

C Commands

This chapter describes the Cisco NX-OS TrustSec commands that begin with C.

clear cts policy

To clear the Cisco TrustSec security group access control list (SGACL) policies, use the **clear cts policy** command.

clear cts policy {all | peer device-id | sgt sgt-value}

Syntax Description	all	Clears all the Cisco TrustSec SGACL policies on the local device.	
	peer device-id	Clears the Cisco TrustSec SGACL policies for a peer device on the local device.	
	sgt sgt-value	Clears the Cisco TrustSec SGACL policies for a security group tag (SGT) on the local device.	
Command Default	None		
Command Modes	Any command mode		
Command History	Release	Modification	
	5.1(3)N1(1)	This command was introduced.	
Usage Guidelines		, you must first enable the 802.1X feature by using the feature dot1x command and o TrustSec feature using the feature cts command.	
		SGACL policies, the operation does not take effect until the interface is flapped. If ic SGT interface, the SGT value is set to zero (0) after the flapping. To undo this llowing commands:	
	<pre>switch(config-if-cts-manual)# no policy static switch(config-if-cts-manual)# policy static sgt sgt-value switch(config-if-cts-manual)#</pre>		
	If the interface is a dynamic SGT interface, the SGT is downloaded again from the RADIUS server after the flapping.		
	This command does	not require a license.	
Examples	This example shows	how to clear all the Cisco TrustSec SGACL policies on the device:	
	switch# clear cts switch#	policy all	

Related Commands	
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Command	Description
cts role-based sgt	Maps SGTs to a SGACL.
feature cts	Enables the Cisco TrustSec feature.
feature dot1x	Enables the 802.1X feature.
policy	Configures an authentication policy on an interface.
show cts role-based policy	Displays Cisco TrustSec SGACL policy information.

clear cts role-based counters

To clear the role-based access control list (RBACL) statistics so that all counters are reset to 0, use the **clear cts role-based counters** command.

clear cts role-based counters

Syntax Description	This command has no argun	nents or keywords.
Command Default	None	
Command Modes	Any configuration mode	
Command History	Release M	odification
	5.1(3)N1(1) T	nis command was introduced.
Usage Guidelines	This command does not requ	iire a license.
Examples	This example shows how to	clear the RBACL statistics:
	switch# clear cts role-ba switch#	used counters
Related Commands	Command	Description
	cts role-based counters en	able Enables the RBACL statistics.
	show cts role-based counter	Prs Displays the configuration status of RBACL statistics and lists statistics for all RBACL policies.

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cts device-id

To configure a Cisco TrustSec device identifier, use the **cts device-id** command.

cts device-id device-id password [7] password

Syntax Description	device-id	Cisco TrustSec device identifier name. The name is alphanumeric and case-sensitive. The maximum length is 32 characters.	
	password	Specifies the password (in clear text or encrypted) to use during EAP-FAST processing.	
	7	(Optional) Specifies that the password is in encrypted text.	
	password	Password for the Cisco TrustSec device. It contains up to 32 alphanumeric, case-sensitive characters.	
Command Default	No Cisco TrustSec device Clear text password	e identifier	
Command Modes	Global configuration mod	le	
Command History	Release	Modification	
-	5.1(3)N1(1)	This command was introduced.	
Usage Guidelines		n must first enable the 802.1X feature by using the feature dot1x command and ustSec feature using the feature cts command.	
	The Cisco TrustSec device identifier name must be unique.		
	This command does not require a license.		
Examples	This example shows how to configure a Cisco TrustSec device identifier:		
	rins enumpre shows now	6	
	switch# configure term	-	
Related Commands	switch# configure term swtich(config)# cts de	inal vice-id DeviceA password Cisco321	
Related Commands	<pre>switch# configure term swtich(config)# cts de swtich(config)#</pre>	inal	
Related Commands	<pre>switch# configure term swtich(config)# cts de swtich(config)# Command</pre>	inal vice-id DeviceA password Cisco321 Description	

cts manual

To enter the Cisco TrustSec manual configuration for an interface, use the **cts manual** command. To remove the manual configuration, use the **no** form of this command.

cts manual

no cts manual

- Syntax Description This command has no arguments or keywords.
- Command Default Disabled

Command Modes Interface configuration mode

Command History	Release	Modification
	5.1(3)N1(1)	This command was introduced.

