

# Cisco

## Exam Questions 210-260

Implementing Cisco Network Security



#### NEW QUESTION 1

What is the Cisco preferred countermeasure to mitigate CAM overflows?

- A. Port security
- B. Dynamic port security
- C. IP source guard
- D. Root guard

**Answer: B**

**Explanation:** <http://www.cisco.com/c/en/us/support/docs/switches/catalyst-3750-series-switches/72846-layer2-secftrs-catl3fixed.html>

#### NEW QUESTION 2

Which Cisco Security Manager application collects information about device status and uses it to generate notifications and alerts?

- A. FlexConfig
- B. Device Manager
- C. Report Manager
- D. Health and Performance Monitor

**Answer: D**

**Explanation:** Health and Performance Monitor (HPM) • Monitors and displays key health, performance and VPN data for ASA and IPS devices in your network. This information includes critical and non-critical issues, such as memory usage, interface status, dropped packets, tunnel status, and so on. You also can categorize devices for normal or priority monitoring, and set different alert rules for the priority devices.

Source:

[http://www.cisco.com/c/en/us/td/docs/security/security\\_management/cisco\\_security\\_manager/security\\_manager/4-4/user/guide/CSMUserGuide\\_wrapper/HPMchap.pdf](http://www.cisco.com/c/en/us/td/docs/security/security_management/cisco_security_manager/security_manager/4-4/user/guide/CSMUserGuide_wrapper/HPMchap.pdf)

#### NEW QUESTION 3

If you change the native VLAN on the trunk port to an unused VLAN, what happens if an attacker attempts a double-tagging attack?

- A. The trunk port would go into an error-disabled state.
- B. A VLAN hopping attack would be successful.
- C. A VLAN hopping attack would be prevented.
- D. The attacked VLAN will be pruned.

**Answer: C**

**Explanation:** VLAN hopping is a computer security exploit, a method of attacking networked resources on a virtual LAN (VLAN). The basic concept behind all VLAN hopping attacks is for an attacking host on a VLAN to gain access to traffic on other VLANs that would normally not be accessible. There are two primary methods of VLAN hopping: switch spoofing and double tagging.

Double Tagging can only be exploited when switches use "Native VLANs". Double Tagging can be mitigated by either one of the following actions:

+ Simply do not put any hosts on VLAN 1 (The default VLAN)

+ Change the native VLAN on all trunk ports to an unused VLAN ID Source: [https://en.wikipedia.org/wiki/VLAN\\_hopping](https://en.wikipedia.org/wiki/VLAN_hopping)

#### NEW QUESTION 4

What is the effect of the send-lifetime local 23:59:00 31 December 31 2013 infinite command?

- A. It configures the device to begin transmitting the authentication key to other devices at 00:00:00 local time on January 1, 2014 and continue using the key indefinitely.
- B. It configures the device to begin transmitting the authentication key to other devices at 23:59:00 local time on December 31, 2013 and continue using the key indefinitely.
- C. It configures the device to begin accepting the authentication key from other devices immediately and stop accepting the key at 23:59:00 local time on December 31, 2013.
- D. It configures the device to generate a new authentication key and transmit it to other devices at 23:59:00 local time on December 31, 2013.
- E. It configures the device to begin accepting the authentication key from other devices at 23:59:00 local time on December 31, 2013 and continue accepting the key indefinitely.
- F. It configures the device to begin accepting the authentication key from other devices at 00:00:00 local time on January 1, 2014 and continue accepting the key indefinitely.

**Answer: B**

**Explanation:** #secure boot-image

This command enables or disables the securing of the running Cisco IOS image. Because this command has the effect of "hiding" the running image, the image file will not be included in any directory listing of the disk.

Source:

<http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/security/s1/sec-s1-cr-book/sec-cr-s1.html#wp3328121947>

#### NEW QUESTION 5

Refer to the exhibit.

```

R1#show snmp
Chassis: FTX123456789
0 SNMP packets input
  6 Bad SNMP version errors
  3 Unknown community name
  9 Illegal operation for community name supplied
  4 Encoding errors
  2 Number of requested variables
  0 Number of altered variables
  98 Get-request PDUs
  12 Get-next PDUs
  2 Set-request PDUs
  0 Input queue packet drops (Maximum queue size 1000)
0 SNMP packets output
  0 Too big errors (Maximum packet size 1500)
  0 No such name errors
  0 Bad values errors
  0 General errors
  31 Response PDUs
  1 Trap PDUs

```

How many times was a read-only string used to attempt a write operation?

- A. 9
- B. 6
- C. 4
- D. 3
- E. 2

**Answer:** A

**Explanation:** To check the status of Simple Network Management Protocol (SNMP) communications, use the show snmp command in user EXEC or privileged EXEC mode.

Illegal operation for community name supplied: Number of packets requesting an operation not allowed for that community

Source:

<http://www.cisco.com/c/en/us/td/docs/ios/netmgmt/command>

#### NEW QUESTION 6

What features can protect the data plane? (Choose three.)

- A. policing
- B. ACLs
- C. IPS
- D. antispoofing
- E. QoS
- F. DHCP-snooping

**Answer:** BDF

**Explanation:** + Block unwanted traffic at the router. If your corporate policy does not allow TFTP traffic, just implement ACLs that deny traffic that is not allowed.  
 + Reduce spoofing attacks. For example, you can filter (deny) packets trying to enter your network (from the outside) that claim to have a source IP address that is from your internal network.  
 + Dynamic Host Configuration Protocol (DHCP) snooping to prevent a rogue DHCP server from handing out incorrect default gateway information and to protect a DHCP server from a starvation attack Source: Cisco Official Certification Guide, Best Practices for Protecting the Data Plane , p.271

#### NEW QUESTION 7

Scenario

Given the new additional connectivity requirements and the topology diagram, use ASDM to accomplish the required ASA configurations to meet the requirements.

New additional connectivity requirements:

Once the correct ASA configurations have been configured: To access ASDM, click the ASA icon in the topology diagram.

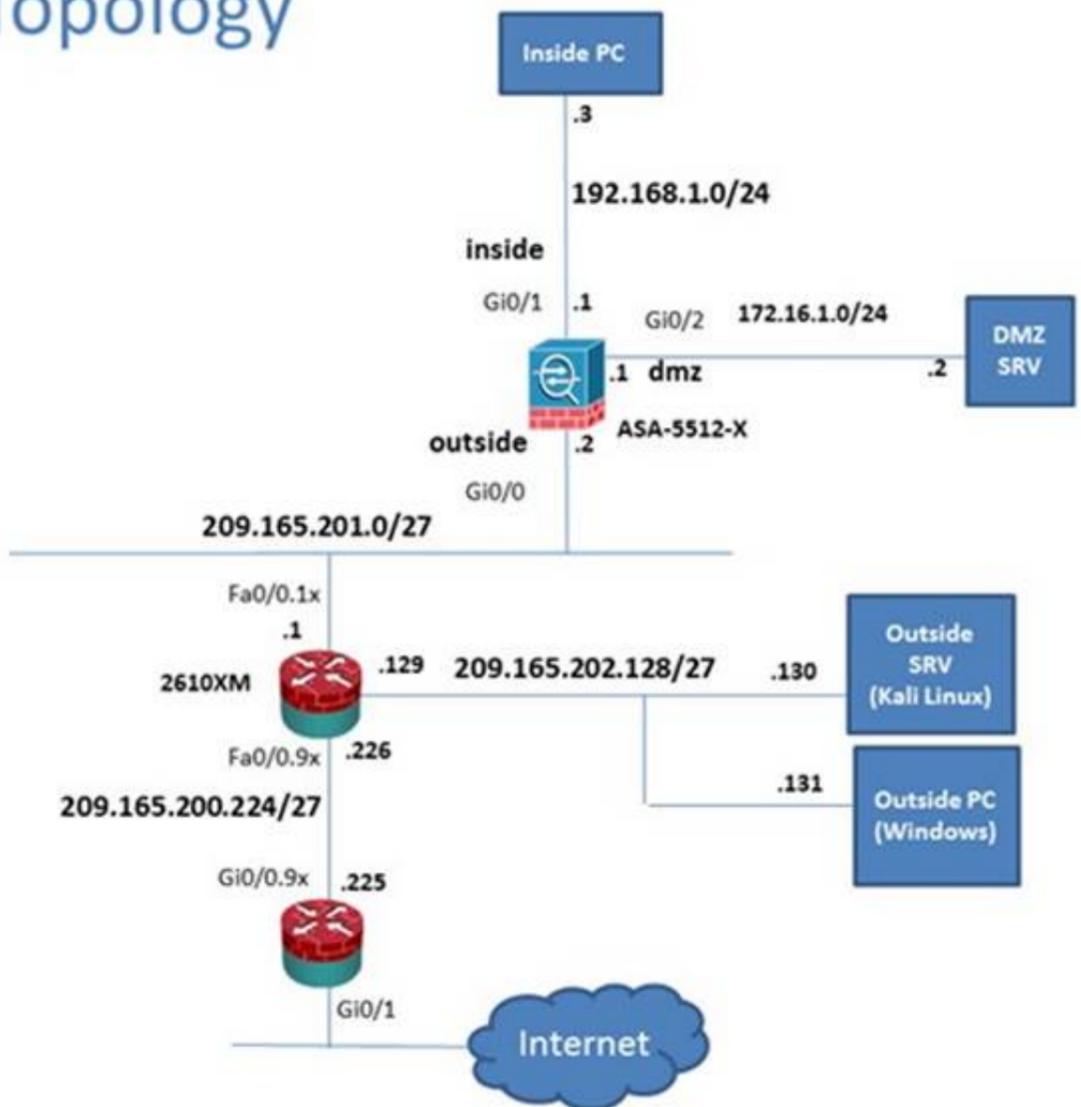
To access the Firefox Browser on the Outside PC, click the Outside PC icon in the topology diagram. To access the Command prompt on the Inside PC, click the Inside PC icon in the topology diagram. Note:

After you make the configuration changes in ASDM, remember to click Apply to apply the configuration changes.

Not all ASDM screens are enabled in this simulation, if some screen is not enabled, try to use different methods to configure the ASA to meet the requirements.

In this simulation, some of the ASDM screens may not look and function exactly like the real ASDM.

# Lab Topology



The screenshot shows the Cisco ASDM 7.5 interface for ASA-5512-X. The top navigation bar includes Home, Configuration, Monitoring, Save, Refresh, Back, Forward, and Help. The main content area is divided into several sections:

- Device Information:** Host Name: P17-ASAsecure-x.local, ASA Version: 100.14(6)13, ASDM Version: 7.5(1)1, Firewall Mode: Routed, Environment Status: OK.
- Interface Status:**

Interface	IP Address/Mask	Line	Link	Kbps
dmz	172.16.1.1/24	up	up	0
inside	192.168.1.1/24	up	up	4
mgmt	10.10.10.2/24	up	up	0
outside	209.165.201.2/24	up	up	0
- System Resources Status:** Total Memory Usage, Total CPU Usage, Core Usage, Details.
- Traffic Status:** Connections Per Second Usage and 'outside' Interface Traffic Usage (Kbps).
- Latest ASDM Syslog Messages:**

Severity	Date	Time	Syslog ID	Source IP	Source	Destination IP	Destine Description
6	May 13 2015	12:35:09	302016	10.81.254.202	123	209.165.201.2	65535 Teardown UDP connection 15136525 for outside: 10.81.254.202/123 to identity: 209.165.201.2/65535(any) duration: 0:02:01 bytes 96
6	May 13 2015	12:35:08	300015	192.168.1.3	14676	192.168.1.1	443 Deny TCP (no connection) from 192.168.1.3/14676 to 192.168.1.1/443 flags FIN ACK on interface inside
6	May 13 2015	12:35:08	302014	192.168.1.3	14676	192.168.1.1	443 Teardown TCP connection 15136528 for inside: 192.168.1.3/14676 to identity: 192.168.1.1/443 duration: 0:00:00 bytes 299 TCP Reset-O

Monitoring > Interfaces > ARP Table

Each row represents one ARP table entry.

Interface	IP Address	MAC Address	Proxy Arp
outside	209.165.201.1	000c.3014.3820	No
inside	192.168.1.4	0050.5633.3333	No
inside	192.168.1.3	0050.5611.1111	No
inside	192.168.1.2	0050.5622.2222	No
inside	192.168.1.56	0050.5692.5c7b	No
inside	192.168.1.55	0006.85e6.98f3	No
dmz	172.16.1.2	0050.5644.4444	No
ngmt	10.10.10.1	000c.3014.3820	No

Buttons: Clear Dynamic ARP Entries, Refresh

Last Updated: 5/19/15 9:32:02 AM

Data Refreshed Successfully.

Monitoring > VPN > VPN Statistics > Sessions

Type	Active	Cumulative	Peak Concurrent	Inactive
Clientless VPN				
Browser				

Filter By: IPsec Site-to-Site -- All Sessions --

Connection Profile	Protocol	Login Time	Bytes Tx	Cer Auth Int	Cer Auth Left
IP Address	Encryption	Duration	Bytes Rx		

Buttons: Details, Logout, Ping, Refresh

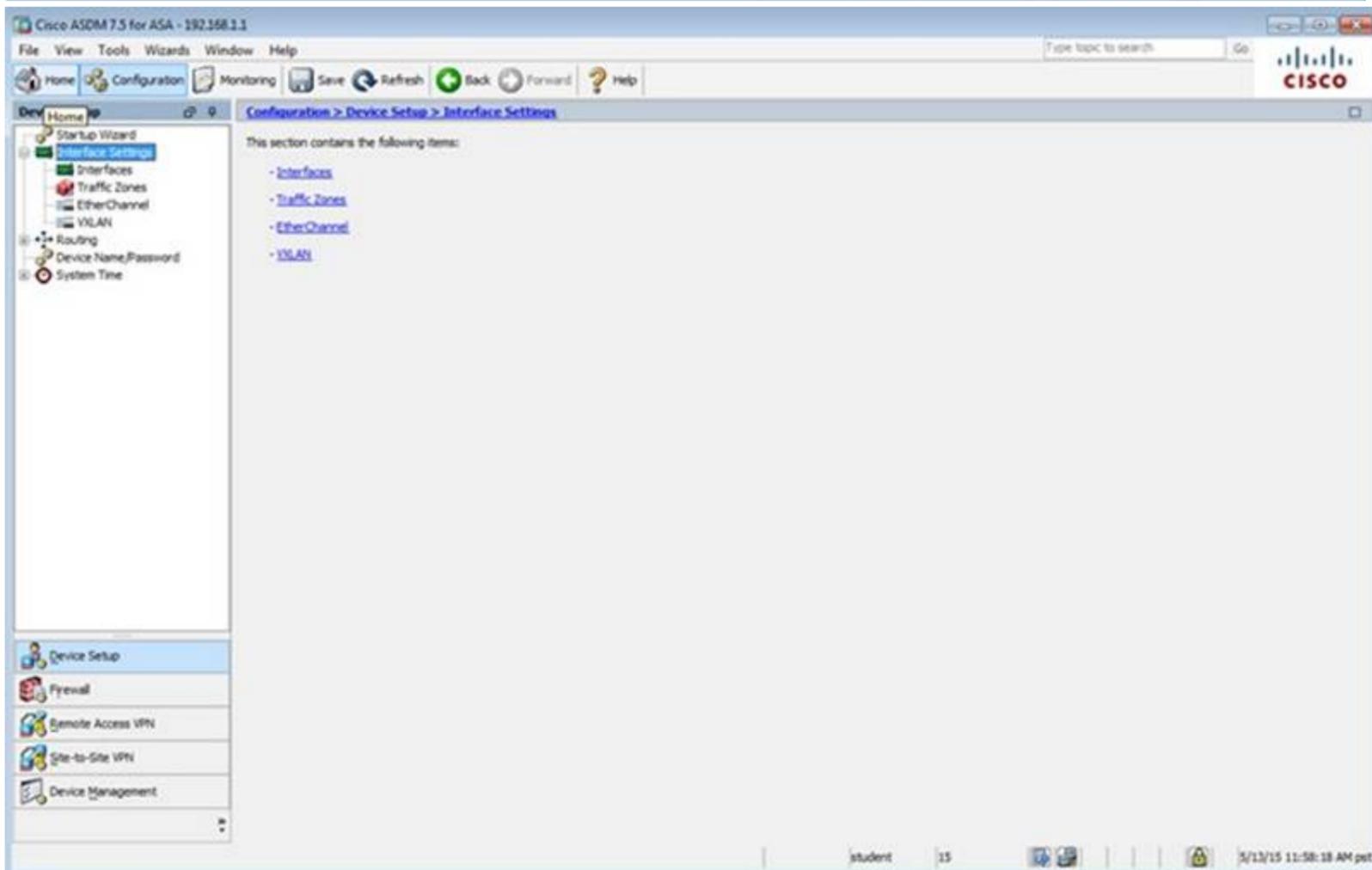
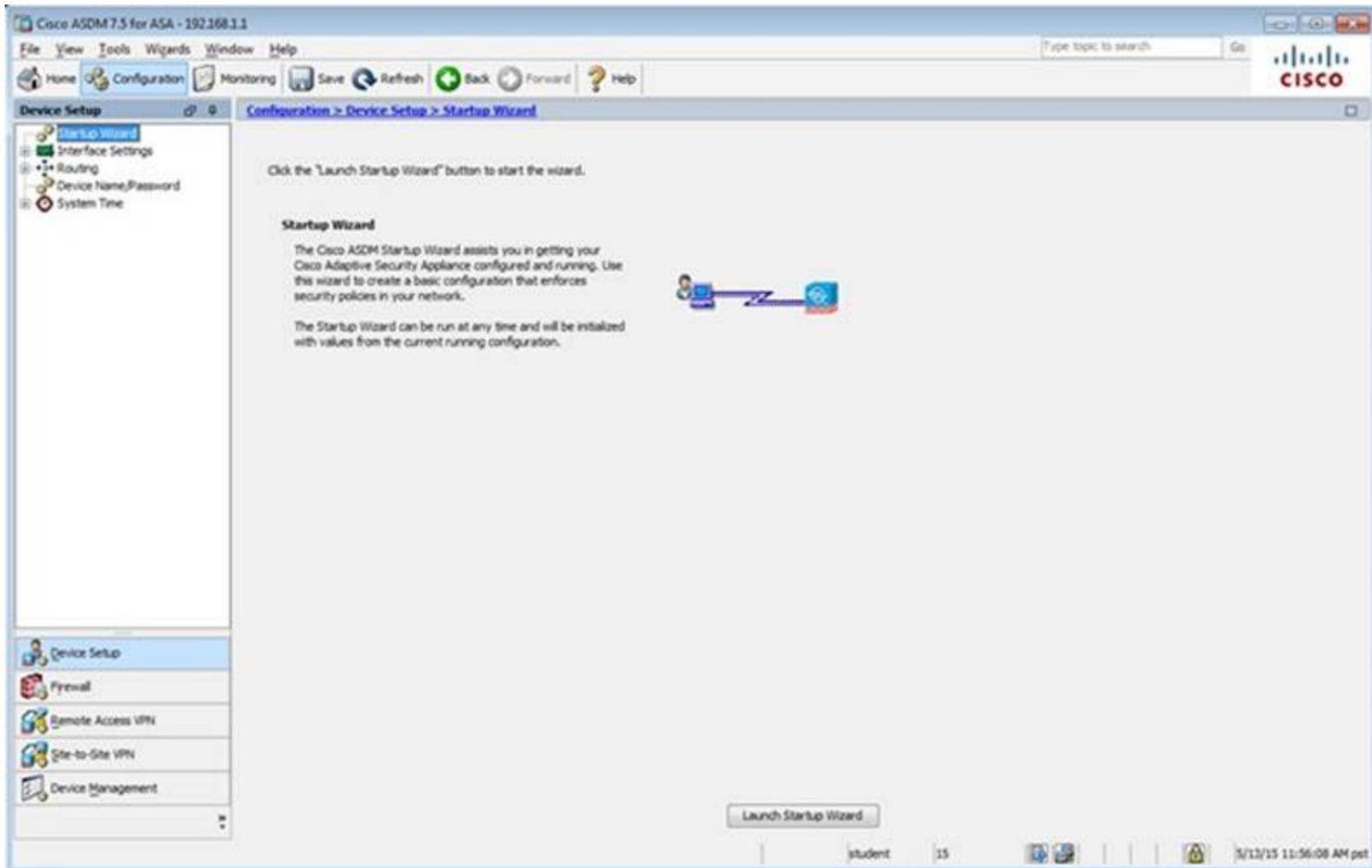
To sort VPN sessions, right-click on the above table and select Table Sort Order from popup menu.

