES
ENTITY-STATE-MIB	YES	YES	YES	YES	YES	YES
RMON-MIB (rmonEtherStatsGroup)	YES	YES	YES	YES	YES	YES
RMON2-MIB (rmon1EthernetEnhancementGroup)	YES	YES	YES	YES	YES	YES
HC-RMON-MIB (etherStatsHighCapacityGroup)	YES	YES	YES	YES	YES	YES
RFC 3636 MAU-MIB (ifMauDefaultType and ifMauAutoNegStatus are writeable)	YES	YES	YES	YES	YES	YES
SNMP-TLS-TM-MIB (RFC 6353)	YES	YES	YES	YES	YES	YES
SNMP-TSM-MIB (RFC 5591)	YES	YES	YES	YES	YES	YES
ARISTA-ACL-MIB	YES	YES	YES	YES	YES	YES
ARISTA-SNMP-TRANS-PORTS-MIB	YES	YES	YES	YES	YES	YES
ARISTA-SMI-MIB	YES	YES	YES	YES	YES	YES
ARISTA-PRODUCTS-MIB	YES	YES	YES	YES	YES	YES
ARISTA-QUEUE-MIB	YES	YES	YES	YES	YES	YES
RFC 4273 BGP4-MIB	YES	YES	YES	YES	YES	YES
RFC 4750 OSPF-MIB	YES	YES	YES	YES	YES	YES
ARISTA-CONFIG-COPY-MIB	YES	YES	YES	YES	YES	YES
ARISTA-CONFIG-MAN-MIB	YES	YES	YES	YES	YES	YES
ARISTA-REDUNDANCY-MIB	YES	YES	YES	YES	YES	YES
MSDP-MIB	YES	YES	YES	YES	YES	YES
PIM-MIB	YES	YES	YES	YES	YES	YES
IGMP-MIB	YES	YES	YES	YES	YES	YES
IPMROUTE-STD-MIB	YES	YES	YES	YES	YES	YES
VRRPV2-MIB	YES	YES	YES	YES	YES	YES

ARISTA-QOS-MIB	YES	YES	YES	YES	YES	YES
ARISTA-ENTITY-SENSOR-MIB	YES	YES	YES	YES	YES	YES
ARISTA-BGPV4V2-MIB	YES	YES	YES	YES	YES	YES
ARISTA-VRF-MIB	YES	YES	YES	YES	YES	YES
ARISTA-IF-MIB	YES	YES	YES	YES	YES	YES
ARISTA-MAU-MIB	YES	YES	YES	YES	YES	YES
ARISTA-PFC-MIB	YES	YES	YES	YES	YES	YES
ARISTA-DAEMON-MIB	YES	YES	YES	YES	YES	YES

## SNMP Traps

Feature	7500R Series	7500E Series	7280R Series	7280E Series	7150 Series	7010 Series	7050 Series	7050X Series	7250X Series	7300X Series
RFC 2863 IF-MIB (linkUp, linkDown)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
LLDP-MIB (lldpRemTablesChange)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
RFC 3418 SNMPv2-MIB (coldStart)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
NET-SNMP-AGENT-MIB (nsNotifyRestart)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
ENTITY-MIB (entConfigChange)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
ENTITY-STATE-MIB (entStateOperEnabled, entStateOperDisabled)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
OSPF-MIB (ospfNbrStateChange, ospfIfConfigError, ospfIfAuthFailure, ospfIfStateChange)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
BGP4-MIB (bgpEstablished, bgpBackwardTransition)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
ARISTA-REDUNDANCY-MIB (aristaRedundancySwitchOverNotif)	YES	YES	NO	NO	NO	NO	NO	NO	NO	YES
ARISTA-CONFIG-MAN-MIB (aristaConfigManEv	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

ent)										
SNMPv2-MIB (authenticationFailure)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
VRRPv2-MIB (vrrpTrapNewMaster, vrrpTrapAuthFailure)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

Feature	7050X2 Series	7060X Series	7260X Series	7320X Series	7060X2 Series	7160 Series
RFC 2863 IF-MIB (linkUp, linkDown)	YES	YES	YES	YES	YES	YES
LLDP-MIB (lldpRemTablesChange)	YES	YES	YES	YES	YES	YES
RFC 3418 SNMPv2-MIB (coldStart)	YES	YES	YES	YES	YES	YES
NET-SNMP-AGENT-MIB (nsNotifyRestart)	YES	YES	YES	YES	YES	YES
ENTITY-MIB (entConfigChange)	YES	YES	YES	YES	YES	YES
ENTITY-STATE-MIB (entStateOperEnabled, entStateOperDisabled)	YES	YES	YES	YES	YES	YES
OSPF-MIB	YES	YES	YES	YES	YES	YES
BGP4-MIB	YES	YES	YES	YES	YES	YES
ARISTA-REDUNDANCY-MIB	YES	YES	YES	YES	YES	YES
ARISTA-CONFIG-MAN-MIB	YES	YES	YES	YES	YES	YES
SNMPV2-MIB	YES	YES	YES	YES	YES	YES
VRRPV2-MIB	YES	YES	YES	YES	YES	YES

## Layer 2 Features

Feature	7500R Series	7500E Series	7280R Series	7280E Series	7150 Series	7010 Series	7050 Series	7050X Series	7250X Series	7300X Series
VLAN based port segmentation	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Tagged native VLAN mode	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

IEEE 802.1D Bridging	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
IEEE 802.1Q Trunking	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
IEEE 802.1 QinQ	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Feature	7500R Series	7500E Series	7280R Series	7280E Series	7150 Series	7010 Series	7050 Series	7050X Series	7250X Series	7300X Series
IEEE 802.1w RSTP (Rapid Spanning Tree Protocol)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
IEEE 802.1s MSTP (Multiple Spanning Tree Protocol)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Rapid Per VLAN Spanning Tree Protocol	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
BPDU Guard	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
BPDU filtering	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Disable STP on a VLAN to support Routed Ports	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Backup Interface	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Interfaces per Link Aggregation Groups	64	64	64	64	16	32	16	64	64	64
Link Aggregation hash utilizing L2 and L3 packet header fields	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
IEEE 802.3ad LACP (Link Aggregation Control Protocol)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Multi-chassis Link Aggregation (MLAG)	YES*	YES	YES*	YES	YES	YES	YES	YES	YES	YES
IGMP Snooping + MLAG	YES*	YES	YES*	YES	YES	YES	YES	YES	YES	YES
VARP for MLAG	YES*	YES	YES*	YES	YES	YES	YES	YES	YES	YES
Port mirroring	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Port-channel source for port mirroring	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Port-channel and Multiple port destinations for port mirroring	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO
MAC security	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Layer 2 Access Lists	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
IEEE 802.1Qaz DCBX (Data Center Bridge Exchange)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

IEEE 802.1Qbb PFC (Priority-based Flow Control)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Interface rate counters	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
mac-address-table configuration	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
1000Base-X and 1000BASE-T SFP+ transceivers	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
<b>Feature</b>	<b>7500R Series</b>	<b>7500E Series</b>	<b>7280R Series</b>	<b>7280E Series</b>	<b>7150 Series</b>	<b>7010 Series</b>	<b>7050 Series</b>	<b>7050X Series</b>	<b>7250X Series</b>	<b>7300X Series</b>
100M support on 1000BASE-T SFP+ transceiver	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
100M forced without Autoneg on BASE-T ports	NO	NO	NO	NO	NO	YES	NO	YES	NO	NO
10M full duplex - forced/auto negotiated	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO
Auto-negotiation with 1000BASE-X	YES	YES	YES	YES	NO	YES	YES	YES	YES	YES
IEEE 802.3x RX PAUSE frames	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
IEEE 802.3x TX PAUSE frames	NO	NO	NO	NO	YES	YES	YES	YES	YES	YES
Jumbo frames up to 9214 bytes	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
sFlow	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Storm control	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Root guard	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Loop guard	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Bridge assurance	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Static MAC multicast	NO	NO	NO	NO	YES	YES	YES	YES	YES	YES
QoS interface trust	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Fabric QoS (PFC, ECN)	YES	YES	YES	YES	NO	NO	NO	NO	YES	YES
WRR scheduling for QoS	NO	NO	NO	NO	NO	NO	NO	YES	YES	YES
Egress port shaping	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Egress queue scheduling and shaping	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
DSCP Rewrite	NO	NO	NO	NO	YES	YES	YES	YES	YES	YES
VLAN Translation	YES	YES	YES	YES	NO	YES	YES	YES	YES	YES
Control Plane Protection (CoPP)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES



VXLAN Bridging	YES	YES	YES	YES	YES	NO	NO	YES	YES	YES
VXLAN Bridging + MLAG	YES	YES	YES	YES	YES	NO	NO	YES	YES	NO
VXLAN Multicast Decapsulation	YES	YES	YES	YES	NO	NO	NO	YES	YES	YES
Explicit Congestion Notification Marking based on Congestion	YES	YES	YES	YES	NO	YES	YES	YES	YES	YES
ACL Policing	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
<b>Feature</b>	<b>7500R Series</b>	<b>7500E Series</b>	<b>7280R Series</b>	<b>7280E Series</b>	<b>7150 Series</b>	<b>7010 Series</b>	<b>7050 Series</b>	<b>7050X Series</b>	<b>7250X Series</b>	<b>7300X Series</b>
Permit traffic during ACL reprogram	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Unidirectional Links	NO	YES	NO	YES	NO	NO	NO	NO	NO	NO
IEEE 802.1x PNAC (Port Based Network Access Control)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
IEEE 802.1X Accounting	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Audio Video Bridging (AVB)	YES	YES	YES	YES	YES	NO	NO	YES	YES	YES
MST-PVST Interop	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Loop Protection	NO	NO	NO	NO	NO	YES	YES	YES	YES	YES
Selective Q-in-Q	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO
802.1AE MACsec encryption	YES	YES	NO	NO	NO	NO	NO	NO	NO	NO
VXLAN Hardware HER	YES	YES	YES	YES	NO	NO	NO	YES	YES	YES
VXLAN P2P Pseudowire	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO
Per port per VLAN QoS	NO	NO	NO	NO	NO	YES	YES	YES	NO	NO

<b>Feature</b>	<b>7050X2 Series</b>	<b>7060X Series</b>	<b>7260X Series</b>	<b>7320X Series</b>	<b>7060X2 Series</b>	<b>7160 Series</b>
VLAN based port segmentation	YES	YES	YES	YES	YES	YES
Tagged native VLAN mode	YES	YES	YES	YES	YES	YES
IEEE 802.1D Bridging	YES	YES	YES	YES	YES	YES
IEEE 802.1Q Trunking	YES	YES	YES	YES	YES	YES
IEEE 802.1 QinQ	YES	YES	YES	YES	YES	YES
IEEE 802.1w RSTP (Rapid Spanning Tree)	YES	YES	YES	YES	YES	YES

Protocol)						
IEEE 802.1s MSTP (Multiple Spanning Tree Protocol)	YES	YES	YES	YES	YES	YES
Rapid Per VLAN Spanning Tree Protocol	YES	YES	YES	YES	YES	YES
BPDU Guard	YES	YES	YES	YES	YES	YES
BPDU filtering	YES	YES	YES	YES	YES	YES
Disable STP on a VLAN to support Routed Ports	YES	YES	YES	YES	YES	YES
<b>Feature</b>	<b>7050X2 Series</b>	<b>7060X Series</b>	<b>7260X Series</b>	<b>7320X Series</b>	<b>7060X2 Series</b>	<b>7160 Series</b>
Backup Interface	YES	YES	YES	YES	YES	YES
Interfaces per link Aggregation Groups	64	64	64	64	64	64
Link Aggregation Groups	YES	YES	YES	YES	YES	YES
Link Aggregation hash utilizing L2 & L3 packet header fields	YES	YES	YES	YES	YES	YES
IEEE 802.3ad LACP (Link Aggregation Control Protocol)	YES	YES	YES	YES	YES	YES
Multi-chassis Link Aggregation (MLAG)	YES	YES	YES	YES	YES	YES
IGMP Snooping + MLAG	YES	YES	YES	YES	YES	YES
VARP for MLAG	YES	YES	YES	YES	YES	YES
MLAG peer gateway	YES	YES	YES	YES	YES	YES
Port mirroring	YES	YES	YES	YES	YES	YES
Port-channel source for port mirroring	YES	YES	YES	YES	YES	YES
Port-channel and Multiple port destinations for mirroring	NO	NO	NO	NO	NO	YES
MAC security	YES	YES	YES	YES	YES	
Layer 2 Access Lists	YES	YES	YES	YES	YES	NO
IEEE 802.1Qaz DCBX (Data Center Bridge Exchange)	YES	YES	YES	YES	YES	YES
IEEE 802.1Qbb PFC (Priority-based Flow Control)	YES	YES	YES	YES	YES	YES
Interface rate	YES	YES	YES	YES	YES	YES

