配置安全客户端的本地LAN访问

目录

简介

本文档介绍如何配置Cisco Secure Client以访问本地LAN并仍然保持与头端的安全连接。

先决条件

要求

思科建议您了解以下主题：

- 思科安全防火墙管理中心(FMC)
- 思科Firepower威胁防御(FTD)
- 思科安全客户端(CSC)

使用的组件

本文档中的信息基于以下软件和硬件版本：

- 思科安全防火墙管理中心虚拟设备版本7.3
- 思科Firepower威胁防御虚拟设备版本7.3
- 思科安全客户端5.0.02075版

本文档中的信息都是基于特定实验室环境中的设备编写的。本文档中使用的所有设备最初均采用原始（默认）配置。如果您的网络处于活动状态，请确保您了解所有命令的潜在影响。

背景信息

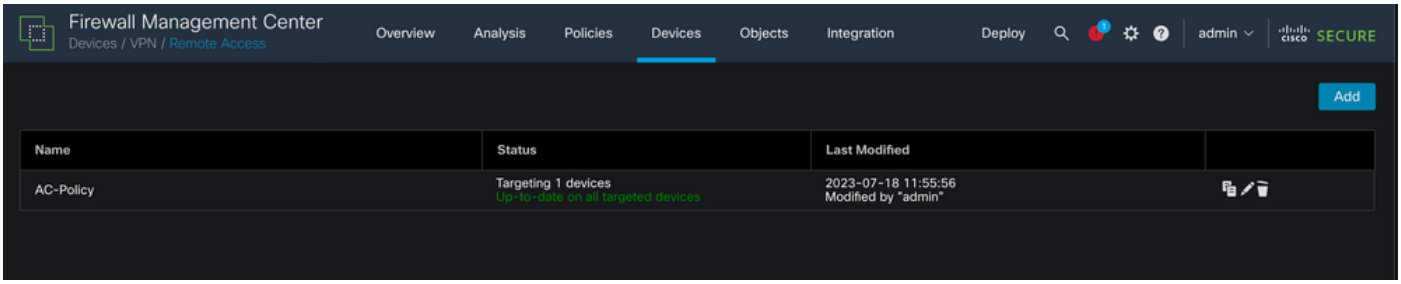
本文档中介绍的配置允许Cisco安全客户端对本地LAN具有完全访问权限，同时仍能保持与前端和企业资源的安全连接。这可用于允许客户端打印或访问网络访问服务器(NAS)。

配置

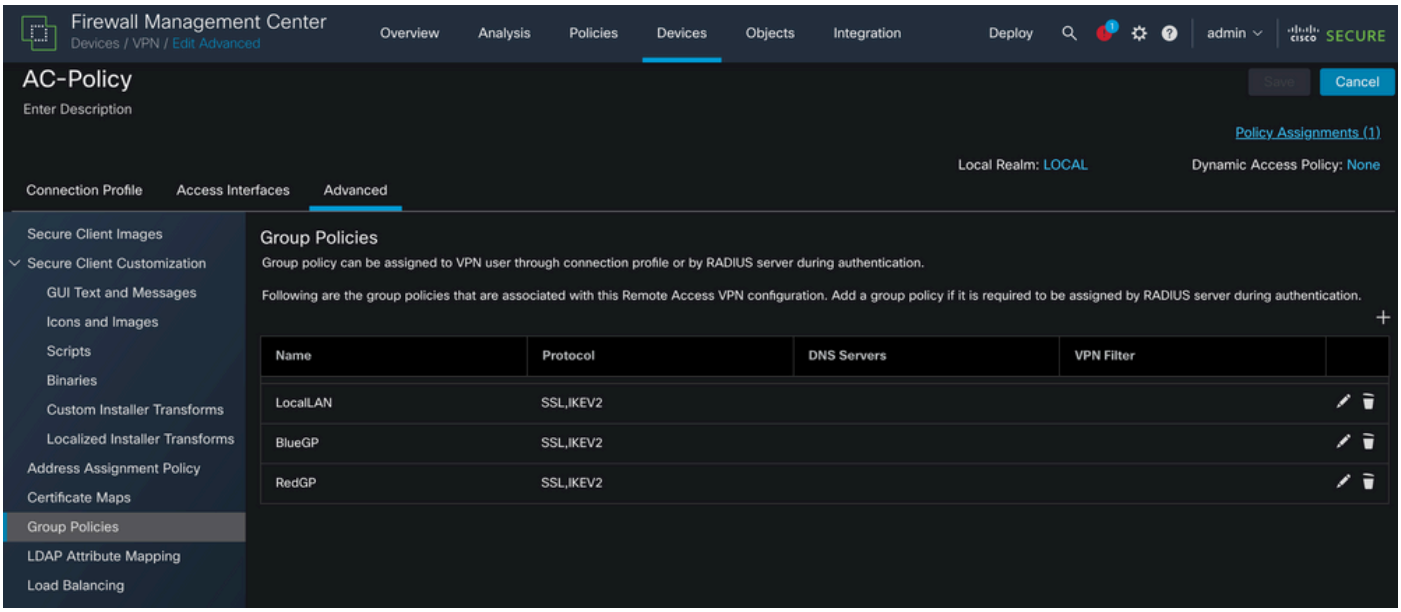
FMC配置

在本文档中，假设您已经有一个工作正常的远程访问VPN配置。

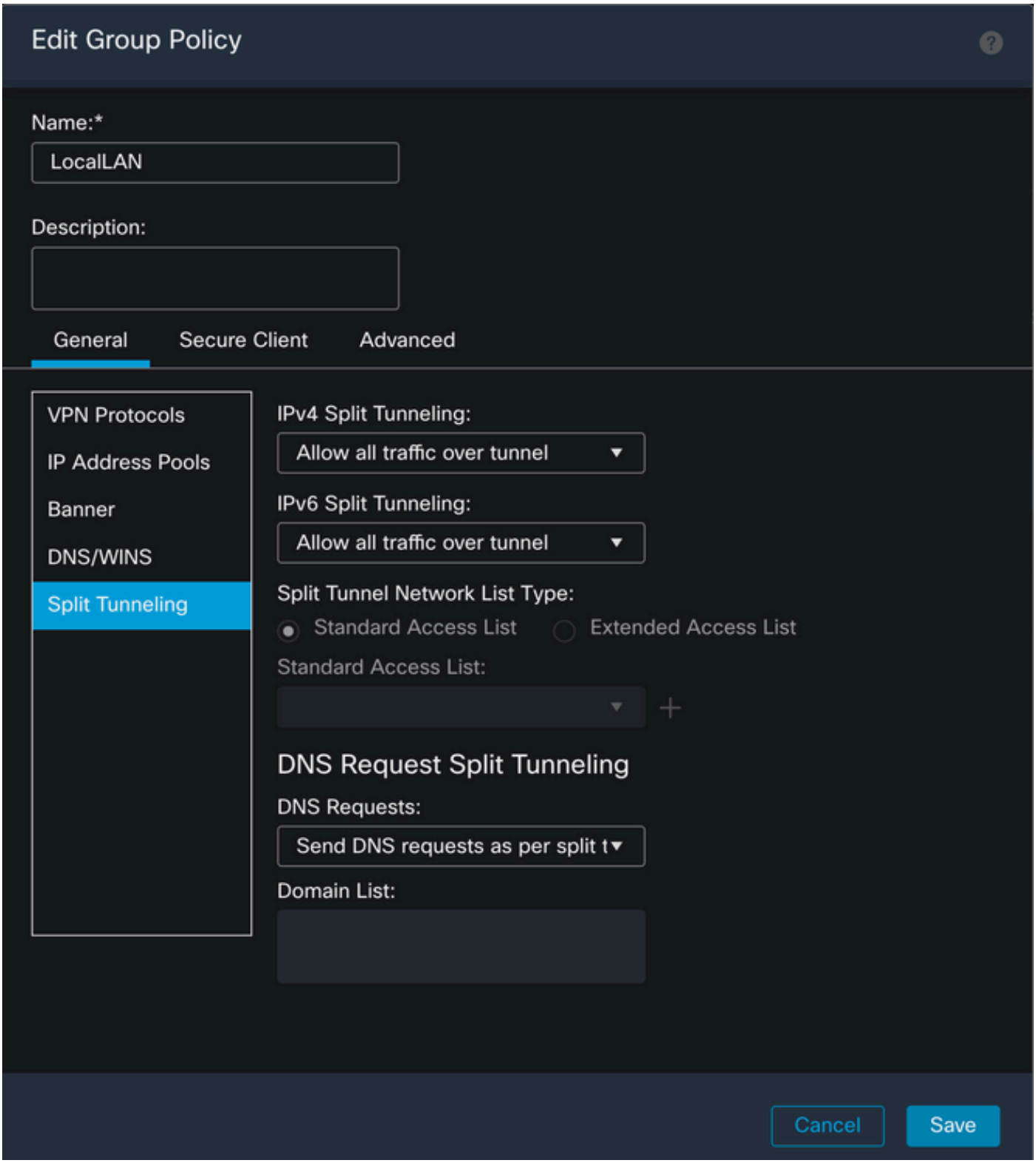
要添加本地LAN访问功能，请导航到设备>远程访问，然后单击相应远程访问策略上的编辑按钮。