Logout By: -- All Sessions -- Logout Sessions

Last Updated: 5/19/15 9:33:12 AM

Data Refreshed Successfully.

Filter By: Clientless SSL VPN -- All Sessions -- Filter



The screenshot shows the Cisco ASDM 7.5 for ASA - 192.168.1.1 interface configuration page. The breadcrumb trail is Configuration > Device Setup > Interface Settings > Interfaces. The main area displays a table of interfaces with the following data:

Interface	Name	Zone	Route Map	State	Security Level	IP Address	Subnet Mask Prefix Length	Group	Type
GigabitEthernet0/0	outside			Enabled		0.0.0.0/0.0.0.0	255.255.255.0		Hardware
GigabitEthernet0/1	inside			Enabled	100	192.168.1.1	255.255.255.0		Hardware
GigabitEthernet0/2	dmz			Enabled		172.16.1.1	255.255.255.0		Hardware
GigabitEthernet0/3				Enabled					Hardware
GigabitEthernet0/4				Enabled					Hardware
GigabitEthernet0/5	mgmt			Enabled	100	10.10.10.2	255.255.255.0		Hardware
Management0/0				Enabled					Hardware

Below the table, there are three checkboxes for advanced options:

- Enable traffic between two or more interfaces which are configured with same security levels
- Enable traffic between two or more hosts connected to the same interface
- Enable jumbo frame reservation

Buttons for 'Apply' and 'Reset' are located at the bottom of the configuration area.

The screenshot shows the Cisco ASDM 7.5 for ASA - 192.168.1.1 Management Access configuration page. The breadcrumb trail is Configuration > Device Management > Management Access. The main area displays a list of items under the heading 'This section contains the following items:':

- [ASDM/HTTPS/Telnet/SSH](#)
- [HTTP Certificate Rule](#)
- [Command Line \(CLI\)](#)
- [File Access](#)
- [ICMP](#)
- [Management Interface](#)
- [Management Session Quota](#)
- [SNMP](#)
- [Management Access Rules](#)

The left sidebar shows the 'Device Management' section selected in the navigation tree.

Configuration > Device Management > Management Access > ASDM/HTTPS/Telnet/SSH

Specify the addresses of all hosts/networks which are allowed to access the ASA using ASDM/HTTPS/Telnet/SSH.

Type	Interface	IP Address	Mask/Prefix Length
Telnet	mgmt	10.10.10.1	255.255.255.255
SSH	inside	192.168.1.2	255.255.255.255
ASDM/HTTPS	inside	192.168.1.0	255.255.255.0

Http Settings

Enable HTTP Server

Port Number: 443

Idle Timeout: 20 minutes

Session Timeout: minutes

Require client certificate to access ASDM on the following interfaces

Interfaces: [Dropdown]

Telnet Settings

Telnet Timeout: 5 minutes

SSH Settings

Allowed SSH Version(s): 1 & 2

SSH Timeout: 5 minutes

DH Key Exchange:  Group 1  Group 14

Apply Reset

Configuration > Device Management > Management Access > Management Interface

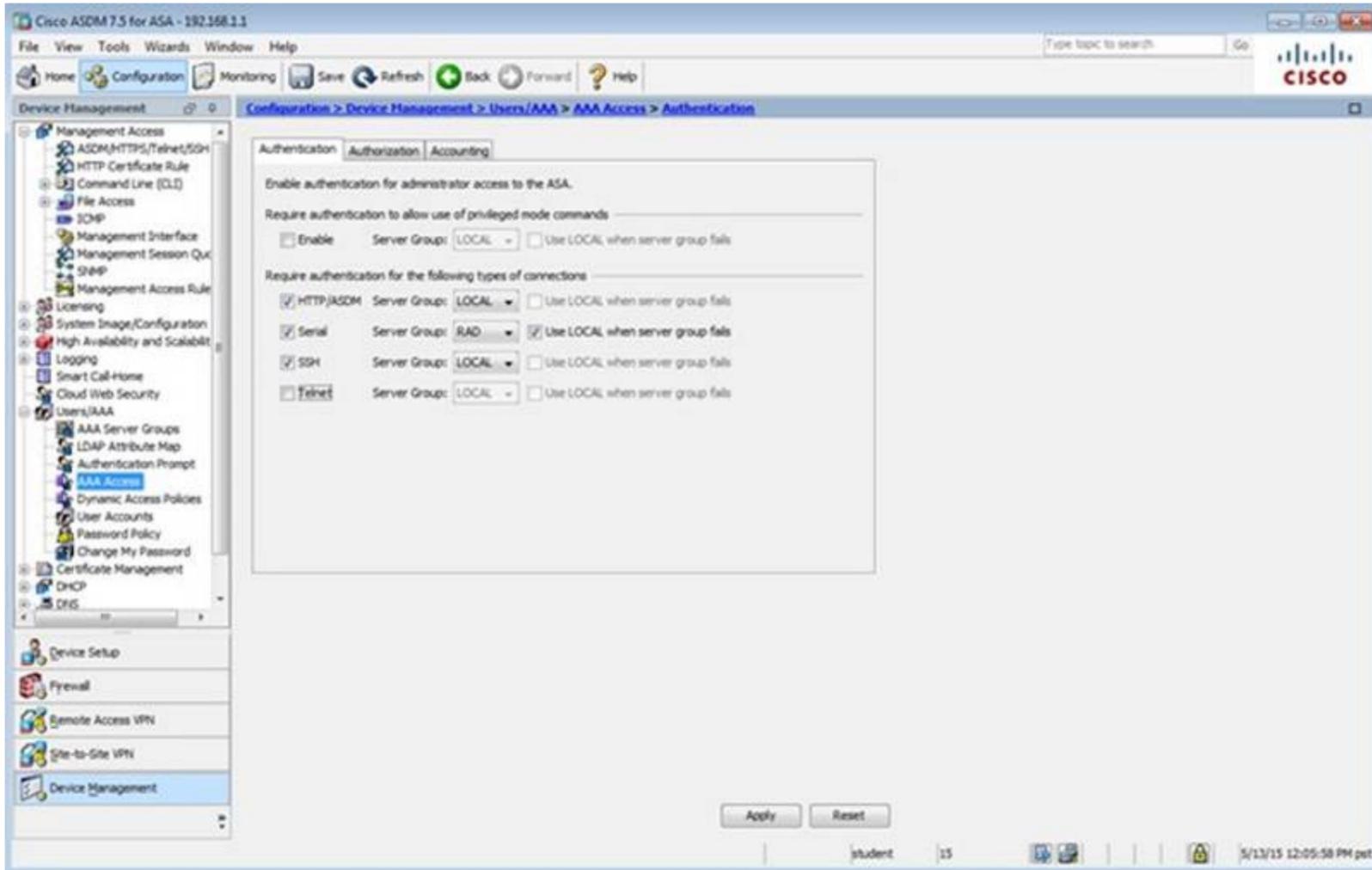
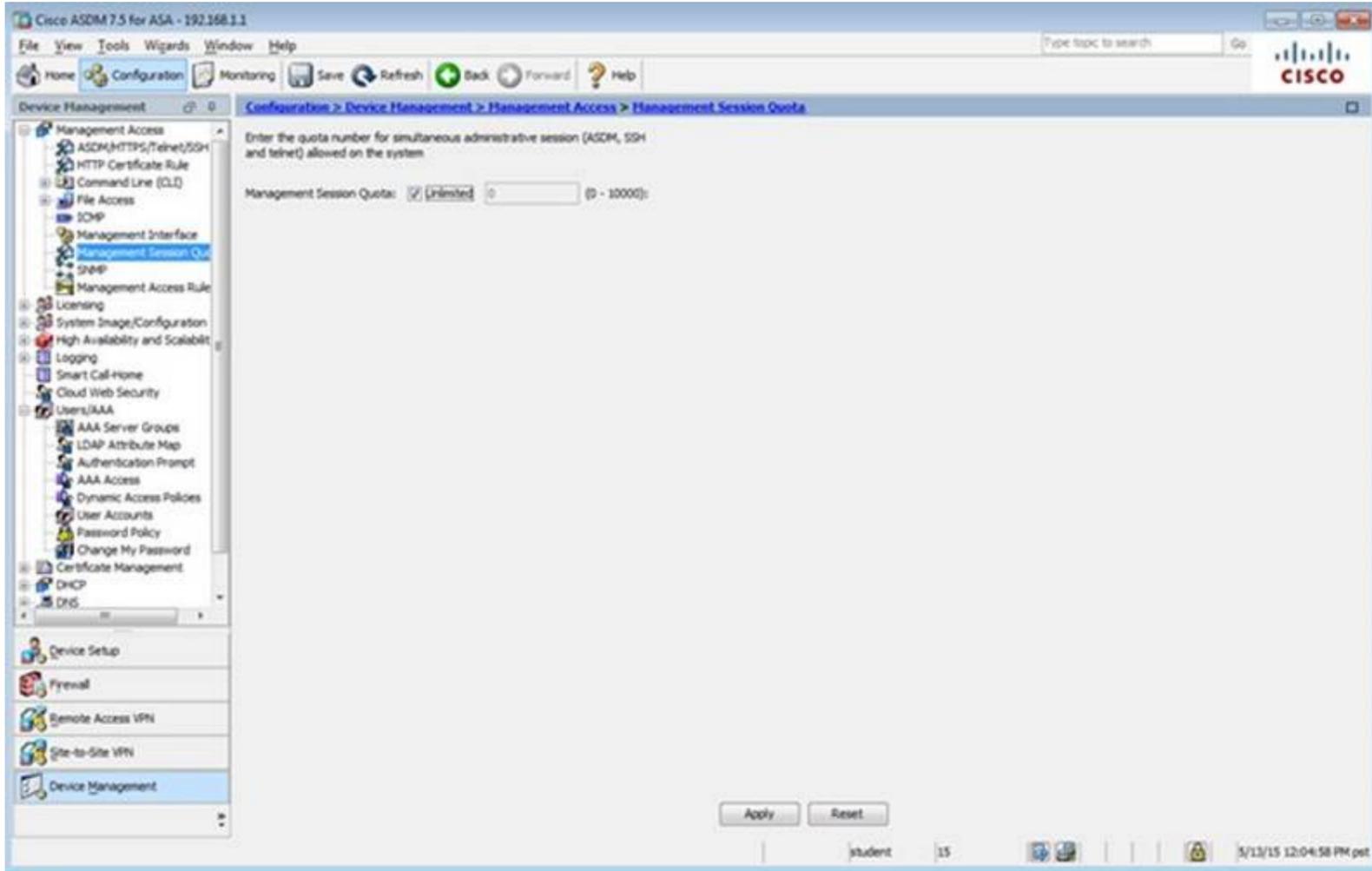
Enable or disable the Management Access feature for an interface. Once you enable this feature on an internal interface, you will be able to perform ASA management functions, such as running ASDM, on this interface using an IPsec VPN client, SSL VPN client, or a site-to-site tunnel.

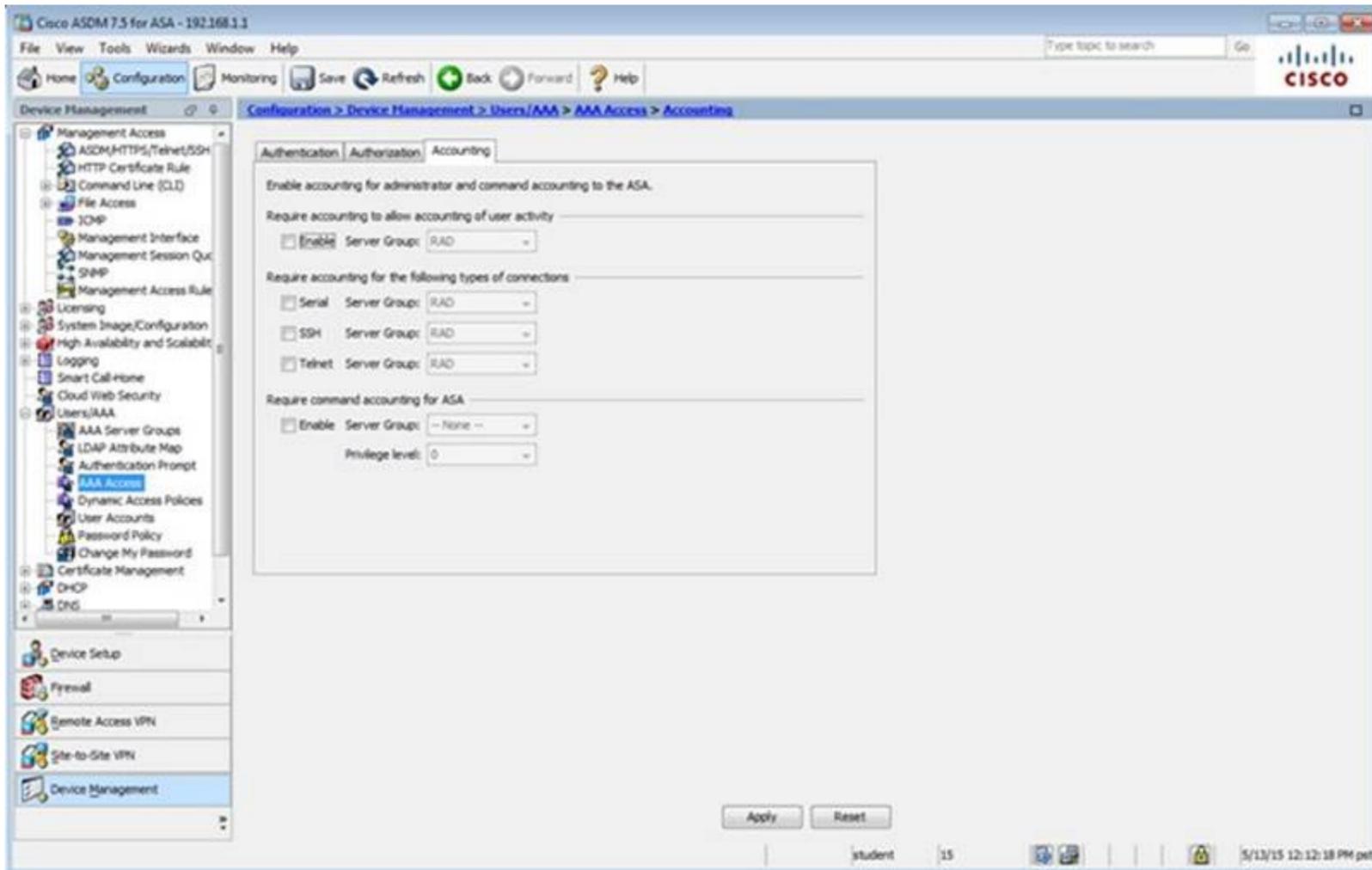
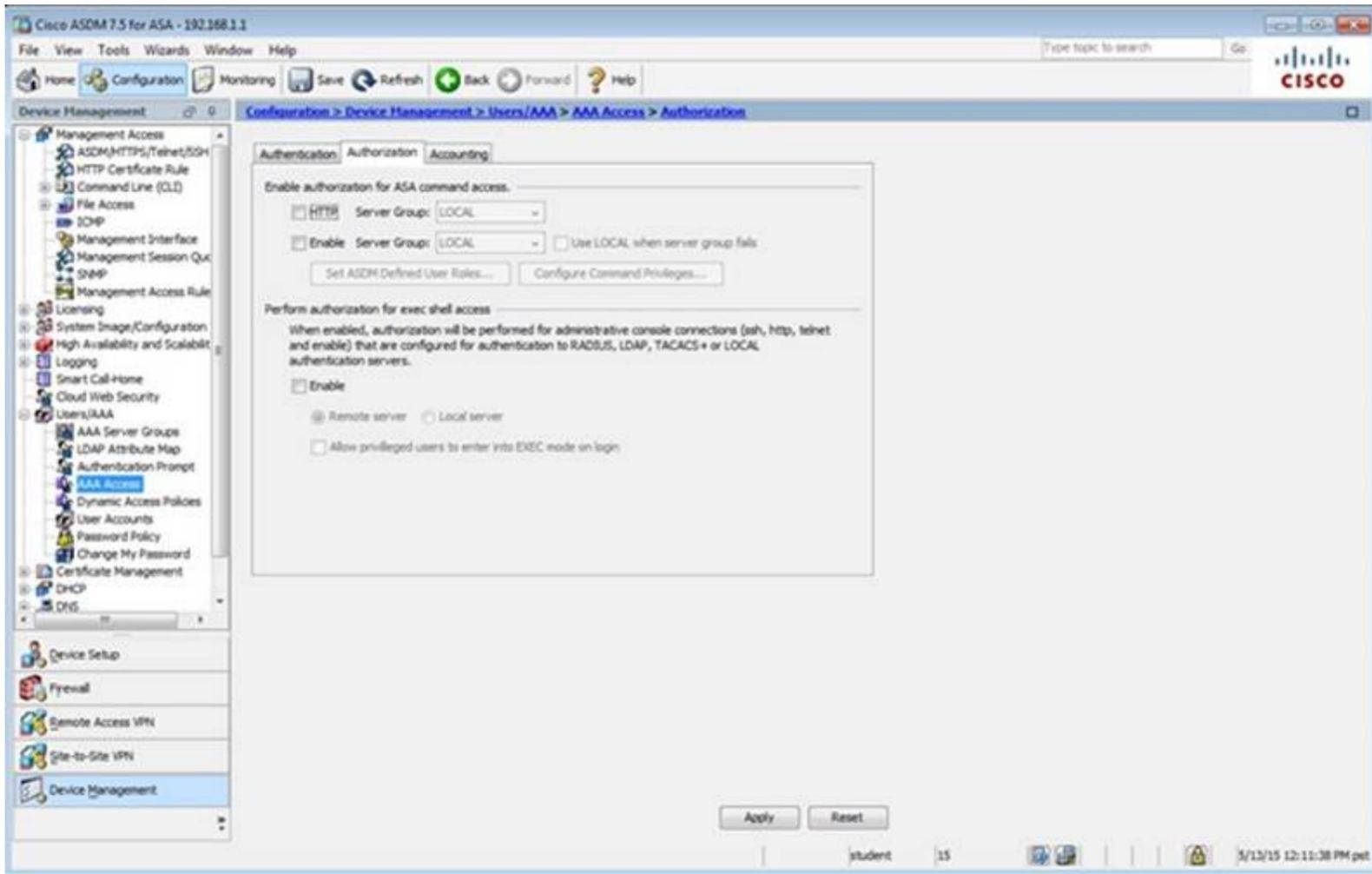
Management Access Interface: [None]

Apply Reset

The screenshot shows the Cisco ASDM 7.5 interface for ASA - 192.168.1.1. The breadcrumb navigation is Configuration > Device Management > Management Access > Management Access Rules. The main area contains a table with columns: #, Enabled, Source Criteria, Destination Criteria, Service, Action, Logging, Time, and Description. The table is currently empty. The left sidebar shows a tree view with 'Management Access Rules' selected. At the bottom, there are 'Apply' and 'Reset' buttons. The system tray shows the user 'student' and the time '5/13/15 12:02:18 PM pet'.

