# 使用RADIUS配置ISE的FDM外部身份驗證和授權

## 目錄

簡必需互授背網設FIS驗疑常限問介要求通權景路定ME 證難見制答件 乱表 態態 解題

## 簡介

本文檔介紹將Cisco Firepower裝置管理器(FDM)與身份服務引擎(ISE)整合以便管理員使用者通過 RADIUS協定進行GUI和CLI訪問的過程。

## 必要條件

需求

思科建議您瞭解以下主題:

- Firepower裝置管理器(FDM)
- •身分識別服務引擎 (ISE)
- RADIUS通訊協定

#### 採用元件

本文中的資訊係根據以下軟體和硬體版本:

• Firepower威脅防禦(FTD)裝置,所有平台Firepower裝置管理器(FDM)版本6.3.0+

• ISE版本3.0

本文中的資訊是根據特定實驗室環境內的裝置所建立。文中使用到的所有裝置皆從已清除(預設))的組態來啟動。如果您的網路運作中,請確保您瞭解任何指令可能造成的影響。

## 互通性

- 使用者配置使用者角色的RADIUS伺服器
- •必須在RADIUS伺服器上使用cisco-av-pair配置使用者角色
- Cisco-av-pair = fdm.userrole.authority.admin
- ISE可用作RADIUS伺服器

### 授權

無特定許可證要求,基本許可證足夠

## 背景資訊

此功能允許客戶使用RADIUS為這些使用者配置外部身份驗證和多個使用者角色。

RADIUS支援,適用於具有3個系統定義使用者角色的管理存取:

- 只讀
- READ\_WRITE (無法執行系統關鍵操作,如升級、還原等)
- •管理員

能夠測試RADIUS伺服器的配置,監控活動使用者會話和刪除使用者會話。

此功能在FDM 6.3.0版中實施。在6.3.0版之前,FDM僅支援一個使用者(管理員)。

預設情況下,思科Firepower裝置管理器在本地對使用者進行身份驗證和授權,以便採用集中式身份 驗證和授權方法,您可通過RADIUS協定使用思科身份服務引擎。

#### 網路圖表

下一張影象提供了網路拓撲示例



流程:

- 1. 管理員使用者引入其憑證。
- 2. 身份驗證過程已觸發,ISE在本地或通過Active Directory驗證憑證。
- 3. 身份驗證成功後,ISE會向FDM傳送用於身份驗證和授權資訊的允許資料包。
- 4. 帳戶在ISE上執行,並且身份驗證活動日誌成功。

設定

## FDM 組態

#### 步驟1.登入到FDM,然後導航到Device > System Settings > Management Access頁籤

Monitoring Policies	Objects	Device				6	0	admin Administrator	•
Device Summary	Model Cisco ASA5508-	Software X Threat Defense 6.3.0-83	VDB 299.0	Rule Update 2018-08-23-001-vrt	High Availability 🔞 Not Configured	CONFIG.	IRE		
Connection Diagram									
Interface Connected	<b>≥ 3</b>  9	Routing There are no routes yet		Updates Geolocation, Ru Security Intellig	ile, VDB, System Upgrac ence Feeds	de,	System Managem Logging S	ent Access Settings	

#### 步驟2.建立新的RADIUS伺服器群組



#### 步驟3.創建新的RADIUS伺服器

Add	RAD	IUS	Server	Group
-----	-----	-----	--------	-------

Name	
Dead Time (1) 10 0-1440 RADIUS Server	minutes Attempts
1 The servers	in the group should be backups of each other
+ 1 T Filter	
Nothing found	ANCEL
2 Create new RADI	JS Server CANCEL OK

Edit RADIUS Server	0 ×					
Capabilities of RADIUS Server i						
Name						
ISE						
Server Name or IP Address	Authentication Port					
10.81.127.185	1812					
Timeout ① 10 seconds 1-300						
Server Secret Key						
******						
RA VPN Only (if this object is used in RA VPN Configuration)						
TEST	ANCEL					

