

排除故障ISE和Firepower集成身份服务的

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简介

本文描述如何配置和排除故障在思科下一代入侵防御系统(NGIPS)的TrustSec意识策略。NGIPS版本6.0支持集成用准许的身份服务引擎(ISE)建立标识基于意识策略。

先决条件

要求

Cisco 建议您了解以下主题：

- 思科可适应安全工具(ASA) VPN配置
- Cisco AnyConnect安全移动客户端配置
- 思科Firepower管理中心基本配置
- 思科ISE配置
- 思科TrustSec解决方案

使用的组件

本文档中的信息基于以下软件和硬件版本：

- Microsoft Windows 7
- Microsoft Windows 2012 Certificate Authority (CA)
- Cisco ASA版本9.3
- Cisco ISE软件版本1.4
- Cisco AnyConnect安全移动客户端版本4.2
- Cisco Firepower管理中心(FMC)版本6.0
- Cisco Firepower NGIPS版本6.0

配置

Firepower管理中心(FMC)是Firepower的管理平台。有与ISE集成涉及的功能的两种类型：

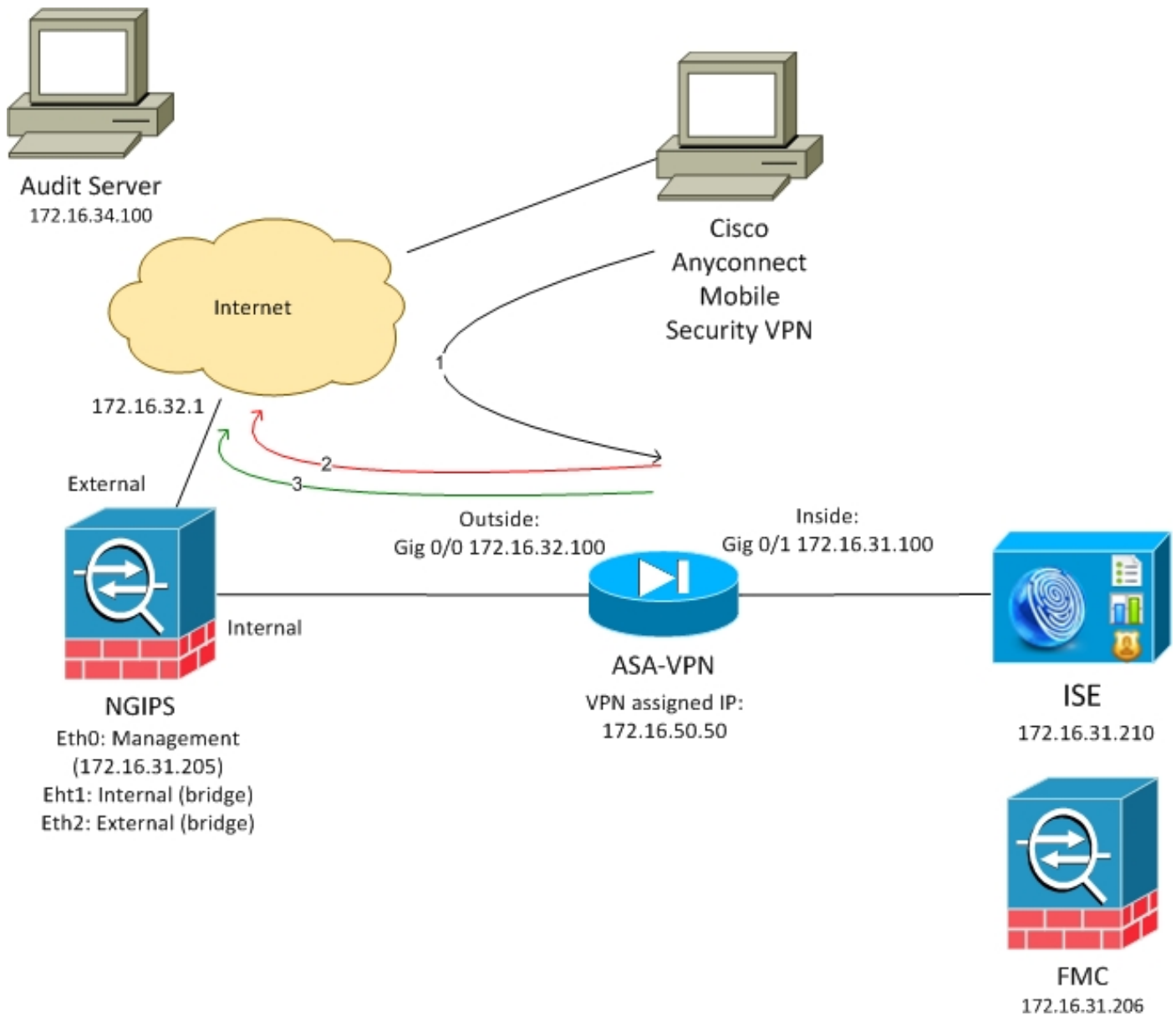
- 修正-允许FMC通过ISE检疫攻击者，是在提供被限制的网络访问的接入设备的动力变化的授权状态。有此解决方案的两生成：

1. 传统Perl脚本使用终端保护业务(EPS)对ISE的API呼叫。
2. 更新的模块使用pxGrid对ISE的协议呼叫(-不支持此模块6.0版本5.4仅支持，在6.1计划的本地支持)。

- 策略-允许FMC配置根据TrustSec安全组标记的策略(SGT)。

此条款着重第二个功能。对于修正示例请读了References部分

网络图



FMC配置与包含两个规则的访问控制策略：

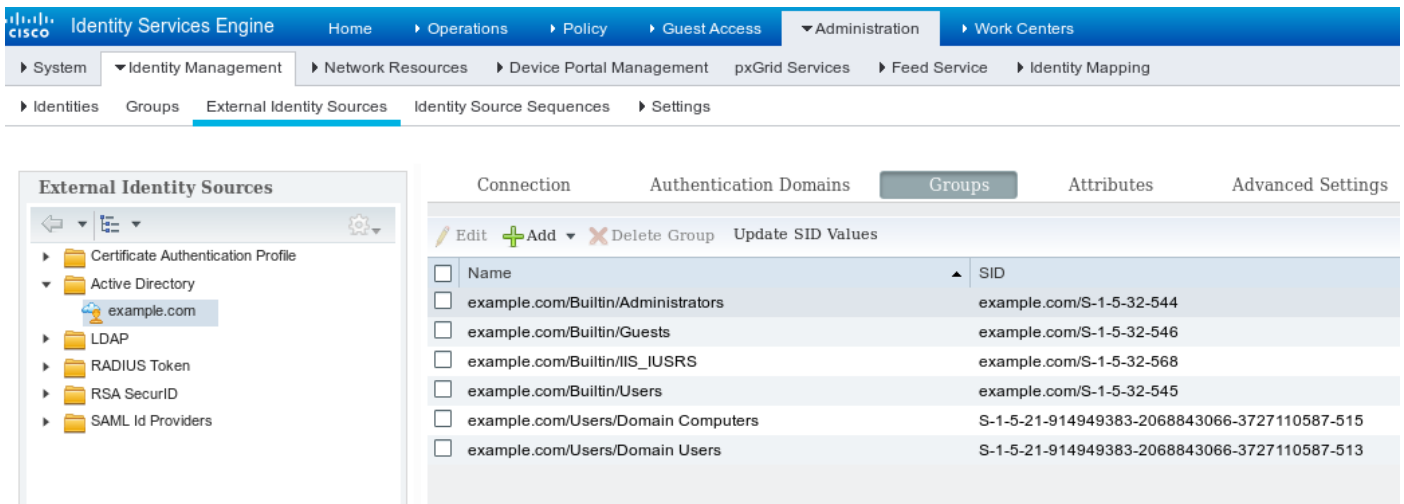
- 为与自定义URL (攻击URL)的HTTP数据流拒绝
- 允许与自定义URL (攻击URL)的HTTP数据流，但是，只有当用户由ISE分配审计(9) SGT标记 ISE决定分配属于管理员组并且使用ASA-VPN设备网络访问的审计标记给所有活动目录用户。