counters						
mac-address-table configuration	YES	YES	YES	NO	YES	YES
Auto-negotiation with 1000BASE-X	YES	YES	YES	NO	YES	YES
IEEE 802.3x PAUSE frames	YES	YES	YES	YES	YES	YES
Jumbo frames up to 9214 bytes	YES	YES	YES	YES	YES	YES
sFlow	YES	YES	YES	YES	YES	YES
Storm control	YES	YES	YES	YES	YES	YES
<b>Feature</b>	<b>7050X2 Series</b>	<b>7060X Series</b>	<b>7260X Series</b>	<b>7320X Series</b>	<b>7060X2 Series</b>	<b>7160 Series</b>
Root guard	YES	YES	YES	YES	YES	YES
Loop guard	YES	YES	YES	YES	YES	YES
Bridge assurance	YES	YES	YES	YES	YES	YES
Static mac multicast	YES	YES	YES	YES	YES	YES
VLAN Translation	YES	YES	YES	YES	YES	NO
<i>Dual Tag VLAN manipulation</i>	NO	NO	NO	NO	NO	NO
Control Plane Protection (CoPP)	YES	YES	YES	YES	YES	YES
Explicit Congestion Notification based on Congestion	YES	YES	NO	NO	YES	YES
Permit Traffic during ACL Reprogram	YES	YES	YES	YES	YES	YES
Unidirectional Links	NO	NO	NO	NO	NO	NO
IEEE 802.1x PNAC (Port Based Network Access Control)	YES	YES	YES	YES	YES	
IEEE 802.1X Accounting	YES	YES	YES	YES	YES	YES
Audio Video Bridging (AVB)	NO	NO	NO	NO	NO	NO
MST-PVST Interop	YES*	YES	YES*	YES	YES	YES
Loop Protection	YES*	YES	YES*	YES	YES	YES
Selective Q-in-Q	NO	NO	NO	NO	NO	NO
IEEE 802.1AE MACsec encryption	NO	NO	NO	NO	NO	NO

## Layer 3 Features

Feature	7500R Series	7500E Series	7280R Series	7280E Series	7150 Series	7010 Series	7050 Series	7050X Series	7250X Series	7300X Series
IPv4 Static Routing	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
IPv6 Static Routing	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Static v4 routes with v6 nexthops	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
SVI Counters	NO	NO	NO	NO	YES	NO	NO	YES	YES	NO
Routed Interfaces	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
L3 Multipathing / Equal Cost Multi-Path routing (ECMP)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Interfaces per ECMP group	128	128	128	128	32	64	32	128	128	128
Feature	7500R Series	7500E Series	7280R Series	7280E Series	7150 Series	7010 Series	7050 Series	7050X Series	7250X Series	7300X Series
VRRP	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
OSPFv2	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
OSPFv3	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
BGPv4	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
MP-BGP IPv6	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Layer 3 Access Control Lists	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
DHCP Relay	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Static ARP entries	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Route maps	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
RIPv2	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Loopback interfaces	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
NULL interface	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Static, Dynamic, Twice, and Cone NAT	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO
NAT redundancy state sync	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO
IS-IS	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Rapid Automated Indication of Link-Loss (RAIL)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Dataplane VRFs	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
BFD	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
BFD v4 VRF	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
BFD v6 VRF	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
OSPFv3 BFD	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
BFD on LAG member interfaces	YES	YES	YES	YES	NO	YES	YES	YES	YES	YES

(RFC7130)										
L3 ACL based DSCP rewrite	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Unicast Reverse Path Forwarding (URPF)	NO	YES	NO	YES	NO	YES	YES	YES	YES	YES
IP-in-IP ECMP nexthop group support	YES	NO	YES	No	YES	NO	YES	YES	YES	YES
Nexthop group with IP nexthops	YES	YES	YES	YES	YES	NO	YES	YES	YES	YES
Nexthop group GRE encapsulation support	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO
Nexthop group MPLS over GRE encapsulation support	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO
<b>Feature</b>	<b>7500R Series</b>	<b>7500E Series</b>	<b>7280R Series</b>	<b>7280E Series</b>	<b>7150 Series</b>	<b>7010 Series</b>	<b>7050 Series</b>	<b>7050X Series</b>	<b>7250X Series</b>	<b>7300X Series</b>
Policy Based Routing (PBR) for IPv4	YES	YES	YES	YES	NO	NO	NO	YES	YES	YES
Policy Based Routing (PBR) for IPv6	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO
IP over MPLS termination	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO
IP over GRE termination	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO
IP over MPLS over GRE termination	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO
IP over MPLS ingress	YES	YES	YES	YES	NO	NO	YES	NO	NO	NO
MPLS pop/swap	YES	YES	YES	YES	NO	NO	YES	YES	YES	YES
EoMPLS Pseudowire	YES	NO	YES	NO	NO	NO	NO	NO	NO	NO
VXLAN Routing	YES	NO	YES	YES	YES	NO	NO	YES	YES	YES
VXLAN Routing with Overlay VRFs	YES	NO	YES	YES	NO	NO	NO	YES	YES	YES
IPv6 Dataplane VRFs	YES	YES	YES	YES	NO	YES	YES	YES	YES	YES
Layer 3 Subinterfaces	YES	YES	YES	YES	NO	YES	NO	YES	YES	YES
Selective Route Download	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
BGP NSF for L3 SSO	NO	YES	NO	NO	NO	NO	NO	NO	NO	NO
OSPF NSF for L3 SSO	NO	YES	NO	NO	NO	NO	NO	NO	NO	NO
BGP graceful restart	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
OSPF graceful restart	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

BGP UCMP	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
ISIS Segment Routing	YES	YES	YES	YES	NO	YES	YES	YES	YES	YES
ISIS Over GRE Tunnels	YES	YES	YES	YES	NO	YES	YES	YES	YES	YES
RFC 5549 (BGP IPv4 routes with IPv6 nexthops)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
RFC 5838 support for OSPFv3 AF	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
BFD SSO for BGP	NO	YES	NO	NO	NO	NO	NO	NO	NO	NO

Feature	7050X2 Series	7060X Series	7260X Series	7320X Series	7060X2 Series	7160 Series
IPv4 Static Routing	YES	YES	YES	YES	YES	YES
IPv6 Static Routing	YES	YES	YES	YES	YES	YES
Static IPv4 routes with IPv6 nexthops	YES	YES	YES	YES	YES	YES
Feature	7050X2 Series	7060X Series	7260X Series	7320X Series	7060X2 Series	7160 Series
SVI counters	YES	YES	NO	NO	NO	YES
Routed Interfaces	YES	YES	YES	YES	YES	YES
L3 Multipathing / Equal Cost Multi-Path routing (ECMP)	YES	YES	YES	YES	YES	YES
Interfaces per ECMP group	128	128	128	128	128	63
VRRP	YES	YES	YES	YES	YES	YES
VRRP v6	YES	YES	YES	YES	YES	YES
OSPFv2	YES	YES	YES	YES	YES	YES
OSPFv3	YES	YES	YES	YES	YES	YES
BGPv4	YES	YES	YES	YES	YES	YES
MP-BGP IPv6	YES	YES	YES	YES	YES	YES
Layer 3 Access Control Lists	YES	YES	YES	YES	YES	YES
DHCP Relay	YES	YES	YES	YES	YES	YES
Static ARP entries	YES	YES	YES	YES	YES	YES
Route maps	YES	YES	YES	YES	YES	YES
RIPv2	YES	YES	YES	YES	YES	YES
Loopback interfaces	YES	YES	YES	YES	YES	YES
NULL interface	YES	YES	YES	YES	YES	YES
Static , Dynamic,	NO	NO	NO	NO	NO	NO

Twice, and Cone NAT						
NAT redundancy state sync	NO	NO	NO	NO	NO	NO
IS-IS	YES	YES	YES	YES	YES	YES
Rapid Automated Indication of LinkLoss (RAIL)	YES	YES	YES	YES	YES	YES
Dataplane VRFs	YES	YES	YES	YES	YES	YES
BFD	YES	YES	YES	YES	YES	YES
BFD v4 VRF	YES	YES	YES	YES	YES	YES
BFD v6 VRF	YES	YES	YES	YES	YES	YES
OSPFv3 BFD	YES	YES	YES	YES	YES	YES
BFD on LAG member interfaces (RFC7130)	YES	YES	YES	YES	YES	NO
Unicast Reverse path forwarding (urpf)	YES	YES	YES	YES	YES	NO
<b>Feature</b>	<b>7050X2 Series</b>	<b>7060X Series</b>	<b>7260X Series</b>	<b>7320X Series</b>	<b>7060X2 Series</b>	<b>7160 Series</b>
IP-in-IP ECMP Nexthop group support	YES	YES	YES	YES	YES	NO
IP-in-IP termination (decap group)	YES	YES	YES	YES	YES	NO
GRE ECMP Nexthop group support	NO	NO	NO	NO	NO	NO
IP Nexthop groups support	YES	YES	YES	YES	YES	NO
Policy Based Routing (PBR) for IPv4	YES	YES	YES	YES	YES	NO
Policy Based Routing (PBR) for IPv6	YES	YES	YES	YES	YES	NO
IP over MPLS termination (decap group)	NO	NO	NO	NO	NO	NO
IP over GRE Termination (decap group)	NO	NO	NO	NO	NO	NO
IP over MPLS over GRE termination (decap group)	NO	NO	NO	NO	NO	NO
IPv6 Dataplane VRFs	YES	YES	YES	YES	YES	YES
Layer 3 Subinterfaces	YES	YES	YES	YES	YES	NO
Selective Route Download	YES	YES	YES	YES	YES	YES

BGP NSF for L3 SSO	NO	NO	NO	NO	NO	NO
OSPF NSF for L3 SSO	NO	NO	NO	NO	NO	NO
BGP graceful restart	YES	YES	YES	YES	YES	YES
OSPF graceful restart	YES	YES	YES	YES	YES	YES
BGP UCMP	YES	YES	YES	YES	YES	NO
IS-IS over GRE tunnels	NO	NO	NO	NO	NO	NO
RFC 5549 (BGP IPv4 routes with IPv6 nexthops)	YES	YES	YES	YES	YES	YES
RFC 5838 support for OSPFv3 AF	YES	YES	YES	YES	YES	YES
IP Directed Broadcast	YES	YES	YES	YES	YES	YES
BFD SSO for BGP	NO	NO	NO	NO	NO	NO

## Multicast Features

Feature	7500R Series	7500E Series	7280R Series	7280E Series	7150 Series	7010 Series	7050 Series	7050X Series	7250X Series	7300X Series
IGMPv2 Snooping	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
IGMPv2 Querier	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
IGMPv3 Snooping	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
IGMPv3 Querier	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
IGMP Host Proxy	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
PIM-SSM	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
PIM-SM/SSM + IGMP + PIM-BSR	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
PIM-MBR	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Anycast RP	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
MSDP	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
PIM + MLAG	YES*	YES	YES*	YES	YES	YES	YES	YES	YES	YES
Static Multicast Routes	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Multicast Route Counters	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO
IP Multicast Multipath (ECMP)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
PIM-SM/SSM + IGMP + PIM-BSR VRF	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
IGMP Host Proxy - VRF	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Anycast RP VRF	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
MSDP - VRF	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES



PIM-BIDIR	NO	NO	NO	NO	NO	NO	NO	YES	YES	YES
PIM-BIDIR VRF	NO	NO	NO	NO	NO	NO	NO	YES	YES	YES

Feature	7050X2 Series	7060X Series	7260X Series	7320X Series	7060X2 Series	7160 Series
IGMPv2 Snooping	YES	YES	YES	YES	YES	YES
IGMPv2 Querier	YES	YES	YES	YES	YES	YES
IGMPv3 Snooping	YES	YES	YES	YES	YES	YES
IGMPv3 Querier	YES	YES	YES	YES	YES	YES
IGMP Snooping Proxy	YES	YES	YES	YES	YES	YES
IGMP Snooping Proxy + MLAG	NO	NO	NO	NO	NO	NO
IGMP Host Proxy	YES	YES	YES	YES	YES	YES
PIM-SSM	YES	YES	YES	YES	YES	YES
Feature	7050X2 Series	7060X Series	7260X Series	7320X Series	7060X2 Series	7160 Series
PIM-SM/SSM+ IGMP	YES	YES	YES	YES	YES	YES
PIM-MBR	YES	YES	YES	YES	YES	YES
Anycast RP	YES	YES	YES	YES	YES	YES
MSDP	YES	YES	YES	YES	YES	YES
PIM + MLAG	YES	YES	YES	YES	YES	YES
Static Multicast Routes	YES	YES	YES	YES	YES	YES
Multicast Route Counters	NO	NO	NO	NO	NO	NO
IP Multicast Multipath (ECMP)	YES	YES	YES	YES	YES	YES
PIM-SM/SSM + IGMP + PIM-BSR	YES	YES	YES	YES	YES	YES
PIM Bidirectional	YES	YES	YES	YES	YES	NO
VRF Support for IP Multicast	YES	YES	YES	YES	YES	YES

