Cisco TrustSec Software-Defined Segmentation Platform and Capability Matrix

Cisco TrustSec uniquely builds upon your existing identity-aware infrastructure by enforcing segmentation and access control policies in a scalable manner using the capabilities detailed below. This table summarizes the platforms and features that are validated in the Cisco TrustSec testing. It is in current with the TrustSec 6.0 validation program.

System Component	Platform	License	Solution-Level Validated Version	Minimum version for all features	Security Group Tag (SGT) Classification	SGT Exchange Protocol (SXP) Support and Version	Inline SGT Tagging	SGT Enforcement
Cisco Identity Services Engine	Cisco ISE 3515, 3595, 3415, and 3495 Appliance & VMware	Base	Cisco ISE 2.1, 2.0, ISE 1.4	Cisco ISE 2.0	Dynamic, IP to SGT	Speaker, Listener V4	–	–
Cisco Catalyst® 2000 Series	Cisco Catalyst 2960-Plus Series Switches	LAN Base K9	-	Cisco IOS 15.2(2)E3	Dynamic, IP to SGT, VLAN to SGT, Subnet to SGT	Speaker V4	No	No
	Cisco Catalyst 2960-C Series	LAN Base K9	-	Cisco IOS 15.2(2)E3	Dynamic, IP to SGT, VLAN to SGT, Subnet to SGT	Speaker V4	No	No
	Cisco Catalyst 2960-CX Series	LAN Base K9	-	Cisco IOS 15.2(3)E	Dynamic, IP to SGT, VLAN to SGT, Subnet to SGT	Speaker V4	No	No
	Cisco Catalyst 2960-S and 2960-SF Series	LAN Base K9	Cisco IOS 15.2(2)E	Cisco IOS 15.2(2)E3	Dynamic, IP to SGT, VLAN to SGT, Subnet to SGT	Speaker V4	No	No
	Cisco Catalyst 2960-X and 2960-XR Series	LAN Base K9	Cisco IOS 15.2(2)E	Cisco IOS 15.2(2)E3	Dynamic, IP to SGT, VLAN to SGT, Subnet to SGT	Speaker V4	No	No
Cisco Catalyst 3000 Series	Cisco Catalyst 3560-E and 3750-E Series	IP Base K9	Cisco IOS 15.0(2)SE5	Cisco IOS 15.0(2)SE5	Dynamic, IP to SGT, VLAN to SGT	Speaker, Listener V2	No	No
	Cisco Catalyst 3560-C/CG Series	IP Base K9	Cisco IOS 15.0(1)SE2	Cisco IOS 15.2(2)E	Dynamic, IP to SGT, VLAN to SGT, Subnet to SGT	Speaker, Listener V4	No	No
	Cisco Catalyst 3560-CX Series	IP Base K9	Cisco IOS 15.2(3)E	Cisco IOS 15.2(3)E	Dynamic, IP to SGT (v4, v6), VLAN to SGT, Subnet to SGT	Speaker, Listener V4	No	No
	Cisco Catalyst 3560-X and 3750-X Series	IP Base K9	Cisco IOS 15.2(2)E3	Cisco IOS 15.2(2)E1	Dynamic, IP to SGT (prefix must be 32), VLAN to SGT, Port to SGT (only on switch to switch links)	Speaker V4	SGT over Ethernet; SGT over MACsec (with C3KX-SM- 10G uplink)	SGACL (maximum of 8 VLANs on a VLAN-trunk link)

