

Configurar a integração ISE 2.4 pxGrid IND 1.6.1

Contents

[Introduction](#)

[Prerequisites](#)

[Requirements](#)

[Componentes Utilizados](#)

[Configurar](#)

[Diagrama de fluxo de alto nível](#)

[Configurações](#)

[Etapa 1. Configurar atributos personalizados de endpoint no ISE](#)

[Etapa 2. Configurar política de perfil usando atributos personalizados](#)

[Etapa 3. Ativar atributos personalizados para aplicação de perfil](#)

[Etapa 4. Exportar certificado de identidade IND](#)

[Etapa 5. Carregar certificado de identidade IND para armazenamento confiável ISE](#)

[Etapa 6. Gerar certificado para IND](#)

[Passo 7. Baixar cadeia de certificados no formato PKCS12](#)

[Etapa 8. Carregar cadeia de certificados em IND](#)

[Etapa 9. Configurar o Servidor de Políticas no IND](#)

[Etapa 10. Configurar a integração pxGrid em IND](#)

[Etapa 11. Aprovar IND no ISE](#)

[Etapa 12. Ative o serviço pxGrid em IND](#)

[Verificar](#)

[Verificação do ISE](#)

[Verificação de IND](#)

[Troubleshoot](#)

[Status de sincronização preso em Sincronizado no IND](#)

[Nem todos os endpoints são compartilhados com o ISE](#)

[assetTag e AssetGroup não estão disponíveis no ISE](#)

Introduction

Este documento descreve como configurar e solucionar problemas do Identity Services Engine (ISE) 2.4 e do Industrial Network Diretor 1.6.1-4, integração sobre pxGrid (Platform Exchange Grid). O Cisco IND está registrado com o pxGrid como um editor e publica informações sobre atributos de endpoint para o ISE para o dicionário IOTASSET.

Prerequisites

Requirements

A Cisco recomenda que você tenha conhecimento básico sobre estes tópicos:

- Cisco Identity Service Engine
- Cisco Industrial Network Diretor

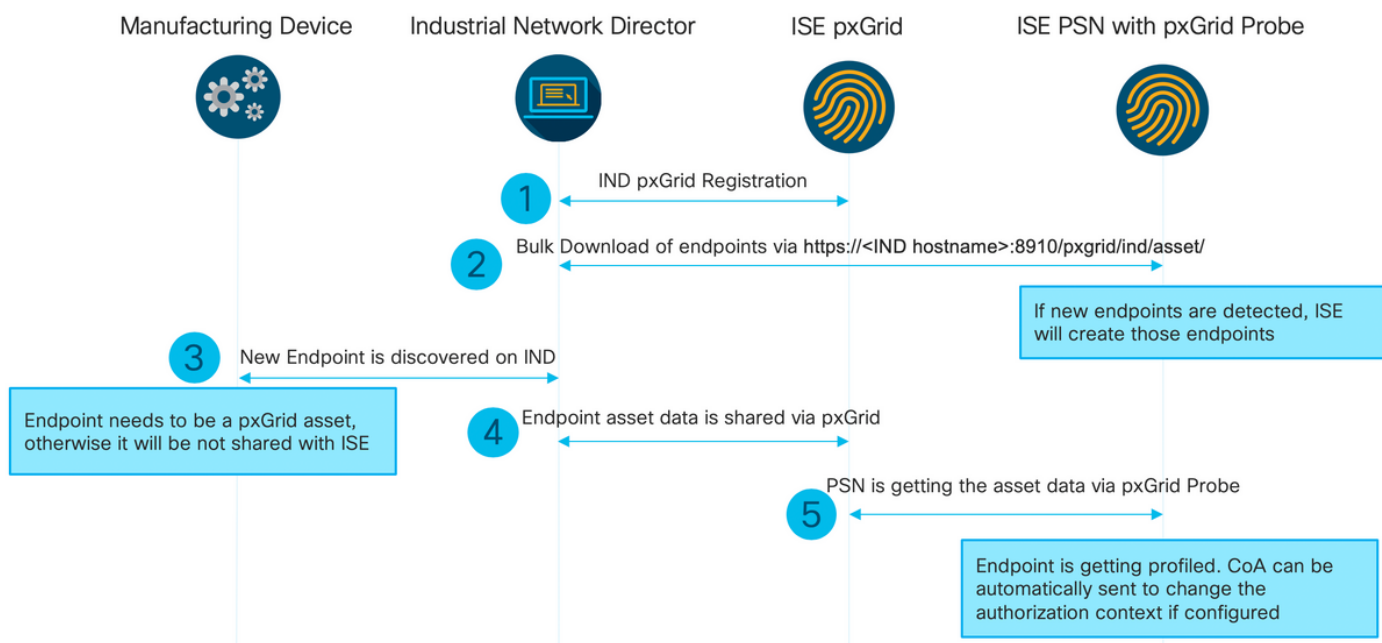
Componentes Utilizados

As informações neste documento são baseadas nestas versões de software e hardware:

- Cisco Identity Service Engine versão 2.4 p6
- Diretor de rede industrial 1.6.1-4

Configurar

Diagrama de fluxo de alto nível



1. O IND se registra com ISE através do pxGrid versão 2 no nó ISE pxGrid. Registros correspondentes do IND (application.log):

```

2019-05-22 14:31:17,770:INFO:qtp281049997-52711:PxgridPublisher:: Connect start
2019-05-22 14:31:17,770:INFO:qtp281049997-52711:PxgridPublisher:: Hostname:WIN2012-AAA
IpAddress:10.62.145.130
2019-05-22 14:31:17,770:INFO:qtp281049997-52711:PxgridPublisher:: pxGrid
RestBaseUrl:https://WIN2012-AAA:8910/pxgrid/ind/asset/
2019-05-22 14:31:17,770:INFO:qtp281049997-52711:PxgridController:: Send Request ServiceRegister
invoked with pxGridServer(s) [ISE24-1ek.example.com]
2019-05-22 14:31:17,770:INFO:qtp281049997-52711:PxgridController:: Sending ServiceRegister
request to pxGridServer ISE24-1ek.example.com
2019-05-22 14:31:17,786:INFO:qtp281049997-52711:PxgridController::
Request={"name": "com.cisco.endpoint.asset", "properties": {"wsPubsubService": "com.cisco.ise.pubsub
", "restBaseUrl": "https://WIN2012-
AAA:8910/pxgrid/ind/asset/", "assetTopic": "/topic/com.cisco.endpoint.asset"}}
2019-05-22 14:31:17,911:INFO:qtp281049997-52711:PxgridController:: Response={"id": "76d4abaf-
9efd-4c68-a046-79e049564902", "reregisterTimeMillis": "300000"}
2019-05-22 14:31:17,911:INFO:qtp281049997-52711:PxgridController:: Send Request ServiceLookup
invoked with pxGridServer(s) [ISE24-1ek.example.com]

```

```
2019-05-22 14:31:17,911:INFO:qtp281049997-52711:PxgridController:: Sending ServiceLookup request
to pxGridServer ISE24-1ek.example.com
2019-05-22 14:31:17,911:INFO:qtp281049997-52711:PxgridController::
Request={"name": "com.cisco.ise.pubsub"}
2019-05-22 14:31:17,911:INFO:qtp281049997-52711:PxgridController::
Response={"services": [{"name": "com.cisco.ise.pubsub", "nodeName": "ise-pubsub-ise24-
1ek", "properties": {"wsUrl": "wss://ISE24-1ek.example.com:8910/pxgrid/ise/pubsub"}}]}
2019-05-22 14:31:17,911:INFO:qtp281049997-52711:PxgridPublisher:: wsUrl=wss://ISE24-
1ek.example.com:8910/pxgrid/ise/pubsub
2019-05-22 14:31:17,911:INFO:qtp281049997-52711:PxgridController:: Send Request AccessSecret
invoked with pxGridServer(s) [ISE24-1ek.example.com]
2019-05-22 14:31:17,911:INFO:qtp281049997-52711:PxgridController:: Sending AccessSecret request
to pxGridServer ISE24-1ek.example.com
2019-05-22 14:31:17,926:INFO:qtp281049997-52711:PxgridController:: Request={"peerNodeName": "ise-
pubsub-ise24-1ek"}
2019-05-22 14:31:17,926:INFO:qtp281049997-52711:PxgridController:: Access Secret recieved
2019-05-22 14:31:17,926:INFO:qtp281049997-52711:PxgridPublisher:: Client created
```

