



Cisco Group Based Policy Platform and Capability Matrix Release 6.5

(inclusive of TrustSec Software-Defined Segmentation)

Cisco Group Based Policy (also known as TrustSec Software-Defined Segmentation) 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 document summarizes the platforms and features that are validated in the Cisco Group Based Policy testing. It is in current with the validation program for Release 6.5.

Table 1 provides cross-platform group-based policy exchange interoperability testing results. Application Centric Infrastructure (ACI) and Group Based Policy integration enables customers to apply consistent security policy across the enterprise- leveraging user roles and device type together with application context. The validated Open Source Open Daylight SDN use case included Nexus 7k SXPv3, ASA SXPv3, and OpenDaylight SXPv4 (Nitrogen and earlier releases) working together in the Data Center.

Table 1. TrustSec Group-Based Policy (GBP) Interoperability

System Component	Platform	Solution-Level Validated Version	Group Information Exchange	Interoperability Platform & Propagation method
Cisco Nexus 9000 Series Switches	Cisco 9000 Series: Spine & Leaf	NX-OS 13.2 (4e)	EndPoint Group – Security Group Mappings via TrustSec-ACI policy and data plane exchange	Cisco ISE 2.4 Patch 6 ACI API
Cisco Application Policy Infrastructure Controller – Data Center	Cisco APIC-DC	APIC-DC 3.2 (4e) Policy plane;		
Open Daylight SDN controller	ODL SDN	Lithium, Beryllium, Carbon	SGT via SXP v4	Cisco ISE 2.1- SXP v4 Nexus 7000 7.3- SXP v3 ASA 9.6.1- SXP v3
Open Daylight SDN controller	ODL SDN	Nitrogen	IPv4, IPv6 SXP Peering	Cisco ISE 2.4 ASR 1001-X IOS XE 16.5.1b CSR 1000v IOS XE 16.6.3 Cat 6500 IOS 15.4(1)SY2 Cat 3850 IOS 3.6.8E

In Tables 2 and 3, Cisco Platform Support Matrix, Dynamic classification includes IEEE 802.1X, MAC Authentication Bypass (MAB), Web Authentication (Web Auth), and Easy Connect. 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.

Cisco DNA Premier is a simple and economical solution for deploying branch and campus switches and wireless access points. It offers an uncompromised user experience in a highly secure and feature-rich access infrastructure and simplify the licensing requirements for Group Based Policy deployment. Cisco DNA Advantage requires Network Advantage hardware licenses.

Solution-level validated versions listed in the tables below may not always represent the latest available

platform version and feature set. Releases may encounter issues in other subsystems and be deferred. For latest platform firmware version and feature set, refer to product release notes.

As an aid to deployment, products are grouped into Tier I, II, and III with regard to feedback on design and deployment. Tier I ① products have full Group Based Policy functionality with few caveats, and they are common components in successful deployments. Tier II ② products have full Group Based Policy functionality but there are some caveats involved in their deployment. Tier III ③ do not have full Group Based Policy functionality and support Classification and SXP based Propagation only. These products tend to be older with a less rich feature set and more caveats to consider when deploying. Security products are not listed in a tier. End of Sale Products are listed in Table 3.

VXLAN is supported on several platforms but not all are listed in the matrix pending review of solution test verification.

