

ىلع FTD LDAP چ RAPN ئەم سەرەت نىوكت ئەتساوب ئەرادملار

تاييىوت حملار

[قىدقملا](#)

[قىساسى ئەلما تابلىطتەملا](#)

[تابلىطتەملا](#)

[قىمدختسى مەللاتانو كەملا](#)

[قىقداصملا قىفتىت](#)

[قىمس ططىخ قىفتىت حەرش LDAP](#)

[نىوكتىلما](#)

[ىلارنىوكتىلات اوخط FDM](#)

[قىمس نىيۇغۇلما تابلىطتەملا LDAP](#)

[قىحصىلىاتم قىقىحتىلما](#)

[اهىالىص او عاطخالا فاش كەتسا](#)

[قلص تاذ تامولۇم](#)

قىدقملا

(LDAP) نزولا فيفخ لىلدلا ىلا لوصولار لوكوتورب مداخ مادختسى عارجى دنتسەملا اذھ فصىي مەلېۋەت (RA VPN) دىپ نىع لوصولل (RA VPN) ئەكپش يەمدىخ سەم ىلە ئەقادىصىللىك مەلۇم مداخ ىلە مەتەممۇج ئەيەمىمىز ئەنەن ئەنەن ئەنەن LDAP.

قىساسى ئەلما تابلىطتەملا

تابلىطتەملا

- ئەيامەل رادىج ئەزەجأ رىدم ىلە RA VPN ئەيىسەس ئەفرۇم
- مداخ نىوكتىب ئەيىسەس ئەفرۇم LDAP ىلە FDM
- ئەيىضارتىفالا ئەلا لقىن قىيىبتەت جەمانرب ئەھجىۋە ئەيىسەس ئەفرۇم FDM REST API
- فىشكەتسەم و ئەتساوب ئەرادملار ئەلا ىلە Cisco FTD 6.5.0 نەم رادىصىلما

قىمدختسى مەللاتانو كەملا

ئەزەجأ/قىيىبتەلل ئەيلاتلا جەماربىل او ئەزەجأ ئەلارادىصا مادختسى مەت:

- Cisco FTD، 6.5.0، build 115
- Cisco AnyConnect، 4.10 رادىصىلما
- Microsoft Active Directory (AD) مداخ
- Postman API رىوطتەل ئەرخ ئادا يىأ و ئادا يىأ

Firepower Device Manager | Monitoring | Policies | Objects | Device: firepower

Model Cisco ASA5545-X Threat Defense Software 6.5.0-115 VDB 309.0 Rule Update 2019-08-12-001-vrt High Availability Not Configured CONFIGURE

Interfaces
Connected
Enabled 3 of 9
[View All Interfaces](#)

Smart License
Registered
[View Configuration](#)

Routing
2 routes
[View Configuration](#)

Backup and Restore
[View Configuration](#)

Updates
Geolocation, Rule, VDB, System Upgrade, Security Intelligence Feeds
[View Configuration](#)

Troubleshoot
No files created yet
[REQUEST FILE TO BE CREATED](#)

System Settings
Management Access, Logging Settings, DHCP Server, DNS Server, Management Interface, Hostname, NTP, Cloud Services, Reboot/Shutdown, Traffic Settings, URL Filtering Preferences

Device Administration
Audit Events, Deployment History, Download Configuration
[View Configuration](#)

Site-to-Site VPN
1 connection
[View Configuration](#)

Remote Access VPN
Configured
2 connections | 5 Group Policies
[View Configuration](#)

Advanced Configuration
Includes: FlexConfig, Smart CLI
[View Configuration](#)

فایل FDM چنانچه AnyConnect صیغه نیکمتر نم قوقحت 2. ۋە طخلا.

Monitoring | Policies | Objects | Device: firepower

Device Summary
Smart License

CONNECTED SUFFICIENT LICENSE Last sync: 11 Oct 2019 09:33 AM Next sync: 11 Oct 2019 09:43 AM [Go to Cloud Services](#)

SUBSCRIPTION LICENSES INCLUDED

- Threat** [ENABLE](#)
Enabled
This license allows you to perform intrusion detection and prevention and file control. You must have this license to apply intrusion policies in access rules. You also must have this license to apply file policies that control files based on file type.
Includes: Intrusion Policy
- Malware** [ENABLE](#)
Disabled by user
This license allows you to perform Cisco Advanced Malware Protection (AMP) with AMP for Firepower and AMP Threat Grid. You must have this license to apply file policies that detect and block malware in files transmitted over your network.
Includes: File Policy

RA VPN License Type [PLUS](#) [DISABLE](#)
Enabled
Please select the license type that you purchased to enable remote access VPN. Note that Firepower Device Manager does not support any of the advanced features covered by the Apex license.
Includes: RA-VPN

PERPETUAL LICENSES INCLUDED

- Base License** [ENABLED ALWAYS](#)
Enabled
This perpetual license is included with the purchase of the system. You must have this license to configure and use the device. It covers all features not covered by subscription licenses.
Includes: Base Firewall Capabilities, Application Visibility and Control

زمرلا يف ريدصتلا قيرط نع اهي ف مكحتلا متى يتلا تاريملانى كمتنم ققحت. 3. ۋە طخلا زىممەلە.

The screenshot shows the Cisco Firepower Device Manager interface. At the top, there are navigation tabs: Monitoring, Policies, Objects, and a selected tab labeled Device: firepower. Below these tabs, there's a 'Device Summary' section with a 'Smart License' card. The card displays a green circular icon with a checkmark and the text 'CONNECTED SUFFICIENT LICENSE'. To the right of this card, a red-bordered box contains information about assigned virtual accounts, export-controlled features, and sync details: 'Assigned Virtual Account: [REDACTED]', 'Export-controlled features: Enabled', 'Go to Cisco Smart Software Manager.', 'Last sync: 11 Oct 2019 09:33 AM', and 'Next sync: 11 Oct 2019 09:43 AM'. Below the summary card, there's a section titled 'SUBSCRIPTION LICENSES INCLUDED' which lists a single license named 'Threat'. This license is currently enabled, as indicated by a green checkmark icon and the word 'Enabled'. A 'DISABLE' button is located to the right of the license name. A descriptive text block explains that this license allows for intrusion detection and prevention and file control, noting it's required for applying policies in access rules and controlling files based on type. It also mentions that it includes an 'Intrusion Policy'. A small pencil icon is positioned to the left of the license section.

ىلىا عوجرلا ىجري لىع فلاب ھنې وكت مەت VPN RA نأ دنتسەملە اذە ضرتفي: ئەظحالىم
ىلىع WAPN نې وكت قې فيك لوح تامولۇملا نم دىزم ىلىع لوصحلىلىاتلا دنتسەملە
[FTD](#) ۋە [FDM](#).

4. ۋە طخلا Remote Access VPN>.

The screenshot shows the Firepower Device Manager dashboard. At the top, there's a navigation bar with 'Monitoring', 'Policies', 'Objects', and 'Device: firepower'. Below the navigation is a summary box for 'Cisco ASA5545-X Threat Defense' with metrics like 0/1 MTBF, 0/7 0/5 0/2 0/1 for various ports, and 0/0 0/4 0/2 0/0 for CONSOLE. To the left is a 'Inside Network' icon, and to the right are icons for 'Internet', 'ISP/WAN/Gateway', and 'Smart License'. The main area has several cards: 'Interfaces' (Connected, Enabled 3 of 9), 'Smart License' (Registered), 'Site-to-Site VPN' (1 connection), 'Routing' (2 routes), 'Updates' (Geolocation, Rule, VDB, System Upgrade, Security Intelligence Feeds), 'System Settings' (Management Access, Logging Settings, DHCP Server, DNS Server, Management Interface, Hostname, NTP, Cloud Services, Reboot/Shutdown, Traffic Settings, URL Filtering Preferences), 'Backup and Restore' (View Configuration), 'Troubleshoot' (REQUEST FILE TO BE CREATED), 'Advanced Configuration' (Includes: FlexConfig, Smart CLI), and 'Device Administration' (Audit Events, Deployment History, Download Configuration). A red box highlights the 'Remote Access VPN' card, which shows 'Configured' (2 connections | 5 Group Policies) and a 'View Configuration' link.

لكل قفل تخدملا ظعومجملا جهن نويوكتل '+ قوف رقنا. ظعومجملا جهن نيل لقتنا 5. ووطخل ا Finance-group-policy و HR-Group-Policy او IT-Group-Policy. فلتخدم ظيعرف تاكبش نيل لوصول.

The screenshot shows the 'Add Group Policy' dialog box. On the left, a sidebar shows 'RA VPN' with 'Group Policies' selected. The main form has a 'Basic' tab with 'General' sub-tab selected. It includes fields for 'Name' (Finance-Group-Policy, highlighted with a red box), 'Description' (Finance User Group), 'DNS Server' (Select DNS Group), 'Banner Text for Authenticated Clients' (This message will be shown to successfully authenticated endpoints in the beginning of their VPN session), 'Default domain', and 'AnyConnect client profiles'. At the bottom are 'CANCEL' and 'OK' buttons, with 'OK' highlighted with a red box.

ييلاتلا تادادعإا نمضتت Finance-Group-Policy:

<#root>

firepower#

```
show run group-policy Finance-Group-Policy
```

```

group-policy Finance-Group-Policy internal
group-policy Finance-Group-Policy attributes
  banner value You can access Finance resource
  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 ssl-client
  split-tunnel-policy tunnelspecified
  ipv6-split-tunnel-policy tunnelall

split-tunnel-network-list value Finance-Group-Policy|splitAcl

split-dns none
split-tunnel-all-dns disable
client-bypass-protocol disable
msie-proxy method no-modify
vlan none
address-pools none
ipv6-address-pools none
webvpn
<output omitted>

```

ةيلاتلا تادادعإلا ىلع ةيرشبلا دراوملا ٤عومجم جهن لمتشي ،لثامم وحن ىلعو:

```

<#root>

firepower#
show run group-policy HR-Group-Policy

group-policy HR-Group-Policy internal
group-policy HR-Group-Policy attributes
  banner value You can access Finance resource
  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 ssl-client
  split-tunnel-policy tunnelspecified
  ipv6-split-tunnel-policy tunnelall

split-tunnel-network-list value HR-Group-Policy|splitAcl

split-dns none
split-tunnel-all-dns disable
client-bypass-protocol disable
msie-proxy method no-modify
vlan none
address-pools none
ipv6-address-pools none

```

```
webvpn  
<output omitted>
```

ةيلاتل ا تادادع إل لى ع تامولعمل ا ةينقت ةعوومجم جهـن يوتحـي ،اريـخـأـوـ:

```
<#root>  
  
firepower#  
  
show run group-policy IT-Group-Policy  
  
group-policy IT-Group-Policy internal  
group-policy IT-Group-Policy attributes  
  banner value You can access Finance resource  
  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 ssl-client  
  split-tunnel-policy tunnelspecified  
  ipv6-split-tunnel-policy tunnelall  
  
split-tunnel-network-list value IT-Group-Policy|splitAcl  
  
  split-dns none  
  split-tunnel-all-dns disable  
  client-bypass-protocol disable  
  msie-proxy method no-modify  
  vlan none  
  address-pools none  
  ipv6-address-pools none  
  webvpn  
<output omitted>
```