System Component	Platform	License	Solution-Level Validated Version	Minimum version for all features	Security Group Tag (SGT) Classification	SGT Exchange Protocol (SXP) Support and Version	Inline SGT Tagging	SGT Enforcement _Services_
Cisco Catalyst 3000 Series	Cisco Catalyst 3650 and 3850 Series	IP Base K9 & above Cisco ONE Foundation & above	Cisco IOS XE 3.6.4	Cisco IOS XE 3.6.0SE	Dynamic, IP to SGT (v4,v6), VLAN to SGT, Port to SGT, Subnet to SGT, L3IF to SGT	Speaker, Listener V4	SGT over Ethernet; SGT over MACsec (3650 requires 3.7.1)	SGACL
	Cisco Catalyst 3650 and 3850 Series	IP Base K9 & above Cisco ONE Foundation & above	Cisco IOS XE Denali 16.3.1	Cisco IOS XE Denali 16.3.1	Dynamic, IP to SGT (v4,v6), VLAN to SGT, Port to SGT, Subnet to SGT, L3IF to SGT	Speaker, Listener V4	SGT over Ethernet; SGT over MACsec (3650 requires 3.7.1)	SGACL
	Cisco Catalyst 3850-XS Series	IP Base K9 & above Cisco ONE Foundation & above	Cisco IOS XE 3.7.4	Cisco IOS XE 3.7.4	Dynamic, IP to SGT, VLAN to SGT, Port to SGT, Subnet to SGT, L3IF to SGT	Speaker, Listener V4	SGT over Ethernet;**** SGT over MACsec	SGACL
Cisco Catalyst 4500 Series	Cisco Catalyst 4500 E-Series Supervisor Engine 6-E and 6L-E ; Cisco Catalyst 4948 Series	IP Base K9	Cisco IOS 15.1(1)SG	Cisco IOS 15.1(1)SG	Dynamic, IP to SGT	Speaker, Listener V4	No	No
	Cisco Catalyst 4500 E-Series Supervisor Engine 7-E and 7L-E	IP Base K9 & above Cisco ONE Foundation & above	Cisco IOS XE 3.5.1E	Cisco IOS XE 3.5.1E	Dynamic, IP to SGT, VLAN to SGT, Subnet to SGT, L3IF to SGT, Port to SGT	Speaker, Listener V4	SGT over Ethernet; SGT over MACsec (See footnote for supported line cards)	SGACL
	Cisco Catalyst 4500 E-Series Supervisor Engine 8-E and 8L-E	IP Base K9 & above Cisco ONE Foundation & above	Cisco IOS XE 3.6.3E	Cisco IOS XE 3.6.0E	Dynamic, IP to SGT (v4, v6), VLAN to SGT, Port to SGT, Subnet to SGT (Src & Dst), L3IF to SGT	Speaker, Listener V4	SGT over Ethernet; SGT over MACsec (See footnote for supported line cards)	SGACL
	Cisco Catalyst 4500-X Series	IP Base K9 & above Cisco ONE Foundation & above	Cisco IOS XE 3.6.3	Cisco IOS XE 3.5.1E	Dynamic, IP to SGT (v4,v6), VLAN to SGT, Port to SGT, Subnet to SGT (Src & Dst), L3IF to SGT	Speaker, Listener V4	SGT over Ethernet; SGT over MACsec	SGACL
Cisco Catalyst 6500 Series	Cisco Catalyst 6500 Series Supervisor Engine 32 and 720	IP Base K9	Cisco IOS 12.2(33)SXJ2	Cisco IOS 15.1(2)SY1	Dynamic, IP to SGT	Speaker, Listener V4	No	No
	Cisco Catalyst 6500 Series Supervisor Engine 2T Cisco Catalyst 6807-XL	IP Base K9	Cisco IOS 15.2(1)SY0a	Cisco IOS 15.2(1)SY0a	Dynamic, IP to SGT (v4, v6), VLAN to SGT, Port to SGT, Subnet to SGT (v4,v6), L3IF-to- SGT (v4,v6)	Speaker, Listener V4 (IPv4, IPv6)	SGT over Ethernet & SGT over MACsec supported on: WS-X69xx modules, C6800 32P10G/G-XL, C6800-16P10G/G-XL, C6800-8P10G/G-XL	SGACL (IPv4, IPv6) _SGT Caching_
	Cisco Catalyst 6880-X, 6840-X, and 6800ia	IP Base K9 & above Cisco ONE Foundation & above	Cisco IOS 15.2(1)SY0a, 15.2(3a)E	Cisco IOS 15.2(1)SY0a	Dynamic, IP to SGT (v4, v6), VLAN to SGT, Port to SGT, Subnet to SGT (v4,v6), L3IF-to-SGT (v4,v6)	Speaker, Listener V4 (IPv4, IPv6)	SGT over Ethernet; SGT over MACsec	SGACL (IPv4, IPv6) _SGT Caching_