## MPLS Features

Feature	7500R Series	7280R Series	7500E Series	7280E Series	7150 Series	7010 Series	7050 Series	7050X Series	7250X Series	7300X Series
Static MPLS label push	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO
Static MPLS label pop	YES	YES	YES	YES	NO	NO	NO	YES	YES	YES
Static MPLS label swap	YES	YES	YES	YES	NO	NO	NO	YES	YES	YES
MPLS on L3 sub-interfaces	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO
MPLS nexthop groups v4	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO
MPLS nexthop groups v6	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO
MPLS multi-label stack push	YES (4)	YES (4)	YES	YES	NO	NO	NO	NO	NO	NO
BGP recursive route resolution over MPLS nexthop groups	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO
Feature	7500R Series	7280R Series	7500E Series	7280E Series	7150 Series	7010 Series	7050 Series	7050X Series	7250X Series	7300X Series
Static MPLS push for v4 and v6 IP routes with v4 or v6 nexthops	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO
Implicit Null - PHP	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO
Explicit Null - 0 or 2	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO
Nexthop group counters	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO
MPLSoGRE encap	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO
MPLSoGRE decap	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO
GRE key based decap	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO
Automatic payload handling on LSR during POP (inner MPLS, IPv4, IPv6)	YES	YES	YES	YES	NO	NO	NO	YES	YES	YES
MPLS Hashing ECMP	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO

	(3 labels + L3 + L4)	(3 labels + L3 + L4)	(3 labels + L3 + L4)	(3 labels + L3 + L4)						
MPLS Hashing LAG	YES (3 labels + L3 + L4)	YES (3 labels + L3 + L4)	YES (3 labels + L3 + L4)	YES (3 labels + L3 + L4)	NO	NO	NO	YES (src-ip, dst-ip, label)	YES (src-ip, dst-ip, label)\	YES (src-ip, dst-ip, label)
MPLS ping / traceroute	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO
Static QoS - derive EXP from DSCP on push	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO
Static QoS - copy MPLS EXP on SWAP	YES	YES	YES	YES	NO	NO	NO	YES	YES	YES
Static QoS - copy EXP to internal TC	YES	YES	YES	YES	NO	NO	NO	YES	YES	YES
LDP control plane for transit LSR (swap / pop)	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO
ISIS-SR transit LSR	YES	YES	YES	YES	NO	NO	NO	YES	YES	YES
BGP-LU RX	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO
<b>Feature</b>	<b>7500R Series</b>	<b>7280R Series</b>	<b>7500E Series</b>	<b>7280E Series</b>	<b>7150 Series</b>	<b>7010 Series</b>	<b>7050 Series</b>	<b>7050X Series</b>	<b>7250X Series</b>	<b>7300X Series</b>
BGP recursive route resolution over BGP-LU tunnels	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO
MPLS class-based forwarding (DSCP + IP)	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO
EoMPLS support for Ethernet PWs or L2VPN	YES*	YES*	NO	NO	NO	NO	NO	NO	NO	NO
LDP signaled PseudoWire support	YES*	YES*	NO	NO	NO	NO	NO	NO	NO	NO

<b>Feature</b>	<b>7050X2 Series</b>	<b>7060X Series</b>	<b>7260X Series</b>	<b>7320X Series</b>	<b>7060X2 Series</b>	<b>7160 Series</b>
Static MPLS label push	NO	NO	NO	NO	NO	NO
Static MPLS label pop	NO	YES	YES	YES	YES	NO
Static MPLS label	NO	YES	YES	YES	YES	NO

swap						
MPLS on L3 sub-interfaces	NO	NO	NO	NO	NO	NO
MPLS nexthop groups v4	NO	NO	NO	NO	NO	NO
MPLS nexthop groups v6	NO	NO	NO	NO	NO	NO
MPLS multi-label stack push	NO	NO	NO	NO	NO	NO
BGP recursive route resolution over MPLS nexthop groups	NO	NO	NO	NO	NO	NO
Static MPLS push for v4 and v6 IP routes with v4 or v6 nexthops	NO	NO	NO	NO	NO	NO
Implicit Null - PHP	NO	YES	YES	YES	YES	NO
Explicit Null - 0 or 2	NO	NO	NO	NO	NO	NO
Nexthop group counters	NO	NO	NO	NO	NO	
MPLSoGRE encap	NO	NO	NO	NO	NO	NO
MPLSoGRE decap	NO	NO	NO	NO	NO	NO
GRE key based decap	NO	NO	NO	NO	NO	NO
Automatic payload handling on LSR during POP (inner MPLS, IPv4, IPv6)	NO	NO	NO	NO	NO	NO
MPLS Hashing ECMP	NO	NO	NO	NO	NO	NO
MPLS Hashing LAG	NO	YES (src-ip, dst-ip, label)	YES (src-ip, dst-ip, label)	YES (src-ip, dst-ip, label)	YES (src-ip, dst-ip, label)	NO
<b>Feature</b>	<b>7050X2 Series</b>	<b>7060X Series</b>	<b>7260X Series</b>	<b>7320X Series</b>	<b>7060X2 Series</b>	<b>7160 Series</b>
MPLS ping / traceroute	NO	NO	NO	NO	NO	NO
Static QoS - derive EXP from DSCP on push	NO	NO	NO	NO	NO	NO
Static QoS - copy MPLS EXP on SWAP	NO	YES	YES	YES	YES	NO
Static QoS - copy EXP to internal TC	NO	NO	NO	NO	NO	NO
LDP control plane for transit LSR (swap / pop)	NO	NO	NO	NO	NO	NO
ISIS-SR transit LSR	NO	NO	NO	NO	NO	NO

BGP-LU RX	NO	NO	NO	NO	NO	NO
BGP recursive route resolution over BGP-LU tunnels	NO	NO	NO	NO	NO	NO
MPLS class-based forwarding (DSCP + IP)	NO	NO	NO	NO	NO	NO
EoMPLS support for Ethernet PWs or L2VPN	NO	NO	NO	NO	NO	NO
LDP signaled PseudoWire support	NO	NO	NO	NO	NO	NO

# Supported Hardware

## Fixed Systems And Accessories

- DCS-7010T-48
- DCS-7010T-48-DC
- DCS-7050Q-16-F
- DCS-7050Q-16-R
- DCS-7050QX-32-F
- DCS-7050QX-32-R
- DCS-7050QX-32-SSD-F
- DCS-7050QX-32-SSD-R
- DCS-7050QX-32S-F
- DCS-7050QX-32S-R
- DCS-7050QX-32S-SSD-F
- DCS-7050QX-32S-SSD-R
- DCS-7050QX2-32S-F
- DCS-7050QX2-32S-R
- DCS-7050S-52-F
- DCS-7050S-52-R
- DCS-7050S-52-SSD-F
- DCS-7050S-52-SSD-R
- DCS-7050S-64-F
- DCS-7050S-64-R
- DCS-7050S-64-SSD-F
- DCS-7050S-64-SSD-R
- DCS-7050SX-64-F
- DCS-7050SX-64-R
- DCS-7050SX-64-SSD-F
- DCS-7050SX-64-SSD-R
- DCS-7050SX-72-F
- DCS-7050SX-72-R
- DCS-7050SX-72-SSD-F
- DCS-7050SX-72-SSD-R
- DCS-7050SX-96-F
- DCS-7050SX-96-R
- DCS-7050SX-96-SSD-F
- DCS-7050SX-96-SSD-R
- DCS-7050SX-128-F
- DCS-7050SX-128-R
- DCS-7050SX-128-SSD-F
- DCS-7050SX-128-SSD-R
- DCS-7050SX2-72Q-F
- DCS-7050SX2-72Q-R
- DCS-7050SX2-128-F
- DCS-7050TX-72-SSD-F
- DCS-7050TX-72-SSD-R
- DCS-7050TX-96-F
- DCS-7050TX-96-R
- DCS-7050TX-96-SSD-F
- DCS-7050TX-96-SSD-R
- DCS-7050TX-128-F
- DCS-7050TX-128-R
- DCS-7050TX-128-SSD-R
- DCS-7050TX-128-SSD-F
- DCS-7050TX2-128-F
- DCS-7050TX2-128-R
- DCS-7060CX-32S-F
- DCS-7060CX-32S-R
- DCS-7060CX-32S-SSD-F
- DCS-7060CX-32S-SSD-R
- DCS-7060CX2-32S-F
- DCS-7060CX2-32S-R
- DCS-7150S-24-F
- DCS-7150S-24-R
- DCS-7150S-24-CL-F
- DCS-7150S-24-CL-R
- DCS-7150S-24-CL-SSD-F
- DCS-7150S-24-CL-SSD-R
- DCS-7150S-52-CL-F
- DCS-7150S-52-CL-R
- DCS-7150S-52-CL-SSD-F
- DCS-7150S-52-CL-SSD-R
- DCS-7150S-64-CL-F
- DCS-7150S-64-CL-R
- DCS-7150-64-CL-SSD-F
- DCS-7150-64-CL-SSD-R
- DCS-7160-32CQ-F
- DCS-7160-32CQ-R
- DCS-7160-32CQ-SSD-F
- DCS-7160-32CQ-SSD-R
- DCS-7160-48YC6-F
- DCS-7160-48YC6-R
- DCS-7160-48TC6-F
- DCS-7160-48TC6-R
- DCS-7250QX-64-F
- DCS-7280QR-C36S-F
- DCS-7280QR-C36S-R
- DCS-7280QR-C36S-M-F
- DCS-7280QR-C36S-M-R
- DCS-7280QR-C72-F
- DCS-7280QR-C72-R
- DCS-7280QR-C72-M-F
- DCS-7280QR-C72-M-R
- DCS-7280SR-48C6-F
- DCS-7280SR-48C6-R
- DCS-7280SR-48C6-M-F
- DCS-7280SR-48C6-M-R
- DCS-7280TR-48C6-F
- DCS-7280TR-48C6-R
- DCS-7280TR-48C6-M-F
- DCS-7280TR-48C6-M-R
- DCS-7280CR-48-F
- DCS-7280CR-48-D
- DCS-7280CR-48-DC-F
- DCS-7280SR2-48YC6-F
- DCS-7280SR2-48YC6-R
- DCS-7020TR-48-F
- DCS-7020TR-48-R
- PWR-1100AC-F
- PWR-1100AC-R
- PWR-1900AC-F
- PWR-1900-DC-F
- PWR-1900-DC-R
- PWR-745AC-F
- PWR-745AC-R
- PWR-750AC-F
- PWR-750AC-R
- PWR-650AC
- PWR-460AC-F
- PWR-460AC-R
- PWR-460DC-F
- PWR-460DC-R
- PWR-500AC-F
- PWR-500AC-R
- PWR-500-DC-F
- PWR-500-DC-R

- DCS-7050SX2-128-R
- DCS-7050T-36-F
- DCS-7050T-36-R
- DCS-7050T-52-F
- DCS-7050T-52-R
- DCS-7050T-52-SSD-F
- DCS-7050T-52-SSD-R
- DCS-7050T-64-F
- DCS-7050T-64-R
- DCS-7050T-64-SSD-F
- DCS-7050T-64-SSD-R
- DCS-7050TX-48-F
- DCS-7050TX-48-R
- DCS-7050TX-48-SSD-F
- DCS-7050TX-48-SSD-R
- DCS-7050TX-64-F
- DCS-7050TX-64-R
- DCS-7050TX-64-SSD-R
- DCS-7050TX-64-SSD-F
- DCS-7050TX-72-F
- DCS-7050TX-72-R
- DCS-7250QX-64-R
- DCS-7250QX-64-SSD-F
- DCS-7250QX-64-SSD-R
- DCS-7260CX-64-F
- DCS-7260CX-64-R
- DCS-7260CX-64-SSD-F
- DCS-7260CX-64-SSD-R
- DCS-7260QX-64-F
- DCS-7260QX-64-R
- DCS-7260QX-64-SSD-F
- DCS-7260QX-64-SSD-R
- DCS-7280SE-64-F
- DCS-7280SE-64-R
- DCS-7280SE-68-F
- DCS-7280SE-68-R
- DCS-7280SE-72-F
- DCS-7280SE-72-R
- DCS-7280QR-C36-F
- DCS-7280QR-C36-R
- DCS-7280QR-C36-M-F
- DCS-7280QR-C36-M-R
- FAN-7002-F
- FAN-7002-R
- FAN-7002H-F
- FAN-7000-F
- FAN-7000-R
- FAN-7000H-F
- FAN-7000H-R