Como visto nos registros, IND se registrou para o assetTopic

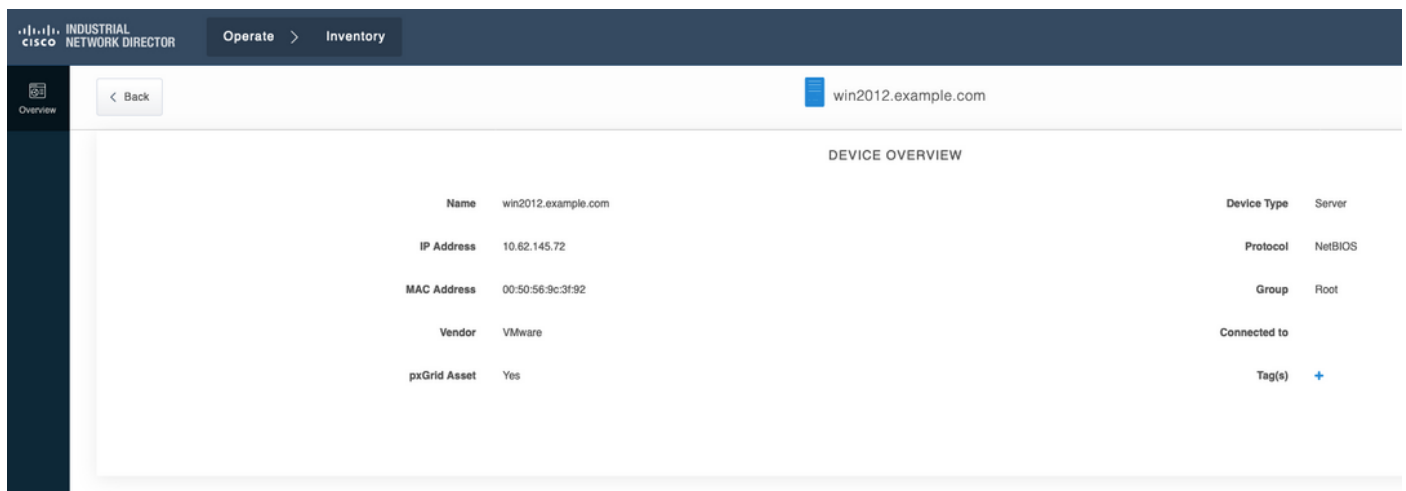
2. O ISE PSN com sonda pxgrid ativada faz um download em massa dos ativos pxGrid existentes (profiler.log):

```
2019-05-22 14:39:25,817 INFO [ProfilerINDSubscriberPoller-56-thread-1][
cisco.profiler.infrastructure.probemgr.INDSubscriber -::- New services are: [Service
[name=com.cisco.endpoint.asset, nodeName=ind2, properties={wsPubsubService=com.cisco.ise.pubsub,
restBaseUrl=https://WIN2012-AAA:8910/pxgrid/ind/asset/,
assetTopic=/topic/com.cisco.endpoint.asset}]]
2019-05-22 14:39:26,011 INFO [ProfilerINDSubscriberPoller-56-thread-1][
cisco.profiler.infrastructure.probemgr.INDSubscriber -::- NODENAME:ind2
2019-05-22 14:39:26,011 INFO [ProfilerINDSubscriberPoller-56-thread-1][
cisco.profiler.infrastructure.probemgr.INDSubscriber -::- REQUEST
BODY{"offset": "0", "limit": "500"}
2019-05-22 14:39:26,046 INFO [ProfilerINDSubscriberPoller-56-thread-1][
cisco.profiler.infrastructure.probemgr.INDSubscriber -::- Response status={}200
2019-05-22 14:39:26,046 INFO [ProfilerINDSubscriberPoller-56-thread-1][
cisco.profiler.infrastructure.probemgr.INDSubscriber -::- Content: "OUT_OF_SYNC"
2019-05-22 14:39:26,047 INFO [ProfilerINDSubscriberPoller-56-thread-1][
cisco.profiler.infrastructure.probemgr.INDSubscriber -::- Status is "OUT_OF_SYNC"
2019-05-22 14:39:26,047 DEBUG [ProfilerINDSubscriberPoller-56-thread-1][
cisco.profiler.infrastructure.probemgr.INDSubscriber -::- Static set after adding new services:
[Service [name=com.cisco.endpoint.asset, nodeName=ind,
properties={wsPubsubService=com.cisco.ise.pubsub, restBaseUrl=https://WIN2012-
AAA:8910/pxgrid/ind/asset/, assetTopic=/topic/com.cisco.endpoint.asset}], Service
[name=com.cisco.endpoint.asset, nodeName=ind2, properties={wsPubsubService=com.cisco.ise.pubsub,
restBaseUrl=https://WIN2012-AAA:8910/pxgrid/ind/asset/,
assetTopic=/topic/com.cisco.endpoint.asset}]]
2019-05-22 14:39:26,052 INFO [ProfilerINDSubscriberBulkRequestPool-80-thread-1][
cisco.profiler.infrastructure.probemgr.INDSubscriber -::- NODENAME:ind2
2019-05-22 14:39:26,052 INFO [ProfilerINDSubscriberBulkRequestPool-80-thread-1][
cisco.profiler.infrastructure.probemgr.INDSubscriber -::- REQUEST
BODY{"offset": "0", "limit": "500"}
2019-05-22 14:39:26,111 INFO [ProfilerINDSubscriberBulkRequestPool-80-thread-1][
cisco.profiler.infrastructure.probemgr.INDSubscriber -::- Response status={}200
2019-05-22 14:39:26,111 INFO [ProfilerINDSubscriberBulkRequestPool-80-thread-1][
cisco.profiler.infrastructure.probemgr.INDSubscriber -::- Content:
{"assets": [{"assetId": "100", "assetName": "WIN2012-
CHILD", "assetIpAddress": "10.62.145.131", "assetMacAddress": "00:50:56:b6:46:87", "assetVendor": "VMw
are", "assetProductId": "Unknown", "assetSerialNumber": "", "assetDeviceType": "Server", "assetSwRevisi
on": "", "assetHwRevision": "", "assetProtocol": "NetBIOS", "assetConnectedLinks": [], "assetCustomAttri
butes": [{"key": "assetGroup", "value": "Root"}, {"key": "assetTag", "value": "SEC_TAG2"}]}, {"assetId": "
101", "assetName": "win2012.example.com", "assetIpAddress": "10.62.145.72", "assetMacAddress": "00:50:
```

```
56:9c:3f:92", "assetVendor": "VMware", "assetProductId": "Unknown", "assetSerialNumber": "", "assetDeviceType": "Server", "assetSwRevision": "", "assetHwRevision": "", "assetProtocol": "NetBIOS", "assetConnectedLinks": [], "assetCustomAttributes": [{"key": "assetGroup", "value": "Root"}, {"key": "assetTag", "value": ""}]]}]}
```

```
2019-05-22 14:39:26,111 DEBUG [ProfilerINDSubscriberBulkRequestPool-80-thread-1][[]]
cisco.profiler.infrastructure.probemgr.INDSubscriber --: Parsing bulk response
{"assets": [{"assetId": "100", "assetName": "WIN2012-CHILD", "assetIpAddress": "10.62.145.131", "assetMacAddress": "00:50:56:b6:46:87", "assetVendor": "VMware", "assetProductId": "Unknown", "assetSerialNumber": "", "assetDeviceType": "Server", "assetSwRevision": "", "assetHwRevision": "", "assetProtocol": "NetBIOS", "assetConnectedLinks": [], "assetCustomAttributes": [{"key": "assetGroup", "value": "Root"}, {"key": "assetTag", "value": "SEC_TAG2"}]}, {"assetId": "101", "assetName": "win2012.example.com", "assetIpAddress": "10.62.145.72", "assetMacAddress": "00:50:56:9c:3f:92", "assetVendor": "VMware", "assetProductId": "Unknown", "assetSerialNumber": "", "assetDeviceType": "Server", "assetSwRevision": "", "assetHwRevision": "", "assetProtocol": "NetBIOS", "assetConnectedLinks": [], "assetCustomAttributes": [{"key": "assetGroup", "value": "Root"}, {"key": "assetTag", "value": ""}]]}]}
```

3. O novo endpoint é descoberto no IND (o endpoint precisa ser descoberto com um protocolo, caso contrário, o endpoint não é identificado como um ativo pxGrid e não é compartilhado via pxGrid com ISE).