The screenshot shows the Cisco ASDM 7.5 interface for ASA - 192.168.1.1. The breadcrumb navigation is Configuration > Device Management > Management Access > Management Session Quota. The main area contains the text: 'Enter the quota number for simultaneous administrative session (ASDM, SSH and telnet) allowed on the system'. Below this, there is a checkbox for 'limited' which is checked, followed by a text input field containing '0' and a range '(0 - 10000)'. The left sidebar shows a tree view with 'Management Session Quota' selected. At the bottom, there are 'Apply' and 'Reset' buttons. The system tray shows the user 'student' and the time '5/13/15 12:03:08 PM pet'.





The screenshot shows the Cisco ASDM 7.5 interface for configuration. The left sidebar shows the navigation tree with 'Users/AAA' selected. The main pane is titled 'Configuration > Device Management > Users/AAA > AAA Server Groups'. It displays a table of AAA Server Groups:

Server Group	Protocol	Accounting Mode	Reactivation Mode	Dead Time	Max Failed Attempts
LOCAL	LOCAL				
myAD	LDAP	Single	Depletion	10	3
myCDA	RADIUS	Single	Depletion	10	3

Below the table, there is a section for 'Servers in the Selected Group' with a table:

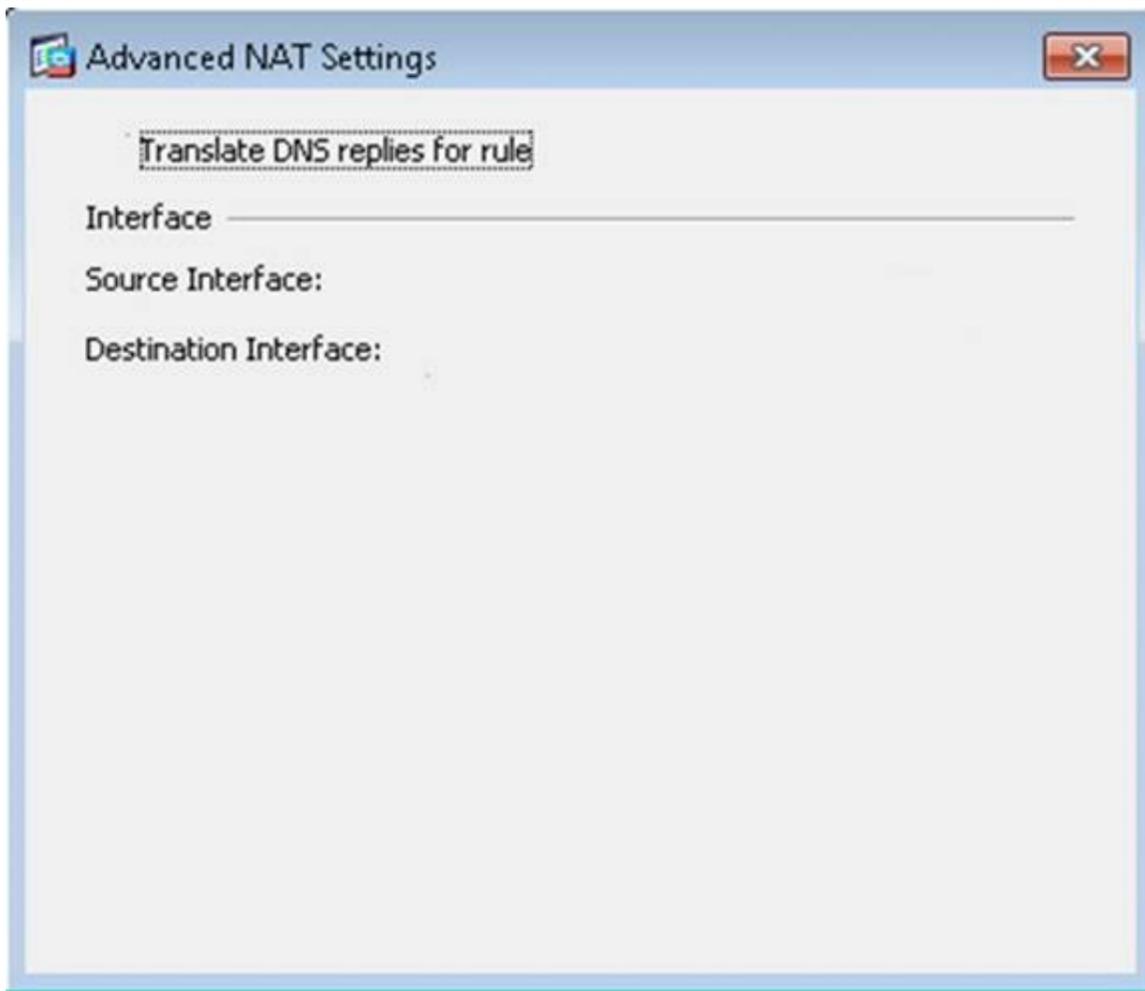
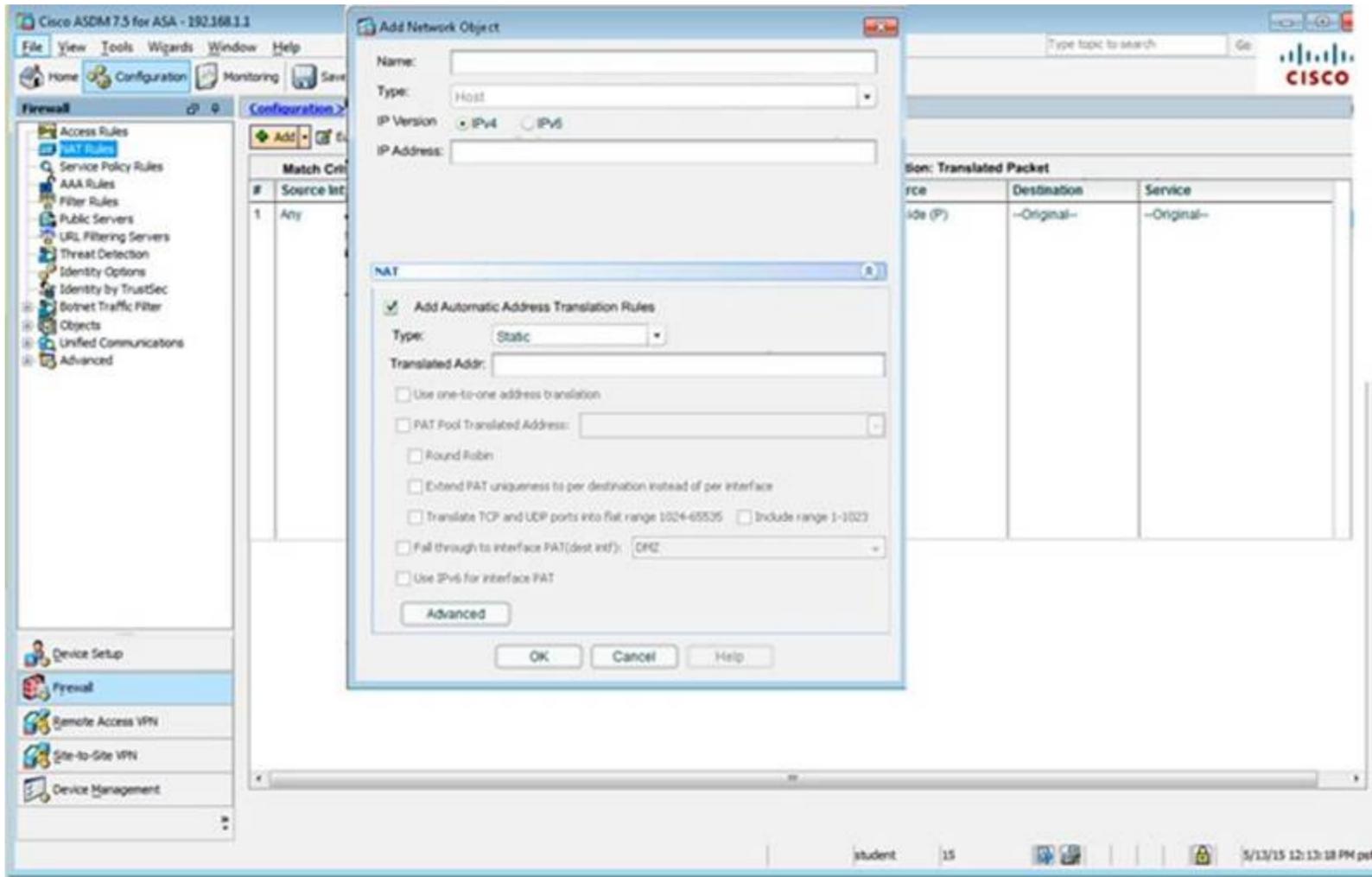
Server Name or IP Address	Interface	Timeout
192.168.1.200	inside	30

At the bottom, there is an 'LDAP Attribute Map' section with 'Apply' and 'Reset' buttons.

The screenshot shows the Cisco ASDM 7.5 interface for configuration. The left sidebar shows the navigation tree with 'Firewall' selected. The main pane is titled 'Configuration > Firewall > NAT Rules'. It displays a table of NAT Rules:

#	Source Intf	Dest Intf	Source	Destination	Service	Source	Destination	Service	Options	Description
1	Any	outside	any-host	any	any	outside (P)	-- Original --	-- Original --		

The interface includes various tool icons at the top of the main pane and a status bar at the bottom.



**Browse Translated Addr**

➕ Add ✎ Edit 🗑 Delete | 🔍 Where Used 🔍 Not Used

Filter:  Filter Clear

Name	IP Address	Netmask	Description	Object NAT Address
<b>Network Objects</b>				
DMZ-ser...	172.16.1.50			
ESA	172.16.1.55			
HQ-srv	10.10.3.20			
TRANSL...	192.0.2.100			
<b>Interfaces</b>				
DMZ				
Guest				
inside				
manage...				
outside				
Site-To...				

Selected Translated Addr

Translated Addr ->

OK Cancel

Cisco ASDM 7.5 for ASA - 192.168.1.1

File View Tools Wizards Window Help

Home Configuration Monitoring Save Refresh Back Forward Help

Configuration > Firewall > Objects > Local Users

Create entries in the ASA local user database.

Command authorization must be enabled in order for the user account privileges to be enforced. To enable command authorization, go to [Authorization](#).

AAA authentication console commands must be enabled in order for certain access restrictions to be enforced. To enable AAA authentication command go to [Authentication](#).

Username	Privilege Level (Role)	Access Restrictions	VPN Group Policy	VPN Group Lock
student	15	Full	-- Inherit Group Policy --	-- Inherit Group Policy --
enable_15	15	Full	N/A	N/A
plco	15	Full	-- Inherit Group Policy --	-- Inherit Group Policy --

End:   Match Case

Apply Reset

student 15 5/13/15 12:14:18 PM pet

The screenshot shows the Cisco ASDM 7.5 interface for ASA - 192.168.1.1. The left sidebar shows the configuration tree with 'Network Objects/Groups' selected. The main pane displays a table of Network Objects:

Name	IP Address	Netmask	Description
any			
any-host	0.0.0.0	0.0.0.0	
any4			
any6			
facebook	www.facebook.com		
My_ASA_Demo_Obj	1.10.8.20		

The screenshot shows the Cisco ASDM 7.5 interface for ASA - 192.168.1.1. The left sidebar shows the configuration tree with 'Service Policy Rules' selected. The main pane displays a table of Service Policy Rules:

Name	#	Enabled	Match	Source	Src Security Group	Destination	Dest Security Group	Service	Time	Rule Actions	Description
Interface: dmz; Policy: asdmf_policy			Match	any		any		any traffic class-default			
Interface: inside; Policy: asasmf_policy			Match	any		any		any traffic class-default			
Global; Policy: global_policy			Match	any		any		default inspec...		Inspect DNS Map preset... Inspect SMTP	

**Edit Service Policy Rule**

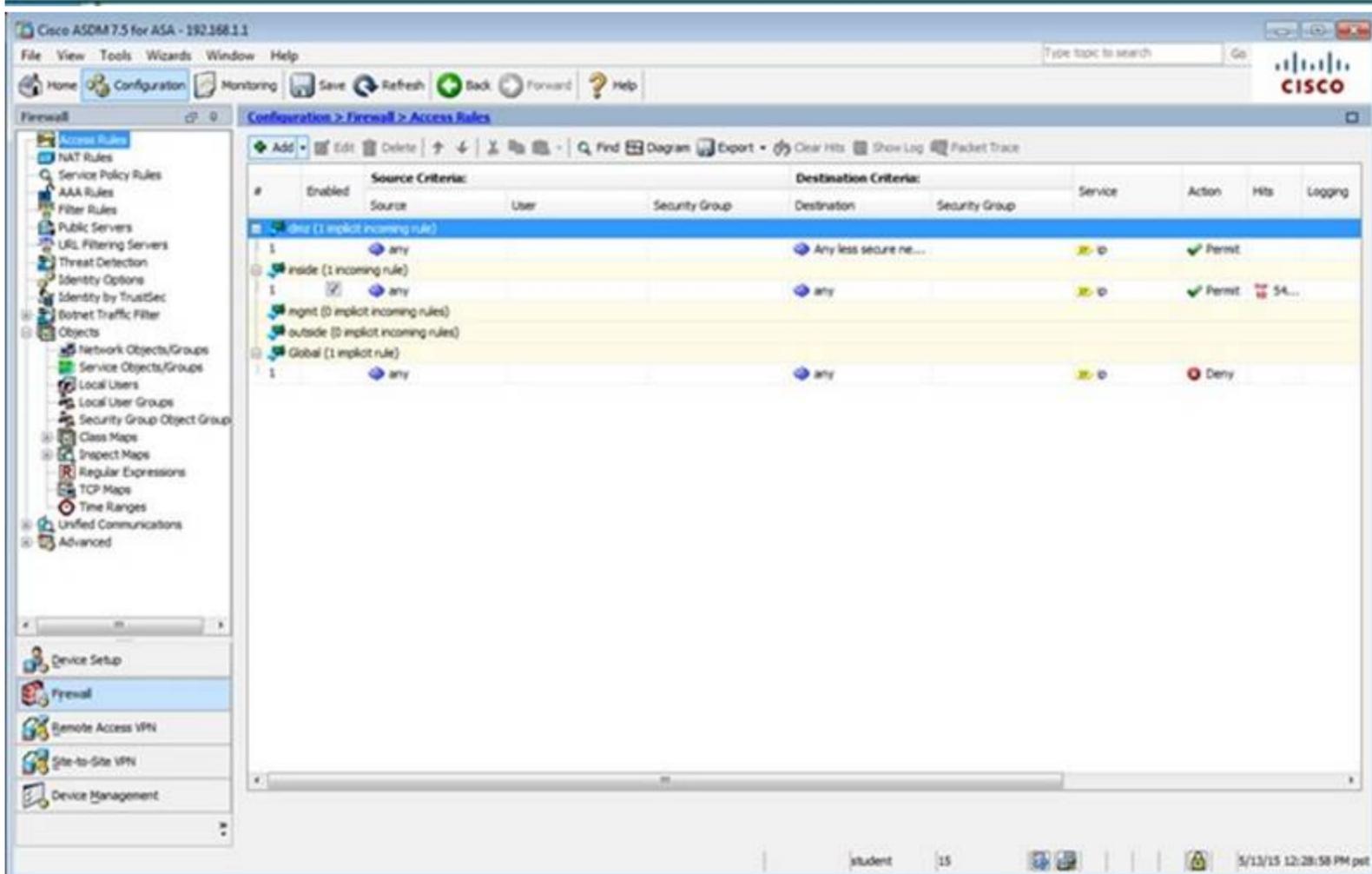
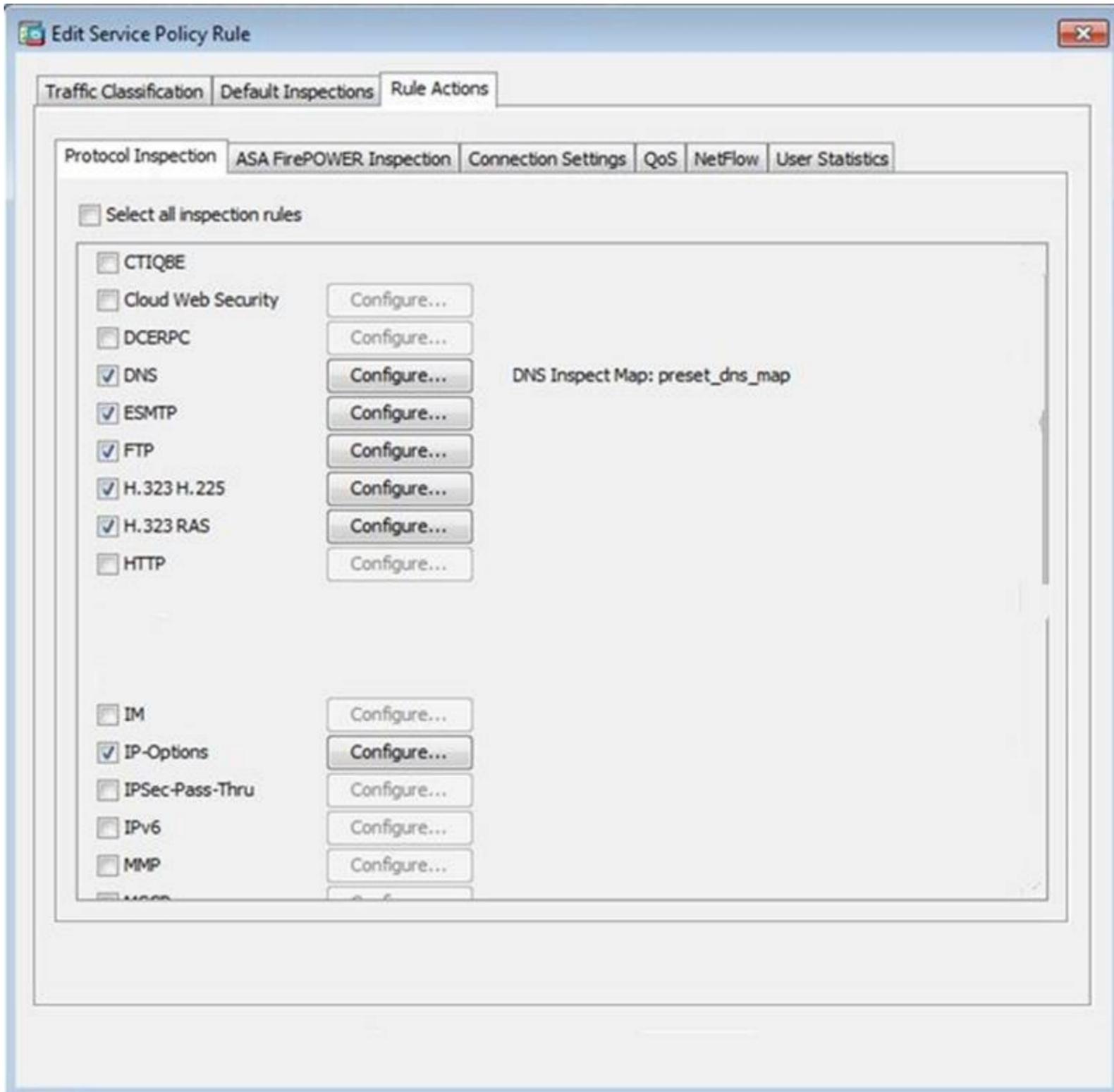
Traffic Classification | Default Inspections | Rule Actions

