



Cisco ASR 900 Series Aggregation Services Routers Feature Compatibility Matrix

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Feature Compatibility Matrix for the Cisco ASR900 Series Aggregation Services Routers



Feature Name	RSP1	RSP2	RSP3
	Supported Release	Supported Release	Supported Release
PPP MRRU Negotiation Configuration	3.6.0S1	3.14.0S	
MPLS - Multilink PPP support	3.9.0S	3.14.0S	
Egress Policing on Non Priority Queues	3.6.0S	3.13.0S	NA
Synchronous Ethernet (SyncE): ESMC & SSM			3.16.1S
MPLS TE NSR	3.13.0S	3.13.0S	
Provide option to enable/disable USB	3.12.0S	3.13.0S	3.16.1S
syslog and trigger support for external alarm	3.13.0S	3.13.0S	3.16.1S
HSRP: Global IPv6 Address			
Support for IEEE 1588-2008 Precision Clock Synchronization Protocol	3.5.0S	3.13.0S	3.16.1S
REP Configurable Timers aka REP Fast Hellos	3.6.0S	3.13.0S	
Link State Tracking (LST)			
QoS Packet Marking	3.5.0S	3.13.0S	3.16.1S
1588-2008 Boundary Clock	3.5.0S	3.13.0S	3.16.1S
Hot Standby Pseudowire Support for Ethernet	3.7.0S	3.13.0S	
Hot Standby Pseudowire Support for TDM ACs	3.7.0S	3.15.0S	

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	Supported Release	Supported Release	Supported Release
RMON Full	3.13.0S	3.13.0S	
Y.1731 Performance Monitoring	3.5.0S	3.13.0S	3.18.0S
Y.1731 Performance Monitoring (Xconnect & Port-Channel Support)	3.6.0S	3.13.0S	
Inverse Multiplexing over ATM (IMA)	3.5.0S	3.15.0S	
Punt Policing and Monitoring	3.5.0S	3.13.0S	3.16.1S
Multi-protocol BGP (MP-BGP) - MPLS VPN	3.5.0S	3.13.0S	3.16.1S
Any Transport over MPLS (AToM): ATM AAL5 over MPLS (AAL5oMPLS)	3.6.0S	3.15.0S	
Embedded Event Manager (EEM) 4.0	3.9.0S	3.13.0S	3.16.1S
ITU-T G.8032 Ethernet Ring Protection Switching	3.6.0S	3.13.0S	3.16.1S
Circuit Emulation over Packet Switched Network (CESoPSN)	3.5.0S	3.14.0S	NA
Temperature and Voltage Monitoring	3.13.0S	3.13.0S	3.16.1S
Egress policing and marking	3.6.0S	3.13.0S	3.16.1S
1588 PTP Best Master Clock Algorithm (BMCA) a.k.a. PTP Redundancy	3.7.0S	3.13.0S	3.16.1S
IPv6 Routing: IS-IS Support for IPv6	3.5.0S	3.13.0S	3.16.1S
DHCPv6 - Relay chaining for Prefix Delegation	3.6.0S	3.13.0S	
NTPv4 hardening through import of open source version 4.2.6p2 (July 2010)	3.5.0S	3.13.0S	
MR-APS integration with hotstandby pseudowire	3.11.0S	3.14.0S	

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L2VPN Componentization	3.6.0S	3.13.0S	3.16.1S
N:1 PVC mapping to PWE with non-unique VPI	3.7.0S	3.15.0S	
E-OAM - CFM CCM Hardware Offload (802.1ag within ms accuracy)	3.5.0S	3.13.0S	3.16.1S
E-OAM - CFM CCM Hardware Offload (802.1ag within ms accuracy) support for Xconnect & BD Up MEP	3.6.0S	3.13.0S	3.16.1S
IPv4 unicast routing support	3.5.0S	3.13.0S	3.16.1S
SAToP over MPLS	3.5.0S	3.14.0S	NA
Circuit Emulation over IP PSN with UDP PW Demultiplexing	3.14.0S	3.16.0S	
L2&L3 QoS ACL classification	3.16.1S	3.16.1S	3.16.1S
SSO Support for REP Fast Hellos	3.5.0S1	3.13.0S	
QoS EXP matching	3.5.0S	3.13.0S	3.16.1S
QoS Support	3.5.0S	3.13.0S	3.16.1S
Dying Gasp Support for Loss of power supply via SNMP, Syslog and Ethernet OAM	3.11.0S	3.14.0S	
6PE support	3.6.0S	3.13.0S	
Min Link Support for Port channel	3.5.0S	3.13.0S	3.18.0S
Port-Shaper and LLQ in the presence of EFPs	3.6.0S	3.13.0S	3.16.1S
match any classification	3.6.0S	3.13.0S	3.16.1S
IEEE BMCA	3.16.1S	3.16.1S	3.16.1S
Right To Use (RTU) licensing support	3.12.0S	3.13.0S	3.16.1S