## Modular Systems and Accessories

- DCS-7508
- DCS-7504
- DCS-7504N
- DCS-7508N
- DCS-7512N
- 7500E-SUP
- 7500E-SUP-D
- 7500-SUP2
- 7500-SUP2-D
- 7500E-36Q-LC
- 7500E-72S-LC
- 7500E-48S-LC
- 7500E-48T-LC
- 7500E-12CM-LC
- 7500E-6C2-LC
- 7500E-12CQ-LC
- 7500E-6CFPX-LC
- 7500R-36CQ-LC
- DCS-7304
- DCS-7308
- DCS-7316
- 7300-SUP
- 7300-SUP-D
- 7300X-32Q-LC
- 7300X-64S-LC
- 7300X-64T-LC
- 7304X-FM
- 7308X-FM
- 7316X-FM
- 7320X-32C-LC
- 7324X-FM-F
- 7328X-FM-F
- 7304-S-FAN
- 7308-S-FAN
- PWR-2900AC
- PWR-3KT-AC-RED

- 7500R-36Q-LC
- 7500RM-36CQ-LC
- 7500R-48S2CQ-LC
- 7500R2-36CQ-LC
- 7500R2-18CQ-LC
- 7504E-FM
- 7508E-FM
- 7508R-FM
- 7504R-FM
- 7512R-FM

- PWR-3K-DC-RED
- PWR-3K-AC-F
- PWR-3K-AC-R
- PWR-2700-DC-F
- PWR-2700-DC-R
- FAN-7002-F
- FAN-7002-R

## Transceivers

- 100GBASE-SR4
- 100GBASE-AOC
- 100GBASE-CR4
- 100GBASE-LR4
- 100GBASE-LRL4
- 100GBASE-CWDM4
- 100GE-DWDM2
- CFP2-100GBASE-LR4
- CFP2-100GBASE-ER4
- CFP2-100GBASE-XSR10
- CFPX-100G-DWDM
- CFPX-200G-DWDM
- 40GBASE-AOC
- 40GBASE-CR4
- 40GBASE-LR4
- 40GBASE-PLR4
- 40GBASE-PLRL4
- 40GBASE-SR4
- 40GBASE-ER4
- 40GBASE-XSR4
- 40GBASE-LRL4
- 40GBASE-UNIV
- 40GBASE-SRBD

- 25GBASE-CR
- 25GBASE-SR
- 25GBASE-AR
- 25GBASE-LR
- 25GBASE-LRL
- 10GBASE-AOC
- 10GBASE-CR
- 10GBASE-DWDM
- 10GBASE-DWDM-ZR
- 10GBASE-DWDM-T
- 10GBASE-ZR
- 10GBASE-ER
- 10GBASE-LR
- 10GBASE-LRL
- 10GBASE-SR
- 10GBASE-SRL
- 1000BASE-SX
- 1000BASE-LX
- 1000BASE-BX10-D
- 1000BASE-BX10-U
- 1000BASE-T



## Software Support Matrix

Platform	First Supported Software Release
DCS-7010T-48	EOS-4.14.2F
DCS-7010T-48-DC	EOS-4.14.5F
DCS-7050S-52	EOS-4.7.3
DCS-7050S-64	EOS-4.7.3
DCS-7050T-36	EOS-4.9.3
DCS-7050T-52	EOS-4.8.3
DCS-7050T-64	EOS-4.8.3
DCS-7050Q-16	EOS-4.8.2.1
DCS-7050QX-32	EOS-4.12.4
DCS-7050QX-32S	EOS-4.14.0F
DCS-7050QX-32S-SSD	EOS-4.14.0F
DCS-7050QX2-32S	EOS-4.18.0F
DCS-7050SX-64	EOS-4.14.0F
DCS-7050SX-64-SSD	EOS-4.14.0F
DCS-7050SX-72	EOS-4.14.2F
DCS-7050SX-72-SSD	EOS-4.14.2F
DCS-7050SX-96	EOS-4.14.2F
DCS-7050SX-96-SSD	EOS-4.14.2F
DCS-7050SX-128	EOS-4.13.0F
DCS-7050SX-128-SSD	EOS-4.13.0F
DCS-7050SX2-72	EOS-4.18.0F
DCS-7050SX2-128	EOS-4.18.0F
DCS-7050TX-48	EOS-4.14.0F
DCS-7050TX-48-SSD	EOS-4.14.0F
DCS-7050TX-64	EOS-4.14.0F
DCS-7050TX-64-SSD	EOS-4.14.0F
DCS-7050TX-72	EOS-4.14.4F
DCS-7050TX-72-SSD	EOS-4.14.4F
DCS-7050TX-96	EOS-4.14.4F
DCS-7050TX-96-SSD	EOS-4.14.4F
DCS-7050TX-128	EOS-4.14.2F
DCS-7050TX-128-SSD	EOS-4.14.2F
DCS-7050TX2-128	EOS-4.18.0F
DCS-7060CX-32S	EOS-4.18.0F
DCS-7060CX-32S-SSD	EOS-4.18.0F
DCS-7060CX2-32S	EOS-4.18.0F
DCS-7060CX2-32S-SSD	EOS-4.18.0F
DCS-7150S-24	EOS-4.11.0
DCS-7150S-24-CL	EOS-4.11.0

DCS-7150S-52-CL	EOS-4.11.1
DCS-7150S-64-CL	EOS-4.11.3
DCS-7160-48YC6	EOS-4.18.0F
DCS-7160-48TC6	EOS-4.18.1F
DCS-7160-32CQ	EOS-4.18.0F
DCS-7160S-32CQ-SSD	EOS-4.18.0F
DCS-7250QX-64	EOS-4.13.0F
DCS-7260CX-64	EOS-4.18.0F
DCS-7260CX-64-SSD	EOS-4.18.0F
DCS-7260QX-64	EOS-4.18.0F
DCS-7260QX-64-SSD	EOS-4.18.0F
DCS-7280SE-64	EOS-4.14.2F
DCS-7280SE-68	EOS-4.15.2F
DCS-7280SE-72	EOS-4.14.2F
DCS-7280QR-C36	EOS-4.17.1F
DCS-7280QR-C36S	EOS-4.18.1F
DCS-7280QR-C72	EOS-4.18.1F
DCS-7280SR-48C6	EOS-4.17.1F
DCS-7280TR-48C6	EOS-4.17.1F
DCS-7280CR-48	EOS-4.17.1F
DCS-7280SR2-48YC6	EOS-4.18.3F
DCS-7020TR-48	EOS-4.18.3F
DCS-7304	EOS-4.13.1F
DCS-7308	EOS-4.13.1F
DCS-7316	EOS-4.14.2F
7300-SUP	EOS-4.13.1F
7300X-32Q-LC	EOS-4.13.1F
7300X-64S-LC	EOS-4.13.1F
7300X-64T-LC	EOS-4.13.1F
7304X-FM	EOS-4.13.1F
7308X-FM	EOS-4.13.1F
7316X-FM	EOS-4.14.2F
7304-S-FAN	EOS-4.14.2F
7308-S-FAN	EOS-4.14.2F
7320X-32C-LC	EOS-4.18.1F
7324X-FM	EOS-4.18.1F
7328X-FM	EOS-4.18.1F
DCS-7504	EOS-4.6.1
DCS-7508	EOS-4.5.0
7500E-SUP	EOS-4.12.1
7500E-36Q-LC	EOS-4.12.0
7500E-48S-LC	EOS-4.12.0
7500E-72S-LC	EOS-4.12.0

7500E-12CM-LC	EOS-4.13.0F
7500E-6C2-LC	EOS-4.14.0F
7500E-48T-LC	EOS-4.15.0F
7500E-12CQ-LC	EOS-4.15.2F
7500R-36CQ-LC	EOS-4.17.1F
7500R-36Q-LC	EOS-4.17.1F
7500R-48S2CQ-LC	EOS-4.17.1F
7500R-8CFPX-LC	EOS-4.18.2F
7500RM-36CQ-LC	EOS-4.18.1F
7500R2-36CQ-LC	EOS-4.18.3F
7500R2-18CQ-LC	EOS-4.18.3F
7504E-FM	EOS-4.12.0
7508E-FM	EOS-4.12.0
7508R-FM	EOS-4.17.1F
7504R-FM	EOS-4.17.1F
7512R-FM	EOS-4.17.2F

## Picking compatible versions for MLAG ISSU Upgrade/Downgrade

Upgrading/downgrading using the MLAG ISSU procedure, from release EOS-A.B.C to release EOS-D.E.F can be done in one or multiple phases.

- 1) If A.B.C is a compatible EOS version for D.E.F (refer to the A.B.X or D.E.X release table) then you can directly do MLAG ISSU using the D.E.F version by following the MLAG ISSU procedure. (A.B.C -> D.E.F).

Example: The customer wants to upgrade from 4.12.10 to 4.15.4F. In the Release 4.15.X MLAG ISSU Table, the 4.15.4F version has 4.12.10 as a MLAG ISSU compatible version, so customer can directly do an MLAG ISSU upgrade from 4.12.10 to 4.15.4F.

- 2) If A.B.C doesn't exist in the list of compatible versions for D.E.F (refer to the A.B.X or D.E.X release table), then look for the A.B.Y version in D.E.F's ISSU compatible EOS versions, do MLAG ISSU upgrade/downgrade from A.B.C to A.B.Y and then do MLAG ISSU upgrade/downgrade to D.E.F by following MLAG ISSU procedure (A.B.C -> A.B.Y -> D.E.F). Here, Y can be greater than or less than C.

Example: The customer wants to upgrade from 4.14.1F to 4.15.4F. In Release 4.15.X MLAG ISSU Table 4.15.4F version has 4.14.9F as MLAG ISSU compatible version and Release 4.14.X MLAG ISSU Table 4.14.9F has 4.14.1F as MLAG ISSU compatible version, so customer can do MLAG ISSU upgrade from 4.14.1F to 4.14.9F and then to 4.15.4F.

- 3) Look for an D.E.Z version that's MLAG ISSU compatible with both A.B.C and D.E.F. Do MLAG ISSU upgrade/downgrade from A.B.C to D.E.Z and then do MLAG ISSU upgrade/downgrade to D.E.F (A.B.C -> D.E.Z -> D.E.F). Here Z can be greater than or less than F.

Example: The customer wants to upgrade from 4.14.7F to 4.15.4F. In Release 4.15.X MLAG ISSU Table 4.15.0F version has 4.14.7F as MLAG ISSU compatible version and 4.15.4F has 4.15.0F as MLAG ISSU compatible version, so customer can do MLAG ISSU upgrade from 4.14.7F to 4.15.0F and then to 4.15.4F.

- 4) Look for an G.H.I version that's MLAG ISSU compatible with both A.B.C and D.E.F. Do an MLAG ISSU upgrade/downgrade from A.B.C to G.H.I and then do Mlag ISSU upgrade/downgrade to D.E.F (A.B.C -> G.H.I -> D.E.F).

- 5) In a highly unlikely scenario, if any of the above procedures are not acceptable, MLAG ISSU can be achieved by picking multiple intermediate versions.

## Release 4.18.X MLAG ISSU Table

EOS Version	Mlag ISSU compatible EOS versions
4.18.0F	4.16.6M-4.16.9M, 4.16.7FX-MLAGISSU-TWO-STEP, 4.16.8FX-MLAGISSU-TWO-STEP, 4.17.0F-4.17.3F
4.18.1F	4.16.6M-4.16.10M, 4.16.7FX-MLAGISSU-TWO-STEP, 4.16.8FX-MLAGISSU-TWO-STEP, 4.17.0F-4.17.3F, 4.17.4M, 4.18.0F
4.18.1.1F	4.16.6M-4.16.10M, 4.16.7FX-MLAGISSU-TWO-STEP, 4.16.8FX-MLAGISSU-TWO-STEP, 4.17.0F-4.17.3F, 4.17.4M, 4.18.0F, 4.18.1F
4.18.2F	4.16.6M-4.16.10M, 4.16.7FX-MLAGISSU-TWO-STEP, 4.16.8FX-MLAGISSU-TWO-STEP, 4.17.0F-4.17.3F, 4.17.4M, 4.18.0F, 4.18.1F, 4.18.1.1F
4.18.3F	4.16.6M-4.16.10M, 4.16.7FX-MLAGISSU-TWO-STEP, 4.16.8FX-MLAGISSU-TWO-STEP, 4.17.0F-4.17.3F, 4.17.4M, 4.18.0F, 4.18.1F, 4.18.1.1F 4.18.2F

## Release 4.17.X MLAG ISSU Table

EOS Version	Mlag ISSU compatible EOS versions
4.17.0F	4.16.6M
4.17.1F	4.16.6M-4.16.7M, 4.16.7FX-MLAGISSU-TWO-STEP, 4.17.0F
4.17.2F	4.16.6M-4.16.8M, 4.16.7FX-MLAGISSU-TWO-STEP, 4.16.8FX-MLAGISSU-TWO-STEP, 4.17.0F-4.17.1F
4.17.3F	4.16.6M-4.16.9M, 4.16.7FX-MLAGISSU-TWO-STEP, 4.16.8FX-MLAGISSU-TWO-STEP, 4.17.0F-4.17.2F
4.17.4M	4.16.6M-4.16.9M, 4.16.7FX-MLAGISSU-TWO-STEP, 4.16.8FX-MLAGISSU-TWO-STEP, 4.17.0F-4.17.3F