ءاغـلـابـ مـقـ وـ ةـسـلـجـلـاـ تـادـادـعـ إـلـ لـقـتـنـاـوـ ةـعـوـمـجـمـلـاـ جـهـنـلـ Noaccessـ ءـاشـنـابـ مـقـ .ـ 6ـ ةـوـطـخـلـاـ تـايـلـمـعـ ةـمـيـقـ نـيـيـعـتـ إـلـ لـقـتـنـاـوـ ةـعـوـمـجـمـلـاـ جـهـنـلـ مـدـخـتـسـمـ لـكـلـ نـمـاـزـتـمـلـاـ لـوـخـدـلـاـ لـيـجـسـتـ رـايـخـ دـيـدـحـتـ .ـ 0ـ ئـلـإـ لـ ةـنـمـاـزـتـمـلـاـ لـوـخـدـلـاـ لـيـجـسـتـ .ـ

(VPN) ةـيـرـهـاـظـلـاـ ةـصـاخـلـاـ ةـكـبـشـلـاـ ةـصـاخـلـاـ ةـكـبـشـلـاـ لـيـجـسـتـ تـايـلـمـعـ ةـمـيـقـ مـوقـتـ (VPN) ةـيـرـهـاـظـلـاـ ةـصـاخـلـاـ ةـكـبـشـلـاـ لـاصـتـاـ ئـلـعـ اـهـنـابـ 0ـ ئـلـعـ اـهـنـيـيـعـتـ دـنـعـ "ـعـوـمـجـمـلـاـ جـهـنـ"ـ يـفـ يـأـ ئـلـإـ نـوـمـتـنـيـ نـيـذـلـاـ نـيـمـدـخـتـسـمـلـاـ عـنـمـلـ ةـيـلـآـلـاـ هـذـهـ مـادـخـتـسـاـ مـتـيـ .ـ اـرـوـفـ مـدـخـتـسـمـلـلـ نـمـ (ITـ وـأـ HRـ)ـ لـاـثـمـلـاـ اـذـهـ يـفـ (ةـنـوـكـمـلـاـ تـاعـوـمـجـمـلـاـ فـالـخـبـ ADـ)ـ نـيـمـدـخـتـسـمـ ةـعـوـمـجـمـ .ـ ئـلـإـ لـ ةـفـرـقـوـتـمـلـاـ ةـنـمـآـلـاـ درـاوـمـلـاـ ئـلـإـ لـوـصـوـلـاـوـ FTDـ بـ ئـلـاصـتـاـ ئـلـإـ اـشـنـاـهـبـ حـوـمـسـمـلـاـ نـيـمـدـخـتـسـمـلـاـ .ـ

ططخم ةقباطم ب ةحیحصـلـا AD يـمـدـخـتـسـمـ تـاعـوـمـجـمـىـلـا نـوـمـتـنـيـ نـيـذـلـا نـوـمـدـخـتـسـمـلـا مـوقـيـ
الـنـيـذـلـا نـوـمـدـخـتـسـمـلـا ثـرـيـ اـمـنـيـبـ ،ـنـيـعـمـلـا ةـعـوـمـجـمـلـا تـاسـاـيـسـ نـوـثـرـيـوـ FTD يـفـ LDAP ةـمـسـ
فـيـرـعـتـ فـلـمـلـ يـضـارـتـفـالـا ةـعـوـمـجـمـلـا جـهـنـ كـلـذـ دـعـبـ اـهـ حـوـمـسـمـلـا تـاعـوـمـجـمـلـا نـمـ يـأـىـلـا نـوـمـتـنـيـ
ةـلـاحـلـا هـذـهـ يـفـ وـهـ يـذـلـاوـ ،ـلـاـصـتـالـاـ NOACCESS.

Add Group Policy

Search for attribute

Name: NOACCESS

Basic

General (Selected)

Session Settings (Highlighted with red box)

Advanced

Address Assignment

Split Tunneling

AnyConnect

Traffic Filters

Windows Browser Proxy

Description: To avoid users not belonging to correct AD group from connecting to VPN

DNS Server: Select DNS Group

Banner Text for Authenticated Clients:
This message will be shown to successfully authenticated endpoints in the beginning of their VPN session

Default domain

AnyConnect client profiles: +

CANCEL OK

Edit Group Policy



Search for attribute

Basic	Maximum Connection Time	Connection Time Alert Interval
General	Unlimited minutes	1 minutes
Session Settings	Idle Time	Idle Alert Interval
Advanced	30 minutes	1 minutes
Address Assignment	1-4473924	1-30; (Default: 1)
Split Tunneling	1-35791394; (Default: 30)	1-30; (Default: 1)
AnyConnect	Simultaneous Login per User 1-2147483647; (Default: 3)	
Traffic Filters		
Windows Browser Proxy		

CANCEL OK

يُوتحن مجمومع ةدعلا ادلاع تادادع ةييلاتل:

```
<#root>

firepower#
show run group-policy NOACCESS
group-policy NOACCESS internal
group-policy NOACCESS attributes
  dhcp-network-scope none

vpn-simultaneous-logins 0
  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 ssl-client
  split-tunnel-policy tunnelall
  ipv6-split-tunnel-policy tunnelall
  split-dns none
  split-tunnel-all-dns disable
  client-bypass-protocol disable
  msie-proxy method no-modify
  vlan none
  address-pools none
  ipv6-address-pools none
  webvpn
    anyconnect ssl dtls none
    anyconnect mtu 1406
```

```

anyconnect ssl keepalive 20
anyconnect ssl rekey time 4
anyconnect ssl rekey method new-tunnel
anyconnect dpd-interval client 30
anyconnect dpd-interval gateway 30
anyconnect ssl compression none
anyconnect dtls compression none
anyconnect profiles none
anyconnect ssl df-bit-ignore disable
always-on-vpn profile-setting

```

مسا، لاثمل اذه يف. لاصتالل افيصوت ئشنأوليصوت تافيصوت ئلا لقتنا 7. ۋوطخلا عاشناب مقو طقف AAA يساسألا ۋەلە رەصم رەتكا. فەرۇتلا فلم دىدج ۋەقىداشمىم داخعون AD.

The screenshot shows the Firepower Device Manager interface. The top navigation bar includes 'Monitoring', 'Policies', 'Objects', and 'Device: firepower'. The main area is titled 'Connection Profile Name' with a note: 'This name is configured as a connection alias, it can be used to connect to the VPN gateway'. A red box highlights the input field 'Remote-Access-LDAP'. Below this are sections for 'Group Alias' (containing 'Remote-Access-LDAP') and 'Group URL'. The 'Primary Identity Source' section is also highlighted with a red box; it shows 'Authentication Type' with 'AAA Only' selected. Under 'Primary Identity Source for User Authentication', a dropdown menu is open, showing 'LocalIdentitySource' and 'Special-Identities-Realm', with 'Create new' and 'AD' options. A red box highlights the 'AD' option. The 'Fallback Local Identity Source' dropdown is set to 'Please Select Local Identity Source'. At the bottom are 'CANCEL' and 'NEXT' buttons.

مداخ تامولعم لىخدا:

- لىلدلا مىختىسىم مسا
- لىلدلا رورم ئەملىك
- DN يساسألا
- يساسألا لاجم
- IP ناونع / فيضىمىلا مسا
- ذفنەملىا
- رېفېشتىلا عون

Add Identity Realm



! Identity Realm is used for Identity Policies and Remote Access VPN. Any changes impact all features that use this realm.

Name

LDAP-AD

Type

Active Directory (AD)



Directory Username

administrator@example.com

e.g. user@example.com

Directory Password

.....

Base DN

dc=example,dc=com

e.g. ou=user, dc=example, dc=com

AD Primary Domain

example.com

e.g. example.com

Directory Server Configuration

192.168.100.125:389



Hostname / IP Address

192.168.100.125

e.g. ad.example.com

Port

389



Interface

inside_25 (GigabitEthernet0/1)



Encryption

NONE



Trusted CA certificate

Please select a certificate



TEST

[Add another configuration](#)

CANCEL

OK

اذه لاصتالا فيرعت فلمل يضارت فالا ٰعومجملا جهنه NOACCESS رتخ او يلاتلا ىلع رقنا.

Remote User Experience

A group policy is a collection of user-oriented session attributes which are assigned to client when a VPN connection is established. Select or create a Group Policy object.

View Group Policy

Filter
Finance-Group-Policy
HR-Group-Policy
IT-Group-Policy
NOACCESS
SSLVPN

Create new Group Policy

SESSION SETTINGS BACK NEXT

Maximum Connection Time / Alert Interval Unlimited / 1 Minutes

تحت ایئرم نآلی Remote-Access-LDAP لاصتالا فیرعت فلم نوکی. تارییغتلار ئەفاڭ ظفح نیوكت RA VPN.

RA VPN

Connection Profiles

Device Summary

Remote Access VPN Connection Profiles

1 object

#	NAME	AAA	GROUP POLICY	ACTIONS
1	Remote-Access-LDAP	Authentication: AAA Only Authorization: None Accounting: None	NOACCESS	

ةممس نیيعدل نیوكتلار تاوطلخ LDAP

ب صاخلا (API) تاقىيىبتلىق چىرىپ ئەجىج او فشكتىسىم لىيغشتىد. 1. ئەوطخلار FTD.

(API) تاقىيىبتلىق چىرىپ ئەجىج او ئەمىاقيىل (API) تاقىيىبتلىق چىرىپ ئەجىج او فشكتىسىم يوتىحى ىلى لىقتىنامى FTD. ىلى https://<FTD Management IP>/API-Explorer

تارايىخلا عىمج ىلىع ئەلطاپلار مىسىقىلى رقنى او LdapAttributeMap مۇھىم دەملە.

The screenshot shows the FTD REST API interface. On the left, there's a sidebar with 'FTD REST API' and 'API Explorer'. The main area is titled 'LdapAttributeMap' and lists several API operations:

- GET /object/ldapattributemaps
- POST /object/ldapattributemaps
- DELETE /object/ldapattributemaps/{objId}
- GET /object/ldapattributemaps/{objId}
- PUT /object/ldapattributemaps/{objId}

At the top right, there are buttons for 'Show/Hide', 'List Operations', and 'Expand Operations'. The top bar also includes the Cisco Firepower Device Manager logo, monitoring and policies tabs, and a user account for 'admin Administrator'.

٥٦ طيـرخ نـيـوكـتـلـ تـاـقـيـبـ طـتـ ظـجـمـرـبـ ظـجـأـوـ ظـادـأـكـ Postman مـدـخـتـسـنـ ،ـلـاثـمـلـاـ اـذـهـ يـفـ ظـحـاـلـمـ ظـمـسـ LDAPـ.

