

عرضو ISE مادختس اب (SGTs) نیوکت (رطسل ا لخاد تامالع)

تاي وتحمل

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ةمدقملا

ةدحwoo لوحه ققحتلاو TrustSec نويوكتم ةيفيك دنتسملا اذه حضوي. ةي وهلا تامدخ كرحم مادختساب ةيكليساللا ةيلحملاء كبسلا مكحت.

ةيساسألا تابلطتملا

ةيلاتلا عيضاوملاب ةفرعم كيدل نوكتنأب Cisco يصوت:

- Cisco TrustSec (CTS) تانوكمب ةيساسأ ةفرعم
- حاتفم ةزافح ةدام نم ليكشت للا ةيساسألا ةفرعم
- ةكبش يف مكحتلا تادحول (GUI) ةيموسرلا مدخلتسملاء هجاونويوكتب ةيساسأ ةفرعم
- Cisco LAN (WLC) نم ةيكليساللا Cisco (ISE)
- ةي وهلا تامدخ كرحم نويوكتم ةبرجت

تابلطتملا

ىلع ةقداصملاء نوييئاهنلا نيمدخلتسملاء ىلع بجي امك ،كتكبش يف Cisco ISE رشن بجي. ةيكليسألا ةكبشب مهليصوت دنع (ىرخأ ةقيرط وأ) 802.1x مادختساب Cisco ISE اوموقي نأ درجمب (SGT) نامألا ةعومجم مقرمب ةصالخلا رورملاء كرحم نيعي كب ةصالخلا ةيكليساللا ةكبشلا ىلع ةقداصملاب.

كب صالحلا زاهجلا ةباوب راضحإ ISE ىلا نوييئاهنلا نيمدخلتسملاء هيجوت ةداعا مدت ،انلاثم يف ةيكليساللا ةكبشلا ىلا نامأب لوصولا مهنكمي ىتح ةداهشب مهديوزت متيو (BYOD) تاووطخلامك درجمب (EAP-TLS) لقنلا ةقبط ناما - عسونتملا ةقداصملاء لوكوتورب مادختساب لخدم BYOD.

ةمدختسملا تانوكملا

ةيلاتلا جماربلأاو ةيداملا تانوكملا تارادصإ ىلا دنتسملا اذه يف ةدراولما تامولعملاء دنتست:

- Cisco Identity Services Engine، 2.4 رادصإلا
- رادصإلا Cisco Catalyst 3850 Switch، 3.7.5E لوحه
- رادصإلا Cisco WLC، 8.5.120.0
- يلحملاء عضولا يف Cisco Aironet ةيكليساللا لوصولا ةطقن

Cisco TrustSec، Cisco Catalyst Switch و/or Cisco WLC+AP Modules دنتسملا لوحه نأ نم ققحت، Cisco TrustSec، Cisco Catalyst Switch و/or Cisco WLC+AP Modules دنتسملا لوحه ديدل جمانربلا رادصإ +:

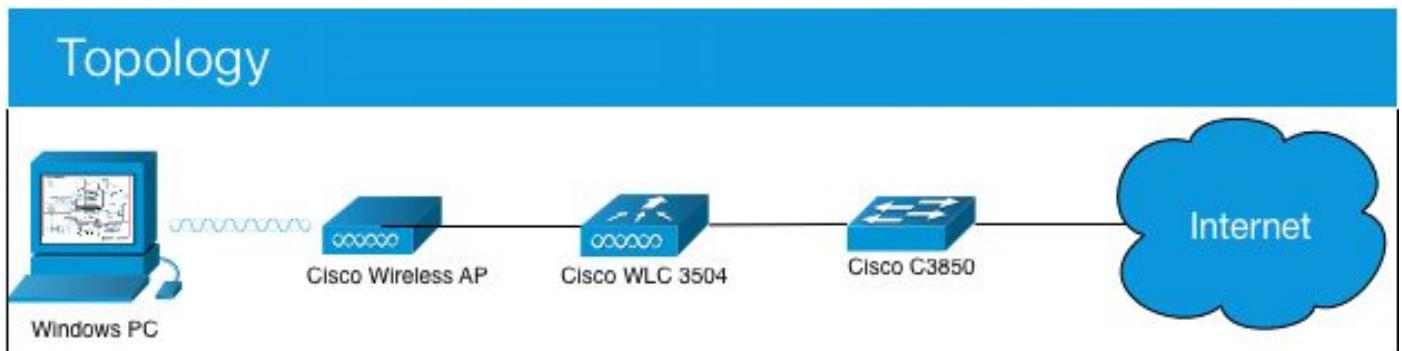
- نامألا ةعومجم تامالع/TrustSec
- يف تامالع عضونم الدب SXP مادختسا كنكمي ،نكبي مل اذا) رطسلاء يف تامالع عضو (رطسلاء)
- (ةجاجلإا دنع) بيقرلا ىلا (IP) تترننإلا لوكوتورب نم ةتباث تانييعت

- (رمألا مزل اذا) بيقرلل ةتباثلا ةيعرفلا تاكبشلا تانيييعت
- (رمألا مزل اذا) بيقرلا ىلإ ةتباثلا (VLAN) ةيرهاظلا ةيلحملاءكبشلا تانيييعت

ةصاخ ةيلمعم ةئيب يف ةدوچوملا ةزهجألا نم دنتسملا اذه يف ةدراولما تامولعملاءاشنامت تناك اذا .(يضرارتفا) حوسمم نيوكتب دنتسملا اذه يف ةمدختسملا ةزهجألا عيمج تأدبل مأ يأ لمحملاريثأتلل كمهف نم داكتف ،ليغشتلا ديق كتكبش.

نيوكتلا

ةكبشلل يطيطختلا مسرا



زييمتب (WLC) ةيكلساللا ةيلحملاءكبشلا يف مكحتملا رصنع موقد ،لاثملاءا اذه يف فظوم نم ناك اذا 7 بيقرلا + ،راستسن نم ناك اذا 15 بيقرلا اهنأ ىلع مزحلا.

نيراشتسملل نكمي ال) 8 بيقرلا ىلإ 15 بيقرلا نم تناك اذا مزحلا هذه حاتفملاءا ضفريو 8 بيقرلاك اهيلع ٰمالع عضو مت يتلا مداخلا ىلإ لوصولا.

لوصولا نيفظوملل نكمي) 8 بيقرلا ىلإ 7 بيقرلا نم تناك اذا مزحلا كلتل لوحملاءا حمسى 8 بيقرلاك اهيلع ٰمالع عضو مت يتلا مداخلا ىلإ.

فده

ىلإ لوصولا بصفحة GuestSSID.

لوصولا دييقت عم نكلو ،ىلإ لوصولا EmployeeSSID ،نيراشتسملل حامسلالا لمأكلالا لوصولا عم EmployeeSSID ،ىلإ لوصولا نيفظوملل حامسلالا.

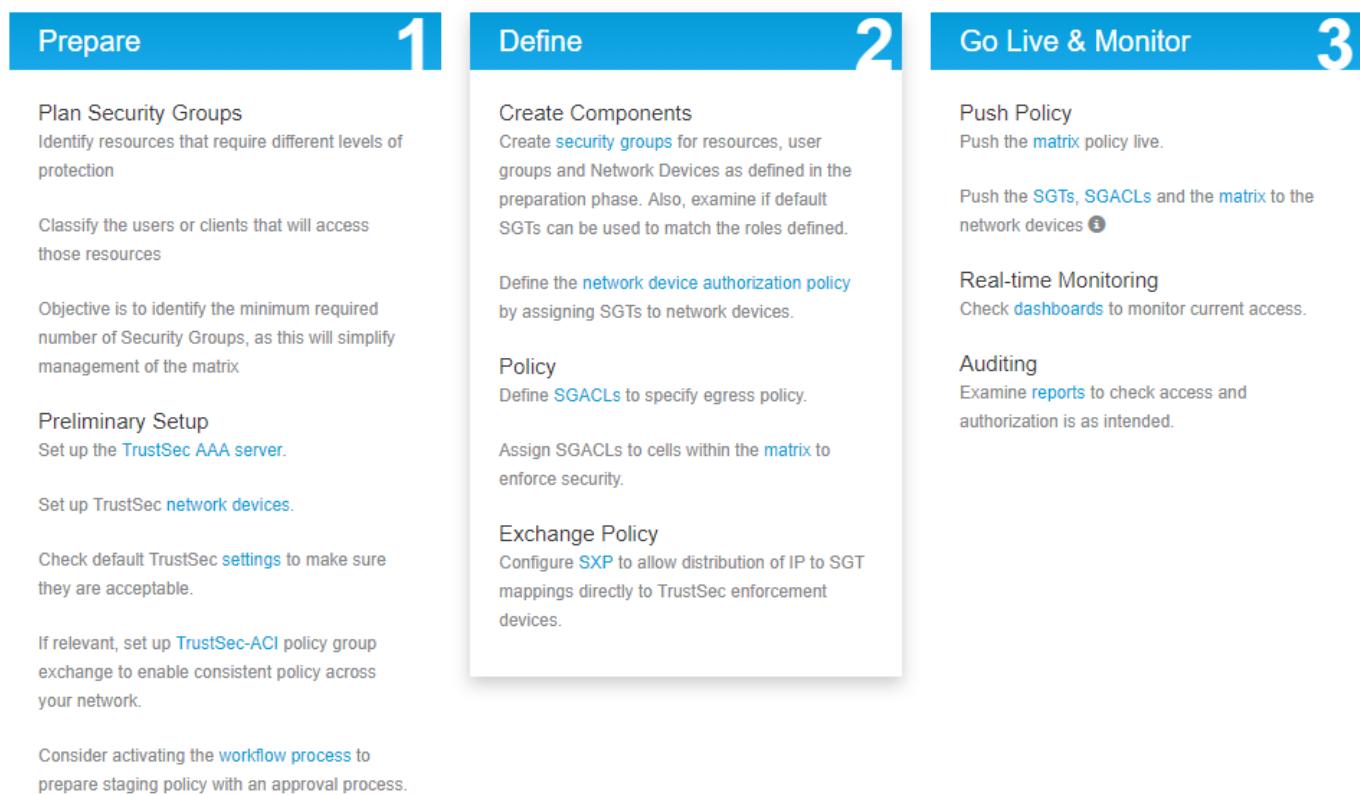
ييلاتلار لاثملاءا يف	IP ناونع	VLAN
ise) ةي وهلا فشك تامدخ كرحم	10.201.214.230	463
Catalyst Switch لوحملاءا	10.201.235.102	1115
WLC	10.201.214.229	463
لوصولا ظقان	10.201.214.138	455

مسالا	Username	ج.س ةينالع إلأ عومجملا	باقر
ثيمسيج	ثيمسيج	نويراستسالا	15
ثيمس	ثيمس	نوفظوملا	7
رفوتمنيغ	رفوتمنيغ	رفوتمنيغ	TrustSec_Devices

تانا يوكتلا

نويوكت TrustSec ىلع ISE

TrustSec Overview



Cisco ISE نويوكت مداخك TrustSec AAA

The screenshot shows the Cisco Identity Services Engine (ISE) interface under the TrustSec tab. The left sidebar lists components such as Security Groups, IP SGT Static Mapping, Security Group ACLs, Network Devices, and Trustsec AAA Servers. The main pane displays the configuration for a new AAA Server named 'CISCOISE'. The form fields include:

- Name: CISCOISE
- Description: (Empty text area)
- IP: 10.201.214.230 (Example: 10.1.1.1)
- Port: 1812 (Valid Range 1 to 65535)

At the bottom are 'Save' and 'Reset' buttons.

