使用PEAP、ISE 2.1和WLC 8.3配置802.1X身份 验证

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简介

本文档介绍如何设置具有802.1x安全性和虚拟局域网(VLAN)覆盖的无线局域网(WLAN)。

先决条件

要求

Cisco 建议您了解以下主题:

- 802.1x
- 受保护的扩展身份验证协议 (PEAP)
- 证书颁发机构(CA)
- 证书

使用的组件

本文档中的信息基于以下软件和硬件版本:

- WLC v8.3.102.0
- 身份服务引擎(ISE)v2.1
- Windows 10笔记本电脑

本文档中的信息都是基于特定实验室环境中的设备编写的。本文档中使用的所有设备最初均采用原 始(默认)配置。如果您的网络处于活动状态,请确保您了解所有命令的潜在影响。

背景信息

设置具有802.1x安全和VLAN的WLAN时,可以使用受保护的可扩展身份验证协议作为可扩展身份验 证协议(EAP)进行覆盖。

配置

网络图



一般步骤如下:

- 1. 在WLC上声明RADIUS服务器,反之亦然,以允许相互通信。
- 2. 在WLC中创建服务集标识符(SSID)。
- 3. 在ISE上创建身份验证规则。
- 4. 在ISE上创建授权配置文件。
- 5. 在ISE上创建授权规则。
- 6. 配置终端。

在WLC上声明RADIUS服务器

为了允许RADIUS服务器和WLC之间的通信,您需要在WLC上注册RADIUS服务器,反之亦然。

GUI:

步骤1:打开WLC的GUI,导航到SECURITY > RADIUS > Authentication > New,如图所示。

ahaha		Sa <u>v</u> e Configuration <u>P</u> ing Lo <u>g</u> out <u>R</u> efresh
cisco	MONITOR WLANS CONTROLLER WIRELESS SECURITY MANAGEMENT COMMANDS HELP FEEDBACK	n Home
Security	RADIUS Authentication Servers	Apply New
AAA General	Auth Called Station ID Type 🛛 🗛 MAC Address:SSID 🛛 🗸	
 RADIUS Authentication 	Use AES Key Wrap 🗌 (Designed for FIPS customers and requires a key vrap compliant RADIUS server)	
Accounting	MAC Delimiter Hyphen V	
DNS	Framed MTU 1300	

第二步:输入RADIUS服务器信息,如图所示。

RADIUS Authentication Ser	vers > New	
Server Index (Priority)	2 ~	
Server IP Address(Ipv4/Ipv6)	a.b.c.d	
Shared Secret Format	ASCII 🗸	
Shared Secret	•••••	
Confirm Shared Secret	•••••	
Key Wrap	🗌 (Designed fo	or FIPS customers and requires a key wrap compliant RADIUS server)
Port Number	1812	
Server Status	Enabled \sim	
Support for CoA	Disabled \vee	
Server Timeout	10 second	s
Network User	🗹 Enable	
Management	🗹 Enable	
Management Retransmit Timeout	2 second:	:
IPSec	Enable	

> config radius auth add <index> <a.b.c.d> 1812 ascii <shared-key>
> config radius auth disable <index>
> config radius auth retransmit-timeout <index> <timeout-seconds>
> config radius auth enable <index>

<a.b.c.d>对应于RADIUS服务器。

创建 SSID

GUI:

步骤1:打开WLC的GUI并导航至WLANs > Create New > Go,如图所示。

ululu cisco	<u>M</u> ONITOR	<u>W</u> LANs	<u>C</u> ONTROLLER	WIRELESS	<u>s</u> ecurity	M <u>A</u> NAGEMENT	C <u>O</u> MMANDS	HELP	<u>F</u> EEDBACK	
WLANs	WLANs									
 ▼ WLANS WLANS ▶ Advanced 	Current Filt	er: No	ne [<u>Cha</u>	nge Filter] [Cl	<u>ear Filter]</u>			Create N	ew	Go

第二步:选择SSID和配置文件的名称,然后单击Apply,如图所示。

W	/LANs > New			< Back	Apply
	Туре	WLAN ~			
	Profile Name	profile-name			
	SSID	SSID-name			
	ID	2 ~	•		

CLI :

> config wlan create <id> <profile-name> <ssid-name>

第三步:将RADIUS服务器分配给WLAN。

CLI :

> config wlan radius_server auth add <wlan-id> <radius-index>

GUI:

导航到Security > AAA Servers并选择所需的RADIUS服务器,然后按图中所示的Apply。

WLANs > Edit 'ise-prof'		< Back	Apply
General Security QoS P	olicy-Mapping Advanced		
Layer 2 Layer 3 AAA Serv	vers		
Select AAA servers below to override RADIUS Servers RADIUS Server Overwrite interface	use of default servers on this WLAN		^
Authentication Servers	Accounting Servers EAP Parameters		μ.
Server 2 None	<pre>> None ></pre>		
Server 4 None	V None V		
Server 5 None Server 6 None	V None V		
RADIUS Server Accounting Interim Update	Interim Interval 0 Seconds		~