4. IND publica essas informações no nó ISE pxGrid

5. PSN via sonda pxGrid recebe estes dados (profiler.log):

```
2019-05-22 15:20:40,616 DEBUG [Grizzly(2)][[]]
cisco.profiler.infrastructure.probemgr.INDSubscriber --: Parsing push notification response:
{"asset":{"assetId": "101", "assetName": "win2012.example.com", "assetIpAddress": "10.62.145.72", "assetMacAddress": "00:50:56:9c:3f:92", "assetVendor": "VMware", "assetProductId": "Unknown", "assetSerialNumber": "", "assetDeviceType": "Server", "assetSwRevision": "", "assetHwRevision": "", "assetProtocol": "NetBIOS", "assetConnectedLinks": [], "assetCustomAttributes": [{"key": "assetGroup", "value": "Root"}, {"key": "assetTag", "value": "SEC_TAG2"}]}, "opType": "UPDATE"}
```

```
2019-05-22 15:20:40,616 DEBUG [Grizzly(2)][[]]
cisco.profiler.infrastructure.probemgr.INDSubscriber --: sending endpoint to
forwarder{"assetId": "101", "assetName": "win2012.example.com", "assetIpAddress": "10.62.145.72", "assetMacAddress": "00:50:56:9c:3f:92", "assetVendor": "VMware", "assetProductId": "Unknown", "assetSerialNumber": "", "assetDeviceType": "Server", "assetSwRevision": "", "assetHwRevision": "", "assetProtocol": "NetBIOS", "assetConnectedLinks": [], "assetCustomAttributes": [{"key": "assetGroup", "value": "Root"}, {"key": "assetTag", "value": "SEC_TAG2"}]}
```

```
2019-05-22 15:20:40,617 INFO [Grizzly(2)][[]] cisco.profiler.infrastructure.probemgr.Forwarder --: Forwarder Mac 00:50:56:9C:3F:92 MessageCode null epSource PXGRIDPROBE
```

```
2019-05-22 15:20:40,617 DEBUG [forwarder-2][[]]
```

```
cisco.profiler.infrastructure.probemgr.ForwarderHelper -:ProfilerCollection:- sequencing Radius message for mac = 00:50:56:9C:3F:92
```

```
2019-05-22 15:20:40,617 DEBUG [forwarder-2][[]] cisco.profiler.infrastructure.probemgr.Forwarder -:ProfilerCollection:- Processing endpoint:00:50:56:9C:3F:92
```

```
2019-05-22 15:20:40,618 DEBUG [forwarder-2][] com.cisco.profiler.im.EndPoint -
:ProfilerCollection:- filtered custom attributes are:{assetGroup=Root, assetTag=SEC_TAG2}
2019-05-22 15:20:40,618 DEBUG [forwarder-2][] cisco.profiler.infrastructure.probemgr.Forwarder -
:ProfilerCollection:- Filtering:00:50:56:9C:3F:92
2019-05-22 15:20:40,618 DEBUG [forwarder-2][] cisco.profiler.infrastructure.probemgr.Forwarder -
:ProfilerCollection:- Endpoint Attributes:EndPoint[id=<null>,name=<null>]
MAC: 00:50:56:9C:3F:92
Attribute:BYODRegistration value:Unknown
Attribute:DeviceRegistrationStatus value:NotRegistered
Attribute:EndPointProfilerServer value:ISE24-1ek.example.com
Attribute:EndPointSource value:PXGRIDPROBE
Attribute:MACAddress value:00:50:56:9C:3F:92
Attribute:NmapSubnetScanID value:0
Attribute:OUI value:VMware, Inc.
Attribute:PolicyVersion value:0
Attribute:PortalUser value:
Attribute:PostureApplicable value:Yes
Attribute:assetDeviceType value:Server
Attribute:assetGroup value:Root
Attribute:assetHwRevision value:
Attribute:assetId value:101
Attribute:assetIpAddress value:10.62.145.72
Attribute:assetMacAddress value:00:50:56:9c:3f:92
Attribute:assetName value:win2012.example.com
Attribute:assetProductId value:Unknown
Attribute:assetProtocol value:NetBIOS
Attribute:assetSerialNumber value:
Attribute:assetSwRevision value:
Attribute:assetTag value:SEC_TAG2
Attribute:assetVendor value:VMware
Attribute:b310a420-78a5-11e9-a189-9ac8f4107843 value:Root
Attribute:b8e73d50-78a5-11e9-a189-9ac8f4107843 value:SEC_TAG2
Attribute:ip value:10.62.145.72
Attribute:SkipProfiling value:false
```

6. A visibilidade do contexto é atualizada com dados corretos

00:50:56:9C:3F:92



MAC Address: 00:50:56:9C:3F:92
Username:
Endpoint Profile: IOT_DEVICE2
Current IP Address: 10.62.145.72
Location:

General Attributes

Description

Static Assignment	false
Endpoint Policy	IOT_DEVICE2
Static Group Assignment	false
Identity Group Assignment	Profiled

Custom Attributes

Filter Settings

Attribute Name	Attribute Value
<input type="text" value="Attribute Name"/>	<input type="text" value="Attribute Value"/>
assetGroup	Root
LogicalProfile	
assetTag	SEC_TAG2

Other Attributes

Configurações

Note: As etapas de 1 a 3 são necessárias mesmo que você deseje ter apenas visibilidade do assetGroup e do assetTag na visibilidade do contexto

Etapa 1. Configurar atributos personalizados de endpoint no ISE

Navegue até **Administration > Identity Management > Settings > Endpoint Custom Attributes**. Configure atributos personalizados (assetGroup e assetTag) de acordo com a imagem abaixo.

Identity Services Engine Home Context Visibility Operations Policy Administration Work Centers

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

Identities Groups External Identity Sources Identity Source Sequences Settings

- User Custom Attributes
- User Authentication Settings
- Endpoint Purge
- Endpoint Custom Attributes

Endpoint Custom Attributes

Endpoint Attributes (for reference)

Mandatory	Attribute Name	Data Type
	PostureApplicable	STRING
	EndPointPolicy	STRING
	AnomalousBehaviour	STRING
	OperatingSystem	STRING
	BYODRegistration	STRING
	PortalUser	STRING
	LastAUPAcceptanceHours	INT
	LogicalProfile	STRING