Cisco ISE نويوكت زاهجك لوحمل ا ئفاضا نم ققحتل او

Network Devices List > CatalystSwitch

Network Devices

* Name: CatalystSwitch

Description: Catalyst 3850 Switch

IP Address: * IP: 10.201.235.102 / 32

* Device Profile: Cisco

Model Name:

Software Version:

* Network Device Group

Location: All Locations

IPSEC: No

Device Type: All Device Types

RADIUS Authentication Settings

RADIUS UDP Settings

Protocol: RADIUS

* Shared Secret: Admin123

Use Second Shared Secret:

CoA Port: 1700

RADIUS DTLS Settings

DTLS Required:

Shared Secret: radius/dtls

هنم ققحتل او (WLC) ئيكلساللا ئيلحمل اكشلا يف مكحتلا رصنعم نويوكت ئفاضا متت TrustSec يف Cisco ISE زاهجك

ىلإ IP تانيرييعت رشن نم Cisco ISE نكمي اذهو لروخ دلا لريجست دامتعا تانايip لخدا لوحملالا ىلإ ئتاباثلا بيقرلا Cisco ISE نم بيولاربع (GUI) ئيموسرلا مدخلتسملما ٽهجاو يف رصانعلما ٽهعاشنى كنكمي تتحت Work Centers > TrustSec > Components > IP SGT Static Mappings:

Silvio's Identity Services Engine

Home > Context Mobility > Operations > Policy > Administration > Audit / Controls

System > Identity Management > Network Resources > Device Portal Management > OAM Services > Trust Center NAC

Network Devices > Network Device Groups > Network Device Profiles > External RADIUS Servers > RADIUS Server Sequences > NAC Managers > External MOB > Location Services

Network Devices

Default Device

Device Security Settings

Advanced TrustCenter Settings

Device Authentication Settings

Use Device ID for TrustCenter Identification

Device ID: CatalystSwitch

Password: Admin123

TrustCenter Notifications and Updates

Download environment data every 1 Minutes

Download peer authorization policy every 1 Days

 * Reauthentication every 1 Days

Download SGMCI lists every 1 Hours

Other TrustCenter devices to trust this device:

Send configuration changes to device: Using: OAM CLI (SSH) Telnet connection

Send Key:

Device Configuration Deployment

Include this device when deploying Security Group Tag Mapping Updates:

Device Interface Credentials

 * EXEC Mode Username: Admin

 * EXEC Mode Password: Admin123

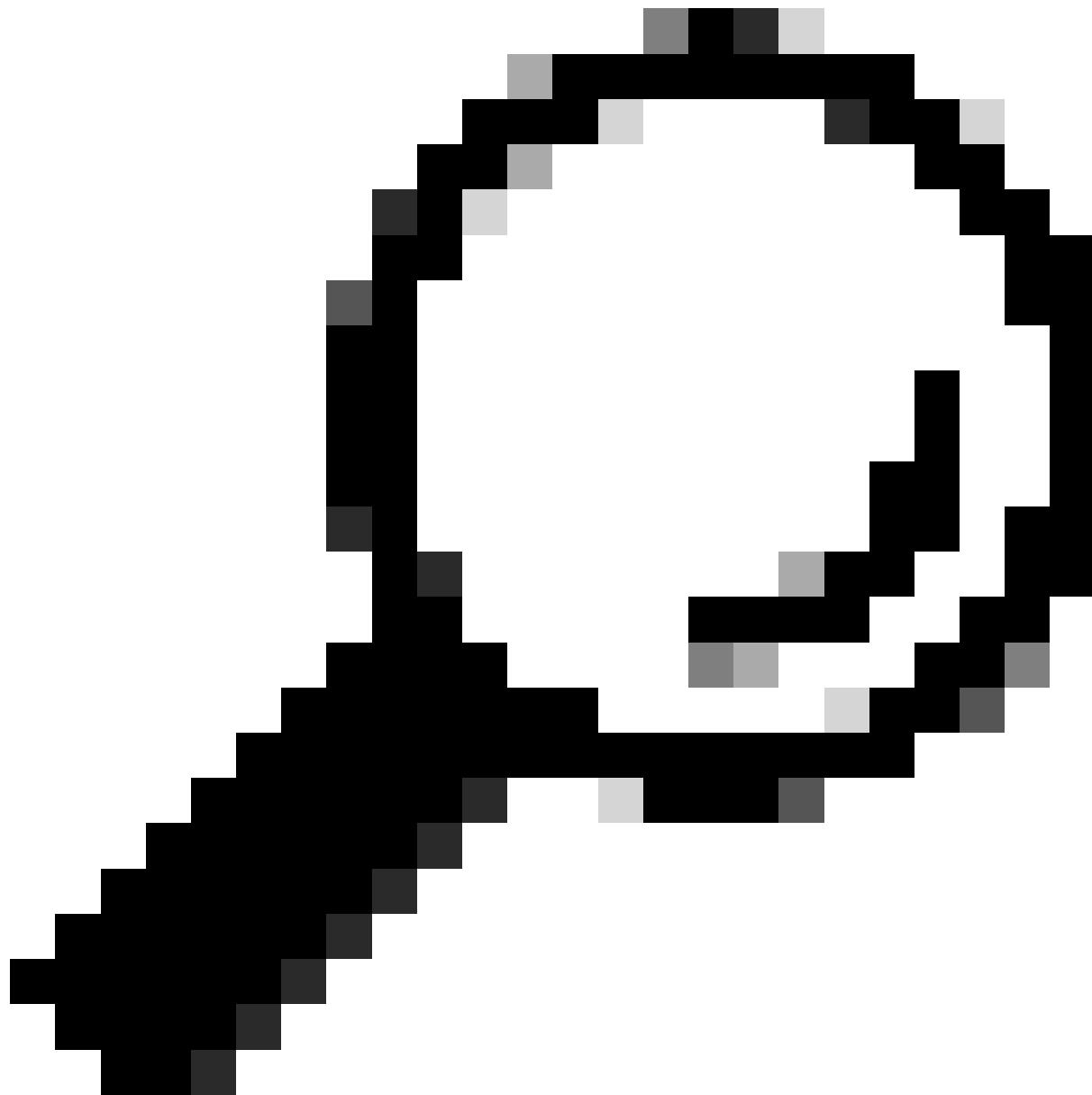
 * Enable Mode Password: Admin123

Out Of Band (OOB) TrustCenter PAC

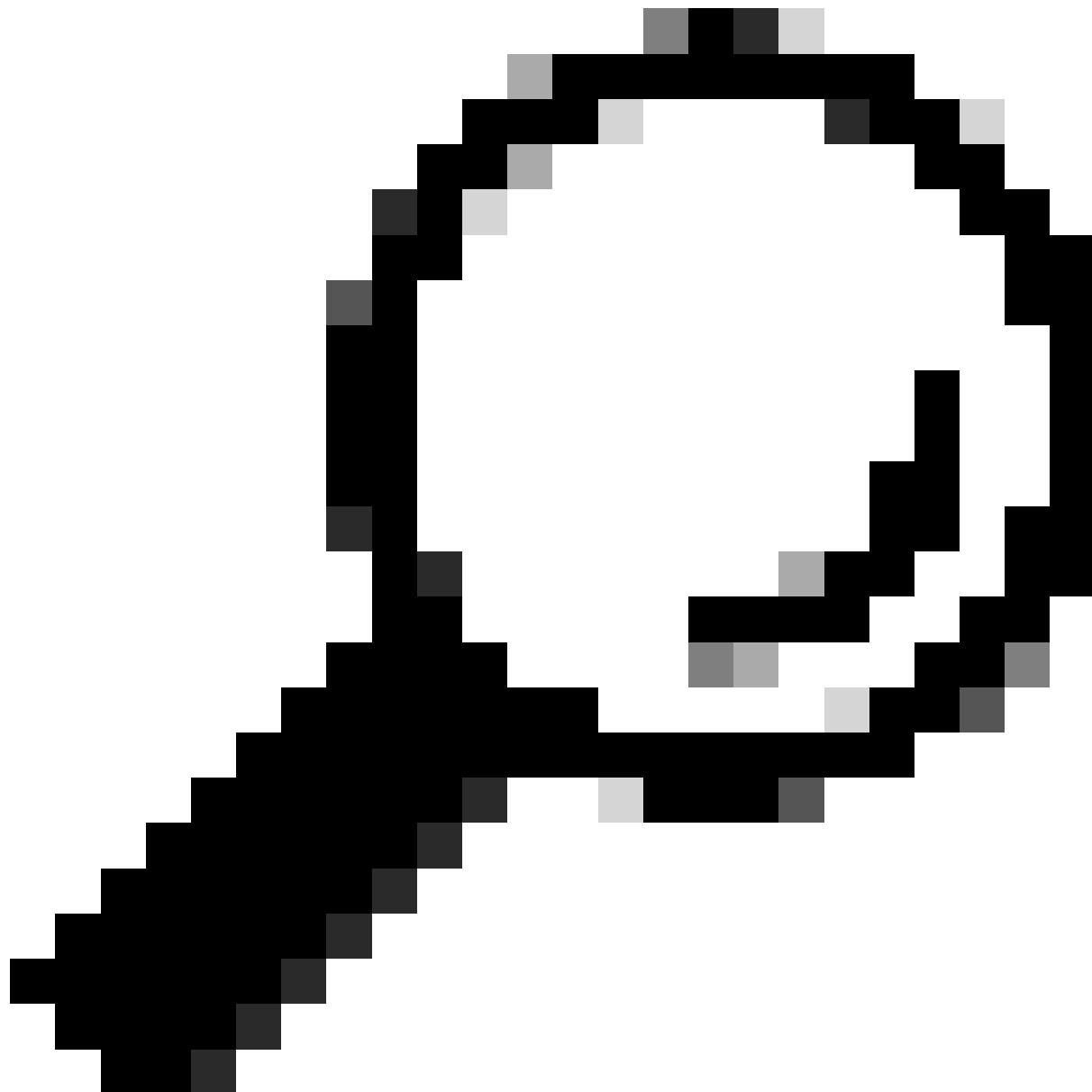
Issue Date: 27-Aug-2018 01:19:24 GMT

Expiration Date: 25-Nov-2018 01:19:24 GMT

Issued By: Network Device



قىب ط نىيوكت ئىفىك: لىيلدلا اذه مادختس|ا كنكمىف ،كىيدل Catalyst لوحىم ىلىع SSH نىيوكتب مقت مل اذا: حېملەت
نىامەلا [لوحىم ىلىع Catalyst \(SSH\)](#).