步驟4.將RADIUS伺服器新增到RADIUS伺服器群組

Add RADIUS Serv	0	×	
Name 3 radius-server-group			
Dead Time 🕕	Maximum Failed Attempts		
10 minutes	3		
0-1440	1-5		
RADIUS Server			
1 The servers in the group	should be backups of each other		
+			
▼ Filter	1	4	
	ANCEL	-4 0K	
🧭 📇 radius-server	()		
Create new RADIUS Server	CANCEL 2 OK		

## **步驟5.選**擇建立的組作為管理伺服器組

Device Summary Management Acces	SS					
AAA Configuration Manager	ment Interface	Data Interfaces				
Configure how to authenticate n	nanagement conr	nections to the device.				
HTTPS Connection						
Server Group for Manageme	nt/REST API					
Filter			×.			
<ul> <li>LocalIdentitySource</li> </ul>						
i radius-server-group			0			
Create New RADIUS Server Group						

AAA Configuration Management Interface Data Interfaces	Management Web Server	
Configure how to authenticate management connections to the device	vice.	
HTTPS Connection	SSH Connection	
Server Group for Management/REST API	Server Group	
To use a RADIUS server successfully, you must configure the RAI accounts with the required authorization values, as described in the required authorization values.	RADIUS user To use a RADIUS server successfully, you must configure the RADIUS user accounts with the required authorization values, as described in the help.	r
Radius-server-group ~	TEST Radius-server-group ~ TEST	
Authentication with LOCAL	Authentication with LOCAL	
After External Server	Before External Server	~
SAVE	SAVE	

### 步驟6.儲存組態



## ISE 組態

**步驟1.**導航至三行圖示 Devices中選擇 位於左上角,在Administration > Network Resources > Network

E Cisco ISE	Administration - Network Resources						
Network Devices	Network Device Groups	Network Device Profiles	External RADIUS Servers	RADIUS Server Sequences	NAC Managers	External MDM	Location Services
Network Devices Default Device	Network	k Devices					
Device Security Settings	🖉 Edit 🕂 Ad	dd 🚺 Dupilicate 🕁 Import	🏠 Export 🗸 👌 Generate PA	C 🔋 Delete 🗸			
	Name	e 🗠 IP/Mask Profile M	Name Location	Туре	Description		

### **步驟2.**選擇**+Add**按鈕並定義Network Access Device Name和IPAddress,然後選中RADIUS覈取方 塊並定義共用金鑰。提交時選**擇**

≡ Cisco ISE		<b>A</b>	Evaluation Mode 89 Days	Q	0	59	¢		
Network Devices	Network Device Groups	Network Device Profiles	External RADIUS Servers	RADIUS Server Sequences	More $\sim$				
Network Devices	Network Dev	ices							
Default Device Device Security Settings	Name	FDM							
	Description								
	IP Address	✓ *IP: 10.122.111.2	/ 32 🔅						
	Device Profile	tisco 👬	~ 0						
	Model Name		~						
	Software Version		~						

✓ RADIUS Authentication Settings

#### **RADIUS UDP Settings**

Protocol	RADIL	IS		
Shared Secret			Show	
Use Second S	Shared S	ecret (j)		
networkDevices.sec	ondShared	Secret		Show
c	oA Port	1700	Set T	o Default