Name: inspection\_default

Description (optional):

Traffic Match Criteria

- Default Inspection Traffic
- Source and Destination IP Address (uses ACL)
- Tunnel Group
- TCP or UDP Destination Port
- RTP Range
- IP DiffServ CodePoints (DSCP)
- IP Precedence
- Any traffic



**Add Access Rule** [Close]

Interface:

Action:

Source Criteria

Source: any [...]

User: [...]

Security Group: [...]

Destination Criteria

Destination:

Security Group:

Service: [...]

Description:

Enable Logging

Logging Level: Default [v]

**More Options** [v]

OK Cancel Help

**Browse Service**

Filter:

Protocol	Name	Source Ports	Des...	ICMP	Descr...
tcp	citrix-ica	default (1-65535)	1494		
tcp	ctiqbe	default (1-65535)	2748		
tcp	daytime	default (1-65535)	13		
tcp	discard	default (1-65535)	9		
tcp	domain	default (1-65535)	53		
tcp	echo	default (1-65535)	7		
tcp	exec	default (1-65535)	512		
tcp	finger	default (1-65535)	79		
tcp	ftp	default (1-65535)	21		
tcp	ftp-data	default (1-65535)	20		
tcp	gopher	default (1-65535)	70		
tcp	h323	default (1-65535)	1720		
tcp	hostname	default (1-65535)	101		
tcp	http	default (1-65535)	80		
tcp	https	default (1-65535)	443		
tcp	ident	default (1-65535)	113		
tcp	imap4	default (1-65535)	143		
tcp	irc	default (1-65535)	194		
tcp	kerberos	default (1-65535)	750		
tcp	klogin	default (1-65535)	543		
tcp	kshell	default (1-65535)	544		

Selected Service:

**Cisco ASDM 7.5 for ASA - 192.168.1.1**

File View Tools Wizards Window Help

Home Configuration Monitoring Save Refresh Back Forward Help

Remote Access VPN Configuration > Remote Access VPN > Introduction

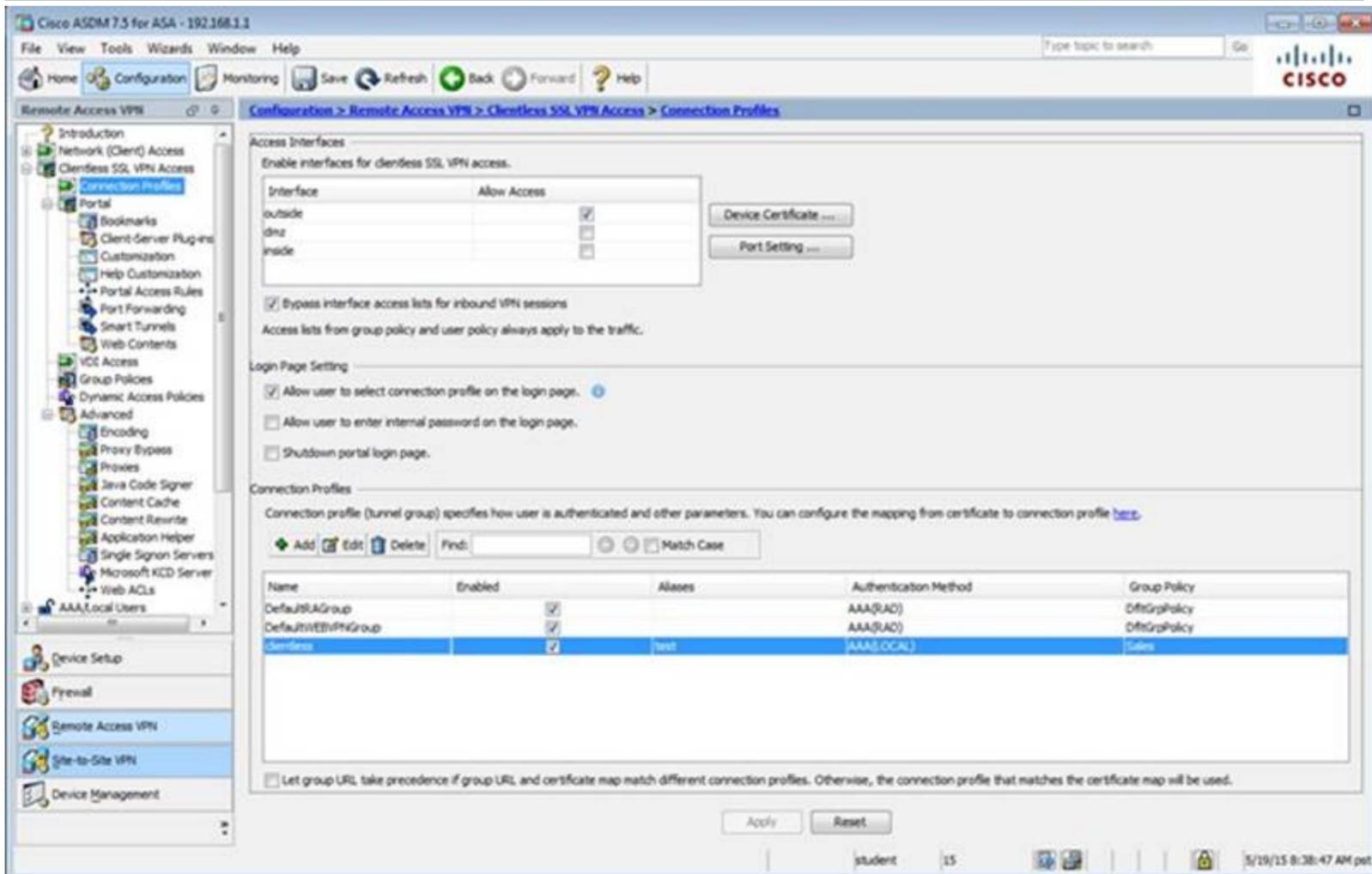
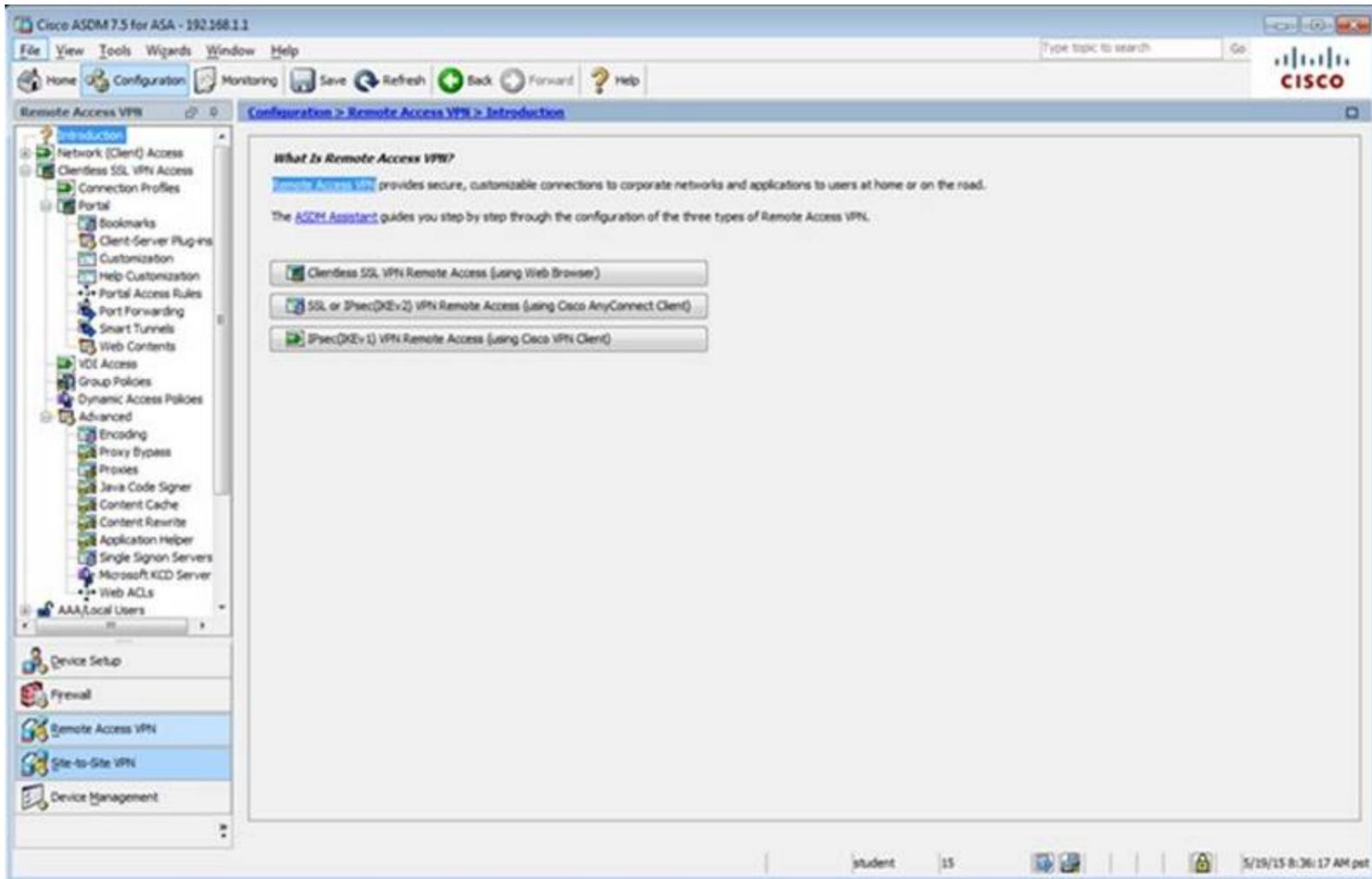
**What is Remote Access VPN?**

Remote Access VPN provides secure, customizable connections to corporate networks and applications to users at home or on the road.

The ASDM Assistant guides you step by step through the configuration of the three types of Remote Access VPN.

- 
- 
- 

student 15 5/19/15 8:47:07 AM pdt



Edit Clientless SSL VPN Connection Profile: clientless

Basic  
Advanced

Name: clientless  
Aliases: test

Authentication  
Method:  AAA  Certificate  Both  
AAA Server Group: LOCAL Manage...  
 Use LOCAL if Server Group fails

DNS  
Server Group: DefaultDNS Manage...  
(Following fields are attributes of the DNS server group selected above.)  
Servers: 192.168.1.2  
Domain Name: secure-x.local

Default Group Policy  
Group Policy: Sales Manage...  
(Following field is an attribute of the group policy selected above.)  
 Enable clientless SSL VPN protocol

Find:   Next  Previous

OK Cancel Help

Edit Clientless SSL VPN Connection Profile: clientless

Basic

Advanced

- General
- Authentication
- Secondary Authentication
- Authorization
- Accounting
- NetBIOS Servers
- Clientless SSL VPN

Login and Logout Page Customization: DfltCustomization Manage...

Enable the display of Radius Reject-Message on the login screen when authentication is rejected

Enable the display of SecurId messages on the login screen

Connection Aliases

This SSL VPN access method will present a list of aliases configured for all connection profiles. You must enable the Login Page Setting in the main panel to complete the configuration.

+ Add - Delete (The table is in-line editable.) i

Alias	Enabled
test	<input checked="" type="checkbox"/>

Group URLs

This SSL VPN access method will automatically select the connection profile, without the need for user selection.

+ Add - Delete (The table is in-line editable.) i

URL	Enabled
https://209.165.201.2/test	<input checked="" type="checkbox"/>

You can chose not to run Cisco Secure Desktop (CSD) on client machine when using group URLs defined above to access the ASA. (If a client connects using a connection alias, this setting is ignored)