تانيييعت عاشنإ كنكمييف، SSH رباع لوچم ىلإ لوچولل Cisco ISE نيكمت يف بغرت نكت مل اذا: حيملىت
ةوطخ يف حضوم) كلذ نم الدب (CLI) رمأولا رطس ةهجاو مادختساب Catalyst لوچم ىلع SGT ىلإ IP لوکوتوربل ئتباث
انه).

cisco Identity Services Engine

Home ▶ Context Visibility ▶ Operations ▶ Policy ▶ Administration ▶ Work Centers

▶ Network Access ▶ Guest Access ▶ TrustSec ▶ BYOD ▶ Profiler ▶ Posture ▶ Device Administration ▶ PassivelD

▶ Overview ▶ Components ▶ TrustSec Policy ▶ Policy Sets ▶ SXP ▶ Troubleshoot ▶ Reports ▶ Settings

General TrustSec Settings

General TrustSec Settings

Verify TrustSec Deployment

Automatic verification after every deploy ⓘ

Time after deploy process minutes (10-60) ⓘ

Verify Now

Protected Access Credential (PAC)

*Tunnel PAC Time To Live Days

*Proactive PAC update when % PAC TTL is Left

Security Group Tag Numbering

System Will Assign SGT Numbers

Except Numbers In Range - From To

User Must Enter SGT Numbers Manually

Security Group Tag Numbering for APIC EPGs

System will assign numbers In Range - From

cisco Identity Services Engine

Home ▶ Context Visibility ▶ Operations ▶ Policy ▶ Administration ▶ Work Centers

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General TrustSec Settings

TrustSec Matrix Settings

Work Process Settings

SXP Settings

ACI Settings

Security Group Tag Numbering for APIC EPGs

System will assign numbers In Range - From

Automatic Security Group Creation

Auto Create Security Groups When Creating Authorization Rules (i)

SGT Number Range For Auto-Creation - From To

Automatic Naming Options

Select basis for names. (Security Group name will be shortened to 32 characters)

Name Will Include

Optional Additions Policy Set Name (i)

Prefix

Suffix

Example Name -

IP SGT static mapping of hostnames

Create mappings for all IP addresses returned by DNS query

Create mappings only for the first IPv4 address and the first IPv6 address returned by DNS query

نیکلساللا نیمدختسمبل نیمأت ۋەممجم تامالع ئاشنا

بىقىرلا - BYOD يراشتىمىل ناما ۋەممجم ئاشنا 15

بىقىرلا - لوا قىرفلا يف نيفظومىل ئىنمأ ۋەممجم ئاشناب مۇق 7

Identity Services Engine

Home > Context Visibility > Operations > Policy > Administration > Work Centers

> Network Access > Guest Access > TrustSec > BYOD > Profiler > Posture > Device Administration > PassivelD

> Overview > Components > TrustSec Policy > Policy Sets > SXP > Troubleshoot > Reports > Settings

Security Groups

For Policy Export go to Administration > System > Backup & Restore > Policy Export Page

Icon	Name	SGT (Dec / Hex)	Description	Learned from
BYODconsultants	15/000F	SGT for consultants who use BYOD - restrict internal access		
BYODemployees	7/0007	SGT for employees who use BYOD - allow internal access		
Contractors	5/0005	Contractor Security Group		
Employees	4/0004	Employee Security Group		
EmployeeServer	8/0008	Restricted Web Server - Only employees should be able to access		
Guests	6/0006	Guest Security Group		
Network_Services	3/0003	Network Services Security Group		
Quarantined_Systems	255/00FF	Quarantine Security Group		
RestrictedWebServer	8/0008			
TrustSec_Devices	2/0002	TrustSec Devices Security Group		
Unknown	0/0000	Unknown Security Group		

دېقىملا بىولما مداخل SGT ئىلما IP نم يكىتاتسما نكاس طي طخت عاشنما

ۋەق دا صەم زوا جەت عەم Cisco ISE قىدا سەت اىلدا كەتكەپش يەپەر تاكبىش وەئىخا IP نى وانع يەل كەلذب مەق، اذكەو، تافىصۇت.

Identity Services Engine

Home > Context Visibility > Operations > Policy > Administration > Work Centers

> Network Access > Guest Access > TrustSec > BYOD > Profiler > Posture > Device Administration > PassivelD

> Overview > Components > TrustSec Policy > Policy Sets > SXP > Troubleshoot > Reports > Settings

IP SGT Static Mapping

IP SGT static mapping > 10.201.214.132

IP address(es)

Add to a mapping group Map to SGT individually

SGT *

Send to SXP Domain

Deploy to devices

Cancel **Save**

ۋەدەشلىڭ ۋەق دا صەم فىرىعەت فەلم عاشنما

Identity Services Engine Home > Context Visibility > Operations > Policy > Administration > Work Centers

> System > Identity Management > Network Resources > Device Portal Management pxGrid Services > Feed Service > Threat Centric NAC

> Identities Groups External Identity Sources Identity Source Sequences > Settings

External Identity Sources

- Certificate Authentication Profile
- Active Directory
- LDAP
- ODBC
- RADIUS Token
- RSA SecurID
- SAML Id Providers
- Social Login

Certificate Authentication Profiles List > New Certificate Authentication Profile

Certificate Authentication Profile

* Name: BYODCertificateAuthProfile

Description: Allow 802.1x authentication to BYOD using username+password + EAP-TLS authentication to BYOD using certificate

Identity Store: Windows_AD_Server

Use Identity From: Certificate Attribute Subject - Common Name
 Any Subject or Alternative Name Attributes in the Certificate (for Active Directory Only)

Match Client Certificate Against Certificate In Identity Store: Only to resolve identity ambiguity
 Never
 Always perform binary comparison

Submit Cancel

لېق نم ئداهشلىا ئوق داصلم فېرعت فەلمب ئويه رەصم لىسىلىنى ئاشن!

Identity Services Engine

- Home
- Context Visibility
- Operations
- Policy
- Administration
- Work Centers

- System
- Identity Management
- Network Resources
- Device Portal Management
- pxGrid Services
- Feed Service
- Threat Centric NAC

- Identities
- Groups
- External Identity Sources
- Identity Source Sequences**
- Settings

Identity Source Sequences List > New Identity Source Sequence

Identity Source Sequence

Identity Source Sequence

* Name: BYOD_Identity_Sequence

Description: allow username+password and certificate for BYOD authentication

Certificate Based Authentication

Select Certificate Authentication Profile: BYODCertificateAuthPr

Authentication Search List

A set of identity sources that will be accessed in sequence until first authentication succeeds

Available	Selected
Internal Endpoints Guest Users	Windows_AD_Server Internal Users
<input type="button" value=">"/> <input type="button" value="<"/> <input type="button" value=">>"/> <input type="button" value="<<"/>	

Advanced Search List Settings

If a selected identity store cannot be accessed for authentication:

- Do not access other stores in the sequence and set the "AuthenticationStatus" attribute to "ProcessError"
- Treat as if the user was not found and proceed to the next store in the sequence

Buttons: Submit, Cancel

بسانم بيقرو (نيراشتسمل او نيفظوملا) نيريكلساللا نيمدختسملا نيرييعتب مق

مسالا	Username	ج.س. ئينالعإلا ۋە مەملا	بىقر
ثيمس يچ	ثيمس نوسياج	نويراشتسا	15
ثيمس يلاس	ثيمس	نوفظوملا	7
رفوتم رىغ	رفوتم رىغ	TrustSec_Devices	2

ةيكلس الـ WLC

Rule Name	Conditions	Security Group
Tag_TrustSec_Devices	If DEVICE:Device Type equals to All Device Types	TrustSec_Devices
Default Rule	If no rules defined or no match	Unknown

جوخلـا ةـسـاـيـسـ دـيـدـحـتـلـ SGACLs

يـلـخـادـ وـهـ اـمـ دـيـيـقـتـ عـمـ نـكـلـوـ،ـيـجـرـاخـ نـاـكـمـ يـأـ لـوـصـوـلـابـ نـيـراـشـتـسـمـلـلـ حـامـسـلـاـ

Identity Services Engine

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Security Groups

IP SGT Static Mapping

Security Group ACLs

Name: RestrictConsultant

Description: Deny Consultants from going to internal sites such as: https://10.201.214.132

IP Version: IPv4

```
permit icmp
deny tcp dst eq 80
deny tcp dst eq 443
permit ip
```

يـلخـاد نـاكـم يـأـىـلـا لـوـصـولـابـ نـيـفـظـومـلـلـ حـامـسـلـا:

Identity Services Engine

- Home
- Context Visibility
- Operations
- Policy
- Administration
- Work Centers

- Network Access
- Guest Access
- TrustSec
- BYOD
- Profiler
- Posture
- Device Administration
- PassiveID

- Overview
- Components
- TrustSec Policy
- Policy Sets
- SXP
- Troubleshoot
- Reports
- Settings

Security Groups

IP SGT Static Mapping

Security Group ACLs

Name: AllowEmployee

Description: Allow Employees to ping and access sites in browser

IP Version: IPv4

```
permit icmp
permit tcp dst eq 80
permit tcp dst eq 443
permit ip
```

(يـرـايـتـخـا) ةـيـسـاسـأـلـا تـامـدـخـلـا يـلـا لـوـصـولـابـ يـرـخـأـلـا ةـزـهـجـأـلـلـ حـامـسـلـا:

The screenshot shows the Cisco Identity Services Engine (ISE) interface. The top navigation bar includes Home, Context Visibility, Operations, Policy, Administration, and Work Centers. Under the TrustSec section, the Components tab is selected, showing options like Overview, TrustSec Policy, Policy Sets, SXP, Troubleshoot, Reports, and Settings. On the left sidebar, there are links for Security Groups, IP SGT Static Mapping, Security Group ACLs, Network Devices, and Trustsec AAA Servers. The main content area displays the 'Security Groups ACLs List > LoginServices' page. It shows a security group named 'LoginServices' with a description: 'This is an ACL for Login services'. The IP Version is set to IPv4. The 'Security Group ACL content' section contains the following permit rules:

```

permit udp dst eq 67
permit udp dst eq 53
permit tcp dst eq 53
permit tcp dst eq 88
permit udp dst eq 88
permit udp dst eq 123
permit tcp dst eq 135
permit udp dst eq 137
permit udp dst eq 389
permit tcp dst eq 389
permit udp dst eq 636
permit tcp dst eq 636
permit tcp dst eq 445
permit tcp dst eq 1025
permit tcp dst eq 1026

```

At the bottom of the page are 'Save' and 'Reset' buttons.

وأ DNS رورم ةكرح نيمضتب مقت ال لخدم هيچوت ةداع(Cisco ISE ئىلۇنلا ئىمداختسىمىلا عىمچ هيچوت ةداعا
DHCP ping وأ WebAuth ئىلەنلەن كەمپي ال اھنألى لقتنىت نأ Cisco ISE:

The screenshot shows the Cisco ISE interface. The top navigation bar includes Home, Context Visibility, Operations, Policy, Administration, and Work Centers. Under the TrustSec section, the Components tab is selected, showing options like Overview, TrustSec Policy, Policy Sets, SXP, Troubleshoot, Reports, and Settings. On the left sidebar, there are links for Security Groups, IP SGT Static Mapping, Security Group ACLs, Network Devices, and Trustsec AAA Servers. The main content area displays the 'Security Groups ACLs List > New Security Group ACLs' page. It shows a new security group named 'ISE' with a description: 'ACL to allow ISE services to occur'. The IP Version is set to IPv4. The 'Security Group ACL content' section contains the following deny and permit rules:

```

deny udp dst eq 67
deny udp dst eq 53
deny tcp dst eq 53
deny icmp
deny tcp dst eq 8443
permit ip

```

At the bottom of the page are 'Submit' and 'Cancel' buttons.