System Component	Platform	License	Solution-Level Validated Version	Minimum version for all features	Security Group Tag (SGT) Classification	SGT Exchange Protocol (SXP) Support and Version	Inline SGT Tagging	SGT Enforcement
Cisco Connected Grid Routers and Switches	Cisco 2010 Connected Grid Routers	-	Cisco IOS 15.5(2)T	Cisco IOS 15.4(1)T	Dynamic, IP to SGT, VLAN to SGT	Speaker, Listener V4	SGT over GETVPN or IPsec VPN	SG Firewall
	Cisco 2500 Series Connected Grid Switches	-	Cisco IOS 15.2(3)EA	Cisco IOS 15.0(2)EK1	Dynamic, IP to SGT, VLAN to SGT, Port to SGT, Subnet to SGT	Speaker, Listener V3	No	No
Cisco Industrial Ethernet Switches	Cisco IE 2000 & 2000U Series Cisco IE 3000 Series	LAN Base	Cisco IOS 15.2(3)EA IE2000U: IOS 15.2(3)E3	Cisco IOS 15.2(1)EY IE2000U: IOS 15.2(3)E3	Dynamic, IP to SGT, VLAN to SGT, Subnet to SGT	Speaker, Listener V4	No	No
	Cisco IE 4000 Series	LAN Base; IP Services for SGToE & SGACL	Cisco IOS 15.2(4)EA, 15.2(5)E	Cisco IOS 15.2(5)EA	Dynamic, IP to SGT, VLAN to SGT, Subnet to SGT	Speaker, Listener V4	SGT over Ethernet	SGACL
	Cisco IE 5000 Series	LAN Base; IP Services for SGToE & SGACL	Cisco IOS 15.2(2)EB1, 15.2(5)E	Cisco IOS 15.2(5)EA	Dynamic, IP to SGT, VLAN to SGT, Subnet to SGT	Speaker, Listener V4	SGT over Ethernet on1G interfaces only	SGACL
Cisco Wireless Controllers	Cisco 5500 Series (5508,5520) Cisco 2500 Series (2504)	-	Cisco AireOS 8.1	AireOS 7.6.130.0	Dynamic	Speaker V2	No	No
	Cisco Wireless Services Module 2 (WiSM2)	-	Cisco AireOS 8.1	AireOS 7.6.130.0	Dynamic	Speaker V2	No	No
	Cisco 5760 Wireless Controller Series	IP Base K9	Cisco IOS XE 3.7.1E	Cisco IOS XE 3.3.1SE	Dynamic, IP to SGT, VLAN to SGT, Port to SGT, Subnet to SGT	Speaker, Listener V4	SGT over Ethernet	SGACL
	Cisco 8500 Wireless Controller Series (8540,8510)	-	Cisco AireOS 8.1	Cisco AireOS 8.1	Dynamic	Speaker V2	No	No
Cisco Nexus® 7000 Series	Cisco Nexus 7000 M-Series and F-Series*** modules Cisco Nexus 7700 F-Series*** modules	Base License NX-OS 6.1 and later	Cisco NX-OS 7.3(0)D1(1), 7.2(0)D1(1)	Cisco NX-OS 7.3(0)D1(1)	IP to SGT[1], Port Profile to SGT, VLAN to SGT[2], Port to SGT[2] Subnet to SGT[5] [1]:FabricPath support requires 6.2(10) or later [2] VPC/VPC+ support requires 7.2(0)D1(1) or later [5] Subnet to SGT	Speaker, Listener V3	SGT over Ethernet[3]; SGT over MACsec[4] [3]: F3 interfaces (L2 or L3) require 802.1Q or FabricPath [4]: M & F2e (Copper-) all ports; F2e (SFP) & F3 (10G)- last 8 ports; All others- no support	SGACL

