Configurar a autenticação passiva com o login de VPN de acesso remoto no Firepower Device Manager

Contents

Introduction

Este documento descreve como configurar a Autenticação Passiva no Firepower Threat Defense (FTD) através do Firepower Device Manager (FDM) com logins de VPN de Acesso Remoto (RA VPN) com AnyConnect.

Prerequisites

Requirements

A Cisco recomenda que você tenha conhecimento destes tópicos:

- Firepower Device Manager.
- VPN de acesso remoto.
- Política de identidade.

Componentes Utilizados

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

- Firepower Threat Defense (FTD) versão 7.0
- Cisco AnyConnect Secure Mobility Client versão 4.10
- Active Directory (AD)

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. Se a rede estiver ativa, certifique-se de que você entenda o impacto potencial de qualquer comando.

Informações de Apoio

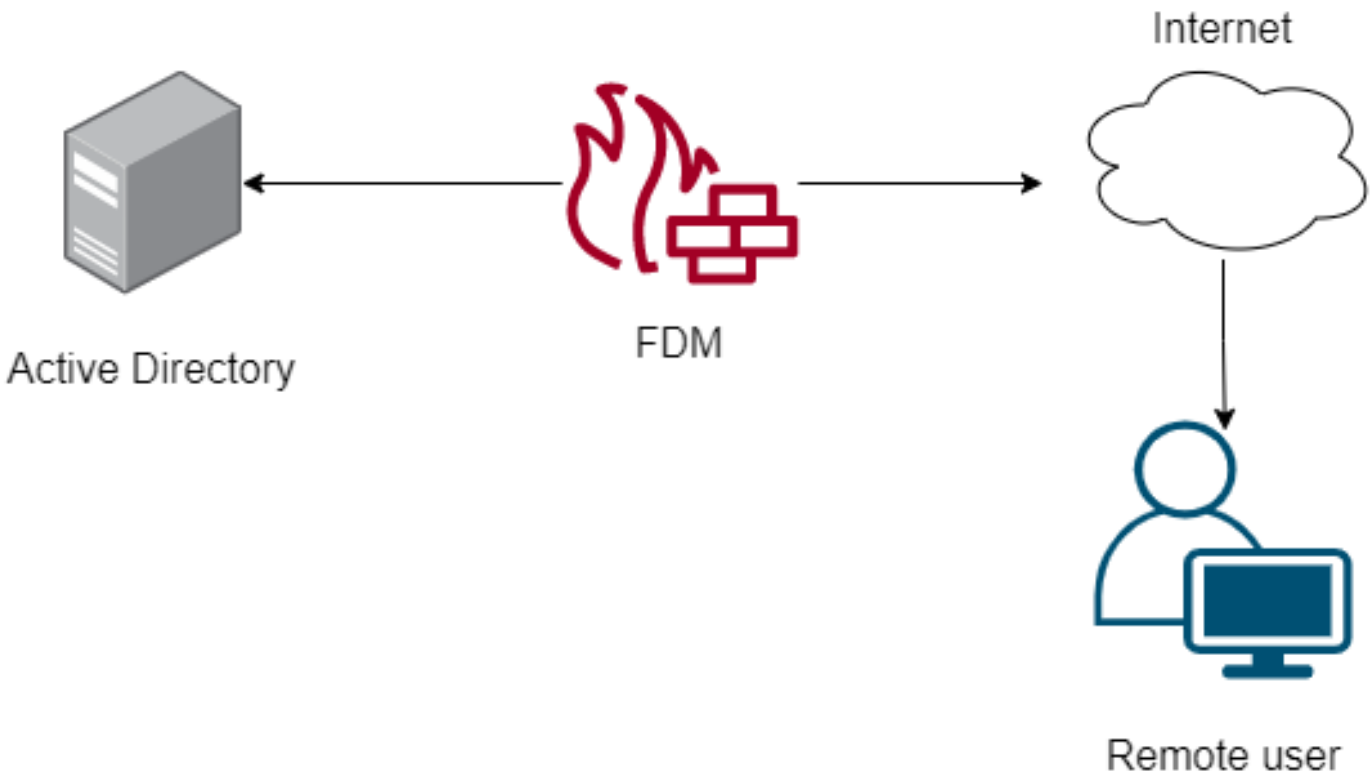
A Política de identidade pode detectar usuários associados a uma conexão. O método usado é Autenticação Passiva, pois a identidade do usuário é obtida de outros serviços de autenticação (LDAP).

No FDM, a autenticação passiva pode funcionar com duas opções diferentes:

- Logons de VPN de acesso remoto
- Cisco Identity Services Engine (ISE)

