Configure SSL Anyconnect With ISE Authentication And Class Attribute For Group-Policy Mapping

Contents

Introduction

This document describes how to configure Secure Sockets Layer (SSL) Anyconnect with the Cisco Identity Services Engine (ISE) for user mapping to specific Group-Policy.

Contributed by Amanda Nava, Cisco TAC Engineer.

Prerequisites

Requirements

Cisco recommends that you have knowledge of these topics:

- AnyConnect Secure Mobility Client Version 4.7
- Cisco ISE 2.4
- Cisco ASA version 9.8 or later.

Components used

The content of this document is based on these software and hardware versions.

- Adaptive Security Appliance (ASA) 5506 with Software Version 9.8.1
- AnyConnect Secure Mobility Client 4.2.00096 on Microsoft Windows 10 64-bit.

- ISE Version 2.4.

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. If your network is live, ensure that you understand the potential impact of any command.

Configure

In the example, Anyconnect users connect directly without the option to select tunnel-group from the drop-down menu as they are assigned by Cisco ISE to specific Group-Policy in accordance to their attributes.

ASA

AAA-Server

```
aaa-server ISE_AAA protocol radius
aaa-server ISE_AAA (Outside) host 10.31.124.82
key cisco123
```

Anyconnect

```
webvpn
enable outside
anyconnect image disk0:/anyconnect-win-4.7.01076-webdeploy-k9.pkg 1
anyconnect enable

tunnel-group DefaultWEBVPNGroup general-attributes
address-pool Remote_users
authentication-server-group ISE_AAA

group-policy DfltGrpPolicy attributes
banner value ###YOU DON'T HAVE AUTHORIZATION TO ACCESS ANY INTERNAL RESOURCES###
vpn-simultaneous-logins 0
vpn-tunnel-protocol ssl-client

group-policy RADIUS-USERS internal
group-policy RADIUS-USERS attributes
banner value YOU ARE CONNECTED TO ### RADIUS USER AUTHENTICATION###
vpn-simultaneous-logins 3
vpn-tunnel-protocol ssl-client
split-tunnel-network-list value SPLIT_ACL

group-policy RADIUS-ADMIN internal
group-policy RADIUS-ADMIN attributes
banner value YOU ARE CONNECTED TO ###RADIUS ADMIN AUTHENTICATION ###
vpn-simultaneous-logins 3
vpn-tunnel-protocol ssl-client
split-tunnel-network-list none
```

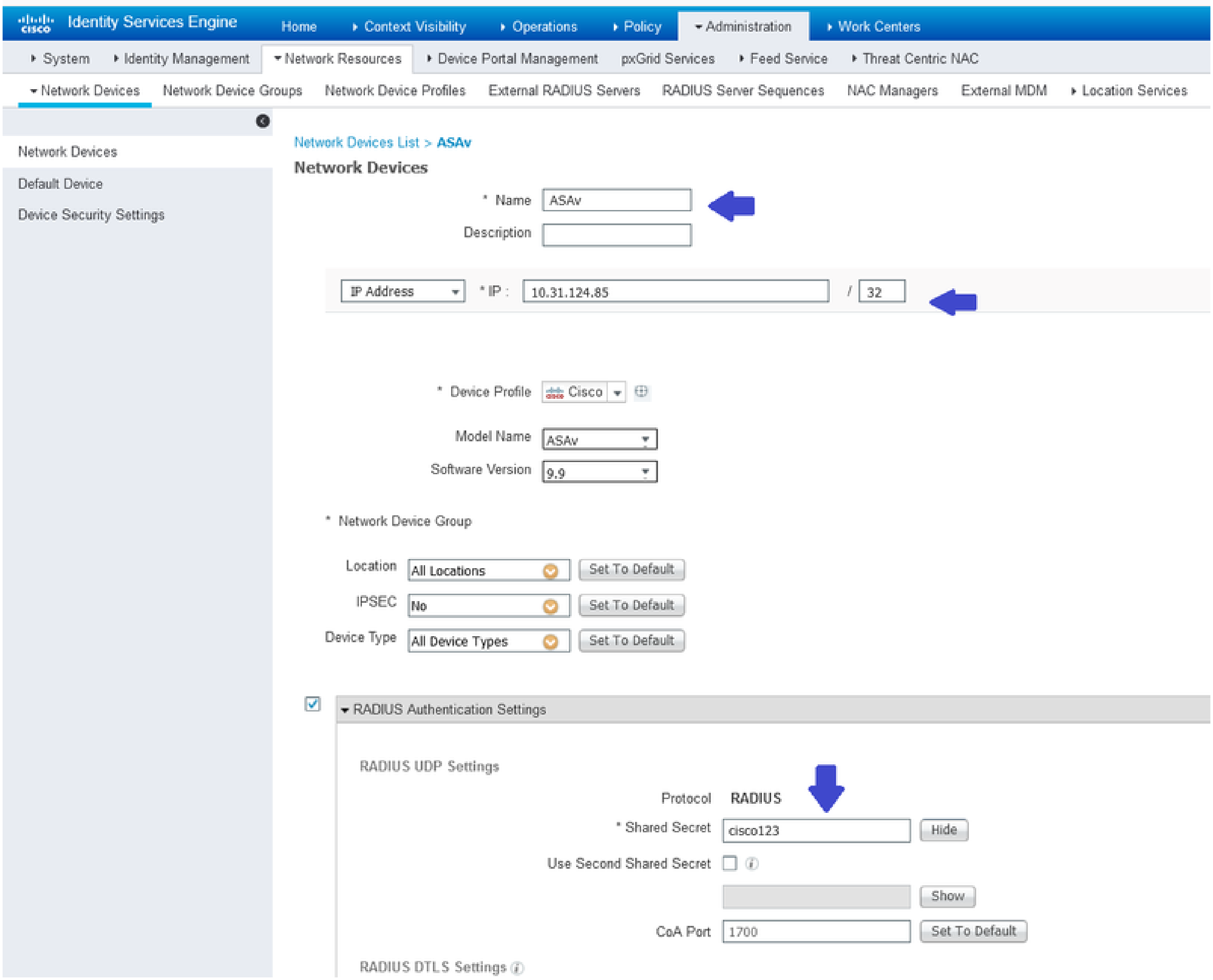
> **Note**: With this configuration example you are able to assign the group-policy to each Anyconnect user through ISE configuration. Because the users don't have the option to select the tunnel group, they are connected to the DefaultWEBVPNGroup tunnel-group and the DfltGrpPolicy. After authentication happens and the Class attribute (Group-policy) returns

in the ISE authentication response, the user is assigned to the corresponding group. In the case, the user doesn't have a Class attribute applied, this user still remains in the DfltGrpPolicy. You can configure the **vpn-simultaneous-logins 0** under the DfltGrpPolicy group in order to avoid users without group-policy to connect through the VPN.

ISE

Step1. Add the ASA to ISE.