第四步:启用Allow AAA Override,并可选择增加会话超时

CLI :

> config wlan aaa-override enable <wlan-id>

> config wlan session-timeout <wlan-id> <session-timeout-seconds>

GUI:

导航到WLANs > WLAN ID > Advanced并启用允许AAA覆盖。 或者指定会话超时(如图所示)。

WLANs > Edit 'ise-pr	of			< Back	A
General Security	QoS Policy-Mapping	Advanced			
	_				^
Allow AAA Override	🗹 Enabled	DHCP			
Coverage Hole Detection	🗹 Enabled	DHC	:P Server	Override	
Enable Session Timeout	Session Timeou (secs)	DHC Assi	:P Addr. gnment	Required	
Aironet IE	Enabled	OEAP			
Diagnostic Channel	Enabled	Spli	it Tunnel	Enabled	
Override Interface ACL	IPv4 None 💙	IPv6 None 💙 Manage	ement Frame Prote	action (MFP)	
Layer2 Ad	None \vee				
URL ACL	None 🗸	MFP	Client Protection 4	Optional 🗸	
P2P Blocking Action	Disabled \lor	DTIM P	eriod (in beacon in	tervals)	
Client Exclusion 💈	Enabled 60 Timeout Value (secs)	802	.11a/n (1 - 255)	1	
Maximum Allowed Clients 🚊	0	802 NAC	.11b/g/n (1 - 255)	1	
Static IP Tunneling	□	NAC	State None	V	> ×

第五步:启用WLAN。

CLI :

> config wlan enable <wlan-id>

GUI:

导航到WLANs > WLAN ID > General,然后启用如图所示的SSID。

WLANs > Edit 'ise-p	orof'				< Back	Apply
General Securit	y QoS	Policy-Mapping	Advanced			
Profile Name Type SSID Status	ise-prof WLAN ise-ssid 🗹 Enabled]				
Security Policies	[WPA2][Au (Modification	th(802.1X)] s done under security	tab will appear a	after applying the changes.	.)	
Radio Policy Interface/Interface Group(G) Multicast Vlan Feature Broadcast SSID NAS-ID	All manageme Enabled Enabled none	∨ nt ∨				

在ISE上声明WLC

步骤1:打开ISE控制台并导航到管理>网络资源>网络设备>添加,如图所示。

dialo Identity Serv	ices Engine	Home	Context \	/isibility	▶ Operatio	ns ▶Po	licy	▼Adminis	tration	► Worl
Ident ► System ► Ident	ity Management 🛛 🗣	- Network	k Resources	Device I	Portal Manag	gement p»	Grid S	ervices 🕨	Feed Se	rvice I
✓ Network Devices	Network Device Gr	roups	Network Devic	e Profiles:	External R	ADIUS Serve	rs F	RADIUS Sen	/er Seque	ences
	G									
Network devices		Netw	ork Devices	6						
Default Device			_							
		🥖 Edi	it 🕂 Add 🖻	Duplicate	👍 Import	🚯 Export 👻	OGe	enerate PAC	XDelet	e 🔻

第二步:输入值。

或者,它可以是指定的型号名称、软件版本、说明,并根据设备类型、位置或WLC分配网络设备组 。

a.b.c.d对应发送请求的身份验证的WLC接口。默认情况下,它是管理接口,如图所示。

Network Devices List > New Network Device Network Devices
* Name WLC-name
Description optional description
* IP Address: a.b.c.d / 32
* Device Profile 🛛 😅 🕀
Model Name, Jule model
Software Version
* Network Device Group
Device Type WLCs-2504 📀 Set To Default
WILCS WILCE
WECS Set TO Default
RADIUS Authentication Settings
Enable Authentication Settings
Protocol RADIUS
* Shared Secret
Enable KevWrap
* Key Encryption Key
* Message Authenticator Code Key
Show
Key Input Format ASCII HEXADECIMAL
CoA Port 1700 Set To Default

有关网络设备组的详细信息:

<u>ISE - 网络设备组</u>

步骤1:导航到管理>身份管理>身份>用户>添加,如图所示。

elistice Identity Services Engine	Home Contex	t Visibility 🔹 🕨 Op	erations	Policy	 Administration
▶ System ▼Identity Management	▶ Network Resources	Device Portal	Management	pxGrid 8	System
■Identities Groups External Ident	tity Sources Identity	Source Sequences	 Settings 	;	Deployment Licensing
() Users	Network Access) Users			Certificates Logging Maintenance
Latest Manual Network Scan Res	🖊 Edit 🕂 Add	🔢 Change Status 👻	🚯 Import	Export 🗸	Upgrade Backup & Restor
	Status	Name	•	Description	Admin Access
	🐊 Loading				Settings
				_	Identity Managem
					Identities

第二步:输入相关信息.