用户访问网络通过在ASA的VPN连接。用户然后设法访问审计的服务器使用URL攻击URL - ，但是出故障，因为他未分配审计SGT组。一旦那修复，连接是成功的。

ISE

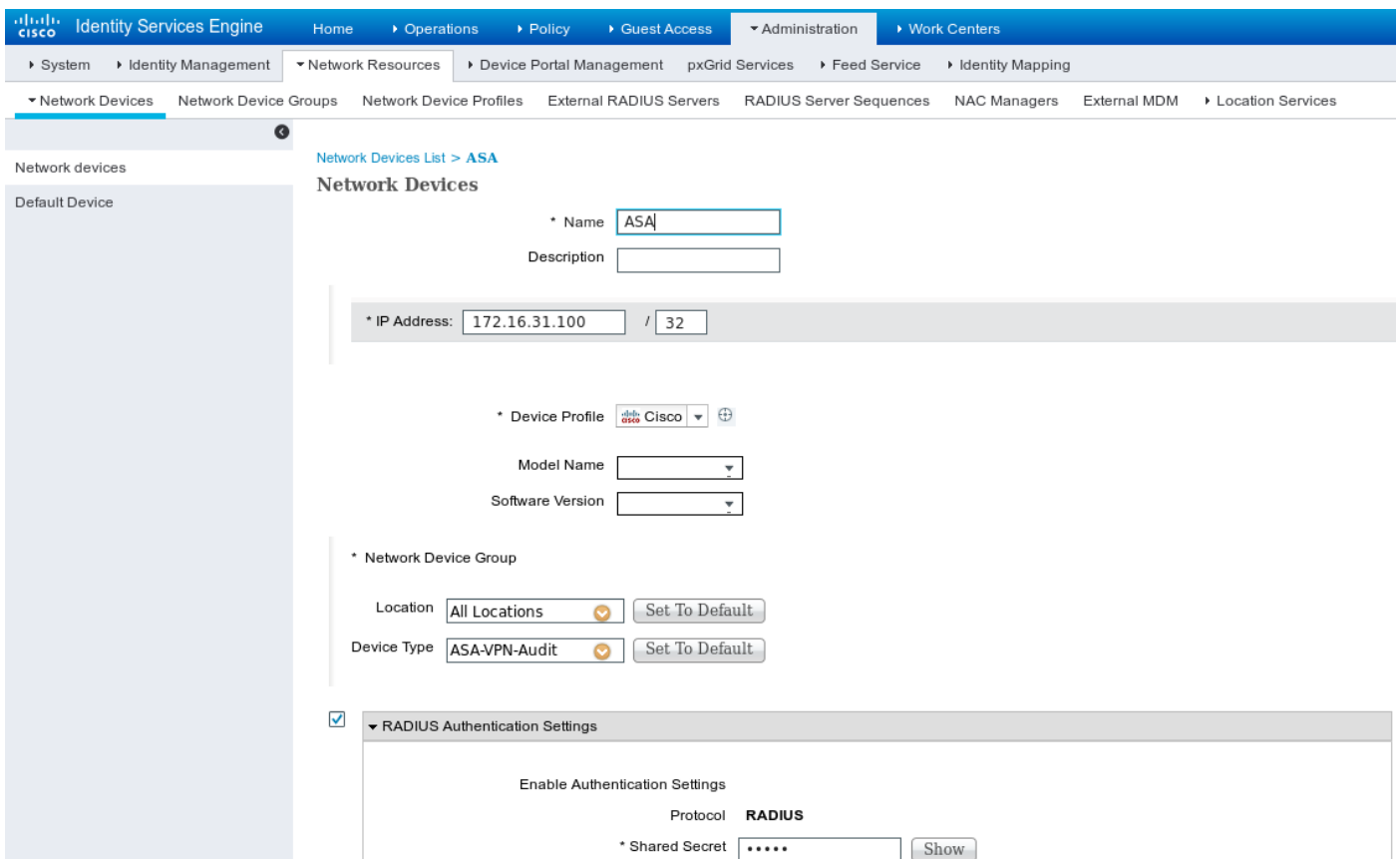
Active Directory

必须配置AD集成，并且正确组必须被拿来(管理员组使用授权规则情况)：



网络接入设备

ASA被添加作为网络设备。如此镜像所显示，自定义组ASA VPN审计使用，：



pxGrid和MnT的证书

FMC使用在ISE的两服务：

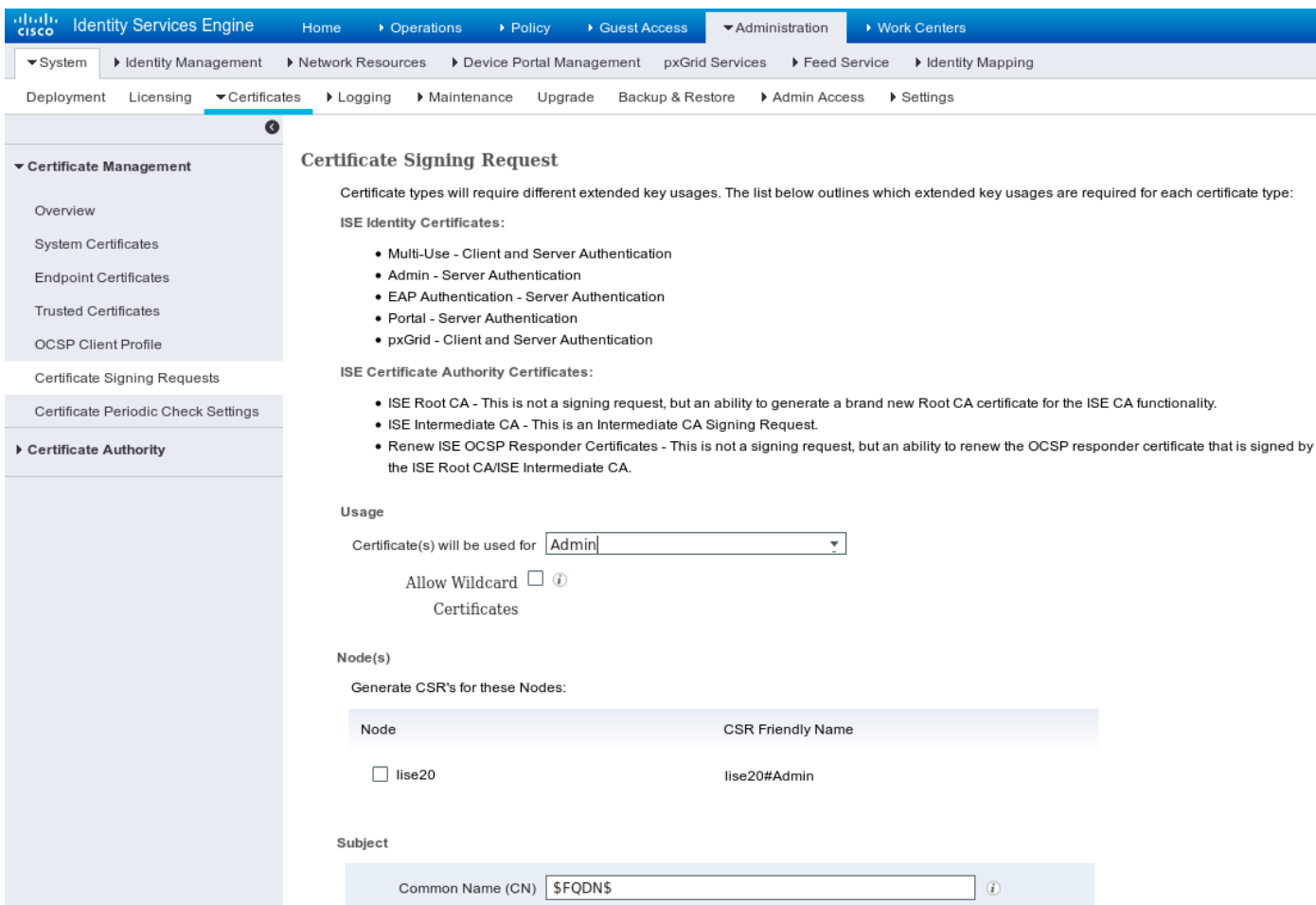
- SGT和配置文件数据查询的pxGrid
- 监控和报告(MnT)大批会话下载的

MnT可用性是非常重要的，因为这样FMC是消息灵通的什么是认证的会话的IP地址，也其用户名和SGT标记。基于该，正确策略可以应用。请注意NGIPS不本地支持SGT标记(轴向标记)类似ASA。但是在对ASA的相反，它支持SGT名称而不是仅编号。

由于那些需求ISE和FMC需要互相委托服务(证书)。MnT使用服务器端证书，pxGrid使用客户端和服务端证书。

Microsoft CA用于签署所有证书。

对于MnT (Admin角色) ISE必须生成证书签名请求(CSR)如此镜像所显示，：



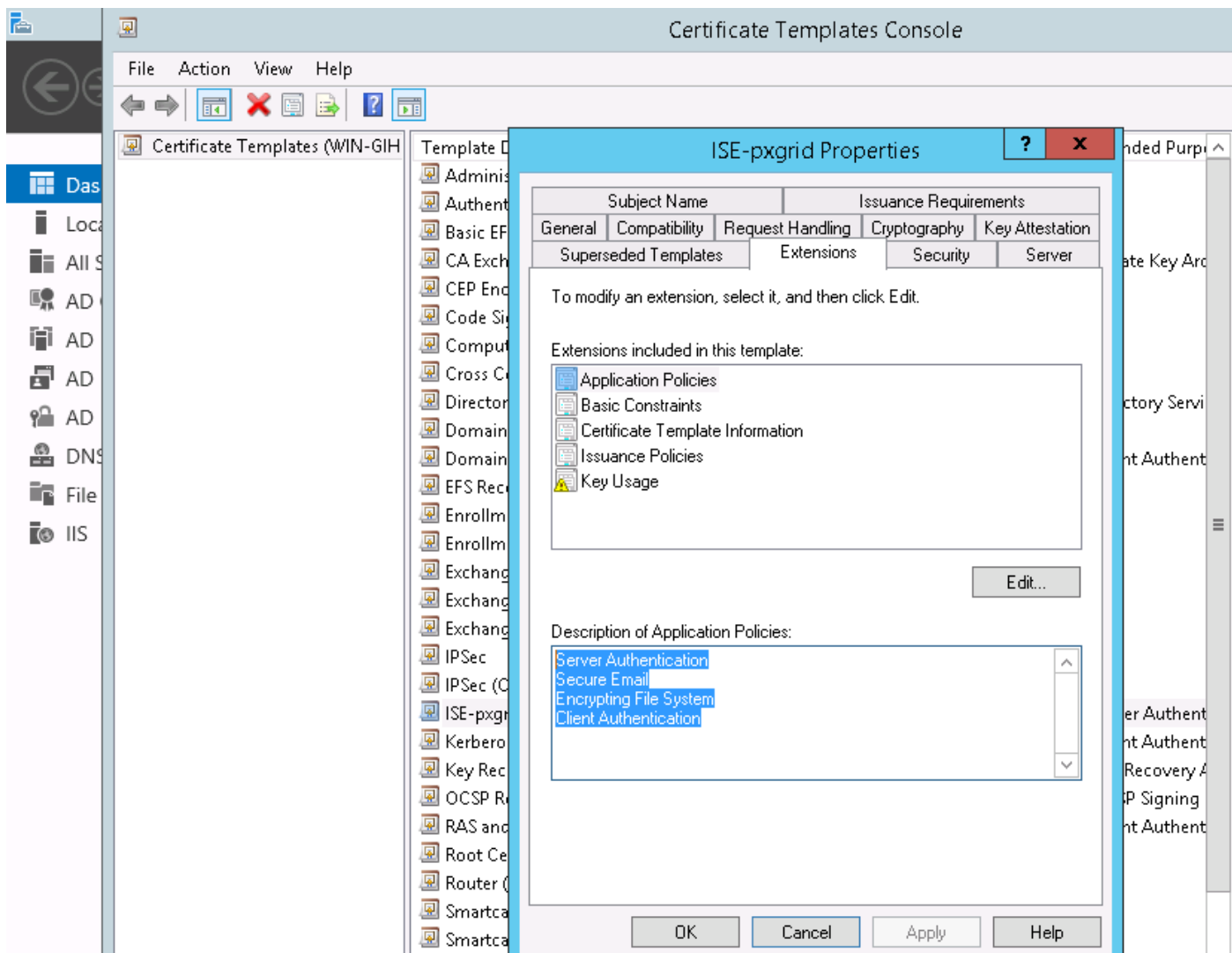
在签字由Microsoft CA以后必须通过 **捆绑身份验证选项**导入它。

必须为pxGrid服务按照相似的进程。**证书将使用选项**必须安排pxGrid选择。

因为不可以有与相同的主题名称的两证书它是充分地不同的可接受的添加为OU或O部分(例如pxGrid)重视。

Note:请确保对于两个ISE和FMC的每完全合格的域名(FQDN)，正确DNS记录在DNS服务器配置。

在Admin和pxGrid证书之间的唯一的区别是签署的进程。因为pxGrid证书一定扩展了两客户端和服务端验证的密钥用法选项在Microsoft CA的自定义模板可以用于那：



如何使用Microsoft Web服务签署pxGrid CSR在此镜像显示：

Submit a Certificate Request or Renewal Request

To submit a saved request to the CA, paste a base-64-encoded

Saved Request:

Base-64-encoded certificate request (CMC or PKCS #10 or PKCS #7):

```
A0Z4skS+gVGuqYC4ls1jHcXGJejph2h2ndn/ri2J
FibxEHkK1tAymQ9G6WXIELdA3XZzV6ilVnWFzLj3
/E2PTchIgFk5zeyXConTNW4QIE/Robkd7DIxduVC
6C6daW+GKhFTbQFjacvr15KlRwo4/XQZ56QZazic
pB+rRDT3dKQW
-----END CERTIFICATE REQUEST-----
```

Certificate Template:

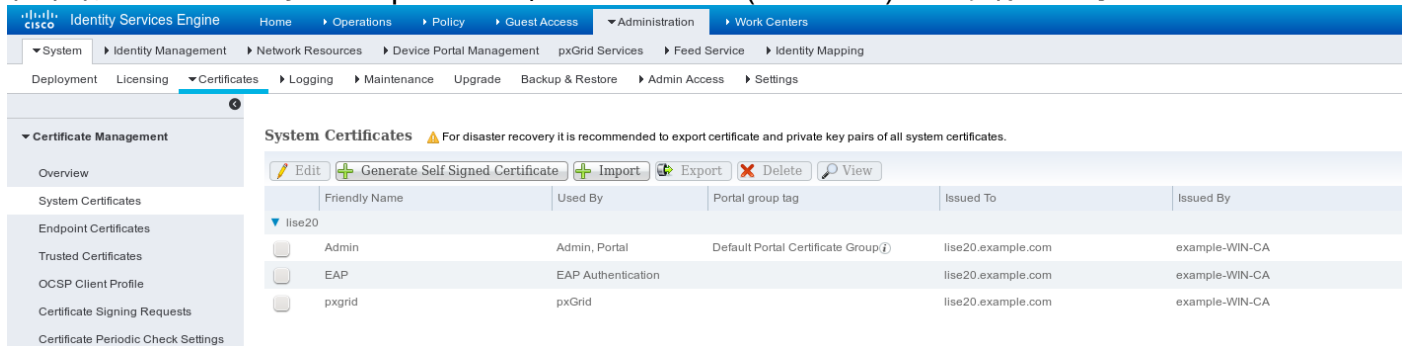
ISE-pxgrid

Additional Attributes:

Attributes:

Submit >

在末端ISE必须有委托CA和pxGrid证书签字的Admin (Microsoft)如此镜像所显示：



pxGrid服务

如此镜像所显示，使用正确证书必须启用特定节点的pxGrid角色，：

Deployment

Deployment
PAN Failover

Deployment Nodes List > **lise20**

Edit Node

General Settings Profiling Configuration

Hostname **lise20**
 FQDN **lise20.example.com**
 IP Address **172.16.31.210**
 Node Type **Identity Services Engine (ISE)**

Personas

Administration Role **STANDALONE** [Make Primary](#)

Monitoring Role PRIMARY Other Monitoring Node

Policy Service

Enable Session Services ⓘ
 Include Node in Node Group **None** ⓘ

Enable Profiling Service

Enable SXP Service
 Use Interface **GigabitEthernet 0** ⓘ

Enable Device Admin Service ⓘ

Enable Identity Mapping ⓘ

pxGrid ⓘ

并且必须设置自动批准到已启用：

Identity Services Engine License Warning

System
Identity Management
Network Resources
Device Portal Management
pxGrid Services
Feed Service
Identity Mapping

[Enable Auto-Registration](#) [Disable Auto-Registration](#)
[View By Capabilities](#)

[Clients](#) [Live Log](#)

Enable Disable Approve Group Decline Delete Refresh Total Pending Approval(0)

Client Name	Client Description	Capabilities	Status	Client Group(s)	Log
ise-admin-lise20		Capabilities(4 Pub, 2 Sub)	Online	Administrator	View
ise-mnt-lise20		Capabilities(2 Pub, 1 Sub)	Online	Administrator	View
iseagent-freepower.example.co...		Capabilities(0 Pub, 3 Sub)	Online	Session	View
fresightsestest-freepower.examp...		Capabilities(0 Pub, 0 Sub)	Offline	Session	View

1 - 4 of 4 Show 25 per page Page 1

授权策略

使用默认验证策略(AD查找执行，如果没有找到本地用户)。

授权策略配置提供全双工网络访问(权限：PermitAccess)验证通过ASA-VPN和属于活动目录组管理员的用户的-为那些用户SGT标记审计员返回：

Authorization Policy

Define the Authorization Policy by configuring rules based on identity groups and/or other conditions. Drag and drop rules to change the order.