Table 2. Cisco Group Based Policy Platform Support Matrix

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® 2000 Series	Catalyst 2960-Plus Series ③	LAN Base K9	-	Cisco IOS 15.2(2)E3	Dynamic, IP to SGT, VLAN to SGT, Subnet to SGT	Speaker V4	No	No
	Catalyst 2960-C Series ③	LAN Base K9	-	Cisco IOS 15.2(2)E3	Dynamic, IP to SGT, VLAN to SGT, Subnet to SGT	Speaker V4	No	No
	Catalyst 2960-CX Series ③	LAN Base K9	-	Cisco IOS 15.2(3)E	Dynamic, IP to SGT, VLAN to SGT, Subnet to SGT	Speaker V4	No	No
	Catalyst 2960-X Series ③	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
	Catalyst 2960-XR Series ③	IP Lite 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	Catalyst 3650 and 3850 Series ①	IP Base K9 & above or Cisco ONE Foundation & above	Cisco IOS XE 3.7.4E 3.6.8E 3.6.6E	Cisco IOS XE 3.6.4E	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, Logging (3.6.6E) SGT Netflow v9
	Catalyst 3650 and 3850 Series ①	IP Base K9 & above or Cisco ONE Foundation & above	Cisco IOS XE Denali 16.6.4	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; SGT over VXLAN	SGACL, Monitor mode, Logging
	Catalyst 3850-XS Series ①	IP Base K9 & above or 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 ^{Note5} ; SGT over MACsec	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 Services
Cisco Catalyst 3000 Series	Catalyst 3560-CX Series ②	IP Base K9	Cisco IOS 15.2(3)E	Cisco IOS 15.2(4)E	(L2 adjacent hosts only) Dynamic, IP to SGT (v4, v6), VLAN to SGT, Subnet to SGT	Speaker, Listener V4	No	SGACL ^{Note16}
	Catalyst 3560-C/CG Series ③	IP Base K9	Cisco IOS 15.0(1)SE2	Cisco IOS 15.2(2)E	(L2 adjacent hosts only) Dynamic, IP to SGT, VLAN to SGT, Subnet to SGT	Speaker, Listener V4	No	No
Cisco Catalyst 4500 Series	Catalyst 4500 E-Series Supervisor Engine 8-E and 8L-E ①	IP Base K9 & above or Cisco ONE Foundation & above	Cisco IOS XE 3.7.1E	Cisco IOS XE 3.6.0E 3.8.0E-Logging	Dynamic, IP to SGT (v4, v6), VLAN to SGT, Port to SGT, Subnet to SGT (Src & Dst), L3IF to SGT ^{Note12}	Speaker, Listener V4	SGT over Ethernet; SGT over MACsec (See note 2 for supported line cards)	SGACL, Logging SGT Netflow v9
	Catalyst 4500-X Series ①	IP Base K9 & above or Cisco ONE Foundation & above	Cisco IOS XE 3.6.3E 3.6.6	Cisco IOS XE 3.5.1E 3.8.0E-logging	Dynamic, IP to SGT (v4,v6), VLAN to SGT, Port to SGT, Subnet to SGT (Src & Dst), L3IF to SGT ^{Note12}	Speaker, Listener V4	SGT over Ethernet; SGT over MACsec	SGACL, Logging
Cisco Catalyst 4500 Series	Catalyst 4500 E-Series Supervisor Engine 7-E and 7L-E ②	IP Base K9 & above or Cisco ONE Foundation & above	Cisco IOS XE 3.7.1E	Cisco IOS XE 3.5.1E	Dynamic, IP to SGT, VLAN to SGT, Subnet to SGT, L3IF to SGT, Port to SGT ^{Note12}	Speaker, Listener V4	SGT over Ethernet; SGT over MACsec (See note 2 for supported line cards)	SGACL, Logging [3.8.0E] SGT Netflow v9
	Catalyst 4500 E-Series Supervisor Engine 6-E and 6L-E; ③	IP Base K9	Cisco IOS 15.1(1)SG	Cisco IOS 15.1(1)SG	Dynamic, IP to SGT ^{Note12}	Speaker, Listener V4	No	No
Cisco Catalyst 6500 Series	Catalyst 6500 Series Supervisor Engine 2T & Supervisor 6T ① Catalyst 6807-XL ①	2T: IP Base K9 6T: IP Services K9	Cisco IOS 15.4(1)SY2 15.2(1)SY05 15.2(1)SY0a Sup 6T Cisco IOS 15.4(1)SY1	Cisco IOS 15.2(1)SY0a Sup 6T Cisco IOS 15.4(1)SY1	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; SGT over VXLAN	SGACL (IPv4, IPv6), Monitor mode, Logging SGT Caching SGT Netflow v9
	Catalyst 6880-X, 6840-X (incl 6816-X-LE), and 6800ia ①	IP Base K9 & above or Cisco ONE Foundation & above	Cisco IOS 15.2(2)SY2, 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), Monitor mode, Logging SGT Caching SGT Netflow v9
	Catalyst 6500 Series Supervisor Engine 32 and 720 ③	IP Base K9	Cisco IOS 12.2(33)SXJ2	Cisco IOS 15.1(2)SY1	Dynamic, IP to SGT	Speaker, Listener V4	No	No