For this step navigate to **Administration>Network Resources>Network Devices.**



Network Devices

* Name: ASAv

Description:

IP Address * IP : 10.31.124.85 / 32

* Device Profile: Cisco

Model Name: ASAv

Software Version: 9.9

* Network Device Group

Location: All Locations

IPSEC: No

Device Type: All Device Types

☑ RADIUS Authentication Settings

Protocol: RADIUS

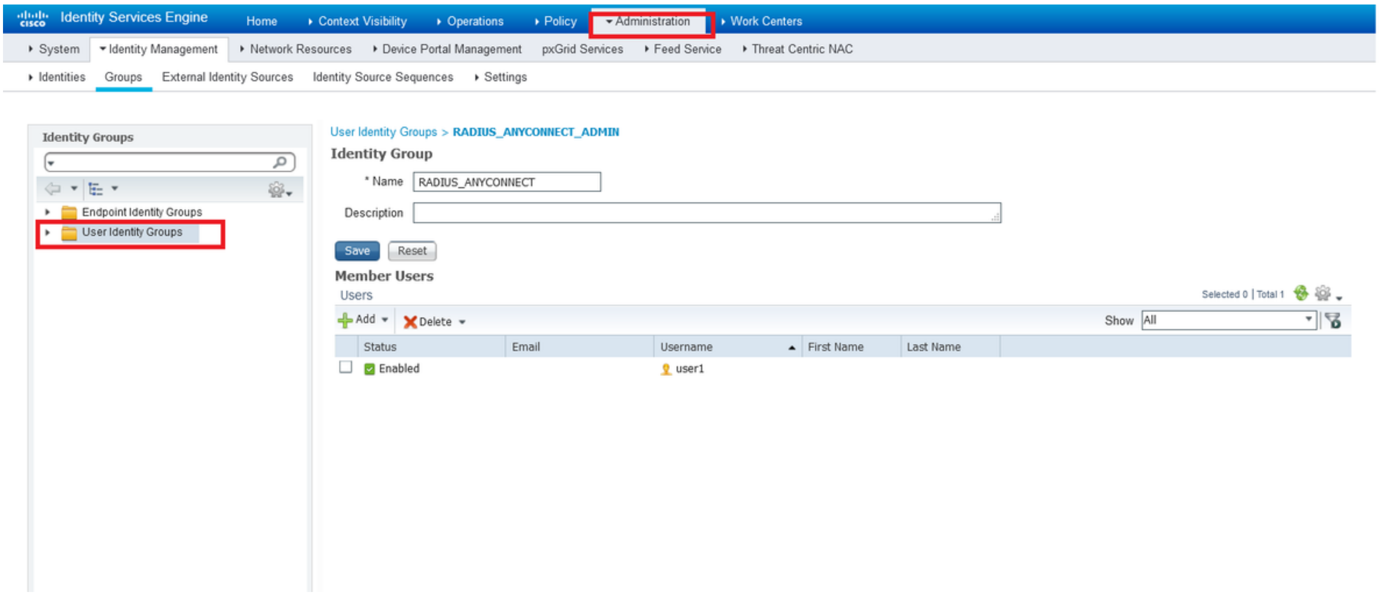
* Shared Secret: cisco123

Use Second Shared Secret: □

CoA Port: 1700

Step 2. Create identity groups.

Define Identity groups to associate each user to the right one in the next steps. Navigate to **Administration>Groups>User Identity Groups.**



User Identity Groups > RADIUS_ANYCONNECT_ADMIN

Identity Group

* Name: RADIUS_ANYCONNECT

Description:

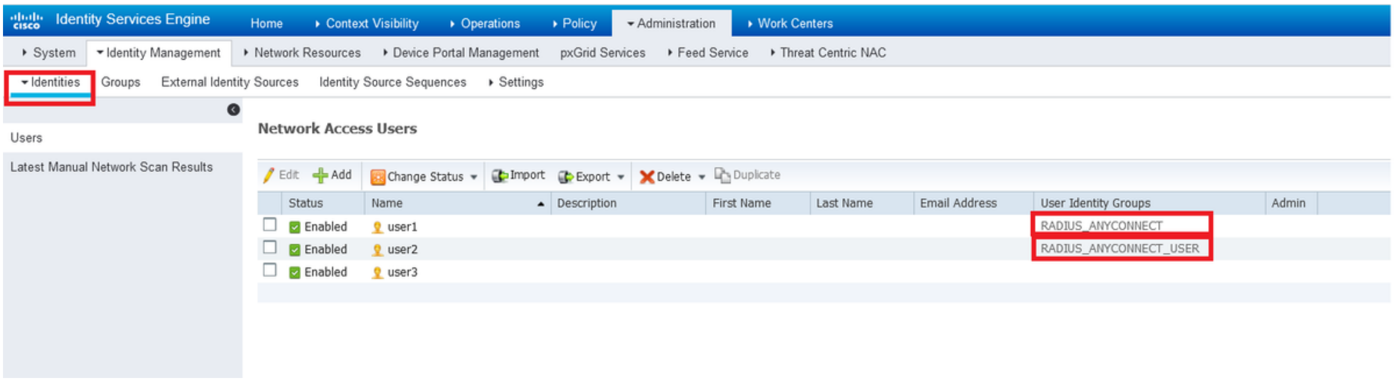
Member Users

Users

	Status	Email	Username	First Name	Last Name
□	Enabled		user1		

Step 3. Associate users to identity groups.

Associate users to the right identity group. Navigate to **Administration>Identities>Users.**

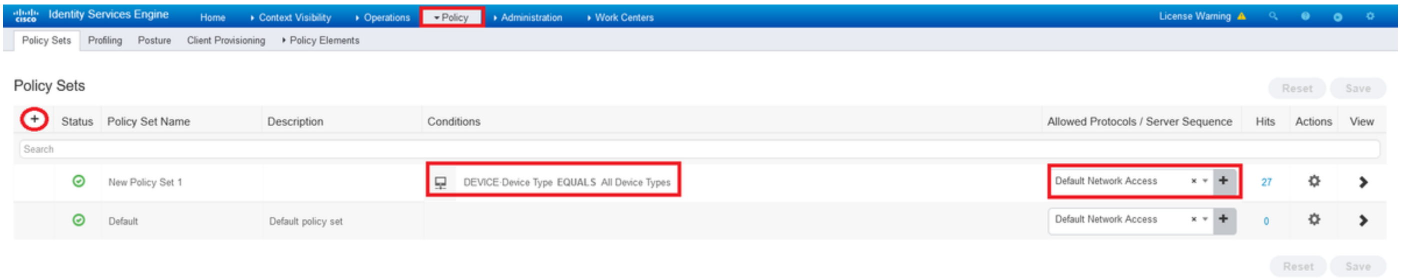


Network Access Users

	Status	Name	Description	First Name	Last Name	Email Address	User Identity Groups	Admin
□	Enabled	user1					RADIUS_ANYCONNECT	
□	Enabled	user2					RADIUS_ANYCONNECT_USER	
□	Enabled	user3						

Step 4. Create Policy Set.

Define a new policy set as shown in example (all device Types) under conditions. Navigate to **Policy>Policy sets.**