## Release 4.16.X MLAG ISSU Table

EOS Version	Mlag ISSU compatible EOS versions
4.16.6M	4.16.7FX-MLAGISSU-TWO-STEP
4.16.7M	4.16.6M, 4.16.7FX-MLAGISSU-TWO-STEP
4.16.8M	4.16.6M-4.16.7M,

	4.16.7FX-MLAGISSU-TWO-STEP - 4.16.8FX-MLAGISSU-TWO-STEP
4.16.9M	4.16.6M-4.16.8M, 4.16.7FX-MLAGISSU-TWO-STEP - 4.16.8FX-MLAGISSU-TWO-STEP
4.16.10M	4.16.6M-4.16.9M, 4.16.7FX-MLAGISSU-TWO-STEP - 4.16.8FX-MLAGISSU-TWO-STEP
4.16.7FX-MLAGISSU -TWO-STEP	4.9.11, 4.10.8.1, 4.11.12, 4.12.11, 4.13.16M, 4.14.14M, 4.15.0F-4.15.4F, 4.15.5M-4.15.7M, 4.16.6M, 4.16.7M, 4.17.0F
4.16.8FX-MLAGISSU -TWO-STEP	4.9.11, 4.10.8.1, 4.11.12, 4.12.11, 4.13.16M, 4.14.15M, 4.15.0F-4.15.4F, 4.15.5M-4.15.8M, 4.16.6M-4.16.8M, 4.17.0F-4.17.1F

## Release 4.15.X MLAG ISSU Table

EOS Version	Mlag ISSU compatible EOS versions
4.15.0F	4.9.11, 4.10.8.1, 4.11.11, 4.12.10, 4.13.12M, 4.14.7M
4.15.1F	4.9.11, 4.10.8.1, 4.11.11, 4.12.10, 4.13.12M, 4.14.7M, 4.15.0F
4.15.2F	4.9.11, 4.10.8.1, 4.11.11, 4.12.10, 4.13.12M, 4.14.9M, 4.15.0F-4.15.1F
4.15.3F	4.9.11, 4.10.8.1, 4.11.11, 4.12.10, 4.13.12M, 4.14.9M, 4.15.0F-4.15.2F
4.15.4F	4.9.11, 4.10.8.1, 4.11.11, 4.12.10, 4.13.12M, 4.14.9M, 4.15.0F-4.15.3F
4.15.5M	4.9.11, 4.10.8.1, 4.11.11, 4.12.10, 4.13.12M, 4.14.10M, 4.15.0F-4.15.4F
4.15.6M	4.9.11, 4.10.8.1, 4.11.12, 4.12.11, 4.13.15M, 4.14.12M, 4.15.0F-4.15.4F, 4.15.5M
4.15.7M	4.9.11, 4.10.8.1, 4.11.12, 4.12.11, 4.13.16M, 4.14.13M, 4.15.0F-4.15.4F, 4.15.5M-4.15.6M
4.15.8M	4.9.11, 4.10.8.1, 4.11.12, 4.12.11, 4.13.16M, 4.14.13M, 4.15.0F-4.15.4F, 4.15.5M-4.15.7M
4.15.9M	4.9.11, 4.10.8.1, 4.11.12, 4.12.11, 4.13.16M, 4.14.15M, 4.15.0F-4.15.4F, 4.15.5M-4.15.8M
4.15.10M	4.9.11, 4.10.8.1, 4.11.12, 4.12.11, 4.13.16M, 4.14.16M, 4.15.0F-4.15.4F, 4.15.5M-4.15.9M

## Enhancements added in 4.18.3F

- Rate limiting for mirroring sessions is now supported on selected platforms. (168523)
- On a Border Leaf VTEP, source IP address and source MAC address in ARP requests can be rewritten to be the local SVI IP address and local bridge MAC address. (181896)
- Added support for advertise-only option to the aggregate-address command. (182777)
- On the DCS-7260CX and DCS-7320X series, VXLAN routing is now supported. (196926)
- On the DCS-7060CX and 7260QX series, per interface PFC Watchdog is now supported. (197127)
- Support for VXLAN controller-client mode on the DCS-7160 series. (198728)
- On the DCS-7050QX-32S, DCS-7050QX2-32S, DCS-7050SX-64, DCS-7060CX-32S, DCS-7060CX2-32S, DCS-7260CX-64, and DCS-7280SE series, the default response to an FPGA CRC error has been changed. Instead of power cycling, EOS will instead log `FPGA_ERROR_SYSTEM` and continue running. This behavior is configurable with the `"hardware fpga error action [ log | power-cycle ]"` command. (199320)
- On the DCS-7500E and DCS-7500R series, an "expanded" port numbering is now supported. This feature makes 40G only interfaces on the 7500R-36Q-LC linecard use the 3 level naming scheme. (200993)
- Support for software forwarding of control plane generated IP packets for routes pointing to tunnels or nexthop-groups, or when routing from one IP address-family to another (e.g RFC5549) in a non-default VRF. (205378)

## Resolved caveats in 4.18.3F

- On an MLAG topology consisting of DCS-7050 series switches, when there are large number of dynamic MAC addresses that can result in hash collisions in the hardware MAC address table, the switches may never age out the dynamic MAC addresses and may cause high CPU utilization of Strata agent. (164352)

- On the DCS-7508 and DCS-7512 series, a kernel crash may occur if an event like a VLAN related configuration change or linecard removal takes place when there are many control plane bound packets. (169255)
- On DCS-7250QX and DCS-7300 series, when Vxlan is encapsulated, if a packet needs to be forwarded to a remote host ( route + encap or decap + route + encap ), if the VTEP is reachable through an ECMP route in the underlay and any of the underlay nexthops in the ECMP has unlearned mac, the packets that are hashed to the nexthop will get dropped. (177580)
- Fixed issue where StrataL3 may crash on bootup if routing is configured. (177661)
- If a BGP session is established using secondary IP address or a VRRP virtual address, that BGP session will flap when any layer 3 interface in that VRF goes down. (180082)
- On the DCS-7500R and the DCS-7280R series, a small number of received PFC and LLFC frames may get miscounted as indiscards. (181741)
- On the DCS-7500R series with DCS-7500R Fabric cards, RQP discards can be observed occasionally under full traffic load condition. (182161)
- Rib agent may restart unexpectedly when BGP has received more than 1024 paths for an ECMP prefix and "show ip bgp " command is executed. "show ip bgp [vrf all|default]" command shall also fail, but not result in Rib agent restart. (190191)
- On the DCS-7280E, DCS-7280R, DCS-7500E, and DCS-7500R series in Tap Aggregation mode, configuring a monitor session whose source is a tool port with egress time stamping enabled can cause the SandFap agent to restart unexpectedly. (190197)
- On the DCS-7500R and DCS-7500E series, if a port-channel has no active member when a linecard is removed, then that port-channel may not be able to bring up any new members using LACP. (191061)
- On the DCS-7280R and DCS-7500R series, forwarded traffic on a FAP may be dropped if mirroring is enabled and there are many smaller packets at very high rate. (191149)
- On the DCS-7050X series, if QoS trust mode is configured as DSCP, the Strata agent may restart when a code point is mapped to a traffic class whose queues are disabled by the PFC watchdog. This may lead to some traffic loss. (192936)
- On the DCS-7050X series, layer3 multicast may experience temporary traffic outage (few microseconds) during a hitless reload. (193118)



- On the DCS-7280SR2, DCS-7280CR2, and 7500R2-36CQ linecard, the SandTunnel agent can restart unexpectedly with the signature "interrupt reg timeout". (193426)
- On the DCS-7050X series, if PFC Watchdog with forced recovery and non-disruptive priorities is configured, a PFC watchdog timeout would occur on a transmit queue affected by a PFC pause storm immediately after a forced recovery event, regardless of the timeout interval configured. (194753)
- On the DCS-7280E, DCS-7280R, DCS-7500E, and DCS-7500R series, Tap ports in Tap Aggregation mode configured with non-default ingress VLAN membership filtering and with br/vn tag stripping enabled globally will not work correctly after a system reload. (195794)
- The standby supervisor in RPR mode stalls and never successfully come up if 'session peer-supervisor' is run immediately after 'write mem' on the active supervisor. (196632)
- When BGP "neighbor maximum-routes" configuration is modified in a manner where that both the limit and action (warning-only) are changed, affected peers may be incorrectly idled. (197030)
- On the DCS-7250X and the DCS-7300X series switches, in an MLAG setup where fast MAC redirection is active, a packet that gets decapsulated and routed into an MLAG Port-Channel will be dropped if the local MLAG port is shut down. (197433)
- If the next hop for a route is a neighbor on a tunnel interface, and a static ARP entry to that neighbor is deleted, a kernel panic will occur. (197536)
- The Rib agent will restart repeatedly if VRF names contain characters from "[{}:]". (198993)
- On DCS-7500E, DCS-7500R, DCS-7280E and DCS-7280R series, sFlow samples are not generated when sFlow is enabled while in TAP Aggregation mode. (199409)
- The Rib agent can restart unexpectedly when OSPFv3 is translating Type 5 LSAs to Type 7 LSAs if the LSAs do not have external route tags. (199919)
- The Rib agent may restart unexpectedly when running OSPFv3 with multiple NSSA areas and redistributed routes. (199920)
- When "soft-reconfiguration inbound all" is enabled for a BGP peer and if a path update with a AS loop is received for the BGP best path which is

also the head ECMP path, then the path is made ineligible and forwarding information is updated based on the new best path for the destination prefix. If a subsequent path update is received for the previously ineligible path now with a valid AS-PATH without an AS loop and if this path is selected as the best path again but this time without ECMP, then BGP may fail to recompute the forwarding information; it will carry over stale adjacency from before the path became ineligible due to AS loop. The corresponding FIB route entry would then point to a FEC with multiple next-hops (ECMP) when ECMP is not expected. (200050)

- On switch models other than the 7160 series, the kernel may crash and the switch may reboot by itself, if there is a large volume of egress traffic from the control plane, and these CPU generated packets have routes with nexthop groups. (200135)
- The Rib agent may restart unexpectedly if BGP has received more than 256 paths for an ECMP prefix when the platform max-ecmp limit is 128. (200389)
- On the 7280TR-48C6 and 7280TRA-48C6, interfaces which are configured to be less than 10G when the forwarding agent starts up will not be able to achieve linerate if the are configued to be 10G at a later time. (200804)
- If multi-agent mode is configured for routing protocols on a BGP router in a network with route-reflectors, the Bgp agent on the router may consume a lot of CPU and memory processing received BGP updates. (201182)
- On the DCS-7500E, DCS-7500R, DCS-7280E and DCS-7280R series, a small number of source packets will not be mirrored from a monitor session. The probability is approximately 1 in 65k source packets with the E series, and 1 in 15M with the R series. (201305)
- On DCS-7280QR-C72, DOM sensor values on ports 7 - 30, 43 - 66 (all inclusive) are always reported as 0 in SNMP queries. (202421)
- On the DCS-7150 and the DCS-7160 series of switches in an MLAG setup, the forwarding agent may crash if the hardware MAC address table is full while trying to program a peer MAC address as a local MAC address as a result of the peer reloading. (202474)
- On DCS-7050X, DCS-7250X, DCS-7060X, DCS-7260X, DCS-7300 series switches, forming an mlag switch pair( S1 and S2), if mlag fast mac redirect feature is activated on either switch S1 or S2, for a mlag which is being used as egress interface for a core SVI, then VXLAN encapsulated packets will be dropped on the switch(S1 or S2) where the fast mac redirect is activated. (204885)

- On the DCS-7200E, DCS-7200R, DCS-7500E and DCS-7500R series of switches, the MAC address table on different switch ASICs can diverge if there are simultaneous MAC learn and MAC delete events. The divergence may clear in about one seventh of the MAC aging time. (206039)