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	Supported Release	Supported Release	Supported Release
QoS ACLs	3.6.0S	3.13.0S	3.16.1S
IGMP Snooping on EFP	3.10.0S	3.14.0S	3.16.1S
IGMP Snooping on Trunk EFP	3.16.0S	3.14.0S	3.16.1S
IGMP Snooping on Port Channel	3.16.0S	3.16.0S	
IGMP State Limit	3.6.0S	3.13.0S	3.16.1S
iPv4 multicast per VRF			3.16.1S
L2VPN Protocol Based CLI	3.7.0S	3.13.0S	3.16.1S
Storm Control	3.10.0S	3.14.0S	3.19.0S
Ethernet Data Plane Loopback (with MAC swap)	3.11.0S	3.14.0S	16.5.1
G.8032 and CFM support for Microwave Adaptive Bandwidth	3.8.0S	3.13.0S	3.16.1S
Synthetic Frame Loss Measurement (ETH-SLM)	3.8.0S	3.13.0S	3.18.0S
IPSLA Support for ETH-SLM (Ethernet Synthetic Loss Measurement in Y1731)	3.7.0S	3.13.0S	3.18.0S
Switch Port Analyzer (SPAN)	3.7.0S	3.13.0S	3.16.1S
Hybrid Clocking Support	3.7.0S	3.13.0S	3.16.1S
Time of Day Selection	3.7.0S	3.13.0S	3.16.1S
STM1 support	3.6.0S	3.14.0S	
Any Transport over MPLS (AToM): Ethernet over MPLS (EoMPLS)	3.5.0S	3.13.0S	3.16.1S
EVC & BD MIB support for trunk EFP	3.8.0S	3.13.0S	3.16.1S
Ethernet Data-Plane Loopback - Route port support & HA	3.11.0S	3.14.0S	

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	Supported Release	Supported Release	Supported Release
Trunk EFP Support on Ether-Channel Interfaces	3.8.0S	3.13.0S	3.18.0S
Egress default queue limit improvement and percent bandwidth support	3.8.0S	3.13.0S	3.16.1S
QoS EXP Marking for for Ingress on TDM	3.9.0S	3.14.0S	
QoS EXP Marking for for Ingress on ATM	3.9.0S	3.15.0S	
1588 BC over MPLS	3.6.0S1	3.13.0S	3.16.1S
SR/MR APS for OC12 port on OC3/OC12 IM	3.9.0S	3.14.0S	
ITU-T Telecom Profile G.8265.1	3.8.0S	3.13.0S	3.16.1S
IEEE 802.3ad Link Aggregation (LACP)	3.5.0S	3.13.0S	3.18.0S
mlppp Egress QoS Support	3.7.0S2	3.14.0S	
Ingress QoS support for Serial Interface	3.13.0S	3.14.0S	
QoS: Global CLI for CoS to EXP table mapping		3.14.0S	
PTP over Native Ethernet	3.9.0S	3.13.0S	
QoS Support for Ether Channels	3.9.0S	3.13.0S	3.18.0S
IP FRR/Remote LFA FRR with L2VPN	3.9.0S	3.13.0S	3.16.1S
EVC Default Encapsulation for QinQ & xconnect	3.5.0S		3.16.1S
Show Interface Capabilities			3.16.1S
MPLS-TP: ATM and TDM Pseudowires	3.8.0S	3.18.0S	
Remote LFA FRR protection for TDM and ATM PWs	3.10.0S		
IPv6 Services: Extended Access Control Lists	3.16.0S	3.14.0S	

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	Supported Release	Supported Release	Supported Release
IPv6 Switching: Provider Edge Router over MPLS (6PE)	3.6.0S	3.13.0S	3.18.0SP
BGP GSHUT enhancement	3.11.0S	3.13.0S	
BGP Monitoring Protocol	3.11.0S	3.13.0S	
VRF aware BGP translate-update	3.11.0S	3.13.0S	
BGP - RTC for legacy PE	3.11.0S	3.13.0S	
IOS VRF Multicast Multi-Topology Support	3.11.0S	3.13.0S	
End-to-End Transparent Clocking	3.7.0S	3.13.0S	3.16.1S
Multi-Topology BGP with VRF enhancement	3.11.0S	3.13.0S	
POS Concatenation mode on STM1/4 IM	3.8.0S	3.14.0S	
ISIS local microloop protection	3.11.0S	3.13.0S	3.16.1S
Autonomic Networking: Certificate Management	3.13.0S		
IP tunnel: Antonomic Networking Support	3.11.0S	3.14.0S	
AutoInstall Using DHCP for LAN Interfaces	3.12.0S	3.13.0S	
ATM/IMA/PPP/MLPPP Support on OC3 Interface Module	3.6.0S1	3.15.0S	
IPSLA Y1731 SLM Feature Enhancements	3.8.0S	3.13.0S	3.18.0S
IP SLA - Service Performance Testing Infrastructure	3.18.0SP	3.18.0SP	16.5.1
MPLS Traffic Engineering (TE) - Fast Reroute (FRR) Link and Node Protection	3.6.0S	3.13.0S	3.18.0SP
BGP - Accumulated IGP	3.12.0S	3.13.0S	3.16.1S