يىف Cisco ISE ئاسىس ئەفوفوصم ئىلع كې ئەصالخا (ACL) لوصولى يىف مكحتلا مئاوق ضرف

لثم، ئىلخادلا بىولما مداوخ دىيقت ناكلۇ، يىجراخ ناكم يأ ئىلۇ لوصولاب نىراشتىسىملىل حامسىلما

ةيلخ ادلاب يو مداوخب حامسل او يجراخ ناكم يأ لىا لوصلاب نيفظوم للحامسل:

Production Matrix (Populated cells: 7)

Source	Destination	Policy Rule	Count
EYODemolists	EYODemolists	RestrictConsultant	8,0000
EYODemolists	Guest	AllowEmployee	8,0000
Guest	Network_Service...		8,0000
Quarantine_Sys...	Network_Service...		20,0000
TrustSec_Device...	Network_Service...		2,0000
Unknown	Unknown	Permit IP	2,0000
Unknown	Unknown	Unknown	2,0000

دقفت ال يتح (WLC و لوحمل) ةكبشلا يلع كتزهجأ نم/يل| (SSH و HTTPS و CAPWAP) ةرادلا ثانايي رورم ةكرحب حامسل

Production Matrix (Populated cells: 5)

Source	Destination	Policy Rule	Count
EmployeeList	Guest		8,0000
Guest	Network_Service...		8,0000
Quarantine_Sys...	Network_Service...		20,0000
TrustSec_Device...	Network_Service...		2,0000
Unknown	Unknown	Permit IP	2,0000

لوصو SSH و HTTPS درجمب Cisco TrustSec رشن:

Cisco ISE نم Allow Multiple SGACLS:

General TrustSec Settings

TrustSec Matrix Settings

- Allow Multiple SGACLS *i*
- Allow Monitoring *i*
- Show SGT Numbers *i*

Appearance Settings Custom Theme *i*

Set In Cell <i>i</i>	Color	Pattern
Permit	Green	White
Deny	Red	White
SGACLS	Blue	White

Default for Matrix (Inherited) *i*

Permit	Color	Pattern
Permit	Light Green	White
Deny	Light Red	White
SGACLS	Light Blue	White

Status Icons *i*

- Enabled
- Disabled
- Monitor

Save Reset

كىلذب مايقلا كىيلع بجي. كتتزمجأ ئىلى لفسسأىل كب صاخلا نىيوكتلار Cisco ISE. نم ئىنمىلا اىلعلا عفدل اپنىيوكتلا ئىوازلا يف Push رقنا: اضىيأ اقچال ئىرخأ ئىرم:

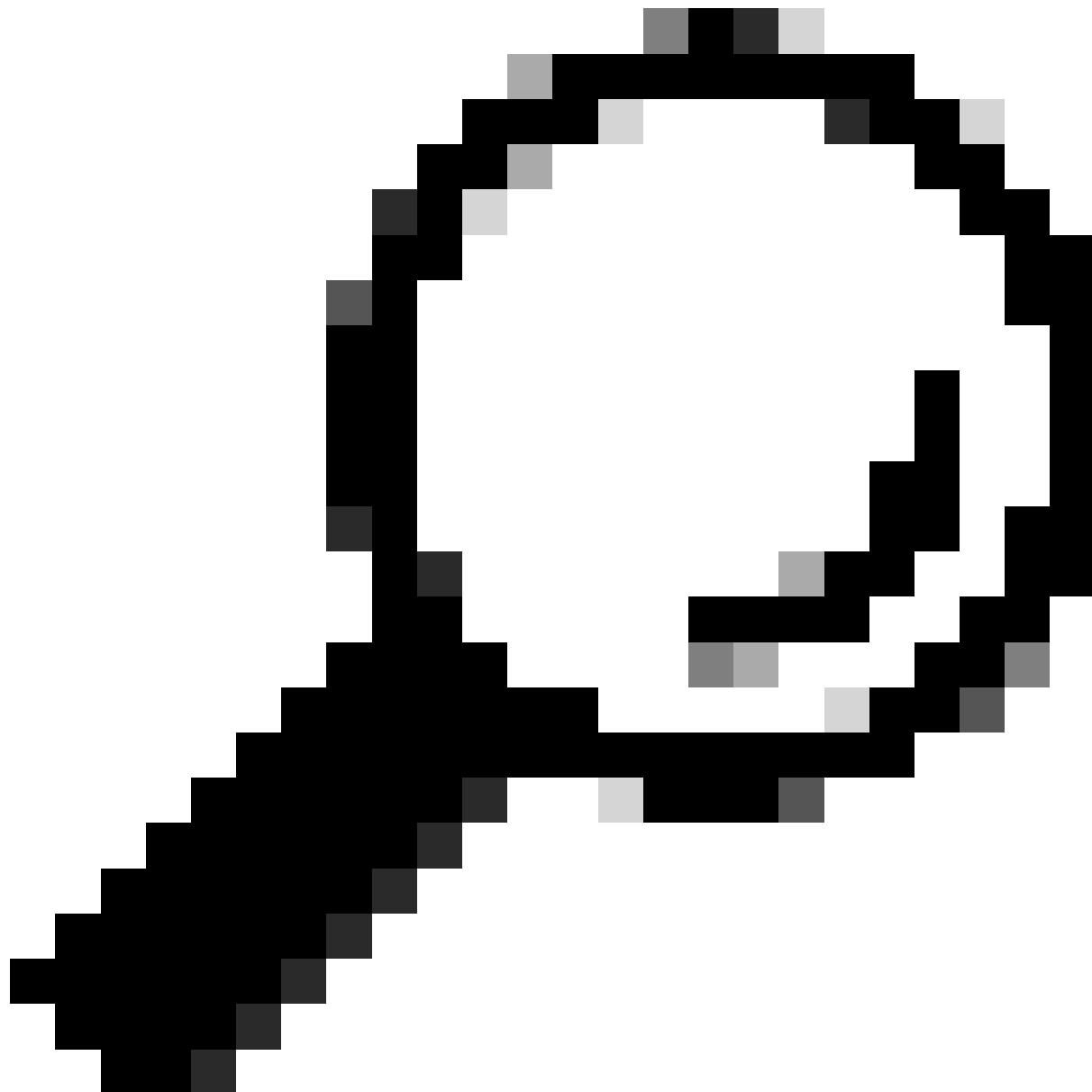
1

There are TrustSec configuration changes that has not been notified to network devices. To notify the relevant network devices about these changes click the push button.

Push

نېيوكت TrustSec لوحىم ئىلۇڭ Catalyst

نېيوكت Catalyst لوحىم ئىلۇڭ Cisco TrustSec ل AAA مادختىسال لوحىملار



Cisco ISE ۋە طس اوپ BYOD يە لىعفلاب نوحجان كىدل نىيىكلىساللا نىيمدختىسىملا نأ دنتسىملا اذه ضرتفى: حېمىت
انه رهاظلا نىوكتىلا لبق.

مۇت دىھو لە باشىمىسىم دوسأىلاب ۋە حضۇمىلا رماوا ئىيىكلىساللا نىوكتىلا لبق (ISE).

<#root>

```
CatalystSwitch(config)#aaa new-model

CatalystSwitch(config)#aaa server radius policy-device

CatalystSwitch(config)#ip device tracking

CatalystSwitch(config)#radius server CISCOISE

CatalystSwitch(config-radius-server)#address ipv4 10.201.214.230 auth-port 1812 acct-port 1813

CatalystSwitch(config)#aaa group server radius AAASERVER
CatalystSwitch(config-sg-radius)#server name CISCOISE

CatalystSwitch(config)#aaa authentication dot1x default group radius
CatalystSwitch(config)#cts authorization list SGLIST
CatalystSwitch(config)#aaa authorization network SGLIST group radius

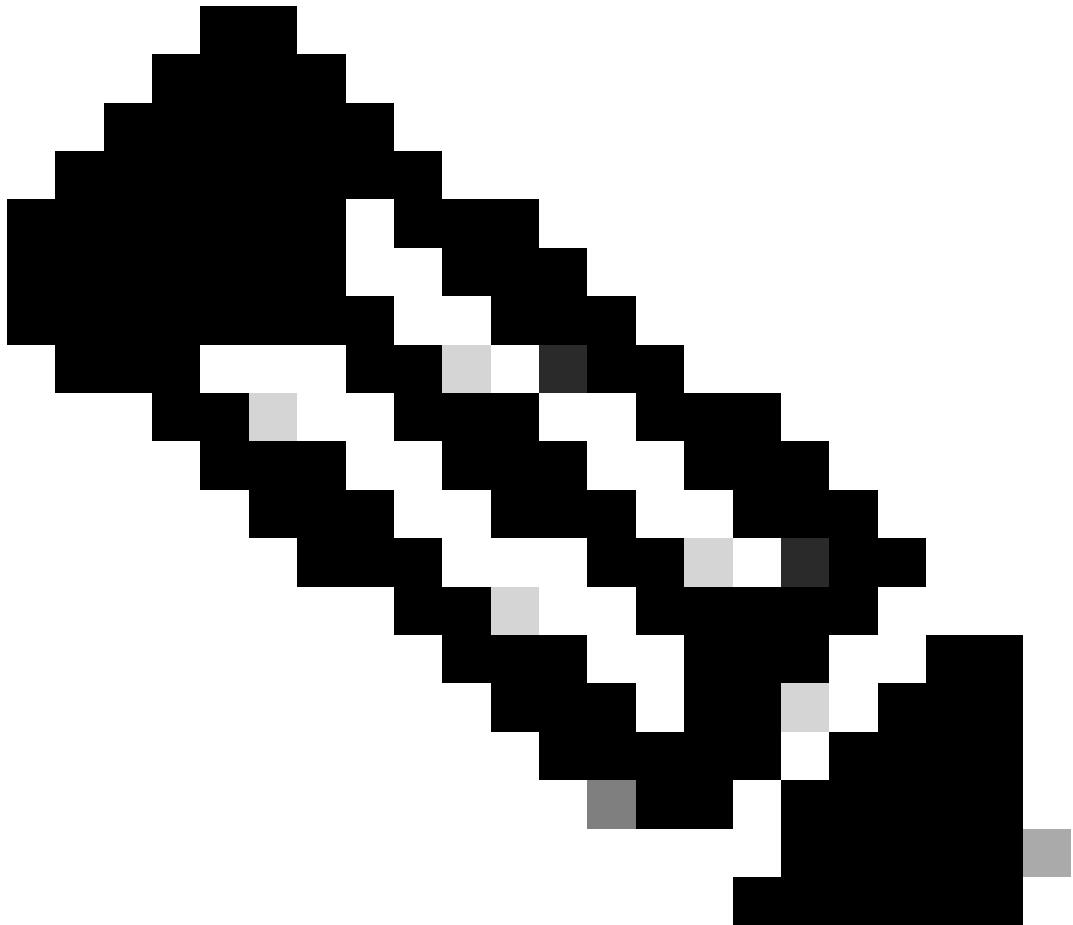
CatalystSwitch(config)#aaa authorization network default group AAASERVER

CatalystSwitch(config)#aaa authorization auth-proxy default group AAASERVER

CatalystSwitch(config)#aaa accounting dot1x default start-stop group AAASERVER

CatalystSwitch(config)#aaa server radius policy-device

CatalystSwitch(config)#aaa server radius dynamic-author
CatalystSwitch(config-locsvr-da-radius)#client 10.201.214.230 server-key Admin123
```



يـف هـتـدـح يـذـلـا كـرـتـشـمـلـا RADIUS رسـهـسـفـنـوـهـ يـمـحـمـلـا لـوـصـوـلـا تـاغـوـسـمـ حـاـتـفـمـ نـوـكـيـنـأـ بـجـيـ: ظـاحـلـمـ
Administration > Network Devices > Add Device > RADIUS Authentication Settings مـسـقـلـا.