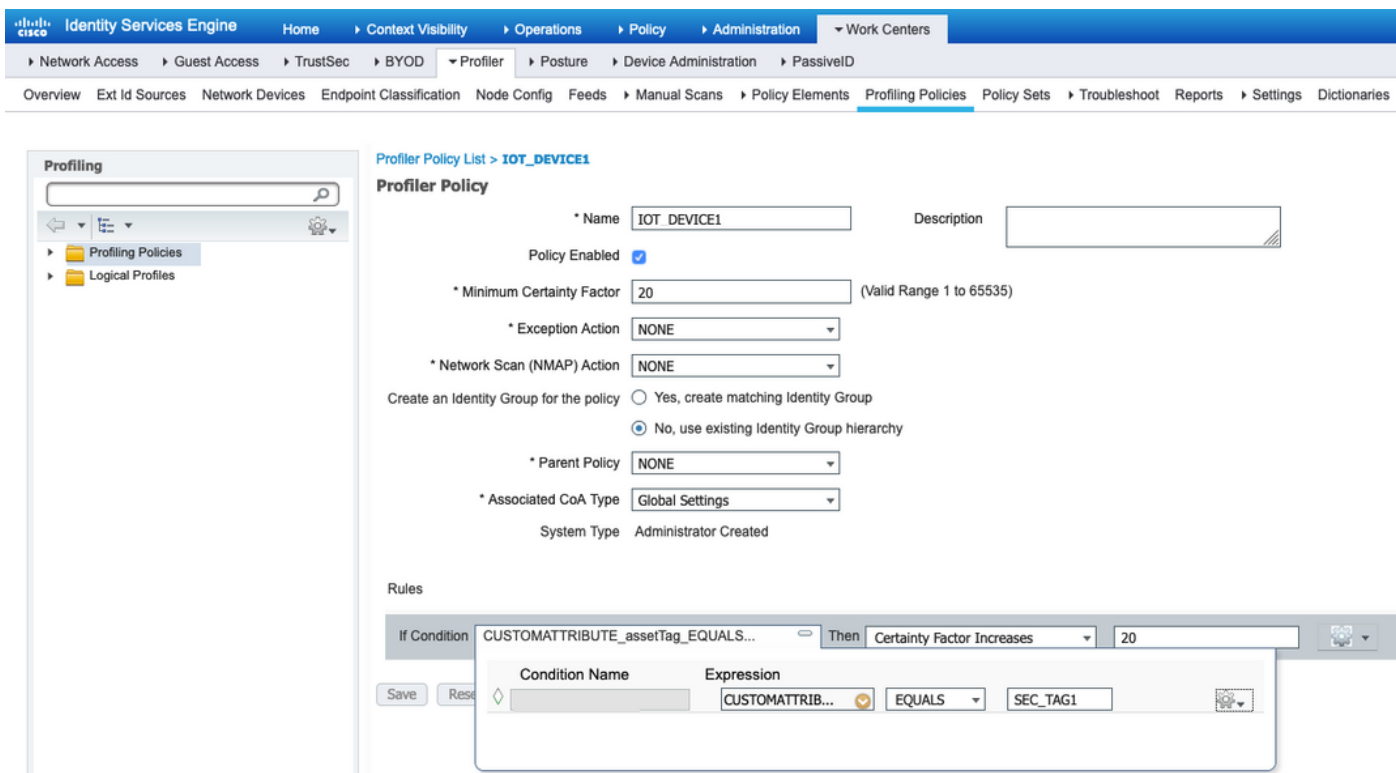
Endpoint Custom Attributes

Attribute name	Type
assetGroup	String -
assetTag	String - +

Reset Save

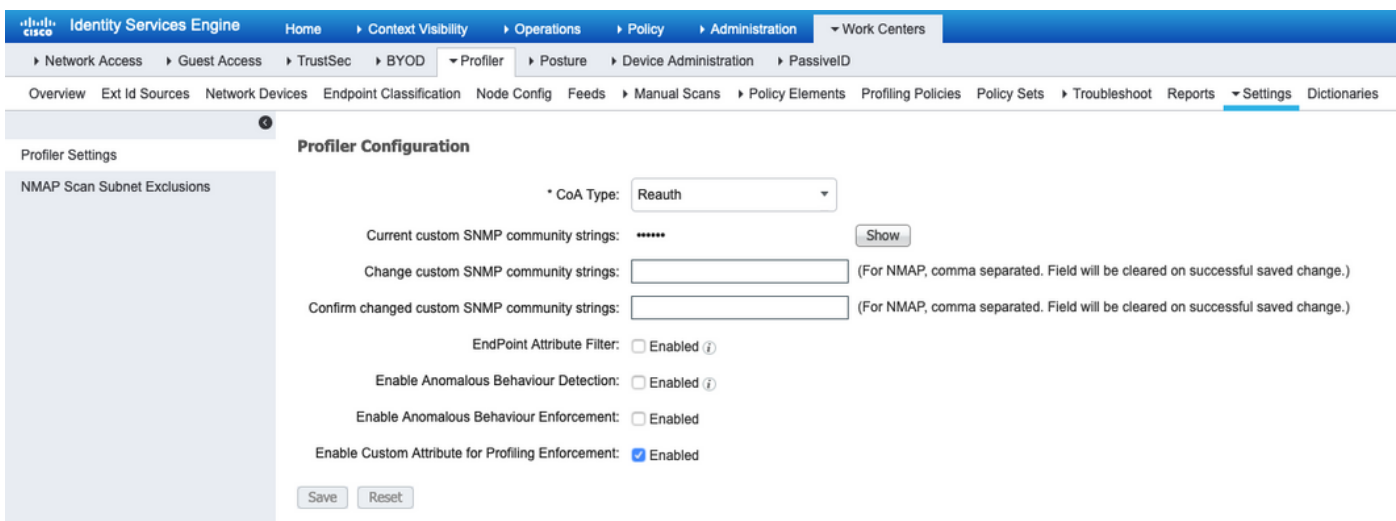
Etapa 2. Configurar política de perfil usando atributos personalizados

Navegue até **Centros de trabalho > Perfil > Políticas de criação de perfil**. Clique em **Adicionar**. Configure a Política de Perfil semelhante à imagem abaixo.



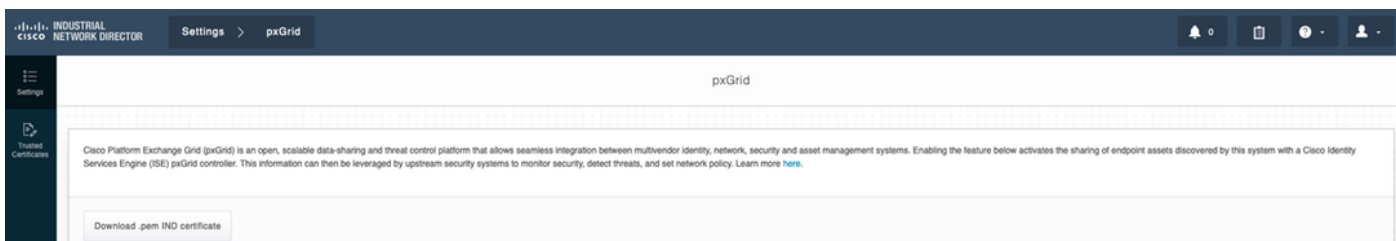
Etapa 3. Ativar atributos personalizados para aplicação de perfil

Navegue até **Centros de trabalho > Perfil > Configurações > Configurações do perfil**. Garantir **Ativar atributo personalizado para aplicação de perfil** está marcada.



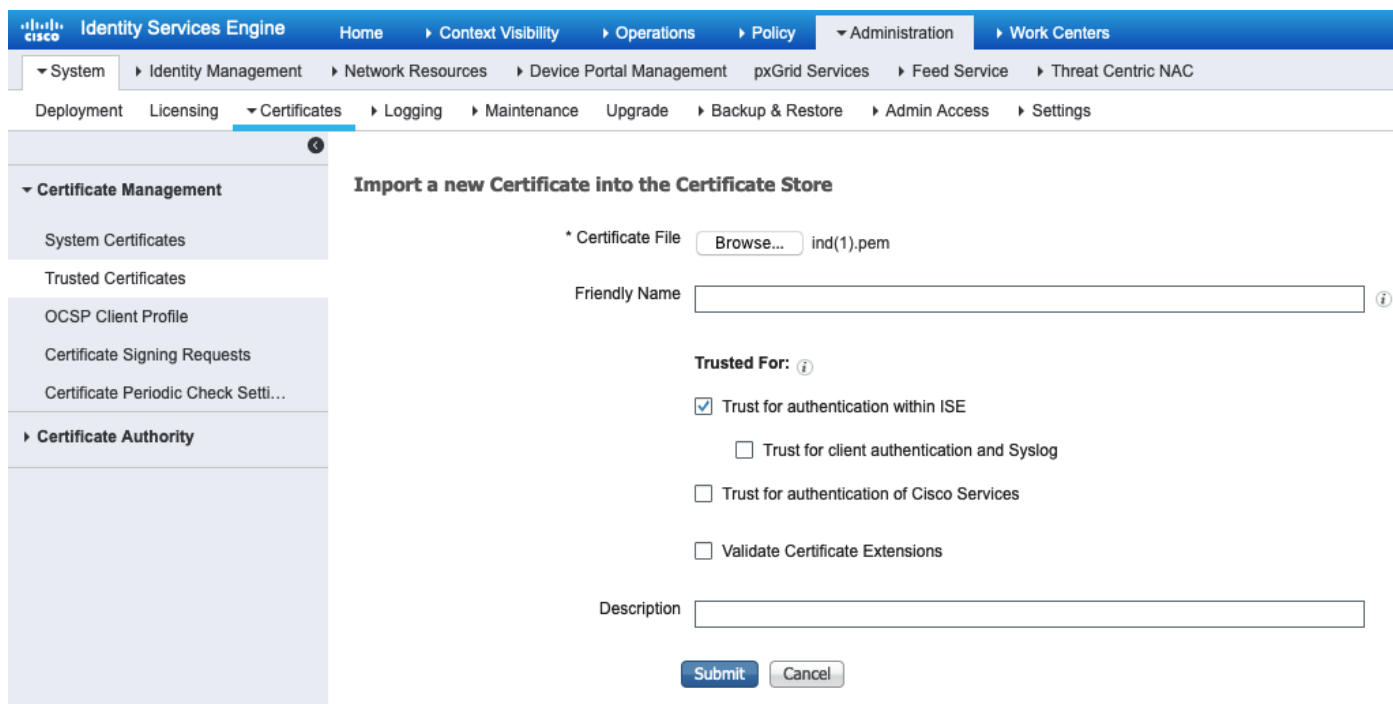
Etapa 4. Exportar certificado de identidade IND