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Feature Name	RSP1	RSP2	RSP3
	Supported Release	Supported Release	Supported Release
802.1ad	3.13.0S	3.14.0S	3.18.0SP
TWAMP RFC compliance	3.12.0S	3.13.0S	16.5.1
Table Map		3.14.0S	
G.8032 (3.3 ms CCM)	3.6.0S	NA	3.16.1S
IEEE 802.1p Support	3.6.0S	3.13.0S	3.16.1S
IP FRR over BDI	3.11.0S	3.13.0S	3.16.1S
NTP Timestamping	3.12.0S	3.13.0S	
Multicast support on T1/E1 & OC3 IMs	3.8.0S		
AAL5 termination with L3QOS	3.11.0S	3.14.0S	
Audio Media Sense		NA	
Smart Licensing with HA Support	3.16.0S	3.15.0S	3.16.1S
Dual Rate		NA	
IPv6 Routing: OSPF for IPv6 (OSPFv3)	3.5.0S	3.13.0S	3.16.1S
Remote SPAN (RSPAN)	3.11.0S	3.14.0S	
DHCP Snooping	3.7.0S	3.13.0S	3.18.0SP
BFD over TDM Routed	3.8.0S	3.14.0S	
L2PT - Layer 2 Protocol Tunneling	3.5.0S	3.13.0S	3.16.1S
ME3600x-24CX OC3 Port Support	NA	NA	NA
ME3600/ME3800: HDLC Support on T1/E1 IM	NA	NA	NA
Secure Shell SSH Version 2 Client Support		3.13.0S	3.16.1S
EVC Push Rewrite			3.16.1S
IPv6 QoS: MQC Packet Classification	3.6.0S	3.13.0S	3.16.1S
IPv6 Routing: Static Routing	3.5.0S	3.13.0S	3.16.1S

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	Supported Release	Supported Release	Supported Release
IPv6 Switching: CEF/dCEF Support	3.5.0S	3.13.0S	3.16.1S
SNMP over IPv6	3.5.0S	3.13.0S	3.16.1S
ACL Baseline Features support for ME3600/ME3800	3.16.1S	3.16.1S	3.16.1S
Egress Marking Features Baseline set for ME3600/ME3800	3.16.1S	3.16.1S	3.16.1S
Baseline QoS feature LLQ with Policer for ME3600/ME3800	3.16.1S	3.16.1S	3.16.1S
Ingress Classification Baseline features for ME3600/ME3800	3.16.1S	3.16.1S	3.16.1S
Flat policy egress support - Baseline qos feature for ME3600/ME3800	3.16.1S	3.16.1S	3.16.1S
Port Shaper support - baseline qos features for ME3600/ME3800	3.16.1S	3.16.1S	3.16.1S
VLAN grouping QoS Baseline features for ME3600/ME3800	3.16.1S	3.16.1S	3.16.1S
Sonet Mode support on OC3 IM	3.8.0S	3.14.0S	
Channelization support for OC3 IM	3.7.0S	3.14.0S	
PIM Version 2	3.5.0S	3.13.0S	3.16.1S
BFD Support for Multicast(PIM)		3.14.0S	
Any Transport over MPLS (AToM): ATM Cell Relay over MPLS: Packed Cell Relay	3.5.0S	3.14.0S	
Class-based QoS MIB	3.6.0S	3.13.0S	3.16.1S
MPLS (Multiprotocol Label Switching)	3.5.0S	3.13.0S	3.16.1S

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Feature Name	RSP1	RSP2	RSP3
	Supported Release	Supported Release	Supported Release
CDP (Cisco Discovery Protocol) Version 2	3.5.0S	3.13.0S	3.16.1S
IPv6 VPN over MPLS (6VPE)	3.6.0S	3.13.0S	3.18.0SP
PTP over Native Ethernet		3.13.0S	
EVC Local Connect		3.18.0S	3.18.0SP
IEEE 802.1Q VLAN Support	3.5.0S	3.13.0S	3.16.1S
SNMPv3 (SNMP Version 3)	3.5.0S	3.13.0S	3.16.1S
Configurable Per VLAN MAC Learning (PVL)	3.5.0S	3.13.0S	
MPLS LDP - IGP Synchronization	3.6.0S	3.13.0S	3.16.1S
Class Based Policing	3.5.0S	3.13.0S	3.16.1S
Y.1731 DMMv1	3.5.0S	3.13.0S	3.18.0S
MPLS over POS Support	3.8.0S	3.14.0S	
QoS Support on POS on OC3 IM	3.8.0S	3.14.0S	
RSVP - Resource Reservation Protocol	3.6.0S	3.13.0S	3.16.1S
Remote Monitoring MIB Update	3.5.0S	3.13.0S	
Class Based Weighted Fair Queuing (CBWFQ)	3.5.0S	3.13.0S	3.16.1S
POS (Packet over SONET/SDH) on OC12 IM card	3.9.0S	3.15.0S	
QoS on serial TDM interface	3.9.0S	3.14.0S	
IPv6 ACL	3.7.0S	3.13.0S	3.18.0SP
Port licensing	3.10.0S	3.14.0S	
PPP	3.6.0S	3.14.0S	
OC12 Support for HDLC and MLPPP	3.9.0S		
HSRP support	3.5.0S	3.13.0S	3.16.1S
Microwave ACM Signaling and EEM integration	3.9.0S	3.13.0S	

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	Supported Release	Supported Release	Supported Release
Microwave ACM Signaling over P2MP Topologies	3.16.0S	3.16.0S	
SNMPv3 - 3DES and AES Encryption Support	3.5.0S	3.13.0S	
TACACS+	3.5.0S	3.13.0S	3.16.1S
MPLS Forwarding Infrastructure Scalability	3.5.0S	3.13.0S	3.16.1S
STP Syslog Messages	3.5.0S	3.13.0S	
L2PT - Layer 2 Protocol Tunneling on Trunk Ports	3.6.0S	3.13.0S	3.16.1S
IPv6 Routing: Unicast Routing	3.5.0S	3.13.0S	3.16.1S
Diffserv Compliant WRED	3.6.0S	3.13.0S	3.16.1S
BGP Support for TCP Path MTU Discovery per Session	3.8.0S	3.13.0S	3.16.1S
Ethernet Connectivity Fault Management (E-CFM)	3.5.0S	3.13.0S	3.16.1S
SNMP (Simple Network Management Protocol)	3.5.0S	3.13.0S	3.16.1S
Support for dissimilar PHB match at Ingress and Egress for mpls/vpls interface.	3.11.0S	3.15.0S	3.16.1S
MPLS VPN - Inter-Autonomous System Support	3.7.0S	3.13.0S	3.16.1S
OSPF TTL Security Check	3.13.0S	3.13.0S	3.16.1S
DS3 support on OC3 port	3.11.0S	3.14.0S	
Ethernet Operations, Administration, and Maintenance (OAM)	3.5.0S	3.13.0S	3.16.1S
Service Activation		3.16.0S	