Configuração

Diagrama de Rede



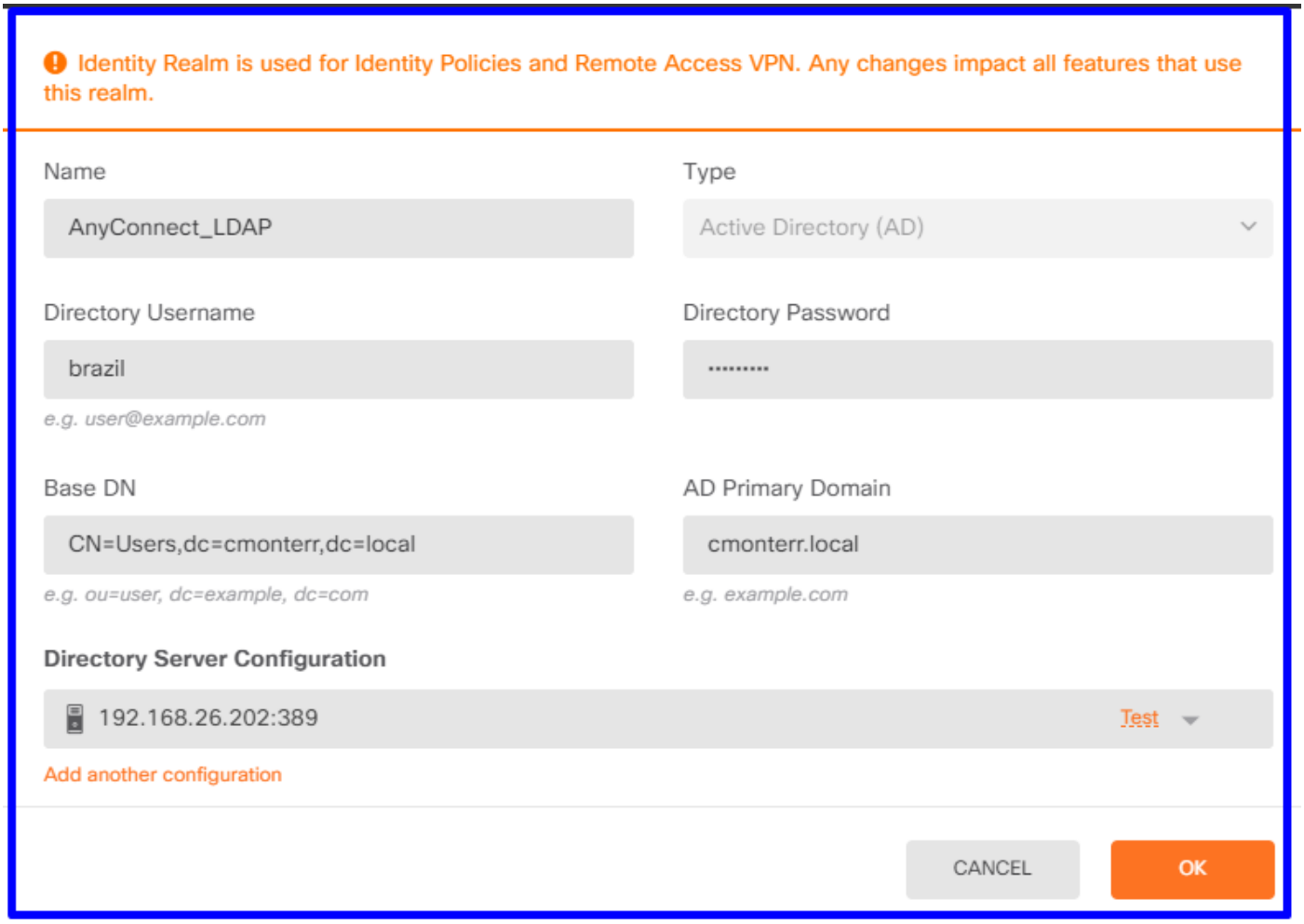
Esta seção descreve como configurar a autenticação passiva no FDM.

Etapa 1. Configurar a origem da identidade

Quer você colete a identidade do usuário ativamente (pelo prompt para autenticação do usuário) ou passivamente, você precisa configurar o servidor do Ative Diretory (AD) que tem as informações de identidade do usuário.

Navegue **até Objetos > Serviços de identidade** e selecione a opçãoAD para adicionar o Ative Diretory.

Adicione a configuração do Ative Diretory:

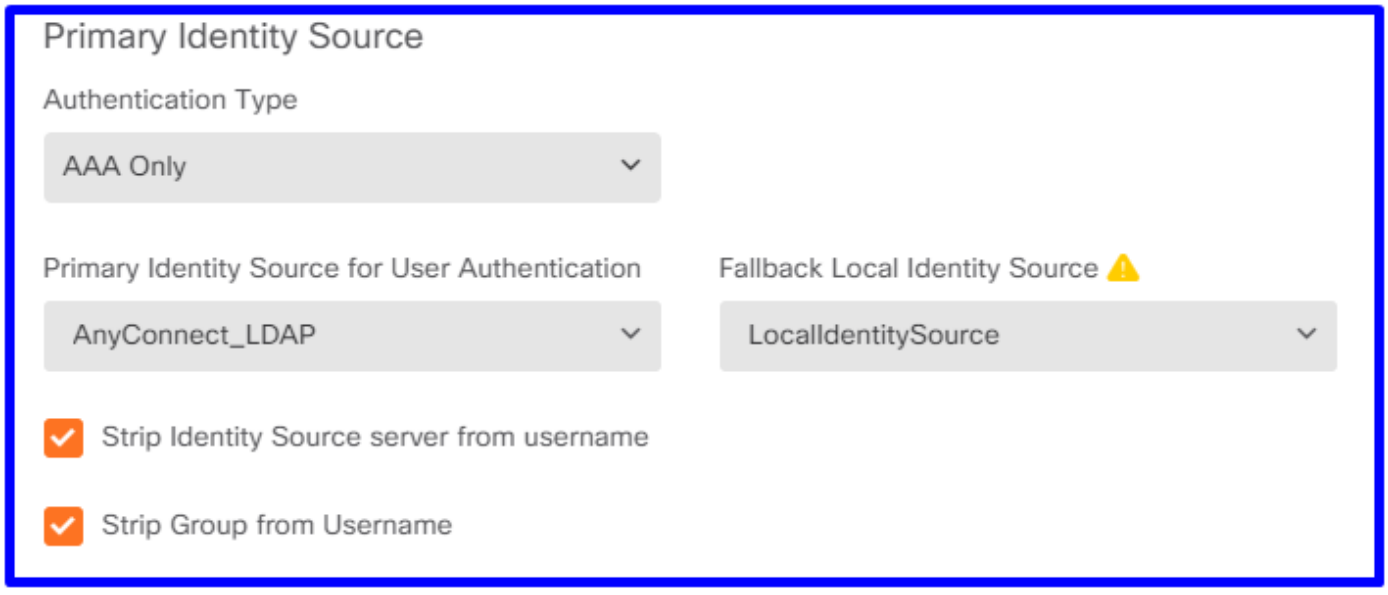


Etapa 2. Configurar a VPN do RA

A configuração da VPN de acesso remoto pode ser revisada neste link

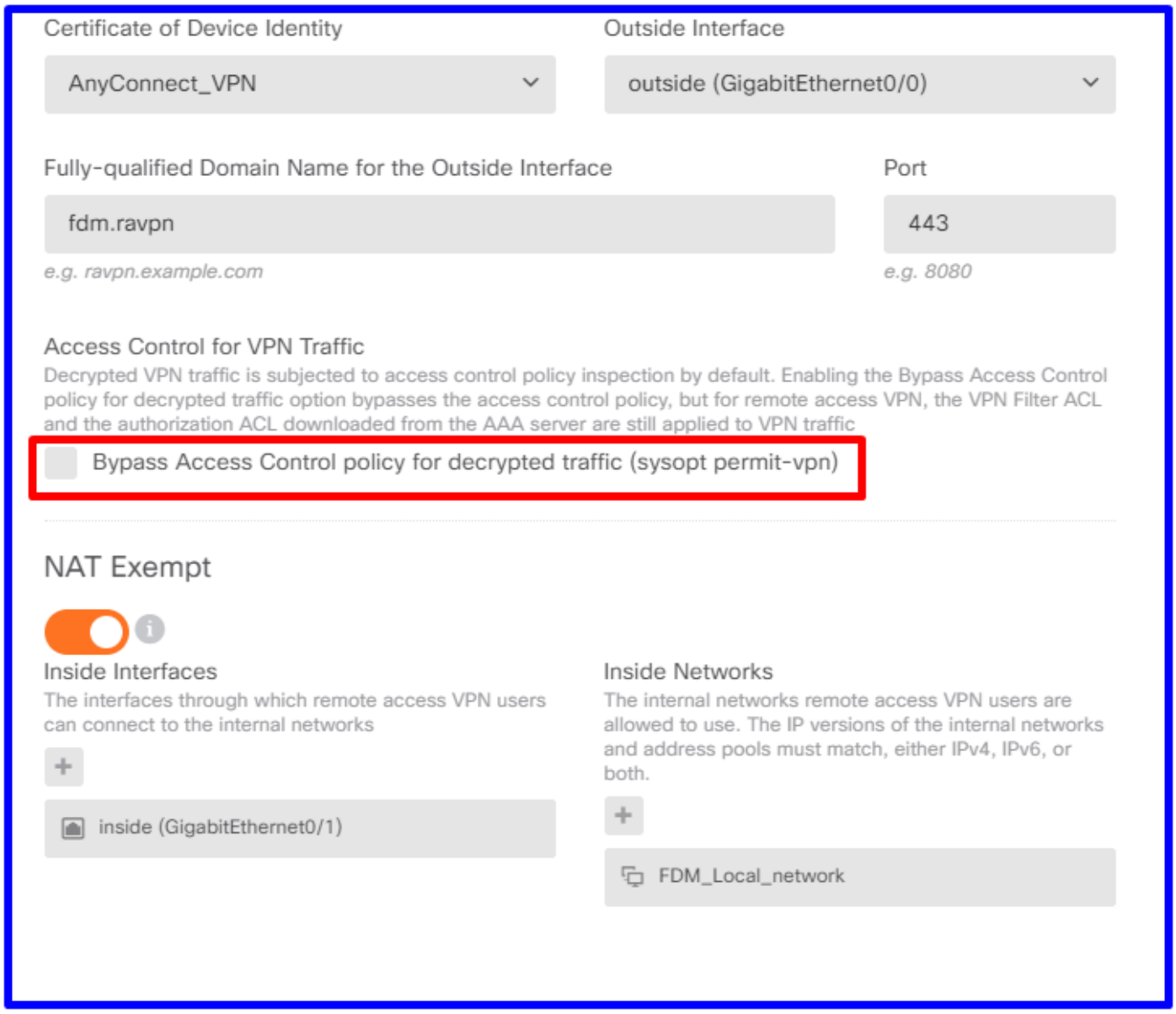
Etapa 3. Configurar o método de autenticação para usuários de VPN RA

Na configuração da VPN RA, selecione o método de autenticação. A Origem Principal da Independência para Autenticação de Usuário deve ser o AD.



Note: Nas Configurações globais da VPN RA, desmarque a opção Ignorar política de

controle de acesso para tráfego descriptografado (**sysopt permit-vpn**) para permitir a possibilidade de usar a política de controle de acesso para inspecionar o tráfego proveniente dos usuários do AnyConnect.



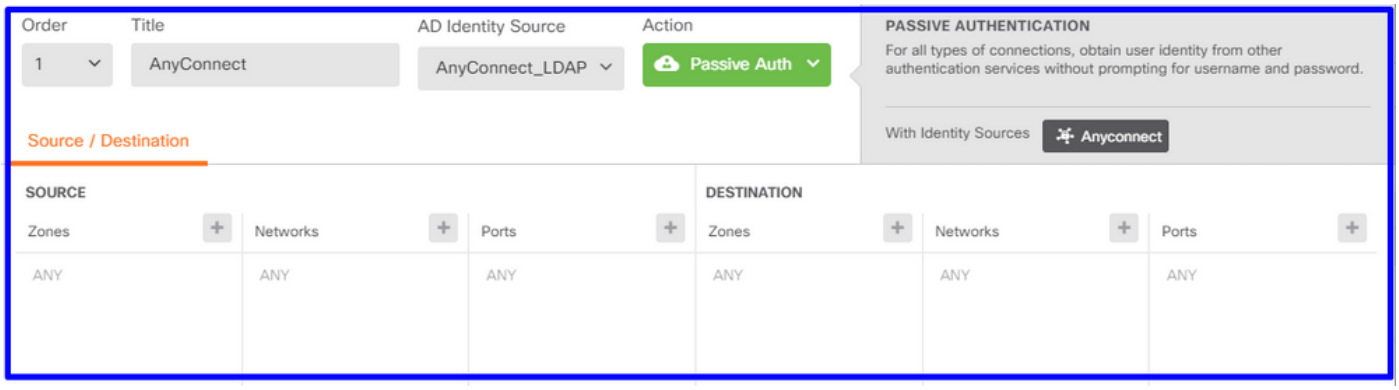
Etapa 4. Configurar a política de identidade para autenticação passiva

Você precisa criar a política de identidade para configurar a autenticação passiva, a política deve ter os seguintes elementos:

- Fonte de identidade do AD: O mesmo que você adicionou na etapa número 1
- Ação: AUTONOMIA PASSIVA

Para configurar a regra de Identidade, navegue até **Políticas > Identidade >** selecione o botão **[+]** para adicionar uma nova regra de Identidade.