		Pigitininger geport - Trop		A *	Q 0 50
Network Devices Netwo	ork Device Groups	Network Device Profiles	External RADIUS Servers	RADIUS Server Sequences	More $\sim$
twork Devices ault Device	Network	Devices			
ice Security Settings					Selected 0 Total 1 🧭 🔞
	/ Edit + Add	Duplicate de Import	₫ Export ~ 👌 Generate I	PAC 🛢 Delete 🗸	ля ~ 5
	Name	^ IP/Mask Profile	Name Location	Туре	Description
	FOM	10.122.111 🚢 Cisc	all Location	All Device Types	
entities Groups	External Ider	Adl	entity Source Sequence	ces Settings	
Identity Groups	0	User Ider	ntity Groups		
Identity Groups	ontity Groups	User Ider	ntity Groups	nport 🟦 Export 🗸	
Identity Groups	ontity Groups	User Ider	ntity Groups	mport ♪ Export ∨ ∧ Description	
Identity Groups	ontity Groups Groups	User Ider	ntity Groups	nport  ⚠ Export ∨	DUNTS (default) User Group
Identity Groups	ontity Groups Groups	User Ider	ntity Groups	mport  ⚠ Export ∨	DUNTS (default) User Group User Group
Identity Groups	ontity Groups	User Ider	Delete V & I	mport	DUNTS (default) User Group User Group CCOUNTS (default) User Group
Identity Groups	ontity Groups	User Ider	Delete V J I	mport	DUNTS (default) User Group User Group CCOUNTS (default) User Group oring the guest type
Identity Groups EQ C E C Endpoint Ide C Endpoint Ide C Endpoint Ide	ontity Groups	User Ider C Edit + Add Name ALL A Emplo A Emplo A Guest G Guest	Delete V & I Delete V & I ACCOUNTS (default) ryce IP_ACCOUNTS (default) Type_Contractor (default) Type_Daily (default)	mport	DUNTS (default) User Group User Group CCOUNTS (default) User Group oring the guest type oring the guest type
Identity Groups	entity Groups	User Ider C Edit + Add Name ALL A Emplo A Emplo A Emplo A Edit Name A ALL A A C ALL A A A C ALL A A A C ALL A A A C ALL A A A A A A A A A A A A A	Delete V & I Delete V & I CCCOUNTS (default) Nyce IP_ACCOUNTS (default) Type_Contractor (default) Type_Daily (default)	mport	DUNTS (default) User Group User Group CCOUNTS (default) User Group oring the guest type oring the guest type oring the guest type
Identity Groups	contity Groups	User Ider C Edit + Add Name ALL A Emplo A Emplo A Emplo A Guest A Guest A Guest A Guest A Guest	Delete V & I Delete V & I CCCOUNTS (default) Nyce IP_ACCOUNTS (default) Type_Contractor (default) Type_Daily (default) Type_SocialLogin (default)	mport	DUNTS (default) User Group User Group CCOUNTS (default) User Group oring the guest type oring the guest type oring the guest type oring the guest type

## **步驟4.在**User Identity Groups上選擇,然後選擇on +Add按鈕。定義名稱並在提交時選擇

E Cisco ISE	Administration - Identity Management	A Evaluation Mode 89 Days	Q	0	P	ø
Identities Groups External Ident	ty Sources Identity Source Sequences Settings					
Identity Groups C C C C C C C C C C C C C	User Identity Groups > New User Identity Group Identity Group * Name FDM_admin Description	Submit		Cane	cel	

						Selected 0 T	otal 2 🖯	٥
2 Edit	+ Add (	📋 Delete 🗸	Im ريلي	port 🔥 Export 🗸		Quic	k Filter $\vee$	V
	Name			∧ Description				
	FDM			×				
		d O o lu						
$\Box$	FDM_Read	uoniy						
	♣ FDM_Read ♣ FDM_admi	in					0.0	-
Cisco	<ul> <li>FDM_Read</li> <li>FDM_admi</li> <li>ISE</li> <li>Groups</li> </ul>	in External Identity	y Sources	Administration - Identity I	Management Is Settings	Evaluation Mode 89 Days	Q (0)	50
Cisco entities	FDM_Read     FDM_admi     SE     Groups E	in External Identity	y Sources User Identity G Identity Gr	Administration - Identity I Identity Source Sequence oups > New User Identity Group Oup	Management Is Settings	Evaluation Mode 89 Days	Q (Ø)	52
E Cisco entities	FDM_Read     FDM_admi     FDM_admi     ISE     Groups E     iroups     Endpoint Identity	in External Identity Groups	y Sources User Identity G Identity Gr * Name	Administration - Identity I Identity Source Sequence oups > New User Identity Group DUD FDM_ReadOnly	Management Is Settings	Evaluation Mode 80 Days	Q (0)	28