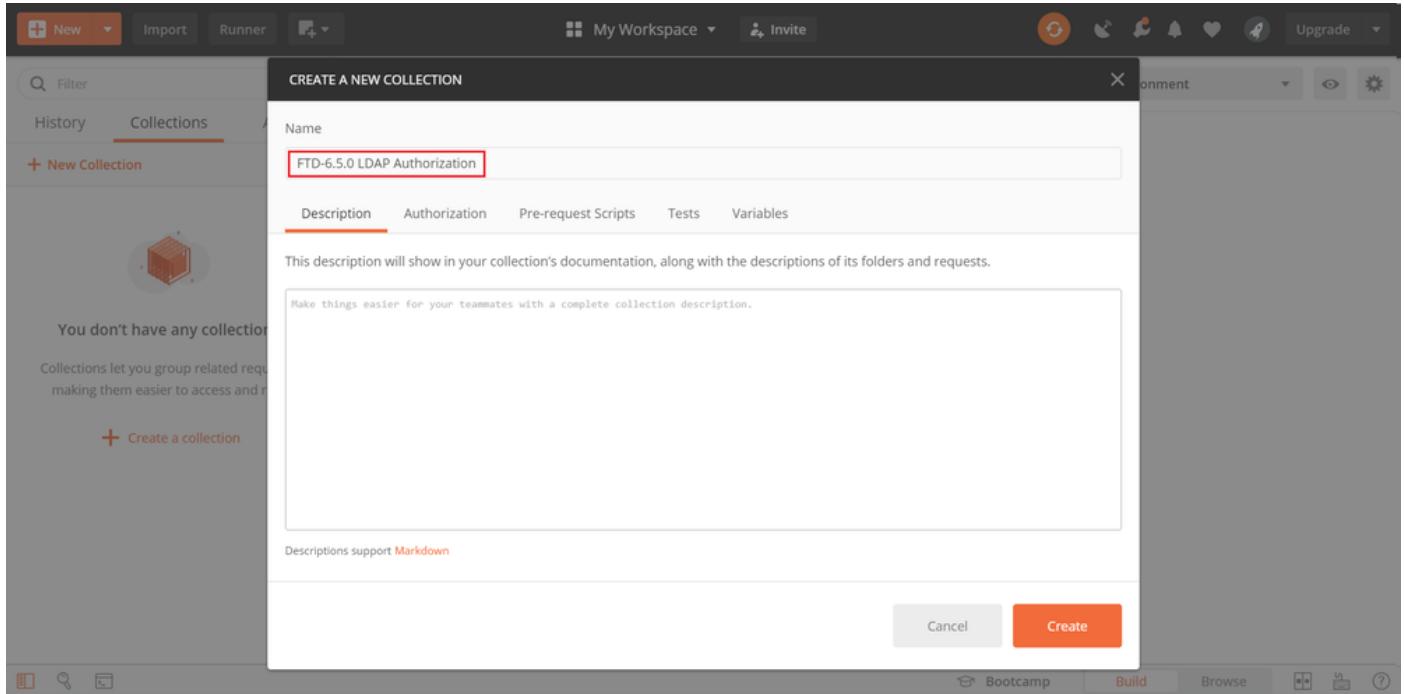
٥٧ ضـيـوـفـتـلـ دـيـرـبـلـاـ يـعـاسـ ظـعـوـمـجـمـ ظـفـاصـاـ ٢ـ ظـوـطـخـلـاـ LDAPـ.

The screenshot shows the Postman application interface. At the top, there's a toolbar with 'New', 'Import', 'Runner', and other icons. Below it is a search bar and a workspace dropdown. The main area has sections for 'Create New', 'Templates', and 'API Network'. Under 'BUILDING BLOCKS', there are several options:

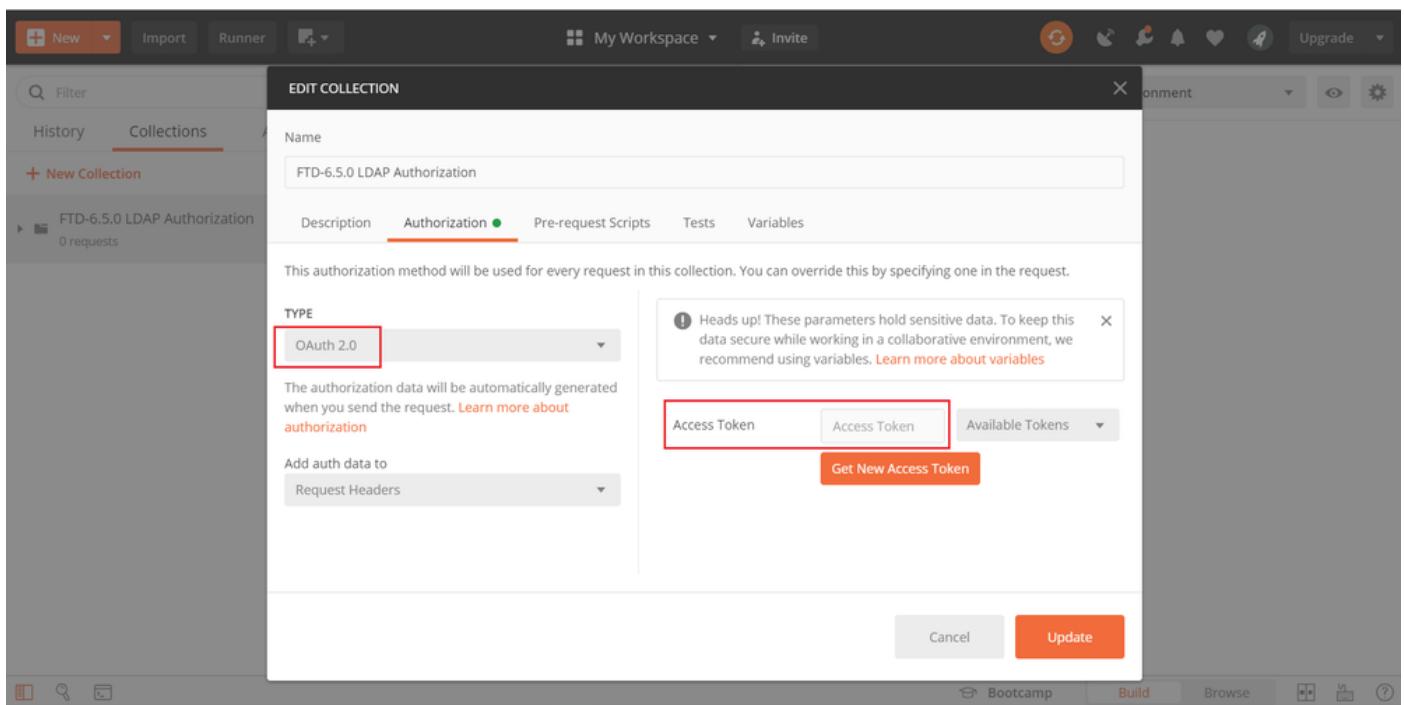
- Request**: Create a basic request.
- Collection**: Save your requests in a collection for reuse and sharing. This option is highlighted with a red box.
- Environment**: Save values you frequently use in an environment.
- API Documentation**: Create and publish beautiful documentation for your APIs.
- Mock Server**: Create a mock server for your in-development APIs.
- API**: Manage all aspects of API design, development, and testing.
- Monitor**: Schedule automated tests and check performance of your APIs.

At the bottom, there's a note about starting with a template and a link to 'Learn more on Postman Docs'.

٥٨ ظـعـوـمـجـمـلـاـ هـذـهـلـ اـمـسـاـ لـخـدـأـ.



عونلـا دـيـدـحـتـو ةـلـوـدـجـ دـامـتـعـاـ رـيـحـتـ



بنـجـتـلـ SSL ةـدـاهـشـ نـمـ قـقـحـتـلـاـ لـيـغـشـتـ فـاقـيـابـ مـقـ ،ـتـادـادـعـ >ـفـلـمـ ىـلـاـ لـقـتـنـاـ 3ـ ةـئـفـلـاـ مـدـخـتـسـيـ FTDـ نـاـكـ اـذـاـ كـلـذـبـ مـاـيـقـلـاـ مـتـيـوـ.ـ اـلـاـ APIـ تـابـلـطـ لـاسـرـاـ دـنـعـ SSLـ وـهـفـاـصـمـ لـشـفـ اـيـتـاـذـ عـقـوـمـ ةـدـاهـشـ.



Postman

File Edit View Help

New... Ctrl+N

New Tab Ctrl+T

New Postman Window Ctrl+Shift+N

New Runner Window Ctrl+Shift+R

Import... Ctrl+O

Settings Ctrl+Comma

Close Window Ctrl+Shift+W

Close Tab Ctrl+W

Force Close Tab Alt+Ctrl+W

Exit

SETTINGS



General Themes Shortcuts Data Add-ons Certificates Proxy Update About

REQUEST

Trim keys and values in request body OFF

New Code Generation Mode ON

Use next generation URL processing OFF

SSL certificate verification OFF

Always open requests in new tab OFF

Always ask when closing unsaved tabs ON

Language detection

Request timeout in ms

Set how long a request should wait for a response before timing out. To never time out, set to 0.

Max response size in MB

Set the maximum size of a response to

HEADERS

Send no-cache header ON

Send Postman Token header ON

Retain headers when clicking on links OFF

Automatically follow redirects ON

Send anonymous usage data to Postman ON

USER INTERFACE

Editor Font Size (px)

Two-pane view OFF

Show icons with tab names ON

Variable autocomplete ON

Enable Launchpad ON

مسق يف CA ڈاہش ڈئیه ىلع FTD لباق نم ڈم دخت سمل ا ڈاہش ل ا ڈفاض ا نکمی ، کلذ نم الدب تادادع ل ا نم ڈاہش ل ا.

SETTINGS



General Themes Shortcuts Data Add-ons Certificates Proxy Update About

CA Certificates

OFF

The file should consist of one or more trusted certificates in PEM format.

PEM file

Client Certificates

Add Certificate

Add and manage SSL certificates on a per domain basis.

[Learn more about working with certificates at our Learning Center.](#)

ىلإ لوطخلا ليجستل POST بلى ط ءاشنال بلى ط ةديدج ةقداصم ةفاضاب مق. 4. ةوطخلا FTD، تابلط يأ ليوطخ زيممل زمرلا ئل ع لوطخلل،

+ New Collection

Trash

FTD-6.5.0 LDAP Authorization 

0 requests



...

This collection
collection



Share Collection



Manage Roles



Rename

Ctrl+E



Edit



Create a fork



Create Pull Request



Merge changes



Add Request



Add Folder



Duplicate

Ctrl+D



Export



Monitor Collection

لوبق json/قىب طتلا

MANAGE HEADER PRESETS

Add Header Preset

Header-LDAP

KEY	VALUE	DESCRIPTION	...	Bulk Edit
<input checked="" type="checkbox"/> Content-Type	application/json			
<input checked="" type="checkbox"/> Accept	application/json			
Key	Value	Description		

Cancel Add

سأر ئەم يىق دەح و ئەلباق مەلە سأرلا تابىۋېت ئىلى لىقتىنە، ئىرخالا تابىل طلا عېمەجىل ئەپسەن لاب تانانايىبلا عونك json مادختىسى ئەل REST API ئەلبىل ئەل قىب سەمە دادعەلە يىس اسالا.