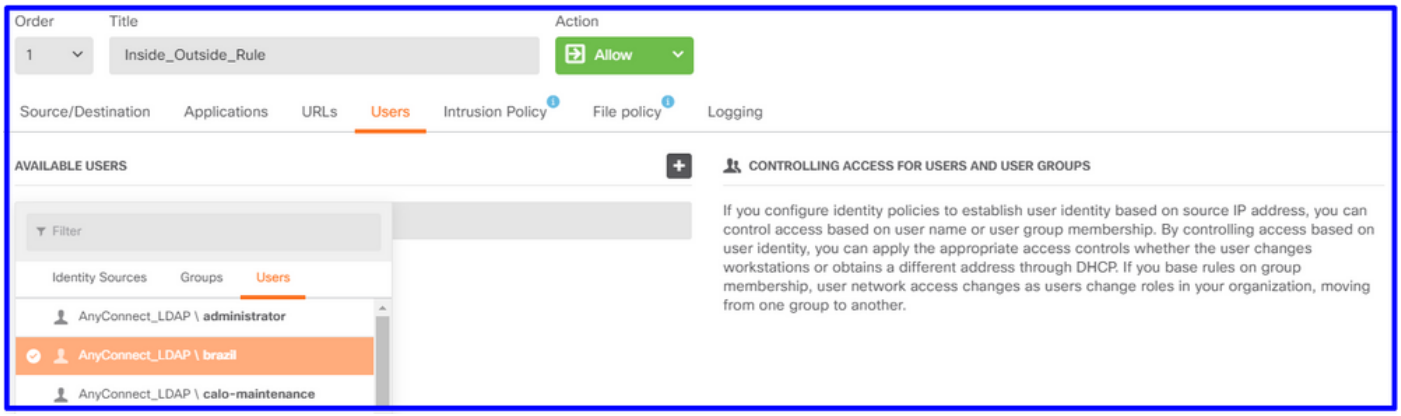
- Defina as sub-redes de origem e de destino onde a autenticação passiva se aplica.



Etapa 5. Crie a regra de controle de acesso na política de controle de acesso

Configure a regra de controle de acesso para permitir ou bloquear o tráfego com base nos usuários.

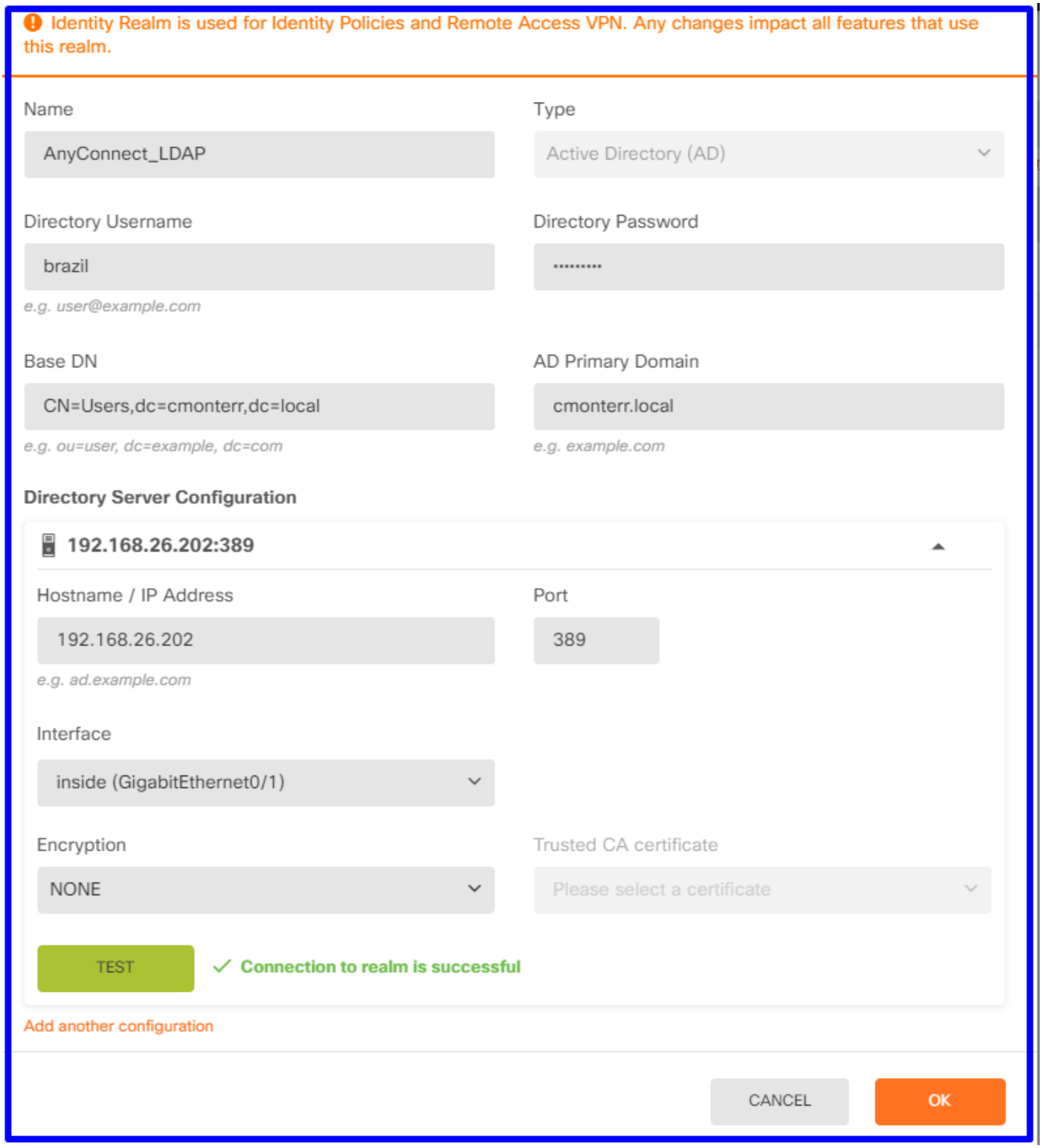
Para configurar o grupo de usuários ou usuários para ter autenticação passiva, selecione a guia Usuários. Você pode adicionar um grupo de usuários ou um usuário individual.