**附註**:在此示例中,建立了FDM\_Admin和FDM\_ReadOnly身份組,您可以對FDM上使用的每 種型別的管理員使用者重複步驟4。

**步驟5.導**航至位於左上角的三行圖示,然後選擇**管理>身份管理>身份**。選擇on **+Add**並定義使用者 名稱和密碼,然後選擇使用者所屬的組。在此示例中,分別建立了fdm\_admin和fdm\_readonly使用 者並將其分配給FDM\_Admin和FDM\_ReadOnly組。

Cisco ISE	Administration - Identity Management	🛕 Evaluation Mode 89 Days Q. ③ 🖓 🐡
Identities Groups Ext	ternal Identity Sources Identity Source Sequences Settings	
Users	Network Access Users List > New Network Access User	
Latest Manual Network Scan Res	✓ Network Access User	
	Password Type: Internal Users     Password     Password     Login Password     Enable Password	Generate Password () Generate Password ()

✓ User	Groups	
÷	DM_admin 🗸	_ +
E Cisco ISE	Administration • Identity Management	🔺 Evaluation Mode 89 Days 🔍 💮 💭
Users Latest Manual Network Scan Res	Network Access Users	Selected 0 Total 2 🦪 🍈
	🖉 Edit 🕂 Add 🔅 Change Status 🗸 🕁 Import 🏦 Export 🗸 📋 Delete 🗸 📋 Du	uplicate All ~ 7
	Status Username  Oescription  Pirst Name Last Name	Email Address User Identity Grou Admin
	Enabled 1 fdm_admin	FDM_admin

步驟6.選擇位於左上角的三個行圖示,然後導航到Policy > Policy Elements > Results > Authorization > Authorization Profiles,選擇on +Add,為Authorization Profile定義名稱。選擇 Radius Service-type並選擇Administrative,然後選擇Cisco-av-pair,並貼上管理員使用者獲得的角色,在這種情況下,使用者將獲得完整的管理員許可權(fdm.serrole.authority.admin)。選擇 Submit。為每個角色(配置為本文檔中的另一個示例的只讀使用者)重複此步驟。

E Cisco ISE	Policy · Policy Elements
Dictionaries Condition	s Results
Authentication	> Authorization Profiles > New Authorization Profile Authorization Profile
Authorization	* Name EDM Profile Admin
Downloadable ACLs	Description
Profiling	>
Posture	Access Type     ACCESS_ACCEPT
Client Provisioning	> Network Device Profile 🗰 Cisco 🗸 🕀
	Service Template Track Movement Agentless Posture Passive Identity Tracking ()

## $\checkmark$ Advanced Attributes Settings

H	Radius:Service-Type	~	=	Administrative	~	_	
÷	Cisco:cisco-av-pair	~	=	fdm.userrole.authority.admin	$\sim$	-	÷

## ✓ Attributes Details

Access Type = ACCESS_ACCEPT
Service-Type = 6
cisco-av-pair = fdm.userrole.authority.admin

## $\sim$ Advanced Attributes Settings

•	Radius:Service-Type	~	=	NAS Prompt	~	-
:	Cisco:cisco-av-pair	~	=	fdm.userrole.authority.ro	~	- +

## ✓ Attributes Details

Access Type = ACCESS_ACCEPT
Service-Type = 7
cisco-av-pair = fdm.userrole.authority.ro

**附註**:確保「高級屬性」部分的順序與影象示例的順序相同,以避免在使用GUI和CLI登入時 產生意外結果。

#### 步驟8.選擇三行圖示並導航至Policy > Policy Sets。選擇時間 義名稱並在中間的+按鈕上選擇以新增新條件。

**步驟9.在「**條件」視窗中,選擇新增屬性,然後選擇**Network Device** Icon,後跟Network access device IP address。 選擇**屬性值**並新增FDM IP地址。新增新條件,依次選擇**Network Access**和 Protocol選項,選擇**RADIUS**,然後選擇使用一次。