Usage GuidelinesTo use this command, you must first enable the 802.1X feature by using the feature dot1x command and
then enable the Cisco TrustSec feature using the feature cts command.After using this command, you must enable and disable the interface using the shutdown and no

shutdown command, you must enable and disable the interface using the shutdown and in shutdown command sequence for the configuration to take effect.

This command does not require a license.

Examples This example shows how to enter Cisco TrustSec manual configuration mode for an interface:

switch# configure terminal switch(config)# interface ethernet 2/4 switch(config-if)# cts manual switch(config-if-cts-manual)#

This example shows how to remove the Cisco TrustSec manual configuration from an interface:

switch# configure terminal switch(config)# interface ethernet 2/4 switch(config-if)# no cts manual switch(config-if)# shutdown switch(config-if)# no shutdown

Related Commands	Command	Description
	feature cts	Enables the Cisco TrustSec feature.

Command	Description
feature dot1x	Enables the 802.1X feature.
show cts interface	Displays Cisco TrustSec configuration information for interfaces.

cts role-based access-list

To create or specify a Cisco TrustSec security group access control list (SGACL) and enter role-based access control list configuration mode, use the **cts role-based access-list** command. To remove an SGACL, use the **no** form of this command.

cts role-based access-list list-name

no cts role-based access-list list-name

Syntax Description	list-name	Name for the SGACL. The name is alphanumeric and case-sensitive. The maximum length is 32 characters.	
Command Default	None		
Command Modes	Global configuration	on mode	
Command History	Release	Modification	
	5.1(3)N1(1)	This command was introduced.	
Usage Guidelines	To use this command, you must first enable the 802.1X feature by using the feature dot1x command and then enable the Cisco TrustSec feature using the feature cts command.		
	When you remove an SGACL, the access list can no longer be referenced by any SGT-DGT pair in the system.		
	This command doe	s not require a license.	
Examples	This example show configuration mode	s how to create a Cisco TrustSec SGACL and enter the role-based access list	
	switch# configure terminal switch(config)# cts role-based access-list MySGACL switch(config-rbacl)#		
	This example shows how to remove a Cisco TrustSec SGACL:		
	switch# configure switch(config)# n switch(config)#	e terminal No cts role-based access-list MySGACL	

Related Command	s
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Command	Description
feature cts	Enables the Cisco TrustSec feature.
feature dot1x	Enables the 802.1X feature on the switch.
show cts role-based access-list	Displays the Cisco TrustSec SGACL configuration.

cts role-based counters enable

To enable role-based access control list (RBACL) statistics, use the **cts role-based counters enable** command. To disable RBACL statistics, use the **no** form of this command.

cts role-based counters enable

no cts role-based counters enable

- **Syntax Description** This command has no arguments or keywords.
- Command Default Disabled
- **Command Modes** Global configuration mode

Command History	Release	Modification
	5.1(3)N1(1)	This command was introduced.

Usage Guidelines To use this command, you must first enable the 802.1X feature by using the **feature dot1x** command and then enable the Cisco TrustSec feature using the **feature cts** command.

To use this command, you must enable RBACL policy enforcement on the VLAN.

When you enable RBACL statistics, each policy requires one entry in the hardware. If you do not have enough space remaining in the hardware, an error message appears, and you cannot enable the statistics.

RBACL statistics are lost during an ISSU or when an access control entry is added to or removed from a RBACL.

This command does not require a license.