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	Supported Release	Supported Release	Supported Release
Etherchannel Min-Links	3.8.0S	3.13.0S	3.18.0S
IP 16-way Equal-Cost Multipath	3.5.0S	3.13.0S	
RADIUS	3.5.0S	3.13.0S	3.16.1S
Ethernet Local Management Interface (LMI) at Provider Edge (PE)	3.8.0S	3.13.0S	3.16.1S
SSO - PPP	3.6.0S	3.14.0S	
BGP Signaling - VPLS interAS option B	3.12.0S		
MLPPP - Multilink PPP	3.6.0S	3.14.0S	
LMM Support for Smart SFP	3.12.0S	NA	NA
DHCP Option 82 Configurable Circuit ID and Remote ID	3.7.0S	3.13.0S	
MPLS Virtual Private Networks (VPN)	3.5.0S	3.13.0S	3.16.1S
DHCP - DHCPv6 Relay Agent notification for Prefix Delegation	3.6.0S	3.13.0S	
onePK SS: Policy API for QoS Multi-Action Policer		3.15.0S	
Interfaces MIB: SNMP context based access	3.5.0S	3.13.0S	3.16.1S
IEEE 802.1ab LLDP (Link Layer Discovery Protocol)	3.9.0S	3.13.0S	3.16.1S
Network Time Protocol (NTP)	3.12.0S		3.16.1S
EFP aware QoS	3.6.0S1	3.13.0S	3.16.1S
IEEE 802.1ag (CFM) Support on Port-Channel Interface	3.6.0S	3.13.0S	16.5.1

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Access Circuit Redundancy	3.10.0S	3.14.0S	
Secure Copy (SCP)	3.5.0S	3.13.0S	3.16.1S
ACFC and PFC support on Multilink interface	3.6.0S1	3.14.0S	
REP - (Resilient Ethernet Protocol)	3.5.0S	3.13.0S	
1 rate 2 color per EVC policer	3.5.0S	3.13.0S	3.16.1S
BFD - Static Route Support	3.5.0S	3.13.0S	3.16.1S
BFD IPv6 Encaps Support	3.6.0S	3.13.0S	
IPv6 - Static Route support for BFD over IPv6		3.13.0S	
BGP Support for 4-byte ASN	3.9.0S	3.13.0S	3.16.1S
EVC 2.0 - Advanced VLAN translations & service mapping based on 802.1ah	3.5.0S	3.13.0S	
EVC MIB		3.13.0S	3.16.1S
Dual Rate Three Color Ingress Policer on Service Instances	3.5.0S	3.13.0S	3.16.1S
Clear Channel ATM	3.13.0S	3.18.0S	
MST on EVC Bridge-Domain	3.5.0S	3.13.0S	3.16.1S
TDM clock recovery	3.10.0S	3.14.0S	
SLM Over VPLS	3.16.0S	3.17.0S	3.18.0S
TSoP Smart SFP -STM1	3.14.0S	3.17.0S	
Async RS232 over MPLS		3.14.0S	
ACL- DSCP Matching	3.5.0S	3.13.0S	3.16.1S
ACL - Source & Destination Address Matching	3.5.0S	3.13.0S	3.16.1S
E&M over MPLS	NA	3.17.0S	

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	Supported Release	Supported Release	Supported Release
ACL - IP Protocol	3.5.0S	3.13.0S	3.16.1S
Ingress QoS support for Serial Interface	3.13.0S		
Static MAC binding to EVCs and Psuedowires	3.7.0S	3.13.0S	3.16.1S
IP SLAs TWAMP Responder v1.0	3.12.0S	3.13.0S	
Modular QoS CLI (MQC)	3.5.0S	3.13.0S	3.16.1S
CFM over EFP interface configured with	3.6.0S	3.13.0S	3.16.1S
Resilient Ethernet Protocol-no-edge-neighbour-enhancement	3.5.0S1	3.13.0S	
Jumbo Frames	3.5.0S	3.13.0S	3.16.1S
IP FRR	3.6.0S	3.13.0S	3.16.1S
Synchronous Ethernet Support	3.5.0S	3.13.0S	3.16.1S
CEM support on 8 port T1E1 IM		3.15.0S	
FHRP - HSRP - Hot Standby Router Protocol V2			3.16.1S
PIM Version 2	3.5.0S	3.13.0S	3.16.1S
Ordinary Clock Master			3.16.1S
PTP High Jitter Mode			3.16.1S
IPv6 Multicast: Multicast Listener Discovery (MLD) Protocol, Versions 1 and 2	3.11.0S	3.15.0S	3.18.0SP
IPv6 Multicast: PIM Sparse Mode (PIM-SM)	3.11.0S	3.15.0S	
IPv6 Multicast: PIM Source-Specific Multicast (PIM-SSM)	3.11.0S	3.14.0S	
IPv6 Multicast: PIM Embedded RP Support	3.11.0S	3.15.0S	