يىلاتلا ئىلع زىممەلە زەرمىلا ئىلىع لوضىچىلى POST بىلەت صىن يىوتتەن بىچى:

عونلار	JSON - ماخ (json/قىب طتلا)
grant_type	رورمەلە ئەملەك
username	ئىلى لوخىدىلا لىيجىستەل لەۋەسەلە مەدختىسىم مەسا FTD
password	لەۋەسەلە مەدختىسىمەلە باسەجىب ئەنرتقىمەلە رورمەلە ئەملەك

```
{  
    "grant_type": "password",  
    "username": "admin",  
    "password": "<enter the password>"  
}
```

POST https://[REDACTED]/api/fdm/latest/fdm/token

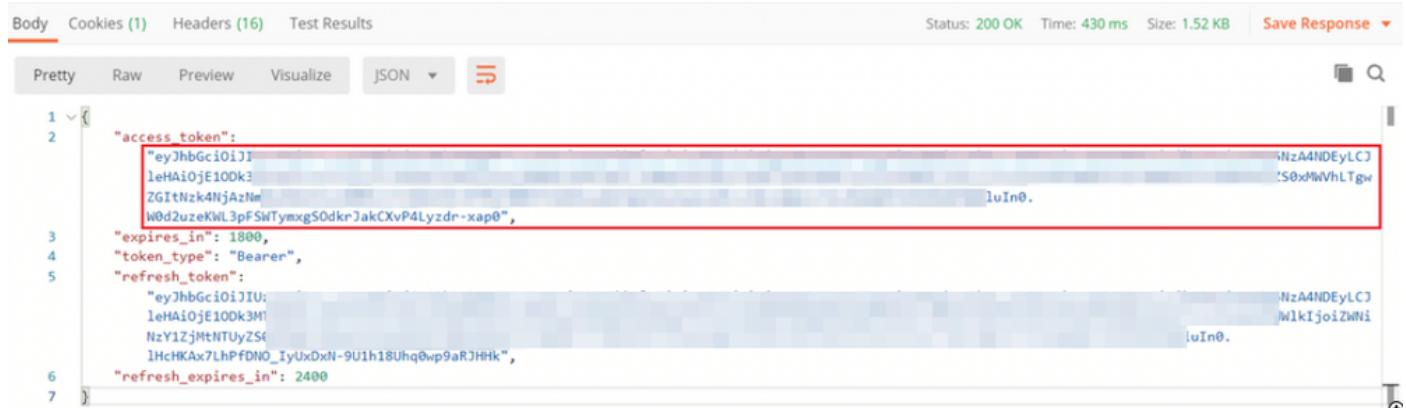
Send

Params Authorization Headers (1) Body Pre-request Script Tests Settings

Body Type: JSON

```
1  {  
2      "grant_type": "password",  
3      "username": "admin",  
4      "password": "[REDACTED]"  
5  }
```

متي يذلا لوصولل زيممل زمرلا ىلع ةباجتسالا صن يوتحي ،لاسرا قوف رقnel درجمب تابلط يأ لاسرال مادختسا PUT/GET/POST FTD.



```

Body Cookies (1) Headers (16) Test Results
Status: 200 OK Time: 430 ms Size: 1.52 KB Save Response ▾
Pretty Raw Preview Visualize JSON ▾
1 {
2   "access_token": "eyJhbGciOiJIUzI1...[redacted]...dkrJakCXvP4Lyzdr-xap0",
3   "expires_in": 1800,
4   "token_type": "Bearer",
5   "refresh_token": "eyJhbGciOiJIUzI1...[redacted]...dkrJakCXvP4Lyzdr-xap0",
6   "refresh_expires_in": 2400
7 }
  
```

```
{
  "access_token": "eyJhbGciOiJIUzI1...[redacted]...dkrJakCXvP4Lyzdr-xap0",
  "expires_in": 1800,
  "token_type": "Bearer",
  "refresh_token": "eyJhbGciOiJIUzI1...[redacted]...dkrJakCXvP4Lyzdr-xap0",
  "refresh_expires_in": 2400
}
```

ةيلاتلا تابلطلا عيمج ليوختل زيممل زمرلا اذه مادختسا متي مث.

ييلاتلا ددحو دي دج بلط لكـ ليـ وـ خـ تـ لـ اـ بـ يـ وـ بـ تـ لـ اـ ةـ مـ الـ عـ ىـ لـ قـ تـ نـ اـ:

عونلا	OAuth 2.0
زمر زيمم	نم هيقلت مت يذلا لوصولل زيممل زمرلا ىلإ لودلا ليجست بلط ليغشت لالخ POST

The screenshot shows the Postman interface for making an API request. The 'Authorization' tab is selected, indicating the use of OAuth 2.0 for authentication. The 'Body' tab is also visible. The response section shows a successful 200 OK status with a response time of 328 ms and a response size of 2.29 KB. The response body contains a large, redacted JSON object.

جەن "ەلەھىلە" لۇچىلىقەنەمەن لۇچىلىقەنەمەن دېدەجەن لۇچىلىقەنەمەن بىلەت ۋەفااضا 5. ۋەطخەلە لەشىملا اذە يەف) ھەنىۋەكت مەت ۋەنەمەن لەكەل فەرۇمەل او مەسالا عەمەجەب مەق. ھەتاادەعەو ۋەنەمەن Finance-Group-Policy و HR-Group-Policy و IT-Group-Policy (يەلاتلا ۋەطخەلە يەف ھەمادختەسال.

وە ھەنىۋەكت مەت يەلاتلا ۋەنەمەن تاسايسىلىقەنەمەن URL ناونىع: <https://<FTD Management IP>/API/FDM/latest/object/rootGroupPolicy>

ۋەنەمەن ئەيلاملا ۋەنەمەن ئەسمايسىلىقەنەمەن ئەۋەپلىقەنەمەن مەتىي، يەلاتلا لەشىملا يەف.

```

58     {
59         "version": "2ndid13x17vu",
60         "name": "radius-group-Policy",
61         "owner": null,
62         "dnsServerGroup": null,
63         "defaultDomainName": null,
64         "simultaneousLoginPerUser": 3,
65         "maxConnectionTimeout": null,
66         "maxConnectionTimeAlertInterval": 1,
67         "vpnIdleTimeout": 30,
68         "vpnIdleTimeoutAlertInterval": 1,
69         "ip4LocalAddressPool": [],
70         "ip4GlobalAddressPool": [],
71         "dhcpScope": null,
72         "ip4SplitTunnelSetting": "TUNNEL_SPECIFIED",
73         "ip6SplitTunnelSetting": "TUNNEL_ALL",
74         "ip4SplitTunnelNetworks": [
75             {
76                 "version": "ogayl13hgip0",
77                 "name": "acl1",
78                 "id": "0ec77902-9836-11ea-ba77-37fd67647b3e",
79                 "type": "networkObject"
80             }
81         ],
82         "ip6SplitTunnelNetworks": [],
83         "splitDnsRequestPolicy": "USE_SPLIT_TUNNEL_SETTING",
84         "splitDnsDomainList": "",
85         "scpeForwarding": null,
86         "periodicClientCertAuthenticationInterval": 1,
87         "enableTLS": false,
88         "enableTLSCompression": false,
89         "sslCompression": "DISABLED",
90         "enableSSLErkey": false,
91         "rekeyMethod": "NEW_TUNNEL",
92         "rekeyTime": 30,
93         "ignoreDFBit": false,
94         "bypassInsupportProtocol": false,
95         "mtuSize": 1400,
96         "useAlwaysOnVPNSettingInProfile": true,
97         "enableKeepaliveMessages": false,
98         "keepaliveMessageInterval": 20,
99         "enableGatewayQoS": false,
100        "gatewayQOInterval": 30,
101        "enableClientHTTP": false,
102        "clientPort": 30,
103        "clientProfiles": [],
104        "keepInstallersOnClient": false,
105        "vpnTrafficFilterACL": null,
106        "enableRestrictVPNTOVLAN": false,
107        "restrictVPNTOVLAN": null,
108        "clientFirewallPrivateNetworkRules": null,
109        "clientFirewallPublicNetworkRules": null,
110        "browserProxyType": "NO_PROXY",
111        "proxy": {
112            "serverHost": null,
113            "port": null,
114            "type": "serverHostandport"
115        },
116        "proxyExceptions": [],
117        "isEnablePeriodicClientCertAuthentication": false,
118        "id": "a5722b15-9836-11ea-ba77-0916f09ace0c",
119        "type": "ravngroupolicy",
120        "links": [
121            {
122                "self": "https://[REDACTED]/api/fdm/latest/object/ravngroupolicies/a5722b15-9836-11ea-ba77-0916f09ace0c"
123            }
124        ]
125    }

```

يـف LDAP ئـمـس نـيـيعـت عـاـشـنـإـل طـطـخـم ئـاـشـنـإـل دـيـج POST بـلـطـةـفـاضـإـل 6. ۋـوـطـخـلـا ىـلـعـاـضـيـأـيـرـخـأـلـا جـذـامـنـلـا يـوـتـحـتـ جـذـومـنـلـا مـادـخـتـسـا مـتـيـ، دـنـتـسـمـلـا اـدـهـ ۋـەـجـاـوـيـفـ جـذـامـنـلـا ھـذـھـلـا ۋـلـثـمـا رـفـوتـتـ ۋـەـسـلـا ۋـەـتـيـرـخـ ئـاـشـنـإـل ۋـەـبـاـشـمـ بـيـلـاسـأـوـتـايـلـمـ دـنـتـسـمـلـا اـدـهـ يـفـ اـقـبـاسـ رـوـكـذـمـ وـهـ اـمـكـ (API-Explorer) تـاقـيـبـ طـتـلـا ۋـەـجـمـرـبـ.

FTD REST API Show/Hide | List Operations | Expand Operations

API Explorer

Error Catalog

LdapAttributeMap

GET /object/ldapattributemaps

POST /object/ldapattributemaps

Implementation Notes
This API call is not allowed on the standby unit in an HA pair.

Response Class (Status 200)

Model	Example Value
LdapAttributeMapping	<p><i>description:</i> Nested Entity which includes common objects for LdapAttributeMapping (Note: The field level constraints listed here might not cover all the constraints on the field. Additional constraints might exist.)</p> <p>ldapName (string): The customer-specific LDAP attribute name that is being mapped.</p> <p>ciscoName (string): An enum value that is the Cisco attribute name that maps to the customer-specific attribute name.</p> <p>valueMappings (Array[LdapToCiscoValueMapping]): A list of LdapToCiscoValueMapping objects, which specify the value mappings for this LDAP attribute.</p> <p>type (string): Idapattributemapping</p>
LdapAttributeToGroupPolicyMapping	<p><i>description:</i> An LDAP attribute to group policy mapping defines a customer-specific LDAP attribute name and maps it to a specific group policy object. Use this nested entity in an LDAP attribute map. (Note: The field level constraints listed here might not cover all the constraints on the field. Additional constraints might exist.)</p> <p>ldapName (string): The customer-specific LDAP attribute name that is being mapped.</p> <p>valueMappings (Array[LdapToGroupPolicyValueMapping]): A list of LdapToGroupPolicyValueMapping objects, which specify the value-to-group policy mappings for this LDAP attribute.</p> <p>type (string): Idapattributetogrouppolicymapping</p>

ع ناون URL رشنل طيرخ LDAP مس ٰه: <https://<FTD Management IP>/API/FDM/latest/object/ldapattributeAps>

ي لي ام ىلع رشنل ا ٰه دام ب ل ط صن ي وتحي نأ ب جي:

مسالا	مس ن ي ع ت م سا LDAP
عونل	ٰه ئ ز ج ت
IdapName	وض
CiscoName	ج ه ن
IdapValue	AD نم م د خ ت س م ل ل و ض ع ل ا ٰه م ي ق
CiscoValue	ج ه ن م س ا

The screenshot shows a Postman collection named "FTD-6.5.0 LDAP Authorization" with three requests: "Auth", "Get Group-Policies", and "Create LDAP Attribute Map". The "Create LDAP Attribute Map" request is selected. The "Body" tab shows the following JSON payload:

```

1 * {
2     "name": "Attribute-Map",
3     "ldapAttributeMaps": [
4         {
5             "ldapName": "memberOf",
6             "ciscoName": "GROUP_POLICY",
7             "valueMappings": [
8                 {
9                     "ldapValue": "CN=Finance-Group,CN=Users,DC=cisco,DC=com",
10                    "ciscoValue": "Finance-Group-Policy",
11                    "type": "ldaptociscovaluemapping"
12                },
13                {
14                    "ldapValue": "CN=HR-Group,CN=Users,DC=cisco,DC=com",
15                    "ciscoValue": "HR-Group-Policy",
16                    "type": "ldaptociscovaluemapping"
17                },
18                {
19                    "ldapValue": "CN=IT-Group,CN=Users,DC=cisco,DC=com",
20                    "ciscoValue": "IT-Group-Policy",
21                    "type": "ldaptociscovaluemapping"
22                }
23            ],
24            "type": "ldapattributemapping"
25        },
26        {
27            "type": "ldapattributemap"
28        }
29    ]
30 }

```

The response status is 200 OK, Time: 105ms, Size: 14.26 KB.