<#root>

```
CatalystSwitch(config)#radius-server attribute 6 on-for-login-auth
```

```
CatalystSwitch(config)#radius-server attribute 6 support-multiple
```

```
CatalystSwitch(config)#radius-server attribute 8 include-in-access-req

CatalystSwitch(config)#radius-server attribute 25 access-request include

CatalystSwitch(config)#radius-server vsa send authentication
CatalystSwitch(config)#radius-server vsa send accounting

CatalystSwitch(config)#dot1x system-auth-control
```

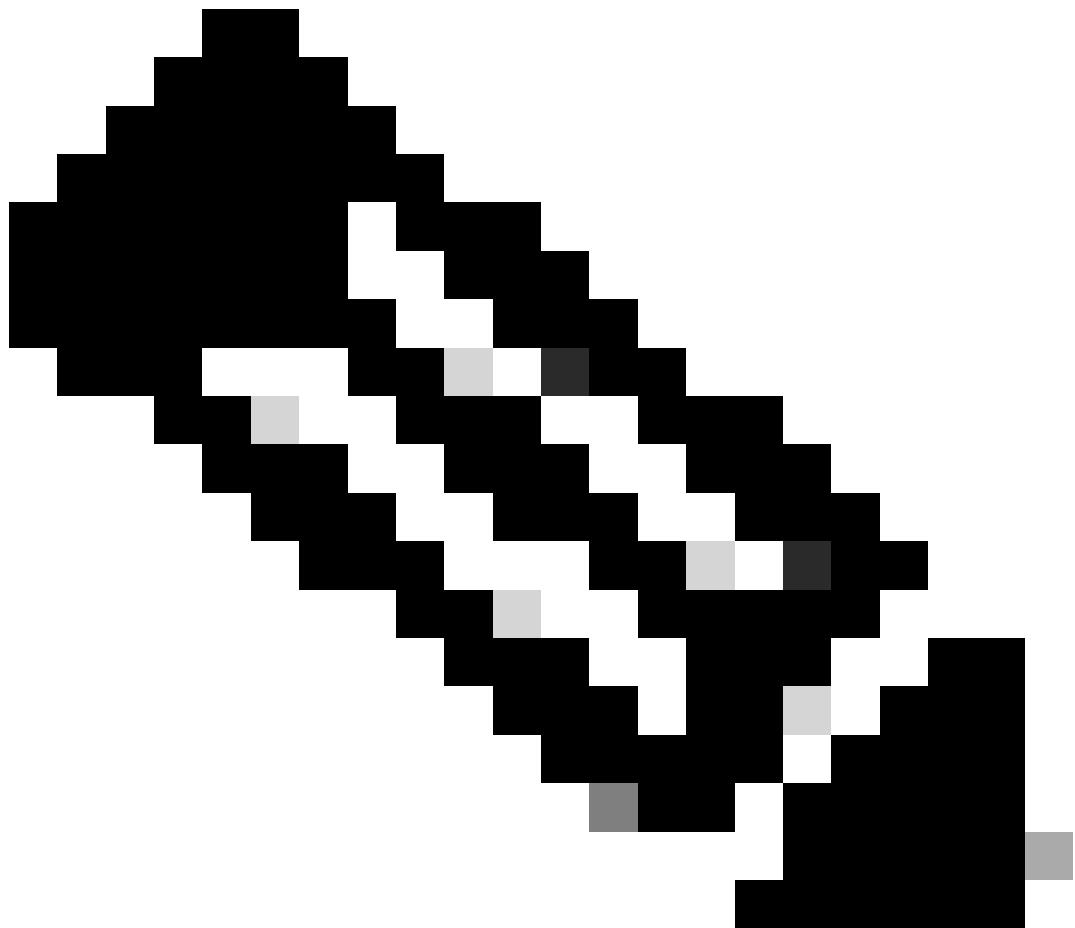
ىلع لوحة مراقبة RADIUS داخل نموذج Cisco ISE حافظة PAC

```
CatalystSwitch(config)#radius server CISCOISE
CatalystSwitch(config-radius-server)#address ipv4 10.201.214.230 auth-port 1812 acct-port 1813
CatalystSwitch(config-radius-server)#pac key Admin123
```

RADIUS Authentication Settings

RADIUS UDP Settings

Protocol	RADIUS
* Shared Secret	<input type="text" value="Admin123"/> <input type="button" value="Hide"/>
Use Second Shared Secret	<input type="checkbox"/> <input type="button" value="i"/>



تحت هتدح يذلا كرتشملا RADIUS رس هسفن وه يمحملال وصولا تاغوسم حاتفم نوكى نأ بجي: **تظالم**
Administration > Network Devices > Add Device > RADIUS Authentication Settings Cisco ISE يف مسقللا (امك هو حضوم).
يف طاقتلا اشلا شة.

Cisco ISE دامتغا تانايip نويوكت لوحملال قدادصل CTS ىلع

CatalystSwitch#cts credentials id CatalystSwitch password Admin123

Identity Services Engine

Home ▶ Context Visibility ▶ Operations ▶ Policy ▶ Administration ▶ Work Centers

System ▶ Identity Management ▶ Network Resources ▶ Device Portal Management ▶ pxGrid Services ▶ Feed Service ▶ Threat Ce

Network Devices ▶ Network Device Groups ▶ Network Device Profiles ▶ External RADIUS Servers ▶ RADIUS Server Sequences ▶ NAC Mana

Network Devices

Default Device

Device Security Settings

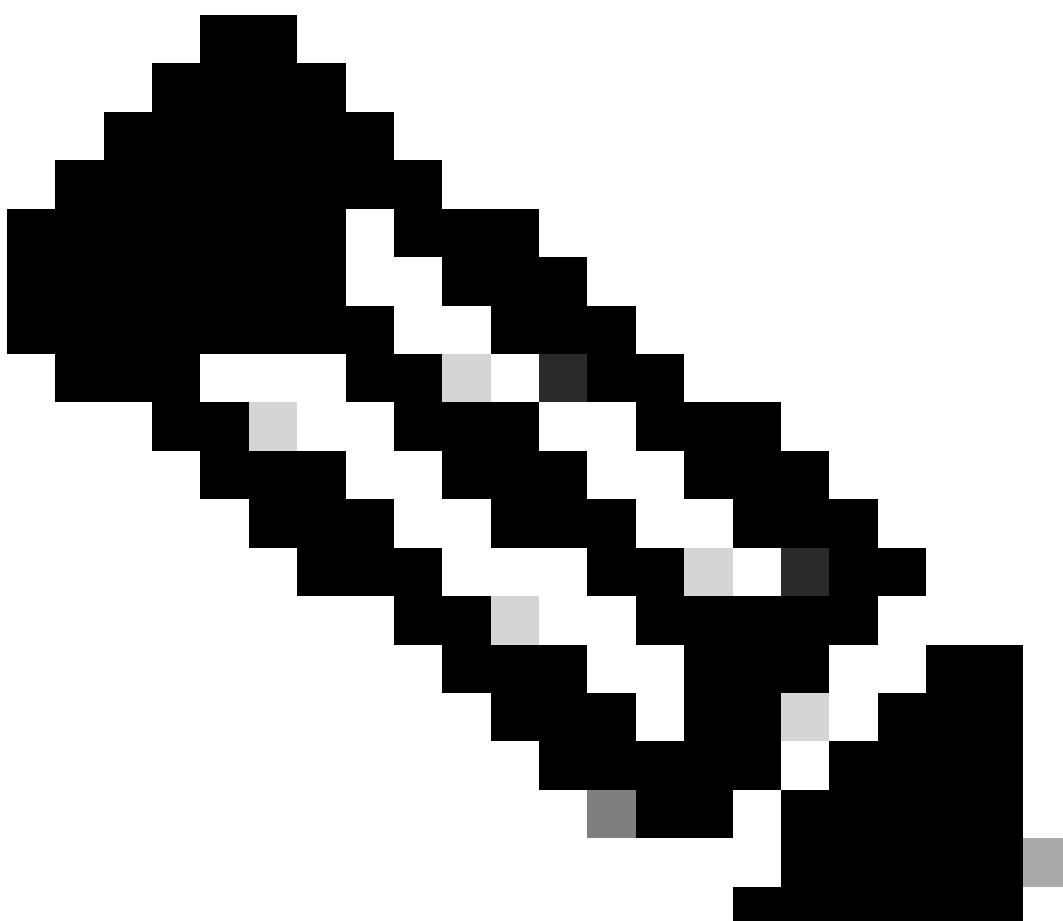
Advanced TrustSec Settings

Device Authentication Settings

Use Device ID for TrustSec Identification

Device Id: CatalystSwitch

* Password: Admin123



CTS دامتع ا تانايip يف اهتددح يتل رورملا قملk + زاهجلا فرعم اوسفن يه CTS دامتع ا تانايip نوكت نأ بجي: **قطحالم**
يف اهتددح يتل رورملا قملk + زاهجلا فرعم اوسفن نوكت نأ بجي Administration > Network Devices > Add Device >

ةشاشلا طاقتلا يف رهظي) Cisco ISE مسقلما يف (Advanced TrustSec Settings).