Navegue até **Settings > pxGrid**. Clique em **Download .pem IND certificate**. Este certificado é usado durante o registro pxGrid, portanto, o ISE deve confiar nele.



Etapa 5. Carregar certificado de identidade IND para armazenamento confiável ISE

Navegue até **Administração > Certificados > Gerenciamento de Certificados > Certificados Confiáveis**. Clique em **Importar**. Clique em **Procurar** e selecione o certificado IND na Etapa 3. Clique em **Submit**.



The screenshot shows the Cisco Identity Services Engine (ISE) Administration console. The breadcrumb navigation is: Home > Context Visibility > Operations > Policy > Administration > Work Centers. The left sidebar shows the navigation menu with 'Certificate Management' expanded. The main content area is titled 'Import a new Certificate into the Certificate Store'. The form includes the following fields and options:

- * Certificate File: A file selection field with a 'Browse...' button and the filename 'ind(1).pem'.
- Friendly Name: A text input field.
- Trusted For: A section with a help icon (i) and four checkboxes:
 - Trust for authentication within ISE
 - Trust for client authentication and Syslog
 - Trust for authentication of Cisco Services
 - Validate Certificate Extensions
- Description: A text input field.
- Buttons: 'Submit' and 'Cancel'.

Etapa 6. Gerar certificado para IND

O IND não usa o certificado do cliente que o CA ISE emite. Em vez disso, o objetivo é preencher o armazenamento confiável de IND, então quando o ISE envia seu certificado pxGrid (durante a troca de TLS), ele é confiável pelo IND.

Navegue até **Administration > pxGrid Services > Certificados**. Preencha os campos de acordo com a imagem abaixo. O campo CN é obrigatório, pois o objetivo da CA do ISE é emitir certificado de identidade. Idealmente, você deve inserir o FQDN do IND, mas como o certificado de identidade não é usado pelo IND, o valor do campo CN não é crítico.

Identity Services Engine Home Context Visibility Operations Policy Administration Work Centers

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

All Clients Web Clients Capabilities Live Log Settings Certificates Permissions

Generate pxGrid Certificates

I want to *

Common Name (CN) *

Description

Certificate Template [PxGrid_Certificate_Template](#) ⓘ

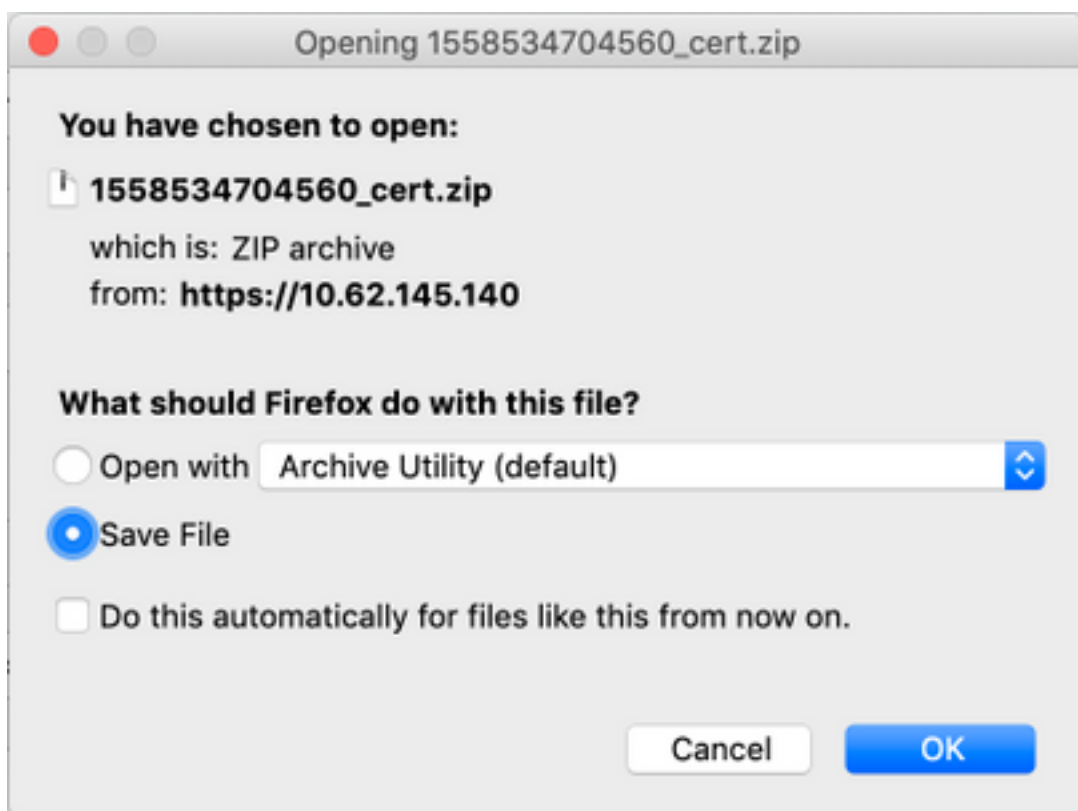
Subject Alternative Name (SAN) - +

Certificate Download Format * ⓘ

Certificate Password * ⓘ

Confirm Password *

Passo 7. Baixar cadeia de certificados no formato PKCS12



Etapa 8. Carregar cadeia de certificados em IND

Navegue até **Configurações > pxGrid > Certificados confiáveis**. Clique em **Novo**. Digite o nome (a cadeia será vista com este nome no IND). A senha é a da Etapa 1.

Upload Trusted Certificate

Name * IND

Password

Certificate * Browse C:\fakepath\ind.example.com_3.p12

Upload Cancel

Etapa 9. Configurar o Servidor de Políticas no IND

Navegue até **Configurações > Servidores de política**, clique em **Novo**. Insira ISE FQDN e o endereço ip do ISE pxGrid Node.

INDUSTRIAL NETWORK DIRECTOR Settings > Policy Servers

Back to Servers New Server

Protocols * RADIUS pxGrid

Host Name * ISE24-1ek.example.com IP Address 10.62.145.140 Description

Cancel Save

Etapa 10. Configurar a integração pxGrid em IND

Navegue até **Settings > pxGrid** e habilite a integração pxGrid. Clique no botão de alternância. Insira o nome do nó, esse nome de host é o nome do cliente pxGrid no ISE. Selecione o ISE configurado anteriormente no menu suspenso no campo Servidor 1. Clique em **Registrar**.