在本示例中,此用户属于名为ALL_ACCOUNTS的组,但可以根据需要进行调整,如图所示。

Network Access Users	List > New Network Access User				
Network Access	: User				
*Name user1					
Statua 🔲 –					
Status 🗹 Enable	:d 🔻				
Email					
Passwords					
Password Type:	Internal Users 🔹				
	Password	Re-Enter Passw			
* Login Password	•••••	•••••			
Enable Password					
 User Informati 	on				
First Name					
Last Name					
 Account Optio 	ins				
	Description				
Change password on next login 🛛					
🚽 Account Disab	le Policy				
Disable accourt	nt if date exceeds 2017-01-21				



第三步:选择Manually connect to a wireless network,然后单击Next,如图所示。

			-		х
-	Set Up a Connection or Network				
	Choose a connection option				
	Connect to the Internet				
	Set up a broadband or dial-up connection to the Internet.				
	Set up a new network				
	Manually connect to a wireless network				
	Connect to a modern network or create a new wreters prome-				
	Connect to a workplace Set up a dial-up or VPN connection to your workplace				
					_
		N	ext	Carry	el.

			-		×
-	🐓 Manually connect to a	vireless network			
	Enter information fo	r the wireless network you want to add			
	Network name:	ise-ssid			
	Carrieran				
	security type:	WPA2-Enterprise			
	Encryption type:	AES			
	Security Key:	Hide characters			
	Start this connection	automatically			
	Connect even if the	network is not broadcasting			
	Warning: If you sele	ct this option, your computer's privacy might be at risk.			
		Ne	đ	Cano	el

第四步:输入SSID名称和安全类型WPA2-Enterprise的信息,然后单击Next,如图所示。

第五步:选择Change connection settings以自定义WLAN配置文件的配置,如图所示。

		-		×
-	Se Manually connect to a wireless network			
	Successfully added ise-ssid			
	→ Change connection settings			
	Open the connection properties so that I can change the settings.			
			Oe	64

第六步:导航到Security选项卡,然后单击Settings,如图所示。

ise-ssid Wireless Network Properties >							
Connection Security							
Security type:	WPA2-Enterprise		\sim				
Encryption type:	AES		\sim				
Choose a network aut	hentication method:		_				
Microsoft: Protected	EAP (PEAP) 🛛 🗸	Setting	gs				
Remember my cre	dentials for this connect	tion each					
unie i mioggeu o							
Advanced settings							
		ОК	Cano	el			

步骤 7. 选择是否验证了RADIUS服务器。

如果是,请启用Verify the server identity by validating the certificate,并从Trusted Root Certification Authorities:列表中选择ISE的自签名证书。

之后,选择Configure并禁用Automatically use my Windows logon name and password...,然后单击OK,如图所示。

Protected EAP Properties	×
When connecting:	
Verify the server's identity by validating the certificate	
Connect to these servers (examples:srv1;srv2;.*\.srv3\.com):	
Trusted Root Certification Authorities:	
Eggen a Cickel Livian	•
EAP-SelfSignedCertificate	
En der soch Dergeh die erdeligen und der die der d	
E. La Contra Con	
< >	
Notifications before connecting:	
Tell user if the server name or root certificate isn't specified	/
Select Authentication Method:	
Secured password (EAP-MSCHAP v2) Configure	
Enable Fast Reconnect	
Disconnect if server does not present cryptobinding TLV	
Enable Identity Privacy	
OK Cancel	

返回Security选项卡后,选择Advanced settings,将身份验证模式指定为User authentication,并保 存ISE上配置的凭证,以便对用户进行身份验证,如映像所示。

ise-ssid Wireless Network Properties 🛛 🗙									
Connection Security									
Security type:	WPA2-Enterprise		\sim						
Encryption type:	AES		\sim						
Choose a network aut	hentication method:		_						
Microsoft: Protected E	EAP (PEAP) 🗸 🗸	Settings							
Remember my cre	dentials for this connec	tion each							
unit i in logged of									
Advanced cettings									
Advanced settings									
		ок	Cancel						

Advanced settings	×						
802.1X settings 802.11 settings							
Specify authentication mode:							
User authentication Save credentials							
Delete credentials for all users							
Enable single sign on for this network							
Perform immediately before user logon							
 Perform immediately after user logon 							
Maximum delay (seconds): 10							
Allow additional dialogs to be displayed during single sign on							
This network uses separate virtual LANs for machine and user authentication							
OK Cano	el						

Windows Security

Save credentials

Saving your credentials allows your computer to connect to the network when you're not logged on (for example, to download updates).

ababa	user1		
cisco	•••••••		
		OK	Cancel

验证

使用本部分可确认配置能否正常运行。

身份验证流程可以从WLC或ISE角度进行验证。

WLC上的身份验证过程

运行以下命令以监控特定用户的身份验证过程:

> debug client <mac-add-client> > debug dot1x event enable > debug dot1x aaa enable

身份验证成功的示例(省略了某些输出):

<#root>

*apfMsConnTask_1: Nov 24 04:30:44.317:

e4:b3:18:7c:30:58 Processing assoc-req station:e4:b3:18:7c:30:58 AP:00:c8:8b:26:2c:d0-00

thread:1a5cc288
*apfMsConnTask_1: Nov 24 04:30:44.317: e4:b3:18:7c:30:58 Reassociation received from mobile on BSSID 00
*apfMsConnTask_1: Nov 24 04:30:44.318: e4:b3:18:7c:30:58 Applying Interface(management) policy on Mobile

 \times

*apfMsConnTask_1: Nov 24 04:30:44.318: e4:b3:18:7c:30:58 Applying site-specific Local Bridging override *apfMsConnTask_1: Nov 24 04:30:44.318: e4:b3:18:7c:30:58 Applying Local Bridging Interface Policy for s *apfMsConnTask_1: Nov 24 04:30:44.318: e4:b3:18:7c:30:58 RSN Capabilities: 60 *apfMsConnTask_1: Nov 24 04:30:44.318: e4:b3:18:7c:30:58 Marking Mobile as none4:b3:18:7c:30:58 Received 802.11i 802.1X key management suite, enabling dot1x Authentication 11w Capable *apfMsConnTask_1: Nov 24 04:30:44.318: e4:b3:18:7c:30:58 Received RSN IE with 1 PMKIDs from mobile e4:b *apfMsConnTask_1: Nov 24 04:30:44.319: Received PMKID: (16) *apfMsConnTask_1: Nov 24 04:30:44.319: e4:b3:18:7c:30:58 Searching for PMKID in MSCB PMKID cache for mo *apfMsConnTask_1: Nov 24 04:30:44.319: e4:b3:18:7c:30:58 No valid PMKID found in the MSCB PMKID cache f *apfMsConnTask_1: Nov 24 04:30:44.319: e4:b3:18:7c:30:58 0.0.0.0 START (0) Initializing policy *apfMsConnTask_1: Nov 24 04:30:44.319: e4:b3:18:7c:30:58 0.0.0.0 START (0) Change state to AUTHCHECK (2) last state START (0) *apfMsConnTask_1: Nov 24 04:30:44.319: e4:b3:18:7c:30:58 0.0.0.0 AUTHCHECK (2) Change state to 8021X_REQD (3) last state AUTHCHECK (2) *apfMsConnTask_1: Nov 24 04:30:44.319: e4:b3:18:7c:30:58 0.0.0.0 8021X_REQD (3) Plumbed mobile LWAPP ru *apfMsConnTask_1: Nov 24 04:30:44.319: e4:b3:18:7c:30:58 apfMsAssoStateInc *apfMsConnTask_1: Nov 24 04:30:44.319: e4:b3:18:7c:30:58 apfPemAddUser2 (apf_policy.c:437) Changing sta *apfMsConnTask_1: Nov 24 04:30:44.319: e4:b3:18:7c:30:58 apfPemAddUser2:session timeout forstation e4:b *apfMsConnTask_1: Nov 24 04:30:44.319: e4:b3:18:7c:30:58 Stopping deletion of Mobile Station: (callerId *apfMsConnTask_1: Nov 24 04:30:44.319: e4:b3:18:7c:30:58 Func: apfPemAddUser2, Ms Timeout = 0, Session *apfMsConnTask_1: Nov 24 04:30:44.320: e4:b3:18:7c:30:58 Sending Assoc Response to station on BSSID 00: *spamApTask2: Nov 24 04:30:44.323: e4:b3:18:7c:30:58 Successful transmission of LWAPP Add-Mobile to AP *spamApTask2: Nov 24 04:30:44.325: e4:b3:18:7c:30:58 Received ADD_MOBILE ack - Initiating 1x to STA e4: *spamApTask2: Nov 24 04:30:44.325: e4:b3:18:7c:30:58 Sent dot1x auth initiate message for mobile e4:b3:18:7c:30:58

*Dot1x_NW_MsgTask_0: Nov 24 04:30:44.326: e4:b3:18:7c:30:58 reauth_sm state transition 0 ---> 1 for mob *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.326: e4:b3:18:7c:30:58 EAP-PARAM Debug - eap-params for Wlan-Id :2 *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.326: e4:b3:18:7c:30:58 Disable re-auth, use PMK lifetime. *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.326: e4:b3:18:7c:30:58 Station e4:b3:18:7c:30:58 setting dot1x rea *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.326: e4:b3:18:7c:30:58 Station e4:b3:18:7c:30:58 setting dot1x rea *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.326: e4:b3:18:7c:30:58 Stopping reauth timeout for e4:b3:18:7c:30: *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.326: e4:b3:18:7c:30:58 dot1x - moving mobile e4:b3:18:7c:30:58 int *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.326:

e4:b3:18:7c:30:58 Sending EAP-Request/Identity to mobile e4:b3:18:7c:30:58 (EAP Id 1)