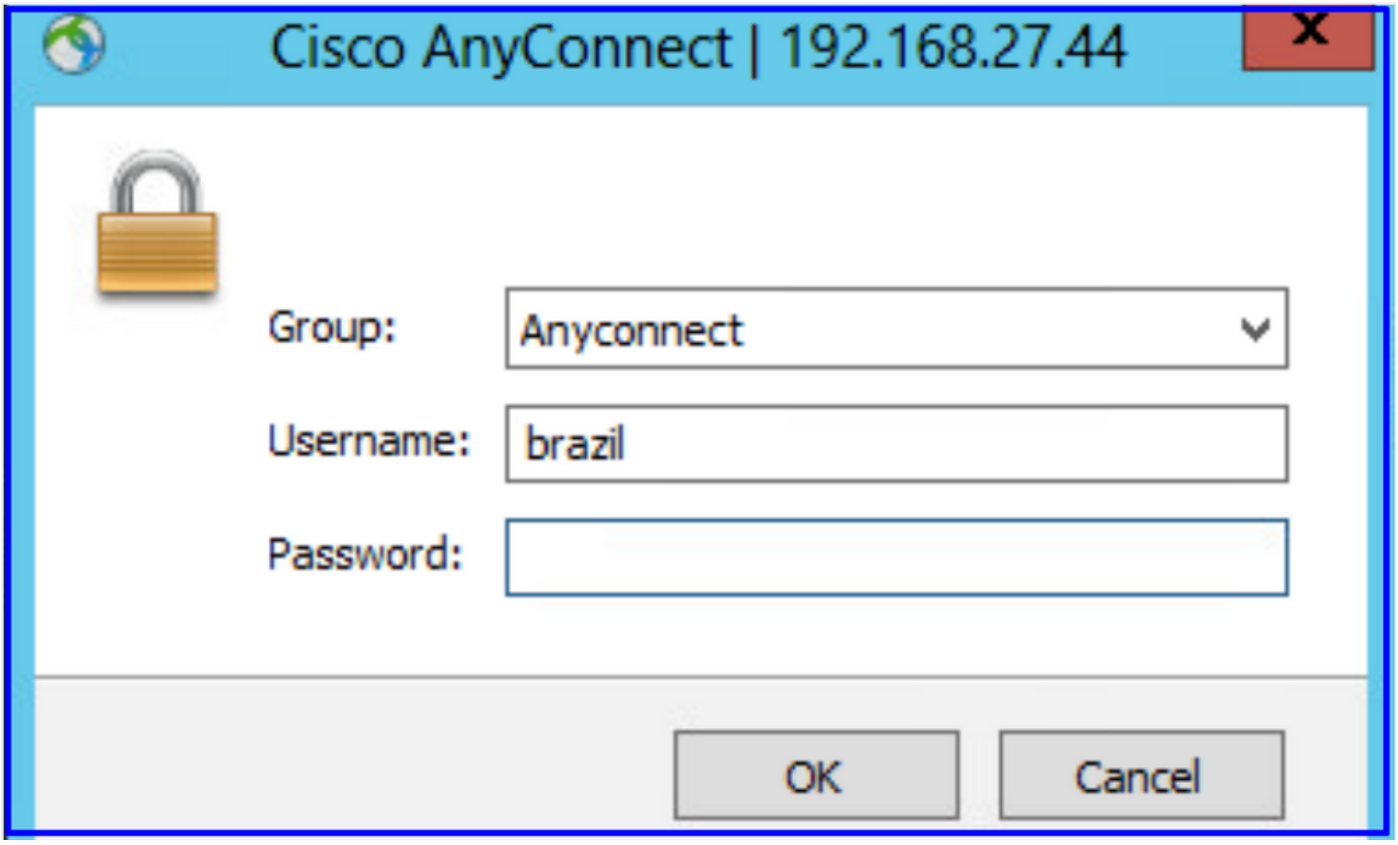
Implante as alterações.

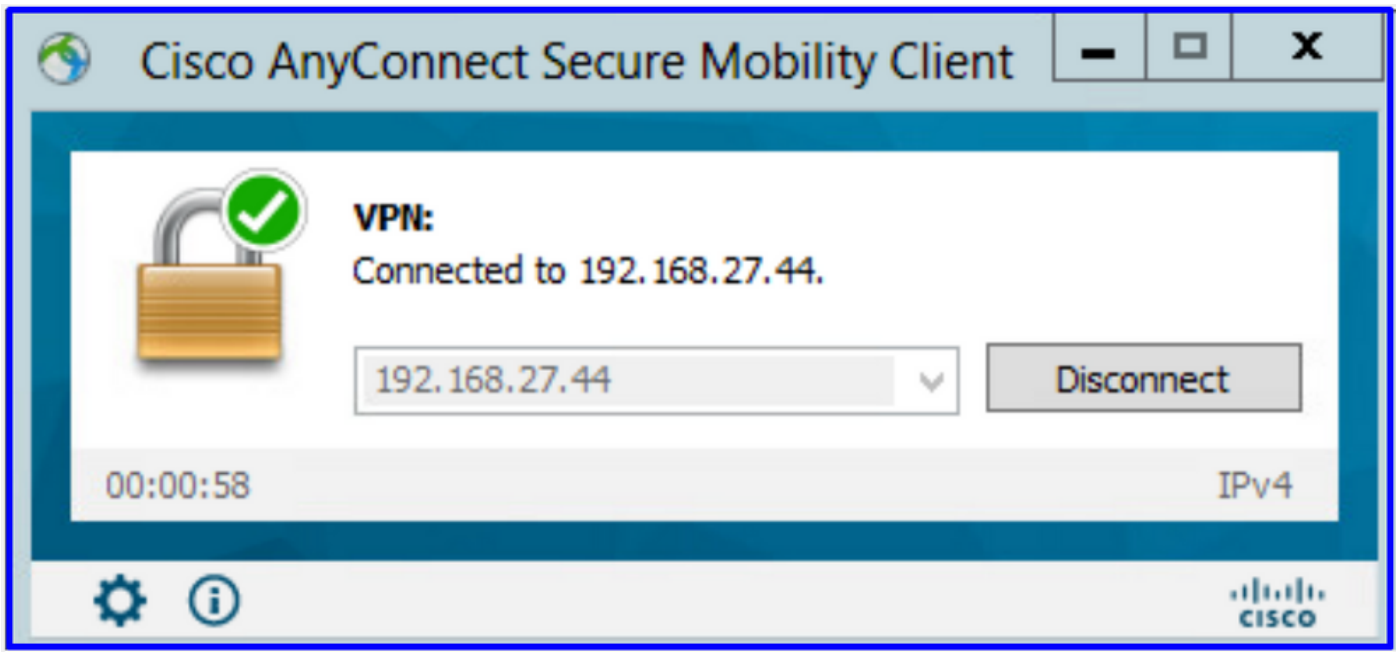
Verificação

Verifique se a conexão de teste com o AD foi bem-sucedida



Verifique se o usuário remoto pode fazer login com o cliente AnyConnect com suas credenciais do AD.