## General known software caveats in 4.18.3F

- Due to the slow nature of writes to USB , when copying two large files (typically 200+ MB) back to back to the external USB, the copy of the second file can end up in an "uninterruptible" state waiting for I/O to complete, resulting in a kernel crash (33988)
- For fixed 10GBASE-T ports on the 7050T and 7050TX families of products, a speed change on the peer of a 10GBASE-T port may not result in a speed change on the port. This will cause the link to remain up, but no traffic will be sent due to the mismatched speeds on each side of the link. A shut/no shut on either side will resolve the issue. (41114)
- The SuperServer agent can restart unexpectedly if tcpdump sessions are configured and a link being captured on by one of the sessions flaps. (60515)
- On a switch A with port-channels A1 and A2 whose member ports are connected to ports in the same port-channel B1 on partner switch B, both port-channels A1 and A2 might be declared link up and all their member ports will forward traffic. However, on switch B, the subset of ports that are connected to A1 or the subset of ports that are connected to A2 are operationally not part of port-channel B1, and thus they are unable to receive or forward traffic. (88867)
- The 'configure replace' command may leak memory after each invocation, up to 132 KB per operation. Repeated use of this command may cause the entire system to run out of memory eventually. (94791)
- Configuring VLANs within a config session that are currently in use as internal VLANs may fail with the message that internal VLANs cannot be created, even if the VLAN would no longer be used as an internal VLAN once the config session is applied. (132550)
- For interfaces undergoing maintenance by virtue of being part of a user configured/builtin unit being put under maintenance, "show maintenance" would not reflect the correct maintenance status of the interface. (141942)
- On the CVX server, if CVX is enabled and then disabled, invoking "show service bug-alert" and "show service cli-relay" commands might cause an error. (145391)

- StpTxRx agent restart can cause momentary disruption in BPDU transmission and processing. This can lead to STP root churn and traffic disruption. (147179)
- The regular expression pattern matching on the Syslog messages might be done on a partial message if the message is being written at the same time when the event handler is reading it. (148530)
- Icmp agent can crash when large number of static groups ( scale of 16K ) are defined (159606)
- The platform forwarding agent may crash and restart when the 'service routing protocols mode' configuration is changed from 'ribd' to 'multi-agent'. (173645)
- On DCS-7010T series, a SEU error in the ASIC SRAM tables may be reported as CPU\_PKT\_BUFFER error and remain uncorrected. Workaround is to restart the Strata slice agent. (175090)
- When no on-logging event-handler is configured, the EventMgr agent keeps the syslog file open. As a result, when logrotate eventually attempts to clean up old logs, the space associated with this file is not actually cleaned up, causing space to be wasted under /var/log/. Only one deleted message file is kept open when more logrotate operations are performed. The workaround is to configure an on-logging event handler and then unconfigure it. Alternatively the EventMgr agent can be manually restarted. (177553)
- On all modular systems, running show interfaces phy module [module], specifying a module that has no Ethernet ports like a slot that is empty or a fabric card, will return an error. This error can be safely ignored. (179400)
- \$\$IGNORE On the DCS-7020T series, the interface bin counter for both in and out packets with sizes 1523-Max may be inaccurate. Packets with sizes between 9217-9236 are not counted by the switch for interfaces Ethernet 1-48. (188121)
- L3 EVPN is NOT supported on Mlags (193471)
- The Admin distance for EVPN Type 5 is set to 1 in IP Rib. (194072)
- On 7050 series switches, 25G optics are not supported. Inserting one would lead the forwarding agent to crash continuously. (199036)
- ip traceroute' from an end host may be missing an intermediate MPLS LSP router in the output, if the traceroute packets got forwarded through an IP route using MPLS nexthop-group with explicit NULL label. (199151)

## Layer3 Known software caveats in 4.18.3F

- When a policy map of type PBR is attached to an interface that is either in down state or a switchport (or both), and if the policy map is too large to fit into available hardware resources, the CLI will not report the error and roll back the configuration. Later, when the interface becomes an operational routed interface, the policy map will not be programmed into hardware. However, "show policy-map type pbr" shows the policy applied to the interface. To fix the discrepancy, remove extra rules from the policy map to make it fit into the hardware. (89931)
- On a BGP router, if "update wait-for-convergence" is disabled when convergence is in progress, BGP route advertisements may not be sent to neighbor under certain circumstances. This can happen when there are only two BGP neighbors and routes are learned from only one of the two neighbors. (97888)
- When a VRF instance is deleted or IPv4 routing is disabled, the snmpd process may restart. (100763)
- When removing a line card, the control plane may experience a several hundred millisecond delay in reconfiguration of the packet path from the control plane to the dataplane. This may cause packets sent from or received by the control plane to be delayed or dropped on some SVIs during this interval. Sensitive protocols, such as BFD, may flap as a result. (110023)
- In a scaled BFD setup with 1400+ BFD sessions, if multiple interfaces are flapped simultaneously, BFD sessions on other interfaces may also flap and cause traffic disruption. (178867)
- FHRP state may start flapping between Backup and Master and Fhrp Agent may restart while dealing with large number of Virtual IP addresses. This is seen at a scale of 20K virtual IPs or more. (182399)
- If Ospf/OspfV3 is configured but cannot select a routerId, Bgp convergence on SSO, hitless-restart or Rib Agent restart, will be delayed for 10 minutes. The workaround is to configure a routerId or add an IP address on an interface in the Vrf or default Vrf. (190877)
- If a Port-channel is configured with "bfd echo" and "bfd per-link rfc-7130" and is used for OSPFv3 or PIM, BFD session will not come up with echo functionality. BFD with SSO for OSPFv3 or PIM is not supported. (190997)

- On the DCS7050X2 series of switches, IPv6 link-local multicast packets (including neighbor discovery packets) may not be forwarded to all the members of the VLAN when no IPv6 address is configured. The workaround is to disable IGMP snooping on the VLAN. (191854)

## MLAG Known software caveats in 4.18.3F

- If non-MLAG reload-delay is configured to be lower than the MLAG reload-delay when LACP standby is used, traffic entering the non-MLAG interfaces destined towards hosts on the MLAG interfaces will be lost during the LACP standby period. (83330)
- When the streaming telemetry agent is configured in combination with MLAG and IGMP snooping, Sysdb may be continuously leaking memory at a rate of about 1.5KB/s. Disabling either IGMP snooping or the streaming telemetry agent can stop the leak. (184849)

## DCS-7060X Known software caveats in 4.18.3F

- On the DCS-7010, DCS-7050, DCS-7050X, DCS-7060X, DCS-7250X, DCS-7260X and DCS-7300X, Strata agent may assert during counter collection when there is a lot of CPU-directed traffic coupled with high CPU utilization. (135192)
- On the DCS-7050X, DCS-7050X2, DCS-7060X, DCS-7250X, DCS-7260X, DCS-7300X and DCS-732X series, restart of StrataL2 and StrataL3 agents at the same time can cause an additional restart of StrataL2 agent. (142907)
- On DCS-7060CX-32S, DCS-7260CX-64, DCS-7320X-32C series switches, forwarding Slice agent will crash continuously if an unsupported speed like 40G is configured on SFP+ interfaces. Workaround is to remove unsupported speed configuration. (164894)
- On the DCS-7050X, DCS-7050X2, DCS-7060X, DCS-7250X, DCS-7260X, DCS-7300X and DCS-7320X series if the routing tables are close to full, executing "show platform trident l3 software routes" or "show platform trident l3 software next-hops" from the Cli or show tech when the system is busy may lead to StrataL3 restart. (169551)
- On the DCS-7050X, DCS-7250X, DCS-7060X, and DCS-7260X series, applying an ACL to a recirculation port or recirculation channel is not supported. Doing so will cause the Acl agent to repeatedly restart. (181275)
- On the DCS-7250X, DCS-7260X, DCS-7050X, DCS-7060X, and DCS-7300X series, if MLAG fast redirection is configured, there may be a traffic loss when a MLAG port channel is being brought up. The duration of a traffic loss

may increase with the number of VLANs enabled on that port channel.  
(183415)

- On the DCS-7250X, DCS-7260X, DCS-7050X, DCS-7060X, and DCS-7300X series, if MLAG fast redirection is configured and activated by a MLAG link, the StrataLag agent crashes if it is restarted. (185054)
- On DCS-7060CX-32S, DCS-7260CX-64, DCS-7320X-32C series, speed change between 10, 25, 40, 50 and 100G will result in link flap on /1, /2, /3 and /4 interfaces of a QSFP100 port. (193515)

## DCS-7050 Known software caveats in 4.18.3F

- On the DCS-7010, DCS-7050, DCS-7050X, DCS-7250X, DCS-7300X, and the DCS-7150 series, control packets sent out through a SVI will have its VLAN priority/CoS value set to 0. (75527)
- On the DCS-7010, DCS-7050, DCS-7050X, DCS-7250X, and DCS-7300X series, when an ACL on an SVI is modified, some packets which should be denied may leak through. (87359)
- On the DCS-7050 and DCS-7050X series, traffic streams matching DirectFlow flows with VLAN or MAC rewrite actions could face brief disruption across a StrataL3 agent restart. (111833)
- On the DCS-7010, DCS-7050, DCS-7050X, DCS-7060X, DCS-7250X, DCS-7260X and DCS-7300X, Strata agent may assert during counter collection when there is a lot of CPU-directed traffic coupled with high CPU utilization. (135192)
- On the DCS-7050, DCS-7050X, DCS-7250X, and DCS-7300X series, agents can restart unexpectedly when an ECMP table overflow condition is hit together with a Resilient ECMP config and all the interfaces on the switch are flapped. Specifically, if there are not enough entries left in the ECMP table and the interfaces are flapped the StrataL3 agent will restart. After the agent restart, the switch recovers. (156311)
- On DCS-7250, DCS-7260, DCS-7050, DCS-7060, and DCS-7300 series, Some of the MACs learnt over remote VXLAN VTEPs go missing in hardware and are never relearnt when a member in peer-link port channel is shut then unshut. (184732)

## DCS-7160 Known software caveats in 4.18.3F

- On DCS-7010T, DCS-7050X, DCS-7160, DCS-7250X, and DCS-7300X series switches with SFP+ interfaces set to 1G speed, there may be spurious syslog messages printed during the boot process. The spurious message is

"%ETH-4-LINKMODEUNSUPPORTED: Unsupported link mode 1G/full". The associated ports will link up normally, so these messages may be safely ignored. (152579)

- On DCS-7160 series switches, when a dynamically learnt vtep is deleted as all the macs attached to the vtep have aged out or flushed, if the Vtep is also in the floodlist for the VNI, the BUM packets being replicated to the Vtep will see a transient drop till the reachability to the VTEP is reprogrammed ( happens automatically ) in hardware. (172316)
- On DCS-7160 series switches, incorrect TX Queues are flow controlled if user has configured TC to TxQ mapping and PFC (priority flow control). TC to TxQ mapping configuration is ignored when processing PFC frames received from adjacent switch. Workaround is, do not configure TC to TxQ mapping on TCs on which PFC is enabled. (177572)

## DCS-7150 Known software caveats in 4.18.3F

- When autonegotiation is enabled for a 1G optical port on the DCS-7150, and the partner side has autonegotiation off, the show interface negotiation command will show an Autoneg Status of "off", instead of the correct status of "failed". (15025)
- On the DCS-7150 series, when the CLI command "default interface" is given for an interface corresponding to a port with a 1000BASE-X transceiver, the link may not come up until a "shut/no shut" command sequence is issued for that interface. (70630)
- On the DCS-7010, DCS-7050, DCS-7050X, DCS-7250X, DCS-7300X, and the DCS-7150 series, control packets sent out through a SVI will have its VLAN priority/CoS value set to 0. (75527)
- On the DCS-7150 series, if a multicast boundary is applied on an SVI which also has IGMP snooping enabled, IGMP snooping will not take effect. (138610)

## DCS-7500 Known software caveats in 4.18.3F

- On the DCS-7500E and DCS-7500R series, a linecard may be detected erroneously as removed and re-inserted after a SSO switchover. (34907)
- On the DCS-7500, DCS-7500E, and DCS-7500R series, the power supply may report erroneously a removal and insertion event during a SSO switchover. (35901)
- On the DCS-7500E and DCS-7500R series, linecard removal can cause a kernel crash during heavy CPU traffic conditions. (88278)



- On the DCS-7280E, DCS-7500E, DCS-7280R and DCS-7500R series, when in MLAG mode without ip routing enabled, under some control plane oversubscription scenarios the MLAG peer link might come down. The workaround is to either enable IP routing or have a static ARP entry on the MLAG peers for each other. (90247)
- On the DCS-7500E and DCS-7500R series, a mirroring to GRE tunnel session may not work after reload if the GRE tunnel is reachable via a port-channel with members on multiple linecards. Toggling any of the tunnel parameters or reconfiguring the monitor session will resolve the issue. (108117)
- On 7500E-36Q-LC linecards, autonegotiation that reported success may report failure after a switchover. This is a cosmetic issue; it does not affect traffic or link status, only the autonegotiation status reported by show interface negotiation. A shut, followed by a no shut, resolves the problem. (110480)
- On the DCS-7280SE-68 and the 7500E-12CQ-LC modules, the Avago agent may restart during initialization, link up or link down events. The restarts are non-impacting on initialization. During link up the restart will delay link up time by approximately 10 seconds and will not impact traffic on unaffected links. (115419)
- On the DCS-7500E series with 7500E-48T-LC, the 10GBASE-T phys can become unresponsive to temperature polls and return continuous failures. There is no functional impact because of this and the link will continue to operate normally except that the agent log file will periodically log this failure. (116136)
- On the DCS-7280E, DCS-7280R, and DCS-7500R series switches, remote MAC learning on a L3 VTEP does not work on packets that undergo routing after VXLAN decapsulation. This primarily impacts learning of hosts that reside behind a L2 VTEP. In such cases, we rely on VXLAN encapsulated ARP replies to learn those remote hosts. So keeping the ARP timeout less than MAC timeout (as recommended for VXLAN routing flows) would be a sufficient workaround. (120476)
- On the DCS-7500E and DCS-7280E series, the command 'sh platform arad acl tcam detail' does not show TCAM resources used by Tap Aggregation features. (130692)
- On the DCS-7280E and DCS-7500E series, IPv4 egress RACLs will not filter multicast traffic in shared mode. In unshared mode, multicast traffic is filtered only if ingress replication is enabled. (131660)
- On the DCS-7280E and DCS-7500E series, MAC mirroring ACLs do not match IPv6 packets. (137537)