Examples This example shows how to enable RBACL statistics:

```
switch# configure terminal
switch(config)# cts role-based counters enable
Note: Clearing previously collected counters...
switch(config)#
```

This example shows how to disable RBACL statistics:

```
switch# configure terminal
switch(config)# no cts role-based counters enable
switch(config)#
```

Related Commands	Command	Description
	clear cts role-based counters	Clears the RBACL statistics so that all counters are reset to 0.
	feature dot1x	Enables the 802.1X feature on the switch.
	show cts role-based counters	Displays the configuration status of RBACL statistics and lists statistics for all RBACL policies.

cts role-based enforcement

To enable role-based access control list (RBACL) enforcement on a VLAN, use the **cts role-based enforcement** command. To disable RBACL enforcement on a VLAN, use the **no** form of this command.

cts role-based enforcement

no cts role-based enforcement

- Syntax Description This command has no arguments or keywords.
- Command Default Disabled
- **Command Modes** VLAN configuration mode

Command History	Release	Modification
	5.1(3)N1(1)	This command was introduced.

Usage Guidelines To use this command, you must first enable the 802.1X feature by using the **feature dot1x** command and then enable the Cisco TrustSec feature using the **feature cts** command.

RBACL enforcement is enabled on per-VLAN basis. RBACL enforcement cannot be enabled on routed VLANs or interfaces. For RBACL enforcement changes to take effect, you must exit from the VLAN configuration mode.

This command does not require a license.

Examples This example shows how to enable RBACL enforcement on a VLAN and verifies the status:

switch# configure terminal switch(config)# vlan 5 switch(config-vlan)# cts role-based enforcement switch(config-vlan)# exit switch(config)# show cts role-based enable vlan:102 switch(config)#

This example shows how to disable RBACL enforcement on a VLAN:

```
switch# configure terminal
switch(config)# vlan 5
switch(config-vlan)# no cts role-based enforcement
switch(config-vlan)#
```

Related Commands	Command	Description
	feature dot1x	Enables the 802.1X feature on the switch.
	show cts role-based enable	Displays the VLANs that has RBACL enabled.

cts role-based sgt

To manually configure mapping of Cisco TrustSec security group tags (SGTs) to a security group access control list (SGACL), use the **cts role-based sgt** command. To remove the SGT mapping to an SGACL, use the **no** form of this command.

cts role-based sgt {*sgt-value* | **any** | **unknown**} **dgt** {*dgt-value* | **any** | **unknown**} **access-list** *list-name*

no cts role-based sgt {*sgt-value* | **any** | **unknown**} **dgt** {*dgt-value* | **any** | **unknown**}

Syntax Description	sgt-value	Source SGT value. The range is from 0 to 65519.
	any	Specifies any SGT or destination SGT.
	unknown	Specifies an unknown SGT.
	dgt	Specifies the destination SGT.
	dgt-value	Destination SGT value. The range is from 0 to 65519.
	access-list list-name	Specifies the name for the SGACL.
Command Default	None	
Command Modes	Global configuration	mode
Command History	Release	Modification
	5.1(3)N1(1)	This command was introduced.
Usage Guidelines	To use this command, you must first enable the 802.1X feature by using the feature dot1x comma then enable the Cisco TrustSec feature using the feature cts command. You must configure the SGACL before you can configure SGT mapping. This command does not require a license.	
Examples	switch# configure t	how to configure SGT mapping for an SGACL: cerminal s role-based sgt 3 dgt 10 access-list MySGACL
	This example shows how to configure any SGT mapping to any destination SGT:	
	switch# configure t	

This example shows how to remove SGT mapping for an SGACL:

```
switch# configure terminal
switch(config)# no cts role-based sgt 3 dgt 10
switch(config)#
```

Related Commands

Command	Description
feature cts	Enables the Cisco TrustSec feature.
feature dot1x	Enables the 802.1X feature on the switch.
show cts role-based policy	Displays the Cisco TrustSec SGT mapping for an SGACL.

cts role-based sgt-map

To manually configure the Cisco TrustSec security group tag (SGT) mapping to IP addresses, use the **cts role-based sgt-map** command. To remove an SGT, use the **no** form of this command.