Verifique se o usuário obtém um endereço IP do pool VPN

```
firepower# show vpn-sessiondb anyconnect filter name brazil

Session Type: AnyConnect

Username     : brazil                  Index        : 23
Assigned IP  : 192.168.19.1            Public IP    : 192.168.27.40
Protocol     : AnyConnect-Parent SSL-Tunnel
License      : AnyConnect Premium
Encryption   : AnyConnect-Parent: (1)none  SSL-Tunnel: (1)AES-GCM-256
Hashing      : AnyConnect-Parent: (1)none  SSL-Tunnel: (1)SHA384
Bytes Tx     : 15818                   Bytes Rx     : 2494
Group Policy : DfltGrpPolicy           Tunnel Group : Anyconnect
Login Time   : 13:22:20 UTC Wed Jul 21 2021
Duration     : 0h:00m:13s
Inactivity   : 0h:00m:00s
VLAN Mapping : N/A                     VLAN         : none
Audt Sess ID : 00000000000170060f81f8c
Security Grp : none                    Tunnel Zone  : 0

firepower#
```

Troubleshoot

Você pode usar o **user_map_query.**plscript para validar se o FDM tem o mapeamento ip do usuário

```
root@firepower:~# user_map_query.pl -u brazil

WARNING: This script was not tested on this major version (7.0.0)! The results may be unexpected.
Current Time: 07/21/2021 13:23:38 UTC

Getting information on username(s)...

___
User #1: brazil
---

  ID:         5
  Last Seen:  07/21/2021 13:22:20 UTC
  for_policy: 1

============================
|          Database        |
============================

##) IP Address
 1) ::ffff:192.168.19.1


##) Group Name (ID)
 1) Domain Users (11)
root@firepower:~# user_map_query.pl -i 192.168.19.1

WARNING: This script was not tested on this major version (7.0.0)! The results may be unexpected.
Current Time: 07/21/2021 13:23:50 UTC

Getting information on IP Address(es)...

___
IP #1: 192.168.19.1
---

============================
|          Database        |
============================

##) Username (ID)
 1) brazil (5)
      for_policy: 1
      Last Seen: 07/21/2021 13:22:20 UTC

root@firepower:~#
```

No modo de silêncio, você pode configurar:

o sistema oferece suporte à depuração **de identidade** para verificar se o redirecionamento foi bem-sucedido.

```
> system support identity-debug
Enable firewall-engine-debug too? [n]: y
Please specify an IP protocol:
Please specify a client IP address: 192.168.19.1
Please specify a client port:
Please specify a server IP address:
Please specify a server port:
Monitoring identity and firewall debug messages

192.168.19.1-62757 > 72.163.47.11-53 17 AS 1-1 I 0 Starting authentication (sfAuthCheckRules
params) with zones 2 -> 2, port 62757 -> 53, geo 14467064 -> 14467082
192.168.19.1-62757 > 72.163.47.11-53 17 AS 1-1 I 0 Retrieved ABP info:
192.168.19.1-62757 > 72.163.47.11-53 17 AS 1-1 I 0 abp src
192.168.19.1-62757 > 72.163.47.11-53 17 AS 1-1 I 0 abp dst
192.168.19.1-62757 > 72.163.47.11-53 17 AS 1-1 I 0 matched auth rule id = 130027046 user_id = 5
realm_id = 3
192.168.19.1-62757 > 72.163.47.11-53 17 AS 1-1 I 0 new firewall session
192.168.19.1-62757 > 72.163.47.11-53 17 AS 1-1 I 0 using HW or preset rule order 2,
'Inside_Outside_Rule', action Allow and prefilter rule 0
192.168.19.1-62757 > 72.163.47.11-53 17 AS 1-1 I 0 HitCount data sent for rule id: 268435458,
192.168.19.1-62757 > 72.163.47.11-53 17 AS 1-1 I 0 allow action
192.168.19.1-62757 > 8.8.8.8-53 17 AS 1-1 I 1 Starting authentication (sfAuthCheckRules params)
with zones 2 -> 2, port 62757 -> 53, geo 14467064 -> 14467082
192.168.19.1-62757 > 8.8.8.8-53 17 AS 1-1 I 1 Retrieved ABP info:
192.168.19.1-62757 > 8.8.8.8-53 17 AS 1-1 I 1 abp src
192.168.19.1-62757 > 8.8.8.8-53 17 AS 1-1 I 1 abp dst
192.168.19.1-62757 > 8.8.8.8-53 17 AS 1-1 I 1 matched auth rule id = 130027046 user_id = 5
realm_id = 3
192.168.19.1-62757 > 8.8.8.8-53 17 AS 1-1 I 1 new firewall session
192.168.19.1-62757 > 8.8.8.8-53 17 AS 1-1 I 1 using HW or preset rule order 2,
'Inside_Outside_Rule', action Allow and prefilter rule 0
192.168.19.1-62757 > 8.8.8.8-53 17 AS 1-1 I 1 HitCount data sent for rule id: 268435458,
192.168.19.1-62757 > 8.8.8.8-53 17 AS 1-1 I 1 allow action
192.168.19.1-53015 > 20.42.0.16-443 6 AS 1-1 I 0 Starting authentication (sfAuthCheckRules
params) with zones 2 -> 2, port 53015 -> 443, geo 14467064 -> 14467082
192.168.19.1-53015 > 20.42.0.16-443 6 AS 1-1 I 0 Retrieved ABP info:
192.168.19.1-53015 > 20.42.0.16-443 6 AS 1-1 I 0 abp src
192.168.19.1-53015 > 20.42.0.16-443 6 AS 1-1 I 0 abp dst
192.168.19.1-53015 > 20.42.0.16-443 6 AS 1-1 I 0 matched auth rule id = 130027046 user_id = 5
realm_id = 3
192.168.19.1-53015 > 20.42.0.16-443 6 AS 1-1 I 0 new firewall session
192.168.19.1-53015 > 20.42.0.16-443 6 AS 1-1 I 0 using HW or preset rule order 2,
'Inside_Outside_Rule', action Allow and prefilter rule 0
192.168.19.1-53015 > 20.42.0.16-443 6 AS 1-1 I 0 HitCount data sent for rule id: 268435458,
192.168.19.1-53015 > 20.42.0.16-443 6 AS 1-1 I 0 allow action
192.168.19.1-52166 > 20.42.0.16-443 6 AS 1-1 I 1 deleting firewall session flags = 0x10001,
fwFlags = 0x102, session->logFlags = 010001
192.168.19.1-65207 > 72.163.47.11-53 17 AS 1-1 I 1 Starting authentication (sfAuthCheckRules
params) with zones 2 -> 2, port 65207 -> 53, geo 14467064 -> 14467082
192.168.19.1-65207 > 72.163.47.11-53 17 AS 1-1 I 1 Retrieved ABP info:
192.168.19.1-65207 > 72.163.47.11-53 17 AS 1-1 I 1 abp src
192.168.19.1-65207 > 72.163.47.11-53 17 AS 1-1 I 1 abp dst
192.168.19.1-65207 > 72.163.47.11-53 17 AS 1-1 I 1 matched auth rule id = 130027046 user_id = 5
realm_id = 3
192.168.19.1-65207 > 72.163.47.11-53 17 AS 1-1 I 1 new firewall session
192.168.19.1-65207 > 72.163.47.11-53 17 AS 1-1 I 1 using HW or preset rule order 2,
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'Inside_Outside_Rule', action Allow and prefilter rule 0
192.168.19.1-65207 > 72.163.47.11-53 17 AS 1-1 I 1 HitCount data sent for rule id: 268435458,
192.168.19.1-65207 > 72.163.47.11-53 17 AS 1-1 I 1 allow action
192.168.19.1-65207 > 8.8.8.8-53 17 AS 1-1 I 0 Starting authentication (sfAuthCheckRules params)
with zones 2 -> 2, port 65207 -> 53, geo 14467064 -> 14467082
192.168.19.1-65207 > 8.8.8.8-53 17 AS 1-1 I 0 Retrieved ABP info:
192.168.19.1-65207 > 8.8.8.8-53 17 AS 1-1 I 0 abp src
192.168.19.1-65207 > 8.8.8.8-53 17 AS 1-1 I 0 abp dst
192.168.19.1-65207 > 8.8.8.8-53 17 AS 1-1 I 0 matched auth rule id = 130027046 user_id = 5
realm_id = 3
192.168.19.1-65207 > 8.8.8.8-53 17 AS 1-1 I 0 new firewall session
192.168.19.1-65207 > 8.8.8.8-53 17 AS 1-1 I 0 using HW or preset rule order 2,
'Inside_Outside_Rule', action Allow and prefilter rule 0
192.168.19.1-65207 > 8.8.8.8-53 17 AS 1-1 I 0 HitCount data sent for rule id: 268435458,
192.168.19.1-65207 > 8.8.8.8-53 17 AS 1-1 I 0 allow action
192.168.19.1-65209 > 8.8.8.8-53 17 AS 1-1 I 0 Starting authentication (sfAuthCheckRules params)
with zones 2 -> 2, port 65209 -> 53, geo 14467064 -> 14467082
192.168.19.1-65209 > 8.8.8.8-53 17 AS 1-1 I 0 Retrieved ABP info:
192.168.19.1-65209 > 8.8.8.8-53 17 AS 1-1 I 0 abp src
192.168.19.1-65209 > 8.8.8.8-53 17 AS 1-1 I 0 abp dst
192.168.19.1-65209 > 8.8.8.8-53 17 AS 1-1 I 0 matched auth rule id = 130027046 user_id = 5
realm_id = 3
192.168.19.1-65209 > 8.8.8.8-53 17 AS 1-1 I 0 new firewall session
192.168.19.1-65209 > 8.8.8.8-53 17 AS 1-1 I 0 using HW or preset rule order 2,
'Inside_Outside_Rule', action Allow and prefilter rule 0
192.168.19.1-65209 > 8.8.8.8-53 17 AS 1-1 I 0 HitCount data sent for rule id: 268435458,
192.168.19.1-65209 > 8.8.8.8-53 17 AS 1-1 I 0 allow action