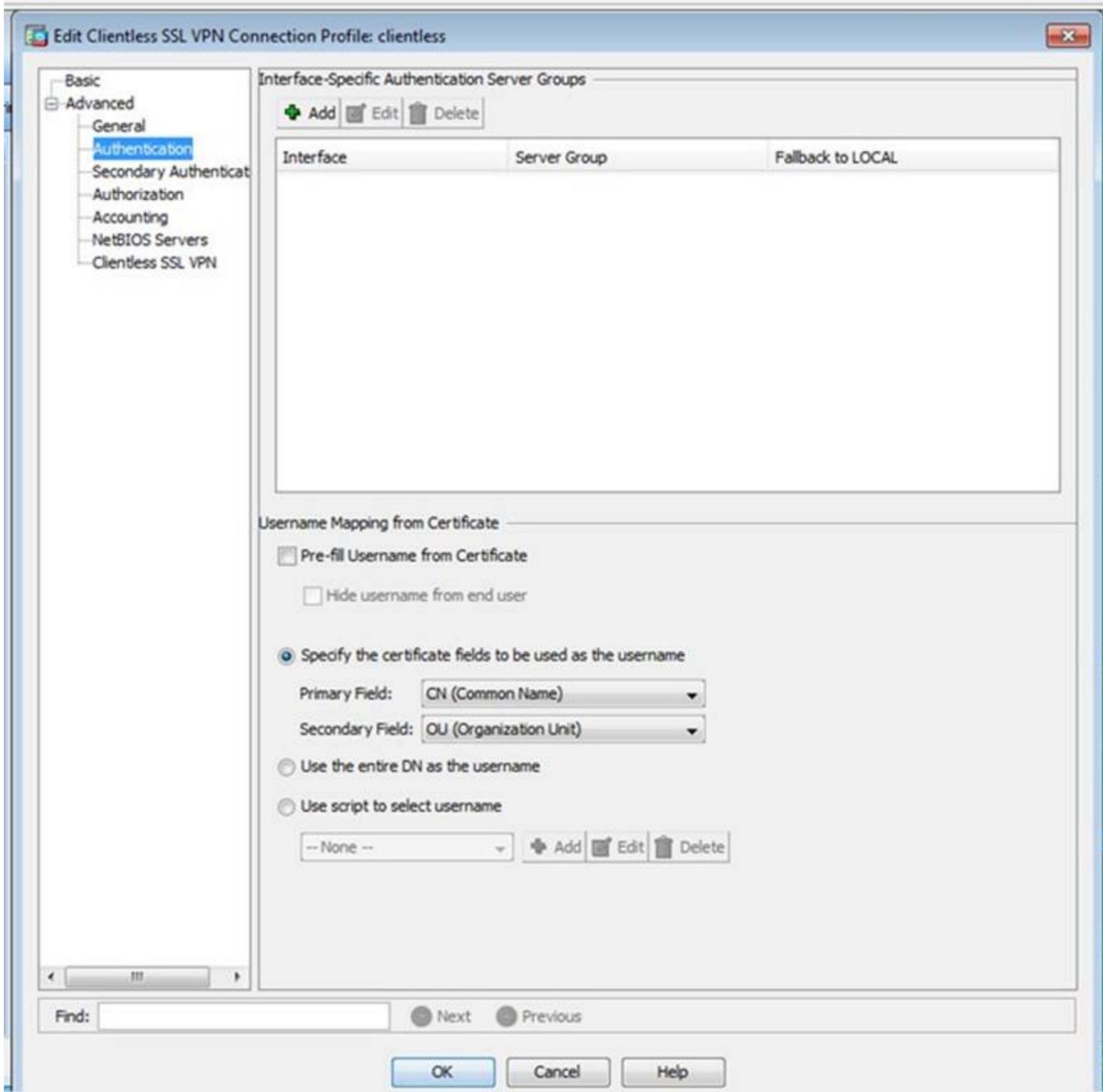
Always run CSD

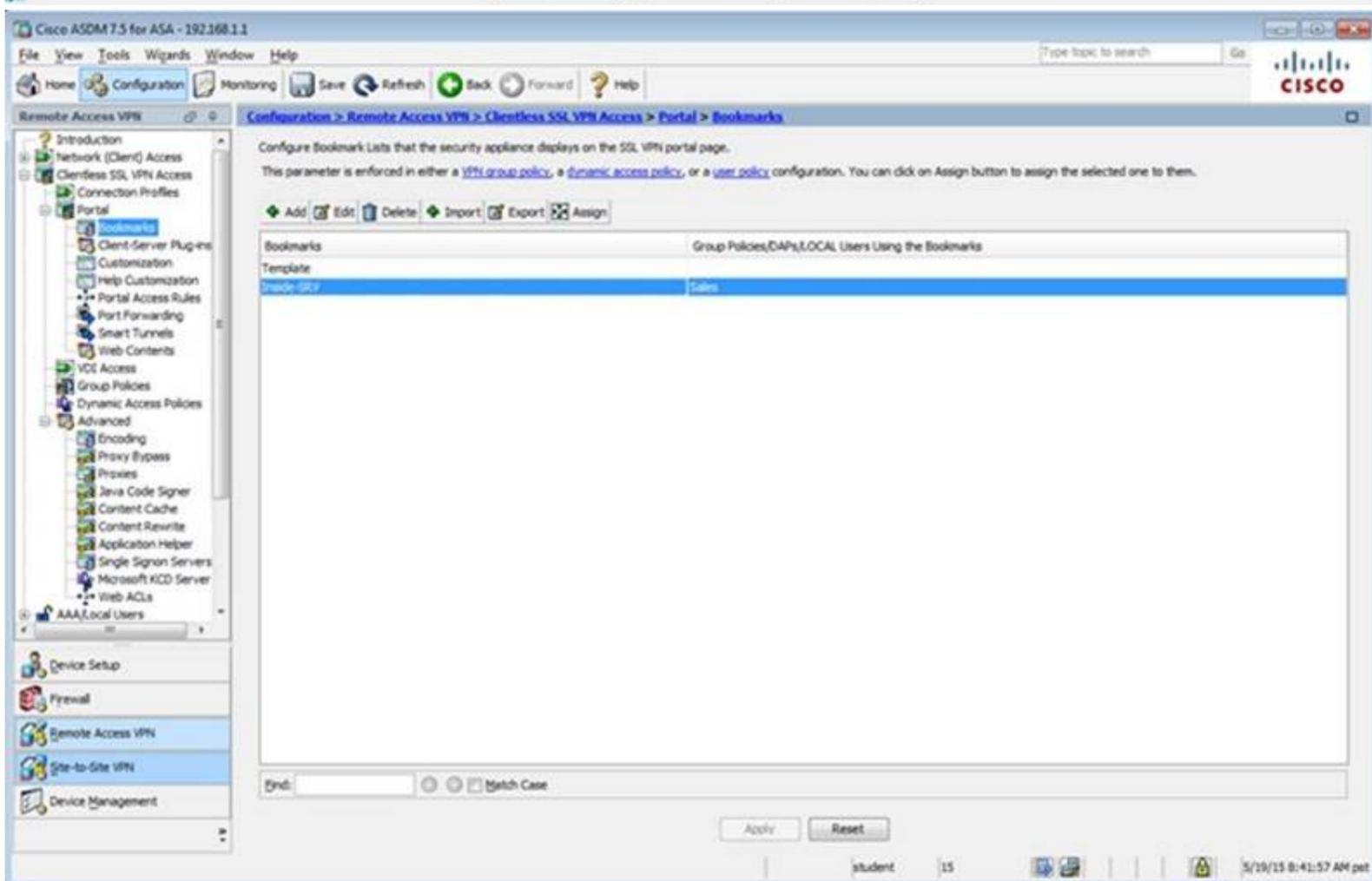
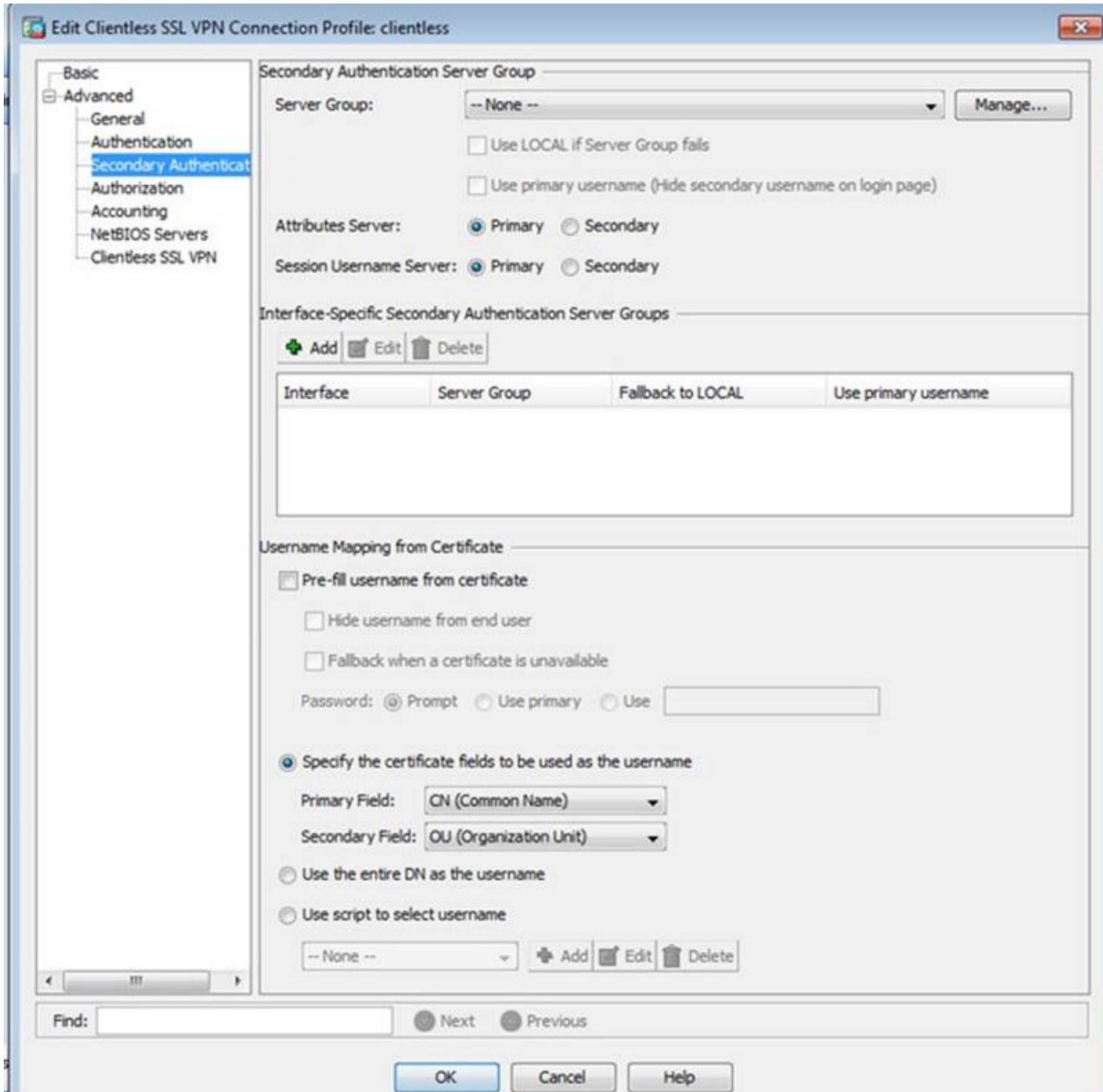
Disable CSD for both AnyConnect and Clientless SSL VPN

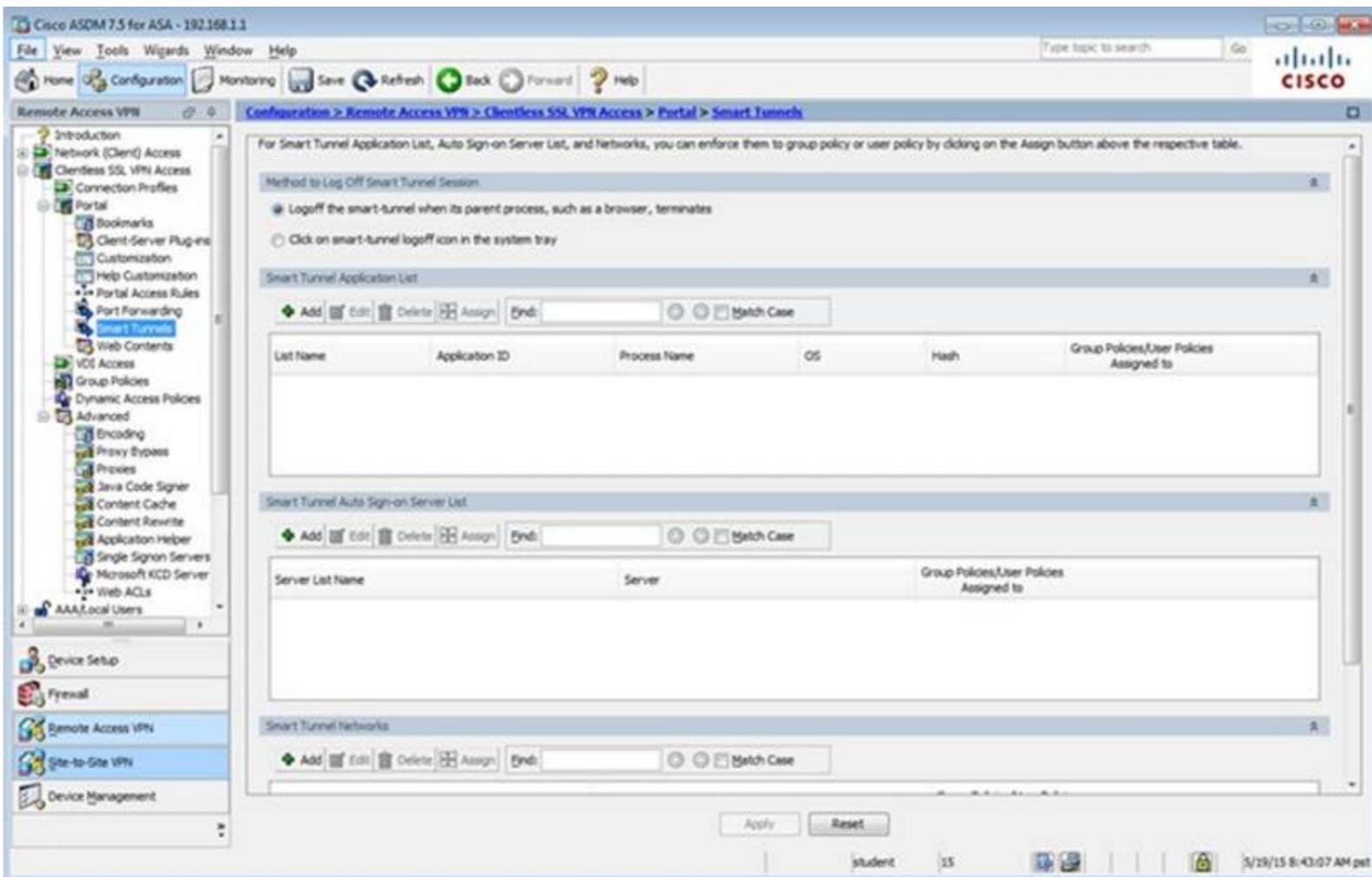
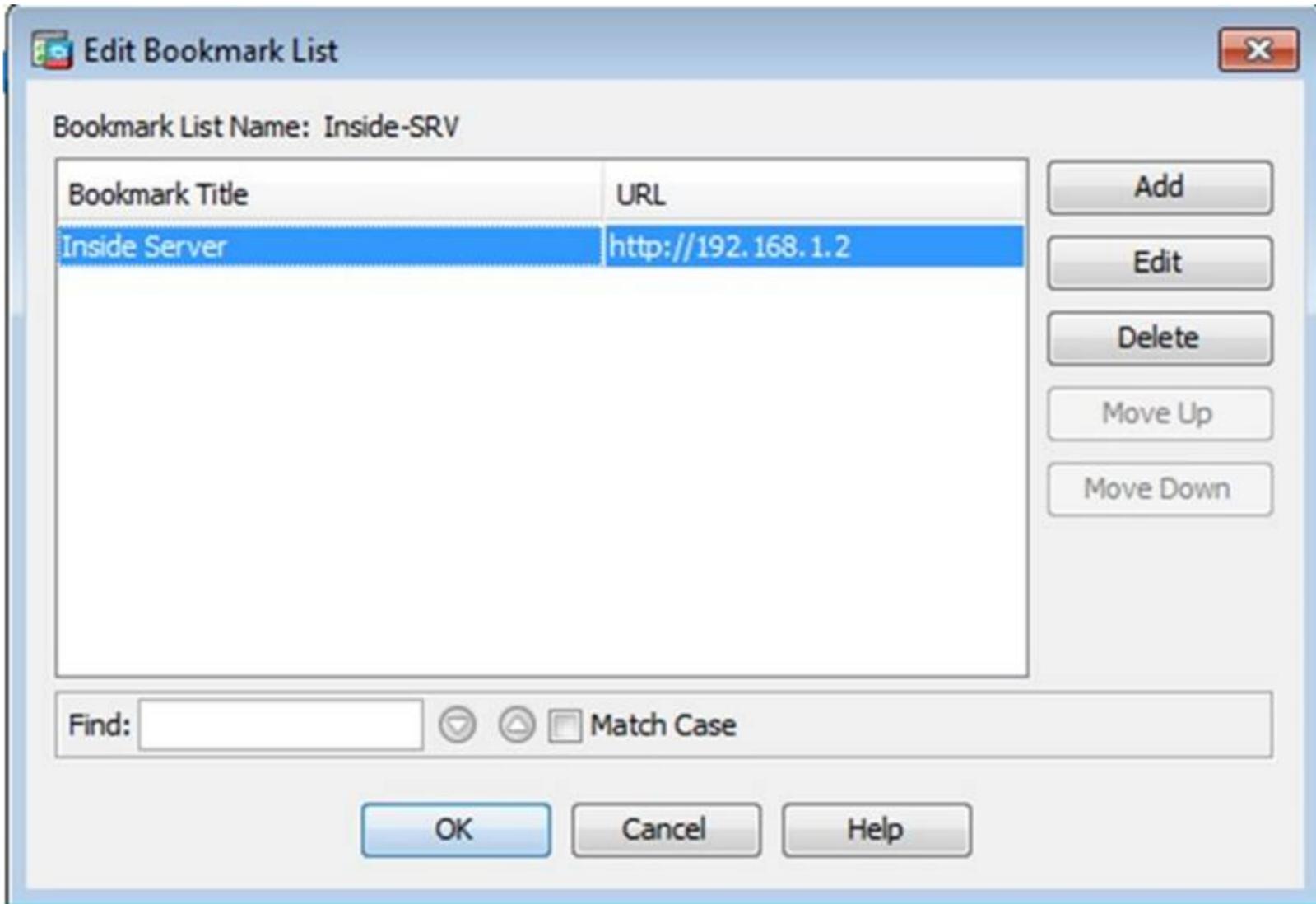
Disable CSD for AnyConnect only

Find:  Next Previous

OK Cancel Help







Configure Port Forwarding Lists that the security appliance uses to grant users access to TCP-based applications over a clientless SSL VPN connection. This parameter is enforced in either a [VPN group policy](#), a [dynamic access policy](#), or a [user policy](#) configuration. You can click on Assign button to assign the selected one to them.