cts role-based sgt-map ipv4-address sgt-value

no cts role-based sgt-map ipv4-address

Syntax Description	ipv4-address	IPv4 address. The format is A.B.C.D		
	sgt-value	SGT value. The range is 1 to 65519.		
Command Default	None			
Command Modes	Global configuration VLAN configuration VRF configuration	on mode		
Command History	Release	Modification		
	5.1(3)N1(1)	This command was introduced.		
Usage Guidelines	To use this command, you must first enable the 802.1X feature by using the feature dot1x command and then enable the Cisco TrustSec feature using the feature cts command.			
	You can use only I	Pv4 addressing with Cisco TrustSec.		
	This command doe	s not require a license.		
Examples	This example show	s how to configure mapping for a Cisco TrustSec SGT:		
	<pre>switch# configure switch(config)# c switch(config)#</pre>	e terminal sts role-based sgt-map 10.10.1.1 3		
	This example shows how to remove a Cisco TrustSec SGT mapping:			
	<pre>switch# configure switch(config)# 1 switch(config)#</pre>	e terminal no cts role-based sgt-map 10.10.1.1		
Related Commands	Command	Description		
	feature cts	Enables the Cisco TrustSec feature.		

Command	Description
feature dot1x	Enables the 802.1X feature on the switch.
show cts role-based sgt-map	Displays the Cisco TrustSec SGT mapping.

cts sgt

To configure the security group tag (SGT) for Cisco TrustSec, use the **cts sgt** command. To revert to the default settings, use the **no** form of this command.

cts sgt tag

no cts sgt

Syntax Description	tag	Local SGT for the device that is a hexadecimal value with the format 0x <i>hhhh</i> . The range is from 0x2 to 0xffef.
Command Default	None	
Command Modes	Global configuration	on mode
Command History	Release	Modification
	5.1(3)N1(1)	This command was introduced.
Usage Guidelines	To use this command, you must first enable the 802.1X feature by using the feature dot1x command and then enable the Cisco TrustSec feature using the feature cts command. This command does not require a license.	
Examples	This example shows how to configure the Cisco TrustSec SGT for the device: <pre>switch# configure terminal switch(config)# cts sgt 0x3 switch(config)#</pre>	
Related Commands	Command	Description
	feature cts	Enables the Cisco TrustSec feature.
	feature dot1x	Enables the 802.1X feature on the switch.
	show cts environn	nent-data Displays the Cisco TrustSec environment data.

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cts sxp connection peer

To configure a Security Group Tag (SGT) Exchange Protocol (SXP) peer connection for Cisco TrustSec, use the **cts sxp connection peer** command. To remove the SXP connection, use the **no** form of this command.

cts sxp connection peer *peer-ipv4-addr* [source *src-ipv4-addr*] password {default | none | required {*password*| 7 *encrypted-password*}} mode listener [vrf *vrf-name*]

no cts sxp connection peer *peer-ipv4-addr* [**source** *src-ipv4-addr*] **password** {**default** | **none** | **required** {*password* | **7** *encrypted-password*} } **mode listener** [**vrf** *vrf-name*]

	peer-ipv4-addr	IPv4 address of the peer device.
Syntax Description	1 1	(Optional) Specifies the IPv4 address of the source device.
	source src-ipv4-addr	Specifies the password option to use for the SXP authentication.
	password default	
	ueraun	Specifies that SXP should use the default SXP password for the peer connection.
	none	Specifies that SXP should not use a password.
	required	Specifies the password that SXP should use for this peer connection.
	password	Clear text password. The password is alphanumeric and case-sensitive. The maximum length is 32 characters.
	7 encrypted-password	Specifies an encrypted password. The maximum length is 32 characters.
	mode	Specifies the mode of the peer device.
	listener	Specifies that the peer is the listener.
	vrf vrf-name	(Optional) Specifies the virtual routing and forwarding (VRF) instance for the peer. The VRF name can be a maximum of 32 alphanumeric characters.
Command Default	e	password for the device source IPv4 address for the device
	Default VRF	
Command Modes	Global configuration mo	
Command Modes		

You can use only IPv4 addressing with Cisco TrustSec.