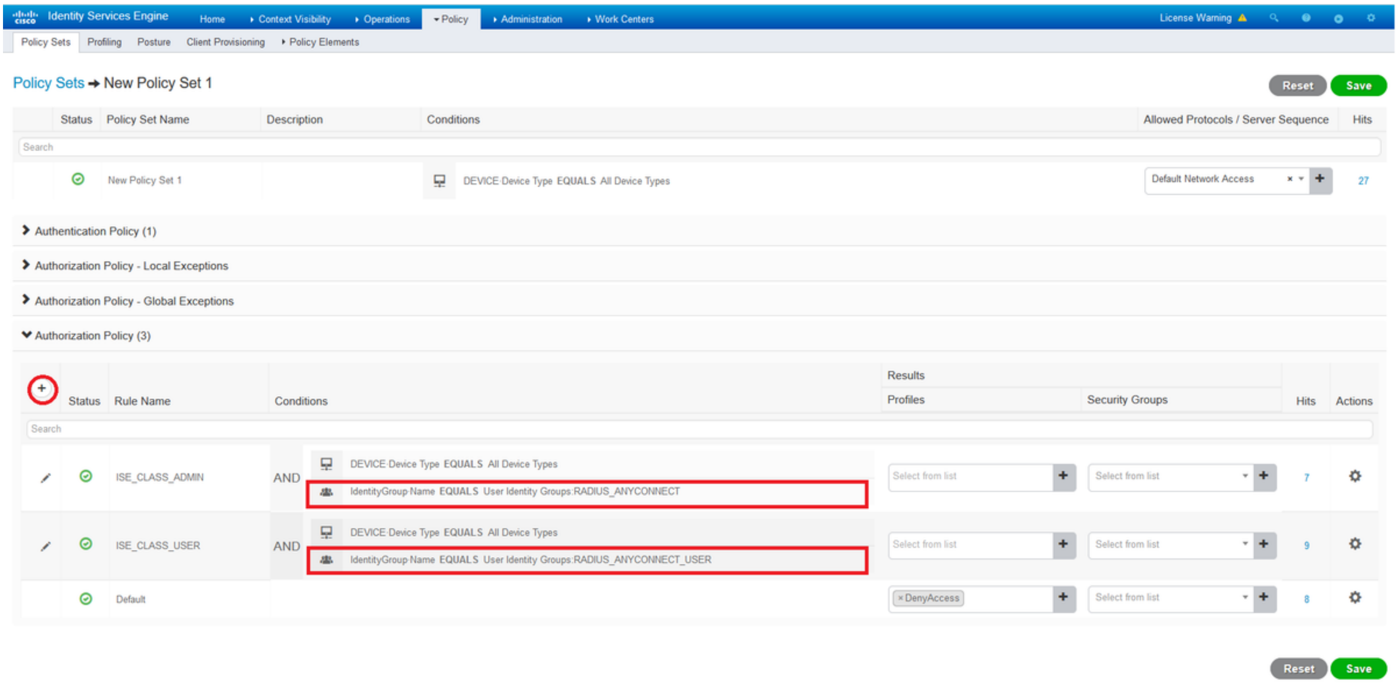


Policy Sets

+	Status	Policy Set Name	Description	Conditions	Allowed Protocols / Server Sequence	Hits	Actions	View
	✓	New Policy Set 1		DEVICE·Device Type EQUALS All Device Types	Default Network Access	27	⚙	>
	✓	Default	Default policy set		Default Network Access	0	⚙	>

Step 5. Create an Authorization Policy.

Create a new Authorization Policy with the proper condition to match the identity group.

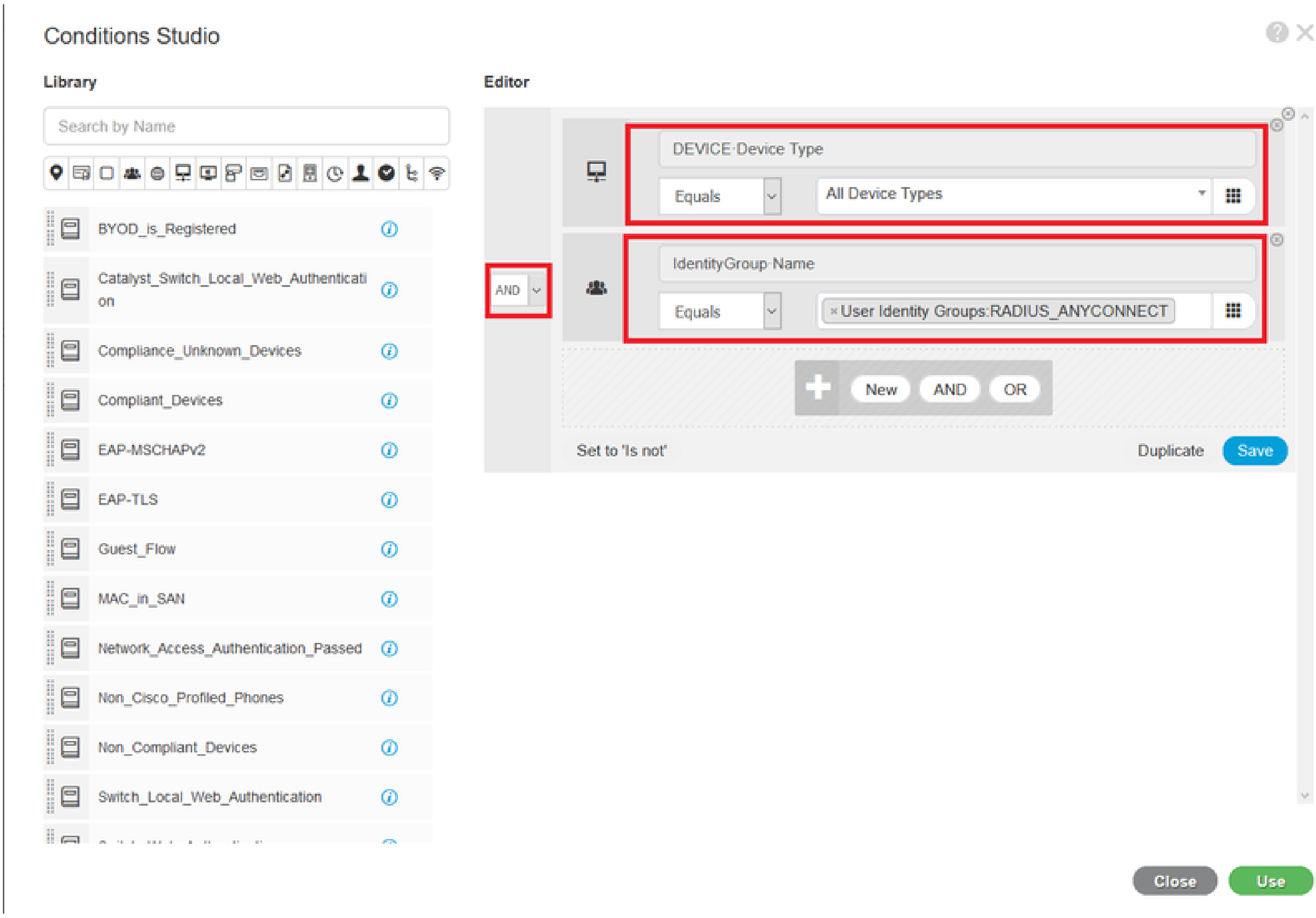


Policy Sets → New Policy Set 1

Status	Policy Set Name	Description	Conditions	Allowed Protocols / Server Sequence	Hits
✓	New Policy Set 1		DEVICE·Device Type EQUALS All Device Types	Default Network Access	27

- Authentication Policy (1)
- Authorization Policy - Local Exceptions
- Authorization Policy - Global Exceptions
- Authorization Policy (3)

Status	Rule Name		Conditions	Results: Profiles	Results: Security Groups	Hits	Actions
✓	ISE_CLASS_ADMIN	AND	DEVICE·Device Type EQUALS All Device Types IdentityGroup·Name EQUALS User Identity Groups:RADIUS_ANYCONNECT	Select from list	Select from list	7	⚙
✓	ISE_CLASS_USER	AND	DEVICE·Device Type EQUALS All Device Types IdentityGroup·Name EQUALS User Identity Groups:RADIUS_ANYCONNECT_USER	Select from list	Select from list	9	⚙
✓	Default			× DenyAccess	Select from list	8	⚙


Conditions Studio

Library

- BYOD_is_Registered
- Catalyst_Switch_Local_Web_Authentication
- Compliance_Unknown_Devices
- Compliant_Devices
- EAP-MSCHAPv2
- EAP-TLS
- Guest_Flow
- MAC_in_SAN
- Network_Access_Authentication_Passed
- Non_Cisco_Profiled_Phones
- Non_Compliant_Devices
- Switch_Local_Web_Authentication