List Name	Local TCP Port	Remote Server	Remote TCP Port	Description	Group Policies/User Policies Assigned to

Find:

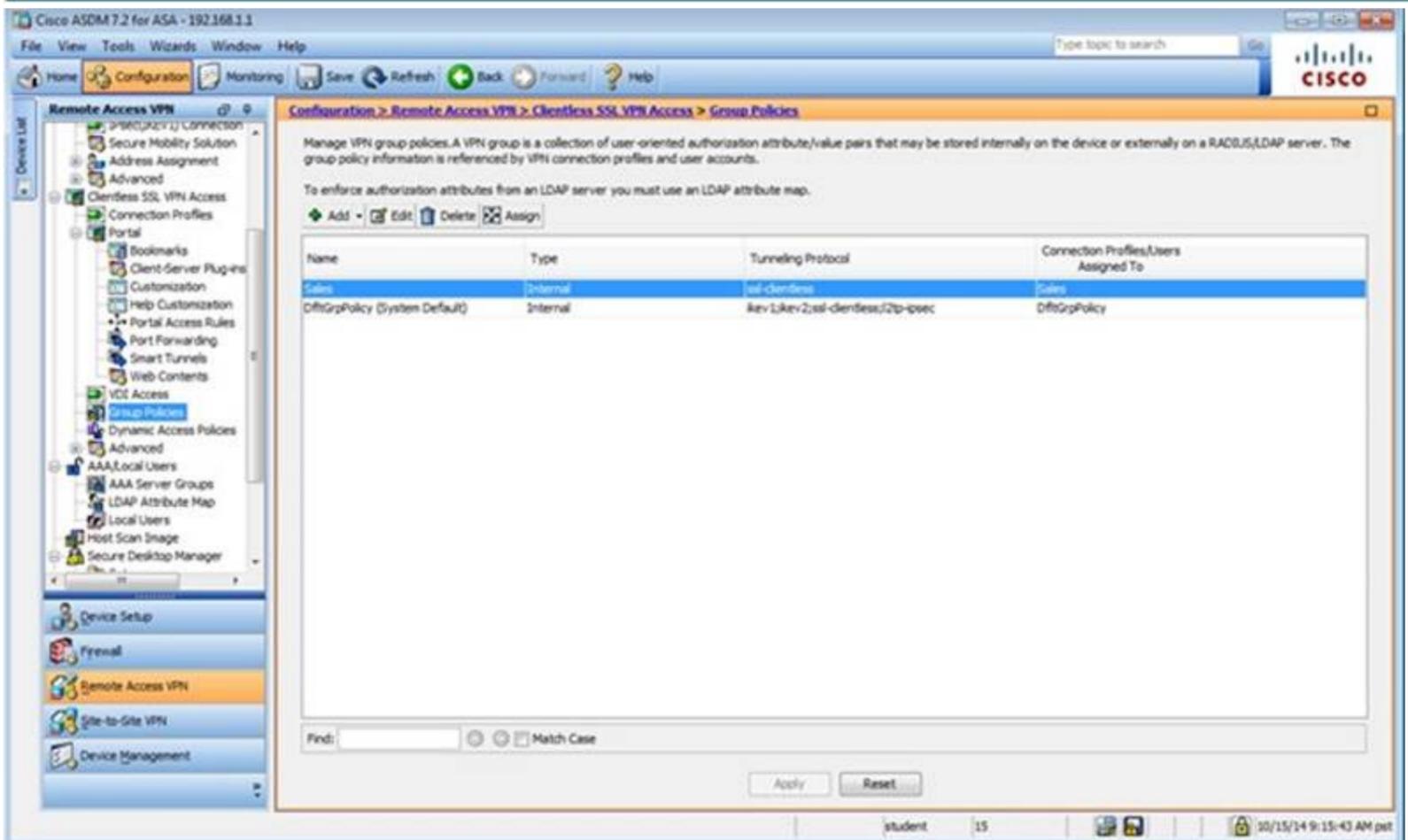
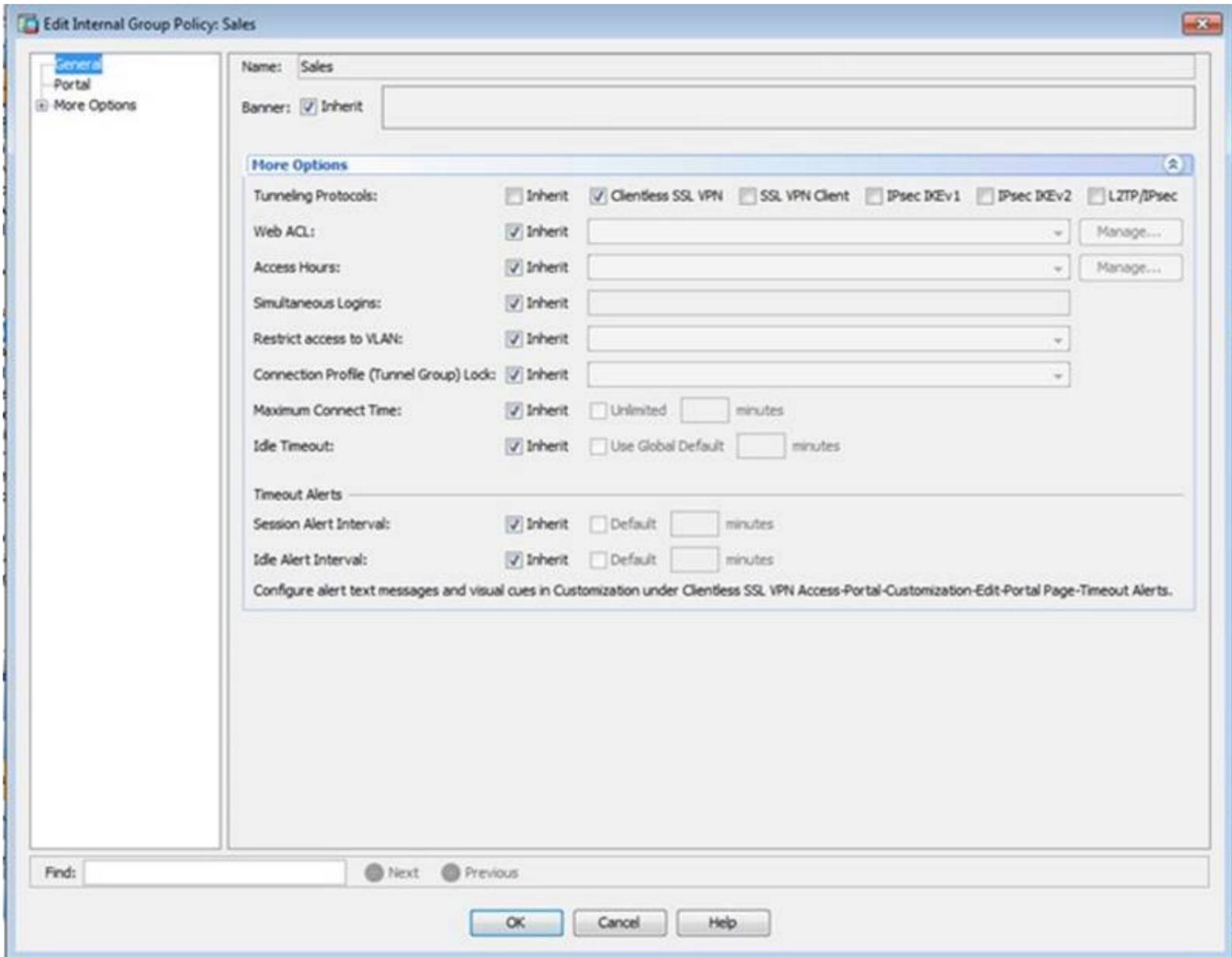
student 15 5/19/15 8:43:47 AM pet

Manage VPN group policies. A VPN group is a collection of user-oriented authorization attribute/value pairs that may be stored internally on the device or externally on a RADIUS/LDAP server. The group policy information is referenced by VPN connection profiles and user accounts. To enforce authorization attributes from an LDAP server you must use an [LDAP attribute map](#).

Name	Type	Tunneling Protocol	Connection Profiles/Users Assigned To
Calvin	Internal	ssl-clientless	Clientless
OffeGrpPolicy (System Default)	Internal	Rev 1;rev 2;ssl-clientless/2tp-espsec	DefaultRAGroup;DefaultL2;Group;DefaultRAMPGroup;Def...

Find:

student 15 5/19/15 8:49:27 AM pet



**Edit Internal Group Policy: Sales**

- General
- Ports
- More Options
  - Customization
  - Login Setting
  - Single Signon
  - VDI Access
  - Session Settings

Bookmark List:  Inherit Inside-SRV Manage...

URL Entry:  Inherit  Enable  Disable

**File Access Control**

File Server Entry:  Inherit  Enable  Disable

File Server Browsing:  Inherit  Enable  Disable

Hidden Share Access:  Inherit  Enable  Disable

**Port Forwarding Control**

Port Forwarding List:  Inherit Manage...

Auto Applet Download

Applet Name:  Inherit

**Smart Tunnel**

Smart Tunnel Policy:  Inherit Network: Manage...

Smart Tunnel Application:  Inherit Tunnel Option: -- None -- Manage...

Smart Tunnel all Applications (This feature only works with Windows platforms)

Auto Start

Auto Sign-on Server:  Inherit Manage...

Windows Domain Name (optional):

Auto sign-on works only with Internet Explorer on Windows client or in Firefox on any platform.

**ActiveX Relay**

ActiveX Relay:  Inherit  Enable  Disable

**More Options**

Find: Next Previous

OK Cancel Help

**Edit Internal Group Policy: DftGrpPolicy**

- General
- Servers
- Advanced

Name: DftGrpPolicy

Banner:

SCEP forwarding URL:

Address Pools: Select...

IPv6 Address Pools: Select...

**More Options**

Tunneling Protocols:  Clientless SSL VPN  SSL VPN Client  IPsec IKEv1  IPsec IKEv2  L2TP/IPsec

Filter: -- None -- Manage...

Access Hours: -- Unrestricted -- Manage...

Simultaneous Logins: 3

Restrict access to VLAN: -- Unrestricted --

Connection Profile (Tunnel Group) Lock: -- None --

Maximum Connect Time:  Unlimited  minutes

Idle Timeout:  None  30 minutes

On smart card removal:  Disconnect  Keep the connection

Find: Next Previous

OK Cancel Help

Cisco ASDM 7.5 for ASA - 192.168.1.1

Configuration > Remote Access VPN > Clientless SSL VPN Access > Portal > Client-Server Plug-ins

Import plug-ins to the security appliance. A browser plug-in is a separate program that a Web browser invokes to perform a dedicated function, such as connecting a client to a server within the browser window.

Client-Server Plug-ins

Client-Server Plug-ins	Hash	Date

Apply Reset

student 15 5/19/15 8:44:27 AM pdt

Cisco ASDM 7.5 for ASA - 192.168.1.1

Configuration > Remote Access VPN > Secure Desktop Manager

**Secure Desktop Manager (Version 3.5.2008.0)**

Secure Desktop Manager lets you configure prelogin policies, enable or disable checks for antivirus, antispam, and personal firewall applications, and configure enforcement for those applications.

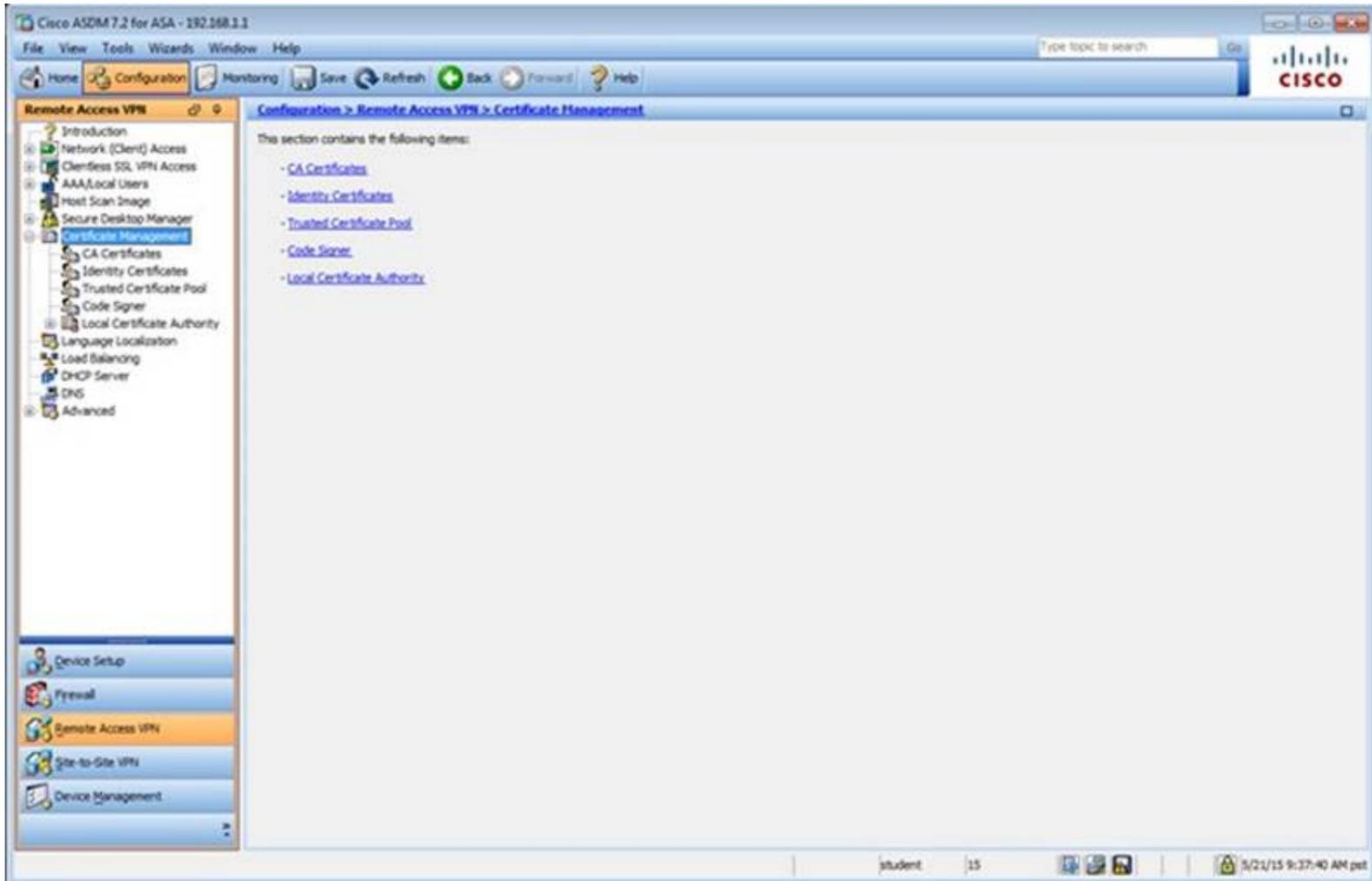
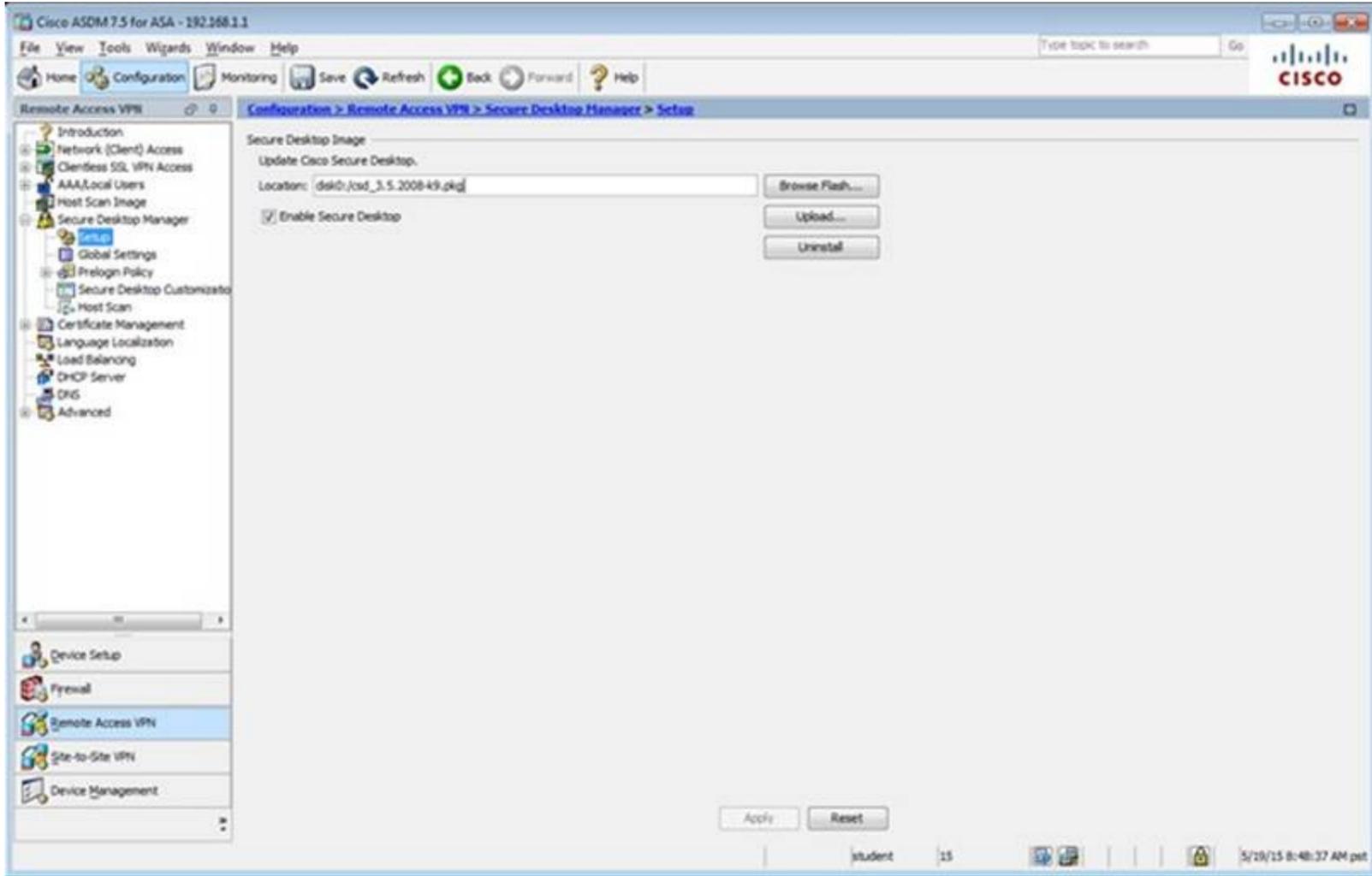
Click Prelogin Policy to specify registry keys, files, certificates, OS versions, and IP address ranges for prelogin policies. As you create each policy, Secure Desktop Manager adds a new menu labeled with the policy name. Go to that menu to assign settings to the policy.

Click Host Scan to enable or disable checks for antivirus, antispam, and personal firewall applications. If you have an Advanced Endpoint Assessment license, specify the applications to install or update as a requirement for access.

After you configure the prelogin policies, you can assign them to dynamic access policies (DAPs). You can also assign the results of the Host Scan to DAPs.

Apply All Reset All

student 15 5/19/15 8:47:47 AM pdt



**Configuration > Remote Access VPN > Certificate Management > Identity Certificates**

Issued To	Issued By	Expiry Date	Associated Trustpoints	Usage	Public Key Type
username=IP17-ASA.sec...	username=IP17-ASA.sec...	11:30:33 pm Oct 20 2024	ASDM-TrustPoint1	General Purpose	RSA (2048 bits)

End:   Match Case

**Certificate Expiration Alerts**  
 Send the first alert before:  (days)   
 Repeat Alert Interval:  (days)

**Public CA Enrollment**  
 Get your Cisco ASA security appliance up and running quickly with an SSL Advantage digital certificate from Entrust. Entrust offers Cisco customers a special promotional price for certificates and trial certificates for testing.

Using a previously saved certificate signing request, [enroll with Entrust](#).

**ASDM Identity Certificate Wizard**  
 The Cisco ASDM Identity Certificate Wizard assists you in creating a self-signed certificate that is required for launching ASDM through launcher.

**Configuration > Remote Access VPN > Advanced**

This section contains the following items:

- [Advanced Management](#)
- [SSL Settings](#)
- [Certificate to AnyConnect and Clientless SSL VPN Connection Profile Maps](#)
- [HTTP Redirect](#)
- [Maximum VPN Sessions](#)
- [Crypto Engine](#)
- [E-mail Proxy](#)

Cisco ASDM 7.5 for ASA - 192.168.1.1

Configuration > Remote Access VPN > Advanced > SSL Settings

Configure SSL parameters. These parameters affect both ASDM and SSL VPN access.