System Component	Platform	License	Solution-Level Validated Version	Minimum version for all features	Security Group Tag (SGT) Classification	SGT Exchange Protocol (SXP) Support and Version	Inline SGT Tagging	SGT Enforcement
Cisco Nexus 5000, 6000 Series	Cisco Nexus 6000/5600 Series	-	Cisco NX-OS 7.1(0)N1(1a)	Cisco NX-OS 7.0(1)N1(1)	Port to SGT	Speaker V1	SGT over Ethernet	SGACL
	Cisco Nexus 5548P, 5548UP, and 5596UP (Note: No support for 5010 or 5020)	-	Cisco NX-OS 7.0(5)N1(1)	Cisco NX-OS 6.0(2)N2(6)	Port to SGT	Speaker V1 [1] [1]: FabricPath	SGT over Ethernet	SGACL
Cisco Nexus 1000 Series	Cisco Nexus 1000V for VMware vSphere	Advanced license for SGT/ SGACL support	Cisco NX-OS 5.2(1)SV3(1.3)	Cisco NX-OS 5.2(1)SV3 (1.1)	IP to SGT, Port Profile to SGT	Speaker, Listener v1	SGT over Ethernet	SGACL
Cisco Integrated Services Router (ISR)	Cisco 890, 1900, 2900, 3900 Series	IP Services/K9 for classify/ propagate; SEC/K9 for enforce-ment	890: Cisco IOS 15.4(1)T1 *IOS 15.4(3)M* 1900/2900/3900:Cisco IOS 15.5(1)20T *IOS 15.4(3)M*	890: Cisco IOS 15.4(3)M 1900/2900/3900: Cisco IOS 15.6(1)T	IP to SGT, Subnet to SGT, L3IF to SGT	Speaker, Listener V4	SGT over Ethernet (no support on ISR G2-Cisco 800 Series), SGT over GETVPN, DMVPN, or IPsec VPN	SG Firewall (890:No services) *SGT based PBR* *SGT Caching* *SGT based QoS*
	Cisco 4000 Series (ISR 4451-X validated)	IP Services/K9 for classify/ propagate; SEC/K9 for enforce-ment	Cisco IOS XE 3.15.01S	Cisco IOS XE 3.17.0S	IP to SGT, Subnet to SGT, L3IF to SGT	Speaker, Listener V4	SGT over Ethernet, SGT over GETVPN, DMVPN, or IPsec VPN,	SG Firewall *SGT based PBR* *SGT Caching* *SGT based QoS*
	Cisco 4000 Series ISR 4431, and 4451-X	IP Services/K9 for classify/ propa-gate; SEC/K9 for enforce-ment	Cisco IOS XE Denali 16.3.1	Cisco IOS XE Denali 16.3.1	IP to SGT, Subnet to SGT, L3IF to SGT	Speaker, Listener V4	SGT over Ethernet, SGT over GETVPN, DMVPN, or IPsec VPN	SGACL SG Firewall *SGT based PBR* *SGT Caching* *SGT based QoS*
	Cisco SM-X Layer 2/3 EtherSwitch Module	IP Services/K9 for classify/ propagate; SEC/K9 for enforce-ment	Cisco IOS 15.5.2T	Cisco IOS 15.2(2)E	Dynamic, IP to SGT, VLAN to SGT	Speaker, Listener V4	SGT over Ethernet; SGT over MACsec	SGACL
Cisco Cloud Services Router	Cisco Cloud Services Router 1000V Series (CSR)	IP Services/K9 for classify/ propagate; SEC/K9 for enforce-ment	Cisco IOS XE 3.15.01S	Cisco IOS XE 3.11.0S	IP to SGT, Subnet to SGT, L3IF to SGT	Speaker, Listener V4	SGT over Ethernet, SGT over IPsec VPN, DMVPN	SG Firewall *SGT based PBR* *SGT Caching*