192.168.19.1-65211 > 72.163.47.11-53 17 AS 1-1 I 1 Starting authentication (sfAuthCheckRules
params) with zones 2 -> 2, port 65211 -> 53, geo 14467064 -> 14467082
192.168.19.1-65211 > 72.163.47.11-53 17 AS 1-1 I 1 Retrieved ABP info:
192.168.19.1-65211 > 72.163.47.11-53 17 AS 1-1 I 1 abp src
192.168.19.1-65211 > 72.163.47.11-53 17 AS 1-1 I 1 abp dst
192.168.19.1-65211 > 72.163.47.11-53 17 AS 1-1 I 1 matched auth rule id = 130027046 user_id = 5
realm_id = 3
192.168.19.1-65211 > 72.163.47.11-53 17 AS 1-1 I 1 new firewall session
192.168.19.1-65211 > 72.163.47.11-53 17 AS 1-1 I 1 using HW or preset rule order 2,
'Inside_Outside_Rule', action Allow and prefilter rule 0
192.168.19.1-65211 > 72.163.47.11-53 17 AS 1-1 I 1 HitCount data sent for rule id: 268435458,
192.168.19.1-65211 > 72.163.47.11-53 17 AS 1-1 I 1 allow action
192.168.19.1-61823 > 72.163.47.11-53 17 AS 1-1 I 1 Starting authentication (sfAuthCheckRules
params) with zones 2 -> 2, port 61823 -> 53, geo 14467064 -> 14467082
192.168.19.1-61823 > 72.163.47.11-53 17 AS 1-1 I 1 Retrieved ABP info:
192.168.19.1-61823 > 72.163.47.11-53 17 AS 1-1 I 1 abp src
192.168.19.1-61823 > 72.163.47.11-53 17 AS 1-1 I 1 abp dst
192.168.19.1-61823 > 72.163.47.11-53 17 AS 1-1 I 1 matched auth rule id = 130027046 user_id = 5
realm_id = 3
192.168.19.1-61823 > 72.163.47.11-53 17 AS 1-1 I 1 new firewall session
192.168.19.1-61823 > 72.163.47.11-53 17 AS 1-1 I 1 using HW or preset rule order 2,
'Inside_Outside_Rule', action Allow and prefilter rule 0
192.168.19.1-61823 > 72.163.47.11-53 17 AS 1-1 I 1 HitCount data sent for rule id: 268435458,
192.168.19.1-61823 > 72.163.47.11-53 17 AS 1-1 I 1 allow action
192.168.19.1-61823 > 8.8.8.8-53 17 AS 1-1 I 0 Starting authentication (sfAuthCheckRules params)
with zones 2 -> 2, port 61823 -> 53, geo 14467064 -> 14467082
192.168.19.1-61823 > 8.8.8.8-53 17 AS 1-1 I 0 Retrieved ABP info:
192.168.19.1-61823 > 8.8.8.8-53 17 AS 1-1 I 0 abp src
192.168.19.1-61823 > 8.8.8.8-53 17 AS 1-1 I 0 abp dst
192.168.19.1-61823 > 8.8.8.8-53 17 AS 1-1 I 0 matched auth rule id = 130027046 user_id = 5
realm_id = 3
192.168.19.1-61823 > 8.8.8.8-53 17 AS 1-1 I 0 new firewall session
192.168.19.1-61823 > 8.8.8.8-53 17 AS 1-1 I 0 using HW or preset rule order 2,
'Inside_Outside_Rule', action Allow and prefilter rule 0
192.168.19.1-61823 > 8.8.8.8-53 17 AS 1-1 I 0 HitCount data sent for rule id: 268435458,
192.168.19.1-61823 > 8.8.8.8-53 17 AS 1-1 I 0 allow action
192.168.19.1-57747 > 72.163.47.11-53 17 AS 1-1 I 1 deleting firewall session flags = 0x10001,
```

```
fwFlags = 0x102, session->logFlags = 010001
192.168.19.1-57747 > 72.163.47.11-53 17 AS 1-1 I 1 Logging EOF as part of session delete with
rule_id = 268435458 ruleAction = 2 ruleReason = 0
192.168.19.1-57747 > 8.8.8.8-53 17 AS 1-1 I 0 deleting firewall session flags = 0x10001, fwFlags
= 0x102, session->logFlags = 010001
192.168.19.1-57747 > 8.8.8.8-53 17 AS 1-1 I 0 Logging EOF as part of session delete with rule_id
= 268435458 ruleAction = 2 ruleReason = 0
192.168.19.1-53038 > 20.42.0.16-443 6 AS 1-1 I 0 Starting authentication (sfAuthCheckRules
params) with zones 2 -> 2, port 53038 -> 443, geo 14467064 -> 14467082
192.168.19.1-53038 > 20.42.0.16-443 6 AS 1-1 I 0 Retrieved ABP info:
192.168.19.1-53038 > 20.42.0.16-443 6 AS 1-1 I 0 abp src
192.168.19.1-53038 > 20.42.0.16-443 6 AS 1-1 I 0 abp dst
192.168.19.1-53038 > 20.42.0.16-443 6 AS 1-1 I 0 matched auth rule id = 130027046 user_id = 5
realm_id = 3
192.168.19.1-53038 > 20.42.0.16-443 6 AS 1-1 I 0 new firewall session
192.168.19.1-53038 > 20.42.0.16-443 6 AS 1-1 I 0 using HW or preset rule order 2,
'Inside_Outside_Rule', action Allow and prefilter rule 0
192.168.19.1-53038 > 20.42.0.16-443 6 AS 1-1 I 0 HitCount data sent for rule id: 268435458,
192.168.19.1-53038 > 20.42.0.16-443 6 AS 1-1 I 0 allow action
192.168.19.1-57841 > 72.163.47.11-53 17 AS 1-1 I 1 deleting firewall session flags = 0x10001,
fwFlags = 0x102, session->logFlags = 010001
192.168.19.1-57841 > 72.163.47.11-53 17 AS 1-1 I 1 Logging EOF as part of session delete with
rule_id = 268435458 ruleAction = 2 ruleReason = 0
192.168.19.1-57841 > 8.8.8.8-53 17 AS 1-1 I 0 deleting firewall session flags = 0x10001, fwFlags
= 0x102, session->logFlags = 010001
192.168.19.1-57841 > 8.8.8.8-53 17 AS 1-1 I 0 Logging EOF as part of session delete with rule_id
= 268435458 ruleAction = 2 ruleReason = 0
192.168.19.1-64773 > 8.8.8.8-53 17 AS 1-1 I 0 Starting authentication (sfAuthCheckRules params)
with zones 2 -> 2, port 64773 -> 53, geo 14467064 -> 14467082
192.168.19.1-64773 > 8.8.8.8-53 17 AS 1-1 I 0 Retrieved ABP info:
192.168.19.1-64773 > 8.8.8.8-53 17 AS 1-1 I 0 abp src
192.168.19.1-64773 > 8.8.8.8-53 17 AS 1-1 I 0 abp dst
192.168.19.1-64773 > 8.8.8.8-53 17 AS 1-1 I 0 matched auth rule id = 130027046 user_id = 5
realm_id = 3
192.168.19.1-64773 > 8.8.8.8-53 17 AS 1-1 I 0 new firewall session
192.168.19.1-64773 > 8.8.8.8-53 17 AS 1-1 I 0 using HW or preset rule order 2,
'Inside_Outside_Rule', action Allow and prefilter rule 0
192.168.19.1-64773 > 8.8.8.8-53 17 AS 1-1 I 0 HitCount data sent for rule id: 268435458,
192.168.19.1-64773 > 8.8.8.8-53 17 AS 1-1 I 0 allow action
```

Informações Relacionadas

Configurar VPN de acesso remoto no FTD gerenciado pelo FDM

https://www.cisco.com/c/en/us/support/docs/security/anyconnect-secure-mobility-client/215532-configure-remote-access-vpn-on-ftd-manag.html