ىرخأ ةرم Cisco ISE لصي ىتح كب صالحلا يمحملا لوصولـا غوسـم ثـيدـحتـب مق ،كـلـذـ دـعـبـ:

```
CatalystSwitch(config)#radius server CISCOISE
CatalystSwitch(config-radius-server)#exit
Request successfully sent to PAC Provisioning driver.
```

لـوـحـمـ ىـلـعـ مـاعـ لـكـشـبـ Catalystـ نـيـكـمـتـ

```
CatalystSwitch(config)#cts role-based enforcement
CatalystSwitch(config)#cts role-based enforcement vlan-list 1115 (choose the vlan that your end user devices are on only)
```

(يـراـيـتـخـ) ةـروـظـحـمـلـاـ بـيـوـلـاـ مـدـاـوـخـلـ SGTـ ىـلـاـ IPـ نـمـ تـبـاـثـ نـيـيـعـتـ

مـادـخـتـسـابـ اـيـوـديـ هـزـيـيـمـتـ كـيـلـعـ بـجـيـ كـلـذـلـ ،ـادـبـأـ ةـقـدـاصـمـلـلـ ISEـ لـالـخـ نـمـ دـيـقـمـلـاـ بـيـوـلـاـ مـدـاـخـ يـتـأـيـ الـ GUIـ Ciscoـ يـفـ بـيـوـلـاـ مـدـاـوـخـ نـمـ دـيـدـعـلـاـ نـمـ دـحـاوـ درـجـمـ دـعـيـ يـذـلـاوـ.

```
CatalystSwitch(config)#cts role-based sgt-map 10.201.214.132 sgt 8
```

لـوـحـمـ ىـلـعـ نـمـ قـقـحـتـلـ Catalystـ

```
CatalystSwitch#show cts pac
AID: EF2E1222E67EB4630A8B22D1FF0216C1
PAC-Info:
PAC-type = Cisco Trustsec
AID: EF2E1222E67EB4630A8B22D1FF0216C1
I-ID: CatalystSwitch
A-ID-Info: Identity Services Engine
Credential Lifetime: 23:43:14 UTC Nov 24 2018
PAC-Opaque: 000200B80003000100040010EF2E1222E67EB4630A8B22D1FF0216C10006009C0003010025D40D409A0DDAF352A3F1A9884AC3F
Refresh timer is set for 12w5d
```

```
CatalystSwitch#cts refresh environment-data
Environment data download in progress
```

```
CatalystSwitch#show cts environment-data
CTS Environment Data
=====
Current state = COMPLETE
Last status = Successful
Local Device SGT:
SGT tag = 2-02:TrustSec_Devices
Server List Info:
Installed list: CTSServerList1-0001, 1 server(s):
*Server: 10.201.214.230, port 1812, A-ID EF2E1222E67EB4630A8B22D1FF0216C1
Status = ALIVE flag(0x11)
auto-test = TRUE, keywrap-enable = FALSE, idle-time = 60 mins, deadtime = 20 secs
Multicast Group SGT Table:
Security Group Name Table:
0001-31 :
0-00:Unknown
2-00:TrustSec_Devices
3-00:Network_Services
4-00:Employees
5-00:Contractors
6-00:Guests
7-00:BYODemployees
8-00:EmployeeServer
15-00:BYODconsultants
255-00:Quarantined_Systems
Transport type = CTS_TRANSPORT_IP_UDP
Environment Data Lifetime = 86400 secs
Last update time = 16:04:29 UTC Sat Aug 25 2018
Env-data expires in 0:23:57:01 (dd:hr:mm:sec)
Env-data refreshes in 0:23:57:01 (dd:hr:mm:sec)
Cache data applied = NONE
State Machine is running
```

```
CatalystSwitch#show cts role-based sgt-map all
Active IPv4-SGT Bindings Information
```

```
IP Address SGT Source
=====
10.201.214.132 8 CLI
10.201.235.102 2 INTERNAL
```

```
IP-SGT Active Bindings Summary
=====
Total number of CLI bindings = 1
Total number of INTERNAL bindings = 1
Total number of active bindings = 2
```

نويوكت TrustSec ىلع WLC

ياف زاهجك RADIUS Cisco ISE ۆيكلساللا ۆيلحملاب كبسلا يف مكحتلا رصنع ۆفاضا نم ققحتل او نويوكتلار

The screenshot shows the Cisco ISE Web GUI interface for managing network devices. On the left sidebar, 'Network Devices' is selected. In the main content area, a device named 'CiscoWLC' is being configured. The 'Name' field is set to 'CiscoWLC' and the 'Description' field is 'Cisco 3504 WLC'. The 'IP Address' field contains '10.201.235.123'. The 'Device Profile' dropdown is set to 'Cisco'. Under 'Network Device Group', 'Location' is 'All Locations', 'IPSEC' is 'No', and 'Device Type' is 'All Device Types'. The 'RADIUS Authentication Settings' section is expanded, showing 'RADIUS UDP Settings' where the 'Protocol' is 'RADIUS' and the 'Shared Secret' is 'cisco'. A blue arrow points to the 'IP' field in the 'IP Address' row. Another blue arrow points to the 'Protocol' dropdown in the 'RADIUS UDP Settings' section.

ياف زاهجك هنم ققحتل او (WLC) ۆيكلساللا ۆيلحملاب كبسلا يف مكحتلا رصنع نويوكت ۆفاضا مرت

ۆيكلساللا ۆيلحملاب كبسلا يف مكحتلا رصنع ىلإ تانينييعت رسن نم Cisco ISE ۆوطخلها هذه نكمت
< لمعلا زكارم يف Cisco ISE Web GUI ب ۆصالخا (GUI) ۆيموسرلا مدختسملاب ۆهوجاويف تانينييعتلها هذه عاشناب تموق دقل (WLC).
TrustSec > تانينييعت > تانوكملا > IP تاباشلا ب يقرل ۆقطخ يف IP تانينييعت >

Identity Services Engine

Home > Context Visibility > Operations > Policy > Administration > Work Centers

> System > Identity Management > Network Resources > Device Portal Management > pxGrid Services > Feed Service > Threat Centric NAC

> Network Devices > Network Device Groups > Network Device Profiles > External RADIUS Servers > RADIUS Server Sequences > NAC Managers > External MDM > Location Services

Network Devices

Default Device
Device Security Settings

Advanced TrustSec Settings

Device Authentication Settings

Use Device ID for TrustSec Identification

Device Id: CiscoWLC

* Password: cisco

TrustSec Notifications and Updates

* Download environment data every 1 Minutes

* Download peer authorization policy every 1 Days

* Reauthentication every 1 Days

* Download SGACL lists every 1 Minutes

Other TrustSec devices to trust this device

Send configuration changes to device Using CoA CLI (SSH)

Send from: Test connection

Ssh Key:

Device Configuration Deployment

Include this device when deploying Security Group Tag Mapping Updates

Device Interface Credentials

* EXEC Mode Username: admin

* EXEC Mode Password: Cisco123

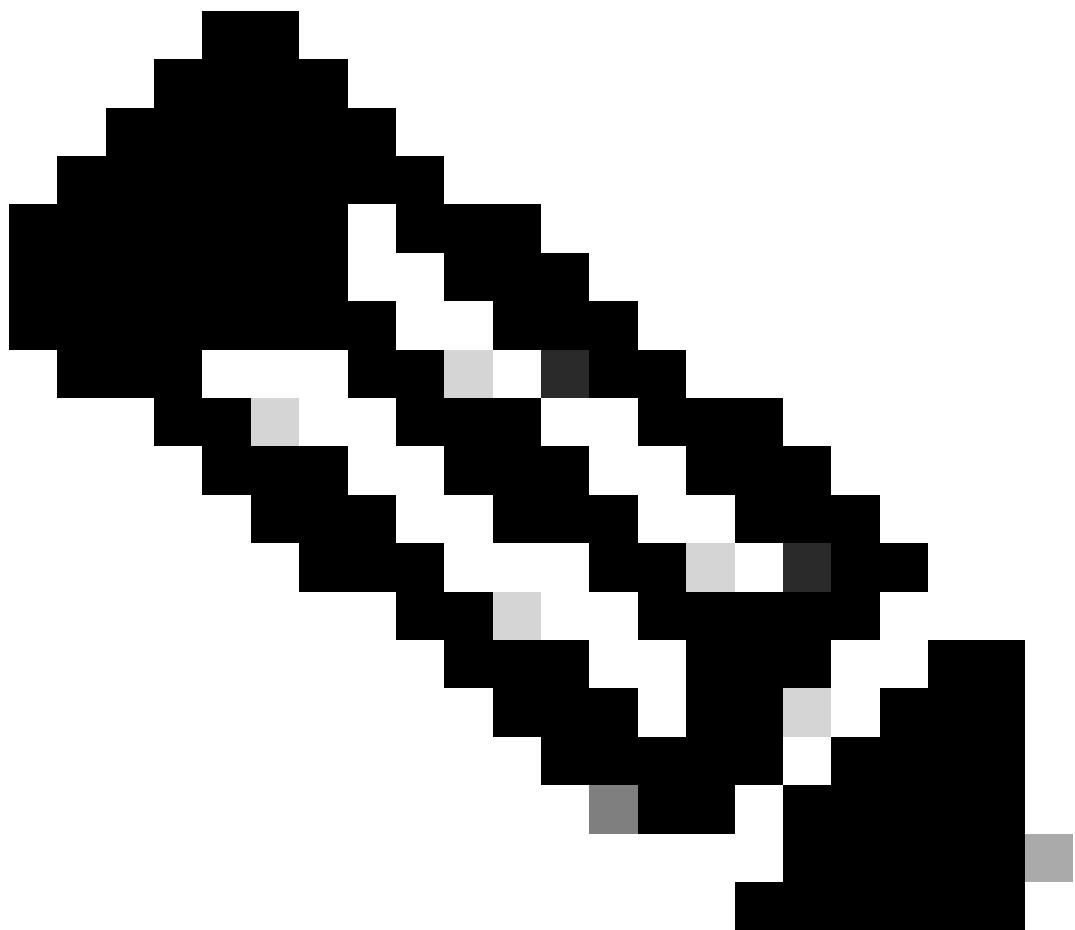
Enable Mode Password: Cisco123

Out Of Band (OOB) TrustSec PAC

Issue Date: 27 Aug 2018 01:58:32 GMT

Expiration Date: 25 Nov 2018 01:58:32 GMT

Issued By: Network Device



بى و مدخلت سىم ئاج او و قىچىال Device Id Password يف و طخ ئاذه مدخلت سىن نىحن ئاظح الـ WLC.

نەم PAC (Programmable Access Controller) رىفوت نىكىمت لوصولى تاغوسىم WLC

CISCO MONITOR WLANs CONTROLLER WIRELESS SECURITY MANAGEMENT COMMANDS HELP FEEDBACK

Security

- AAA
 - General
 - RADIUS
 - Authentication
 - Accounting
 - Fallback
 - DNS
 - Downloaded AVP
 - TACACS+
 - LDAP
 - Local Net Users
 - MAC Filtering
 - Disabled Clients
 - User Login Policies
 - AP Policies
 - Password Policies
- Local EAP
 - Advanced EAP
- Priority Order
- Certificate
- Access Control Lists
- Wireless Protection Policies
- Web Auth
- TrustSec
 - Local Policies
 - OpenDNS
 - Advanced

RADIUS Authentication Servers > Edit

Server Index	2
Server Address(Ipv4/Ipv6)	10.201.214.230
Shared Secret Format	ASCII ▾
Shared Secret	***
Confirm Shared Secret	***
Key Wrap	<input type="checkbox"/> (Designed for FIPS customers and requires a key wrap compliant RADIUS server)
Apply Cisco ISE Default settings	<input type="checkbox"/>
Port Number	1812
Server Status	Enabled ▾
Support for CoA	Enabled ▾
Server Timeout	5 seconds
Network User	<input checked="" type="checkbox"/> Enable
Management	<input type="checkbox"/> Enable
Management Retransmit Timeout	5 seconds
Tunnel Proxy	<input type="checkbox"/> Enable
PAC Provisioning	<input checked="" type="checkbox"/> Enable
IPSec	<input type="checkbox"/> Enable

نیکم ت WLC ع لى TrustSec

CISCO MONITOR WLANS CONTROLLER WIRELESS SECURITY MANAGEMENT COMMANDS HELP FEEDBACK Home

Save Configuration | Ping | Logout | Refresh

Security General

CTS Enable

Device Id CiscoWLC

Password *****

Inline Tagging

Environment Data

Current State START

Last Status WAITING_RESPONSE

1. Clear DeviceID will clear Device ID and password
2. Apply button will configure Device ID and other parameters

AAA

- General
- RADIUS
 - Authentication
 - Accounting
 - Fallback
 - DNS
 - Downloaded AVP
- TACACS+
- LDAP
- Local Net Users
- MAC Filtering
- Disabled Clients
 - User Login Policies
 - AP Policies
 - Password Policies