System Component	Platform	License	Solution-Level Validated Version	Minimum version for all features	Security Group Tag (SGT) Classification	SGT Exchange Protocol (SXP) Support and Version	Inline SGT Tagging	SGT Enforcement Services
Cisco Aggregation Services Router (ASR)	Cisco 1000 Series Router Processor 1 or 2 (RP1, RP2); ASR 1001, 1002,1004, 1006 and 1013 with ESP (10,20, 40, 100, 200) and SIP (10/40)	IP Services/K9 for classify/ propagate; SEC/K9 for enforce-ment	Cisco IOS XE 3.15.0S	Cisco IOS 3.17.0S	IP to SGT, Subnet to SGT, L3IF to SGT	Speaker, Listener V4	SGT over Ethernet, SGT over GETVPN, IPsec VPN, or DMVPN	SG Firewall *SGT based PBR (1000 RP2)* *SGT based QoS* *SGT Caching*
	Cisco ASR 1001-X and 1002-X	IP Services /K9 for classify/ propagate; SEC/K9 for enforcement	Cisco IOS XE 3.13.0S	Cisco IOS XE 3.17.0S	IP to SGT, Subnet to SGT, L3IF to SGT	Speaker, Listener V4	SGT over Ethernet, SGT over GETVPN, IPsec VPN, DMVPN	SG Firewall SGT based PBR SGT based QoS SGT Caching
	Cisco ASR 1004, 1006, 1013, 1006-X, and 1009-X	IP Services/K9 for classify/ propagate; SEC/K9 for enforce-ment	Cisco IOS XE Denali 16.3.1	Cisco IOS XE Denali 16.3.1	IP to SGT, Subnet to SGT, L3IF to SGT	Speaker, Listener V4	SGT over Ethernet, SGT over GETVPN, DMVPN, or IPsec VPN	SGACL SG Firewall *SGT based PBR* *SGT Caching* *SGT based QoS*
Cisco Adaptive Security Appliance (ASA)	Cisco ASA 5510, 5520, 5540, 5550, 5580	-	Cisco ASA 9.0.1, ASDM 7.1.6	Cisco ASA 9.0.1, ASDM 7.1.6		Speaker, Listener v2		SG Firewall
	Cisco ASA 5505**, 5512, 5515, 5525, 5545, 5555, 5585	-	ASA 9.3.1, ASDM 7.3.1, CSM 4.8	Cisco ASA 9.3.1, ASDM 7.3.1, CSM 4.8	Remote Access VPN (IPSec, SSL-VPN)	Speaker, Listener V2 (IPv4, IPv6)	SGT over Ethernet	SG Firewall (IPv4, IPv6) *SGT based PBR*
	Cisco ASA 5506-X, 5506H-X, 5506W-X, 5508-X, 5516-X	-	Cisco ASA 9.6.1, ASDM 7.6.1	Cisco ASA 9.6.1, ASDM 7.6.1	Remote Access VPN (IPSec, SSL-VPN)	Speaker, Listener V3	SGT over Ethernet	SG Firewall (IPv4, IPv6) *SGT based PBR*
	Cisco ASA 5512-X, 5515-X, 5525-X, 5545-X, 5555-X, 5585-X with FirePower Services	-	Cisco ASA 9.6.1, ASDM 7.6.1	Cisco ASA 9.6.1, ASDM 7.6.1	Remote Access VPN (IPSec, SSL-VPN)	Speaker, Listener V3	SGT over Ethernet	SG Firewall (IPv4, IPv6) *SGT based PBR*
	Cisco ASAv	-	Cisco ASA 9.3.1 ADSM 7.1.6	Cisco ASA 9.6.1 ASDM 7.6.1	Remote Access VPN (IPSec, SSL-VPN)	Speaker, Listener V3	SGT over Ethernet	SG Firewall *SGT based PBR*
Cisco Firepower (FP)	Cisco FP 4100 Cisco FP 9300	Firepower Threat Defense Base	Cisco FXOS 2.0(1) Cisco ASA 9.6.1	Cisco FXOS 2.0(1) Cisco ASA 9.6.1	Remote Access VPN (IPSec, SSL-VPN)	Speaker, Listener V3	SGT over Ethernet	SG Firewall
	Cisco FirePOWER 7000 and 8000 Series	-	Cisco FireSIGHT 5.4.0.6, 5.4.1.5, 6.0.1.1	Cisco FireSIGHT 5.4.0.6, 5.4.1.5, 6.0.1.1	-	-	SGT over Ethernet	-

Notes

Dynamic classification includes IEEE 802.1X, MAC Authentication Bypass (MAB), and Web Authentication (Web Auth).

IP to SGT, VLAN to SGT, subnet to SGT, port profile to SGT, L2IF to SGT, and L3IF to SGT use the static classification method.

Solution-level validated versions may not always represent the latest available platform version and feature set.

For latest platform firmware version and feature set, refer to product release notes.

* Product part numbers of supported line cards for SGT over Ethernet and SGT over MACsec on the Cisco Catalyst 4500 Supervisor Engine 7-E, 7L-E, 8-E, and 8L-E include the following: WS-X4712-SFP+E, WS-X4712-SFP-E, WS-X4748-UPOE+E, WS-X4748-RJ45V+E, WS-X4748-RJ45- E, WS-X4724-SFP-E, WS-X4748-SFP-E, and WS-X4748-12X48U+E.

** Cisco ASA 5505 does not support releases after 9.2.

*** Cisco Nexus 7000 F1-Series modules do not support Cisco TrustSec.

****Use of inline tagging with LACP requires future IOS XE Denali or IOS 3.7 release (CSCva22545)

- With IPv6 support, DGT can be IPv4.

- Cisco vWLC does not support Cisco TrustSec.

- Prior versions of this document listed Cisco Catalyst 3750-X validated version, IOS 12.2(3)E1. It has a TrustSec defect and was deferred.