وهي موجة جن نبييعتب موقف يتلا LDAP ةمس نبييعت تامولع مىلع POST بـ لـ طـ صـ نـ يـ وـ تـ حـ يـ

ـ ةـ عـ وـ مـ جـ مـ جـ ـ ةـ مـ يـ قـ لـ اـ لـ اـ دـ اـ نـ اـ سـ اـ ADـ عـ وـ مـ جـ مـ جـ ـ ةـ مـ يـ قـ لـ اـ لـ اـ دـ دـ حـ مـ

```
{
  "name": "Attribute-Map",
  "ldapAttributeMaps": [
    {
      "ldapName": "memberOf",
      "ciscoName": "GROUP_POLICY",
      "valueMappings": [
        {
          "ldapValue": "CN=Finance-Group,CN=Users,DC=cisco,DC=com",
          "ciscoValue": "Finance-Group-Policy",
          "type": "ldaptociscovaluemapping"
        },
        {
          "ldapValue": "CN=HR-Group,CN=Users,DC=cisco,DC=com",
          "ciscoValue": "HR-Group-Policy",
          "type": "ldaptociscovaluemapping"
        },
        {
          "ldapValue": "CN=IT-Group,CN=Users,DC=cisco,DC=com",
          "ciscoValue": "IT-Group-Policy",
          "type": "ldaptociscovaluemapping"
        }
      ],
      "type": "ldapattributemapping"
    },
    {
      "type": "ldapattributemap"
    }
  ]
}
```



نكمي واً dsquery رمألا مادختس اب AD مداخن م memberOf لقح دادرتس ا نكمي: ظحالم نع ثحبا، عاطخأ حيحصت تالجس يف FTD. ىلع LDAP اعاطخأ حيحصت نم هراضح memberOf value: field.

هيلاتل ا طقنلل ههب اشم اذه رشنل ا ةدام بـلـط ئـبـاجـتـسـا نـأ وـدـبـي:

Body Cookies (3) Headers (17) Test Results

Status: 200 OK Time: 193 ms Size: 1.46 KB Save Response ▾

Pretty Raw Preview Visualize JSON

```
1 {
2   "version": "nwy43w4jd32po",
3   "name": "Attribute-Map",
4   "ldapAttributeMaps": [
5     {
6       "ldapName": "memberOf",
7       "ciscoName": "GROUP_POLICY",
8       "valueMappings": [
9         {
10           "ldapValue": "CN=HR-Group,CN=Users,DC=cisco,DC=com",
11           "ciscoValue": "HR-Group-Policy",
12           "type": "ldaptociscovaluemapping"
13         },
14         {
15           "ldapValue": "CN=IT-Group,CN=Users,DC=cisco,DC=com",
16           "ciscoValue": "IT-Group-Policy",
17           "type": "ldaptociscovaluemapping"
18         },
19         {
20           "ldapValue": "CN=Finance-Group,CN=Users,DC=cisco,DC=com",
21           "ciscoValue": "Finance-Group-Policy",
22           "type": "ldaptociscovaluemapping"
23         }
24       ],
25       "type": "ldapattributemapping"
26     }
27   ],
28   "ldapAttributeToGroupPolicyMappings": [],
29   "id": "b2147c0e-984a-11ea-ba77-5b2ed5c4ab8c",
30   "type": "ldapattributemap",
31   "links": {
32     "self": "https://<FTD Management IP>/FDM/latest/object/ldapattributemaps/b2147c0e-984a-11ea-ba77-5b2ed5c4ab8c"
33   }
34 }
```

ىلع يـلـاحـلـا AD قـاطـنـنـيـوـكـتـ ىـلـعـ لـوـصـحـلـلـ دـيـدـجـ GET بـلـطـ ئـفـاضـاـبـ مـقـ 7ـ وـطـخـلـاـ

وـهـ يـلـاحـلـاـ نـالـعـاـلـاـ قـاطـنـنـيـوـكـتـ ىـلـعـ لـوـصـحـلـلـ URLـ نـاـونـعـ <https://<FTD Management IP>/API/FDM/latest/object/realm>

```

1 {
2   "items": [
3     {
4       "version": "ks3pd4he6ixiyy",
5       "name": "LDAP-AD",
6       "directoryConfigurations": [
7         {
8           "hostname": "[REDACTED]",
9           "port": 389,
10          "encryptionProtocol": "NONE",
11          "encryptionCert": null,
12          "type": "directoryconfiguration"
13        }
14      ],
15      "enabled": true,
16      "systemDefined": false,
17      "realmId": 3,
18      "dirUsername": "administrator@[REDACTED]",
19      "dirPassword": "*****",
20      "baseDN": "dc=[REDACTED], dc=com",
21      "ldapAttributeMap": null,
22      "adRealmDomain": "[REDACTED]",
23      "id": "bf50a8ab-9819-11ea-ba77-d32ecc224295",
24      "type": "activedirectoryrealm",
25      "links": [
26        {
27          "self": "https://[REDACTED]/api/fdm/latest/object/realm/bf50a8ab-9819-11ea-ba77-d32ecc224295"
28        }
29      ],
30      "paging": {
31        "prev": [],
32        "next": [],
33        "limit": 10,
34        "offset": 0,
35        "count": 1,
36        "pages": 0
37      }
38    }
39  ],
40  "paging": {
41    "prev": [],
42    "next": [],
43    "limit": 10,
44    "offset": 0,
45    "count": 1,
46    "pages": 0
47  }
48 }

```

نأ ظحال حاتفملا ڈميق نأ ظحال IdapAttributeMap ھي null.

ووطخلا نم GET ڈباجتسا جارخا خسنـا AD. لاجم ريرحتل ديدج بـلـطـ عـاـشـنـاـبـ مـقـ. 8ـ وـطـخـلـاـ يـأـ عـاـرـجـ إـلـ ڈـبـاـجـتـسـاـ نـكـمـيـ. اـذـهـ دـيـدـجـلـاـ P~U~Tـ بـلـطـ صـنـىـلـاـ اـهـتـفـاـضـ اوـ قـبـاـسـلـاـ وـأـ IPـ نـاـونـعـ وـأـ رـوـرـمـلـاـ ڈـمـلـكـ رـيـيـغـتـ:ـ لـاـثـمـلـاـ لـيـبـسـىـلـعـ،ـ يـلـاحـلـاـ ADـ قـاـطـنـ دـادـعـاـ ىـلـعـ تـالـيـدـعـتـاـ.ـ لـاحـلـاـ ھـذـھـ یـفـ ڈـبـاـجـتـسـاـ ڈـمـيـقـ ڈـفـاضـاـ.

لـمـاـکـلـاـ بـاـجـتـسـاـ جـارـخـاـ نـمـ اـلـدـبـ رـصـانـعـلـاـ ڈـمـيـاـقـ تـايـوـتـحـمـ خـسـنـمـهـمـلـاـ نـمـ:ـ ظـحـالـمـ عـاـرـجـاـ مـتـ يـذـلـاـ نـئـاـكـلـاـ رـصـنـعـ فـرـعـمـبـ P~U~Tـ بـلـطـ صـاـخـلـاـ بـلـطـلـلـ URLـ نـاـونـعـ قـاـحـلـاـ بـجـيـ يـهـ ڈـمـيـقـلـاـ،ـ لـاـثـمـلـاـ اـذـهـ یـفـ.ـ ھـ ڈـبـاـجـتـسـاـ تـارـيـيـغـتـلـاـ d32ecc224295

نـاـونـعـ:ـ وـهـ يـلـاحـلـاـ نـاـلـعـإـلـاـ قـاـطـنـ نـيـوـكـتـ رـيـرـحـتـلـ URLـ Nـاـونـعـ <https://<FTD Management IP>/API/FDM/latest/object/realm/<realm id>>

:ـ يـلـيـ اـمـ ىـلـعـ P~U~Tـ بـلـطـ صـنـ یـوـتـحـیـ نـأـ بـجـيـ

رادصـإـلـاـ	نـمـ ھـيـلـعـ لـوـصـحـلـاـ مـتـ يـذـلـاـ رـادـصـإـلـاـ قـبـاـسـلـاـ G~E~Tـ بـلـطـ ڈـبـاـجـتـسـاـ
فرـعـمـ	نـمـ ھـيـلـعـ لـوـصـحـلـاـ مـتـ يـذـلـاـ فـرـعـمـلـاـ قـبـاـسـلـاـ G~E~Tـ بـلـطـ ڈـبـاـجـتـسـاـ
IdapAttributeMap	نـيـيـعـتـ عـاـشـنـاـ بـلـطـ ڈـبـاـجـتـسـاـ نـمـ ڈـمـيـقـ لـD~A~P~idـ مـسـ ڈـمـيـقـ لـD~A~P~

The screenshot shows the Postman interface with a collection named "FTD-6.5.0 LDAP Authorization". The "PUT Edit AD Realm" request is selected. The URL is set to `https://[REDACTED]/api/fdm/latest/object/realms/bf50a8ab-9819-11ea-ba77-d32ecc224295`. The "Body" tab is active, showing a JSON payload. A red box highlights the "Send" button at the top right.

```

1 * {
2     "version": "ks3p4he5ixiyy",
3     "name": "LDAP-AD",
4     "directoryConfigurations": [
5         {
6             "hostname": "<IP Address>",
7             "port": 389,
8             "encryptionProtocol": "NONE",
9             "encryptionCert": null,
10            "type": "directoryconfiguration"
11        }
12    ],
13    "enabled": true,
14    "systemDefined": false,
15    "realmId": 3,
16    "dirUsername": "administrator@example.com",
17    "dirPassword": "*****",
18    "baseDN": "dc=example, dc=com",
19    "ldapAttributeMap": [
20        {
21            "id": "b2147c0e-984a-11ea-ba77-5b2ed5c4ab8c",
22            "type": "ldapattributemap"
23        },
24        {
25            "adPrimaryDomain": "example.com",
26            "id": "bf50a8ab-9819-11ea-ba77-d32ecc224295",
27            "type": "activedirectoryrealm",
28            "links": {
29                "self": "https://[REDACTED]/api/fdm/latest/object/realms/bf50a8ab-9819-11ea-ba77-d32ecc224295"
30            }
31        }
32    ]
33 }

```

وهـ لـ اـ ثـ مـ لـ اـ اـ ذـ يـ فـ نـ يـ وـ كـ تـ لـ اـ صـ نـ

```

<#root>

{
    "version": "ks3p4he5ixiyy",

    "name": "LDAP-AD",
    "directoryConfigurations": [
        {
            "hostname": "<IP Address>",
            "port": 389,
            "encryptionProtocol": "NONE",
            "encryptionCert": null,
            "type": "directoryconfiguration"
        }
    ],
    "enabled": true,
    "systemDefined": false,
    "realmId": 3,
    "dirUsername": "administrator@example.com",
    "dirPassword": "*****",
    "baseDN": "dc=example, dc=com",
    "ldapAttributeMap": [
        {
            "id": "b2147c0e-984a-11ea-ba77-5b2ed5c4ab8c",
            "type": "ldapattributemap"
        },
        {
            "adPrimaryDomain": "example.com",
            "id": "bf50a8ab-9819-11ea-ba77-d32ecc224295",
            "type": "activedirectoryrealm",
            "links": {
                "self": "https://[REDACTED]/api/fdm/latest/object/realms/bf50a8ab-9819-11ea-ba77-d32ecc224295"
            }
        }
    ]
}

```

```

"self": "https://
/api/fdm/latest/object/realms/bf50a8ab-9819-11ea-ba77-d32ecc224295"
}

}
}

```

بـلـطـلـا اـذـهـلـ ةـبـاجـتـسـاـلـا صـنـيـفـ لـاـقـبـاـطـ نـمـ قـقـحـتـ.