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 9200 Series	Cisco Catalyst 9200 Series	Network Advantage	Cisco IOS XE 16.10.1	Cisco IOS XE 16.10.1	Dynamic, IP to SGT, VLAN to SGT, Port to SGT, Subnet to SGT, L3IF to SGT	Speaker, Listener V4	SGT over Ethernet SGT over VXLAN	SGACL V4, V6 (Note 17), Monitor mode, Logging SGT Netflow v9
Cisco Catalyst 9300 Series	Catalyst 9300 Series ①	Network Advantage	Cisco IOS XE Everest 16.6.2 SMU	Cisco IOS XE Everest 16.6.2 SMU (Note 10) 16.8.1	Dynamic, IP to SGT, VLAN to SGT, Port to SGT, Subnet to SGT, L3IF to SGT	Speaker, Listener V4	SGT over Ethernet SGT over VXLAN	SGACL V4, V6 (Note 17), Monitor mode, Logging SGT Netflow v9
Cisco Catalyst 9400 Series	Catalyst 9400 Series Supervisor Engine-1 & -1XL ①	Network Advantage	Cisco IOS XE 16.6.2, 16.8.1	Cisco IOS XE Everest 16.6.2 SMU (Note 10) 16.8.1	Dynamic, IP to SGT, VLAN to SGT, Port to SGT, Subnet to SGT, L3IF to SGT	Speaker, Listener V4	SGT over Ethernet SGT over VXLAN	SGACL V4, V6 (Note 17), Monitor mode, Logging SGT Caching SGT Netflow v9
Cisco Catalyst 9500 Series	Catalyst 9500 Series ①	Network Advantage	Cisco IOS XE Everest 16.6.2 SMU	Cisco IOS XE Everest 16.6.2 SMU (Note 10)	Dynamic, IP to SGT, VLAN to SGT, Port to SGT, Subnet to SGT, L3IF to SGT	Speaker, Listener V4	SGT over Ethernet SGT over VXLAN ^{Note13}	SGACL V4, V6 (Note 17), Monitor mode SGT Caching SGT Netflow v9
	Catalyst 9500H Series	Network Advantage	Cisco IOS XE 16.12.2	Cisco IOS XE 16.12.2	Dynamic, IP to SGT, VLAN to SGT, Port to SGT, Subnet to SGT, L3IF to SGT	Speaker, Listener V4	SGT over Ethernet SGT over VXLAN	SGACL V4, V6 (Note 17), Monitor mode, Logging SGT Netflow v9
Cisco Catalyst 9600 Series	Cisco Catalyst 9600 Series	Network Advantage	Cisco IOS XE 16.12.2	Cisco IOS XE 16.12.2	Dynamic, IP to SGT, VLAN to SGT, Port to SGT, Subnet to SGT, L3IF to SGT	Speaker, Listener V4	SGT over Ethernet SGT over VXLAN	SGACL V4, V6 (Note 17), Monitor mode, Logging SGT Netflow v9
Cisco Connected Grid Router Series	CGR 2010 Series ②	-	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, SGT over IPsec VPN	SG Firewall
Cisco Connected Grid Switch Series	CGS 2500 Series ③	-	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	IE 2000 & 2000U Series IE 3000 Series ③	LAN Base	Cisco IOS 15.2(3)EA	Cisco IOS 15.2(1)EY	(L2 adjacent hosts only) Dynamic, IP to SGT, VLAN to SGT, Subnet to SGT	Speaker, Listener V4	No	No
			IE2000U: IOS 15.2(3)E3	IE2000U: IOS 15.2(3)E3				