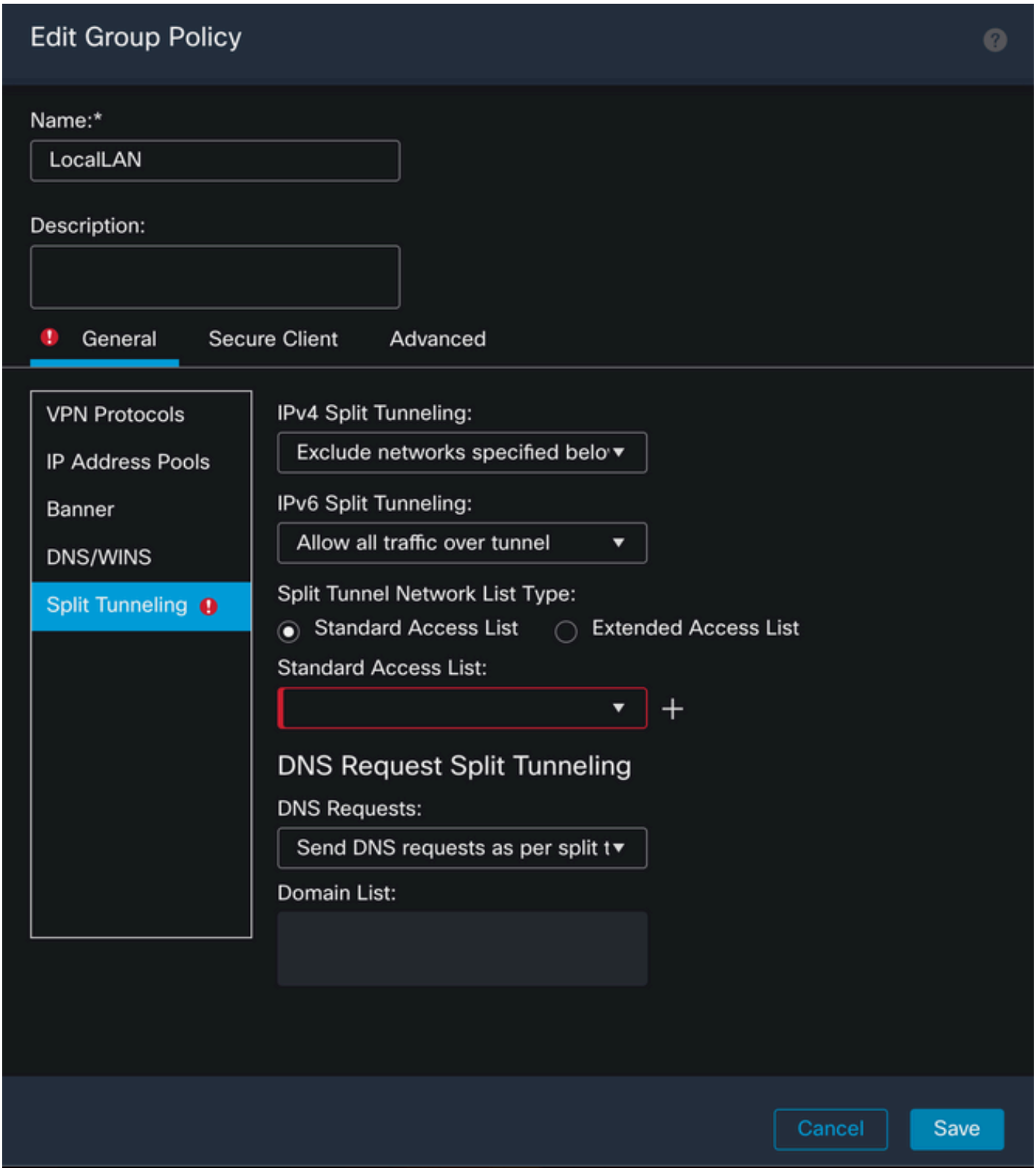
然后，导航到Advanced > Group Policies。



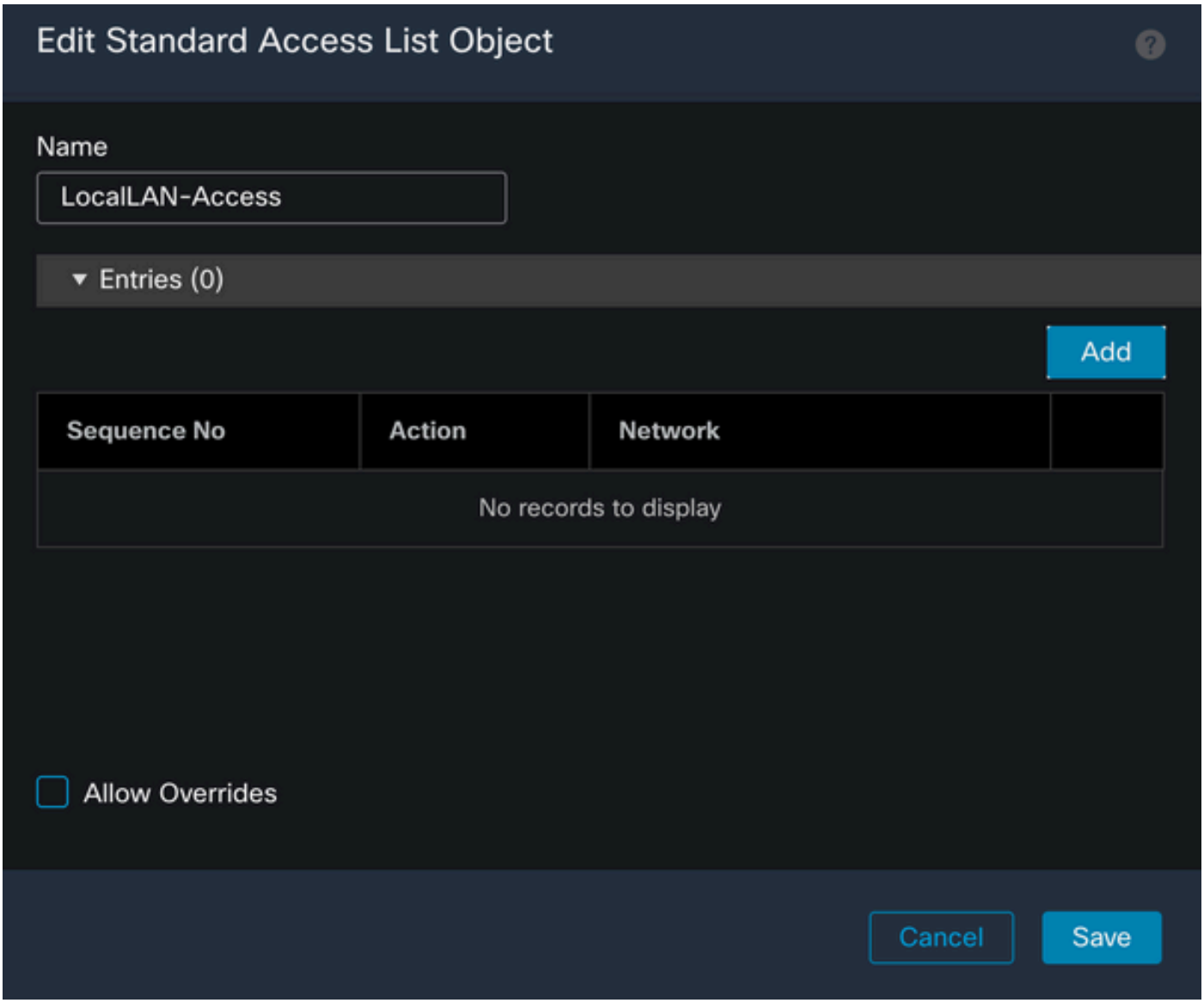
在要配置本地LAN访问的组策略上单击Edit按钮，并导航到Split