For Policy Export go to [Administration > System > Backup & Restore > Policy Export Page](#)

First Matched Rule Applies ▼

▶ Exceptions (0)

Standard

Status	Rule Name	Conditions (identity groups and other conditions)	Permissions
✔	ASA VPN	if (example.com:ExternalGroups EQUALS example.com/Builtin /Administrators AND DEVICE:Device Type EQUALS All Device Types#ASA-VPN-Audit)	then PermitAccess AND Auditors

FMC

活动目录领域

领域配置要求为了工作与ISE集成(使用标识策略和为已认证的用户被动地获取组成员)。领域可以为活动目录或轻量级目录访问协议(LDAP)配置。在本例中使用AD。从**系统>集成>领域**：

AD-Realm

Enter a description

Directory **Realm Configuration** User Download

AD Primary Domain * ex: domain.com

Directory Username * ex: user@domain

Directory Password *

Base DN * ex: ou=user,dc=cisco,dc=com

Group DN * ex: ou=group,dc=cisco,dc=com

Group Attribute ▼

User Session Timeout

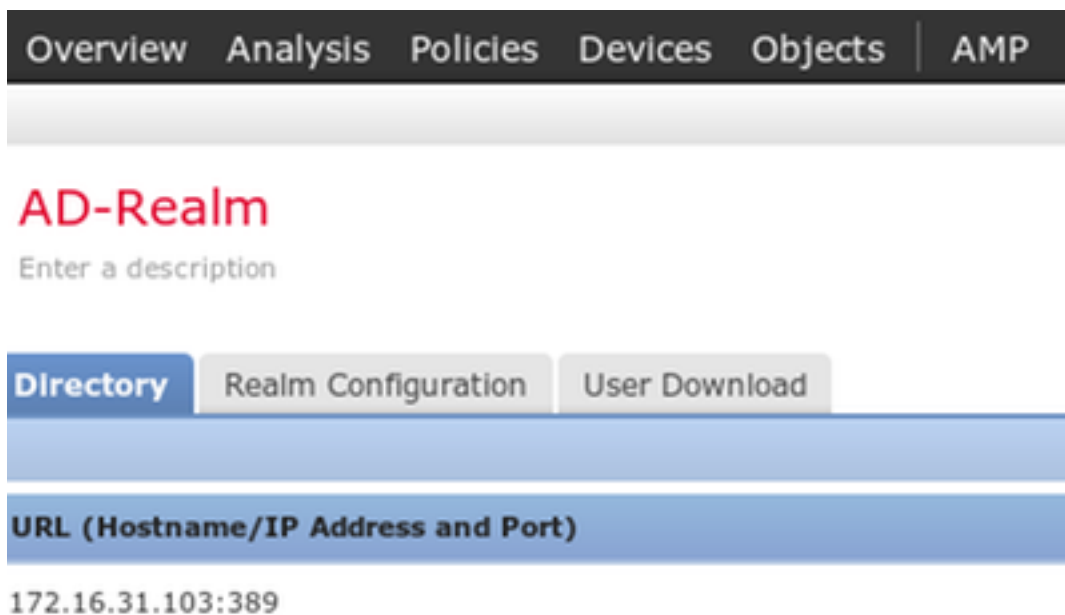
Authenticated Users minutes

Failed Authentication Users minutes

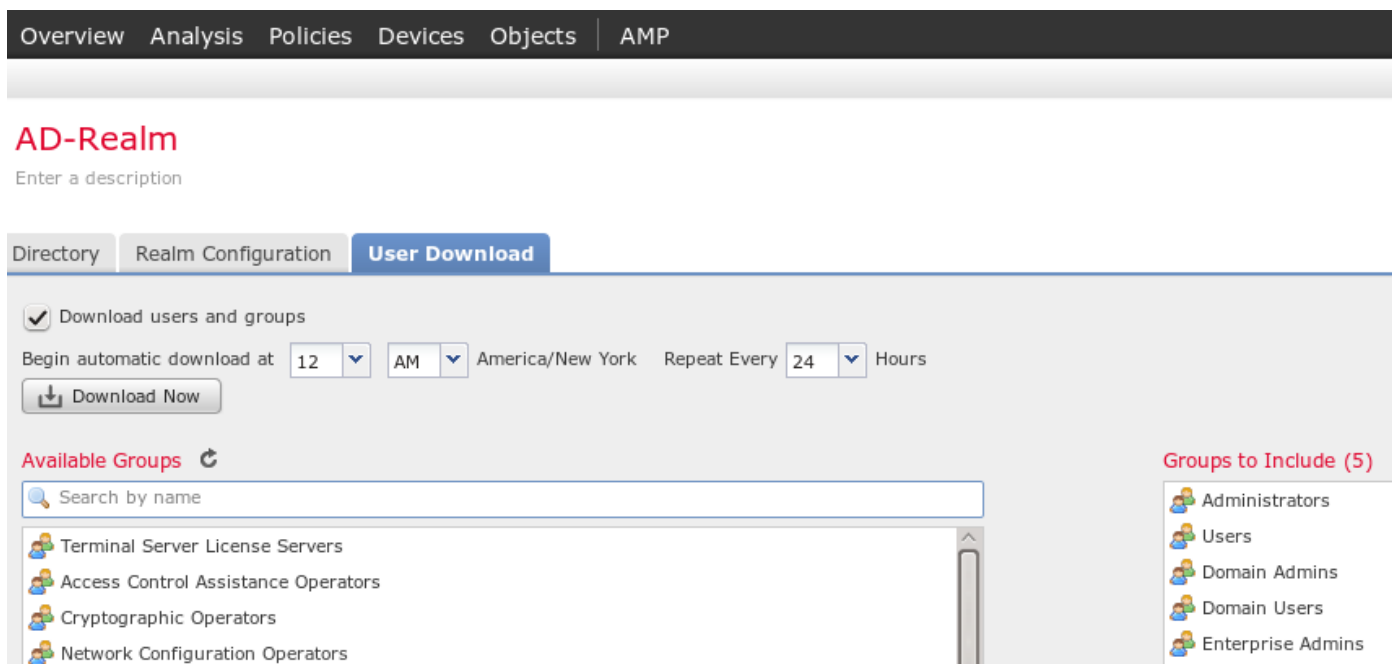
Guest Users minutes

* Required Field

使用标准的目录设置：

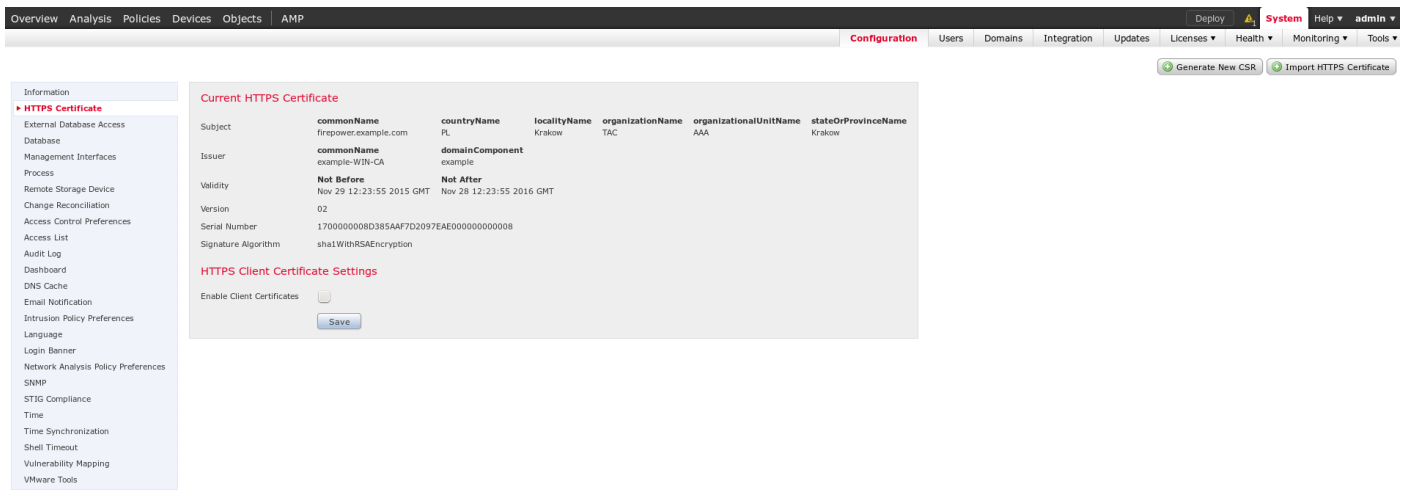


并且某些AD组被检索(将使用作为另外的情况在访问控制规则)：

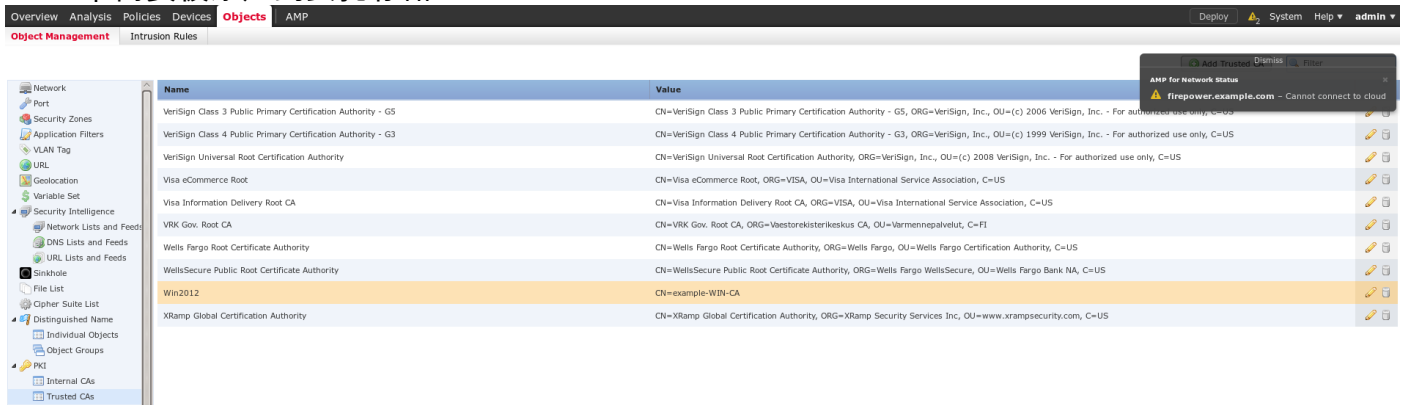


Admin和pxGrid的证书

虽然没要求，其良好的做法生成admin访问的CSR。使用委托AD，如此镜像所显示，签署该CSR，导入上一步签名证书，：



CA证书需要被添加到委托存储：



最后一步是生成FMC用于的pxGrid证书授权到ISE pxGrid服务。生成CSR CLI需要使用(或任何其他外部计算机用openssl工具)。

```
admin@firepower:~$ sudo su -
Password:
root@firepower:~#
root@firepower:~# openssl genrsa -des3 -out fire.key 4096
Generating RSA private key, 4096 bit long modulus
.....
.....
e is 65537 (0x10001)
Enter pass phrase for fire.key:
Verifying - Enter pass phrase for fire.key:
root@firepower:~#
root@firepower:~# openssl req -new -key fire.key -out fire.csr
You are about to be asked to enter information that will be incorporated
into your certificate request.
What you are about to enter is what is called a Distinguished Name or a DN.
There are quite a few fields but you can leave some blank
For some fields there will be a default value,
If you enter '.', the field will be left blank.
-----
Country Code []:PL
State or Province Name []:
Locality Name []:
Organization Name []:Cisco
Organizational Unit Name []:TAC
Common Name []:firepower.example.com
Email Address []:
root@firepower:~#
```