≡ 0	isco IS	SE		Policy ·	Polic	cy Sets		A Evaluation M	ode 89 Days	Q (0)	5a (
Policy	Sets						Reset	Reset Policyse	t Hitcount		Save
۲	Status	Policy Set Name	Description	Cond	itions		Allowed Protocols	/ Server Sequer	ce Hits	Actions	View
(0	Search										
	•	FTD_FDM_Radius_Access		AND	9 2	Network Access-Device IP Address EQUALS 10.122.111.212 Network Access-Protocol EQUALS RADIUS	Default Network J	Access 🗷 🖂	÷	٥	>
	0	Default	Default policy set				Default Network	Access 🙁 🗸	+ 0	٩	>
									Reset		Save

步驟10.在allow protocols部分,選擇Device Default Admin。儲存時選擇

	ISE		Policy	Polic	cy Sets		A De	eluation Mode 8	9 Days	Q (0)	50 ¢
Policy Sets						Reset	Reset P	olicyset Hit	counts		Save
🕣 Status	Policy Set Name	Description	Cond	litions		Allowed Protocols	/ Server	Sequence	Hits	Actions	View
Q Searc	h										
				÷	Network Access-Device IP Address EQUALS 10.122.111.212						
	FTD_FDM_Radius_Access		AND	2	Network Access-Protocol EQUALS RADIUS	Default Network A	ccess	<u> </u>		ŝ	`
٥	Default	Default policy set				Default Network A	ccess	∞ ~+	•	礅	>

步驟11.選擇右箭頭 🎽 用於定義身份驗證和授權策略的策略集的圖示

步驟12.選擇 位於身份驗證策略標題下方,定義名稱並在中間的+上選擇以新增新條件。在「條件」視窗下,選擇新增屬性,然後在網路裝置圖示上依次選擇網路接入裝置IP地址。 選擇屬性值 並新增FDM IP地址。完成後在使用時選擇

步驟13.選擇Internal Users作為Identity Store並選擇儲存

V Authentication F	Policy	(1)
--------------------	--------	-----

۲	Status	Rule Name	Use		Hits	Actions		
0	Search							
					Internal Users	∞ ~		
	0	FDM_Users	ę	Network Access-Device IP Address EQUALS 10.122.111.212	> Options			ŝ

**附註**:如果ISE加入到Active Directory,可以將身份儲存更改為AD儲存。

# 步驟14.選擇於 位於授權策略標題下方,定義名稱並在中間的+上選擇以新增新條件。在「條件」視窗下,選擇新增屬性,然後選擇Identity Group圖示,後跟Internal User:Identity Group。選擇 FDM\_Admin組,選擇AND和NEW選項以新增新條件,選擇埠圖示後跟RADIUS NAS-Port-Type:Virtual,然後選擇使用。

Conditions Studio	

Library	Editor			~
Search by Name		42	IdentityGroup-Name Equals  Vuser Identity Groups:FDM_admin ×	®®
BYOD_is_Registered				*
Catalyst_Switch_Local_Web_Aut hentication	AND 🗸	D	Radius·NAS-Port-Type	
: Dompliance_Unknown_Devices				
: E Compliant_Devices		+	NEW AND OR	
EAP-MSCHAPv2		Set to 'Is	not' Duplicate Save	