Editor

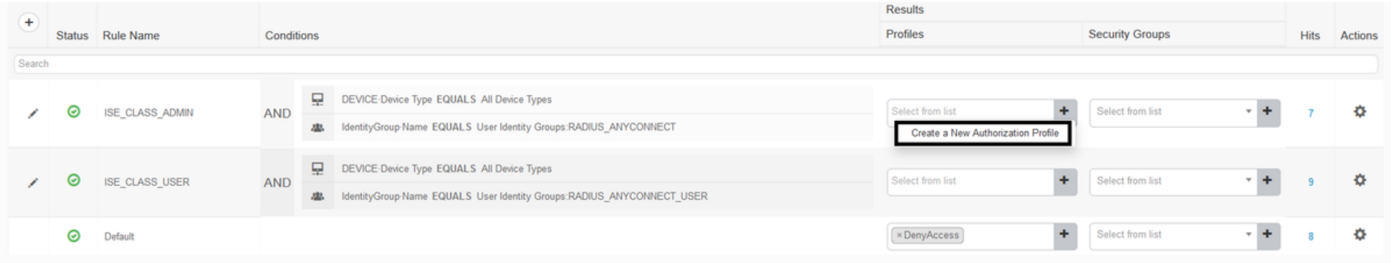
AND

DEVICE·Device Type — Equals — All Device Types

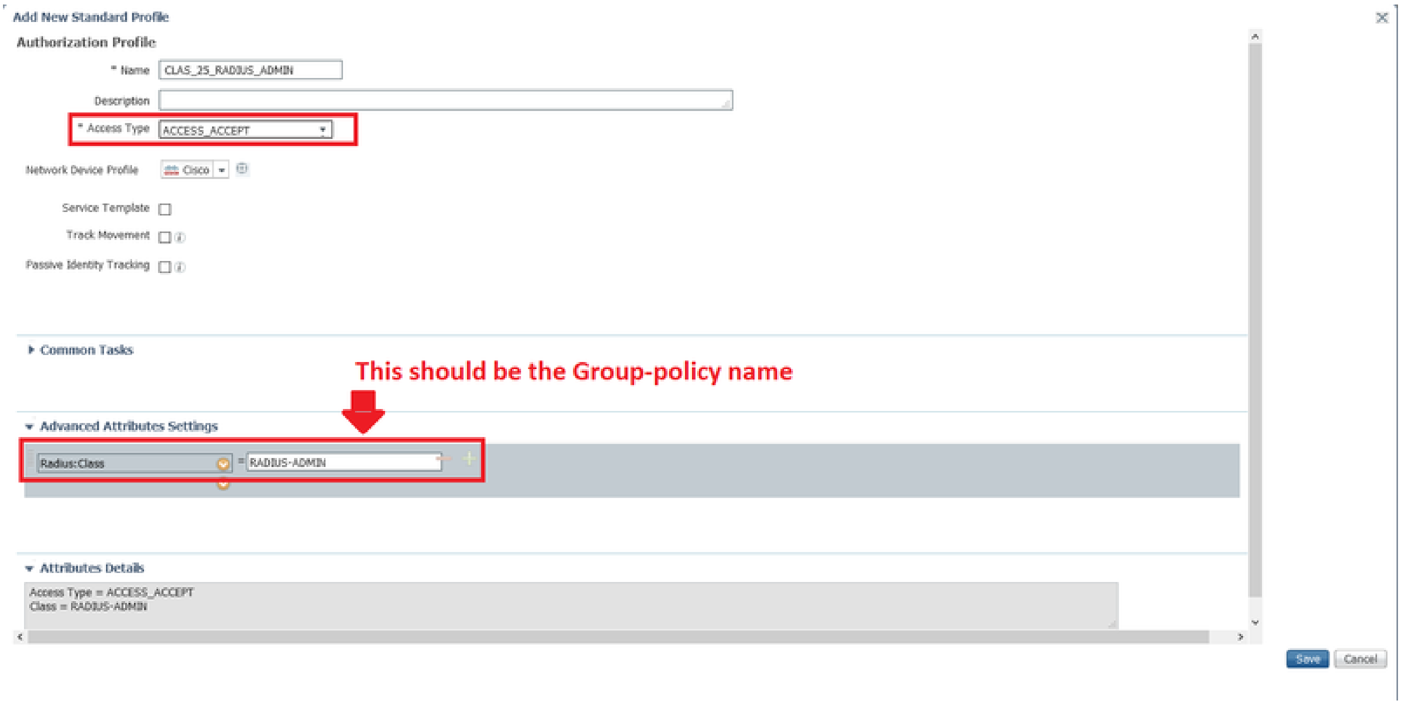
IdentityGroup·Name — Equals — × User Identity Groups:RADIUS_ANYCONNECT

Step 6. Create an Authorization Profile.

Create a new Authorization Profile with RADIUS: Class<Group-policy-ASA> attribute and *Access Type: ACCESS_ACCEPT.



Status	Rule Name	Conditions		Results Profiles	Security Groups	Hits	Actions
		Search					
✓	ISE_CLASS_ADMIN	AND	DEVICE Device Type EQUALS All Device Types IdentityGroup Name EQUALS User Identity Groups:RADIUS_ANYCONNECT	Select from list Create a New Authorization Profile	Select from list	7	⚙
✓	ISE_CLASS_USER	AND	DEVICE Device Type EQUALS All Device Types IdentityGroup Name EQUALS User Identity Groups:RADIUS_ANYCONNECT_USER	Select from list	Select from list	9	⚙
✓	Default			× DenyAccess	Select from list	8	⚙



Add New Standard Profile

Authorization Profile

* Name: CLAS_25_RADIUS_ADMIN

Description:

* Access Type: ACCESS_ACCEPT

Network Device Profile: Cisco

Service Template □

Track Movement □

Passive Identity Tracking □

▸ Common Tasks

This should be the Group-policy name

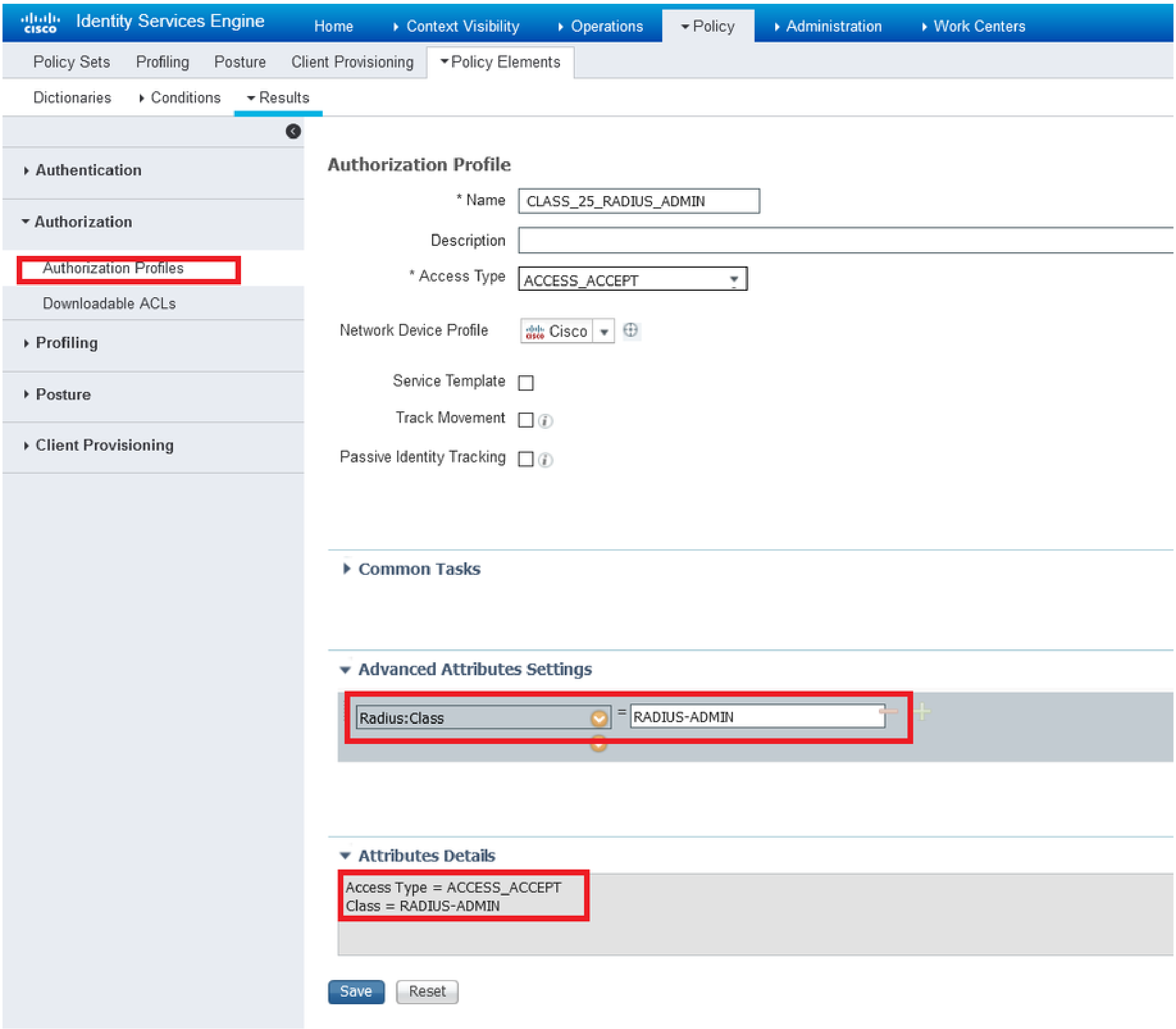
▾ Advanced Attributes Settings

Radius:Class = RADIUS-ADMIN

▾ Attributes Details

```
Access Type = ACCESS_ACCEPT
Class = RADIUS-ADMIN
```

Step 7. Review Authorization Profile configuration.



Authorization Profile

* Name: CLASS_25_RADIUS_ADMIN

Description:

* Access Type: ACCESS_ACCEPT

Network Device Profile: Cisco

Service Template □

Track Movement □

Passive Identity Tracking □

Advanced Attributes Settings

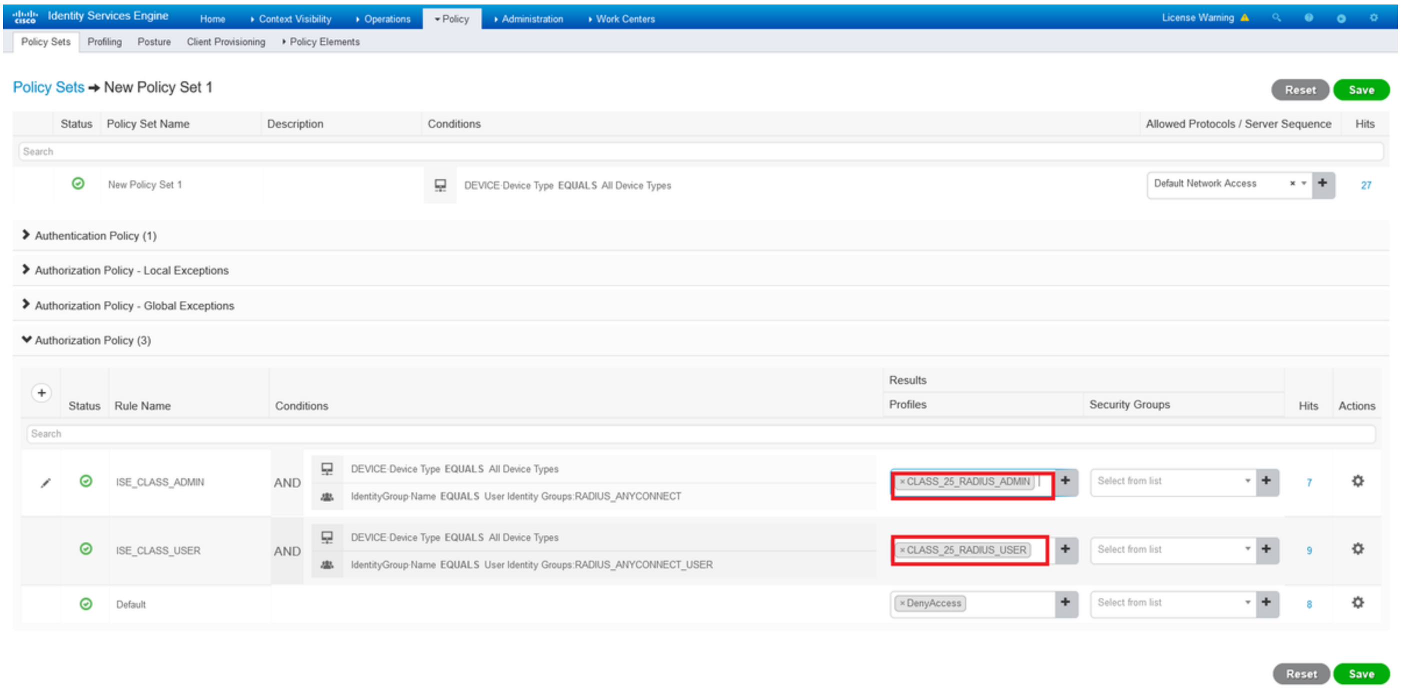
Radius:Class = RADIUS-ADMIN

Attributes Details

Access Type = ACCESS_ACCEPT
Class = RADIUS-ADMIN

Note: Follow the configuration as it is shown on the previous image, Access_Accept, Class—[25], the RADIUS-ADMIN is the name of your group policy (can be changed).

The image shows how configuration must look like. On the same Policy set, you have n authorization policies, each one matches the identity group necessary in the ***conditions*** section and uses the group policy you have on the ASA In the ***profile*** section***.***



Policy Sets → New Policy Set 1

Status	Policy Set Name	Description	Conditions	Allowed Protocols / Server Sequence	Hits
✓	New Policy Set 1		DEVICE·Device Type EQUALS All Device Types	Default Network Access	27

> Authentication Policy (1)

> Authorization Policy - Local Exceptions

> Authorization Policy - Global Exceptions

Authorization Policy (3)

Status	Rule Name	Conditions		Results		Hits	Actions
				Profiles	Security Groups		
✓	ISE_CLASS_ADMIN	AND	DEVICE·Device Type EQUALS All Device Types IdentityGroup·Name EQUALS User Identity Groups:RADIUS_ANYCONNECT	× CLASS_25_RADIUS_ADMIN	Select from list	7	⚙
✓	ISE_CLASS_USER	AND	DEVICE·Device Type EQUALS All Device Types IdentityGroup·Name EQUALS User Identity Groups:RADIUS_ANYCONNECT_USER	× CLASS_25_RADIUS_USER	Select from list	9	⚙
✓	Default			× DenyAccess	Select from list	8	⚙

With this configuration example, you are able to assign the group-policy to each Anyconnect user through ISE configuration based on the class attribute.