Tunneling选项卡。



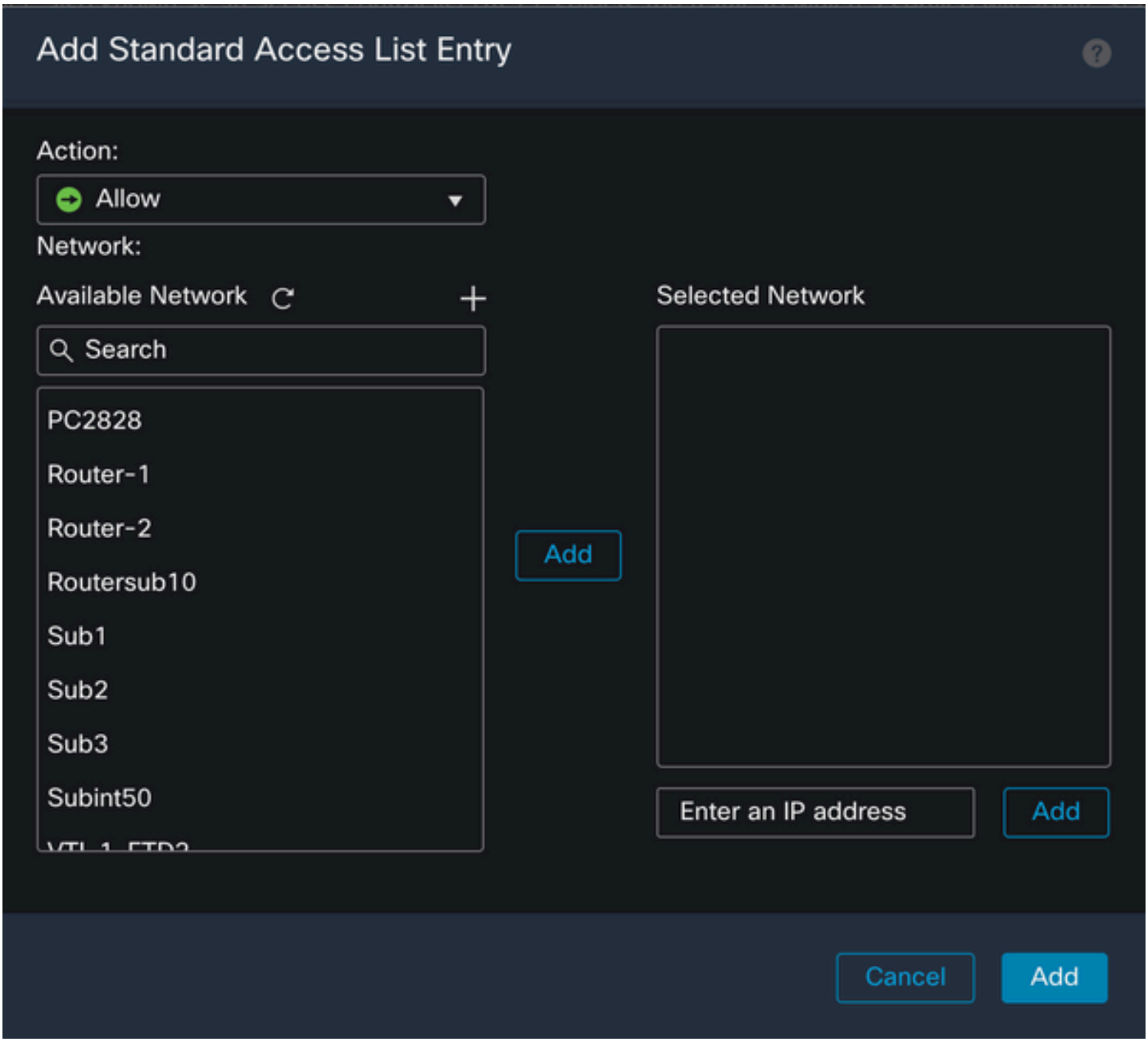
在IPv4 Split Tunneling部分中，选择Exclude networks specified below选项。这将提示选择标准访问列表。