Local EAP

- Advanced EAP
- Priority Order
- Certificate
- Access Control Lists
- Wireless Protection Policies

Web Auth

TrustSec

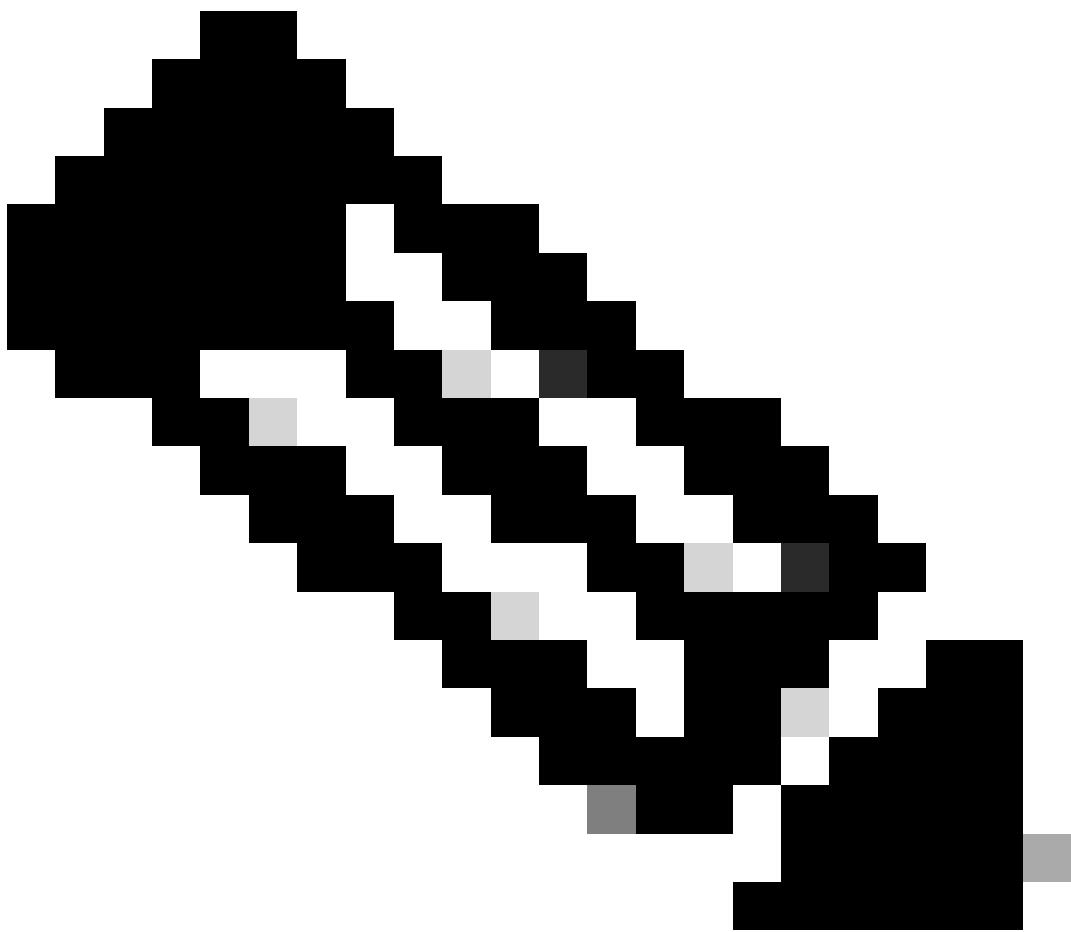
- General ←
- SXP Config
- Policy

Local Policies

OpenDNS

Advanced

Clear DeviceID Refresh Env Data Apply



فەظحالىم: Cisco ISE > Network Devices > Add Device > Advanced TrustSec Settings يىف مسقىللا Cisco ISE.

دەرىجىن بىردىمىسى (WLC) يىكلسىلىا ئېلىخەملىا ئېنىشلىا يىف مكھتىلا رصىنۇ ئىلىع (PAC) يىمەتمەنلا لوصولىا تاغوسىم رىفوفوت نىم ققىختىلا

دەرىجىن بىردىمىسى (WLC) يىكلسىلىا ئېلىخەملىا ئېنىشلىا يىف مكھتىلا رصىنۇ ئىلىع نىأىرت (Refresh Env Data):

Security

AAA

- General
- RADIUS
- Authentication
- Accounting
- Fallback
- DNS
- Downloaded AVP
- TACACS+
- LDAP
- Local Net Users
- MAC Filtering
- Disabled Clients
- User Login Policies
- AP Policies
- Password Policies

Local EAP

Advanced EAP

Priority Order

Certificate

Access Control Lists

Wireless Protection Policies

Web Auth

TrustSec

- General
- SXP Config
- Policy

Local Policies

OpenDNS

Advanced

RADIUS Authentication Servers > Edit

Server Index	2
Server Address(Ipv4/Ipv6)	10.201.214.230
Shared Secret Format	ASCII
Shared Secret	***
Confirm Shared Secret	***
Key Wrap	<input type="checkbox"/> (Designed for FIPS customers and requires a key wrap compliant RADIUS server)
Apply Cisco ISE Default settings	<input type="checkbox"/>
Port Number	1812
Server Status	Enabled
Support for CoA	Enabled
Server Timeout	5 seconds
Network User	<input checked="" type="checkbox"/> Enable
Management	<input type="checkbox"/> Enable
Management Retransmit Timeout	5 seconds
Tunnel Proxy	<input type="checkbox"/> Enable
Realm List	
PAC Provisioning	<input checked="" type="checkbox"/> Enable

PAC Params

PAC A-ID Length	16	<input type="button" value="Clear PAC"/>
PAC A-ID	ef2e1222e67eb4630a8b22d1ff0216c1	
PAC Lifetime	Wed Nov 21 00:01:07 2018	
IPSec	<input type="checkbox"/> Enable	

CTS نم Cisco ISE لىل | تانايip ليزنت

عابقرا ليزنتب (WLC) ئيكلساللا ئيلحملارا كبسلىا يف مكحتلا ۋە دەھەندا دەپ Refresh Env Data.

CISCO MONITOR WLANS CONTROLLER WIRELESS SECURITY MANAGEMENT COMMANDS HELP FEEDBACK Home

Save Configuration | Ping | Logout | Refresh

Security

- AAA
 - General
 - RADIUS
 - Authentication
 - Accounting
 - Fallback
 - DNS
 - Downloaded AVP
 - TACACS+
 - LDAP
 - Local Net Users
 - MAC Filtering
 - Disabled Clients
 - User Login Policies
 - AP Policies
 - Password Policies
- Local EAP
 - Advanced EAP
- Priority Order
- Certificate
- Access Control Lists
- Wireless Protection Policies
- Web Auth
- TrustSec
 - General
 - SXP Config
 - Policy
- Local Policies
- OpenDNS
- Advanced

General Clear DeviceID Refresh Env Data Apply

CTS Enable

Device Id: CiscoWLC

Password: *****

Inline Tagging

Environment Data

Current State: COMPLETE

Last Status: START

Environment Data Lifetime (seconds): 86400

Last update time (seconds): Mon Aug 27 02:00:06 2018

Environment Data expiry: 0:23:59:58 (dd:hr:mm:sec)

Environment Data refresh: 0:23:59:58 (dd:hr:mm:sec)

Security Group Name Table

0:Unknown
2:TrustSec_Devices
3:Network_Services
4:Employees
5:Contractors
6:Guests
7:BYODemployees
8:EmployeeServer
15:BYODconsultants
255:Quarantined_Systems

1. Clear DeviceID will clear Device ID and password
 2. Apply button will configure Device ID and other parameters

روزمه ئەكچىلۇ اەدىفەنتو تالىيىزنىت نىيكمەت

CISCO MONITOR WLANs CONTROLLER WIRELESS SECURITY MANAGEMENT

Wireless

- Access Points
 - All APs
 - Direct APs
 - Radios
 - 802.11a/n/ac
 - 802.11b/g/n
 - Dual-Band Radios
 - Global Configuration
- Advanced
- Mesh
- ATF
- RF Profiles
- FlexConnect Groups
 - FlexConnect ACLs
 - FlexConnect VLAN Templates

All APs > APb838.61ac.3598 > Trustsec Configuration

AP Name: APb838.61ac.3598

Base Radio MAC: b8:38:61:b8:c6:70

TrustSec Configuration

CTS Override:

Sgacl Enforcement:

1. Inline tagging is supported in only Flex mode AP (Applicable to 11ac AP)
 2. SXPv4(Listener/Speaker/Both) is supported in Flex, Flex+bridge AP (Applicable to 11ac AP)

بـيـقـرـلـا عـم لـوـصـولـا ةـطـقـنـو (WLC) ةـيـكـلـسـالـلـا ةـيـلـحـمـلـا ةـكـبـشـلـا يـف مـكـحـتـلـا رـصـنـع صـيـصـخـتـب مـقـ

رورـمـلـا ةـكـرـحـب حـامـسـلـل (TrustSec_Devices) 2 نـم اـبـيـقـرـ (WLC+WLAN) ةـيـكـلـسـالـلـا ةـيـلـحـمـلـا ةـكـبـشـلـا يـف مـكـحـتـلـا رـصـنـع حـنـمـا لـوـحـمـلـا لـالـخـ نـم لـوـصـولـا ةـطـقـنـ + (WLC + CAPWAP و HTTPS و SSH)

The screenshot shows the Cisco Wireless LAN Controller (WLC) configuration interface. The top navigation bar includes links for MONITOR, WLANS, CONTROLLER, WIRELESS, SECURITY, MANAGEMENT, COMMANDS, HELP, and FEEDBACK. The main menu on the left has sections for WLANS, SECURITY, and MANAGEMENT, with WLANS expanded to show sub-options like WLANs, Advanced, and others.

The current page is 'WLANS > Edit 'CiscoEmployee''. The tab bar at the top of the configuration pane includes General, Security, QoS, Policy-Mapping, and Advanced. The 'Advanced' tab is selected.

The configuration pane displays various parameters under the 'Advanced' tab:

- running**: Tunnel Profile set to None.
- mDNS**: mDNS Snooping is Enabled.
- TrustSec**: Security Group Tag is set to 2.
- OpenDNS**: OpenDNS Mode is set to Ignore, and the OpenDNS Profile is None.
- Fabric Configuration**: Fabric is Enabled.
- Mobility**: Selective Reanchor is Enabled.
- U3 Interface**: U3 Interface is Enabled, and the U3 Reporting Interval is set to 30.

A blue arrow points to the 'Security Group Tag' field, which is highlighted in the configuration pane.

ىـلـع رـطـسـلـا لـخـاد تـامـالـعـلـا عـضـوـنـيـكـمـتـ

The screenshot shows the Cisco WLC configuration interface with the 'SECURITY' tab selected in the top navigation bar. The left sidebar contains a tree view of security-related configurations, including AAA, Local EAP, Priority Order, Certificate, Access Control Lists, Wireless Protection Policies, Web Auth, TrustSec, Local Policies, OpenDNS, and Advanced.