Cisco Access Points	IE 3400 Series	Network Advantage	Cisco IOS-XE 16.11.1	Cisco IOS-XE 16.11.1	Dynamic, IP to SGT, VLAN to SGT, Port to SGT, Subnet to SGT, L3IF to SGT	Speaker, Listener V4	SGT over Ethernet SGT over VXLAN	SGACL V4, V6 (Note 17), Monitor mode, Logging SGT Netflow v9
	IE 4000 Series ②	LAN Base; IP Services for SGTtoE & SGACL	Cisco IOS 15.2(4)EA, 15.2(5)E	Cisco IOS 15.2(5)E	(L2 adjacent hosts only) Dynamic, IP to SGT, VLAN to SGT, Subnet to SGT	Speaker ^{Note11} V4	SGT over Ethernet	SGACL ^{Note16}
	IE 5000 Series ②	LAN Base; IP Services for SGTtoE & SGACL	Cisco IOS 15.2(2)EB1, 15.2(5)E	Cisco IOS 15.2(5)E1	(L2 adjacent hosts only) Dynamic, IP to SGT, VLAN to SGT, Subnet to SGT	Speaker ^{Note11} V4	SGT over Ethernet on 1G & 10G interfaces only	SGACL ^{Note16}
	1700, 2700, 3700, AP Series (Wave 1) ①	-	Cisco AireOS 8.9	Cisco AireOS 8.9	Dynamic	Speaker, Listener V4 ^{Note6}	SGT over Ethernet ^{Note6}	SGACL
	1815, 1830, 1850, 2800, 3800 AP Series (Wave 2) ①	-	Cisco AireOS 8.9	Cisco AireOS 8.9	Dynamic	Speaker, Listener V4 ^{Note6}	SGT over Ethernet ^{Note6}	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 Services
Cisco Wireless Controller Series	8540 Series Wireless Controller ①	-	Cisco AireOS 8.9	Cisco AireOS 8.9	Dynamic	Speaker v2	SGT over Ethernet	No
	5520 Series Wireless Controller ①	-	Cisco AireOS 8.9	Cisco AireOS 8.9	Dynamic	Speaker v2	SGT over Ethernet	No
	3504 Wireless Controller ①	-	Cisco AireOS 8.9	Cisco AireOS 8.9	Dynamic	Speaker v2	SGT over Ethernet (Centralized mode)	Supports AP SGACL in Centralized and Flex Connect mode)
	vWLC ①	-	Cisco AireOS 8.5	Cisco AireOS 8.5	Dynamic	Speaker v2		Supports APs in Flex mode only
	5500 Series (5508,5520) 2500 Series (2504) ③	-	Cisco AireOS 8.3.102.0, 7.6.130.0	Cisco AireOS 7.6.130.0	Dynamic	Speaker V2	No	No
	8500 Series (8540,8510) ③	-	Cisco AireOS 8.3.102.0 (pre 8.4)	Cisco AireOS 8.1	Dynamic	Speaker V2	No	No

Cisco Nexus® 7000 Series	Nexus 7000 with M3-Series modules ①	Base License NX-OS 6.1 and later	Cisco NX-OS 8.1(2), 8.1(1), 8.0(1) 7.3.2 7.3(0)D1(1) [logging, monitor mode], 7.2(0)D1(1)	Cisco NX-OS 8.0(1)	IP to SGT ¹ , Port Profile to SGT, VLAN to SGT ² , Port to SGT ² Subnet to SGT ⁵ <i>Note14</i>	Speaker, Listener V4	SGT over Ethernet ⁵ ; SGT over MACsec; SGT over VXLAN ⁵ : F3 interoperability requires M3 'no propagate- sgt l2 control' command	SGACL, Monitor mode & logging
	Nexus 7000 with M2-Series modules ②	Base License NX-OS 6.1 and later	Cisco NX-OS 8.1(1), 8.0(1) 7.3(0)D1(1) [Monitor mode & limited logging], 7.2(0)D1(1)	Cisco NX-OS 8.0(1)	IP to SGT ¹ , Port Profile to SGT, VLAN to SGT ² , Port to SGT ² Subnet to SGT ⁵ <i>Note14</i> 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 requires 7.3(0)D1(1) or later	Speaker, Listener V4	SGT over Ethernet ⁵ ; SGT over MACsec ⁵ : M2 cannot link to F3 module.	SGACL Monitor mode & limited logging
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 Nexus® 7000 Series	Nexus 7700 F-Series ^{Note4} modules ② F3 modules do not support SGT tagging with other Cisco products unless these products support the SGT tagging exemption feature for Layer 2 protocols. M3 series support this by enabling 'no propagate- sgt l2-control' command.	Base License NX-OS 6.1 and later	Cisco NX-OS 8.1(1), 8.0(1) 7.3(0)D1(1), 7.2(0)D1(1)	Cisco NX-OS 8.0(1)	IP to SGT ¹ , Port Profile to SGT, VLAN to SGT ² , Port to SGT ² Subnet to SGT ⁵ <i>Note14</i> 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 requires 7.3(0)D1(1) or later	Speaker, Listener V4	SGT over Ethernet ^{3,5} ; SGT over MACsec ⁴ ³ : F3 interfaces (L2 or L3) require 802.1Q or FabricPath ⁴ : F2e (Copper) all ports; F2e (SFP) & F3 (10G)- last 8 ports; All others- no support ⁵ : Not supported between F3 and either M2 or F2e	SGACL
Cisco Nexus 5000, 6000 Series	Nexus 6000/5600 Series ②	-	Cisco NX-OS 7.1(0)N1(1a)	Cisco NX-OS 7.0(1)N1(1)	(L2 adjacent hosts only) Port to SGT	Speaker V1	SGT over Ethernet	SGACL ^{Note16}
	Nexus 5548P, 5548UP, and 5596UP ②	-	Cisco NX-OS 7.0(5)N1(1)	Cisco NX-OS 6.0(2)N2(6)	(L2 adjacent hosts only) Port to SGT	Speaker V1 ¹ ¹ : FabricPath	SGT over Ethernet	SGACL ^{Note16}