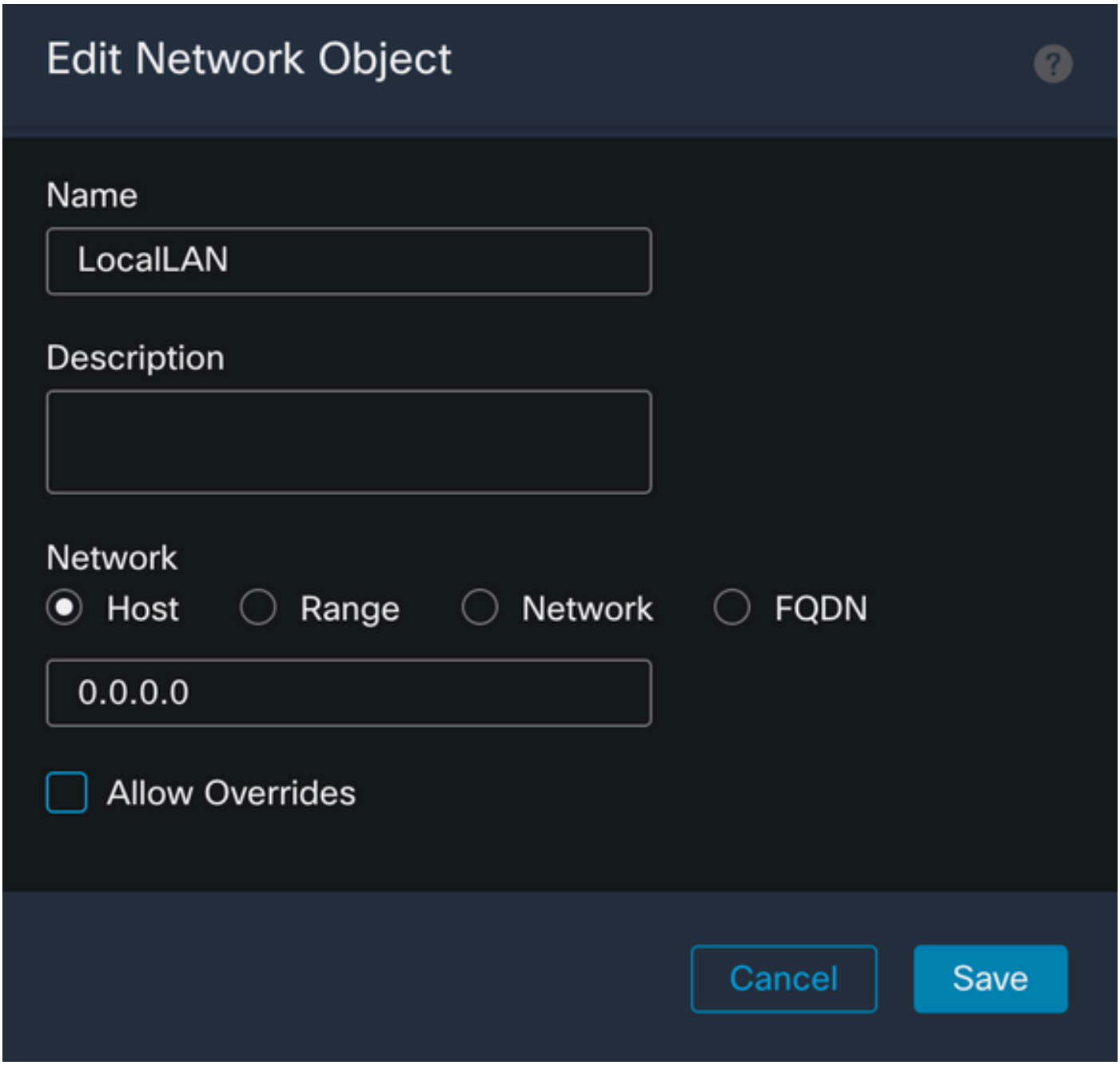
单击+ 按钮创建新的标准访问列表。



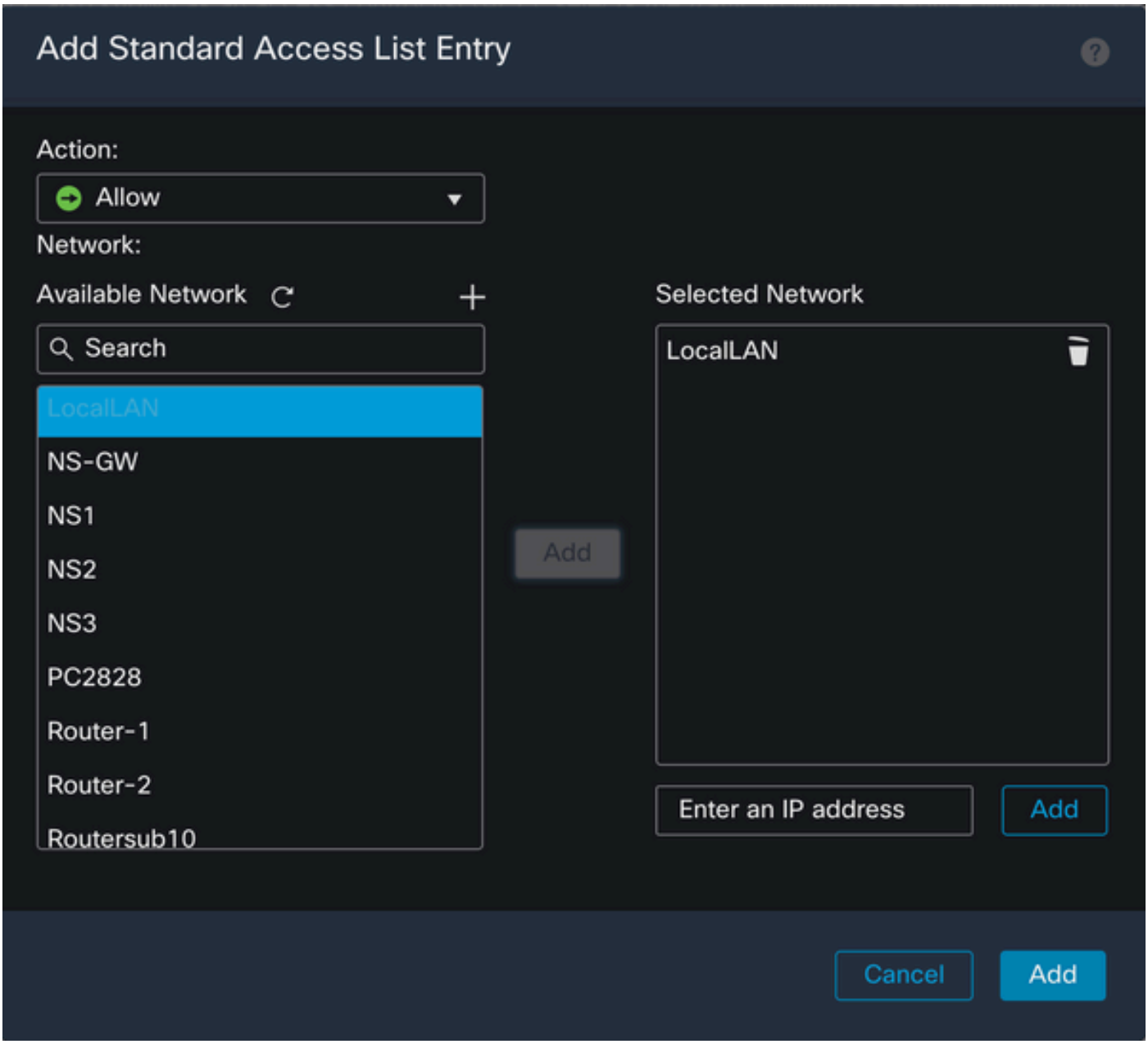