Troubleshoot

One of the most useful debugs is **debug radius.** It shows details of the radius authentication request and authentication response between AAA and ASA process**.**

```
debug radius
```

Another useful tool is the command test aaa-server. You now see if the authentication is ACCEPTED or REFUSED and the attributes ('class' attribute in this example) exchanged in the authentication process.

```
test aaa-server authentication <aaa_server_group> [host <name>|<host_ip>] username <user>
password <password>
```

Working Scenario

In the configuration example mentioned above **user1** belongs to **RADIUS-ADMIN** group-policy in accordance with the ISE configuration, it can be verified if you run the test aaa-server and debug radius. Highlight the lines that need to be verified.

```
ASAv# debug radius
ASAv#test aaa-server authentication ISE_AAA host 10.31.124.82 username user1 password *****
INFO: Attempting Authentication test to IP address (10.31.124.82) (timeout: 12 seconds)

RADIUS packet decode (authentication request)

--------------------------------------
Raw packet data (length = 84).....
01 1e 00 54 ac b6 7c e5 58 22 35 5e 8e 7c 48 73    |  ...T..|.X"5^.|Hs
04 9f 8c 74 01 07 75 73 65 72 31 02 12 ad 19 1c    |  ...t..user1.....
40 da 43 e2 ba 95 46 a7 35 85 52 bb 6f 04 06 0a    |  @.C...F.5.R.o...
```

```
1f 7c 55 05 06 00 00 00 06 3d 06 00 00 00 05 1a    |  .|U......=......
15 00 00 00 09 01 0f 63 6f 61 2d 70 75 73 68 3d    |  .......coa-push=
74 72 75 65                                        |  true

Parsed packet data.....
Radius: Code = 1 (0x01)
Radius: Identifier = 30 (0x1E)
Radius: Length = 84 (0x0054)
Radius: Vector: ACB67CE55822355E8E7C4873049F8C74
Radius: Type = 1 (0x01) User-Name
Radius: Length = 7 (0x07)
Radius: Value (String) =
75 73 65 72 31                                     |  user1
Radius: Type = 2 (0x02) User-Password
Radius: Length = 18 (0x12)
Radius: Value (String) =
ad 19 1c 40 da 43 e2 ba 95 46 a7 35 85 52 bb 6f    |  ...@.C...F.5.R.o
Radius: Type = 4 (0x04) NAS-IP-Address
Radius: Length = 6 (0x06)
Radius: Value (IP Address) = 10.31.124.85 (0x0A1F7C55)
Radius: Type = 5 (0x05) NAS-Port
Radius: Length = 6 (0x06)
Radius: Value (Hex) = 0x6
Radius: Type = 61 (0x3D) NAS-Port-Type
Radius: Length = 6 (0x06)
Radius: Value (Hex) = 0x5
Radius: Type = 26 (0x1A) Vendor-Specific
Radius: Length = 21 (0x15)
Radius: Vendor ID = 9 (0x00000009)
Radius: Type = 1 (0x01) Cisco-AV-pair
Radius: Length = 15 (0x0F)
Radius: Value (String) =
63 6f 61 2d 70 75 73 68 3d 74 72 75 65             |  coa-push=true
send pkt 10.31.124.82/1645
rip 0x00007f03b419fb08 state 7 id 30
rad_vrfy() : response message verified
rip 0x00007f03b419fb08
 : chall_state ''
 : state 0x7
 : reqauth:
     ac b6 7c e5 58 22 35 5e 8e 7c 48 73 04 9f 8c 74
 : info 0x00007f03b419fc48
     session_id 0x80000007
     request_id 0x1e
     user 'user1'
     response '***'
     app 0
     reason 0
     skey 'cisco123'
     sip 10.31.124.82
     type 1
```

RADIUS packet decode (response)

```
--------------------------------------
Raw packet data (length = 188).....
02 1e 00 bc 9e 5f 7c db ad 63 87 d8 c1 bb 03 41    |  ....._|..c.....A
37 3d 7a 35 01 07 75 73 65 72 31 18 43 52 65 61    |  7=z5..user1.CRea
75 74 68 53 65 73 73 69 6f 6e 3a 30 61 31 66 37    |  uthSession:0a1f7
63 35 32 52 71 51 47 52 72 70 36 5a 35 66 4e 4a    |  c52RqQGRrp6Z5fNJ
65 4a 39 76 4c 54 6a 73 58 75 65 59 35 4a 70 75    |  eJ9vLTjsXueY5Jpu
70 44 45 61 35 36 34 66 52 4f 44 57 78 34 19 0e    |  pDEa564fRODWx4..
```

```
52 41 44 49 55 53 2d 41 44 4d 49 4e 19 50 43 41    |  RADIUS-ADMIN.PCA
43 53 3a 30 61 31 66 37 63 35 32 52 71 51 47 52    |  CS:0a1f7c52RqQGR
72 70 36 5a 35 66 4e 4a 65 4a 39 76 4c 54 6a 73    |  rp6Z5fNJeJ9vLTjs
58 75 65 59 35 4a 70 75 70 44 45 61 35 36 34 66    |  XueY5JpupDEa564f
52 4f 44 57 78 34 3a 69 73 65 61 6d 79 32 34 2f    |  RODWx4:iseamy24/
33 37 39 35 35 36 37 34 35 2f 33 31                |  379556745/31

Parsed packet data.....
Radius: Code = 2 (0x02)
Radius: Identifier = 30 (0x1E)
Radius: Length = 188 (0x00BC)
Radius: Vector: 9E5F7CDBAD6387D8C1BB0341373D7A35
Radius: Type = 1 (0x01) User-Name
Radius: Length = 7 (0x07)
Radius: Value (String) =
75 73 65 72 31                                     |  user1
Radius: Type = 24 (0x18) State
Radius: Length = 67 (0x43)
Radius: Value (String) =
52 65 61 75 74 68 53 65 73 73 69 6f 6e 3a 30 61    |  ReauthSession:0a
31 66 37 63 35 32 52 71 51 47 52 72 70 36 5a 35    |  1f7c52RqQGRrp6Z5
66 4e 4a 65 4a 39 76 4c 54 6a 73 58 75 65 59 35    |  fNJeJ9vLTjsXueY5
4a 70 75 70 44 45 61 35 36 34 66 52 4f 44 57 78    |  JpupDEa564fRODWx
34                                                 |  4
Radius: Type = 25 (0x19) Class
Radius: Length = 14 (0x0E)
Radius: Value (String) =
52 41 44 49 55 53 2d 41 44 4d 49 4e                |  RADIUS-ADMIN
Radius: Type = 25 (0x19) Class
Radius: Length = 80 (0x50)
Radius: Value (String) =
43 41 43 53 3a 30 61 31 66 37 63 35 32 52 71 51    |  CACS:0a1f7c52RqQ
47 52 72 70 36 5a 35 66 4e 4a 65 4a 39 76 4c 54    |  GRrp6Z5fNJeJ9vLT
6a 73 58 75 65 59 35 4a 70 75 70 44 45 61 35 36    |  jsXueY5JpupDEa56
34 66 52 4f 44 57 78 34 3a 69 73 65 61 6d 79 32    |  4fRODWx4:iseamy2
34 2f 33 37 39 35 35 36 37 34 35 2f 33 31          |  4/379556745/31
rad_procpkt: ACCEPT
RADIUS_ACCESS_ACCEPT: normal termination
RADIUS_DELETE
remove_req 0x00007f03b419fb08 session 0x80000007 id 30
free_rip 0x00007f03b419fb08
radius: send queue empty
INFO: Authentication Successful
```