The screenshot shows a Postman interface with the following details:

- Body:** Contains the JSON response from the API call.
- Cookies (3):** Shows three cookie entries.
- Headers (17):** Shows various header fields.
- Test Results:** Not visible in the screenshot.
- Status:** 200 OK
- Time:** 657 ms
- Size:** 1.37 KB
- Save Response:** A button to save the response.

The JSON response body is as follows:

```

1 {
2   "version": "ksy7p574qfq7w",
3   "name": "LDAP-AD",
4   "directoryConfigurations": [
5     {
6       "hostname": "██████████",
7       "port": 389,
8       "encryptionProtocol": "NONE",
9       "encryptionCert": null,
10      "type": "directoryconfiguration"
11    },
12  ],
13  "enabled": true,
14  "systemDefined": false,
15  "realmId": 3,
16  "dirUsername": "administrator████████",
17  "dirPassword": "*****",
18  "baseDN": "dc=████████, dc=com",
19  "ldapAttributeMap": {
20    "version": "rwy43w4jd32po",
21    "name": "Attribute-Map",
22    "id": "b2147c0e-984a-11ea-ba77-5b2ed5c4ab8c",
23    "type": "ldapattributemap"
24  },
25  "adPrimaryDomain": "████████ com",
26  "id": "bf50a8ab-9819-11ea-ba77-d32ecc224295",
27  "type": "activedirectoryrealm",
28  "links": {
29    "self": "https://████████/api/fdm/latest/object/realms/bf50a8ab-9819-11ea-ba77-d32ecc224295"
30  }
31 }

```

A red box highlights the "ldapAttributeMap" object in the JSON response.

ةـمـسـ طـطـخـ عـاشـنـابـ مـقـ. Tـاـبـلـطـ مـاـدـخـتـسـاـبـ LDAPـ ةـمـسـ نـيـيـعـتـ لـيـدـعـتـ نـكـمـيـ. (ـيـرـايـتـخـاـ) Tـاـعـوـمـجـمـلـ لـلـ اـلـثـمـلـاـ يـفـ تـارـيـيـغـتـ يـأـ عـارـجـاـبـ مـقـوـ دـيـدـجـ PUTـ MemeberOf Valueـ. Tـاـعـوـمـجـمـلـ لـلـ اـلـثـمـلـاـ يـفـ اـهـعـيـمـجـ ثـالـثـلـاـ.

The screenshot shows the Postman interface with a PUT request to the URL `https://10.197.224.99/api/fdm/latest/object/ldapattributemaps/b2147c0e-9844-11ea-ba77-502ed5c4abdc`. The request body is a JSON object representing an LDAP attribute map. The JSON includes fields like 'version', 'name', 'idapname', 'ciscename', 'valueMappings', and 'links'. Several specific values in the JSON body are highlighted with red boxes.

```

1 "version": "1.0",
2 "name": "ADtoCiscoMap",
3 "idapname": "memberOf",
4 "ciscename": "GROUP_POLICY",
5 "valueMappings": [
6   {
7     "idapvalue": "memberOf",
8     "ciscovalue": "GROUP_POLICY",
9     "type": "IdapToCiscoValueMapping"
10   },
11   {
12     "idapvalue": "Finance-Group_ChUserGroup_DC=disco.DC=com",
13     "ciscovalue": "Finance-Group-Policy",
14     "type": "IdapToCiscoValueMapping"
15   },
16   {
17     "idapvalue": "Channel-Group_ChUserGroup_DC=disco.DC=com",
18     "ciscovalue": "Channel-Group-Policy",
19     "type": "IdapToCiscoValueMapping"
20   },
21   {
22     "idapvalue": "Retail-Group_ChUserGroup_DC=disco.DC=com",
23     "ciscovalue": "Retail-Policy",
24     "type": "IdapToCiscoValueMapping"
25   },
26 ],
27 "type": "IdapAttributeMapping"
28 }
29 {
30   "id": "b2147c0e-9844-11ea-ba77-502ed5c4abdc",
31   "type": "IdapAttributeMap",
32   "links": [
33     {
34       "self": "https://10.197.224.99/api/fdm/latest/object/ldapattributemaps/b2147c0e-9844-11ea-ba77-502ed5c4abdc"
35     }
36   ]
37 }

```

نیم ضتب مق. ۆم س نییعەت فذح بلىط ئاشناب مق، دوجوم LDAP ۆم س ططخم فذح ل. (يرايىت خا) فذح لا بلىطلى يس اسألا URL ناونعب قحلأو ۋەقباسلى HTTP ۋە باسلى نم ۋە طىرخ لافرۇم

The screenshot shows the Postman interface with a DELETE request to the URL `https://10.197.224.99/api/fdm/latest/object/ldapattributemaps/b2147c0e-9844-11ea-ba77-502ed5c4abdc`. The request body is a JSON object with a single field 'key' set to 'Value'. The entire URL and the request body are highlighted with red boxes.

```

{
  "key": "Value"
}

```

ارفشىم URL نوكىي نأ بجىف، تافاسمىلۇ يوتحت memberOf مەمسىلە تناناڭ ادا: ظحالىم مقرىب لىتلە ئىيىس HTTP ۋە باجتسا يقلت مەتى الار. اھلىخەت بىولما مداخلى 400٪ اما مادختسالا نكىمى، ئاضىپ تافاسمىلۇ يوتحت يېتلا ۋەلسلىل ۋە سىنلاب. أطخىلما اذە بىنچىل " + وۇ.

نآلارشىنلارا قوف رقنى او رشنىنلار زىمر ددھو، ئىلار خارجىم لىقتىنامىسىم 9. ۋە طىخ لە.

Pending Changes



✓ Last Deployment Completed Successfully

17 May 2020 07:46 PM. [See Deployment History](#)

Deployed Version (17 May 2020 07:46 PM)

Pending Version

LEGEND

+ **Idapattributemap Added: Attribute-Map**

-
-
-
-
-
-
-
-

```
ldapAttributeMaps[0].ldapName: memberOf
ldapAttributeMaps[0].valueMappings[0].ldapValue: CN=IT-Gr...
ldapAttributeMaps[0].valueMappings[0].ciscoValue: IT-Grou...
ldapAttributeMaps[0].valueMappings[1].ldapValue: CN=HR-Gr...
ldapAttributeMaps[0].valueMappings[1].ciscoValue: HR-Grou...
ldapAttributeMaps[0].valueMappings[2].ldapValue: CN=Finan...
ldapAttributeMaps[0].valueMappings[2].ciscoValue: Finance...
ldapAttributeMaps[0].ciscoName: GROUP_POLICY
name: Attribute-Map
```

✎ **Active Directory Realm Edited: LDAP-AD**

ldapAttributeMap:
-

Attribute-Map

MORE ACTIONS ▾

CANCEL

DEPLOY NOW

ةحصـلـا نـم قـقـحتـلـا

يف رـشـنـلـا تـاطـوـفـحـم مـسـقـ يـف رـشـنـلـا تـارـيـيـغـتـ نـم قـقـحتـلـا نـكـمـيـ.

The screenshot shows the Firepower Device Manager interface. At the top, there's a navigation bar with icons for Cisco, Monitoring, Policies, Objects, and a device selection for "Device: firepower". On the left, a sidebar has sections for "Device Administration", "Audit Log", and "Download Configuration". The main content area displays deployment history and pending changes.

Deployment Completed: User (admin) Triggered Deployment

Entity ID: b2147c0e-984a-11ea-ba77-5b2ed5c4ab8c

Deployed Version

Pending Version

Idapattributemap Added: Attribute-Map

Entity ID: b2147c0e-984a-11ea-ba77-5b2ed5c4ab8c

```
ldapAttributeMaps[0].ldapName: memberOf
ldapAttributeMaps[0].valueMappings[0].ldapValue: CN=Finan...
ldapAttributeMaps[0].valueMappings[0].ciscoValue: Finance...
ldapAttributeMaps[0].valueMappings[1].ldapValue: CN=IT-Gr...
ldapAttributeMaps[0].valueMappings[1].ciscoValue: IT-Grou...
ldapAttributeMaps[0].valueMappings[2].ldapValue: CN=HR-Gr...
ldapAttributeMaps[0].valueMappings[2].ciscoValue: HR-Grou...
ldapAttributeMaps[0].ciscoName: GROUP_POLICY
name: Attribute-Map
```