单击Add按钮以创建标准访问列表条目。此条目的操作必须设置为允许。



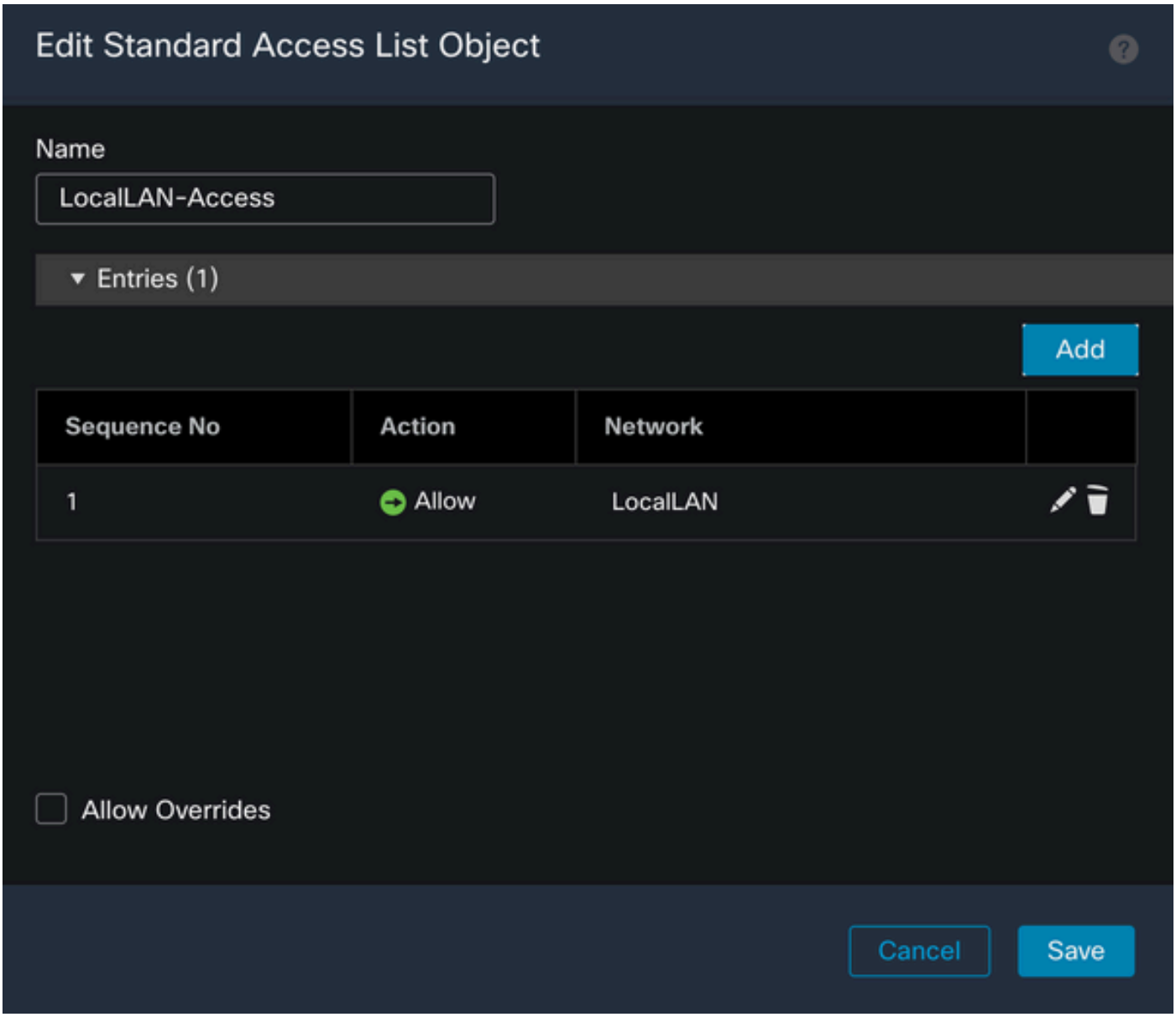
单击+按钮添加新的网络对象。确保在网络部分将此对象设置为主机，并在框中输入0.0.0.0。