Another way to verify if it works when the user1 connects through Anyconnect, use the **show vpn-sessiondb anyconnect** command to know the Group-policy assigned by the ISE class attribute.

```
ASAv# show vpn-sessiondb anyconnect Session Type: AnyConnect
Username     : user1                  Index        : 28
Assigned IP  : 10.100.2.1             Public IP    : 10.100.1.3
Protocol     : AnyConnect-Parent SSL-Tunnel DTLS-Tunnel
License      : AnyConnect Premium
Encryption   : AnyConnect-Parent: (1)none  SSL-Tunnel: (1)AES-GCM-256  DTLS-Tunnel: (1)AES256
Hashing      : AnyConnect-Parent: (1)none  SSL-Tunnel: (1)SHA384  DTLS-Tunnel: (1)SHA1
Bytes Tx     : 15604                  Bytes Rx     : 28706
Group Policy : RADIUS-ADMIN           Tunnel Group : DefaultWEBVPNGroup
Login Time   : 04:14:45 UTC Wed Jun 3 2020
Duration     : 0h:01m:29s
Inactivity   : 0h:00m:00s
VLAN Mapping : N/A                    VLAN         : none
Audt Sess ID : 0a6401010001c0005ed723b5
```

```
Security Grp : none
```

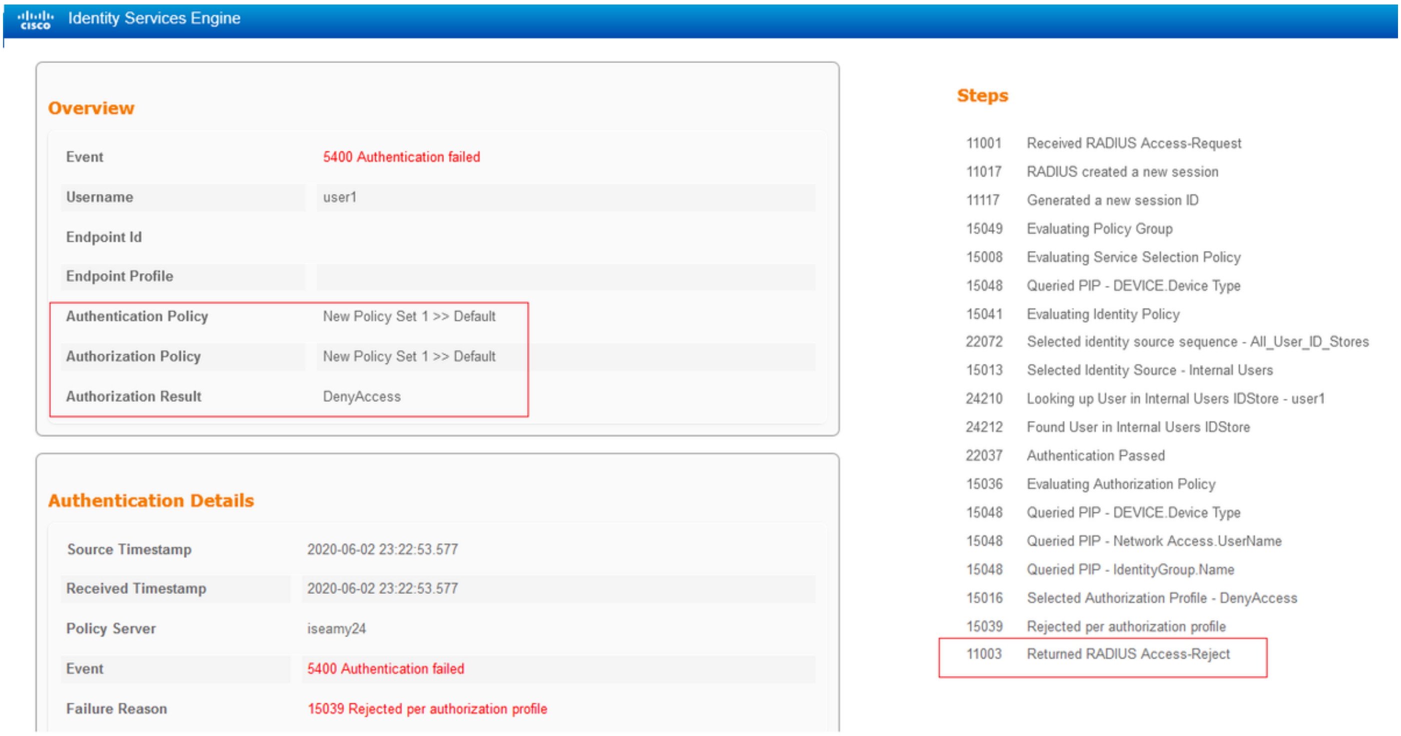
Non-working Scenario 1

If the Authentication fails on Anyconnect and the ISE replies with a REJECT. You need to verify either the user is associate with a **User Identity Group** or the password is incorrect. Navigate to **Operations>Live logs > Details.**

```
RADIUS packet decode (response)

--------------------------------------
Raw packet data (length = 20).....
03 21 00 14 dd 74 bb 43 8f 0a 40 fe d8 92 de 7a    |  .!...t.C..@....z
27 66 15 be                                        |  'f..

Parsed packet data.....
Radius: Code = 3 (0x03)
Radius: Identifier = 33 (0x21)
Radius: Length = 20 (0x0014)
Radius: Vector: DD74BB438F0A40FED892DE7A276615BE
rad_procpkt: REJECT
RADIUS_DELETE
remove_req 0x00007f03b419fb08 session 0x80000009 id 33
free_rip 0x00007f03b419fb08
radius: send queue empty
ERROR: Authentication Rejected: AAA failure
```



Overview

Event	5400 Authentication failed
Username	user1
Endpoint Id	
Endpoint Profile	
Authentication Policy	New Policy Set 1 >> Default
Authorization Policy	New Policy Set 1 >> Default
Authorization Result	DenyAccess

Authentication Details

Source Timestamp	2020-06-02 23:22:53.577
Received Timestamp	2020-06-02 23:22:53.577
Policy Server	iseamy24
Event	5400 Authentication failed
Failure Reason	15039 Rejected per authorization profile

Steps

11001	Received RADIUS Access-Request
11017	RADIUS created a new session
11117	Generated a new session ID
15049	Evaluating Policy Group
15008	Evaluating Service Selection Policy
15048	Queried PIP - DEVICE.Device Type
15041	Evaluating Identity Policy
22072	Selected identity source sequence - All_User_ID_Stores
15013	Selected Identity Source - Internal Users
24210	Looking up User in Internal Users IDStore - user1
24212	Found User in Internal Users IDStore
22037	Authentication Passed
15036	Evaluating Authorization Policy
15048	Queried PIP - DEVICE.Device Type
15048	Queried PIP - Network Access.UserName
15048	Queried PIP - IdentityGroup.Name
15016	Selected Authorization Profile - DenyAccess
15039	Rejected per authorization profile
11003	Returned RADIUS Access-Reject

Note: In this example, **user1** is not associated with any **User Identity Group.** Therefore, it hits the Default Authentication and Authorization policies under the **New Policy Set 1** with the **DenyAccess** action. You can modify this action to **PermitAcces** in the Default Authorization Policy to allow the users without the User identity group associated authenticate.