Cisco Nexus 1000 Series	Nexus 1000V for VMware vSphere ②	Advanced license for SGTtoE/SGACL support	Cisco NX-OS 5.2(1)SV3(3.1) [Logging] 5.2(1)SV3(1.3)	Cisco NX-OS 5.2(1)SV3 (1.1)	Dynamic (802.1x) ^{Note15,} IP to SGT, Port Profile to SGT	Speaker, Listener v4 v1 (prior to 5.2(1)SV3(3.1))	SGT over Ethernet ^{Note9}	SGACL, Logging
	Nexus 1000VE Virtual Edge ②	Advanced license for SGACL support	Cisco NX-OS 5.2(1)SV5(1.1)	Cisco NX-OS 5.2(1)SV5(1.1)	Port Profile to SGT, IP to SGT	Speaker, Listener v4	No	SGACL
Cisco Integrated Services Router (ISR)	4000 Series ISR 4431, 4451-X, 4321, 4331, 4351 ①	IP Base/K9 for classify/propagate, SGACL; Security/K9 for SG FW enforcement	Cisco IOS XE Denali 16.3.2, Everest 16.4.1	Cisco IOS XE Denali 16.3.2	IP to SGT, Subnet to SGT, L3IF to SGT	Speaker, Listener V4	SGT over Ethernet, SGT over GETVPN, DMVPN, or IPsec VPN	SGACL, Monitor mode & Logging SG Firewall —— SGT based PBR SGT Caching SGT based QoS
	ISRv ①	IP Base/K9 for classify/propagate, SGACL	Cisco IOS XE Denali 16.3.2	Cisco IOS XE Denali 16.3.2	IP to SGT, Subnet to SGT, L3IF to SGT	Speaker, Listener V4	SGT over Ethernet, SGT over IPsec VPN, DMVPN	SGACL, Monitor mode & Logging
	890, 1900, 2900, 3900 Series ②	IP Base/K9 for classify/propagate; Security/K9 for SG FW enforcement	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
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 Integrated Services Router (ISR)	4000 Series (ISR 4451-X validated) ②	IP Base/K9 for classify/propagate; Security/K9 for SG FW enforcement	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 SGT Netflow v9
	SM-X Layer 2/3 EtherSwitch Module ②	IP Services/K9	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	CSR 1000V ①	IP Base/K9 for classify/propagate, SGACL;	Cisco IOS XE 16.6.3 Denali 16.3.2, Everest 16.4.1	Cisco IOS XE Denali 16.3.2	IP to SGT, Subnet to SGT, L3IF to SGT	Speaker, Listener V4	SGT over Ethernet, SGT over IPsec VPN, DMVPN	SGACL, Monitor mode & Logging
	Cloud Services Router 1000V Series (CSR) ②	IP Base/K9 for classify/propagate; Security/K9 for enforcement	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_ SGT Netflow v9