Feature Compatibility Matrix for the Cisco ASR900 Series Aggregation Services Routers

Feature Name	RSP1	RSP2	RSP3
	Supported Release	Supported Release	Supported Release
IPv6 Multicast: PIM Accept Register	3.11.0S	3.15.0S	
Fp init fails with Qos policies and with huge range of BD on TEFP	3.13.0S	3.13.0S	3.16.1S
Set and police in the same class-map (Ingress and Egress)	3.10.0S	3.13.0S	3.16.1S
Egress Port Level Policy with Ingress EFP Level Policy	3.10.0S	3.13.0S	3.16.1S
OSPF doesn't come up when PIM is enabled on VPLS core interface	3.12.0S	3.13.0S	
VRRPv3 Protocol Support	3.16.0S	3.14.0S	3.18.0SP
BFD Support for HSRP	3.8.0S	3.13.0S	3.16.1S
L2VPN Static to Dynamic PW Interconnection & PW Preferred Path for MPLS-TP Tunnels	3.5.0S	3.13.0S	
MPLS-TP: PW Redundancy for Static PWs	3.5.0S	3.13.0S	
MPLS-TP: MS-PW with Static and Dynamic PW Support	3.6.0S	3.13.0S	
GOLD – Generic Online Diagnostics	3.7.0S		
L2VPN: PW Status for Static PWs	3.5.0S	3.13.0S	
Bidirectional MPLS-TP LSP	3.5.0S	3.13.0S	
MPLS-TP Path Protection	3.5.0S	3.13.0S	
MPLS-TP OAM: GACH	3.5.0S	3.13.0S	
MPLS-TP OAM: Continuity Check via BFD	3.5.0S	3.13.0S	
MPLS-TP OAM: Ping/Trace	3.5.0S	3.13.0S	

Feature Compatibility Matrix for the Cisco ASR900 Series Aggregation Services Routers

Feature Name	RSP1	RSP2	RSP3
	Supported Release	Supported Release	Supported Release
MPLS-TP OAM: Fault Management	3.5.0S	3.13.0S	
BFD - BFD Hardware Offload Support	3.5.0S	3.13.0S	3.16.1S
Kerberos V Client Support			3.16.1S
Unicast Reverse Path Forwarding (uRPF)	3.6.0S	3.13.0S	3.16.1S
CFM Extension for 1+1 Hot-Standby Support	3.5.0S	3.13.0S	3.16.1S
VPLS over MPLS-TP	3.5.0S	3.13.0S	
MPLS-TP: LDP signaling over MPLS TP LSPs	3.5.0S	3.13.0S	
MPLS-TP: IP addresses for MPLS TP interfaces	3.5.0S	3.13.0S	
MPLS TP: IP-less configuration of MPLS TP tunnels	3.5.0S	3.13.0S	
Any Transport over MPLS (AToM): Layer 2 QoS (Quality of Service)	3.7.0S		
Callhome V2 enhancements	3.13.0S	3.13.0S	3.16.1S
Call Home V3		3.13.0S	
BGP - MP-iBGP NSR	3.6.0S	3.13.0S	3.16.1S
Cisco-BGP-MIPv2	3.5.0S	3.13.0S	3.16.1S
Trunk EFP support	3.5.0S	3.13.0S	3.16.1S
MVPN	3.9.0S	3.17.0S	16.5.1
CSL (Cisco Secure Licensing Support)	3.5.0S	3.13.0S	
	3.7.0S		
BFD: BGP multihop client Support (IPv4/IPv6)		3.13.0S	
BGP: Gracefull Shutdown (GSHUT)	3.7.0S	3.13.0S	3.16.1S
MFI -Extended LFA	3.7.0S	3.13.0S	3.16.1S

Feature Compatibility Matrix for the Cisco ASR900 Series Aggregation Services Routers

Feature Name	RSP1	RSP2	RSP3
	Supported Release	Supported Release	Supported Release
MAC Limiting per VFI and BD	3.7.0S	3.13.0S	
CFM Support on Trunk EFP	3.9.0S	3.13.0S	3.16.1S
Link Path Through	3.7.0S	3.13.0S	3.16.1S
Spanning Tree Protocol (STP)			3.16.1S
Static VPLS over MPLS-TP	3.6.0S	3.13.0S	
MPLS-TP MIB	3.8.0S	3.13.0S	
MPLS-TP: IP Less trace support (Nodeld, LinkId)	3.8.0S	3.13.0S	
VPLS BGP Signaling	3.8.0S	3.13.0S	3.17.0S
Y.1731 enhancements (On-demand & Concurrent	3.8.0S	3.13.0S	3.18.0S
MFI - VPLS BGP sig	3.8.0S	3.13.0S	3.17.0S
Unicast Reverse Path Forwarding (uRPF) Loose mode	3.8.0S	3.13.0S	3.16.1S
uRPF for IPv6 (Strict and Loose mode)		3.16.0S	
IS-IS Support for BFD over IPv6	3.8.0S	3.13.0S	
QoS: CBQoS Management - Policy-to-Interface Mapping Support	3.6.0S		
BGP PIC (edge & core) - for RFC-3107 labeled iBGP	3.8.0S	3.13.0S	3.16.1S
QoS Classification based on EFP	3.9.0S	3.13.0S	3.16.1S
BD and CFM Protocol Based New CLI Model	3.7.0S	3.13.0S	3.16.1S
Offloading IPv4 Async BFD sessions with 3.3ms timers	3.8.0S	3.13.0S	3.16.1S
QoS: Global CLI for CoS to EXP table mapping	3.9.0S	3.13.0S	