Non-working Scenario 2

If the Authentication fails on Anyconnect and the default Authorization policy is PermitAccess, the authentication is accepted. However, the class attribute is not presented in the Radius response, therefore the user is located in the DfltGrpPolicy and it won't connect due to **vpn-simultaneous-logins 0.**

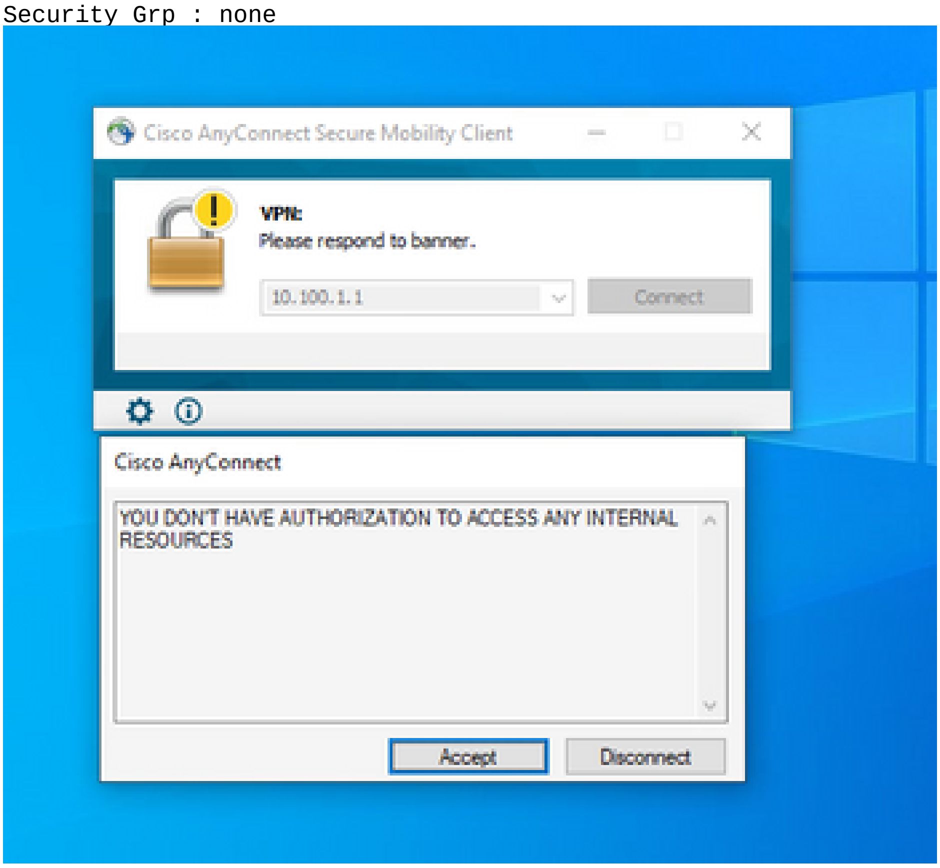
```
RADIUS packet decode (response)

--------------------------------------
Raw packet data (length = 174).....
02 24 00 ae 5f 0f bc b1 65 53 64 71 1a a3 bd 88    |  .$.._...eSdq....
7c fe 44 eb 01 07 75 73 65 72 31 18 43 52 65 61    |  |.D...user1.CRea
75 74 68 53 65 73 73 69 6f 6e 3a 30 61 31 66 37    |  uthSession:0a1f7
63 35 32 32 39 54 68 33 47 68 6d 44 54 49 35 71    |  c5229Th3GhmDTI5q
37 48 46 45 30 7a 6f 74 65 34 6a 37 50 76 69 4b    |  7HFE0zote4j7PviK
5a 35 77 71 6b 78 6c 50 39 33 42 6c 4a 6f 19 50    |  Z5wqkxlP93BlJo.P
43 41 43 53 3a 30 61 31 66 37 63 35 32 32 39 54    |  CACS:0a1f7c5229T
68 33 47 68 6d 44 54 49 35 71 37 48 46 45 30 7a    |  h3GhmDTI5q7HFE0z
6f 74 65 34 6a 37 50 76 69 4b 5a 35 77 71 6b 78    |  ote4j7PviKZ5wqkx
6c 50 39 33 42 6c 4a 6f 3a 69 73 65 61 6d 79 32    |  lP93BlJo:iseamy2
34 2f 33 37 39 35 35 36 37 34 35 2f 33 37          |  4/379556745/37

Parsed packet data.....
Radius: Code = 2 (0x02)
Radius: Identifier = 36 (0x24)
Radius: Length = 174 (0x00AE)
Radius: Vector: 5F0FBCB1655364711AA3BD887CFE44EB
Radius: Type = 1 (0x01) User-Name
Radius: Length = 7 (0x07)
Radius: Value (String) =
75 73 65 72 31                                      |  user1
Radius: Type = 24 (0x18) State
Radius: Length = 67 (0x43)
Radius: Value (String) =
52 65 61 75 74 68 53 65 73 73 69 6f 6e 3a 30 61    |  ReauthSession:0a
31 66 37 63 35 32 32 39 54 68 33 47 68 6d 44 54    |  1f7c5229Th3GhmDT
49 35 71 37 48 46 45 30 7a 6f 74 65 34 6a 37 50    |  I5q7HFE0zote4j7P
76 69 4b 5a 35 77 71 6b 78 6c 50 39 33 42 6c 4a    |  viKZ5wqkxlP93BlJ
6f                                                  |  o
Radius: Type = 25 (0x19) Class
Radius: Length = 80 (0x50)
Radius: Value (String) =
43 41 43 53 3a 30 61 31 66 37 63 35 32 32 39 54    |  CACS:0a1f7c5229T
68 33 47 68 6d 44 54 49 35 71 37 48 46 45 30 7a    |  h3GhmDTI5q7HFE0z
6f 74 65 34 6a 37 50 76 69 4b 5a 35 77 71 6b 78    |  ote4j7PviKZ5wqkx
6c 50 39 33 42 6c 4a 6f 3a 69 73 65 61 6d 79 32    |  lP93BlJo:iseamy2
34 2f 33 37 39 35 35 36 37 34 35 2f 33 37          |  4/379556745/37
rad_procpkt: ACCEPT
RADIUS_ACCESS_ACCEPT: normal termination
RADIUS_DELETE
remove_req 0x00007f03b419fb08 session 0x8000000b id 36
free_rip 0x00007f03b419fb08
radius: send queue empty
INFO: Authentication Successful
ASAv#
```

If the **vpn-simultaneous-logins 0** is changed to '1', The user connects as shown in the output:

```
ASAv# show vpn-sessiondb anyconnect Session Type: AnyConnect Username      : user1                 Index
: 41
Assigned IP  : 10.100.2.1             Public IP    : 10.100.1.3
Protocol     : AnyConnect-Parent SSL-Tunnel DTLS-Tunnel
License      : AnyConnect Premium
Encryption   : AnyConnect-Parent: (1)none  SSL-Tunnel: (1)AES-GCM-256  DTLS-Tunnel: (1)AES256
Hashing      : AnyConnect-Parent: (1)none  SSL-Tunnel: (1)SHA384  DTLS-Tunnel: (1)SHA1
Bytes Tx     : 15448                  Bytes Rx     : 15528
Group Policy : DfltGrpPolicy          Tunnel Group : DefaultWEBVPNGroup
Login Time   : 18:43:39 UTC Wed Jun 3 2020
Duration     : 0h:01m:40s
Inactivity   : 0h:00m:00s
VLAN Mapping : N/A                    VLAN         : none
Audt Sess ID : 0a640101000290005ed7ef5b
Security Grp : none
```



Please respond to banner.

YOU DON'T HAVE AUTHORIZATION TO ACCESS ANY INTERNAL RESOURCES

Non-working Scenario 3

If the Authentication passes but the user doesn't have the right policies applied, for example, if the group-policy connected has the split tunnel instead of the full tunnel as it must be. The user can be in the wrong User identity group.

```
ASAv# sh vpn-sessiondb anyconnect

Session Type: AnyConnect

Username     : user1                  Index        : 29
Assigned IP  : 10.100.2.1             Public IP    : 10.100.1.3
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     : 15592                  Bytes Rx     : 0
Group Policy : RADIUS-USERS           Tunnel Group : DefaultWEBVPNGroup
```

```
Login Time   : 04:36:50 UTC Wed Jun 3 2020
Duration     : 0h:00m:20s
Inactivity   : 0h:00m:00s
VLAN Mapping : N/A                    VLAN         : none
Audt Sess ID : 0a6401010001d0005ed728e2
Security Grp : none
```

Video

This video provides the steps to configure SSL Anyconnect With ISE Authentication And Class Attribute For Group-Policy Mapping.