使用Microsoft CA (pxGrid模板)，一旦生成fire.csr，签署它。导入回到专用密钥(fire.key)和签名证书(fire.pem)对FMC内部证书存储。对于专用密钥请使用密码在密钥时设置(openssl genrsa命令)的生

成：

Overview Analysis Policies Devices **Objects** AMP

Object Management Intrusion Rules

Name	Value
pxgrid	CN=firepower.example.com, ORG=TAC, OU=pxgrid, C=PL

Add Known Internal Certificate

Name: pxgrid

Certificate Data or, choose a file:

```
AwICAgCAMA4GCCqGSIb3DQMEAgIAgDAHBgUrDgMChBzAKBggqhkiG9w0DBzANBgkqhkiG9w0BAQUFAAOCAQEASObDPO4nTYpH5CbWz1nusKooPIUeYfHAJZU7TrgWb1WVXeJET3TrUj3ao9mu+9Jn4yoLC/+qygMl8U2lzb2bhLaxu336/qXGLyA8S39gnhNZRPXr11dSYokftzWW22yuDvyoTGWnPx3VGeKfgCZXx94SpbNPeWrChx0ku7IPZmDel5KWLidWgy4LgojIEjInGnd5XVHfkZdsgT1eV697dQLHRp+f5BulYXuT8A1m694XbOG4a2GYV9JlGfm1ctTa7ed6yB4oFc9bM8Nb60pxc5H/7r0TjDyUBQgnHQPvqUJpdlEn+qYWp3lXoHMV4mR6br9fz6g==-----END CERTIFICATE-----
```

Key or, choose a file:

```
tHX8NiiQM+NBuAtcEiUvVb78tkKnuPy5UT5KSBQ4i6E97z53haL4lSyyJyTIRQaG5OqjWIMD085sUvCayzQh40QhpZlfcECggEAAUz7CpeuUSdLIDSKmiktAbgbykNtGthrT2p8/8++qF0F0mC+Gsq7PkaR1WLH/HFcFUMwP41Xd2WkiITNamVjopMZ800n/8oo/MNe46OKr1ZuToUWt9ID01JjvzvTcTnlyZ5DSoXFmlwX2Tu6mSXWq6ycL7/Ep6UdGhkJTdyU0FsJHT5W3dmnFkWerBS5Cw+eWqCOQacObx0IB5OpwDzw5PQ/Gom+WZNF+2LWlvM2dh2dATdywrad0ZjG7RpdV5uYfPkSZOWLiGJHl1m+3FpLiIMIT5VwssCFK0O4DVJhidH6jRqA3VfgvWL/psTUbWknMF8drv8ix4SF1dU4qoA==-----END RSA PRIVATE KEY-----
```

Encrypted, and the password is:

ISE集成

一旦所有证书安装请配置从系统>集成的ISE集成：

Overview Analysis Policies Devices Objects AMP

Cisco CSI Realms **Identity Sources** eStreamer Host Input Client Smart Software Satellite

Identity Sources

Service Type: None Identity Services Engine User Agent

Primary Host Name/IP Address *

Secondary Host Name/IP Address

pxGrid Server CA *


MNT Server CA *

MC Server Certificate *

ISE Network Filter

* Required Field

Status

 ISE connection status:
Primary host: Success

请使用已导入CA pxGrid和MnT服务证书确认。对于管理控制台(MC)请使用内部生成的证书pxGrid。

标识策略

配置为被动验证使用以前已配置的AD领域的标识策略：

Overview Analysis **Policies** Devices Objects AMP

Access Control Identity Network Discovery Application Detectors Correlation Actions

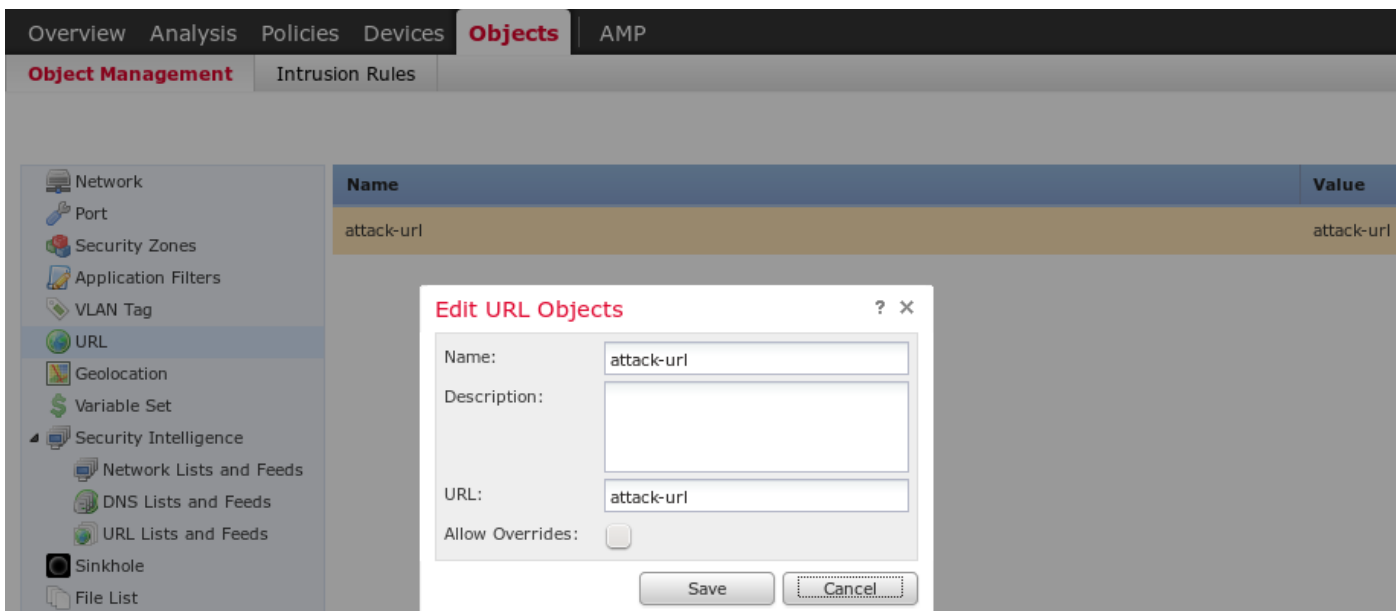
ISEPolicy
Enter a description

Rules Active Authentication

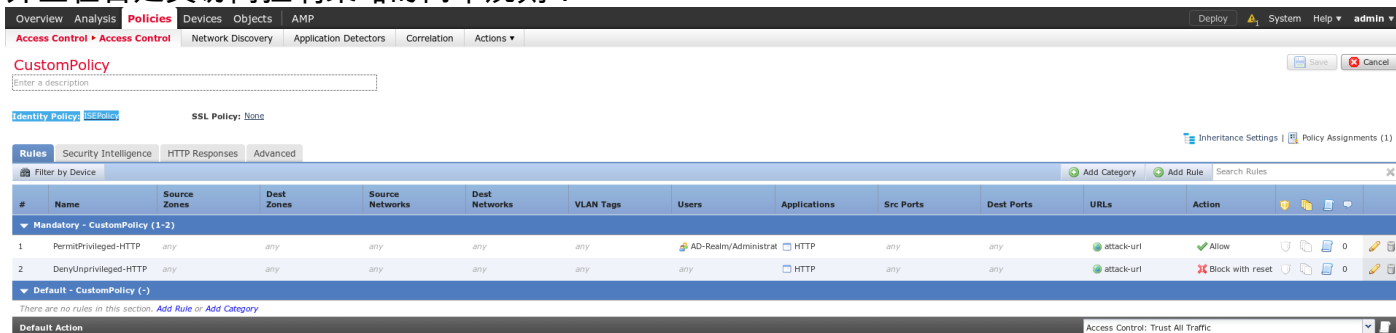
#	Name	Source Zones	Dest Zones	Source Networks	Dest Networks	VLAN Tags	Src Ports	Dest Ports	Realm	Action
Administrator Rules <i>This category is empty</i>										
Standard Rules										
1	Rule-AD	any	any	any	any	any	any	any	AD-Realm	Passive Authentication
Root Rules <i>This category is empty</i>										

访问控制策略

对于此示例自定义URL创建：



并且在自定义访问控制策略的两个规则：

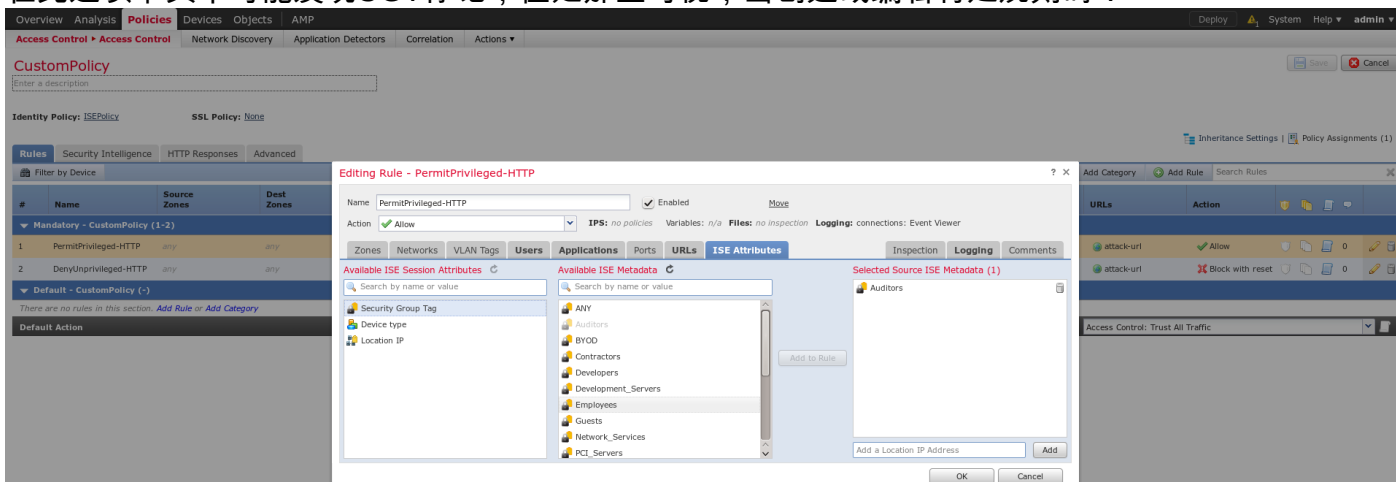


PermitPrivileged HTTP规则允许分配SGT标记属于AD管理员组的所有用户。执行在所有目标的HTTP攻击的审计员。

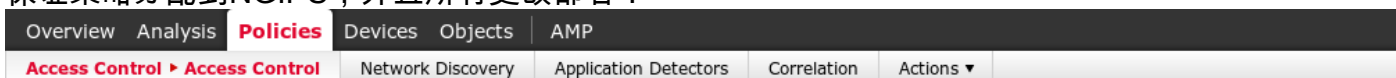
DenyUnprivileged HTTP否认该操作其他用户。

并且请注意以前已创建标识策略分配到此访问控制策略。

在此选项卡其不可能发现SGT标记，但是那些可视，当创建或编辑特定规则时：



保证策略分配到NGIPS，并且所有更改部署：



Access Control Policy	Status
CustomPolicy	Targeting 1 devices Up-to-date on all targeted devices

验证

在一切正确地后配置ISE应该为会话服务(联机的状态看到pxGrid客户端订阅)。

Identity Services Engine Administration console showing the Clients page. The table lists the following clients:

Client Name	Client Description	Capabilities	Status	Client Group(s)
ise-admin-ise20		Capabilities(4 Pub, 2 Sub)	Online	Administrator
ise-mnt-ise20		Capabilities(2 Pub, 1 Sub)	Online	Administrator
iseagent-firepower.example.co...		Capabilities(0 Pub, 3 Sub)	Online	Session
firesightisetest-firepower.exempl...		Capabilities(0 Pub, 0 Sub)	Offline	Session