#### 步驟15.在配置檔案下,選擇在步驟6中建立的配置檔案,然後選擇Save

對FDM\_ReadOnly組重複步驟14和15

$\sim$ Autho	rizatior	Policy (3)						Click here to do visib	ot shov	/ this again	
						Results					
•	Status	Rule Name	Co	onditio	ns	Profiles			Hits	Actions	
Q	Search	n									
		FTD_FDM_Authz_AdminRo	AND	8	IdentityGroup-Name EQUALS User Identity Groups:FDM_admin	EDM Drofile Admin	~ 4	Solast from list	~ 4		ŝ
	Č	le	AND		Radius-NAS-Port- Type EQUALS Virtual	PDM_PIONE_Admin X		Select nom list	T	3	£ <del>6</del> 3
		ETD EDM Authy DODala	AND	8	IdentityGroup-Name EQUALS User Identity Groups:FDM_ReadOnly	EDM Profile PO V	~+	Select from list	~+		100
	Č	PTD_PDM_AUII2_ROROB	AND	82	Radius-NAS-Port- Type EQUALS Virtual	PDM_PIONE_RO X				Ŭ	2Q3
	0	Default				$DenyAccess \times$	$\sim$ +	Select from list	~+	4	{Ô}

第16步(可選)。 導航到位於左上角的三行圖示,在Administration > System > Maintenance > Repository上選擇,然後選擇+ Add以新增用於儲存TCP轉儲檔案以進行故障排除的儲存庫。

第17步(可選)。 定義儲存庫名稱、協定、伺服器名稱、路徑和憑據。完成後在Submit上選擇。

	Deployment	Licensing	Certificates	Logging	Maintenance	Upgrade	Health Checks	Backup	Click here to do visibility setup Do not show this again.
	Patch Management		Repository List >	Add Repository					
I	Repository		Repository C	onfiguration	n				
1	Operational Data Pur	ging	, , , , , , , , , , , , , , , , , , , ,	0					
			* Repository Nar	ne VMRepos	sitory				
			* Protocol	FTP 🗸	<u></u>				
			Location						
			* Server Name	10.122.1	112.137				
			* Path	1					
			Credentials						
			* User Name	cisco					
			* Password						

## 驗證

步驟1.導覽至Objects > Identity Sources選項卡,然後驗證RADIUS伺服器和組伺服器配置



## 步驟2.導覽至Device > System Settings > Management Access選項卡,然後選擇TEST按鈕

cisco.	m Monitoring	Ø Policies	i≩≣ Objects		Device	1		
System Set	ttings _ ←		Device Man	summary nagemen	t Acc	ess		
Managemen	t Access		3	Configuration	Mana	noment Interfore	Data	Interfaces
Logging Sett	ings		AAA C	onnguration	Manag	gement interrace	Data	interraces
DHCP Server	r		Config	jure how to au	thenticate	e management cor	nections	to the device.
DNS Server			H	TTPS Conn	ection			
Management	t Interface		Sa	over Group for	Manage	ment/REST API		
Hostname				To use a RA	DIUS serv	ver successfully, you	must cor	nfigure the
NTP				RADIUS use as describe	er account d in the he	s with the required app.	authorizat	ion values,
Cloud Servic	es			radius-server-	group		~	TEST
Traffic Sett	ings		Au	thentication w	ith LOCA	L		4
URL Filtering	Preferences		E	Before Externa	l Server			~
				SAVE				

## 步驟3.插入使用者憑證並選擇TEST按鈕

## Add RADIUS Server Group

Name			
Dead Time 🕕		Maximum Failed Attempts	
10	minutes	3	
0-1440		1-5	
RADIUS Server			
1 The servers	in the group should	d be backups of each other	
+			
1. radius-serv	ver		
Server Crede	ntials		
radiusread	writeuser1		
Please provide	the credentials for tes	sting.	
		CANCEL	