The main configuration pane for 'General' settings includes:

- AAA**: CTS is checked (Enable), Device Id is CiscoWLC, and Password is masked.
- Environment Data**: Current State is COMPLETE, Last Status is START, Environment Data Lifetime (seconds) is 86400, Last update time (seconds) is Mon Aug 27 02:00:06 2018.
- Security Group Name Table**: A dropdown menu lists security group names, with '2:TrustSec_Devices' selected.

At the bottom of the configuration pane, there are two informational links:

1. Clear DeviceID will clear Device ID and password
2. Apply button will configure Device ID and other parameters

A blue arrow points to the 'Inline Tagging' checkbox, which is checked in the configuration pane.

تحـت Wireless > Access Points > Global Configuration دـدـحـو لـفـسـأـل قـالـزـنـا TrustSec Config.

CISCO

MONITOR WLANs CONTROLLER WIRELESS SECURITY MANAGEMENT

Wireless

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- RF Profiles
- FlexConnect Groups
 - FlexConnect ACLs
 - FlexConnect VLAN
 - Templates
- OEAP ACLs
- Network Lists
- 802.11a/n/ac
- 802.11b/g/n
- Media Stream
- Application Visibility And Control
- Lync Server
- Country
- Timers
- Netflow
- QoS

All APs TrustSec Configuration

TrustSec

Sgac1 Enforcement	<input checked="" type="checkbox"/>
Inline Taging	<input checked="" type="checkbox"/>
AP SXP State	Disabled ▾
Default Password	*****
SXP Listener Min Hold Time (seconds)	90
SXP Listener Max Hold Time (seconds)	180
SXP Speaker Hold Time (seconds)	120
Reconciliation Time Period (seconds)	120
Retry Period (seconds)	120

Peer Config

Peer IP Address	<input type="text"/>
Password	Default ▾
Local Mode	Speaker ▾

ADD

Peer IP Address Password SXP Mode

1. *Inline tagging is supported in only Flex mode AP (Applicable to 11ac AP)*
2. *SXPv4(Listener/Speaker/Both) is supported in Flex, Flex+bridge AP (Applicable to 11ac AP)*

لوجه مىلع رطسل ا لخاد تامالع ا عضو نيكوت Catalyst

<#root>

CatalystSwitch(config)#interface TenGigabitEthernet1/0/48

CatalystSwitch(config-if)#description goestoWLC

CatalystSwitch(config-if)#switchport trunk native vlan 15

CatalystSwitch(config-if)#switchport trunk allowed vlan 15,455,463,1115

CatalystSwitch(config-if)#switchport mode trunk

```
CatalystSwitch(config-if)#cts role-based enforcement
CatalystSwitch(config-if)#cts manual
CatalystSwitch(config-if-cts-manual)#policy static sgt 2 trusted
```

ةحصـلـا نـم قـقـحـتـلـا

Client MAC Addr	IP Address(Ipv4/Ipv6)	AP Name	WLAN Profile	WLAN SSID	User Name	Protocol	Status	Auth	Port	Slot Id
00:70:24:46:58:97	10.201.235.125	AP0838.61ac.3598CORBIN	CorbinEmployee	CorbinEmployee	jsmith	802.11ac	Associated	No	1	1

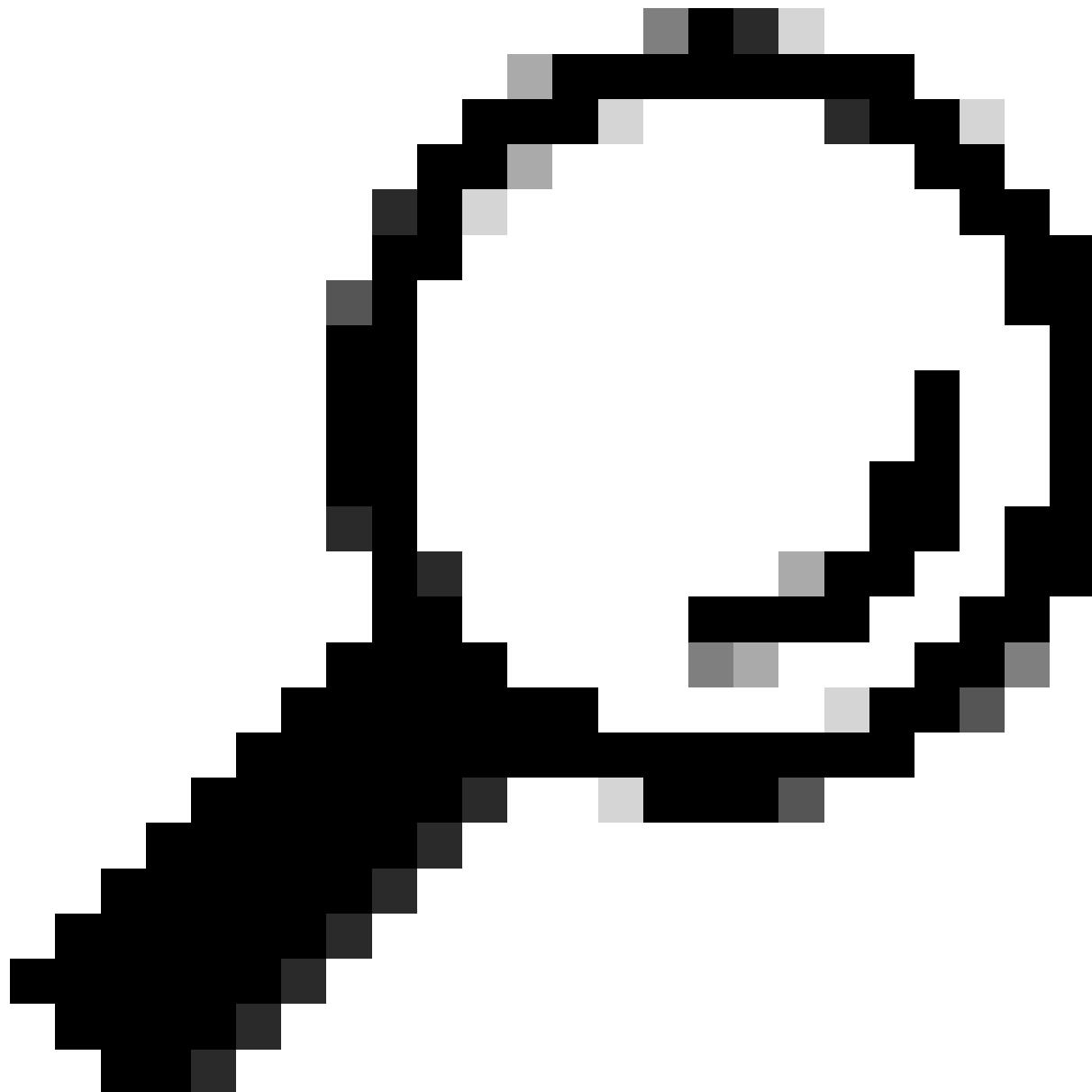
يـسـاسـلـا مـاظـنـلـلـ لـوـصـولـا يـفـ مـكـحـتـلـا ةـمـئـاـقـ تـادـادـعـ ةـزـجـاـ

تـارـاطـاـ 10: (454) جـوـرـخـلـا دـنـعـ (SGACL) تـنـرـتـنـاـلـا لـوـكـوـتـوـرـبـ نـمـ عـبـارـلـا رـادـصـاـلـا بـاـشـلـا لـوـصـولـا يـفـ مـكـحـتـلـا ةـمـئـاـقـ طـاقـسـاـ

تـارـاطـاـ 0: جـرـخـمـ (455) IPv6

تـارـاطـاـ 0: جـرـخـمـلـا نـمـ (456) SGACL IPv4

تـارـاطـاـ 0: جـرـخـمـ (457) IPv6 sgacl

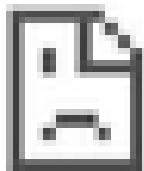


يـف دعـاسـي نـأـ انـه جـرـدـمـلـا دـنـتـسـمـلـلـنـكـمـيـفـ، كـلـذـنـمـالـدـبـ Cisco ASA وـأـ Nexus وـأـ Cisco ASR مـدـخـتـسـتـ تـنـكـ اـذـاـ: حـيـمـلـتـ اـمـحـالـصـ اوـ عـاطـخـالـاـ فـاشـكـتـسـأـلـيـلـدـ: كـبـ صـاخـلـاـ بـيـقـرـلـاـ تـامـالـعـ ضـرـفـ نـمـ قـقـحـتـلـاـ TrustSec.

يـف مـكـحـتـلـاـ ـةـمـئـاـقـ هـجـاـوـتـ - jsmith password admin123 مـدـخـتـسـمـلـاـ مـسـاـ مـادـخـتـسـاـبـ ئـيـكـلـسـالـلـاـ ئـكـبـشـلـاـ ئـلـعـ ئـقـدـاصـمـلـاـبـ مـقـ لـوـحـمـلـاـ يـفـ ضـفـرـلـلـ (ACL)ـ لـوـصـوـلـاـ:



https://10.201.214.132



This site can't be reached

10.201.214.132 took too long to respond.

Try:

Checking the connection

ERR_CONNECTION_TIMED_OUT

RELOAD

هـ لـ وـ لـ جـ رـ تـ لـ اـ هـ ذـ هـ

ةـ يـ لـ آـ لـ اـ تـ اـ يـ نـ قـ تـ لـ اـ نـ مـ مـ جـ مـ وـ عـ مـ اـ دـ خـ تـ سـ اـ بـ دـ نـ تـ سـ مـ لـ اـ اـ ذـ هـ تـ مـ جـ رـ تـ
لـ اـ عـ لـ اـ ءـ اـ حـ نـ اـ عـ يـ مـ جـ يـ فـ نـ يـ مـ دـ خـ تـ سـ مـ لـ لـ مـ عـ دـ ئـ وـ تـ حـ مـ يـ دـ قـ تـ لـ ةـ يـ رـ شـ بـ لـ اـ وـ
اـ مـ كـ ةـ قـ يـ قـ دـ نـ وـ كـ تـ نـ لـ ةـ يـ لـ آـ ةـ مـ جـ رـ تـ لـ ضـ فـ اـ نـ اـ ةـ ظـ حـ اـ لـ مـ ئـ جـ رـ يـ .ـ صـ اـ خـ لـ اـ مـ هـ تـ غـ لـ بـ
يـ لـ خـ تـ .ـ فـ رـ تـ حـ مـ مـ جـ رـ تـ مـ اـ هـ دـ قـ يـ يـ تـ لـ اـ ةـ يـ فـ اـ رـ تـ حـ اـ لـ اـ ةـ مـ جـ رـ تـ لـ اـ عـ مـ لـ اـ حـ لـ اـ وـ
ىـ لـ إـ أـ مـ ئـ اـ دـ عـ وـ جـ رـ لـ اـ بـ يـ صـ وـ تـ وـ تـ اـ مـ جـ رـ تـ لـ اـ هـ ذـ هـ ةـ قـ دـ نـ عـ اـ هـ تـ يـ لـ وـ ئـ سـ مـ
(رـ فـ وـ تـ مـ طـ بـ اـ رـ لـ اـ)ـ يـ لـ صـ أـ لـ اـ يـ زـ يـ لـ جـ نـ إـ لـ اـ دـ نـ تـ سـ مـ لـ اـ).