从日志您能也确认FMC为TrustSecMetaData (SGT标记)服务订阅-获得了所有标记并且取消预订。

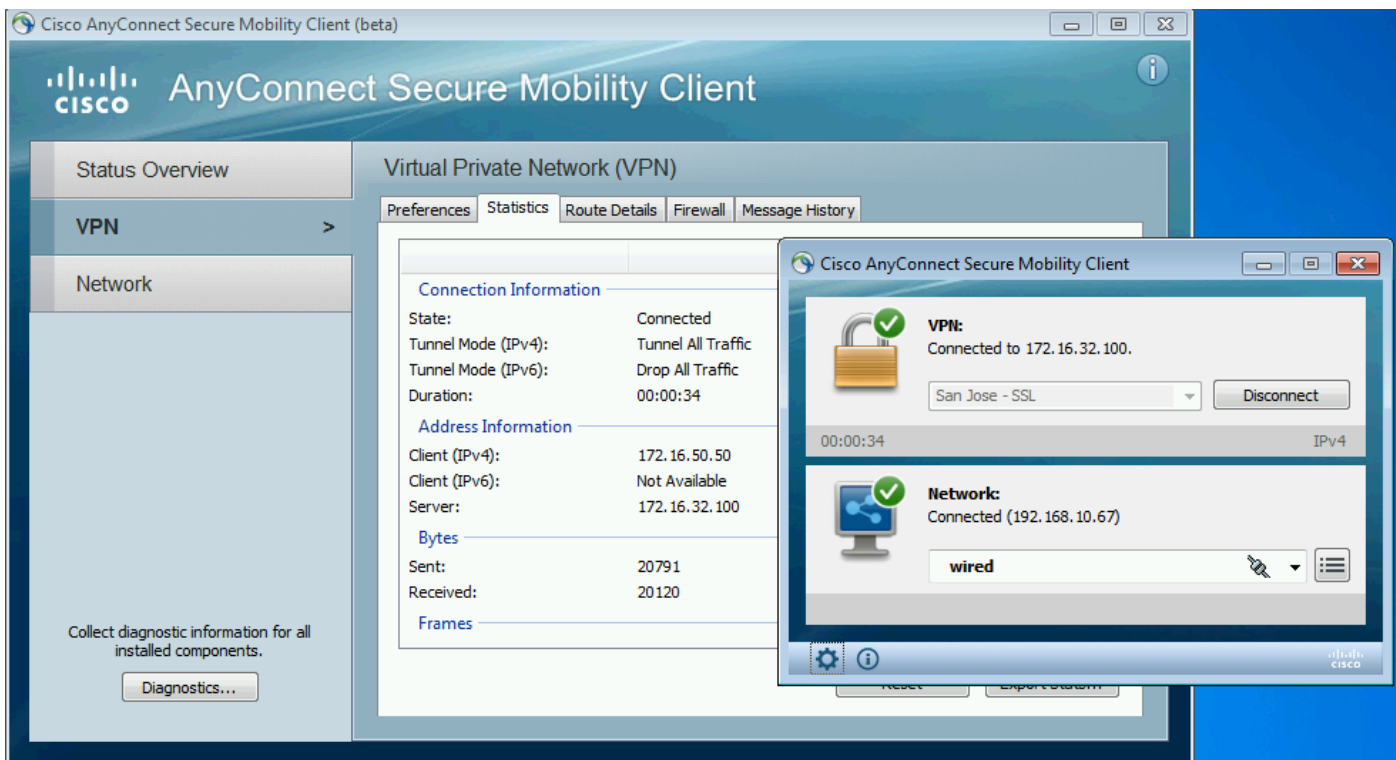
Identity Services Engine Administration console showing the Live Log for client: `iseagent-firepower.example.com-0739edea820cc77e04cc7c44200f661e`. The log table shows the following events:

Client Name	Capability Name	Event Type	Timestamp
firesightisetest-firepower.exempl...		Client offline	11:53:14 PM CET, Dec 1 2015
firesightisetest-firepower.exempl...	TrustSecMetaData-1.0	Client unsubscribed	11:53:14 PM CET, Dec 1 2015
firesightisetest-firepower.exempl...	SessionDirectory-1.0	Client unsubscribed	11:53:13 PM CET, Dec 1 2015
firesightisetest-firepower.exempl...	EndpointProfileMetaData-1.0	Client unsubscribed	11:53:13 PM CET, Dec 1 2015
firesightisetest-firepower.exempl...	SessionDirectory-1.0	Client subscribed	11:53:13 PM CET, Dec 1 2015
firesightisetest-firepower.exempl...	TrustSecMetaData-1.0	Client subscribed	11:53:13 PM CET, Dec 1 2015
firesightisetest-firepower.exempl...	EndpointProfileMetaData-1.0	Client subscribed	11:53:12 PM CET, Dec 1 2015
firesightisetest-firepower.exempl...		Client online	11:53:12 PM CET, Dec 1 2015

VPN会话建立

第一测验为方案被执行，当在ISE的授权不返回正确SGT标记时(NGIPS不允许审计测试)。

一旦VPN会话启用AnyConnect用户界面(UI)能提供更多细节：



ASA能确认会话设立：

```
asav# show vpn-sessiondb anyconnect
```

```
Session Type: AnyConnect
```

```

Username      : Administrator           Index      : 1
Assigned IP   : 172.16.50.50             Public IP  : 192.168.10.67
Protocol        : AnyConnect-Parent SSL-Tunnel DTLS-Tunnel
License         : AnyConnect Essentials
Encryption      : AnyConnect-Parent: (1)none  SSL-Tunnel: (1)RC4  DTLS-Tunnel:
(1)AES128

Hashing         : AnyConnect-Parent: (1)none  SSL-Tunnel: (1)SHA1  DTLS-Tunnel:
(1)SHA1

Bytes Tx       : 11428                      Bytes Rx   :
24604

Group Policy   : POLICY                       Tunnel Group :
SSLVPN

Login Time     : 12:22:59 UTC Wed Dec 2
2015

Duration       :
0h:01m:49s

Inactivity     :
0h:00m:00s

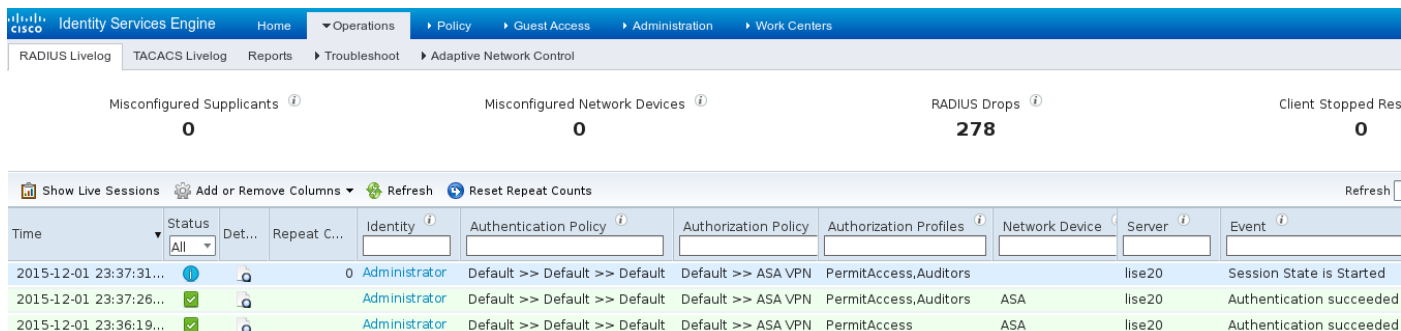
VLAN Mapping   : N/A                          VLAN       :
none

Audt Sess ID   : ac101f6400001000565ee2a3

```


请注意ASA为此验证看到返回的所有SGT标记。ASA没有为TrustSec配置-，以便信息无论如何被跳过。

ISE是也报告成功的授权(在23:36:19的日志) -没有返回的SGT标记：



The screenshot shows the Cisco Identity Services Engine (ISE) interface. At the top, there are navigation tabs for Home, Operations, Policy, Guest Access, Administration, and Work Centers. Below these are sub-tabs for RADIUS Livelog, TACACS Livelog, Reports, Troubleshoot, and Adaptive Network Control. A summary bar displays four metrics: Misconfigured Supplicants (0), Misconfigured Network Devices (0), RADIUS Drops (278), and Client Stopped Res (0). The main area shows a table of live sessions with columns for Time, Status, Det..., Repeat C..., Identity, Authentication Policy, Authorization Policy, Authorization Profiles, Network Device, Server, and Event. Three sessions are listed, all for the user 'Administrator' on device 'ise20'. The first session at 23:37:31... shows 'Session State is Started'. The second at 23:37:26... and the third at 23:36:19... both show 'Authentication succeeded'.

Time	Status	Det...	Repeat C...	Identity	Authentication Policy	Authorization Policy	Authorization Profiles	Network Device	Server	Event
2015-12-01 23:37:31...	🟡		0	Administrator	Default >> Default >> Default	Default >> ASA VPN	PermitAccess,Auditors		ise20	Session State is Started
2015-12-01 23:37:26...	🟢			Administrator	Default >> Default >> Default	Default >> ASA VPN	PermitAccess,Auditors	ASA	ise20	Authentication succeeded
2015-12-01 23:36:19...	🟢			Administrator	Default >> Default >> Default	Default >> ASA VPN	PermitAccess	ASA	ise20	Authentication succeeded

