# 在ISE上配置網路檔案系統儲存庫

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## 簡介

本文描述如何在身份服務引擎(ISE)上配置網路檔案系統(NFS)儲存庫。

## 必要條件

## 需求

思科建議您瞭解以下主題:

- ISE 2.x。
- 基本shell命令

## 採用元件

- ISE
- Debian分佈(此處使用Ubuntu)

## 設定

### 步驟1.在ubuntu上設定NFS

• 您需要首先在ubuntu電腦上安裝nfs-kernel-server程式包:

bara@ubuntu:~\$ sudo apt-get update

bara@ubuntu:~\$ sudo apt-get install nfs-kernel-server

• 建立名為nfs的共用目錄:

bara@ubuntu:~\$ sudo mkdir /var/nfs/general -p

#### •更改所有權以匹配任何人:nogroup

bara@ubuntu:~\$ sudo chown nobody:nogroup /var/nfs/general

#### • 將ISE配置為NFS上的客戶端,並將目錄匯出:

bara@ubuntu:~\$ more /etc/exports

# directory\_to\_share client(share\_option1,...,share\_optionN)

to NFS clients. See exports(5).

# /etc/exports: the access control list for filesystems which may be exported

#

# Example for NFSv2 and NFSv3:

# /srv/homes hostname1(rw,sync,no\_subtree\_check) hostname2(ro,sync,no\_subtree\_check)

#

# Example for NFSv4:

# /srv/nfs4 gss/krb5i(rw,sync,fsid=0,crossmnt,no\_subtree\_check)

# /srv/nfs4/homes gss/krb5i(rw,sync,no\_subtree\_check)

• 開啟/etc/export with nano:

bara@ubuntu:~\$ sudo nano /etc/exports

• 在末尾新增以下兩行(將IP更改為ISE IP)

/var/nfs/general 10.48.85.249(rw,sync,no\_subtree\_check)
/home 10.48.85.249(rw,sync,no\_root\_squash,no\_subtree\_check)

• 儲存並關閉(Ctrl+x,當要求儲存時,按Y和enter),然後使用以下命令重新啟動NFS伺服器:

bara@ubuntu:~\$ sudo systemctl restart nfs-kernel-server

#### 步驟2. ISE配置

•將NFS儲存庫新增到ISE,其中/home/bara是NFS安裝點 在CLI上:

ISE23S/admin(config)# repository NFS
ISE23S/admin(config-Repository)# url nfs://10.48.60.193:/home/bara

附註:從CLI配置的儲存庫不能從ISE Web UI使用,並且不能複製到其他ISE節點。

在GUI中,轉至Administration -> Maintenance -> Repository:

#### Repository List > Add Repository

## **Repository Configuration**

* Repository Name	NFS
* Protocol	NFS <b>v</b>
Location	
* Server Name	10.48.60.193
* Path	/home/bara
Credentials	
* User Name	anyuser
* Password	••••••
Submit Cancel	)

**附註:**在此案例中,NFS不需要使用者名稱和密碼,但由於需要使用者名稱和密碼的形式才能 新增它們,因此可以輸入任何使用者名稱和密碼。

## 驗證

### •列出NFS儲存庫中的所有檔案。

ISE23S/admin# show repository NFS ise-support-bundle-przaise001-a-hv11674-11-04-2019-08-25.tar.gpg jcameron-key.asc test.txt

### • 在NFS上,您可以看到以下檔案:

bara@ubuntu:~\$ pwd
/home/bara
bara@ubuntu:~\$ ls
ise-support-bundle-przaise001-a-hv11674-11-04-2019-08-25.tar.gpg jcameron-key.asc test.txt

已知瑕疵

CSCvd73085:在ISE上安裝NFS位置時出錯

CSCvk61086: ISE 2.4 2.3 2.2.1 2.0 :未使用NFS儲存庫憑據

CSCvm41485:ISE 2.3:無法訪問NFS儲存庫和使用NFS儲存庫不工作的計畫報告

## 疑難排解

• 要在ISE上調試儲存庫,請使用以下調試:

#debug copy 7 #debug transfer 7

#### • 如果#show代表NFS失敗、捕獲捕獲和調試. 下面是一個工作場景的截圖:

	-				
+	98 4.484133	10.48.85.249	10.48.60.193	NFS	250 V4 Call (Reply In 91) SETCLIENTID
	91 4.486119	10.48,60.193	10.48.85.249	NFS	130 V4 Reply (Call In 90) SETCLIENTID
	92 4.406172	10.48.85.249	10.48.60.193	NFS	170 V4 Call (Reply In 93) SETCLIENTID_CONFIRM
	93 4.408060	10.48.60.193	10.48.85.249	NFS	114 V4 Reply (Call In 92) SETCLIENTID_CONFIRM
	94 4.408144	10.48.85.249	10.48.60.193	NFS	182 V4 Call (Reply In 96) PUTROOTFH   GETATTR
	96 4.408813	10.48.60.193	10.48.85.249	NFS	286 V4 Reply (Call In 94) PUTROOTFH   GETATTR
	97 4.408853	10.48.85.249	10.48.60.193	NFS	186 V4 Call (Reply In 98) GETATTR FH: 0x62d40c52
	98 4.411316	10.48.60.193	10.48.85.249	NFS	162 V4 Reply (Call In 97) GETATTR
	99 4.411371	10.48.85.249	10.48.60.193	NES	190 V4 Call (Reply In 100) GETATTR FH: 0x62d40c52
	100 4.412407	10.48.60.193	10.48.85.249	NES	178 V4 Reply (Call In 99) GETATTR
	101 4.412441	10.48.85.249	10.48.60.193	NFS	186 V4 Call (Reply In 102) GETATTR FH: 0x62d40c52
	102 4.414590	10.48.60.193	10.48.85.249	NFS	162 V4 Reply (Call In 101) GETATTR
	103 4.414635	10.48.85.249	10.48.60.193	NFS	190 V4 Call (Reply In 104) GETATTR FH: 0x62d40c52
	104 4.414923	10.48.60.193	10.48.85.249	NFS	178 V4 Reply (Call In 103) GETATTR
	105 A A1495A	10 18 85 249	10 48 60 103	NEC	186 VA Call (Renty To 186) GETATTE EN. Av62448-52
1					

> Frame 91: 130 bytes on wire (1040 bits), 130 bytes captured (1040 bits)

Ethernet II, Src: Cisco\_2a:c4:a3 (00:06:f6:2a:c4:a3), Dst: Vmware\_8d:9a:86 (00:50:56:8d:9a:86)

Fragment header: Last fragment, 60 bytes XID: 0xfa136502 (4195575042) Message Type: Reply (1) [Program: NFS (100003)] [Program Version: 4] [Procedure: COMPOUND (1)] Reply State: accepted (0) [This is a reply to a request in frame 90] [Time from request: 0.001986000 seconds] ✓ Verifier Flavor: AUTH\_NULL (0) Length: 0

State: RPC executed successfully (0) > Network File System, Ops(1): SETCLIENTID

### 工作

### •以下是非工作場景,可能是ISE未列在/etc/exports中

455 4.273621	10.240.239.68	10.235.139.48	NES	262 V4 Call (Reply In 456) SETCLIENTID
456 4.275495	10.235.139.48	10.240.239.68	NES	90 V4 Reply (Call In 455)
463 4.279409	10.240.239.68	10.235.139.48	NFS	262 V4 Call (Reply In 465) SETCLIENTID
465 4.281223	10.235.139.48	10.240.239.68	NES	90 V4 Reply (Call In 463)
473 4.284947	10.240.239.68	10.235.139.48	NES	262 V4 Call (Reply In 475) SETCLIENTID
475 4.286759	10.235.139.48	10.240.239.68	NES	90 V4 Reply (Call In 473)
477 4.286834	10.240.239.68	10.235.139.48	NFS	262 V4 Call (Reply In 478) SETCLIENTID
478 4.288635	10.235.139.48	10.240.239.68	NES	90 V4 Reply (Call In 477)
485 4.292429	10.240.239.68	10.235.139.48	NES	262 V4 Call (Reply In 487) SETCLIENTID
497 A 204249	10 335 130 49	10 340 330 69	MEC	OA VA Benly (Call In 1951

Frame 456: 90 bytes on wire (720 bits), 90 bytes captured (720 bits) Ethernet II, Src: Cisco\_c7:04:40 (00:c1:64:c7:04:40), Dst: Cisco\_e7:76:84 (70:0f:6a:e7:76:84) Internet Protocol Version 4, Src: 10.235.139.48, Dst: 10.240.239.68 Transmission Control Protocol, Src Port: 2049, Dst Port: 766, Seq: 29, Ack: 241, Len: 24 Remote Procedure Call, Type:Reply XID:0x1da7b938 Fragment header: Last fragment, 20 bytes XID: 0x1da7b938 (497531192) Message Type: Reply (1) [Program: NFS (100003)] [Program Version: 4]

[Procedure: COMPOUND (1)] Reply State: denied (1) [This is a reply to a request in frame 455] [Time from request: 0.001874000 seconds] Reject State: AUTH\_ERROR (1)

Auth State: bad credential (seal broken) (1)

 <sup>&</sup>gt; Internet Protocol Version 4, Src: 10.48.60.193, Dst: 10.48.85.249
 > Transmission Control Protocol, Src Port: 2049, Dst Port: 952, Seq: 29, Ack: 229, Len: 64 Remote Procedure Call, Type:Reply XID:0xfa136502