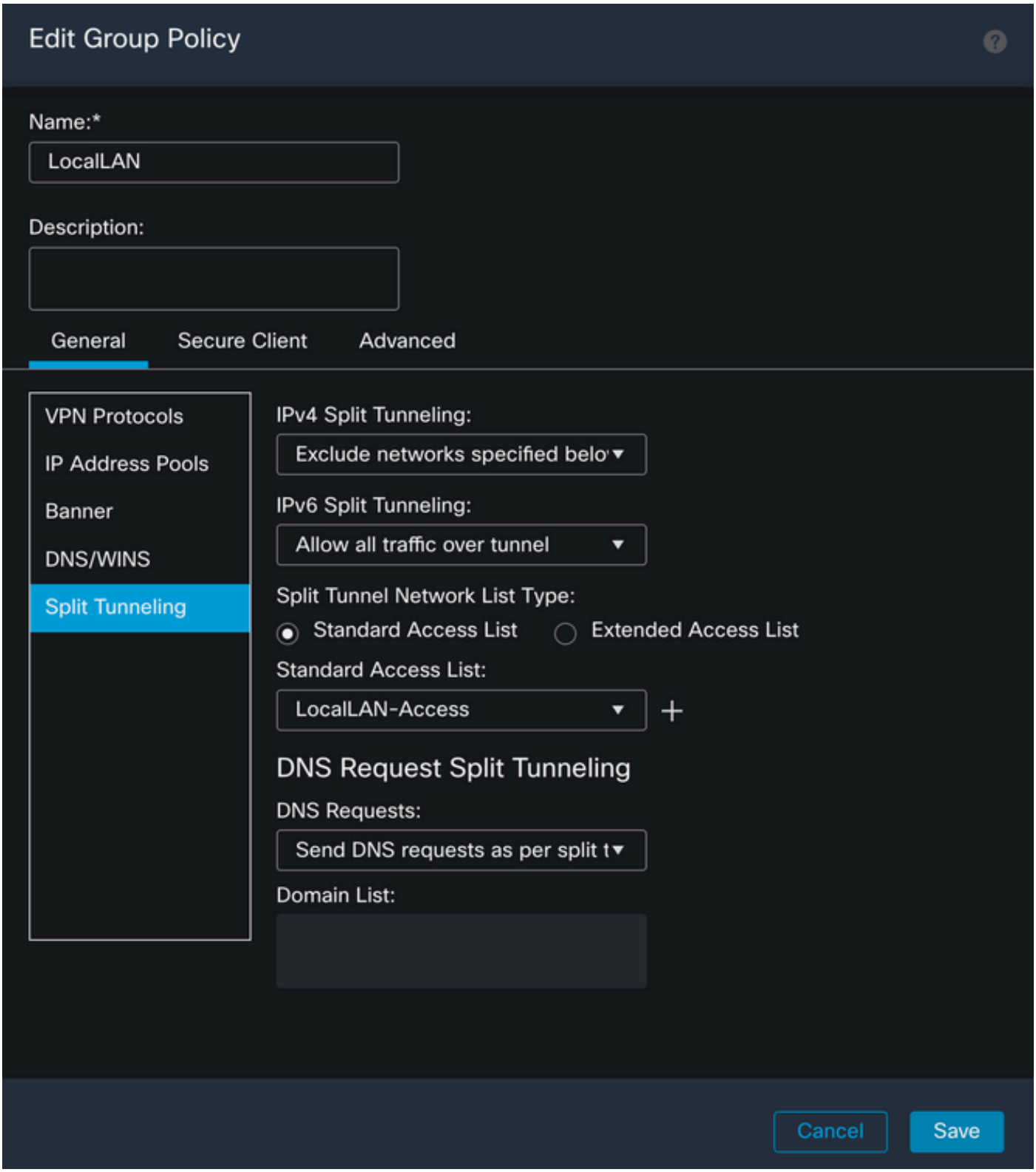
单击Save按钮并选择新创建的对象。



单击Add按钮保存标准访问列表条目。



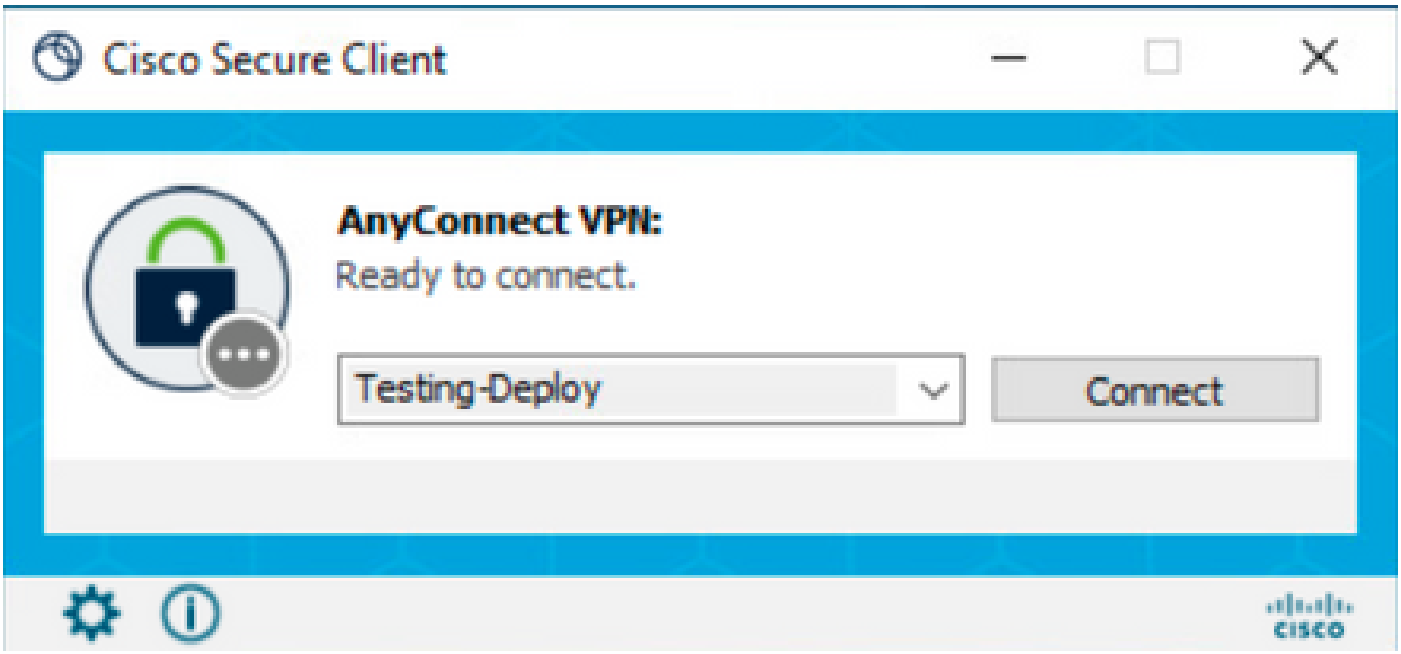
单击Save按钮，系统会自动选择新创建的标准访问列表。



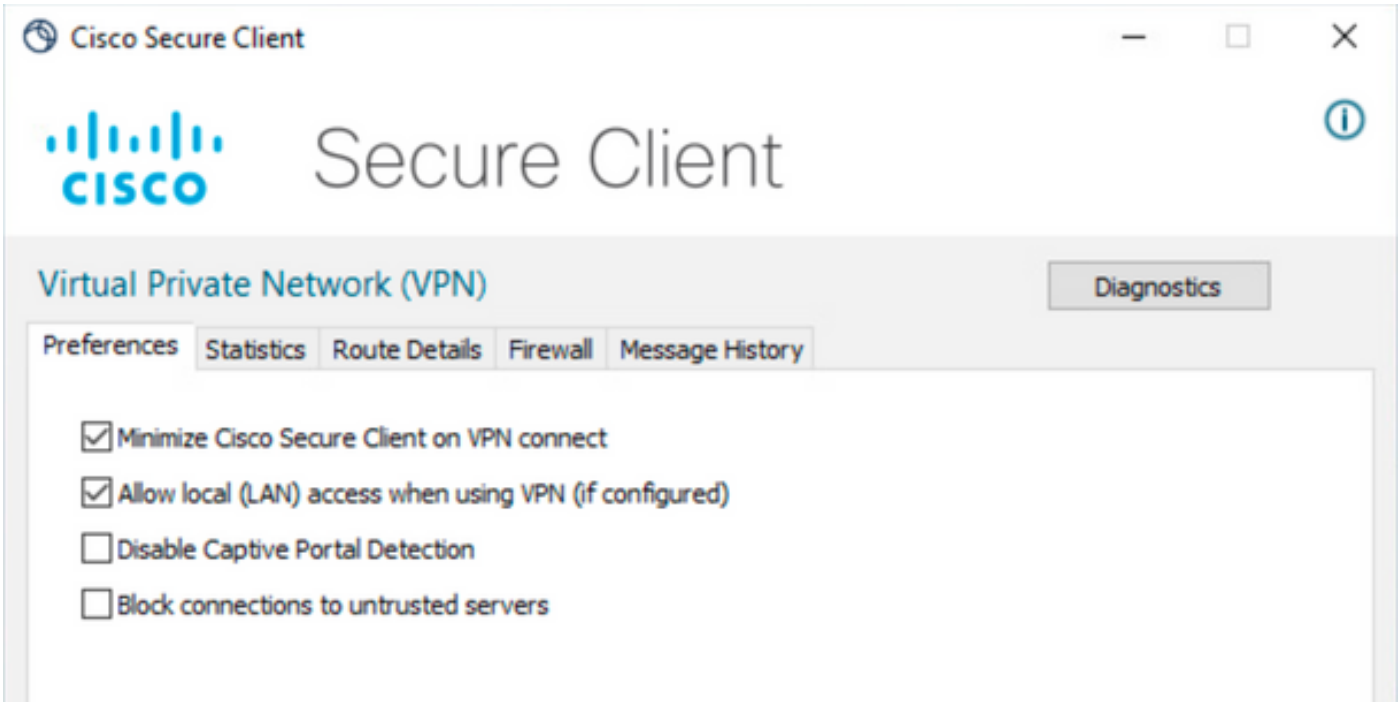
单击Save按钮并部署更改。

安全客户端配置

默认情况下，本地LAN访问选项设置为用户可控制。要启用该选项，请点击安全客户端GUI上的Gear图标。



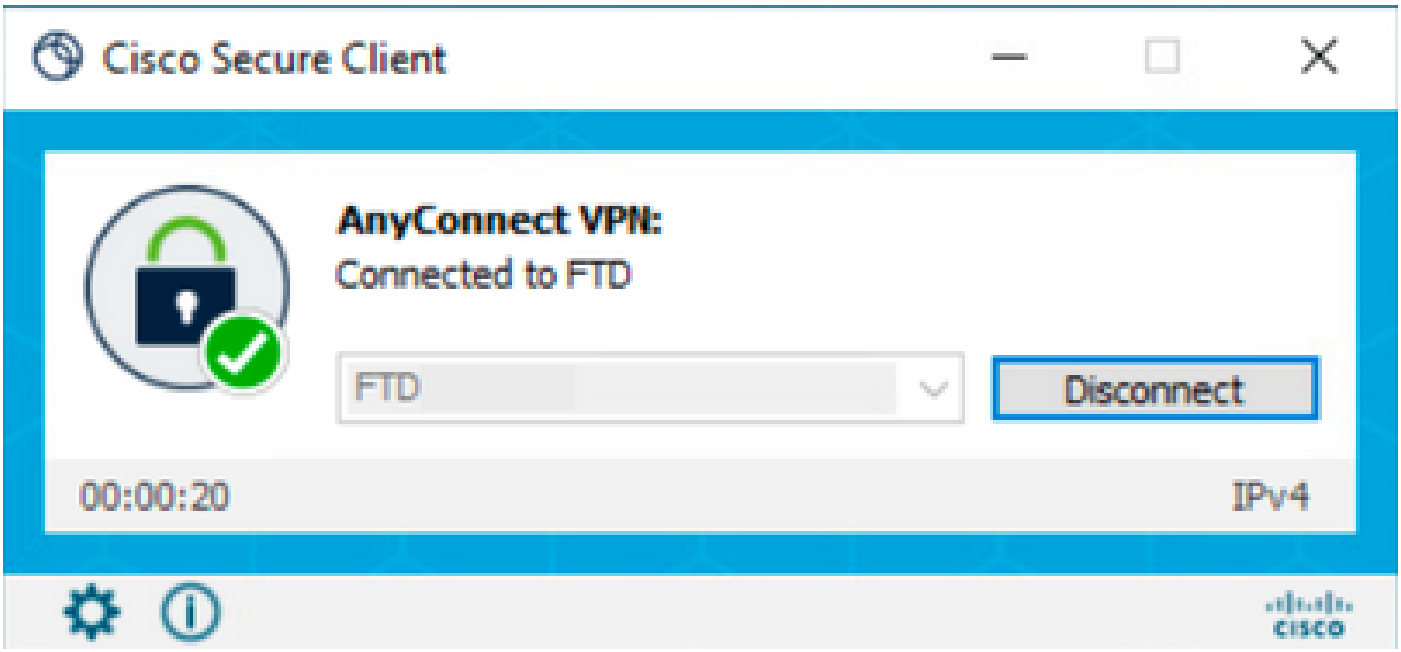
导航到首选项，并确保启用使用VPN（如果已配置）时允许本地(LAN)访问选项。



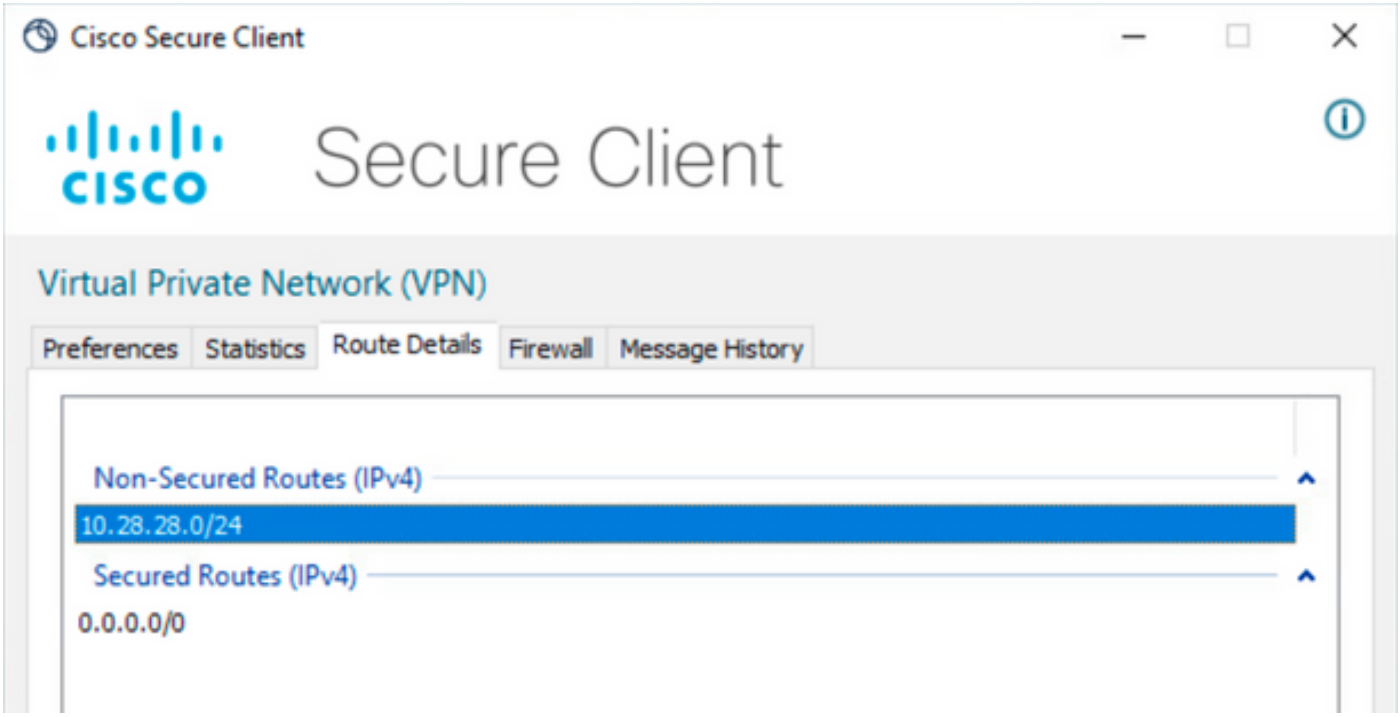
验证

安全客户端

使用安全客户端连接到头端。



点击齿轮图标并导航至Route Details。在这里您可以看到，本地LAN被自动检测并从隧道中排除。



FTD CLI

要验证配置是否已成功应用，您可以使用FTD的CLI。

```
<#root>

firepower#

show running-config group-policy LocalLAN


group-policy LocalLAN internal
group-policy LocalLAN attributes
```

```
banner value Local LAN Access is allowed
wins-server none
dns-server none
dhcp-network-scope none
vpn-simultaneous-logins 3
vpn-idle-timeout 30
vpn-idle-timeout alert-interval 1
vpn-session-timeout none
vpn-session-timeout alert-interval 1
vpn-filter none
vpn-tunnel-protocol ikev2 ssl-client
```

split-tunnel-policy excludespecified

```
ipv6-split-tunnel-policy tunnelall
```

split-tunnel-network-list value LocalLAN-Access

```
default-domain none
split-dns none
split-tunnel-all-dns disable
client-bypass-protocol disable
vlan none
address-pools value AC_Pool
webvpn
anyconnect ssl dtls enable
anyconnect mtu 1406
anyconnect firewall-rule client-interface public none
anyconnect firewall-rule client-interface private none
anyconnect ssl keepalive 20
anyconnect ssl rekey time none
anyconnect ssl rekey method none
anyconnect dpd-interval client 30
anyconnect dpd-interval gateway 30
anyconnect ssl compression none
anyconnect dtls compression none
anyconnect modules value none
anyconnect ask none default anyconnect
anyconnect ssl df-bit-ignore disable
```