Feature Compatibility Matrix for the Cisco ASR900 Series Aggregation Services Routers

Feature Name	RSP1	RSP2	RSP3
	Supported Release	Supported Release	Supported Release
L2VPN Protocol Base CLIs	3.9.0S	3.13.0S	
MPLS -TP: Linear Protection/PSC support	3.9.0S	3.13.0S	
QoS support for dataplane loopback for EFP	3.11.0S	3.15.0S	
BFD Debug Enhancement	3.10.0S	3.13.0S	3.17.0S
BFD Deterministic Hardware Offload	3.10.0S	3.13.0S	3.16.1S
Remote LFA FRR and labeled BGP FRR integration	3.10.0S	3.13.0S	3.16.1S
Pseudowire Group Switchover	3.10.0S	3.13.0S	3.16.1S
Auto-IP	3.10.0S	3.13.0S	3.16.1S
TCAM threshold based alarms	3.11.0S	3.14.0S	
Onboard Failure Logging	3.7.0S		
Secure Boot Support		3.13.0S	3.16.1S
VPLS over remote LFA	3.10.0S	3.13.0S	
Access Circuit Redundancy	3.12.0S		
Autoroute announce and forwarding adjacencies for OSPFv3 over IPv4 TE tunnels	3.12.0S	3.13.0S	
Control Plane Security (CoPP)		3.14.0S	
REP-AG Enhancements	3.13.0S	3.13.0S	
Prefix Independent Convergence with Fast Re-Route Over Bridge Domain Interface	3.11.0S1	3.13.0S	3.16.1S
BGP Per Neighbor Graceful Restart Configuration			
Routed Pseudo-Wire and Routed VPLS	NA	3.15.0S	16.6.1

Feature Compatibility Matrix for the Cisco ASR900 Series Aggregation Services Routers

Feature Name	RSP1	RSP2	RSP3
	Supported Release	Supported Release	Supported Release
WAN mode support	3.6.0S	3.13.0S	
CRM Support for Cyton ASIC with integrated OAM HW offload	NA	3.13.0S	3.16.1S
SSO - BFD	3.5.0S	3.13.0S	3.16.1S
PIM DR Loadbalancing	3.13.0S	3.13.0S	
PTP-SYNCE on 10G interface in WANPHY mode	3.10.0S	3.13.0S	3.16.1S
eCPU & FPGA stats	NA	3.13.0S	NA
EFP policers without Ingress TCAM consumption		3.14.0S	NA
Enhanced Tracking Support / Enhanced Object Tracking / EOT	3.9.0S	3.13.0S	
Source Specific Multicast (SSM) Mapping	3.5.0S	3.13.0S	3.16.1S
DAI (Dynamic ARP Inspection)	3.7.0S	3.13.0S	
QoS - Service Policies on Aggregate GEC			NA
EVC QoS			3.16.1S
Field Programmable Device Upgrade Tool	3.5.0S	3.13.0S	3.16.1S
Virtual Private LAN Services (VPLS)	3.5.0S	3.13.0S	3.17.0S
IS-IS Support for BFD over IPv4	3.5.0S	3.13.0S	3.16.1S
OSPF Support for BFD over IPv4	3.5.0S	3.13.0S	3.16.1S
Access Switch Device Manager (SDM) Template - Default	3.10.0S	3.13.0S	NA
Access Switch Device Manager (SDM) Template - IP & Video	3.11.0S	3.13.0S	NA
MQC - Multi-Level Priority Queue	3.7.0S	3.13.0S	3.16.1S

Feature Compatibility Matrix for the Cisco ASR900 Series Aggregation Services Routers

Feature Name	RSP1	RSP2	RSP3
	Supported Release	Supported Release	Supported Release
BFD Echo Mode	3.9.0S	3.13.0S	
IS-IS - MPLS LDP Autoconfiguration	3.6.0S	3.13.0S	3.16.1S
VPLS Autodiscovery, BGP based	3.6.0S	3.13.0S	3.17.0S
LACP 1-1 redundancy with fast switchover	3.8.0S	3.13.0S	3.18.0S
Multichassis LACP (mLACP)	3.10.0S	3.15.0S	16.5.1
Service Groups	3.11.0S		
BGP Support for BFD	3.5.0S	3.13.0S	3.16.1S
CISL - SNMP Support			3.16.1S
4293 IP-MIB (IPv6 only) and RFC 4292 IP-FORWARD-MIB (IPv6 only)	3.6.0S	3.13.0S	3.16.1S
H-VPLS N-PE Redundancy for MPLS Access	3.6.0S	3.13.0S	3.17.0S
Label Switched Multicast (LSM) Multicast Label Distribution Protocol (mLDP) based Multicast VPN (mVPN) support		3.15.0S	16.5.1
VPLS MAC Address Withdrawal	3.5.0S	3.13.0S	3.17.0S
MPLS TE - Bundled Interface Support (EtherChannel and MLP)	3.6.0S	3.13.0S	
MAC Address Limiting on Service Instance / Bridge Domain	3.5.0S	3.13.0S	
L2 ACL on Service Instance on Port-channel	3.6.0S	3.13.0S	3.16.1S
MAC Address Security for EVC Bridge-Domain	3.7.0S	3.13.0S	16.5.1
Qos EVC Push Rewrite		3.15.0S	3.16.1S