INDUSTRIAL NETWORK DIRECTOR Settings > pxGrid

pxGrid

Enable pxGrid- Settings

Download .pem IND certificate

Connect Using the Existing Node Register a New Node

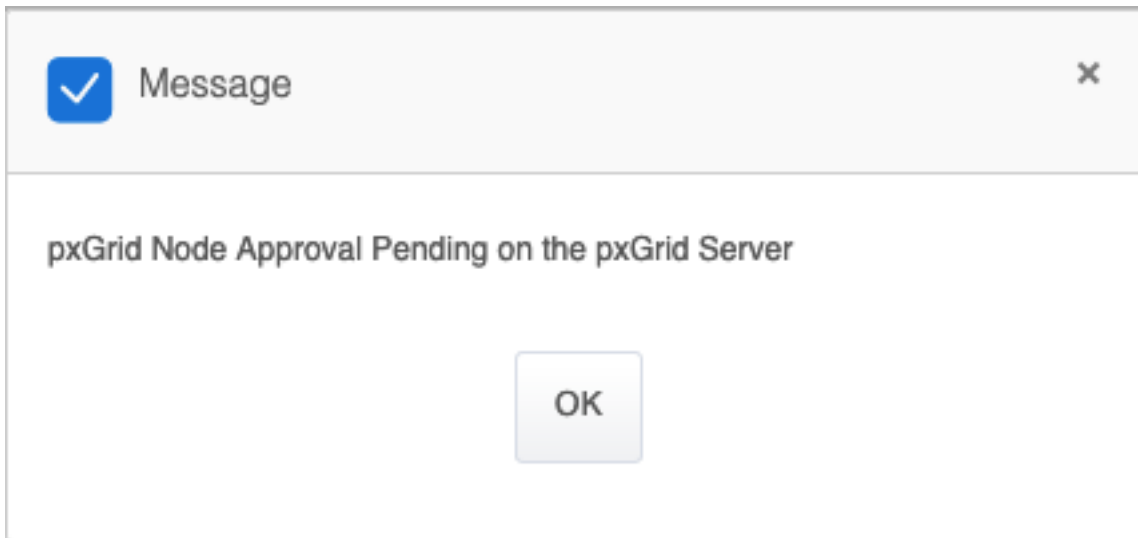
ISE Server

Node Name * IND Server 1 * ISE24-1ek.example.com Server 2 * Select a server

Cancel Register

Note: As etapas 11 a 12 podem ser ignoradas se a opção Aprovar automaticamente novas contas baseadas em certificado estiver habilitada no ISE.

A seguinte mensagem é exibida no IND após o registro bem-sucedido:



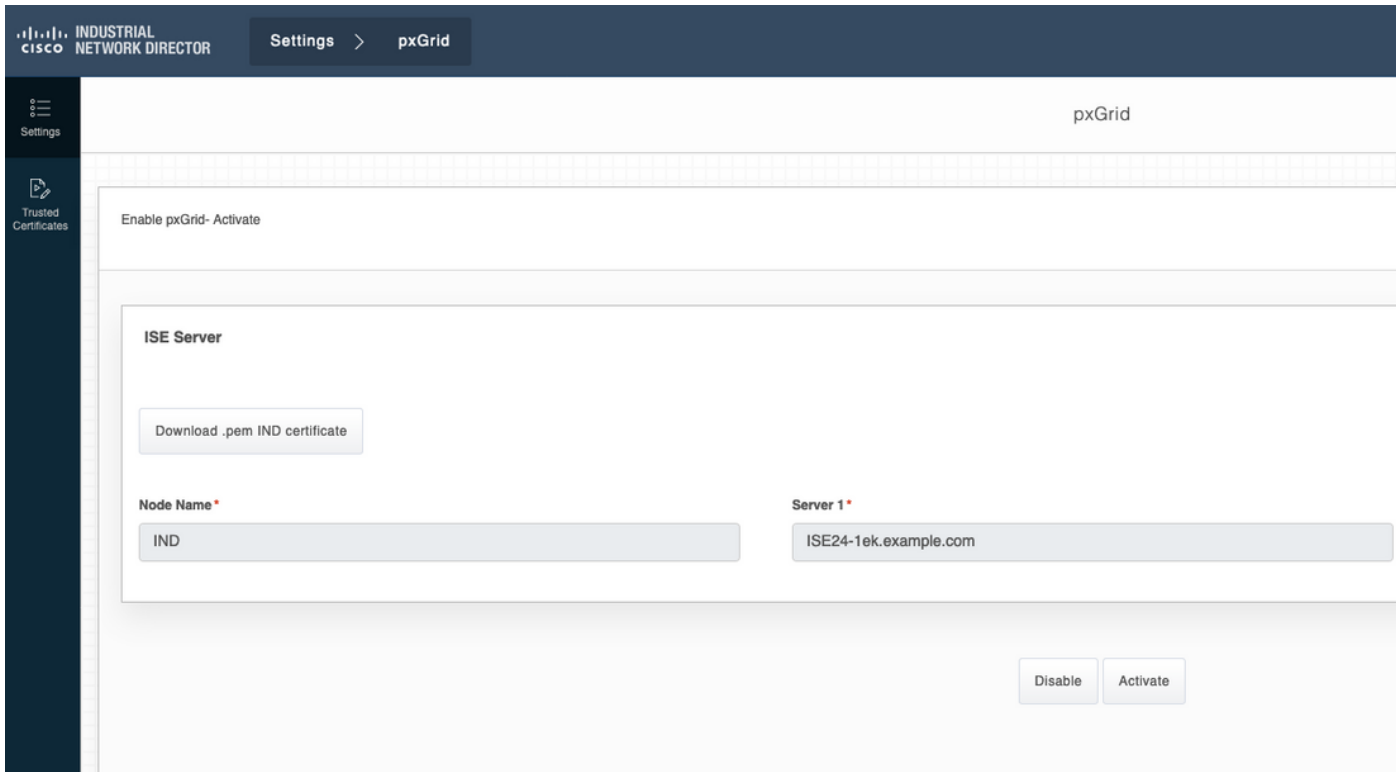
Etapa 11. Aprovar IND no ISE

Navegue até **Administration > pxGrid Services > All Clients**. Abra o menu suspenso Total Pending Approval(1) (Aprovação pendente total). Clique em **Aprovar tudo**.

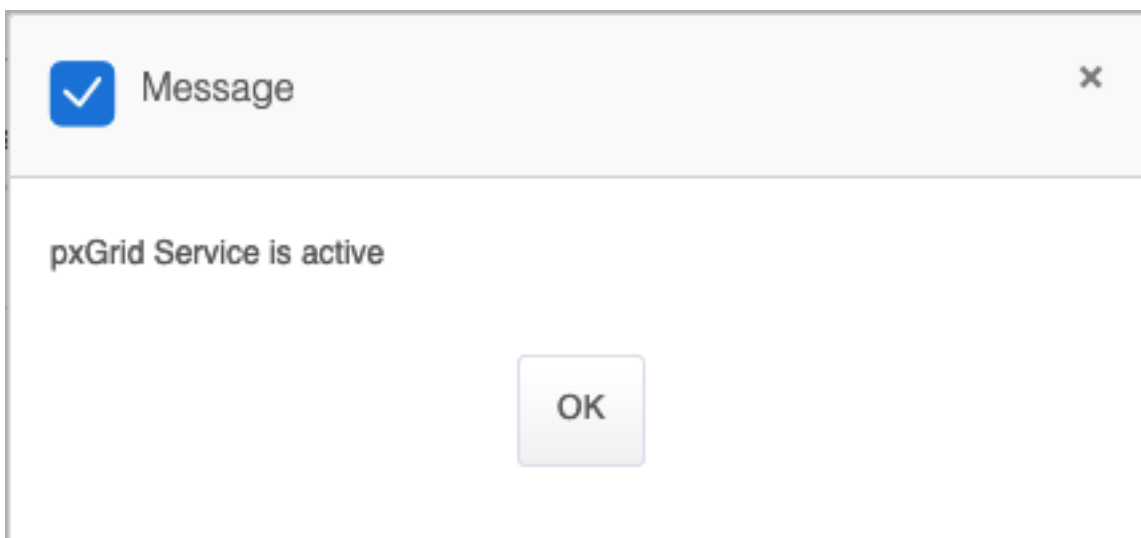
Client Name	Client Description	Capabilities	Status	Client Group(s)
ise-fanout-ise24-1ek		Capabilities(0 Pub, 0 Sub)	Online (XMPP)	Internal
ise-pubsub-ise24-1ek		Capabilities(0 Pub, 0 Sub)	Online (XMPP)	Internal
ise-pubsub-ise24-2ek		Capabilities(0 Pub, 0 Sub)	Online (XMPP)	Internal
ise-fanout-ise24-2ek		Capabilities(0 Pub, 0 Sub)	Online (XMPP)	Internal
ise-admin-ise24-3ek		Capabilities(0 Pub, 0 Sub)	Online (XMPP)	Internal
ise-mnt-ise24-2ek		Capabilities(2 Pub, 1 Sub)	Online (XMPP)	Internal
ise-mnt-ise24-1ek		Capabilities(2 Pub, 1 Sub)	Online (XMPP)	Internal
ise-bridge-ise24-1ek		Capabilities(0 Pub, 4 Sub)	Online (XMPP)	Internal
ise-admin-ise24-1ek		Capabilities(5 Pub, 2 Sub)	Online (XMPP)	Internal
ise-admin-ise24-2ek		Capabilities(1 Pub, 1 Sub)	Online (XMPP)	Internal
ind		Capabilities(0 Pub, 0 Sub)	Pending	