*Dot1x_NW_MsgTask_0: Nov 24 04:30:44.380: e4:b3:18:7c:30:58 Received EAPOL EAPPKT from mobile e4:b3:18: *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.380: e4:b3:18:7c:30:58 Received Identity Response (count=1) from m *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.380: e4:b3:18:7c:30:58 Resetting reauth count 1 to 0 for mobile e4 *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.380: e4:b3:18:7c:30:58 EAP State update from Connecting to Authent *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.380: e4:b3:18:7c:30:58 dot1x - moving mobile e4:b3:18:7c:30:58 int *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.380: e4:b3:18:7c:30:58 Entering Backend Auth Response state for mo *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.380: e4:b3:18:7c:30:58 Created Acct-Session-ID (58366cf4/e4:b3:18: *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.386: e4:b3:18:7c:30:58 Processing Access-Challenge for mobile e4:b *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.387: e4:b3:18:7c:30:58 Entering Backend Auth Req state (id=215) fo *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.387: e4:b3:18:7c:30:58 WARNING: updated EAP-Identifier 1 ===> 215 *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.387: e4:b3:18:7c:30:58 Sending EAP Request from AAA to mobile e4:b *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.387: e4:b3:18:7c:30:58 Allocating EAP Pkt for retransmission to mo *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.390: e4:b3:18:7c:30:58 Received EAPOL EAPPKT from mobile e4:b3:18: *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.390: e4:b3:18:7c:30:58 Received EAP Response from mobile e4:b3:18: *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.390: e4:b3:18:7c:30:58 Resetting reauth count 0 to 0 for mobile e4 *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.390: e4:b3:18:7c:30:58 Entering Backend Auth Response state for mo *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.393: e4:b3:18:7c:30:58 Processing Access-Challenge for mobile e4:b *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.393: e4:b3:18:7c:30:58 Entering Backend Auth Req state (id=216) fo *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.393: e4:b3:18:7c:30:58 Sending EAP Request from AAA to mobile e4:b *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.393: e4:b3:18:7c:30:58 Reusing allocated memory for EAP Pkt for r

*Dot1x_NW_MsgTask_0: Nov 24 04:30:44.530:

e4:b3:18:7c:30:58 Processing Access-Accept for mobile e4:b3:18:7c:30:58

*Dot1x_NW_MsgTask_0: Nov 24 04:30:44.530: e4:b3:18:7c:30:58 Resetting web IPv4 acl from 255 to 255
*Dot1x_NW_MsgTask_0: Nov 24 04:30:44.530: e4:b3:18:7c:30:58 Resetting web IPv4 Flex acl from 65535 to 6
*Dot1x_NW_MsgTask_0: Nov 24 04:30:44.530:

e4:b3:18:7c:30:58 Username entry (user1) created for mobile, length = 253

*Dot1x_NW_MsgTask_0: Nov 24 04:30:44.530:

e4:b3:18:7c:30:58 Found an interface name: 'vlan2404' corresponds to interface name received: vlan2404

*Dot1x_NW_MsgTask_0: Nov 24 04:30:44.530: e4:b3:18:7c:30:58 override for default ap group, marking intg *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.530: e4:b3:18:7c:30:58 Applying Interface(management) policy on Mol *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.530: e4:b3:18:7c:30:58 Re-applying interface policy for client *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.531: e4:b3:18:7c:30:58 apfApplyWlanPolicy: Apply WLAN Policy over *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.531:

e4:b3:18:7c:30:58 Inserting AAA Override struct for mobile

MAC: e4:b3:18:7c:30:58, source 4 *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.531: e4:b3:18:7c:30:58 Applying override policy from source Overrie *Dot1x_NW_MsgTask_0: Nov 24

04:30:44.531: e4:b3:18:7c:30:58 Found an interface name: 'vlan2404' corresponds to interface name received