Cisco Aggregation Services Router (ASR)	ASR 1004, 1006, 1013, 1001-X, 1002-X, 1002-HX, 1006-X, and 1009-X ①	IP Base/K9 for classify/propagate; SGACL; Security/K9 for SGFW enforcement	Cisco IOS XE 16.5.1b Denali 16.3.2, Everest 16.4.1	Cisco IOS XE Denali 16.3.2	IP to SGT, Subnet to SGT, L3IF to SGT	Speaker, Listener V4	SGT over Ethernet, SGT over GETVPN, DMVPN, or IPsec VPN	SGACL, Monitor mode & Logging SG Firewall SGT based PBR SGT Caching SGT based QoS
	ASR 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) ②	IP Base/K9 for classify/propagate; Security/K9 for enforcement	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 SGT Netflow v9
	ASR 1001-X and 1002-X ②	IP Base/K9 for classify/propagate; Security/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 SGT Netflow v9
Cisco Identity Services Engine	ISE 3515, 3595, 3415, and 3495 Appliance & VMware	Base Plus for pxGrid	Cisco ISE 2.4, 2.3P1, 2.2, 2.1, 2.0, 1.4	Cisco ISE 2.2	Dynamic, IP to SGT, Subnet to SGT	Speaker, Listener V4 pxGrid	-	-
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 Adaptive Security Appliance	ASA 5580	-	Cisco ASA 9.0.1, ASDM 7.1.6	Cisco ASA 9.0.1, ASDM 7.1.6		Speaker, Listener v2		SG Firewall
	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
	ASA 5525-X, 5545-X, 5555-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
	ASAv	-	Cisco ASA 9.3.1 ASDM 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 NGFW	Cisco Firepower 2100	Firepower Threat Defense Base	Cisco Firepower System 6.2.1	Cisco Firepower System 6.2.1	-	pxGrid	SGT over Ethernet	SG Firewall (src SGTs only) SGT based PBR

	FP 4100 FP 9300	-	Cisco FXOS 2.0.1.37 Cisco ASA 9.6.1	Cisco FXOS 2.0.1.37 Cisco ASA 9.6.1	Remote Access VPN (IPsec, SSL-VPN)	Speaker, Listener V3	SGT over Ethernet	SG Firewall SGT based PBR
	Cisco Firepower Threat Defense Firepower 4100 & 9300	Firepower Threat Defense Base	Cisco Firepower System 6.1.0	Cisco Firepower System 6.1.0	-	pxGrid	SGT over Ethernet	SG Firewall (src SGTs only) SGT based PBR
	FTDv	Threat & Apps (TA)	Cisco Firepower System 6.2.0.2	Cisco Firepower System 6.2.0.2	-	pxGrid	SGT over Ethernet	SG Firewall (src SGTs only) SGT based PBR
Cisco Industrial Security Appliance	ISA 3000 Series	-	Cisco ASA 9.6.1	Cisco ASA 9.6.1	Remote Access VPN (IPsec, SSL-VPN)	Speaker, Listener V3	SGT over Ethernet	SG Firewall (IPv4, IPv6) SGT based PBR

Table 3. End of Sale Group Based Policy Platform Support Matrix
(<https://www.cisco.com/c/en/us/products/eos-eol-listing.html>)