- For the DCS-7500E and DCS-7280E series, while running Tap Aggregation, toggling the link state of a port-channel member configured as a tap interface has a very brief period where MAC addresses can be learned. The effect is that any learned MAC addresses will then be dropped if the destination MAC matches these learned addresses. To resolve this issue, the customer should clear the mac address table. (141496)
- On the DCS-7280E and DCS-7500E series, an IPv6 Egress ACL applied to a Port Channel is not applied to a newly added member interface, if the member interface already has the same ACL applied to it. The workaround is to remove the ACL from the interface before adding it to the PortChannel. (141736)
- On the DCS-7500E, DCS-7280E, DCS-7500R, and DCS-7280R, VLAN mapping on egress interfaces in a port channel may not be successfully applied after reloading or restarting forwarding agents. (143698)
- On the DCS-7500E, DCS-7280E, DCS-7500R, and DCS-7280R series, the SandL3Unicast agent may restart if the ECMP FEC or regular FEC tables are full. (146739)
- On the DCS-7500E, DCS-7280E, DCS-7500R, and DCS-7280R, VLAN mapping on egress interfaces in a port channel may not be successfully applied after reloading or restarting forwarding agents. (148018)
- On the DCS-7500E and DCS-7500R series, a fabric module with a memory failing can persistently cause packets to be dropped over the fabric. (151115)
- On the DCS-7500E, DCS-7280E, DCS-7500R and DCS-7280R series, the SandMact agent may restart repeatedly if the MAC address scale is above 128K. (152367)
- On the DCS-7280E and DCS-7500E series, SandFap agent may restart when a port-channel is removed. (155825)
- On the DCS-7500E series with dual supervisors, when the startup-config is big, the Fru and Launcher agents might restart on the standby after reload. It has no operational impact. (159852)
- On 7500E-48T-LC linecard and DCS-7280TR series, MAU-MIB::ifMauType for 10GBASE-T ports is reported as 0.0. (164921)
- On the DCS-7500E, DCS-7280E, DCS-7500R and DCS-7280R series, PBR policy applied on a sub-interface may not be programmed in the hardware after a SandAcl agent restart if the policy has a mix of IPv4 and IPv6 rules and if the policy is applied on multiple sub-interface with the same parent interface and atleast one subinterface is configured with a single

protocol - either IPv4 or IPv6. The workaround is to remove the policy from all the interfaces and apply it back. (170537)

- On DCS-7280E, DCS-7500R, and DCS-7280R series switches, egress MTU is not enforced for VXLAN encapsulated packets on the egress overlay SVI. (172092)
- On the DCS-7500R series and the DCS-7280R series switches, in a scaled scenario with large number of VLANs, shutting and unshutting many interfaces may cause SandMcast agent to be restarted. (175529)
- On DCS-7300 and DCS-7500 series switches, sub interface configuration may not be cleaned up if a linecard in a slot is replaced by a different model linecard/ (178945)
- On the DCS-7280E, DCS-7280R, DCS-7500E, and DCS-7500R series, interfaces with a QSFP to SFP adapter installed may not link up unless the "speed forced" or "speed auto" commands are used to configure those interfaces. (181592)
- On the DCS-7280R and DCS-7500R series, pseudowire configuration is mutually exclusive with VXLAN, VLAN translation, dot1q tunnel, and TapAgg configuration. (188565)
- On the DCS-7280R and DCS-7500R series, pseudowire MPLS encapsulated packets egressing a core SVI interface will have its VLAN priority/COS value 0 set to 1 and vice-versa. (188723)
- On systems with 7500R2 series linecards, for interfaces with Reed-Solomon FEC enabled, FEC lane corrected symbols counts in 'show interfaces phy detail' command are reported incorrectly. (188751)
- On the DCS-7280E, DCS-7280R, DCS-7500E and DCS-7500R series, configuration of egress packet time stamping is not supported on port-channel interfaces. Configure this feature on each member instead. (190479)
- On the DCS-7280E, DCS-7280R, DCS-7500E and DCS-7500R series in Tap Aggregation mode, a monitor session with either a tap or tool port as source would result in the first byte removed from packets seen at the monitor destination port. (190497)
- On the DCS-7280E/R and DCS-7500E/R series, mirrored traffic is not subject to egress security ACLs which are applied to mirroring destination ports. (190637)
- On the DCS-7280E, DCS-7280R, DCS-7500E, and DCS-7500R series, egress security ACLs only apply to routed IP traffic. (191753)

- On the DCS-7280R and DCS-7500R series, pseudowires will snoop IPv4 and IPv6 traffic to CPU with destination addresses in the link-local multicast block. (192948)
- On the DCS-7280R and DCS-7500R series, MAC ACLs configured on Pseudowires will not take effect on Pseudowire traffic. (192950)
- On the DCS-7500E, DCS-7500R, DCS7280E and DCS-7280R series while in Tap Aggregation mode, if a packet matches two separate class maps with only the lower priority one having a destination with truncation enabled, then this packet will be forwarded to both the regular destination of the higher priority class, and the truncation destination of the lower priority class. Always configure a tool destination with truncation as part of the higher priority class. (196875)
- On the DCS-7500E, DCS-7500R, DCS-7280E and DCS-7280R series, if a source interface is shared by several mirroring sessions with a combination of both MAC and IP ACLs, restarting the SandAcl agent will cause mirrored traffic in sessions with IP ACLs to stop. Unconfigure and then re-configure the mirroring sessions with IP ACLs. (202853)
- On the DCS-7500E, DCS-7500R, DCS-7280E and DCS-7280R series, a "clear arp" command will cause forwarded traffic to be disrupted, when the traffic is forwarded at layer 2 and there is a monitoring session applied to the ingress interface and the destination of the said session is a GRE tunnel. (203153)
- On the DCS-7500E, DCS-7500R, DCS-7280E and DCS-7280R series while in Tap Aggregation mode, if a traffic steering policy contains both a deny rule and a destination with egress truncation, then the denied traffic will be forwarded erroneously to the destination with egress truncation. Configure deny rules as a separate class-map in a traffic steering policy and set the destination to an unused tool port. (203992)
- On the 7280SE, 7500E-48T-LC and 7500E-6CFPX-LC, when Priority-Based Flow Control (PFC) mode is enabled on a interface, mirroring rate-limit feature could stop work. Disable PFC mode and restart SandFap will solve the problem. (204920)
- On the DCS-7500R2 and DCS-7280R2 series, MAC addresses are not learnt with incoming IPv6 packets on SVIs. (206163)

## Multicast Known software caveats in 4.18.3F

- PimBidirDf agent could restart if it did not receive the Pim Hello message from neighbor, and subsequently receives too many DF election messages. (193594)

## DCS-7300 Known software caveats in 4.18.3F

- On the DCS-7010, DCS-7050, DCS-7050X, DCS-7250X, DCS-7300X, and the DCS-7150 series, control packets sent out through a SVI will have its VLAN priority/CoS value set to 0. (75527)
- On the DCS-7010, DCS-7050, DCS-7050X, DCS-7250X, and DCS-7300X series, when an ACL on an SVI is modified, some packets which should be denied may leak through. (87359)
- On the DCS-7010 series, 802.1x pause and guaranteed bandwidth cannot be configured at the same time. (91141)
- On the DCS-7010T, DCS-7050X, DCS-7250X and DCS-7300X series, IPv6 fragmented packets requiring next hop resolution could get dropped in the switch control plane. Any un-fragmented IPv6 packet for same next hop will recover the switch from this problem. (100857)
- On the DCS-7300X series, an SEU on a supervisor SCD will cause a power cycle of the supervisor and possibly a misleading reload cause of "The system rebooted due to a watchdog". The reload cause should be "The system rebooted due to an SEU error on the SCD". (104962)
- On the DCS-7050 and DCS-7050X series, traffic streams matching DirectFlow flows with VLAN or MAC rewrite actions could face brief disruption across a StrataL3 agent restart. (111833)
- On the DCS-7050X, DCS-7250X, and DCS-7300X series, a front-panel or fabric port may get stuck in an errored state and drop traffic egressing the port. When this happens, the forwarding agent log will contain "port start error detected". This condition will persist until it is manually cleared. A forwarding agent restart is required to clear the error and forward traffic normally. (112051)
- On the DCS-7050X, DCS-7250X and the DCS-7300X series configured as MLAG, link flap of one or more LAG peer-link member ports could cause brief flooding of packets over the peer-link and can also lead to double delivery of packets on the MLAG interfaces. (117870)
- On the DCS-7300X series, the SNMP agent may fail to initialize properly after a linecard hotswap. (126736)
- On the DCS-7010, DCS-7050, DCS-7050X, DCS-7060X, DCS-7250X, DCS-7260X and DCS-7300X, Strata agent may assert during counter collection when there is a lot of CPU-directed traffic coupled with high CPU utilization. (135192)

- On the DCS-7050X, DCS-7050X2, DCS-7250X, and DCS-7300X series switches, if the number of VTEPs and number of ports on VXLAN VLANs overflow the hardware capacity and then an SVI is configured on these VLANs, the forwarding agent may restart unexpectedly. The workaround is to either remove the SVI configuration on the VXLAN VLAN or clear the overflow condition by reducing the number of ports on VLANs with VXLAN enabled. (139203)
- On DCS-7050TX-72, DCS-7050TX-96, DCS-7050SX-72, DCS-7050SX-96, DCS-7050SX-64, DCS-7050TX-48, DCS-7050TX-64, DCS-7050QX-32S, DCS-7050QX-32, DCS-7050SX-128, DCS-7050TX-128, recirculation ports or ports that are configured in MAC loopback mode, traffic gets forwarded through those ports even if they are administratively disabled. Workaround is move those ports out of vlan membership or port-channel group. (141506)
- On the DCS-7050X, DCS-7050X2, DCS-7060X, DCS-7250X, DCS-7260X, DCS-7300X and DCS-732X series, restart of StrataL2 and StrataL3 agents at the same time can cause an additional restart of StrataL2 agent. (142907)
- On DCS-7010T, DCS-7050X, DCS-7160, DCS-7250X, and DCS-7300X series switches with SFP+ interfaces set to 1G speed, there may be spurious syslog messages printed during the boot process. The spurious message is "%ETH-4-LINKMODEUNSUPPORTED: Unsupported link mode 1G/full". The associated ports will link up normally, so these messages may be safely ignored. (152579)
- On the DCS-7050, DCS-7050X, DCS-7250X, and DCS-7300X series, agents can restart unexpectedly when an ECMP table overflow condition is hit together with a Resilient ECMP config and all the interfaces on the switch are flapped. Specifically, if there are not enough entries left in the ECMP table and the interfaces are flapped the StrataL3 agent will restart. After the agent restart, the switch recovers. (156311)
- On the DCS-7050X2 series, under heavily congested broadcast/multicast flooding scenarios, control packet received may be incorrectly discarded. (156736)
- On the DCS-7050X2 series switches, in MLAG VTEP configuration, the switch incorrectly drops VXLAN encapsulated packets that are destined to the VTEP IP address but the peer switch's bridge MAC address. (159874)
- On DCS-7050QX-32 with Trident2 A1 silicon, MPLS traffic gets incorrectly prioritized, causing other traffic on the same port to get dropped. (160269)
- On the DCS-7250X and DCS-7300X series, configuring "switchport dot1q ethertype" and VxLAN routing (creating SVIs for VxLAN VLAN) simultaneously is not supported. If routing "switchport dot1q ethertype"

has been configured and routing for VxLAN VLAN needs to be enabled, the workaround is to remove "switchport dot1q ethertype" configuration and reload the switch. (164362)