Active Directory Realm Edited: LDAP-AD

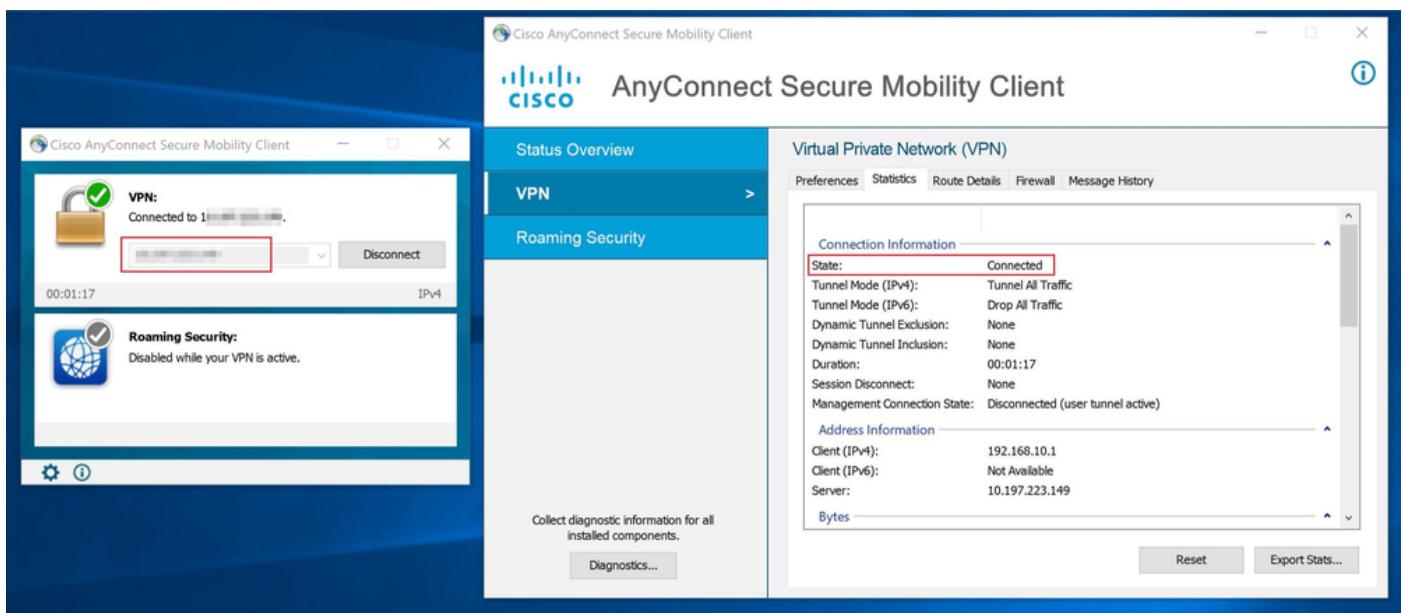
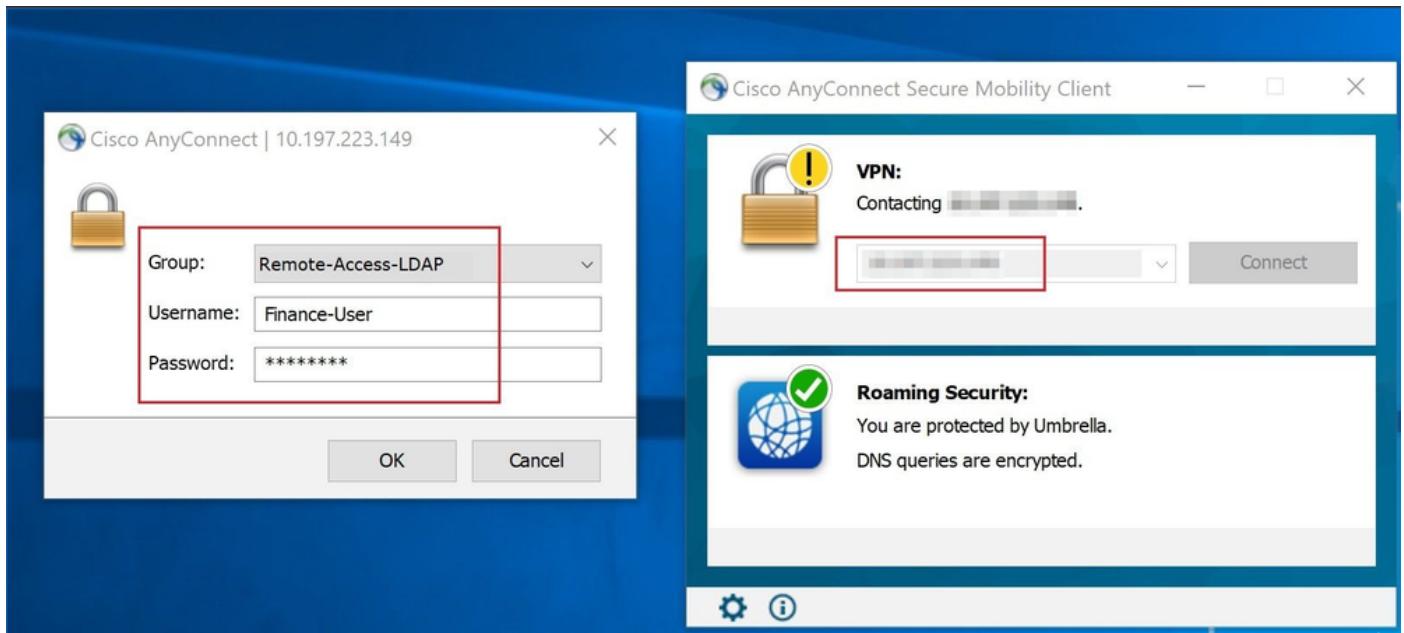
Entity ID: bf50a8ab-9819-11ea-ba77-d32ecc224295

ldapAttributeMap:
-

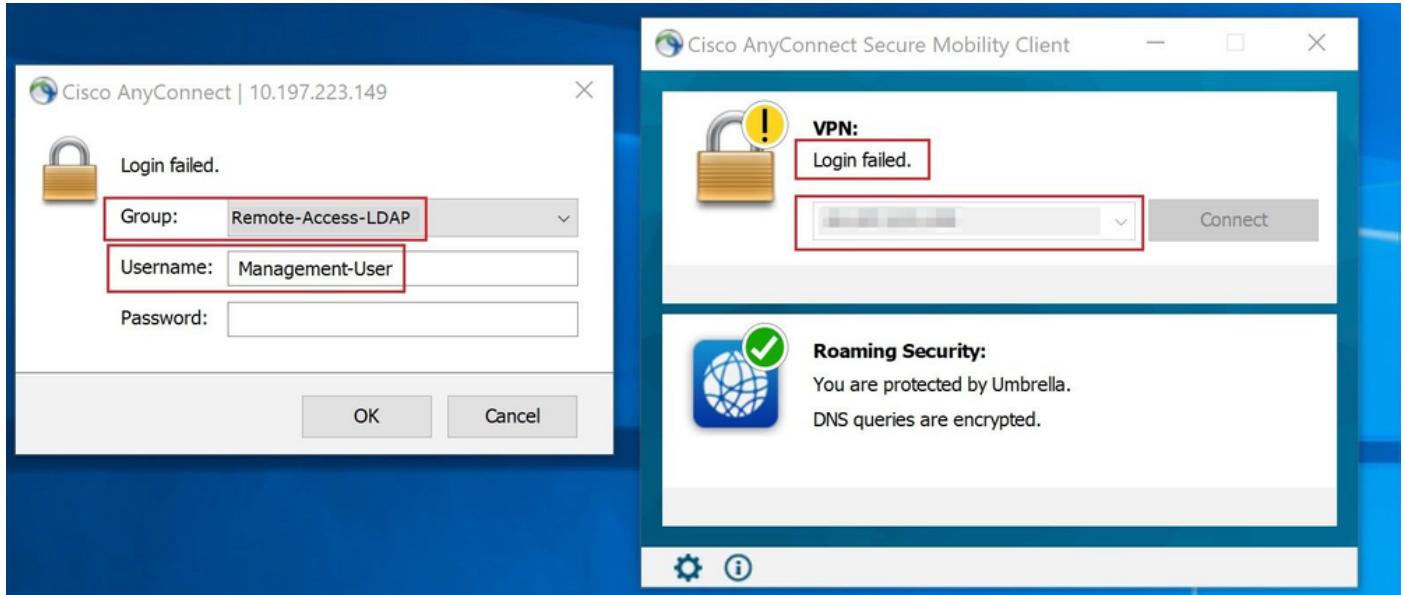
Attribute-Map

ةـمـلـكـو مـدـخـتـسـمـلـا مـسـا يـلـقـحـ يـف AD دـامـتـعـا تـانـاـيـبـ رـيـفـوـتـبـ مـقـ ،ـنـيـوـكـتـلـا اـذـهـ رـابـخـالـ رـوـرـمـلـا

وہ امک ۃلواح ملأ حجت نت ، لوح دلأ لیج سمت AD ۃیلام ۃعومجم یلأ یمتنی مدخلت سمت لواح یام دن عوقوتم.



ب لاصتالا AD یف ۃرادلأا ۃعومجم یلأ یمتنی مدخلت سمت لواح یام دن عوچم ملأ جھن نوكی ، ۃقباطمل LDAP ۃمس ۃطیرخ یأ عاجرا مدخل ارظن ، Remote-Access-LDAP لیج سمت تایلمع نییعت مت یذلأ NOACCESS وہ FTD یلع مدخلت سملأا اذه لباق نم ثوروم ملأ لوح دلأ لیج سمت ۃلواح ملش فت ، یلاتلابو . 0 ۃمیقلأا یلع vpn ب ۃصالخا ۃنم ازتملأا لوح دلأ مدخلت سملأا اذهل.



ةصالخلا (CLI) رمأوألا رطس ٰهـجـاـنـمـ ةـيـلـاتـلـاـ showـ رـمـأـوـاـ مـادـخـتـسـابـ نـيـوـكـتـلـاـ نـكـمـيـ بـ FTDـ:

```
<#root>
firepower#
show vpn-sessiondb anyconnect

Session Type: AnyConnect

Username      :
Finance-User

Index          : 26
Assigned IP   : 192.168.10.1           Public IP     : 10.1.1.1
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      : 22491197             Bytes Rx     : 14392
Group Policy  :

Finance-Group-Policy

Tunnel Group  : Remote-Access-LDAP
Login Time    : 11:14:43 UTC Sat Oct 12 2019
Duration      : 0h:02m:09s
Inactivity    : 0h:00m:00s
VLAN Mapping  : N/A                  VLAN         : none
Audit Sess ID : 000000000001a0005da1b5a3
Security Grp  : none                Tunnel Zone  : 0
```

<#root>

```
firepower#  
  
show run aaa-server LDAP-AD  
  
aaa-server LDAP-AD protocol ldap  
realm-id 3  
aaa-server AD1 host 192.168.1.1  
server-port 389  
ldap-base-dn dc=example, dc=com  
ldap-scope subtree  
ldap-login-password *****  
ldap-login-dn Administrator@example.com  
server-type auto-detect
```

```
ldap-attribute-map Attribute-Map
```

```
<#root>
```

```
firepower#  
  
show run ldap attribute-map  
  
ldap attribute-map Attribute-Map  
map-name memberOf Group-Policy  
map-value memberOf CN=Finance-Group,CN=Users,DC=cisco,DC=com Finance-Group-Policy  
map-value memberOf CN=HR-Group,CN=Users,DC=cisco,DC=com HR-Group-Policy  
map-value memberOf CN=IT-Group,CN=Users,DC=cisco,DC=com IT-Group-Policy
```

اهحالص او عاطخألا فاشكتس ا

زيمملـا زـمـرـلـا دـيـدـجـت REST تـاقـيـبـطـت ظـجـمـرـب ظـهـجـاوـنـيـوـكـت عـم اـعـوـيـش لـكـاشـمـلـا رـثـكـأ نـم بلـطـلـ بـاجـتـسـالـا يـف زـيمـمـلـا زـمـرـلـا ظـيـحـالـص ءـاهـتـنـا تـقـوـرـيـفـوت مـتـي .ـرـخـآلـ تـقـوـنـم لـمـاحـلـلـ ةـرـتـفـلـ يـفـاـضـا زـيمـمـ ثـيـدـجـت زـمـرـمـادـخـتـسـا نـكـمـي ،ـدـمـلـا هـذـه ظـيـحـالـص تـهـتـنـا اـذـا .ـقـقـدـاـصـمـلـا ةـدـاعـإـلـ دـيـدـجـ ةـقـدـاـصـمـ بـلـطـلـاسـرا بـجـي ،ـاضـيـأ ئـيـدـجـتـلـلـ زـيمـمـلـا زـمـرـلـا ظـيـحـالـص ءـاهـتـنـا دـعـبـ .ـلـوـطـأـ دـيـدـجـ لـوـصـوـلـلـ زـيمـمـ زـمـرـنـيـيـعـتـ.

 رـمـ اوـاـ مـادـخـتـسـا لـبـقـ [حـيـحـصـتـلـاـرـمـ اوـاـلـوـحـ قـمـمـ تـامـوـلـعـمـ](#) ئـلـا عـجـراـ: ظـحـالـمـ debug.