The minimum SSL version for the security appliance to negotiate as a "server": TLS V1

The minimum SSL version for the security appliance to negotiate as a "client": TLS V1

Diffe-Hellman group to be used with SSL: Group2 - 1024-bit modAas

ECDH group to be used with SSL: Group19 - 256-bit EC

Encryption

Cipher Version	Cipher Security Level	Cipher Algorithms/ Custom String
Default	Medium	DES-CBC3-SHA AES128-SHA DHE-RSA-AES128-SHA AES256-SHA ...
TLSV1	Medium	DES-CBC3-SHA AES128-SHA DHE-RSA-AES128-SHA AES256-SHA ...
TLSV1.1	Medium	DES-CBC3-SHA AES128-SHA DHE-RSA-AES128-SHA AES256-SHA ...
TLSV1.2	Medium	DES-CBC3-SHA AES128-SHA DHE-RSA-AES128-SHA AES256-SHA ...
DTLSV1	Medium	DES-CBC3-SHA AES128-SHA DHE-RSA-AES128-SHA AES256-SHA ...

Server Name Indication (SNI)

Domain	Certificate
dmz	ASDM_TrustPoint1.h...

Certificates

Specify which certificates, if any, should be used for SSL authentication on each interface. The fallback certificate will be used on interfaces not associated with a certificate of their own.

Apply Reset

student 15 5/19/15 8:54:07 AM pet

Cisco ASDM 7.5 for ASA - 192.168.1.1

Configuration > Remote Access VPN > Advanced > Maximum VPN Sessions

Configure the maximum number of VPN sessions allowed at any given time.

Maximum AnyConnect Sessions: 2

Maximum Other VPN Sessions: 250

Apply Reset

student 15 5/19/15 8:54:47 AM pet

Cisco ASDM 7.5 for ASA - 192.168.1.1

File View Tools Wizards Window Help

Home Configuration Monitoring Save Refresh Back Forward Help

Remote Access VPN Configuration > Remote Access VPN > Network (Client) Access

**Network (Client) Access**

**What Is Network (Client) Access?**

After a VPN client, such as AnyConnect, is authenticated, remote users can access corporate networks or applications as if they were on-site. The data traffic between remote users and the corporate network is secured by being encrypted when going through the Internet.

The [ASDM Assistant](#) provides simple "How Do I" steps for configuring Network (Client) Access.

**Important Concepts**

Following are some important concepts for setting up a connection.

**1. SSL tunnel and IPsec tunnel**

They are two different ways to encrypt data traffic. An SSL tunnel uses SSL protocol to encrypt data, while an IPsec tunnel uses IPsec protocol. Cisco AnyConnect VPN Client supports SSL and IPsec(DKv2) protocols, Cisco VPN Client supports only IPsec(DKv1) protocol.

**2. User and connection profile**

To access corporate network resources, remote users must authenticate, and identify which Connection Profile (Tunnel Group) to use. This connection profile specifies how the security appliance authenticates users.

You configure user account database in [AAA/Local Users](#).  
 You configure AnyConnect connection profile in [AnyConnect Connection Profiles](#), IPsec connection profile in [IPsec\(DKv1\) Connection Profiles](#).

**3. Access policy**

Access policies control how remote users can access corporate networks. An access policy includes the following:

- Session control - how long a session can remain idle before it is closed.
- Endpoint security - determines the conditions that remote PCs must satisfy to connect, for example, requiring up-to-date anti-virus software.

You configure session control policies in [Dynamic Access Policies](#) or [Group Policies](#).  
 You configure endpoint security policies for AnyConnect client in [Secure Desktop Manager](#). You also have the option to setup [NAC](#) based ending security policies.

student 15 3/19/15 8:55:47 AM pet

Cisco ASDM 7.5 for ASA - 192.168.1.1

File View Tools Wizards Window Help

Home Configuration Monitoring Save Refresh Back Forward Help

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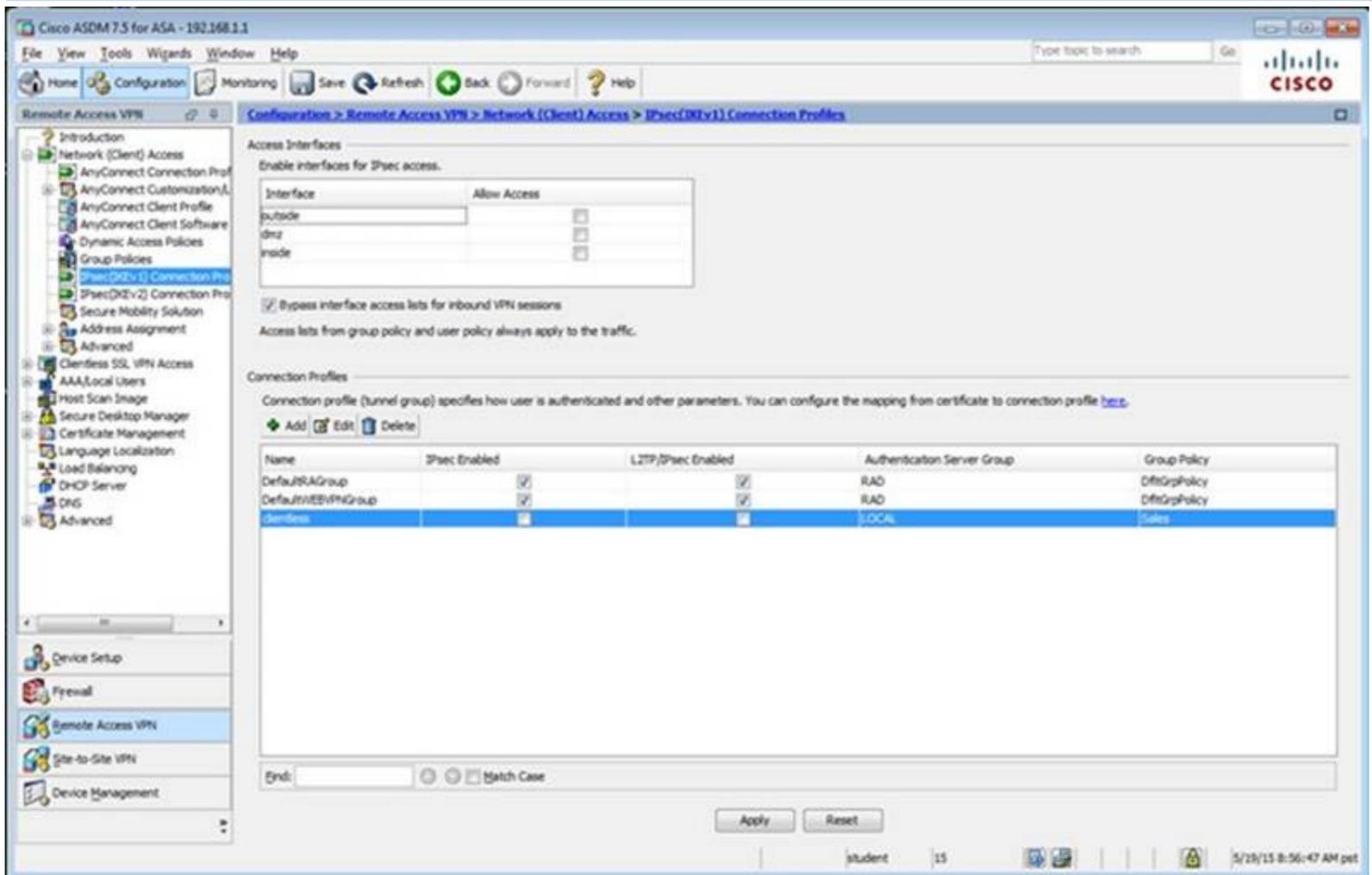
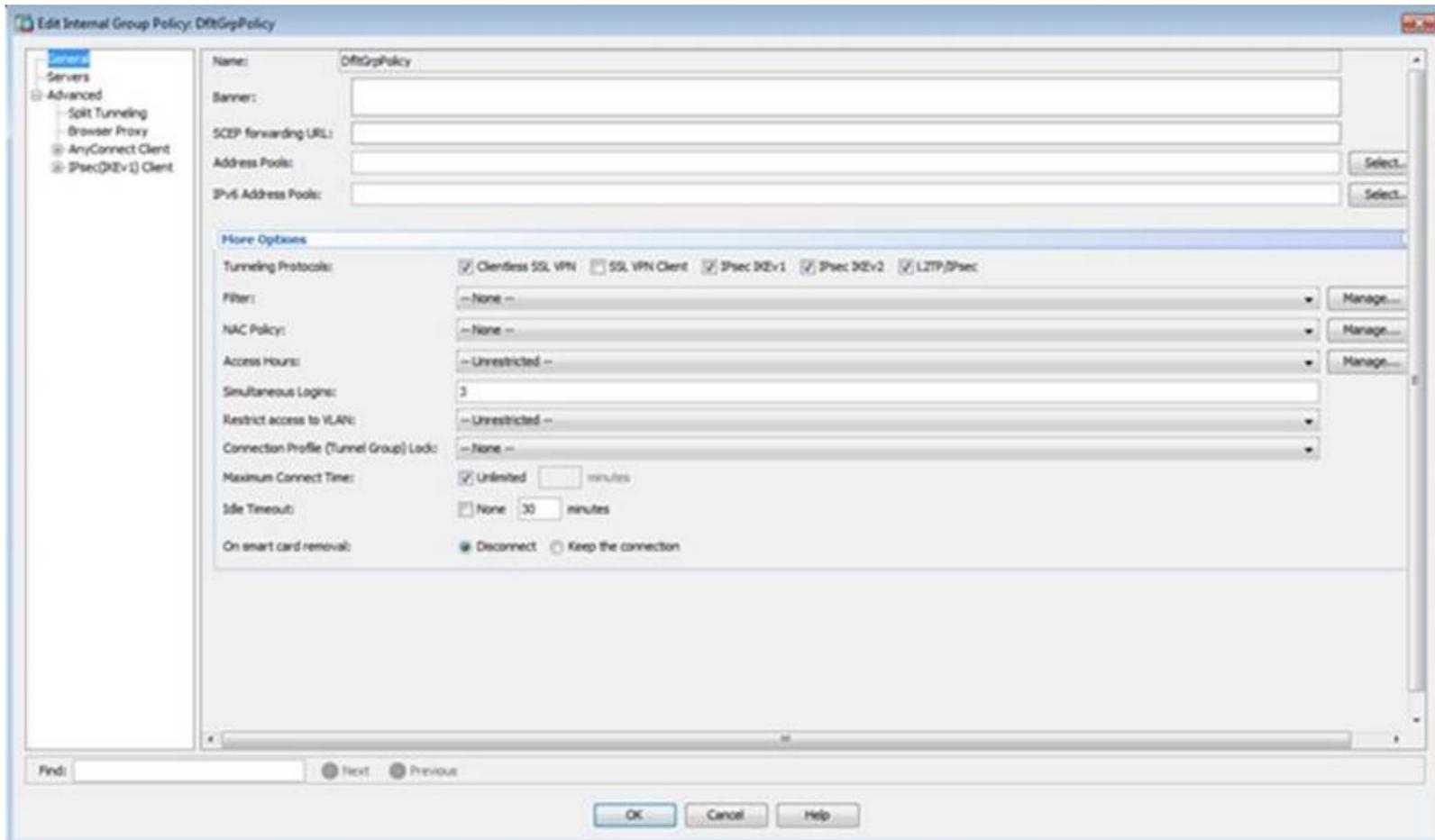
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student 15 3/19/15 8:55:47 AM pet



The screenshot shows the Cisco ASDM 7.5 interface for configuration. The breadcrumb trail is: Configuration > Remote Access VPN > Network (Client) Access > AnyConnect Connection Profiles. The main content area includes:

- Access Interfaces:** A table to configure access for different interfaces.
 

Interface	SSL Access		IPsec (IKEv2) Access	
	Allow Access	Enable DTLS	Allow Access	Enable Client Services
outside	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
dmz	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
inside	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- Connection Profiles:** A table listing configured profiles.
 

Name	SSL Enabled	IPsec Enabled	Aliases	Authentication Method	Group Policy
DefaultRAGroup	<input type="checkbox"/>	<input checked="" type="checkbox"/>		AAA(RAC)	DfltGrpPolicy
DefaultWEBVPNGroup	<input type="checkbox"/>	<input checked="" type="checkbox"/>		AAA(RAC)	DfltGrpPolicy
test	<input type="checkbox"/>	<input type="checkbox"/>	test	AAA(OCA)	Salts

The screenshot shows the Cisco ASDM 7.5 interface for configuration. The breadcrumb trail is: Configuration > Remote Access VPN > AAA/Local Users. The main content area displays a list of items:

- AAA Server Groups
- LDAP Attribute Map
- MDM Proxy
- Local Users

Configuration > Remote Access VPN > AAA/Local Users > Local Users

Create entries in the ASA local user database.  
 Command authorization must be enabled in order for the user account privileges to be enforced. To enable command authorization, go to [Authorization](#).  
 AAA authentication console commands must be enabled in order for certain access restrictions to be enforced. To enable AAA authentication command go to [Authentication](#).

Username	Privilege Level (Role)	Access Restrictions	VPN Group Policy	VPN Group Lock
student	15	Full	-- Inherit Group Policy --	-- Inherit Group Policy --
enable_15	15	Full	N/A	N/A
plao	15	Full	-- Inherit Group Policy --	-- Inherit Group Policy --

End:  Match Case

Apply Reset

student 15 5/19/15 8:59:27 AM pet

Configuration > Remote Access VPN > AAA/Local Users > AAA Server Groups

AAA Server Groups

Server Group	Protocol	Accounting Mode	Reactivation Mode	Dead Time	Max Failed Attempts
LOCAL	LOCAL				
RAO	RADIUS	Single	Depletion	10	3
myAD	LDAP		Depletion	10	3
myCDA	RADIUS	Single	Depletion	10	3

End:  Match Case

Servers in the Selected Group

Server Name or IP Address	Interface	Timeout
---------------------------	-----------	---------