If you do not specify a source IPv4 address, you must configure a default SXP source IPv4 address using the **cts sxp default source-ip** command.

If you specify default as the password mode, you must configure a default SXP password using the **cts sxp default password** command.

This command does not require a license.

Examples

This example shows how to configure an SXP peer connection:

switch# configure terminal
switch(config)# cts sxp connection peer 10.10.1.1 source 10.10.2.2 password default mode
listener
switch(config)#

This example shows how to remove an SXP peer connection:

```
switch# configure terminal
switch(config)# no cts sxp connection peer 10.10.1.1
switch(config)#
```

Related Commands	Command	Description
	cts sxp default password	Configures the default SXP password for the device.
	cts sxp default source-ip	Configures the default SXP source IPv4 address for the device.
	feature cts	Enables the Cisco TrustSec feature.
	feature dot1x	Enables the 802.1X feature on the switch.
	show cts sxp connection	Displays the Cisco TrustSec SXP peer connection information.

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cts sxp default password

To configure the default Security Group Tag (SGT) Exchange Protocol (SXP) password for the device, use the cts sxp default password command. To remove the default, use the no form of this command.

cts sxp default password { password | 7 encrypted-password }

no cts sxp default password

Syntax Description	password	Clear text password. The password is alphanumeric and case-sensitive. The maximum length is 32 characters.	
	7 encrypted-passwo	Specifies an encrypted password. The maximum length is 32 characters.	
Command Default	None		
Command Modes	Global configuratio	n mode	
Command History	Release	Modification	
·····	5.1(3)N1(1)	This command was introduced.	
Fyamplas		s not require a license.	
Examples	This example shows how to configure the default SXP password for the device:		
	<pre>switch# configure terminal switch(config)# cts sxp default password Cisco654 switch(config)#</pre>		
	This example shows how to remove the default SXP password:		
	<pre>switch# configure terminal switch(config)# no cts sxp default password switch(config)#</pre>		
Related Commands	Command	Description	
neialeu commands	feature cts	Description Enables the Cisco TrustSec feature.	
	feature dot1x	Enables the 802.1X feature on the switch.	
	show cts sxp	Displays the Cisco TrustSec SXP configuration information.	
	T.		

cts sxp default source-ip

To configure the default Security Group Tag (SGT) Exchange Protocol (SXP) source IPv4 address for the device, use the **cts sxp default source-ip** command. To revert to the default, use the **no** form of this command.

cts sxp default source-ip ipv4-address

no cts sxp default source-ip

Syntax Description	ipv4-address	Default SXP IPv4 address for the device.	
Command Default	None		
Command Modes	Global configuration	on mode	
Command History	Release	Modification	
	5.1(3)N1(1)	This command was introduced.	
Usage Guidelines	To use this command, you must first enable the 802.1X feature by using the feature dot1x command and then enable the Cisco TrustSec feature using the feature cts command.		
	You can use only IPv4 addressing with Cisco TrustSec.		
	This command doe	s not require a license.	
Examples	This example show	vs how to configure the default SXP source IP address for the device:	
	switch# configure terminal switch(config)# cts sxp default source-ip 10.10.3.3 switch(config)#		
	This example shows how to remove the default SXP source IP address:		
	<pre>switch# configure switch(config)# r switch(config)#</pre>	e terminal no cts sxp default source-ip	
Related Commands	Command	Description	

•••iiiiiaiia	Decemption
feature cts	Enables the Cisco TrustSec feature.
feature dot1x	Enables the 802.1X feature on the switch.
show cts sxp	Displays the Cisco TrustSec SXP configuration information.