 مـادـخـتـسـا مـتـي ،ـيـضـارـتـفـا لـكـشـبـ .ـعـونـتـمـ عـاطـخـأـ حـيـحـصـتـ تـاـيـوـتـسـمـ طـبـضـ كـنـكـمـيـ عـسـوـتـ ظـجـرـدـ دـيـازـتـتـ دـقـفـ ،ـعـاطـخـأـلـا حـيـحـصـتـ ئـوـتـسـمـ رـيـيـغـتـبـ تـمـقـ اـذـا 1. ئـوـتـسـمـلـاـ جـاتـنـإـلـا تـاـئـيـبـ يـفـ^ـصـاخـوـ ،ـرـذـحـبـ كـلـذـبـ مـقـ .ـعـاطـخـأـلـا حـيـحـصـتـ

وقـلـعـتـمـلـا لـكـاشـمـلـا فـاشـكـتـسـأـ يـفـ ظـدـيـفـمـ لـFTDـ لـCLIـ ئـلـعـ ظـيـلـاـتـلـا عـاطـخـأـلـا نـوـكـتـ دـقـ اـهـحالـصـ اوـاـلـدـمـ ظـمـسـ ظـطـيـرـبـ

```
debug ldap 255  
debug webvpn condition user <username>
```

```
debug webvpn anyconnect 255
debug aaa common 127
```

مٽ يٽلـا تامولعـمـلا حـيـضـوـتـلـا ةـيـلـاتـلـا ءـاطـخـأـلـا حـيـحـصـتـ تـايـلـمـعـ عـيـمـجـتـ مـتـ لـاـثـمـلـا اـذـهـ يـفـ لـاـصـتـالـا لـبـقـ نـيـرـوـكـذـمـلـا رـابـتـخـالـا يـمـدـخـتـسـمـ مـاـيـقـ دـنـعـ AD مـدـاخـنـمـ اـهـيـقـلـتـ

لـيـوـمـتـلـا مـدـخـتـسـمـلـ LDAP ءـاطـخـأـلـا حـيـحـصـتـ:

```
<#root>
```

```
[48] Session Start
[48] New request Session, context 0x00002b0482c2d8e0, reqType = Authentication
[48] Fiber started
[48] Creating LDAP context with uri=ldap://192.168.1.1:389
[48] Connect to LDAP server: ldap://192.168.1.1:389, status = Successful
[48] supportedLDAPVersion: value = 3
[48] supportedLDAPVersion: value = 2
[48] LDAP server 192.168.1.1 is Active directory
[48] Binding as Administrator@cisco.com
[48] Performing Simple authentication for Administrator@example.com to 192.168.1.1
[48] LDAP Search:
      Base DN = [dc=cisco, dc=com]
      Filter = [sAMAccountName=Finance-User]
      Scope = [SUBTREE]
[48] User DN = [CN=Finance-User,OU=Finance,OU=VPN,DC=cisco,DC=com]
[48] Talking to Active Directory server 192.168.1.1
[48] Reading password policy for Finance-User, dn:CN=Finance-User,OU=Finance,OU=VPN,DC=cisco,DC=com
[48] Read bad password count 0
[48] Binding as Finance-User
[48] Performing Simple authentication for Finance-User to 192.168.1.1
[48] Processing LDAP response for user Finance-User
[48] Message (Finance-User):
[48]
```

Authentication successful for Finance-User to 192.168.1.1

```
[48] Retrieved User Attributes:
[48]   objectClass: value = top
[48]   objectClass: value = person
[48]   objectClass: value = organizationalPerson
[48]   objectClass: value = user
[48]   cn: value = Finance-User
[48]   givenName: value = Finance-User
[48]   distinguishedName: value = CN=Finance-User,OU=Finance,OU=VPN,DC=cisco,DC=com
[48]   instanceType: value = 4
[48]   whenCreated: value = 20191011094454.0Z
[48]   whenChanged: value = 20191012080802.0Z
[48]   displayName: value = Finance-User
[48]   uSNCreated: value = 16036
[48]
```

```
memberOf: value = CN=Finance-Group,CN=Users,DC=cisco,DC=com
```

```
[48]
```

```
mapped to Group-Policy: value = Finance-Group-Policy
```

```
[48]
```

```
mapped to LDAP-Class: value = Finance-Group-Policy
```

```

[48] memberOf: value = CN=Users,CN=BuiltIn,DC=cisco,DC=com
[48]           mapped to Group-Policy: value = CN=Users,CN=BuiltIn,DC=cisco,DC=com
[48]           mapped to LDAP-Class: value = CN=Users,CN=BuiltIn,DC=cisco,DC=com
[48] uSNChanged: value = 16178
[48] name: value = Finance-User
[48] objectGUID: value = .J.2...N....X.0Q
[48] userAccountControl: value = 512
[48] badPwdCount: value = 0
[48] codePage: value = 0
[48] countryCode: value = 0
[48] badPasswordTime: value = 0
[48] lastLogoff: value = 0
[48] lastLogon: value = 0
[48] pwdLastSet: value = 132152606948243269
[48] primaryGroupID: value = 513
[48] objectSid: value = .....B...a5/ID.dT...
[48] accountExpires: value = 9223372036854775807
[48] logonCount: value = 0
[48] sAMAccountName: value = Finance-User
[48] sAMAccountType: value = 805306368
[48] userPrincipalName: value = Finance-User@cisco.com
[48] objectCategory: value = CN=Person,CN=Schema,CN=Configuration,DC=cisco,DC=com
[48] dSCorePropagationData: value = 20191011094757.0Z
[48] dSCorePropagationData: value = 20191011094614.0Z
[48] dSCorePropagationData: value = 16010101000000.0Z
[48] lastLogonTimestamp: value = 132153412825919405
[48] Fiber exit Tx=538 bytes Rx=2720 bytes, status=1
[48] Session End

```

مدخلات LDAP لـ ارادة ملء اطاراً حيحة:

<#root>

```

[51] Session Start
[51] New request Session, context 0x00002b0482c2d8e0, reqType = Authentication
[51] Fiber started
[51] Creating LDAP context with uri=ldap://192.168.1.1:389
[51] Connect to LDAP server: ldap://192.168.1.1:389, status = Successful
[51] supportedLDAPVersion: value = 3
[51] supportedLDAPVersion: value = 2
[51] LDAP server 192.168.1.1 is Active directory
[51] Binding as Administrator@cisco.com
[51] Performing Simple authentication for Administrator@example.com to 192.168.1.1
[51] LDAP Search:
    Base DN = [dc=cisco, dc=com]
    Filter  = [sAMAccountName=Management-User]
    Scope   = [SUBTREE]
[51] User DN = [CN=Management-User,OU=Management,OU=VPN,DC=cisco,DC=com]
[51] Talking to Active Directory server 192.168.1.1
[51] Reading password policy for Management-User, dn:CN=Management-User,OU=Management,OU=VPN,DC=cisco,DC=com
[51] Read bad password count 0
[51] Binding as Management-User
[51] Performing Simple authentication for Management-User to 192.168.1.1
[51] Processing LDAP response for user Management-User
[51] Message (Management-User):
[51]

Authentication successful for Management-User to 192.168.1.1

```

```

[51] Retrieved User Attributes:
[51]   objectClass: value = top
[51]   objectClass: value = person
[51]   objectClass: value = organizationalPerson
[51]   objectClass: value = user
[51]   cn: value = Management-User
[51]   givenName: value = Management-User
[51]   distinguishedName: value = CN=Management-User,OU=Management,OU=VPN,DC=cisco,DC=com
[51]   instanceType: value = 4
[51]   whenCreated: value = 20191011095036.0Z
[51]   whenChanged: value = 20191011095056.0Z
[51]   displayName: value = Management-User
[51]   uSNCreated: value = 16068
[51]

memberOf: value = CN=Management-Group,CN=Users,DC=cisco,DC=com

[51]

mapped to Group-Policy: value = CN=Management-Group,CN=Users,DC=cisco,DC=com

[51]

mapped to LDAP-Class: value = CN=Management-Group,CN=Users,DC=cisco,DC=com

[51]   memberOf: value = CN=Users,CN=Builtin,DC=cisco,DC=com
[51]         mapped to Group-Policy: value = CN=Users,CN=Builtin,DC=cisco,DC=com
[51]         mapped to LDAP-Class: value = CN=Users,CN=Builtin,DC=cisco,DC=com
[51]   uSNChanged: value = 16076
[51]   name: value = Management-User
[51]   objectGUID: value = i._.E.0.....Gig
[51]   userAccountControl: value = 512
[51]   badPwdCount: value = 0
[51]   codePage: value = 0
[51]   countryCode: value = 0
[51]   badPasswordTime: value = 0
[51]   lastLogoff: value = 0
[51]   lastLogon: value = 0
[51]   pwdLastSet: value = 132152610365026101
[51]   primaryGroupID: value = 513
[51]   objectSid: value = .....B...a5/ID.dW...
[51]   accountExpires: value = 9223372036854775807
[51]   logonCount: value = 0
[51]   sAMAccountName: value = Management-User
[51]   sAMAccountType: value = 805306368
[51]   userPrincipalName: value = Management-User@cisco.com
[51]   objectCategory: value = CN=Person,CN=Schema,CN=Configuration,DC=cisco,DC=com
[51]   dSCorePropagationData: value = 20191011095056.0Z
[51]   dSCorePropagationData: value = 16010101000000.0Z
[51] Fiber exit Tx=553 bytes Rx=2688 bytes, status=1
[51] Session End

```

ةلص تاذ تامولعم

Cisco نم (TAC) ةينقتلا ةدعاسملا زكرمب لاصتالا ئجري، ةيفاضا ةدعاسم ىلع لوصح لـ Cisco. مـ لـ اـ عـ اـ حـ نـ أـ عـ يـ مـ جـ يـ فـ Cisco معـ دـ لـ اـ صـ تـ اـ تـ اـ هـ.

هـ لـ وـ لـ جـ رـ تـ لـ اـ هـ ذـ هـ

ةـ يـ لـ آـ لـ اـ تـ اـ يـ نـ قـ تـ لـ اـ نـ مـ مـ جـ مـ وـ عـ مـ اـ دـ خـ تـ سـ اـ بـ دـ نـ تـ سـ مـ لـ اـ اـ ذـ هـ تـ مـ جـ رـ تـ
لـ اـ عـ لـ اـ ءـ اـ حـ نـ اـ عـ يـ مـ جـ يـ فـ نـ يـ مـ دـ خـ تـ سـ مـ لـ لـ مـ عـ دـ ئـ وـ تـ حـ مـ يـ دـ قـ تـ لـ ةـ يـ رـ شـ بـ لـ اـ وـ
اـ مـ كـ ةـ قـ يـ قـ دـ نـ وـ كـ تـ نـ لـ ةـ يـ لـ آـ ةـ مـ جـ رـ تـ لـ ضـ فـ اـ نـ اـ ةـ ظـ حـ اـ لـ مـ ئـ جـ رـ يـ .ـ صـ اـ خـ لـ اـ مـ هـ تـ غـ لـ بـ
يـ لـ خـ تـ .ـ فـ رـ تـ حـ مـ مـ جـ رـ تـ مـ اـ هـ دـ قـ يـ يـ تـ لـ اـ ةـ يـ فـ اـ رـ تـ حـ اـ لـ اـ ةـ مـ جـ رـ تـ لـ اـ عـ مـ لـ اـ حـ لـ اـ وـ
ىـ لـ إـ أـ مـ ئـ اـ دـ عـ وـ جـ رـ لـ اـ بـ يـ صـ وـ تـ وـ تـ اـ مـ جـ رـ تـ لـ اـ هـ ذـ هـ ةـ قـ دـ نـ عـ اـ هـ تـ يـ لـ وـ ئـ سـ مـ
(رـ فـ وـ تـ مـ طـ بـ اـ رـ لـ اـ)ـ يـ لـ صـ أـ لـ اـ يـ زـ يـ لـ جـ نـ إـ لـ اـ دـ نـ تـ سـ مـ لـ اـ).