**步驟4.**開啟新視窗瀏覽器並鍵入<u>https.//FDM\_ip\_Address</u>,使用ISE配置部分下步驟5中建立的 fdm\_admin使用者名稱和密碼。

Firepower Device Manager	
Successfully logged out	
fdm_admin	
LOG IN	

## 可在ISE RADIUS即時日誌上驗證登入嘗試是否成功

E Cisco ISE		(	JS	A Evaluation Mode 79 Day	¢ 0 9 ¢	
Live Logs Live Sessions					Click here to do visibility setup	Do not show this again. $ imes$
C. Butweb - D. Burret Burret Cou	A Frank To 1			Neve	r V Latest 20 records V	Last 3 hours
😥 Refresh 🛛 Reset Repeat Cou	ints 🛄 Export To	~				¥ Filter √ ψ
Time	Status	Details Repea	Identity	Authentication Policy	Authorization Policy	Authorization Profiles
×		~	Identity	Authentication Policy	Authorization Policy	Authorization Profiles
Jul 06, 2021 04:54:12.41		ò	fdm_admin	FTD_FDM_Radius_Access >> FDM	FTD_FDM_Radius_Access >> FTD_FDM	FDM_Profile_Admin

還可以檢視右上角的FDM上的管理員使用者



#### Cisco Firepower裝置管理器CLI(管理員使用者)

[ECANOGUT-M-D4N7:~ ecanogut\$ ssh fdm\_admin@10.122.111.212 The authenticity of host '10.122.111.212 (10.122.111.212)' can't be established. ECDSA key fingerprint is SHA256:sqpyFmCcGBslEjjDMdHnrkqdw40qvc7ne1I+Pjw6fJs. Are you sure you want to continue connecting (yes/no/[fingerprint])? yes Warning: Permanently added '10.122.111.212' (ECDSA) to the list of known hosts. Password: !!! New external username identified. Please log in again to start a session. !! I Copyright 2004-2019, Cisco and/or its affiliates. All rights reserved. Cisco is a registered trademark of Cisco Systems, Inc. All other trademarks are property of their respective owners. Cisco Fire Linux OS v6.5.0 (build 4) Cisco Firepower Threat Defense for VMWare v6.5.0 (build 115) Connection to 10.122.111.212 closed. ECANOGUT-M-D4N7:~ ecanogut\$ ssh fdm\_admin@10.122.111.212 Password: Last login: Tue Jul 6 17:01:20 UTC 2021 from 10.24.242.133 on pts/0 Copyright 2004-2019, Cisco and/or its affiliates. All rights reserved. Cisco is a registered trademark of Cisco Systems, Inc. All other trademarks are property of their respective owners. Cisco Fire Linux OS v6.5.0 (build 4) Cisco Firepower Threat Defense for VMWare v6.5.0 (build 115) >

## 疑難排解

本節提供的資訊用於對組態進行疑難排解。

通過ISE上的TCP轉儲工具進行通訊驗證

步驟1.登入ISE並選擇位於左上角的三行圖示並導航到操作>故障排除>診斷工具。

**步驟2.在**General tools下,選擇on TCP Dumps,然後選擇Add+。選擇主機名、網路介面檔名、儲存庫(可選)以及過濾器,以僅收集FDM IP地址通訊流。在「儲存並**運行」中選擇** 

E Cisco ISE	
Diagnostic Tools Down	oad Logs Debug Wizard
General Tools RADIUS Authentication Troubl Execute Network Device Com Evaluate Configuration Validat Posture Troubleshooting Agentless Posture Troublesho EndPoint Debug TCP Dump	TCP Dump > New         Add TCP Dump         Add TCP Dump packet for monitoring on a network interface and troubleshoot problems on the network as they appear         Host Name *         ise31         Network Interface *         GigabitEthernet 0 [Up, Running]         ①
Session Trace Tests	
TrustSec Tools	Filter         ip host 10.122.111.212         Image: Provide the state of the
	Repository VM $\checkmark$
	File Size 10 O Mb
	Limit to 1 File(s)
	Time Limit 5 Image: Im

步驟3.登入FDM UI並鍵入管理員憑據。

步驟4.在ISE上,選擇Stop按鈕並驗證pcap檔案已傳送到定義的儲存庫。

E Cisco ISE	(	Operations • Troublesho	ot	🔺 Evaluati	on Mode 79 Days Q 🕜 🔎
Diagnostic Tools Downloa	d Logs Debug Wizard			Click here to do visi	bility setup Do not show this again. $^{ imes}$
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Total 1 file, 545 bytes