EOS 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® 2000 Series	Catalyst 2960-S and 2960-SF Series	LAN Base K9	Cisco IOS 15.0(2)SE ^{Note1} 15.2(2)E	Cisco IOS 15.2(2)E3	Dynamic, IP to SGT, VLAN to SGT, Subnet to SGT	Speaker V4 ^{Note1}	No	No
Cisco Catalyst 3000 Series	Catalyst 3560-E and 3750-E Series	IP Base K9	Cisco IOS 15.0(2)SE5	Cisco IOS 15.0(2)SE5	(L2 adjacent hosts only) Dynamic, IP to SGT, VLAN to SGT	Speaker, Listener V2	No	No
	Catalyst 3560-X and 3750-X Series	IP Base K9	Cisco IOS 15.2(2)E3	Cisco IOS 15.2(2)E1	(L2 adjacent hosts only) 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); SGT over VXLAN	SGACL ^{Note16} (maximum of 8 VLANs on a VLAN-trunk link)
Cisco Catalyst 4500 Series	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 Nexus® 7000 Series	Cisco Nexus 7000 F2-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 requires 7.3(0)D1(1) or later	Speaker, Listener V3	SGT over Ethernet; SGT over MACsec ⁴ ⁴ : M & F2e (Copper-) all ports; F2e (SFP) - last 8 ports; All others- no support	SGACL
Cisco Wireless Controller	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
	Wireless Services Module 2 (WiSM2)	-	Cisco AireOS 8.3.102.0, 7.6.130.0	Cisco AireOS 7.6.130.0	Dynamic	Speaker V2	No	No
	Flex 7500 Series Wireless Controller	-	Cisco AireOS 8.3.102.0, 7.6.130.0	Cisco AireOS 8.3	Dynamic	Speaker V2	No	No
EoS 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)	ASR 1001, 1002	IP Base/K9 for classify/propagate; Security/K9 for enforcement	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 SGT Netflow v9
Cisco Identity Services Engine	ISE 3315, 3355, 3395, Appliance		Cisco ISE 1.0, 1.1, 1.2				-	-
Cisco Adaptive Security Appliance	ASA 5510, 5520, 5540, 5550	-	Cisco ASA 9.0.1, ASDM 7.1.6	Cisco ASA 9.0.1, ASDM 7.1.6		Speaker, Listener v2		SG Firewall
	ASA 5505 ^{Note3} , 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
	ASA 5512-X, 5515-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 FirePOWER	FirePOWER 7000 and 8000 Series	Threat & Apps (TA)	Cisco FireSIGHT 5.4.0.6, 5.4.1.5, 6.0.1.1, 6.2	Cisco FireSIGHT 5.4.0.6, 5.4.1.5, 6.0.1.1	-	-	SGT over Ethernet	-
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Notes

- 1: Catalyst 2960 S/SF Product management recommends 15.0(2)SE which supports SXP v2.
- 2: 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.
- 3: Cisco ASA 5505 does not support releases after 9.2.
- 4: Cisco Nexus 7000 F1-Series modules do not support Cisco TrustSec.
- 5: Use of inline tagging with LACP requires future IOS XE Denali or IOS 3.7 release (CSCva22545)
- 6: For SXP support, AP must run in FlexConnect Mode
- 7: With IPv6 support, DGT can be IPv4.
- 8: Prior versions of this document listed Cisco Catalyst 3750-X validated version, IOS 12.2(3)E1, and WLC AireOS 8.1. These releases have been deferred.
- 9: When inline tagging (SGToE) is enabled with the VIC 12xx and VIC 13xx, packet processing is handled at the processor level which will attribute to lower network I/O performance. An alternative solution is to use Intel adaptors.
- 10: IOS XE Everest 16.6.2 SMU is required for ISE BYOD, Guest, and Posture features. See ISE Compatibility Matrix: <https://www.cisco.com/c/en/us/support/security/identity-services-engine/products-device-support-tables-list.html>
- 11: The IE 4000 and IE 5000 platforms perform similarly to the Catalyst 3560-X and 3750-X platforms in the reliance on IP Address, MAC Address, and physical port/VLAN of the device, learned via dot1x or MAB or IP Device Tracking (IPDT). These devices cannot use information learned via SXP for either enforcement or tag propagation as the device is not directly attached. SXP v4 is supported in Speaker mode only.
- 12: Catalyst 4500 Series Release 3.9 and later, with the introduction of VRF, an SVI is needed for L3 lookup to derive SGT for switched traffic, and a SVI is also needed on the VLAN for the derivation of source group for L2 traffic.
- 13: C9500 as a border node does not currently support transferring the tag from the VXLAN header to the CMD field for inline tagging. C9500 outside the fabric supports inline tagging
- 14: The N7K must have an SVI on the VLAN if the mappings reside in the VRF. If N7K is L2 only, create an SVI without IP to be able to utilize the mappings from the VRF. SVI is not required if entered into the VLAN.
- 15: Dynamic classification with IEEE 802.1x on Nexus 1000V requires 5.2(1)SV3(4.1). This is validated with VMware Horizon 7 VDI.
- 16: Port based platforms cannot do enforcement of policy for remote IP addresses, ie. they can only classify or enforce for IP addresses present in the IPDT table (hosts that are L2 adjacent).
- 17: IPv6 SGACL Support added in IOS-XE 16.10.1 and validation in solution validation 6.5 release was carried out with IOS-XE 16.12.1




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