*Dot1x_NW_MsgTask_0: Nov 24 04:30:44.531: e4:b3:18:7c:30:58 Applying Interface(vlan2404) policy on Mobi *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.531: e4:b3:18:7c:30:58 Re-applying interface policy for client *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.531: e4:b3:18:7c:30:58 Setting re-auth timeout to 0 seconds, got f *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.531: e4:b3:18:7c:30:58 Station e4:b3:18:7c:30:58 setting dot1x rea *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.531: e4:b3:18:7c:30:58 Stopping reauth timeout for e4:b3:18:7c:30: *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.531: e4:b3:18:7c:30:58 Creating a PKC PMKID Cache entry for statio *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.531: e4:b3:18:7c:30:58 Resetting MSCB PMK Cache Entry 0 for statio *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.531: e4:b3:18:7c:30:58 Adding BSSID 00:c8:8b:26:2c:d1 to PMKID cac *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.531: New PMKID: (16) *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.531: [0000] cc 3a 3d 26 80 17 8b f1 2d c5 cd fd a0 8a c4 39 *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.531: e4:b3:18:7c:30:58 unsetting PmkIdValidatedByAp *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.531: e4:b3:18:7c:30:58 Updating AAA Overrides from local for stati *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.531: e4:b3:18:7c:30:58 Adding Audit session ID payload in Mobility *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.531: e4:b3:18:7c:30:58 0 PMK-update groupcast messages sent *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.531: e4:b3:18:7c:30:58 PMK sent to mobility group *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.531: e4:b3:18:7c:30:58 Disabling re-auth since PMK lifetime can ta *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.531: e4:b3:18:7c:30:58 Sending EAP-Success to mobile e4:b3:18:7c:3 *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.532: e4:b3:18:7c:30:58 Freeing AAACB from Dot1xCB as AAA auth is d *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.532: e4:b3:18:7c:30:58 key Desc Version FT - 0 *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.532: e4:b3:18:7c:30:58 Found an cache entry for BSSID 00:c8:8b:26: *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.532: Including PMKID in M1 (16) [0000] cc 3a 3d 26 80 17 8b f1 2d c5 cd fd a0 8a c4 39 *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.532: *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.532: M1 - Key Data: (22) *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.532: [0000] dd 14 00 0f ac 04 cc 3a 3d 26 80 17 8b f1 2d c5 *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.532: [0016] cd fd a0 8a c4 39 *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.532:

e4:b3:18:7c:30:58 Starting key exchange to mobile e4:b3:18:7c:30:58, data packets will be dropped

*Dot1x_NW_MsgTask_0: Nov 24 04:30:44.532:

e4:b3:18:7c:30:58 Sending EAPOL-Key Message to mobile e4:b3:18:7c:30:58

state INITPMK (message 1), replay counter 00.00.00.00.00.00.00.00
*Dot1x_NW_MsgTask_0: Nov 24 04:30:44.532: e4:b3:18:7c:30:58 Reusing allocated memory for EAP Pkt for r
*Dot1x_NW_MsgTask_0: Nov 24 04:30:44.532: e4:b3:18:7c:30:58 Entering Backend Auth Success state (id=223)

*Dot1x_NW_MsgTask_0: Nov 24 04:30:44.532: e4:b3:18:7c:30:58 Received Auth Success while in Authenticati *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.532: e4:b3:18:7c:30:58 dot1x - moving mobile e4:b3:18:7c:30:58 int *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.547: e4:b3:18:7c:30:58 Received EAPOL-Key from mobile e4:b3:18:7c: *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.547: e4:b3:18:7c:30:58 Ignoring invalid EAPOL version (1) in EAPOL *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.547: e4:b3:18:7c:30:58 key Desc Version FT - 0 *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.547:

e4:b3:18:7c:30:58 Received EAPOL-key in PTK_START state (message 2) from mobile

e4:b3:18:7c:30:58

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*Dotlx_NW_MsgTask_0: Nov 24 04:30:44.548: e4:b3:18:7c:30:58 Successfully computed PTK from PMK!!!
*Dotlx_NW_MsgTask_0: Nov 24 04:30:44.548: e4:b3:18:7c:30:58 Received valid MIC in EAPOL Key Message M2!
*Dotlx_NW_MsgTask_0: Nov 24 04:30:44.548: e4:b3:18:7c:30:58 Not Flex client. Do not distribute PMK Key
*Dotlx_NW_MsgTask_0: Nov 24 04:30:44.548: e4:b3:18:7c:30:58 Stopping retransmission timer for mobile e4
*Dotlx_NW_MsgTask_0: Nov 24 04:30:44.548: e4:b3:18:7c:30:58 Key Desc Version FT - 0
*Dotlx_NW_MsgTask_0: Nov 24 04:30:44.548: e4:b3:18:7c:30:58 Sending EAPOL-Key Message to mobile e4:b3:1
state PTKINITNEGOTIATING (message 3), replay counter 00.00.00.00.00.00.00
*Dotlx_NW_MsgTask_0: Nov 24 04:30:44.548: e4:b3:18:7c:30:58 Reusing allocated memory for EAP Pkt for r
*Dotlx_NW_MsgTask_0: Nov 24 04:30:44.555: e4:b3:18:7c:30:58 Ignoring invalid EAPOL-Key from mobile e4:b3:18:7c:
*Dotlx_NW_MsgTask_0: Nov 24 04:30:44.555: e4:b3:18:7c:30:58 Key Desc Version FT - 0
*Dotlx_NW_MsgTask_0: Nov 24 04:30:44.555: e4:b3:18:7c:30:58 Reusing allocated memory for EAP Pkt for r
*Dotlx_NW_MsgTask_0: Nov 24 04:30:44.555: e4:b3:18:7c:30:58 Reusing allocated memory for EAP Pkt for r
*Dotlx_NW_MsgTask_0: Nov 24 04:30:44.555: e4:b3:18:7c:30:58 Reusing invalid EAPOL-Key from mobile e4:b3:18:7c:
*Dotlx_NW_MsgTask_0: Nov 24 04:30:44.555: e4:b3:18:7c:30:58 Key Desc Version FT - 0
*Dotlx_NW_MsgTask_0: Nov 24 04:30:44.555: e4:b3:18:7c:30:58 Key Desc Version FT - 0
*Dotlx_NW_MsgTask_0: Nov 24 04:30:44.555: e4:b3:18:7c:30:58 Key Desc Version FT - 0
*Dotlx_NW_MsgTask_0: Nov 24 04:30:44.555: e4:b3:18:7c:30:58 Key Desc Version FT - 0
*Dotlx_NW_MsgTask_0: Nov 24 04:30:44.555: e4:b3:18:7c:30:58 Key Desc Version FT - 0
*Dotlx_NW_MsgTask_0: Nov 24 04:30:44.555:
```

e4:b3:18:7c:30:58 Received EAPOL-key in PTKINITNEGOTIATING state (message 4)

from mobile e4:b3:18:7c:30:58

*Dot1x_NW_MsgTask_0: Nov 24 04:30:44.555: e4:b3:18:7c:30:58 Stopping retransmission timer for mobile e4 *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.555: e4:b3:18:7c:30:58 Freeing EAP Retransmit Bufer for mobile e4: *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.555: e4:b3:18:7c:30:58 apfMs1xStateInc *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.555: e4:b3:18:7c:30:58 apfMsPeapSimReqCntInc *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.555: e4:b3:18:7c:30:58 apfMsPeapSimReqSuccessCntInc *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.555: e4:b3:18:7c:30:58 apfMsPeapSimReqSuccessCntInc *Dot1x_NW_MsgTask_0: Nov 24 04:30:44.555: e4:b3:18:7c:30:58 apfMsPeapSimReqSuccessCntInc

e4:b3:18:7c:30:58 0.0.0.0 8021X_REQD (3) Change state to L2AUTHCOMPLETE (4) last state 8021X_REQD (3)