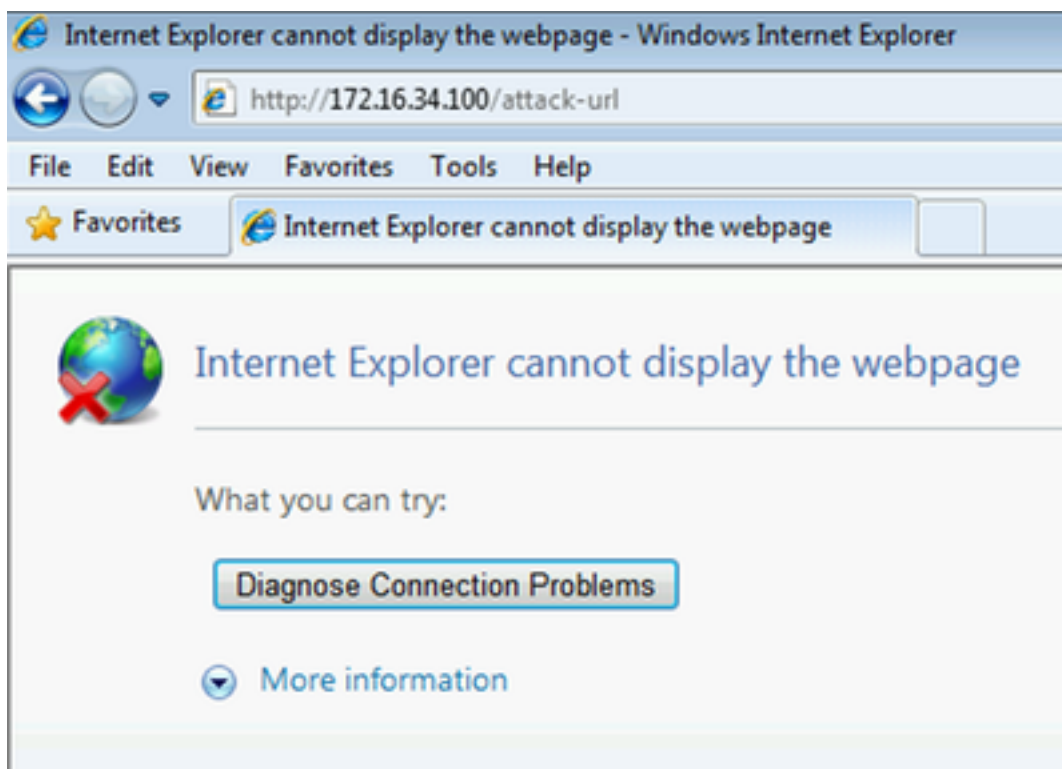
得到会话数据的FMC从MnT

在该阶段在/var/log/messages的FMC报告一个新会话(接收作为pxGrid服务的一个用户)管理员用户名和peform组成员的AD查找的：

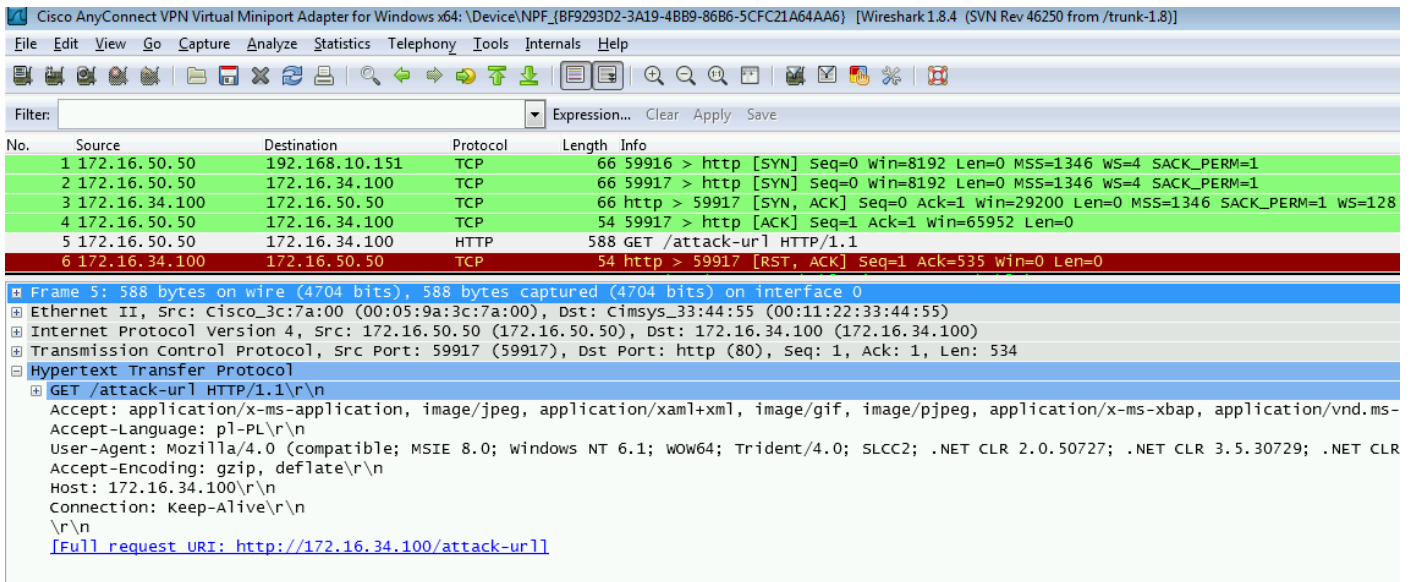
```
firepower SF-IMS[3554]: [17768] ADI:adi.LdapRealm [INFO] search '(|(sAMAccountName=Administrator))' has the following DN: 'CN=Administrator,CN=Users,DC=example,DC=com'.
```

无特权和特许网络访问

当在该阶段用户设法打开Web浏览器，并且访问审计的服务器，连接将终止：



它可以由从客户端采取的数据包捕获确认(TCP根据FMC配置的RST发送)：



一旦ISE配置返回，审计标记ASA会话报告：

```
asav# show vpn-sessiondb anyconnect
```

```
Session Type: AnyConnect
```

```

Username      : Administrator          Index      : 1
Assigned IP   : 172.16.50.50          Public IP   : 192.168.10.67
Protocol        : AnyConnect-Parent SSL-Tunnel DTLS-Tunnel
License         : AnyConnect Essentials
Encryption      : AnyConnect-Parent: (1)none  SSL-Tunnel: (1)RC4  DTLS-Tunnel:
(1)AES128

Hashing         : AnyConnect-Parent: (1)none  SSL-Tunnel: (1)SHA1  DTLS-Tunnel:
(1)SHA1

Bytes Tx        : 11428          Bytes Rx    :
24604

Group Policy    : POLICY          Tunnel Group :
SSLVPN

Login Time      : 12:22:59 UTC Wed Dec 2
2015

Duration        :
0h:01m:49s

Inactivity      :
0h:00m:00s

VLAN Mapping    : N/A          VLAN        :
none

```

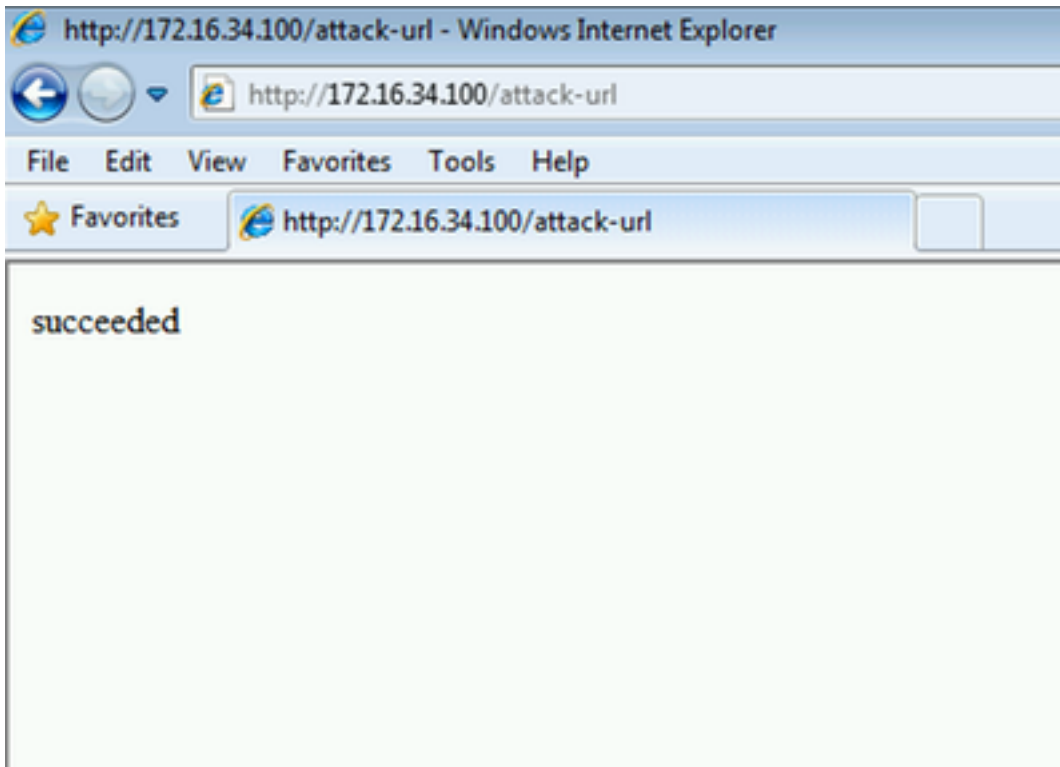
```
Audt Sess ID : ac101f6400001000565ee2a3
```

```
Security Grp : 9
```

ISE是也报告成功的授权(在23:37:26的日志) - SGT标记审计员返回：

Time	Status	Det...	Repeat C...	Identity	Authentication Policy	Authorization Policy	Authorization Profiles	Network Device	Server	Event
2015-12-01 23:37:31...			0	Administrator	Default >> Default >> Default	Default >> ASA VPN	PermitAccess,Auditors		lise20	Session State is Started
2015-12-01 23:37:26...				Administrator	Default >> Default >> Default	Default >> ASA VPN	PermitAccess,Auditors	ASA	lise20	Authentication succeeded
2015-12-01 23:36:19...				Administrator	Default >> Default >> Default	Default >> ASA VPN	PermitAccess	ASA	lise20	Authentication succeeded

并且用户能访问被提及的服务：



FMC记录日志访问

此活动可以由连接事件报告确认：

Jump to...	Last Packet	Action	Initiator IP	Initiator User	Responder IP	Ingress Security Zone	Application Protocol	Access Control Policy	Access Control Rule	Security Group Tag	Ingress Interface	NetBIOS Domain	Initiator Packets	Initiator Bytes	Count
		Allow	172.16.50.50	AD-Realm\Administrator (LDAP)	172.16.34.100	Internal	HTTP	CustomPolicy	PermitPrivileged-HTTP	Auditors	eth1		10	1,680	1
		Allow	172.16.50.50	AD-Realm\Administrator (LDAP)	172.16.34.100	Internal	HTTP	CustomPolicy	PermitPrivileged-HTTP	Auditors	eth1		12	1,512	1
		Allow	172.16.50.50	AD-Realm\Administrator (LDAP)	172.16.34.100	Internal	HTTP	CustomPolicy	PermitPrivileged-HTTP	Auditors	eth1		8	1,312	1
		Allow	172.16.50.50	AD-Realm\Administrator (LDAP)	172.16.34.100	Internal	HTTP	CustomPolicy	PermitPrivileged-HTTP	Auditors	eth1		22	3,752	1
		Block with reset	172.16.50.50	AD-Realm\Administrator (LDAP)	172.16.34.100	Internal	HTTP	CustomPolicy	DenyUnprivileged-HTTP		eth1		25	3,928	5

首先，用户没有安排SGT标记分配和点击DenyUnprivileged HTTP规则。一旦审计员的标记由ISE (并且获取由FMC)规则分配，使用PermitPrivileged HTTP，并且访问允许。