故障排除

要验证是否应用了本地LAN访问功能，可以启用以下调试：

```
debug webvpn anyconnect 255
```

以下是成功调试输出的示例：

<#root>

```
firepower# debug webvpn anyconnect 255
```

```
Validating the session cookie...
Processing CSTP header line: 'webvpn=5E1823@15949824@D2CF@BF38A398B90D09039C60B55929055D33AE31BA05'
Found WebVPN cookie: 'webvpn=5E1823@15949824@D2CF@BF38A398B90D09039C60B55929055D33AE31BA05'
WebVPN Cookie: 'webvpn=5E1823@15949824@D2CF@BF38A398B90D09039C60B55929055D33AE31BA05'
Cookie validation successfull, session authenticated
http_parse_cstp_method()
...input: 'CONNECT /CSCOSSLC/tunnel HTTP/1.1'
webvpn_cstp_parse_request_field()
...input: 'Host: ftdv-cehidalg.cisco.com'
Processing CSTP header line: 'Host: ftdv-cehidalg.cisco.com'
webvpn_cstp_parse_request_field()
...input: 'User-Agent: Cisco AnyConnect VPN Agent for Windows 5.0.02075'
Processing CSTP header line: 'User-Agent: Cisco AnyConnect VPN Agent for Windows 5.0.02075'
Setting user-agent to: 'Cisco AnyConnect VPN Agent for Windows 5.0.02075'
webvpn_cstp_parse_request_field()
...input: 'Cookie: webvpn=5E1823@15949824@D2CF@BF38A398B90D09039C60B55929055D33AE31BA05'
Processing CSTP header line: 'Cookie: webvpn=5E1823@15949824@D2CF@BF38A398B90D09039C60B55929055D33AE31BA
Session already authenticated, skip cookie validation
webvpn_cstp_parse_request_field()
...input: 'X-CSTP-Version: 1'
Processing CSTP header line: 'X-CSTP-Version: 1'
webvpn_cstp_parse_request_field()
...input: 'X-CSTP-Hostname: DESKTOP-LPMOG6M'
Processing CSTP header line: 'X-CSTP-Hostname: DESKTOP-LPMOG6M'
Setting hostname to: 'DESKTOP-LPMOG6M'
webvpn_cstp_parse_request_field()
...input: 'X-CSTP-MTU: 1399'
Processing CSTP header line: 'X-CSTP-MTU: 1399'
webvpn_cstp_parse_request_field()
...input: 'X-CSTP-Address-Type: IPv6,IPv4'
Processing CSTP header line: 'X-CSTP-Address-Type: IPv6,IPv4'
webvpn_cstp_parse_request_field()
...input: 'X-CSTP-Local-Address-IP4: 10.28.28.7'
Processing CSTP header line: 'X-CSTP-Local-Address-IP4: 10.28.28.7'
webvpn_cstp_parse_request_field()
...input: 'X-CSTP-Base-MTU: 1500'
Processing CSTP header line: 'X-CSTP-Base-MTU: 1500'
webvpn_cstp_parse_request_field()
...input: 'X-CSTP-Remote-Address-IP4: 10.28.28.10'
Processing CSTP header line: 'X-CSTP-Remote-Address-IP4: 10.28.28.10'
webvpn_cstp_parse_request_field()
...input: 'X-CSTP-Full-IPv6-Capability: true'
Processing CSTP header line: 'X-CSTP-Full-IPv6-Capability: true'
webvpn_cstp_parse_request_field()
...input: 'X-AnyConnect-STRAP-Pubkey: MFkwEwYHKoZIzj0CAQYIKoZIzj0DAQcDQgAEkzG6nj9HDKz/zLa3Yz+QJDHOYWfT6
Processing CSTP header line: 'X-AnyConnect-STRAP-Pubkey: MFkwEwYHKoZIzj0CAQYIKoZIzj0DAQcDQgAEkzG6nj9HDK
Setting Anyconnect STRAP rekey public key(len: 124): MFkwEwYHKoZIzj0CAQYIKoZIzj0DAQcDQgAEkzG6nj9HDKz/zL
webvpn_cstp_parse_request_field()
...input: 'X-AnyConnect-STRAP-Verify: MEQCICzX1yDWLXQHnlOhOXV+/OI1/OlLjBic/Nu/K2+N6E5GAiA5CLAF6BtOtcxhj
Processing CSTP header line: 'X-AnyConnect-STRAP-Verify: MEQCICzX1yDWLXQHnlOhOXV+/OI1/OlLjBic/Nu/K2+N6E
Setting Anyconnect STRAP client signature(len: 96): MEQCICzX1yDWLXQHnlOhOXV+/OI1/OlLjBic/Nu/K2+N6E5GAiA
webvpn_cstp_parse_request_field()
...input: 'X-DTLS-Master-Secret: 0224D83639071BBF29E2D77B15B762FE85BD50D1F0EF9758942B75DF9A97C709325C3E
Processing CSTP header line: 'X-DTLS-Master-Secret: 0224D83639071BBF29E2D77B15B762FE85BD50D1F0EF975894
webvpn_cstp_parse_request_field()
...input: 'X-DTLS-CipherSuite: DHE-RSA-AES256-GCM-SHA384:DHE-RSA-AES256-SHA256:DHE-RSA-AES128-GCM-SHA25
Processing CSTP header line: 'X-DTLS-CipherSuite: DHE-RSA-AES256-GCM-SHA384:DHE-RSA-AES256-SHA256:DHE-R
Skipping cipher selection using DTLSv1 since a higher version is set in ssl configuration
webvpn_cstp_parse_request_field()
...input: 'X-DTLS12-CipherSuite: ECDHE-RSA-AES256-GCM-SHA384:ECDHE-ECDSA-AES256-GCM-SHA384:ECDHE-RSA-AE
Processing CSTP header line: 'X-DTLS12-CipherSuite: ECDHE-RSA-AES256-GCM-SHA384:ECDHE-ECDSA-AES256-GCM-
Selecting cipher using DTLSv1.2
```

```
webvpn_cstp_parse_request_field()
...input: 'X-DTLS-Accept-Encoding: lzs'
Processing CSTL header line: 'X-DTLS-Accept-Encoding: lzs'
webvpn_cstp_parse_request_field()
...input: 'X-DTLS-Header-Pad-Length: 0'
webvpn_cstp_parse_request_field()
...input: 'X-CSTP-Accept-Encoding: lzs,deflate'
Processing CSTP header line: 'X-CSTP-Accept-Encoding: lzs,deflate'
webvpn_cstp_parse_request_field()
...input: 'X-CSTP-Protocol: Copyright (c) 2004 Cisco Systems, Inc.'
Processing CSTP header line: 'X-CSTP-Protocol: Copyright (c) 2004 Cisco Systems, Inc.'
cstp_util_address_ipv4_accept: address asigned: 172.16.28.15
cstp_util_address_ipv6_accept: No IPv6 Address
np_svc_create_session(0xF3600O, 0x000014d37b17c080, TRUE)
webvpn_svc_np_setup
SVC ACL Name: NULL
SVC ACL ID: -1
No SVC ACL
Iphdr=20 base-mtu=1500 def-mtu=1500 conf-mtu=1406
tcp-mss = 1460
path-mtu = 1460(mss)
TLS Block size = 16, version = 0x304
mtu = 1460(path-mtu) - 0(opts) - 5(ssl) = 1455
mod-mtu = 1455(mtu) & 0xfff0(complement) = 1440
tls-mtu = 1440(mod-mtu) - 8(cstp) - 32(mac) - 1(pad) = 1399
DTLS Block size = 16
mtu = 1500(base-mtu) - 20(ip) - 8(udp) - 13(dtlshdr) - 16(dtlsiv) = 1443
mod-mtu = 1443(mtu) & 0xfff0(complement) = 1440
dtls-mtu = 1440(mod-mtu) - 1(cdtp) - 48(mac) - 1(pad) = 1390
computed tls-mtu=1399 dtls-mtu=1390 conf-mtu=1406
DTLS enabled for intf=2 (outside)
tls-mtu=1399 dtls-mtu=1390
SVC: adding to sessmgmt
```

Sending X-CSTP-Split-Exclude msgs: for ACL - LocalLAN-Access: Start

Sending X-CSTP-Split-Exclude: 0.0.0.0/255.255.255.255

```
Sending X-CSTP-MTU: 1399
Sending X-DTLS-MTU: 1390
Sending X-DTLS12-CipherSuite: ECDHE-ECDSA-AES256-GCM-SHA384
Sending X-CSTP-FW-RULE msgs: Start
Sending X-CSTP-FW-RULE msgs: Done
Sending X-CSTP-Quarantine: false
Sending X-CSTP-Disable-Always-On-VPN: false
Sending X-CSTP-Client-Bypass-Protocol: false
```

关于此翻译
思科采用人工翻译与机器翻译相结合的方式将此文档翻译成不同语言，希望全球的用户都能通过各自的语言得到支持性的内容。

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