```
*Dot1x_NW_MsgTask_0: Nov 24 04:30:44.555: e4:b3:18:7c:30:58 Mobility query, PEM State: L2AUTHCOMPLETE
*Dot1x_NW_MsgTask_0: Nov 24 04:30:44.555: e4:b3:18:7c:30:58 Building Mobile Announce :
*Dot1x_NW_MsgTask_0: Nov 24 04:30:44.556: e4:b3:18:7c:30:58
                                                              Building Client Payload:
*Dot1x_NW_MsgTask_0: Nov 24 04:30:44.556: e4:b3:18:7c:30:58
                                                                Client Ip: 0.0.0.0
*Dot1x_NW_MsgTask_0: Nov 24 04:30:44.556: e4:b3:18:7c:30:58
                                                                Client Vlan Ip: 172.16.0.134, Vlan mask
*Dot1x_NW_MsgTask_0: Nov 24 04:30:44.556: e4:b3:18:7c:30:58
                                                                Client Vap Security: 16384
*Dot1x_NW_MsgTask_0: Nov 24 04:30:44.556: e4:b3:18:7c:30:58
                                                                Virtual Ip: 10.10.10.10
*Dot1x_NW_MsgTask_0: Nov 24 04:30:44.556: e4:b3:18:7c:30:58
                                                                ssid: ise-ssid
*Dot1x_NW_MsgTask_0: Nov 24 04:30:44.556: e4:b3:18:7c:30:58
                                                              Building VlanIpPayload.
*Dot1x_NW_MsgTask_0: Nov 24 04:30:44.556: e4:b3:18:7c:30:58 Not Using WMM Compliance code qosCap 00
*Dot1x_NW_MsgTask_0: Nov 24 04:30:44.556: e4:b3:18:7c:30:58 0.0.0.0 L2AUTHCOMPLETE (4) Plumbed mobile L
*Dot1x_NW_MsgTask_0: Nov 24 04:30:44.556:
```

e4:b3:18:7c:30:58 0.0.0.0 L2AUTHCOMPLETE (4) Change state to DHCP_REQD (7) last state L2AUTHCOMPLETE (4)

*Dot1x_NW_MsgTask_0: Nov 24 04:30:44.556: e4:b3:18:7c:30:58 0.0.0.0 DHCP_REQD (7) pemAdvanceState2 6677
*Dot1x_NW_MsgTask_0: Nov 24 04:30:44.556: e4:b3:18:7c:30:58 0.0.0.0 DHCP_REQD (7) Adding Fast Path rule
type = Airespace AP - Learn IP address
on AP 00:c8:8b:26:2c:d0, slot 0, interface = 1, QOS = 0
IPv4 ACL ID = 255, IPv
*Dot1x_NW_MsgTask_0: Nov 24 04:30:44.556: e4:b3:18:7c:30:58 0.0.0.0 DHCP_REQD (7) Fast Path rule (contd
*Dot1x_NW_MsgTask_0: Nov 24 04:30:44.556: e4:b3:18:7c:30:58 0.0.0.0 DHCP_REQD (7) Fast Path rule (contd
*Dot1x_NW_MsgTask_0: Nov 24 04:30:44.556: e4:b3:18:7c:30:58 0.0.0.0 DHCP_REQD (7) Fast Path rule (contd
*Dot1x_NW_MsgTask_0: Nov 24 04:30:44.556: e4:b3:18:7c:30:58 0.0.0.0 DHCP_REQD (7) Successfully plumbed
*Dot1x_NW_MsgTask_0: Nov 24 04:30:44.556: e4:b3:18:7c:30:58 Successfully Plumbed PTK session Keysfor mo
*spamApTask2: Nov 24 04:30:44.557: e4:b3:18:7c:30:58 0.0.0.0 Added NPU entry of type 9, dtlFlags 0x0

*apfReceiveTask: Nov 24 04:30:44.557: e4:b3:18:7c:30:58 0.0.0.0 DHCP_REQD (7) mobility role update require Peer = 0.0.0.0, Old Anchor = 0.0.0.0, New Anchor = 172.16.0.3 *apfReceiveTask: Nov 24 04:30:44.557: e4:b3:18:7c:30:58 0.0.0.0 DHCP_REQD (7) State Update from Mobility *apfReceiveTask: Nov 24 04:30:44.557: e4:b3:18:7c:30:58 0.0.0.0 DHCP_REQD (7) pemAdvanceState2 6315, Ad *apfReceiveTask: Nov 24 04:30:44.557: e4:b3:18:7c:30:58 0.0.0.0 DHCP_REQD (7) Replacing Fast Path rule IPv4 ACL ID = 255, *apfReceiveTask: Nov 24 04:30:44.557: e4:b3:18:7c:30:58 0.0.0.0 DHCP_REQD (7) Fast Path rule (contd...) *apfReceiveTask: Nov 24 04:30:44.557: e4:b3:18:7c:30:58 0.0.0.0 DHCP_REQD (7) Fast Path rule (contd...) *apfReceiveTask: Nov 24 04:30:44.557: e4:b3:18:7c:30:58 0.0.0.0 DHCP_REQD (7) Fast Path rule (contd...) *apfReceiveTask: Nov 24 04:30:44.557: e4:b3:18:7c:30:58 0.0.0.0 DHCP_REQD (7) Successfully plumbed mobi *pemReceiveTask: Nov 24 04:30:44.557: e4:b3:18:7c:30:58 Sent an XID frame *dtlArpTask: Nov 24 04:30:47.932: e4:b3:18:7c:30:58 Static IP client associated to interface vlan2404 w *dtlArpTask: Nov 24 04:30:47.933: e4:b3:18:7c:30:58 apfMsRunStateInc *dtlArpTask: Nov 24 04:30:47.933: e4:b3:18:7c:30:58 172.16.0.151 DHCF_REQD (7) Change state to RUN (20) last state DHCP_REQD (7)

要轻松读取调试客户端输出,请使用无线调试分析器工具:

Wireless Debug Analyzer

ISE上的身份验证过程

导航到操作(Operations)> RADIUS >实时日志(Live Logs),以查看分配给用户的身份验证策略、授 权策略和授权配置文件。

有关详细信息,请单击Details以查看更详细的身份验证过程,如图所示。

altalta cisco	Identi	ty Service	es Engine	Home	 Contex 	d Visibility	+ Operation	s Policy	Administra	ation 🔸	Work Centers		License
▼RA	ADIUS	TC-NAC Li	ve Logs	▶ TACACS	Reports	Troubleshoo	t 🕨 Adapti	ve Network Co	ntrol				
Live	Logs	Live Sessio	ons										
Misconfigured Supplicants		ants	Misconfigured Network Devices O		ε	RADIUS Drops 🛛		Client Stopped Responding		g Repea			
GF	Refresh	© Rese	t Repeat Co	ounts 🖪 E	Export To 🕶					Refresh	Never	Show	Latest 20 records
	Time	Sta	Details	Ide	Endpoint	ID En	dpoint	Authenticat	ion Policy	Auth	orization Polic	γ Authoriz	ation Profiles
	No	1	Q	user1	08:74:02:7	7:13:45 App	ole-Device	Default ≻> Rui	e name >> Defau	ult Defau	It >> NameAuthZr	rule PermitAcc	essVLAN2404

故障排除

当前没有故障排除此配置的特定可用资料。

关于此翻译

思科采用人工翻译与机器翻译相结合的方式将此文档翻译成不同语言,希望全球的用户都能通过各 自的语言得到支持性的内容。

请注意:即使是最好的机器翻译,其准确度也不及专业翻译人员的水平。

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