并且请注意那有显示，多列删除，因为通常访问控制规则和安全组标记显示，当一个最后列(和水平的滚动条需要使用)。可以在将来保存和重新使用定制的视图。

故障排除

FMC调试

要检查adi组件日志负责对身份服务请检查/var/log/messages文件：

```
[23509] ADI_ISE_Test_Help:ADI_ISE_Test_Help [INFO] Parsing command line arguments...
[23509] ADI_ISE_Test_Help:adi.DirectoryTestHandler [INFO] test: ISE connection.
[23509] ADI_ISE_Test_Help:adi.ISEConnection [INFO] Preparing ISE Connection objects...

[23509] ADI_ISE_Test_Help:adi.ISEConnection [INFO] Preparing subscription objects...

[23509] ADI_ISE_Test_Help:adi.ISEConnection [INFO] subscribed successfully to
EndpointProfileMetaDataCapability
[23509] ADI_ISE_Test_Help:adi.ISEConnection [INFO] registered callback for capability
EndpointProfileMetaDataCapability
[23509] ADI_ISE_Test_Help:adi.ISEConnection [INFO] subscribed successfully to
TrustSecMetaDataCapability
[23509] ADI_ISE_Test_Help:adi.ISEConnection [INFO] registered callback for capability
TrustSecMetaDataCapability
[23509] ADI_ISE_Test_Help:adi.ISEConnection [INFO] subscribed successfully to
SessionDirectoryCapability
[23509] ADI_ISE_Test_Help:adi.ISEConnection [INFO] registered callback for capability
SessionDirectoryCapability
[23509] ADI_ISE_Test_Help:adi.ISEConnection [INFO] Connecting to ISE server...
[23509] ADI_ISE_Test_Help:adi.ISEConnection [INFO] Beginning to connect to ISE server...

[23510] ADI_ISE_Test_Help:adi.ISEConnection [INFO] Captured Jabberwerx log:2015-12-01T23:10:44 [
INFO]: _reconnection_thread started
[23510] ADI_ISE_Test_Help:adi.ISEConnection [INFO] Captured Jabberwerx log:2015-12-01T23:10:44 [
INFO]: pxgrid connection init done successfully
[23510] ADI_ISE_Test_Help:adi.ISEConnection [INFO] Captured Jabberwerx log:2015-12-01T23:10:44 [
INFO]: connecting to host lise20.example.com .....
[23511] ADI_ISE_Test_Help:adi.ISEConnection [INFO] Captured Jabberwerx log:2015-12-01T23:10:44 [
INFO]: stream opened
[23511] ADI_ISE_Test_Help:adi.ISEConnection [INFO] Captured Jabberwerx log:2015-12-01T23:10:44 [
INFO]: EXTERNAL authentication complete
[23511] ADI_ISE_Test_Help:adi.ISEConnection [INFO] Captured Jabberwerx log:2015-12-01T23:10:44 [
INFO]: authenticated successfully (sasl mechanism: EXTERNAL)
[23510] ADI_ISE_Test_Help:adi.ISEConnection [INFO] Captured Jabberwerx log:2015-12-01T23:10:45 [
INFO]: successfully subscribed
message repeated 2 times
[23510] ADI_ISE_Test_Help:adi.ISEConnection [INFO] Queried 1 bulk download
hostnames:lise20.example.com:8910
[23509] ADI_ISE_Test_Help:adi.ISEConnection [INFO] ...successfully connected to ISE
server.
[23509] ADI_ISE_Test_Help:adi.ISEConnection [INFO] Starting bulk download
[23514] ADI_ISE_Test_Help:adi.ISEConnection [INFO] Captured Jabberwerx log:2015-12-01T23:10:45 [
INFO]: curl_easy_setopt() for CURLOPT_URL:
'https://lise20.example.com:8910/pxgrid/mnt/sd/getSessionListByTime'
[8893] ADI:ADI [INFO] : sub command emits:* Trying 172.16.31.210...'
[8893] ADI:ADI [INFO] : sub command emits:* Connected to lise20.example.com (172.16.31.210)
port 8910 (#0)'
[8893] ADI:ADI [INFO] : sub command emits:* Cipher selection:
ALL:!EXPORT:!EXPORT40:!EXPORT56:!aNULL:!LOW:!RC4:@STRENGTH'
[8893] ADI:ADI [INFO] : sub command emits:* SSL connection using TLSv1.2 / DHE-RSA-AES256-
SHA256'
[8893] ADI:ADI [INFO] : sub command emits:* Server certificate:'
[8893] ADI:ADI [INFO] : sub command emits:* ^I subject: CN=lise20.example.com'
[8893] ADI:ADI [INFO] : sub command emits:* ^I start date: 2015-11-21 14:40:36 GMT'
```

```

[8893] ADI:ADI [INFO] : sub command emits: '* ^I expire date: 2017-11-20 14:40:36 GMT'
[8893] ADI:ADI [INFO] : sub command emits: '* ^I common name: lise20.example.com (matched)'

[8893] ADI:ADI [INFO] : sub command emits: '* ^I issuer: DC=com; DC=example; CN=example-WIN-CA'
[8893] ADI:ADI [INFO] : sub command emits: '* ^I SSL certificate verify ok.'
[8893] ADI:ADI [INFO] : sub command emits: '> POST /pxgrid/mnt/sd/getSessionListByTime
HTTP/1.1^M'
[8893] ADI:ADI [INFO] : sub command emits: 'Host: lise20.example.com:8910^M'
[8893] ADI:ADI [INFO] : sub command emits: 'Accept: /*/*^M'
[8893] ADI:ADI [INFO] : sub command emits: 'Content-Type: application/xml^M'
[8893] ADI:ADI [INFO] : sub command emits: 'user:firesightisetest-firepower.example.com-0739edea820cc77e04cc7c44200f661e@xgrid.cisco.com^M'
[8893] ADI:ADI [INFO] : sub command emits: 'Content-Length: 269^M'
[8893] ADI:ADI [INFO] : sub command emits: '^M'
[8893] ADI:ADI [INFO] : sub command emits: '* upload completely sent off: 269 out of 269 bytes'

[8893] ADI:ADI [INFO] : sub command emits: '< HTTP/1.1 200 OK^M'
[8893] ADI:ADI [INFO] : sub command emits: '< Date: Tue, 01 Dec 2015 23:10:45 GMT^M'
[8893] ADI:ADI [INFO] : sub command emits: '< Content-Type: application/xml^M'
[8893] ADI:ADI [INFO] : sub command emits: '< Content-Length: 1287^M'
[8893] ADI:ADI [INFO] : sub command emits: '< Server: ^M'
[8893] ADI:ADI [INFO] : sub command emits: '< ^M'
[8893] ADI:ADI [INFO] : sub command emits: '* Connection #0 to host lise20.example.com left intact'

[23509] ADI_ISE_Test_Help:adi.ISEConnection [INFO] bulk download processed 0 entries.
[23509] ADI_ISE_Test_Help:adi.ISEConnection [INFO] disconnecting pxgrid
[23509] ADI_ISE_Test_Help:adi.ISEConnection [INFO] Captured Jabberwerx log:2015-12-01T23:10:45 [
INFO]: Starting reconnection stop
[23510] ADI_ISE_Test_Help:adi.ISEConnection [INFO] Captured Jabberwerx log:2015-12-01T23:10:45 [
INFO]: _reconnection_thread exited
[23511] ADI_ISE_Test_Help:adi.ISEConnection [INFO] Captured Jabberwerx log:2015-12-01T23:10:45 [
INFO]: stream closed; err_dom=(null) 2015-12-01T23:10:45 [ INFO]: clientDisconnectedCb ->
destroying client object
[23511] ADI_ISE_Test_Help:adi.ISEConnection [INFO] Captured Jabberwerx log:2015-12-01T23:10:45 [
INFO]: pxgrid connection shutdown done successfully
[23511] ADI_ISE_Test_Help:adi.ISEConnection [INFO] Captured Jabberwerx log:2015-12-01T23:10:45 [
INFO]: Exiting from event base loop
[23509] ADI_ISE_Test_Help:adi.ISEConnection [INFO] Captured Jabberwerx log:2015-12-01T23:10:45 [
INFO]: successfully disconnected
[23509] ADI_ISE_Test_Help:adi.ISEConnection [INFO] Captured Jabberwerx log:2015-12-01T23:10:45 [
INFO]: connection disconnect done .....
```

```

[23509] ADI_ISE_Test_Help:adi.ISEConnection [INFO] destroying pxgrid reconnection
[23509] ADI_ISE_Test_Help:adi.ISEConnection [INFO] destroying underlying pxgrid
connection
[23509] ADI_ISE_Test_Help:adi.ISEConnection [INFO] destroying pxgrid config
[23509] ADI_ISE_Test_Help:adi.ISEConnection [INFO] ISE identity feed destructor called

[23509] ADI_ISE_Test_Help:ADI_ISE_Test_Help [INFO] /usr/local/sf/bin/adi_iseTestHelp cleanly
exits.
[23509] ADI_ISE_Test_Help:adi.ISEConnection [INFO] Captured Jabberwerx log:2015-12-01T23:10:45 [
INFO]: pxgrid library has been uninitialized
[8893] ADI:ADI [INFO] Parent done waiting, child completed with integer status 0
要变得更加详细调试它是可能结束adi进程(从在sudo以后的根)和运行它以调试参数 :
```

```

root@firepower:/var/log# ps ax | grep adi
24047 ?          Sl          0:00 /usr/local/sf/bin/adi
24090 pts/0      S+          0:00 grep adi
root@firepower:/var/log# kill -9 24047
root@firepower:/var/log# /usr/local/sf/bin/adi --debug
Dec 01 23:14:34 firepower SF-IMS[24106]: [24106] ADI:adi.Adi [DEBUG] adi.cpp:319:HandleLog():
ADI Created, awaiting config
```

```
Dec 01 23:14:34 firepower SF-IMS[24106]: [24106] ADI:config [DEBUG]
config.cpp:289:ProcessConfigGlobalSettings(): Parsing global settings
<.....a lot of detailed output with data.....>
```

SGT查询通过pxGrid

操作被执行，当Test按钮在ISE集成部分时单击或，当SGT列表刷新时，当增加在访问控制策略时的规则。

```
Dec 01 23:14:38 firepower SF-IMS[24106]: [24139] ADI:adi.ISEConnection [DEBUG]
adi.cpp:319:HandleLog(): Querying Security Group metaData...
Dec 01 23:14:38 firepower SF-IMS[24106]: [24139] ADI:adi.pxGridAdapter [DEBUG]
adi.cpp:319:HandleLog(): pxgrid_connection_query(connection*:0x10c7da0, capability: 0x1064510,
request:<getSecurityGroupListRequest xmlns='http://www.cisco.com/pxgrid/identity'/>)...
Dec 01 23:14:38 firepower SF-IMS[24106]: [24139] ADI:adi.pxGridAdapter [DEBUG]
adi.cpp:319:HandleLog(): returns [OK|<ns5:getSecurityGroupListResponse
xmlns:ns2='http://www.cisco.com/pxgrid' xmlns:ns3='http://www.cisco.com/pxgrid/net'
xmlns:ns4='http://www.cisco.com/pxgrid/admin' xmlns:ns5='http://www.cisco.com/pxgrid/identity'
xmlns:ns6='http://www.cisco.com/pxgrid/eps' xmlns:ns7='http://www.cisco.com/pxgrid/netcap'
xmlns:ns8='http://www.cisco.com/pxgrid/anc'><ns5:SecurityGroups><ns5:SecurityGroup><ns5:id>fc6f9
470-6d8f-11e5-978e-005056bf2f0a</ns5:id><ns5:name>Unknown</ns5:name><ns5:description>Unknown
Security
Group</ns5:description><ns5:tag>0</ns5:tag></ns5:SecurityGroup><ns5:SecurityGroup><ns5:id>fc7c8c
c0-6d8f-11e5-978e-005056bf2f0a</ns5:id><ns5:name>ANY</ns5:name><ns5:description>Any Security
Group</ns5:description><ns5:tag>65535</ns5:tag></ns5:SecurityGroup><ns5:SecurityGroup><ns5:id>fc
f95de0-6d8f-11e5-978e-005056bf2f0a</ns5:id><ns5:name>Auditors</ns5:name><ns5:description>Auditor
Security
Group</ns5:description><ns5:tag>9</ns5:tag></ns5:SecurityGroup><ns5:SecurityGroup><ns5:id>fd14fc
30-6d8f-11e5-978e-005056bf2f0a</ns5:id><ns5:name>BYOD</ns5:name><ns5:description>BYOD Security
Group</ns5:description><ns5:tag>15</ns5:tag></ns5:SecurityGroup><ns5:SecurityGroup><ns5:id>fd2fb
020-6d8f-11e5-978e-
005056bf2f0a</ns5:id><ns5:name>Contractors</ns5:name><ns5:description>Contractor Security
Group</ns5:description><ns5:tag>5</ns5:tag></ns5:SecurityGroup><ns5:SecurityGroup><ns5:id>fd4e34
a0-6d8f-11e5-978e-005056bf2f0a</ns5:id><ns5:name>Developers</ns5:name><ns5:description>Developer
Security
Group</ns5:description><ns5:tag>8</ns5:tag></ns5:SecurityGroup><ns5:SecurityGroup><ns5:id>fd6d2e
50-6d8f-11e5-978e-
005056bf2f0a</ns5:id><ns5:name>Development_Servers</ns5:name><ns5:description>Development
Servers Security
Group</ns5:description><ns5:tag>12</ns5:tag></ns5:SecurityGroup><ns5:SecurityGroup><ns5:id>fda10
f90-6d8f-11e5-978e-005056bf2f0a</ns5:id><ns5:name>Employees</ns5:name><ns5:description>Employee
Security
Group</ns5:description><ns5:tag>4</ns5:tag></ns5:SecurityGroup><ns5:SecurityGroup><ns5:id>fdbcd4
f0-6d8f-11e5-978e-005056bf2f0a</ns5:id><ns5:name>Guests</ns5:name><ns5:description>Guest
Security
Group</ns5:description><ns5:tag>6</ns5:tag></ns5:SecurityGroup><ns5:SecurityGroup><ns5:id>fdd9ab
c0-6d8f-11e5-978e-
005056bf2f0a</ns5:id><ns5:name>Network_Services</ns5:name><ns5:description>Network Services
Security
Group</ns5:description><ns5:tag>3</ns5:tag></ns5:SecurityGroup><ns5:SecurityGroup><ns5:id>fdf4d4
e0-6d8f-11e5-978e-005056bf2f0a</ns5:id><ns5:name>PCI_Servers</ns5:name><ns5:description>PCI
Servers Security
Group</ns5:description><ns5:tag>14</ns5:tag></ns5:SecurityGroup><ns5:SecurityGroup><ns5:id>fella
bb0-6d8f-11e5-978e-
005056bf2f0a</ns5:id><ns5:name>Point_of_Sale_Systems</ns5:name><ns5:description>Point of Sale
Security
Group</ns5:description><ns5:tag>10</ns5:tag></ns5:SecurityGroup><ns5:SecurityGroup><ns5:id>fe2d2
2f0-6d8f-11e5-978e-
005056bf2f0a</ns5:id><ns5:name>Production_Servers</ns5:name><ns5:description>Production Servers
Security
Group</ns5:description><ns5:tag>11</ns5:tag></ns5:SecurityGroup><ns5:SecurityGroup><ns5:id>fe487
320-6d8f-11e5-978e-
```

```

005056bf2f0a</ns5:id><ns5:name>Production_Users</ns5:name><ns5:description>Production User
Security
Group</ns5:description><ns5:tag>7</ns5:tag></ns5:SecurityGroup><ns5:SecurityGroup><ns5:id>fe62d8
f0-6d8f-11e5-978e-
005056bf2f0a</ns5:id><ns5:name>Quarantined_Systems</ns5:name><ns5:description>Quarantine
Security
Group</ns5:description><ns5:tag>255</ns5:tag></ns5:SecurityGroup><ns5:SecurityGroup><ns5:id>fe7d
3ec0-6d8f-11e5-978e-005056bf2f0a</ns5:id><ns5:name>Test_Servers</ns5:name><ns5:description>Test
Servers Security
Group</ns5:description><ns5:tag>13</ns5:tag></ns5:SecurityGroup><ns5:SecurityGroup><ns5:id>fe99c
770-6d8f-11e5-978e-
005056bf2f0a</ns5:id><ns5:name>TrustSec_Devices</ns5:name><ns5:description>TrustSec Devices
Security
Group</ns5:description><ns5:tag>2</ns5:tag></ns5:SecurityGroup></ns5:SecurityGroups></ns5:getSec
urityGroupListResponse>]