步驟5.開啟pcap檔案驗證FDM和ISE之間的成功通訊。

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如果在pcap檔案上未顯示任何條目,則驗證以下選項:

1. 已在FDM配置中新增正確的ISE IP地址

- 2. 如果防火牆位於中間,驗證是否允許埠1812-1813。
- 3. 檢查ISE和FDM之間的通訊

#### 與FDM生成的檔案的通訊驗證。

在排除從FDM裝置頁面生成的檔案故障時,查詢關鍵字:

- FdmPasswordLoginHelper
- NGFWDefaultUserMgmt
- AAAIdentitySourceStatusManager
- RadiusIdentitySourceManager

有關此功能的所有日誌都可以在/var/log/cisco/ngfw-onbox.log中找到

#### 參考資料:

https://www.cisco.com/c/en/us/td/docs/security/firepower/640/fdm/fptd-fdm-config-guide-640/fptd-fdm-mgmt.html#id\_73793

常見問題

案例1 — 外部驗證無法運作

- 檢查secretKey、埠或主機名
- RADIUS上的AVP組態錯誤

• 伺服器可能處於「Dead Time」

案例2 — 測試IdentitySource失敗

- 確保儲存對對象的更改
- 確保憑據正確

## 限制

- •FDM最多允許5個活動的FDM會話。
- 建立第6個會話會導致第1個會話被吊銷
- RadiusIdentitySourceGroup的名稱不能為「LocalIdentitySource」
- 最多16個RadiusIdentitySource到RadiusIdentitySourceGroup
- 在RADIUS上錯誤配置AVP會導致拒絕訪問FDM

## 問答

Q: 此功能是否在「評估」模式下工作?

A:是

Q: 如果兩個只讀使用者登入(其中擁有只讀使用者1的訪問許可權),則他們從兩個不同的瀏覽器 登入。 它將如何顯示? 會發生什麼?

A:兩個使用者的會話都以相同名稱顯示在活動使用者會話頁面中。 每個條目顯示時間戳的單個值。

Q: 行為是外部radius伺服器提供存取拒絕與如果您在第二天配置了本地身份驗證,則為「無響應」 ?

A: 即使您配置了2nd的本地身份驗證,也可能會嘗試本地身份驗證,即使您獲得拒絕訪問或無響應 。

Q: ISE如何區分管理員登入的RADIUS請求與驗證RA VPN使用者的RADIUS請求

A: ISE不會區分管理員和RAVPN使用者的RADIUS請求。FDM檢視cisco-avpair屬性以確定 Admin訪問許可權的授權。在這兩種情況下,ISE都會傳送為使用者配置的所有屬性。

Q: 這意味著ISE日誌無法區分FDM管理員登入和同一使用者訪問同一裝置上的遠端訪問VPN。 在 ISE可以金鑰的訪問請求中,是否有任何RADIUS屬性傳遞到ISE?

A: 以下是在RADIUS身份驗證期間從FTD傳送到ISE的上行RADIUS屬性。這些屬性不會作為外部 身份驗證管理訪問請求的一部分傳送,並且可用於區分FDM管理登入與RAVPN使用者登入。

146 — 隧道組名稱或連線配置檔名稱。

150 — 客戶端型別(適用值:2 = AnyConnect Client SSL VPN,6 = AnyConnect Client IPsec VPN(IKEv2)。

151 — 會話型別(適用值:1 = AnyConnect客戶端SSL VPN,2 = AnyConnect客戶端IPSec VPN(IKEv2)。

#### 關於此翻譯

思科已使用電腦和人工技術翻譯本文件,讓全世界的使用者能夠以自己的語言理解支援內容。請注 意,即使是最佳機器翻譯,也不如專業譯者翻譯的內容準確。Cisco Systems, Inc. 對這些翻譯的準 確度概不負責,並建議一律查看原始英文文件(提供連結)。