Feature Compatibility Matrix for the Cisco ASR900 Series Aggregation Services Routers

Feature Name	RSP1	RSP2	RSP3
	Supported Release	Supported Release	Supported Release
Label Switched Multicast Point-to-Multipoint Traffic Engineering		3.15.0S	
NSR - LDP Support	3.16.0S	3.15.0S	
Hop-by-Hop BC in a ring with master/slave role reversal	3.16.0S	3.15.0S	
BGP PIC Edge/Core VPNv6		3.15.0S	
ACL - ICMP Code	3.5.0S	3.13.0S	3.16.1S
DHCP Server v6		3.15.0S	
IPv6 DHCP Client		3.15.0S	
BCP Support over MLPPP		16.5.1	
IKE Security Protocol			3.18.0SP
IPSec Triple DES Encryption (3DES)			3.18.0SP
Encrypted Pre-shared Key			3.18.0SP
Advanced Encryption Standard (AES)			3.18.0SP
IKE Mode Configuration			3.18.0SP
Multicast Source Discovery Protocol (MSDP)	3.5.0S	3.13.0S	
MPLS OAM Support for Multisegment Pseudowires	3.5.0S1	3.13.0S	3.16.1S
Static MAC binding to EVCs and Psuedowires	3.7.0S	3.13.0S	3.16.1S
BGP PIC Edge for IP/MPLS	3.6.0S	3.13.0S	3.16.1S
GNSS reciever support	NA	NA	3.17.0S
UniDirectional Link Detection (UDLD)	3.13.0S	3.14.0S	3.16.1S

Feature Compatibility Matrix for the Cisco ASR900 Series Aggregation Services Routers

Feature Name	RSP1	RSP2	RSP3
	Supported Release	Supported Release	Supported Release
Policy-Based Routing (PBR)		3.16.0S	
PTP Hybrid BMCA		3.15.0S	3.18.0S
QoS Priority Propagation in Multi-level Scheduler		3.15.0S	
IEEE 802.1Q Custom Ethertype		3.15.0S	3.18.0SP
VRRPv3 High Scale		3.15.0S	
Hierarchical Color-Aware Policing		3.15.0S	
8 path ECMP	3.16.0S	3.16.0S	
Support sending PW Grouping ID TLV		3.16.0S	
Image Signing		3.16.0S	3.16.1S
Priority Queing - Shaper support		3.16.0S	3.16.1S
Segment Routing - ISIS v4 node SID	3.16.0S	3.16.0S	
Phase profile G8275.1	NA	3.18.0S	3.18.0SP
Phase profile G8273.2	NA	3.18.0SP	3.18.0SP
FlexLSP base functionality	NA	3.18.0SP	3.18.0SP
VLAN Scale Convergence		3.17.0S	
Ethernet Fault Detection		3.17.0S	
Qos Support for VLAN Translation		3.17.0S	
CFM over CVLAN		3.17.0S	
MLDP Extranet		3.17.0S	
MPLS-TE over BDI		3.17.0S	
POS APS on OC3 IM card		3.17.0S	
BGP PIC + TDM	3.17.0S	3.18.0S	

Feature Compatibility Matrix for the Cisco ASR900 Series Aggregation Services Routers

Feature Name	RSP1	RSP2	RSP3
	Supported Release	Supported Release	Supported Release
L3 Security ACL for EVC support		3.17.0S	
IPV6 MVPN with MLDP		3.18.0S	16.5.1
BGP PIC + TE	3.18.0S	3.18.0S	
Circuit Emulation over UDP on A900-IMA32D on ASR900 RSP2 and ASR920		3.18.0S	
Discard class based WRED			3.18.0S
Netflow with EFP support		3.18.0SP	
PPPoE Intermediate Agent		3.18.0S	
Asymmetric EFP		3.18.0S	
EVPN VPWS		3.18.0S	
Ethernet loopback for untagged/default		3.18.0S	
8K EFP per box (rsp3) + 4K EFP per port			3.18.0SP
ASR 900 4 port C37.94 Interface Module		3.18.1SP	
OTN Wrapper on Ethernet cards: 2x10GE, 1x10G+8x1G			3.18.0SP
Differential clock recovery on 9xOCn IM interfaces			3.18.0SP
Differential clock recovery on DSx interfaces			3.18.0SP
APS support on 9xOCn IM			3.18.0SP
DCC support on 9xOCn IM			
MQC - Hierarchical Service-Policy Map Infrastructure			3.18.0SP
Evolved Manageability Data Model Mapping and Infrastructure Support on RSP2		3.18.0S	

Feature Compatibility Matrix for the Cisco ASR900 Series Aggregation Services Routers

Feature Name	RSP1	RSP2	RSP3
	Supported Release	Supported Release	Supported Release
Evolved Manageability Additional Data Model Mapping Infrastructure and Platform Support		3.18.0S	
STM-4 TSoP		3.18.0S	
L2VPN over IP/MPLS support			3.18.0SP
SONET support on 9xOCn IM			3.18.0SP
DS1 support on 48 port DS1/E1 IM			3.18.0SP
DS3 support on 48 port DS3 IM			3.18.0SP
QoS support on CEMoMPLS			3.18.0SP
Circuit emulation support on 48xDS1/E1 IM			3.18.0SP
Loopback and BERT support on DSx IMs			3.18.0SP
Circuit emulation support on 9xOCn IM			3.18.0SP
Circuit emulation support on 48 port DS3/E3 IM			3.18.0SP
Adaptive clock recovery on 9xOCn IM interfaces			3.18.0SP
Adaptive clock recovery support on DSx interfaces			3.18.0SP
DS3 Channelization			3.18.0SP
OTN Wrapper on Combo Ethernet card:1x10GE + 8 GE			3.18.0SP
DS3 MDL support			3.18.0SP
ONS pluggable optics support on OCn interfaces			3.18.0SP