- In an MLAG configuration on the DCS-7050X, DCS-7250X, and DCS-7300X series, if the StrataL2 agent is restarted, traffic to MLAG interfaces may be double delivered by both switches. The workaround is to removing and re-apply the MLAG configuration. (164669)
- On the DCS-7050X, DCS-7050X2, DCS-7060X, DCS-7250X, DCS-7260X, DCS-7300X and DCS-7320X series if the routing tables are close to full, executing "show platform trident l3 software routes" or "show platform trident l3 software next-hops" from the Cli or show tech when the system is busy may lead to StrataL3 restart. (169551)
- On DCS-7050X series switches, after reload hitless, packets may get hashed to a different link than before the reload (177366)
- On DCS-7300 and DCS-7500 series switches, sub interface configuration may not be cleaned up if a linecard in a slot is replaced by a different model linecard/ (178945)
- On the DCS-7050X, DCS-7250X, DCS-7060X, and DCS-7260X series, applying an ACL to a recirculation port or recirculation channel is not supported. Doing so will cause the Acl agent to repeatedly restart. (181275)
- On the DCS-7250X, DCS-7260X, DCS-7050X, DCS-7060X, and DCS-7300X series, if MLAG fast redirection is configured, there may be a traffic loss when a MLAG port channel is being brought up. The duration of a traffic loss may increase with the number of VLANs enabled on that port channel. (183415)
- On DCS-7250, DCS-7260, DCS-7050, DCS-7060, and DCS-7300 series, Some of the MACs learnt over remote VXLAN VTEPs go missing in hardware and are never relearnt when a member in peer-link port channel is shut then unshut. (184732)
- On the DCS-7250X, DCS-7260X, DCS-7050X, DCS-7060X, and DCS-7300X series, if MLAG fast redirection is configured and activated by a MLAG link, the StrataLag agent crashes if it is restarted. (185054)
- On the DCS-7050X series, altering the priority of transmit queues of a port will result in some traffic loss on that port. (194460)
- On the DCS-7050X series having PFC Watchdog enabled on twenty-five or more interfaces, the Strata agent might restart when QoS maps are changed. (195248)

## General Limitations and Restrictions in 4.18.3F

- The CLI does not allow access to files whose names contain spaces. (539)
- MapReduce Tracer is only recommended for deployments with 128 or fewer TaskTrackers. If a switch has more than 128 directly connected TaskTracker nodes with MapReduce Tracer deployed, then the MapReduceTracer Agent can increase CPU utilization significantly. It is recommended to keep the directly connected TaskTracker count to below 128 when MapReduce Tracer feature is deployed. (80403)
- DHCP relay is not supported when running virtual machines on EOS (101754)
- For 7060CX-32S, 7260QX-64, 7260CX-64 and 7320X-32C, when a transceiver is plugged into a front panel port, "show int phy detail" on the CLI will incorrectly show "PHY state" as "detectingXcvr", while "Transceiver SN" would be a valid string. When a pair of transceivers form a valid connection, "PHY state" will correctly change to "linkUp", and when the connection is shut down with the transceivers left in the front panel slots, "PHY state" will also correctly change to "linkDown". Only when the transceiver is first inserted will we see the incorrect "PHY state" as "detectingXcvr". The issue is only relevant to the debugging information, and does not affect the real connection. (138767)
- Switches and CVX instances participating in a CVX setup must either all run 4.15.4F or later, or all run images from before 4.15.4F. (146664)
- EOS SDK-based applications must be run via the 'daemon' command configuration. They cannot be run directly from bash. (158431)
- EOS extension scripts and agents which do not use EOS-SDK will need to be modified to work in 4.16.6M and beyond. (158467)
- EOS swix extensions containing RPMs which were based out of or procured from Fedora distributions prior to Fedora 18 may fail to install due to dependency issues. Suggested workaround is to recreate the swix files with the corresponding RPMs from Fedora 18 distribution. (162325)
- Packets with size greater than MTU of egress interface will not honor directflow flows and may not be forwarded (180927)
- ZeroTouch provisioning may fail if the interface used for ZeroTouch provisioning is connected to a device configured with non-default FEC. (180982)



## Layer3 Limitations and Restrictions in 4.18.3F

- CLI does not detect TCAM exhaustion and automatically revert the change when a PBR policy is applied to an L3 interface in the "shutdown" state, since the actual hardware programming happens when the interface comes up. (122651)
- OSPFv3 support for multiple address families (RFC 5838) in EOS introduces support for IPv4 routing with OSPFv3. OSPFv3 for IPv4 AF in EOS requires configuring neighboring OSPFv3 IPv4 routers on the same link with primary IPv4 addresses in the same subnet. Adjacency is established in OSPFv3 IPv4 AF even if the neighbor's primary IPv4 address is in a different subnet but routes through the neighbor on a different subnet will however not be installed. This limitation may be removed in a future release. (140234)

## MLAG Limitations and Restrictions in 4.18.3F

- Spanning-tree mode backup does not work in an MLAG configuration. (15151)
- Configuring a device connected to an MLAG with a round-robin LAG distribution algorithm is not supported if the device is going to participate in IGMP. (28370)
- On a scaled MLAG setup, Lag+LacpAgent agent may restart unexpectedly if MLAG is reinitialized due to configuration changes. (116125)

## DCS-7060X Limitations and Restrictions in 4.18.3F

- On DCS-7050X, DCS-7250X, DCS-7060X, DCS-7260X, DCS-7304, DCS-7308, DCS-7316, DCS7320X series switches, Every time nexthop specified in the PBR policy gets a new resolution, PBR policy might cause temporary traffic disruption. This can involve: momentarily routing as per L3 lookup of the packet, momentary packet drops. System will recover automatically and PBR policy will route the packet as per new nexthop resolution (105670)
- On DCS-7050X, DCS-7250X, DCS-7060X, DCS-7260X, DCS-7304, DCS-7308, DCS-7316, DCS7320X series switches, Vxlan and MPLS features may not be configured at the same time. (109330)
- On DCS-7050X, DCS-7250X, DCS-7060X, DCS-7260X, DCS-7300 series switches, mirroring of Vxlan encapsulated packets in the egress direction is not supported. (167189)

## DCS-7050 Limitations and Restrictions in 4.18.3F

- When IGMP snooping is enabled on the DCS-7010T, DCS-7050, DCS-7050X, DCS-7250X, and DCS-7300X series, a single unknown multicast floodset is shared across all VLANs with IGMP snooping enabled. This can cause unexpected flooding to a trunk port that has no multicast routers on a given VLAN, but has multicast router attached to the same trunk port on another VLAN. (105188)
- On the DCS-7010T, DCS-7050, and DCS-7050X, a large ACL and PBR policy configuration that consumes all TCAM resources may not fit after doing a config-replace, ACL agent restart or switch reload. After performing a config-replace, ACL agent restart or a switch reload, it is possible that only the ACL or the PBR policy will be able to fit. (105667)
- On the DCS-7050, DCS-7010T, DCS-7050X, DCS-7050X2, DCS-7250X and DCS-7300X series, if IP-in-IP decap groups are configured, "qos trust dscp" configuration is not supported on traffic matching the decap groups. (107579)
- On the DCS-7010, DCS-7050 and DCS-7060 series switches, when any PBR policy is applied, packets that violate the egress MTU and are destined to flood the VLAN will end up being flooded instead of being sent to the CPU. (196134)

## DCS-7500 Limitations and Restrictions in 4.18.3F

- On the DCS-7280E, DCS-7280R, DCS-7500E, and DCS-7500R series, an egress ACL on a destination port of a monitor session only takes effect for Rx mirrored packets which are IP forwarded. The egress ACL will not work for bridged packets or Tx mirrored routed packets. (89915)
- On the DCS-7500R and DCS-7280R series switches, VXLAN Multicast Decap feature is not supported. (135529)
- On the DCS-7500E, DCS-7500R, DCS-7280E, and DCS-7280R series, mirroring to GRE does not support GRE destinations that are reachable by sub-interfaces. (136130)
- On the DCS-7500, DCS-7500E, DCS-7280E, DCS-7500R, and DCS-7280R series, IPv6 Egress ACL deny logging is not supported on subinterfaces. (146487)
- On the DCS-7500E, DCS-7280E, DCS-7500R, and DCS-7280R series, disabling IPv4 routing on an L3 interface is not supported when IPv6 routing is enabled on that L3 interface. When "no ip routing ipv6 interfaces" is configured to enable the forwarding of IPv4 packets over IPv6 nexthops

over interfaces that do not have IPv4 address, but only a IPv6 address, it will also allow routing IPv4 traffic over these interface. (151356)

- On 7500R-8CFPX-LC modules, links are not compatible with systems running EOS 4.18.1F The workaround is to upgrade both sides of the link. (199152)
- On the DCS-7500R and DCS-7280R series, due to a hardware limitation, "show interfaces queue length" and LANZ may fail to report congestion in some scenarios, usually involving sFlow queues or multicast traffic. (199470)

## DCS-7150 Limitations and Restrictions in 4.18.3F

- On the DCS-7150 series, IEEE 1588 PTP transparent clock does not decrement TTL for PTP routed packets (55078)
- On the DCS-7150 series, enabling counters for Static or Twice NAT connection can cause FocalPointV2 agent restarts, when the number of connections exceed 275. (109048)

## DCS-7160 Limitations and Restrictions in 4.18.3F

- On DCS-7160 series, "policy-map type control-plane" counters are not supported. (180303)
- On DCS-7160 series switches, a maximum of 3840 remote VTEPS are supported when the switch is configured as a Vxlan Vtep. (188553)

## Multicast Limitations and Restrictions in 4.18.3F

- On the DCS-7050QX2 series switches, egress VLAN translation will not work on routed multicast packets when the VLAN to be translated is part of the outgoing interface list. (151093)

## DCS-7300 Limitations and Restrictions in 4.18.3F

- Only up to 1K interfaces are supported on the DCS-7316. (97243)
- When IGMP snooping is enabled on the DCS-7010T, DCS-7050, DCS-7050X, DCS-7250X, and DCS-7300X series, a single unknown multicast floodset is shared across all VLANs with IGMP snooping enabled. This can cause unexpected flooding to a trunk port that has no multicast routers on a given VLAN, but has multicast router attached to the same trunk port on another VLAN. (105188)

- On the DCS-7010T, DCS-7050, and DCS-7050X, a large ACL and PBR policy configuration that consumes all TCAM resources may not fit after doing a config-replace, ACL agent restart or switch reload. After performing a config-replace, ACL agent restart or a switch reload, it is possible that only the ACL or the PBR policy will be able to fit. (105667)
- On DCS-7050X, DCS-7250X, DCS-7060X, DCS-7260X, DCS-7304, DCS-7308, DCS-7316, DCS7320X series switches, Every time nexthop specified in the PBR policy gets a new resolution, PBR policy might cause temporary traffic disruption. This can involve: momentarily routing as per L3 lookup of the packet, momentary packet drops. System will recover automatically and PBR policy will route the packet as per new nexthop resolution (105670)

## Conditions and Impacts

The release notes listed above use shorthand terminology to refer to conditions that arise frequently in connection with bugs. This section explains each condition and its impact in more detail.

### **Condition: Rib agent restart**

**Impact:** When the Rib agent goes down, all routing sessions are terminated; all BGP sessions drop, all OSPF adjacencies are lost, and neighbors stop forwarding traffic to us. When the Rib agent restarts, adjacencies are re-formed, and, after protocol convergence, traffic flows through us again. In most cases where there is adequate network-level redundancy, application-visible impact should be minimal.

### **Condition: Rib agent hang**

**Impact:** When the Rib agent hangs, routing protocols stop running. Routing peers will generally time out their session with the hung Rib agent, withdrawing routes accordingly. Meanwhile, the device continues to forward packets based on existing routing state. During this time, the device will not respond to routing topology changes. After a heartbeat timer expires (typically 10 minutes), the Rib agent restarts. In networks with sufficient redundancy, application impact of a Rib agent hang is usually low, because there is no data path disruption. However, in conjunction with other network changes (such as link failure or introduction), routing loops may occur.

### **Condition: kernel crash**

**Impact:** A kernel crash has impact similar to issuing the "reload now" command. All links go down and all forwarding stops. Then, the system reloads, which may take up to 15 minutes. In a network with adequate redundancy, there should be minimal traffic loss associated with this period. After reload, links come up and protocols (LACP, STP, BGP, etc) reconverge. Protocol reconvergence is not necessarily hitless, depending on topology and configuration. For example, a switch may advertise a prefix to a connected

subnet before STP has converged. However, any associated outage should be short lived, typically lasting around 30 seconds. The MLAG-SSO feature can dramatically reduce the window of disruption.

**Condition: forwarding agent restart**

**Impact:** A forwarding agent restart typically results in the switch ASIC being reset. It clears packet memory, dropping all packets currently in the switch, and causes all links to go down. The restart can take up to 45 seconds, during which time all links are down. Once the restart completes, all links come back up automatically, followed by protocol reconvergence (MLAG, LACP, STP, BGP/OSPF/IS-IS, etc). Depending on which protocols and options are in use, the reconvergence may take a few seconds up through several minutes. On modular switches, the impact of forwarding agent restart is limited to the affected line card; that is, if the forwarding agent for line card 3 restarts, then all ports on line card 3 bounce and protocols on those ports reconverge, but ports on other line cards are unaffected.