Etapa 12. Ative o serviço pxGrid em IND

Navegue até **Settings > pxGrid**. Clique em **Ativar**.



A seguinte mensagem é exibida no IND após a ativação bem-sucedida:



Verificar

Verificação do ISE

Navegue até **Administration > pxGrid Services > All Clients**. Espera-se que o cliente IND veja como Offline (XMPP) em All Clients, IND usa pxGrid versão 2.

Identity Services Engine Home Context Visibility Operations Policy Administration Work Centers

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

All Clients Web Clients Capabilities Live Log Settings Certificates Permissions

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

Client Name	Client Description	Capabilities	Status	Client Group(s)
ise-fanout-ise24-1ek		Capabilities(0 Pub, 0 Sub)	Online (XMPP)	Internal
ise-pubsub-ise24-1ek	Client Name: Not Sortable	Capabilities(0 Pub, 0 Sub)	Online (XMPP)	Internal
ise-pubsub-ise24-2ek		Capabilities(0 Pub, 0 Sub)	Online (XMPP)	Internal
ise-fanout-ise24-2ek		Capabilities(0 Pub, 0 Sub)	Online (XMPP)	Internal
ise-admin-ise24-3ek		Capabilities(0 Pub, 0 Sub)	Online (XMPP)	Internal
ise-mnt-ise24-2ek		Capabilities(2 Pub, 1 Sub)	Online (XMPP)	Internal
ise-mnt-ise24-1ek		Capabilities(2 Pub, 1 Sub)	Online (XMPP)	Internal
ise-bridge-ise24-1ek		Capabilities(0 Pub, 4 Sub)	Online (XMPP)	Internal
ise-admin-ise24-1ek		Capabilities(5 Pub, 2 Sub)	Online (XMPP)	Internal
ise-admin-ise24-2ek		Capabilities(1 Pub, 1 Sub)	Online (XMPP)	Internal
ind		Capabilities(0 Pub, 0 Sub)	Offline (XMPP)	

Clique em **Web Clients**, confirme se o cliente IND tem o status ON e se /topic/com.cisco.endoint.asset faz parte de Assinaturas.

Identity Services Engine Home Context Visibility Operations Policy Administration Work Centers

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

All Clients Web Clients Capabilities Live Log Settings Certificates Permissions

Rows/Page 25 1 / 1 Go 12 Total Rows

Refresh Filter

Client Name	Connect To	Session Id	Certificate	Subscriptions	Publications	IP Address	Status	Start time
IND	ISE24-1ek	ISE24-1ek:181	CN=WIN2012-AAA, ...			10.62.145.130	ON	2019-05-23 08:27
ise-mnt-ise24-1ek	ISE24-1ek	ISE24-1ek:182	CN=ISE24-1ek.exa ...	/topic/com.cisco.ise.session.internal		10.62.145.140	ON	2019-05-23 08:28
ise-fanout-ise24-1ek	ISE24-1ek	ISE24-1ek:183	CN=ISE24-1ek.exa ...	/topic/distributed	/topic/distributed	10.62.145.140	ON	2019-05-23 08:28
ise-admin-ise24-1ek	ISE24-1ek	ISE24-1ek:184	CN=ISE24-1ek.exa ...	/topic/com.cisco.endpoint.asset		10.62.145.140	OFF	2019-05-23 08:28
ise-mnt-ise24-2ek	ISE24-1ek	ISE24-1ek:185	No Certificate	/topic/com.cisco.ise.session.internal	/topic/com.cisco.ise.session.internal	10.62.145.141	OFF	2019-05-23 08:59
ise-admin-ise24-2ek	ISE24-1ek	ISE24-1ek:188	No Certificate			10.62.145.141	ON	2019-05-23 09:30
ise-bridge-ise24-1ek	ISE24-1ek	ISE24-1ek:189	CN=ISE24-1ek.exa ...			127.0.0.1	OFF	2019-05-23 09:30
ise-fanout-ise24-1ek	ISE24-1ek	ISE24-1ek:190	CN=ISE24-1ek.exa ...	/topic/wildcard		127.0.0.1	ON	2019-05-23 09:30
ise-mnt-ise24-2ek	ISE24-1ek	ISE24-1ek:191	No Certificate	/topic/com.cisco.ise.session.internal	/topic/com.cisco.ise.session.internal	10.62.145.141	ON	2019-05-23 09:43
ise-admin-ise24-1ek	ISE24-1ek	ISE24-1ek:192	CN=ISE24-1ek.exa ...	/topic/com.cisco.endpoint.asset		10.62.145.140	ON	2019-05-23 09:43
ise-bridge-ise24-1ek	ISE24-1ek	ISE24-1ek:193	CN=ISE24-1ek.exa ...			127.0.0.1	OFF	2019-05-23 10:04
ise-bridge-ise24-1ek	ISE24-1ek	ISE24-1ek:194	CN=ISE24-1ek.exa ...			127.0.0.1	ON	2019-05-23 10:09

Verificação de IND

O IND deve passar para o status In Sync. Isso é feito se o download em massa for bem-sucedido no ISE, se não for o caso, o IND ficará preso no estado Fora de Sincronização.

Cisco Platform Exchange Grid (pxGrid) is an open, scalable data-sharing and threat control platform that allows seamless integration between multivendor identity, network, security and asset management systems. Enabling the feature below activates the sharing of endpoint assets discovered by this system with a Cisco Identity Services Engine (ISE) pxGrid controller. This information can then be leveraged by upstream security systems to monitor security, detect threats, and set network policy. Learn more [here](#).