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cts sxp enable

To enable the Security Group Tag (SGT) Exchange Protocol (SXP) peer on a device, use the **cts sxp enable** command. To revert to the default, use the **no** form of this command.

cts sxp enable

no cts sxp enable

Syntax Description	This command has no arguments	or keywords.
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Command Default Disabled

Command Modes Global configuration mode

Command History	Release	Modification
	5.1(3)N1(1)	This command was introduced.

Usage Guidelines To use this command, you must first enable the 802.1X feature by using the **feature dot1x** command and then enable the Cisco TrustSec feature using the **feature cts** command.

This command does not require a license.

Examples This example shows how to enable SXP:

switch# configure terminal
switch(config)# cts sxp enable
switch(config)#

This example shows how to disable SXP:

switch# configure terminal
switch(config)# no cts sxp enable
switch(config)#

Related Commands	Command	Description
	feature cts	Enables the Cisco TrustSec feature.
	feature dot1x	Enables the 802.1X feature on the switch.
	show cts sxp	Displays the Cisco TrustSec SXP configuration information.

cts sxp reconcile-period

To configure a Security Group Tag (SGT) Exchange Protocol (SXP) reconcile period timer, use the **cts sxp reconcile-period** command. To revert to the default, use the **no** form of this command.

cts sxp reconcile-period seconds

no cts sxp reconcile-period

Syntax Description	seconds	Number of seconds. The range is from 0 to 64000.
Command Default	120 seconds (2 min	utes)
Command Modes	Global configuratio	n mode
Command History	Release	Modification
	5.1(3)N1(1)	This command was introduced.
Usage Guidelines		d, you must first enable the 802.1X feature by using the feature dot1x command and co TrustSec feature using the feature cts command.
•	-	ates an SXP connection, an internal hold-down timer starts. If the peer reconnects hold-down timer expires, the SXP reconcile period timer starts.
Note	Setting the SXP rec	concile period to 0 seconds disables the timer.
	This command does	s not require a license.
Examples	This example show	s how to configure the SXP reconcile period:
	<pre>switch# configure switch(config)# c switch(config)#</pre>	terminal ts sxp reconcile-period 120
	switch# configure	s how to revert to the default SXP reconcile period value: terminal o cts sxp reconcile-period

ls Command	Description
feature cts	Enables the Cisco TrustSec feature.
feature dot1x	Enables the 802.1X feature on the switch.
show cts sxp connection	Displays the Cisco TrustSec SXP configuration information.

cts sxp retry-period

To configure a Security Group Tag (SGT) Exchange Protocol (SXP) retry period timer, use the **cts sxp retry-period** command. To revert to the default, use the **no** form of this command.

cts sxp retry-period seconds

no cts sxp retry-period

Syntax Description	seconds	Number of seconds. The range is from 0 to 64000.
Command Default	60 seconds (1 minu	ite)
Command Modes	Global configuration	on mode
Command History	Release	Modification
	5.1(3)N1(1)	This command was introduced.
Usage Guidelines	To use this command, you must first enable the 802.1X feature by using the feature dot1x command and then enable the Cisco TrustSec feature using the feature cts command.	
•	an SXP connection	od determines how often the Cisco NX-OS software retries an SXP connection. When is not successfully set up, the Cisco NX-OS software makes a new attempt to set up r the SXP retry period timer expires.
Note	Setting the SXP ret	try period to 0 seconds disables the timer and retries are not attempted.
	This command doe	s not require a license.
Examples	This example show	s how to configure the SXP retry period:
	<pre>switch# configure switch(config)# c switch(config)#</pre>	e terminal sts sxp retry-period 120
	This example show	s how to revert to the default SXP retry period value:
	<pre>switch# configure switch(config)# m switch(config)#</pre>	e terminal no cts sxp retry-period

nds	Command	Description
	feature cts	Enables the Cisco TrustSec feature.
	feature dot1x	Enables the 802.1X feature on the switch.
	show cts sxp connection	Displays the Cisco TrustSec SXP peer connection information.