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Feature Name	RSP1	RSP2	RSP3
	Supported Release	Supported Release	Supported Release
Alarm history and TL1 timestamping on OCn interfaces			3.18.0SP
Qos LACP Activ/Standby			3.18.0SP
SSM Support on Legacy Ocx		3.18.0SP	3.18.0SP
PW Redundancy with Uni-directional Active-Active	3.18.1SP	3.18.1SP	
G.8275.1			3.18.1SP
WAN Phy			3.18.1SP
VPLS with BDI/PC			3.18.1SP
C37.94		3.18.1SP	
Port Licensing			3.18.1SP
G.8275.2		16.5.1	16.5.1
IPv6 QoS			16.5.1
FAT Pseudowire			16.5.1
VRF Aware IPsec		16.5.1	16.5.1
PVST/RPVST		16.5.1	
Egress Shaping on MLPPP Bundle		16.5.1	
Egress QoS Support on MLPPP Bundle (Strict Priority Queuing)		16.5.1	
1G on 8x10G IM			16.5.1
100G IM OTN			16.5.1
Flex LSP Phase-2		16.5.1	16.5.1
UPSR			16.5.1

Feature Compatibility Matrix for the Cisco ASR900 Series Aggregation Services Routers

Feature Name	RSP1	RSP2	RSP3
	Supported Release	Supported Release	Supported Release
Two Level PHB scheduling at egress			16.5.1
5G XFI			16.5.1
Adaptive Clock Recovery (ACR) for 8 T1/E1 - only for CEM over MPLS		16.5.1	
AINS Phase 1			16.5.1
E1 support on T1E1 card			16.5.1
E3 support on T3E3 card			16.5.1
10G SADT			
VPLS Over BDI/PC		16.5.1	16.5.1
Static PW with OAM enabling Remote Port Shutdown			
System clock at 1.4MHz			16.5.1
TWAMP with VRF support		16.5.1	
1mHz Bandwidth settings with GNSS Enabled			16.5.1
mVPN-GRE over Physical Interface & BDI			16.6.1
16K EFP Support			16.6.1
Active / Active QoS			16.6.1
AINS			16.6.1
ISIS Segment Routing enhancement - TI LFA FRR, SR-LDP interworking, Adj SID			16.6.1
FMEA			16.6.1
DS1/DS3_1:1_Card_Protection			16.6.1

Feature Compatibility Matrix for the Cisco ASR900 Series Aggregation Services Routers

Feature Name	RSP1	RSP2	RSP3
	Supported Release	Supported Release	Supported Release
STM1 TU-AIS & AIS		16.6.1	
E&M CAS Support, interop with 8T1/E1		16.6.1	
PTP BC Holdover Improvement in Double failure scenarios		16.6.1	16.6.1
SDH Support on Eowyn			16.6.1
SDH MSP on Eowyn			16.6.1
SDH SNCP on Eowyn			16.6.1
DCC Support on Eowyn			16.6.1
Split Horizon Scale Improvements			16.6.1
VPLS FRR			16.6.1
Fat PW			16.6.1
Segment Routing TE Feature		16.6.1	
TWAMP mpls support on RSP3			16.6.1
Auto-BW tunnels			16.6.1
MEF OpNID/Latching Loopback		16.7.1	
L2CP protocol for forward/discard at EVC (MRP, MMRP, MVRP)		16.7.1	
5G SDH			16.7.1
Card Protection			16.7.1
Mac Limit			16.7.1
CESoP For High Density CEM Ims			16.7.1
VLAN on Trunk EFP		16.7.1	
Eomer 3G card		16.7.1	

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Feature Name	RSP1	RSP2	RSP3
	Supported Release	Supported Release	Supported Release
Celeborn Support			16.7.1
EVC Filtering			16.7.1
AIS support on IMS8D, IMA16D		16.7.1	
SADT - FPGA Support			16.7.1
BFD support on IPv6			16.7.1
Increase ingress classification to 2K			16.7.1
Backup PW on VPLS			16.8.1
DS3 CEP			16.8.1
Far end PMON			16.8.1
Alarm consolidation			16.8.1
TDM Remote loopback			16.8.1
Framed DS1 (SAtOP)			16.8.1
2K Egress IPSLA classification			16.8.1
Multi EFP over single BD			16.8.1
LACP 10+10G (Active-Active) with EFP scale			16.8.1
3G MS - IP IW + HDLC			16.9.1
YANG model for RJIL			16.9.1
3G CEM LC support with RSP3 400G			16.9.1
IPv6 ACL: wildcard support			16.9.1
DCC Tunnelling			16.9.1
CoPP - Control Plane Policing			16.9.1
Dying Gasp Enhancements - RSP3			16.9.1
3G MS - IP IW + PPP			16.9.1

Feature Compatibility Matrix for the Cisco ASR900 Series Aggregation Services Routers

Feature Name	RSP1	RSP2	RSP3
	Supported Release	Supported Release	Supported Release
MPLS (RFC3107) ECMP over TE-FRR NextHops			16.9.1
VPLS + FAT PW			16.9.1