Download .pem IND certificate

ISE Server

Node Name*

Server 1*

Server 2

Statistics

	Sync. Status	In Sync	Last Sync. Status Probe Time
Number of Assets Shared via Last Bulk Request	2		2019-05-23 10:19:16
Last Update Operation	Update		Last Bulk Request Time 2019-05-23 08:29:14
Total pxGrid Asset Count	2		Last Update Time 2019-05-22 20:17:36

Troubleshoot

Status de sincronização preso em Sincronizado no IND

A transição de Fora de Sincronização para Sincronizado acontece se o download em massa for bem-sucedido no ISE. IND application.log abaixo.

```
2019-05-22 22:09:06,902:INFO:qtp281049997-53444:PxgridConfigMgr:: Pxgrid Statistics Start:: Bulk Request : bulkReqAssetCount:2 add: false
2019-05-22 22:09:06,902:INFO:qtp281049997-53444:PxgridConfigMgr:: Pxgrid Statistics updated:: Bulk Request : AssetCount:2
2019-05-22 22:09:06,902:INFO:qtp281049997-53444:PxgridConfigMgr:: Sync Status transition to IN_SYNC
2019-05-22 22:09:06,918:INFO:qtp281049997-53444:PxGridServiceRestController:: getAssets Completed
```

É fundamental que o ISE seja capaz de resolver o nome de host IND que é compartilhado pelo IND. Caso contrário, o ISE não pode fazer o download em massa e o IND nunca fará a transição para o estado In Sync. Você pode ver a seguinte exceção em profiler.log se o download em massa falhar (WIN2012-AAA não foi resolvido pelo ISE). Para disparar o download em massa, você pode desmarcar e verificar a prova pxGrid no PSN.

```
2019-04-30 13:59:50,708 INFO [ProfilerINDSubscriberPoller-60-thread-1][]
cisco.profiler.infrastructure.probemgr.INDSubscriber -::- New services are: []
2019-04-30 13:59:50,714 INFO [ProfilerINDSubscriberPoller-60-thread-1][]
cisco.profiler.infrastructure.probemgr.INDSubscriber -::- NODENAME:ind
2019-04-30 13:59:50,714 INFO [ProfilerINDSubscriberPoller-60-thread-1][]
cisco.profiler.infrastructure.probemgr.INDSubscriber -::- REQUEST
BODY{"offset":"0","limit":"500"}
2019-04-30 13:59:50,716 ERROR [ProfilerINDSubscriberPoller-60-thread-1][]
cisco.profiler.infrastructure.probemgr.INDSubscriber -::- Unable to get sync statusWIN2012-AAA:WIN2012-AAA
java.net.UnknownHostException: WIN2012-AAA
at java.net.AbstractPlainSocketImpl.connect(AbstractPlainSocketImpl.java:184)
at java.net.SocksSocketImpl.connect(SocksSocketImpl.java:392)
at java.net.Socket.connect(Socket.java:589)
at sun.security.ssl.SSLSocketImpl.connect(SSLSocketImpl.java:673)
```

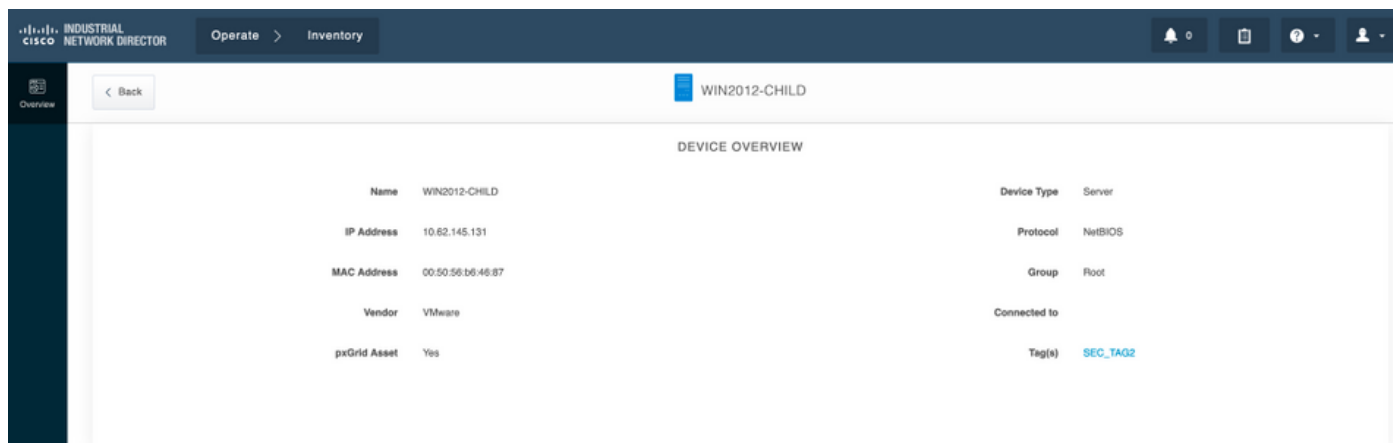
```

at sun.security.ssl.BaseSSLSocketImpl.connect(BaseSSLSocketImpl.java:173)
at sun.net.NetworkClient.doConnect(NetworkClient.java:180)
at sun.net.www.http.HttpClient.openServer(HttpClient.java:463)
at sun.net.www.http.HttpClient.openServer(HttpClient.java:558)
at sun.net.www.protocol.https.HttpsClient.<init>(HttpsClient.java:264)
at sun.net.www.protocol.https.HttpsClient.New(HttpsClient.java:367)
at
sun.net.www.protocol.https.AbstractDelegateHttpsURLConnection.getNewHttpClient(AbstractDelegateH
ttpsURLConnection.java:191)
at sun.net.www.protocol.http.HttpURLConnection.plainConnect0(HttpURLConnection.java:1156)
at sun.net.www.protocol.http.HttpURLConnection.plainConnect(HttpURLConnection.java:1050)
at
sun.net.www.protocol.https.AbstractDelegateHttpsURLConnection.connect(AbstractDelegateHttpsURLCo
nnection.java:177)
at sun.net.www.protocol.http.HttpURLConnection.getOutputStream0(HttpURLConnection.java:1334)
at sun.net.www.protocol.http.HttpURLConnection.getOutputStream(HttpURLConnection.java:1309)
at
sun.net.www.protocol.https.HttpURLConnectionImpl.getOutputStream(HttpURLConnectionImpl.java:25
9)
at com.cisco.profiler.infrastructure.probemgr.INDSubscriber.getRequest(INDSubscriber.java:362)
at com.cisco.profiler.infrastructure.probemgr.INDSubscriber.isInSync(INDSubscriber.java:500)
at
com.cisco.profiler.infrastructure.probemgr.INDSubscriber.populateIOTServiceList(INDSubscriber.ja
va:462)
at
com.cisco.profiler.infrastructure.probemgr.INDSubscriber$WorkerThread.run(INDSubscriber.java:441
)
at java.util.concurrent.Executors$RunnableAdapter.call(Executors.java:511)
at java.util.concurrent.FutureTask.runAndReset(FutureTask.java:308)
at
java.util.concurrent.ScheduledThreadPoolExecutor$ScheduledFutureTask.access$301(ScheduledThreadP
oolExecutor.java:180)
at
java.util.concurrent.ScheduledThreadPoolExecutor$ScheduledFutureTask.run(ScheduledThreadPoolExec
utor.java:294)
at java.util.concurrent.ThreadPoolExecutor.runWorker(ThreadPoolExecutor.java:1149)
at java.util.concurrent.ThreadPoolExecutor$Worker.run(ThreadPoolExecutor.java:624)
at java.lang.Thread.run(Thread.java:748)

```

Nem todos os endpoints são compartilhados com o ISE

Endpoints em IND são compartilhados com ISE somente se o sinalizador de ativo pxGrid for Sim, o endereço MAC também deve estar disponível, caso contrário o ISE não tem dados suficientes para criar um endpoint.



assetTag e AssetGroup não estão disponíveis no ISE

Se assetTag somente não estiver disponível, pode ser o caso quando o tipo de TAG errado é usado. Você precisa usar a etiqueta de segurança (não a etiqueta regular) ao atualizar o endpoint.

Associated Device Tags ×

No Tags Associated with this device

Add Regular Tag

Select a tag

Add Security Tag

✓ Select a tag
SEC_TAG1
SEC_TAG2

Se a AssetTag e o AssetGroup não estiverem disponíveis, pode haver vários motivos por trás

1. A política de criação de perfil não está configurada com o uso de atributos personalizados (consulte as etapas de 1 a 3 na parte Configurações do documento)
2. Devido ao defeito [CSCvn66106](#) Filtro de atributo de ponto final: deve ser desativado. Caso contrário, ele filtra atributos personalizados do classificador. O registro a seguir pode ser visto em profiler.log.

```
2019-05-22 11:20:11,796 DEBUG [PersistentWorker-8-18-thread-1][] com.cisco.profiler.im.EndPoint  
-:Profiling:- filtered custom attributes are:{assetGroup=Root, assetTag=SEC_TAG2, b310a420-78a5-  
11e9-a189-9ac8f4107843=Root, b8e73d50-78a5-11e9-a189-9ac8f4107843=SEC_TAG2}
```