```

对于更加好的图xml从该日志的内容可以复制到xml文件和由Web浏览器打开。您能确认特定SGT (审计)接收以及其他SGT在ISE定义：



```

- <ns5:getSecurityGroupListResponse>
  - <ns5:SecurityGroups>
    - <ns5:SecurityGroup>
      <ns5:id>fc6f9470-6d8f-11e5-978e-005056bf2f0a</ns5:id>
      <ns5:name>Unknown</ns5:name>
      <ns5:description>Unknown Security Group</ns5:description>
      <ns5:tag>0</ns5:tag>
    </ns5:SecurityGroup>
    - <ns5:SecurityGroup>
      <ns5:id>fc7c8cc0-6d8f-11e5-978e-005056bf2f0a</ns5:id>
      <ns5:name>ANY</ns5:name>
      <ns5:description>Any Security Group</ns5:description>
      <ns5:tag>65535</ns5:tag>
    </ns5:SecurityGroup>
    - <ns5:SecurityGroup>
      <ns5:id>fcf95de0-6d8f-11e5-978e-005056bf2f0a</ns5:id>
      <ns5:name>Auditors</ns5:name>
      <ns5:description>Auditor Security Group</ns5:description>
      <ns5:tag>9</ns5:tag>
    </ns5:SecurityGroup>
    - <ns5:SecurityGroup>
      <ns5:id>fd14fc30-6d8f-11e5-978e-005056bf2f0a</ns5:id>
      <ns5:name>BYOD</ns5:name>
      <ns5:description>BYOD Security Group</ns5:description>
      <ns5:tag>15</ns5:tag>
    </ns5:SecurityGroup>

```

会话查询通过对MnT的其余API

那也是测试操作的部分(请注意MnT主机名和端口通过pxGrid通过)。使用大批会话下载：

```
Dec 01 23:14:38 firepower SF-IMS[24106]: [24139] ADI:adi.ISEConnection [DEBUG]
adi.cpp:319:HandleLog(): Querying Security Group metaData...
Dec 01 23:14:38 firepower SF-IMS[24106]: [24139] ADI:adi.pxGridAdapter [DEBUG]
adi.cpp:319:HandleLog(): pxgrid_connection_query(connection*:0x10c7da0, capability: 0x1064510,
request:<getSecurityGroupListRequest xmlns='http://www.cisco.com/pxgrid/identity'/>)...
Dec 01 23:14:38 firepower SF-IMS[24106]: [24139] ADI:adi.pxGridAdapter [DEBUG]
adi.cpp:319:HandleLog(): returns [OK|<ns5:getSecurityGroupListResponse
xmlns:ns2='http://www.cisco.com/pxgrid' xmlns:ns3='http://www.cisco.com/pxgrid/net'
xmlns:ns4='http://www.cisco.com/pxgrid/admin' xmlns:ns5='http://www.cisco.com/pxgrid/identity'
xmlns:ns6='http://www.cisco.com/pxgrid/eps' xmlns:ns7='http://www.cisco.com/pxgrid/netcap'
xmlns:ns8='http://www.cisco.com/pxgrid/anc'><ns5:SecurityGroups><ns5:SecurityGroup><ns5:id>fc6f9
470-6d8f-11e5-978e-005056bf2f0a</ns5:id><ns5:name>Unknown</ns5:name><ns5:description>Unknown
Security
Group</ns5:description><ns5:tag>0</ns5:tag></ns5:SecurityGroup><ns5:SecurityGroup><ns5:id>fc7c8c
c0-6d8f-11e5-978e-005056bf2f0a</ns5:id><ns5:name>ANY</ns5:name><ns5:description>Any Security
Group</ns5:description><ns5:tag>65535</ns5:tag></ns5:SecurityGroup><ns5:SecurityGroup><ns5:id>fc
f95de0-6d8f-11e5-978e-005056bf2f0a</ns5:id><ns5:name>Auditors</ns5:name><ns5:description>Auditor
Security
Group</ns5:description><ns5:tag>9</ns5:tag></ns5:SecurityGroup><ns5:SecurityGroup><ns5:id>fd14fc
30-6d8f-11e5-978e-005056bf2f0a</ns5:id><ns5:name>BYOD</ns5:name><ns5:description>BYOD Security
Group</ns5:description><ns5:tag>15</ns5:tag></ns5:SecurityGroup><ns5:SecurityGroup><ns5:id>fd2fb
020-6d8f-11e5-978e-
005056bf2f0a</ns5:id><ns5:name>Contractors</ns5:name><ns5:description>Contractor Security
Group</ns5:description><ns5:tag>5</ns5:tag></ns5:SecurityGroup><ns5:SecurityGroup><ns5:id>fd4e34
a0-6d8f-11e5-978e-005056bf2f0a</ns5:id><ns5:name>Developers</ns5:name><ns5:description>Developer
Security
Group</ns5:description><ns5:tag>8</ns5:tag></ns5:SecurityGroup><ns5:SecurityGroup><ns5:id>fd6d2e
50-6d8f-11e5-978e-
005056bf2f0a</ns5:id><ns5:name>Development_Servers</ns5:name><ns5:description>Development
Servers Security
Group</ns5:description><ns5:tag>12</ns5:tag></ns5:SecurityGroup><ns5:SecurityGroup><ns5:id>fda10
f90-6d8f-11e5-978e-005056bf2f0a</ns5:id><ns5:name>Employees</ns5:name><ns5:description>Employee
Security
Group</ns5:description><ns5:tag>4</ns5:tag></ns5:SecurityGroup><ns5:SecurityGroup><ns5:id>fdbcd4
f0-6d8f-11e5-978e-005056bf2f0a</ns5:id><ns5:name>Guests</ns5:name><ns5:description>Guest
Security
Group</ns5:description><ns5:tag>6</ns5:tag></ns5:SecurityGroup><ns5:SecurityGroup><ns5:id>fdd9ab
c0-6d8f-11e5-978e-
005056bf2f0a</ns5:id><ns5:name>Network_Services</ns5:name><ns5:description>Network Services
Security
Group</ns5:description><ns5:tag>3</ns5:tag></ns5:SecurityGroup><ns5:SecurityGroup><ns5:id>fdf4d4
e0-6d8f-11e5-978e-005056bf2f0a</ns5:id><ns5:name>PCI_Servers</ns5:name><ns5:description>PCI
Servers Security
Group</ns5:description><ns5:tag>14</ns5:tag></ns5:SecurityGroup><ns5:SecurityGroup><ns5:id>fe11a
bb0-6d8f-11e5-978e-
005056bf2f0a</ns5:id><ns5:name>Point_of_Sale_Systems</ns5:name><ns5:description>Point of Sale
Security
Group</ns5:description><ns5:tag>10</ns5:tag></ns5:SecurityGroup><ns5:SecurityGroup><ns5:id>fe2d2
2f0-6d8f-11e5-978e-
005056bf2f0a</ns5:id><ns5:name>Production_Servers</ns5:name><ns5:description>Production Servers
Security
Group</ns5:description><ns5:tag>11</ns5:tag></ns5:SecurityGroup><ns5:SecurityGroup><ns5:id>fe487
320-6d8f-11e5-978e-
005056bf2f0a</ns5:id><ns5:name>Production_Users</ns5:name><ns5:description>Production User
Security
Group</ns5:description><ns5:tag>7</ns5:tag></ns5:SecurityGroup><ns5:SecurityGroup><ns5:id>fe62d8
f0-6d8f-11e5-978e-
005056bf2f0a</ns5:id><ns5:name>Quarantined_Systems</ns5:name><ns5:description>Quarantine
Security
Group</ns5:description><ns5:tag>255</ns5:tag></ns5:SecurityGroup><ns5:SecurityGroup><ns5:id>fe7d
```



```
3ec0-6d8f-11e5-978e-005056bf2f0a</ns5:id><ns5:name>Test_Servers</ns5:name><ns5:description>Test
Servers Security
Group</ns5:description><ns5:tag>13</ns5:tag></ns5:SecurityGroup><ns5:SecurityGroup><ns5:id>fe99c
770-6d8f-11e5-978e-
005056bf2f0a</ns5:id><ns5:name>TrustSec_Devices</ns5:name><ns5:description>TrustSec Devices
Security
Group</ns5:description><ns5:tag>2</ns5:tag></ns5:SecurityGroup></ns5:SecurityGroups></ns5:getSec
urityGroupListResponse>]
```

并且解析的结果(1激活的会话接收) :

```
Dec 01 23:14:39 firepower SF-IMS[24106]: [24142] ADI:adi.ISESessionEntry [DEBUG]
adi.cpp:319:HandleLog(): Parsing incoming DOM resulted in following ISESessionEntry:
{gid = ac101f6400007000565d597f, timestamp = 2015-12-01T23:37:31.191+01:00,
state = Started, session_id = 91200007, nas_ip = 172.16.31.100,
mac_addr = 08:00:27:23:E6:F2, ip = 172.16.50.50, user_name = Administrator,
sgt = Auditors, domain = example.com, device_name = Windows7-Workstation}
```

在该阶段NGIPS是设法关联该用户名(和域)与领域AD用户名 :

```
Dec 01 23:14:39 firepower SF-IMS[24106]: [24142] ADI:adi.RealmContainer [DEBUG] adi.cpp:319
:HandleLog(): findRealm: Found Realm for domain example.com
Dec 01 23:14:39 firepower SF-IMS[24106]: [24142] ADI:adi.ISEConnectionSub [DEBUG]
adi.cpp:319:HandleLog(): userName = 'Administrator' realmId = 2, ipAddress = 172.16.50.50
```

LDAP用于找到用户和组成员 :

```
Dec 01 23:14:39 firepower SF-IMS[24106]: [24142] ADI:adi.LdapRealm [INFO] adi.cpp:322:
HandleLog(): search '(|(sAMAccountName=Administrator))' has the following
DN: 'CN=Administrator,CN=Users,DC=example,DC=com'.
Dec 01 23:14:39 firepower SF-IMS[24106]: [24142] ADI:adi.LdapRealm [DEBUG] adi.cpp:319:
HandleLog(): getUserIdentifier: searchfield sAMAccountName has display naming attr:
Administrator.
```

ISE调试

在启用pxGrid组件的跟踪级别调试以后其可能检查每操作(但是没有有效负载/数据请喜欢在FMC)。

与SGT标记检索的示例 :

```
2015-12-02 00:05:39,352 DEBUG [pool-1-thread-14][]
cisco.pxgrid.controller.query.CoreAuthorizationManager -::
::- checking core authorization (topic=TrustSecMetaData, user=firesightisetest-
firepower.example.com
-0739e0dea820cc77e04cc7c44200f661e@xgrid.cisco.com, operation=subscribe)...
2015-12-02 00:05:39,358 TRACE [pool-1-thread-14][] cisco.pxgrid.controller.common.
LogAdvice -:::- args: [TrustSecMetaData, subscribe, firesightisetest-firepower.example.com-
0739e0dea820cc77e04cc7c44200f661e@xg
rid.cisco.com]
2015-12-02 00:05:39,359 DEBUG [pool-1-thread-14][] cisco.pxgrid.controller.persistence.
XgridDaoImpl -:::- groups [Any, Session] found for client firesightisetest-firepower.
example.com-0739e0dea820cc77e04cc7c44200f661e@xgrid.cisco.com
2015-12-02 00:05:39,360 DEBUG [pool-1-thread-14][] cisco.pxgrid.controller.persistence.
XgridDaoImpl -:::- permitted rule found for Session TrustSecMetaData subscribe.
total rules found 1
```

Bug

[CSCuv32295](#) - ISE可能发送域信息在用户名字段

[CSCus53796](#) -无法获得主机FQDN其余容量查询的

[CSCuv43145](#) - PXGRID &标识映射服务重新启动，信任存储导入/删除

参考

- [配置与ISE和Firepower集成的修正服务](#)
- [配置在一个分布式ISE环境的pxGrid](#)
- [部署与思科pxGrid的如何证书：配置CA签名的ISE pxGrid节点和CA签名的pxGrid客户端](#)
- [ISE版本1.3与IPS pxLog应用程序的pxGrid集成](#)
- [思科身份服务引擎管理员指南，版本2.0](#)
- [思科身份服务引擎API参考指南，版本1.2 –外部宁静的S简介...](#)
- [思科身份服务引擎API参考指南，版本1.2 –监控的RES简介...](#)
- [思科身份服务引擎管理员指南，版本1.3](#)
- [技术支持和文档 - Cisco Systems](#)