End:  Match Case

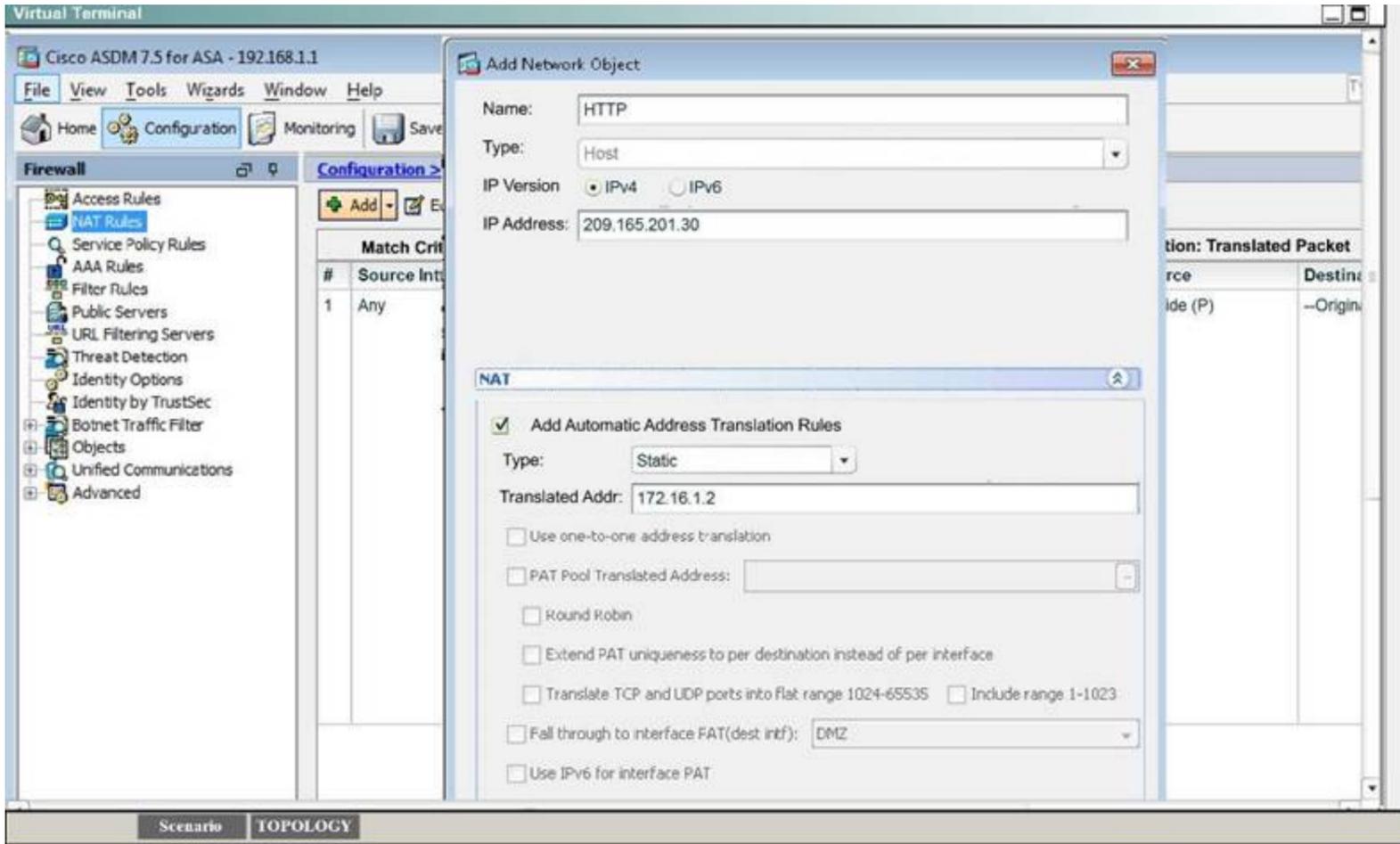
LDAP Attribute Map

Apply Reset

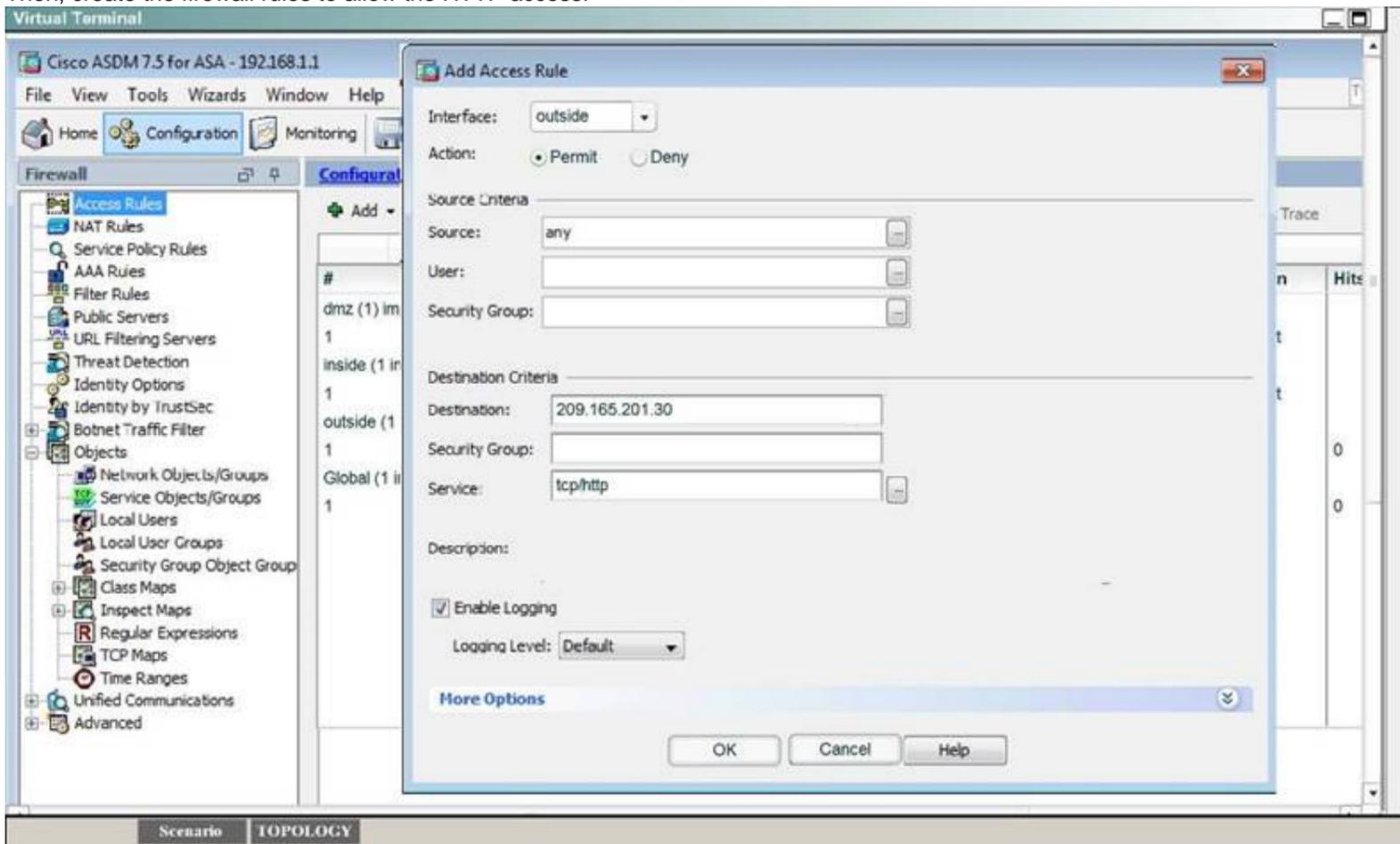
student 15 5/19/15 8:59:57 AM pet

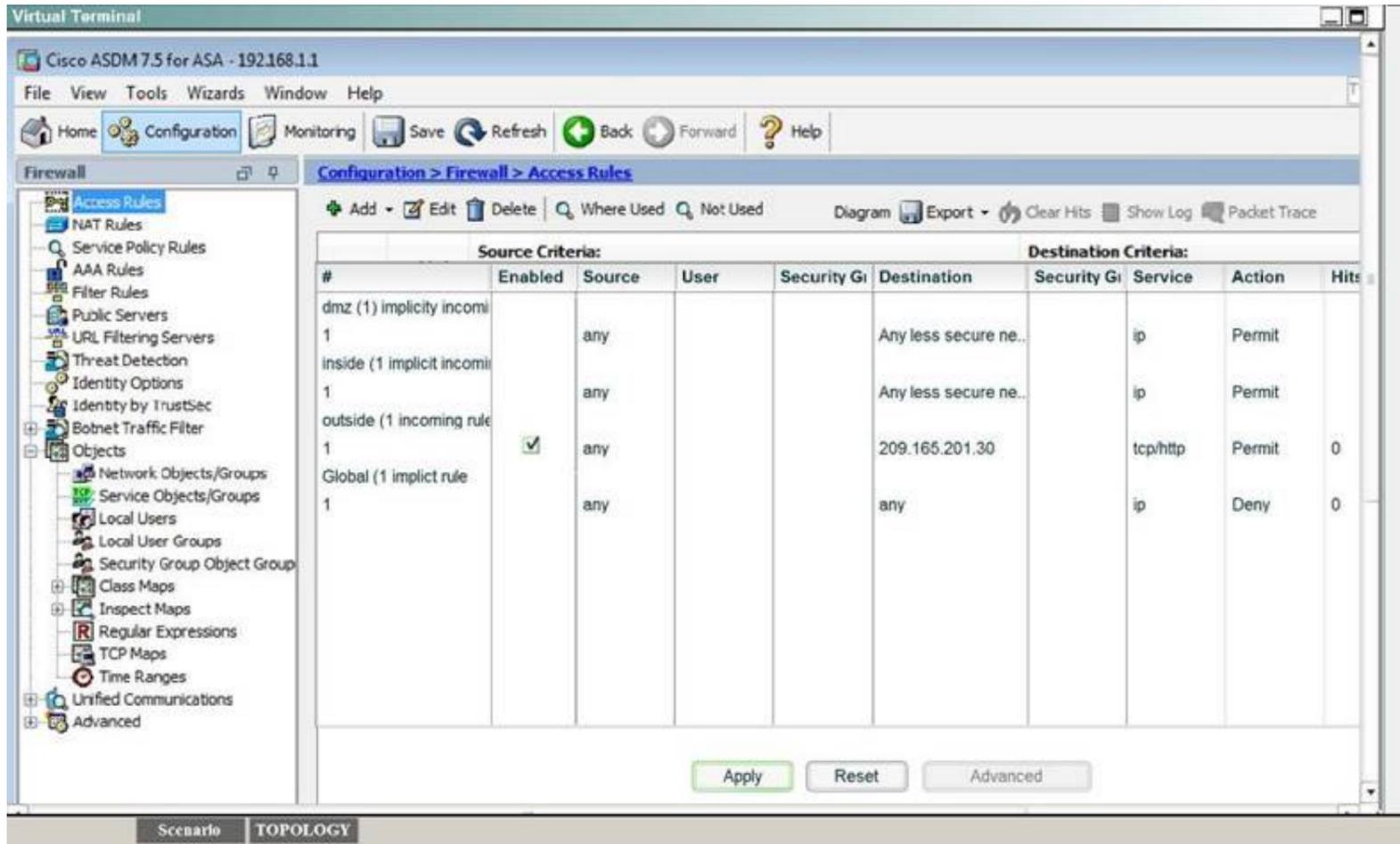
Answer:

Explanation: First, for the HTTP access we need to create a NAT object. Here I called it HTTP but it can be given any name.



Then, create the firewall rules to allow the HTTP access:



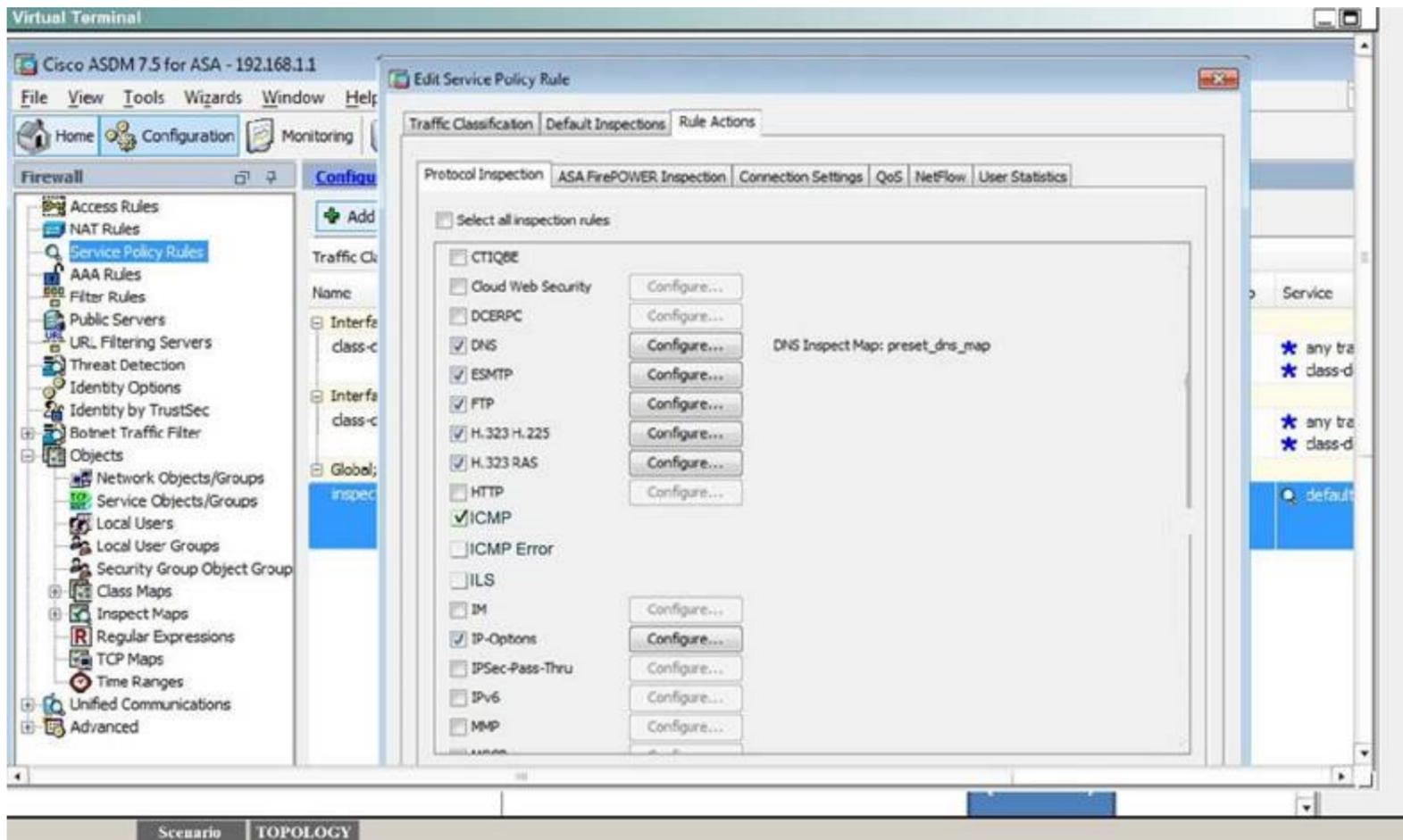


You can verify using the outside PC to HTTP into 209.165.201.30.

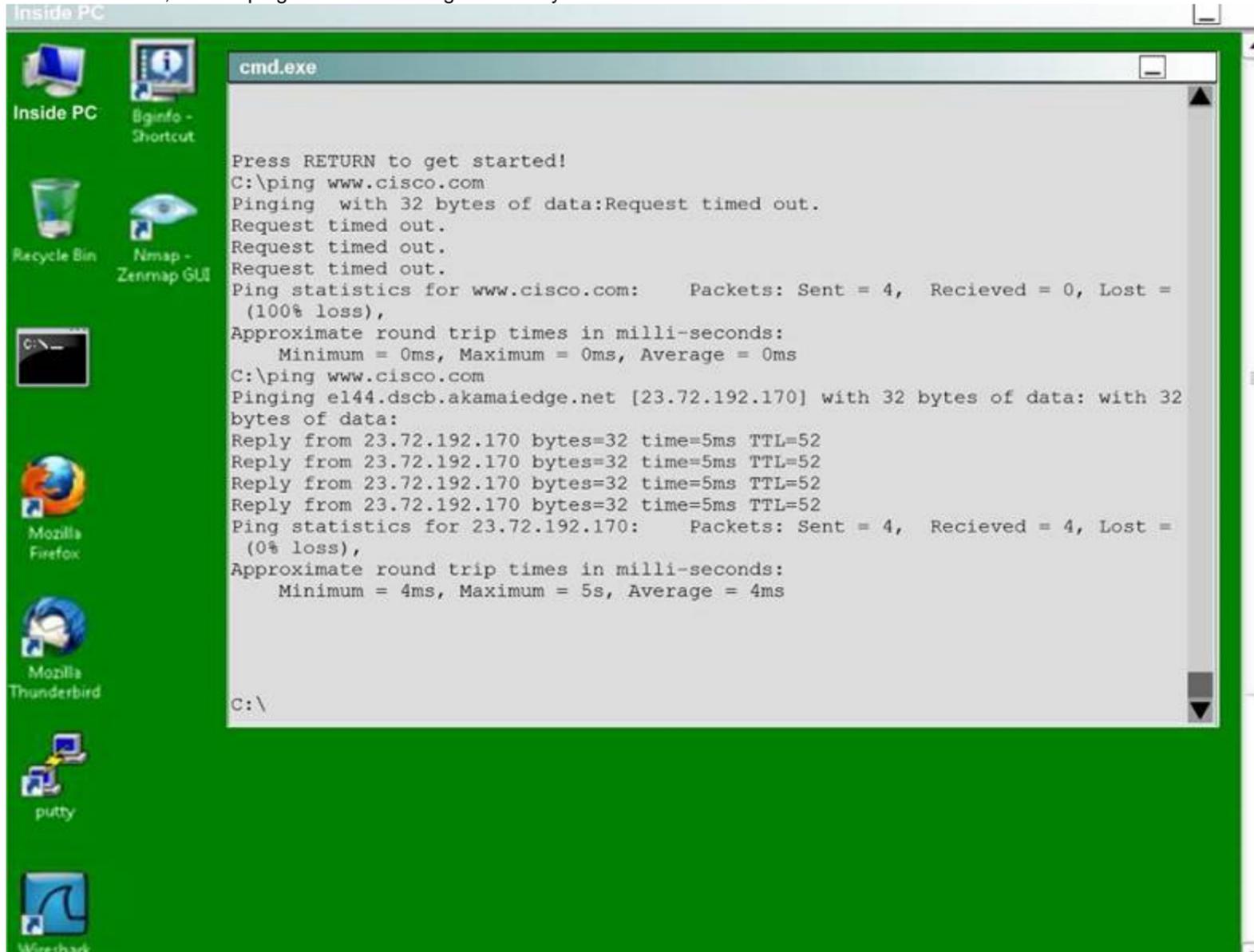
For step two, to be able to ping hosts on the outside, we edit the last service policy shown below:



And then check the ICMP box only as shown below, then hit Apply.



After that is done, we can ping www.cisco.com again to verify:



**NEW QUESTION 8**  
Refer to the exhibit.

```

current_peer: 10.1.1.5
  PERMIT, flags={origin_is_acl,}
    #pkts encaps: 1205, #pkts encrypt: 1205, #pkts digest 1205
    #pkts decaps: 1168, #pkts decrypt: 1168, #pkts verify 1168
    #pkts compressed: 0, #pkts decompressed: 0
    #pkts not compressed: 0, #pkts compr. failed: 0,
    #pkts decompress failed: 0, #send errors 0, #recv errors 0
    local crypto endpt.: 10.1.1.1, remote crypto endpt.: 10.1.1.5
  
```

While troubleshooting site-to-site VPN, you issued the show crypto ipsec sa command. What does the given output show?

- A. IPsec Phase 2 is established between 10.1.1.1 and 10.1.1.5.
- B. ISAKMP security associations are established between 10.1.1.5 and 10.1.1.1.
- C. IKE version 2 security associations are established between 10.1.1.1 and 10.1.1.5.
- D. IPsec Phase 2 is down due to a mismatch between encrypted and decrypted packets.

**Answer:** A

**Explanation:** This command shows IPsec SAs built between peers - IPsec Phase2. The encrypted tunnel is build between 10.1.1.5 and 10.1.1.1 (the router from which we issued the command).

### NEW QUESTION 9

Refer to the exhibit.

```

R1> show clock detail
.22:22:35.123 UTC Tue Feb 26 2013
Time source is NTP
  
```

Which statement about the device time is true?

- A. The time is authoritative, but the NTP process has lost contact with its servers.
- B. The time is authoritative because the clock is in sync.
- C. The clock is out of sync.
- D. NTP is configured incorrectly.
- E. The time is not authoritative.

**Answer:** A

**Explanation:** Remember: The [.] at the beginning of the time tells us the NTP process has last contact with its servers. We know the time is authoritative because there would be a [\*] at the beginning if not.

### NEW QUESTION 10

What is one requirement for locking a wired or wireless device from ISE?

- A. The ISE agent must be installed on the device.
- B. The device must be connected to the network when the lock command is executed.
- C. The user must approve the locking action.
- D. The organization must implement an acceptable use policy allowing device locking.

**Answer:** A

**Explanation:** Agents are applications that reside on client machines logging into the Cisco ISE network. Agents can be persistent (like the AnyConnect, Cisco NAC Agent for Windows and Mac OS X) and remain on the client machine after installation, even when the client is not logged into the network. Agents can also be temporal (like the Cisco NAC Web Agent), removing themselves from the client machine after the login session has terminated.

Source:

[http://www.cisco.com/c/en/us/td/docs/security/ise/2-0/admin\\_guide/b\\_ise\\_admin\\_guide\\_20/b\\_ise\\_admin\\_guide\\_20\\_chapter\\_010101.html](http://www.cisco.com/c/en/us/td/docs/security/ise/2-0/admin_guide/b_ise_admin_guide_20/b_ise_admin_guide_20_chapter_010101.html)

### NEW QUESTION 10

Which statement about a PVLAN isolated port configured on a switch is true?

- A. The isolated port can communicate only with the promiscuous port.
- B. The isolated port can communicate with other isolated ports and the promiscuous port.
- C. The isolated port can communicate only with community ports.
- D. The isolated port can communicate only with other isolated ports.

**Answer:** A

**Explanation:** Isolated -- An isolated port is a host port that belongs to an isolated secondary VLAN. This port has complete isolation from other ports within the same private VLAN domain, except that it can communicate with associated promiscuous ports. Private VLANs block all traffic to isolated ports except traffic from promiscuous ports. Traffic received from an isolated port is forwarded only to promiscuous ports. You can have more than one isolated port in a specified isolated VLAN. Each port is completely isolated from all other ports in the isolated VLAN.

Source:

<http://www.cisco.com/c/en/us/td/docs/switches/datacenter/nexus5000/sw/configuration/guide/cli/CLIConfigurationGuide/PrivateVLANs.html>

**NEW QUESTION 13**

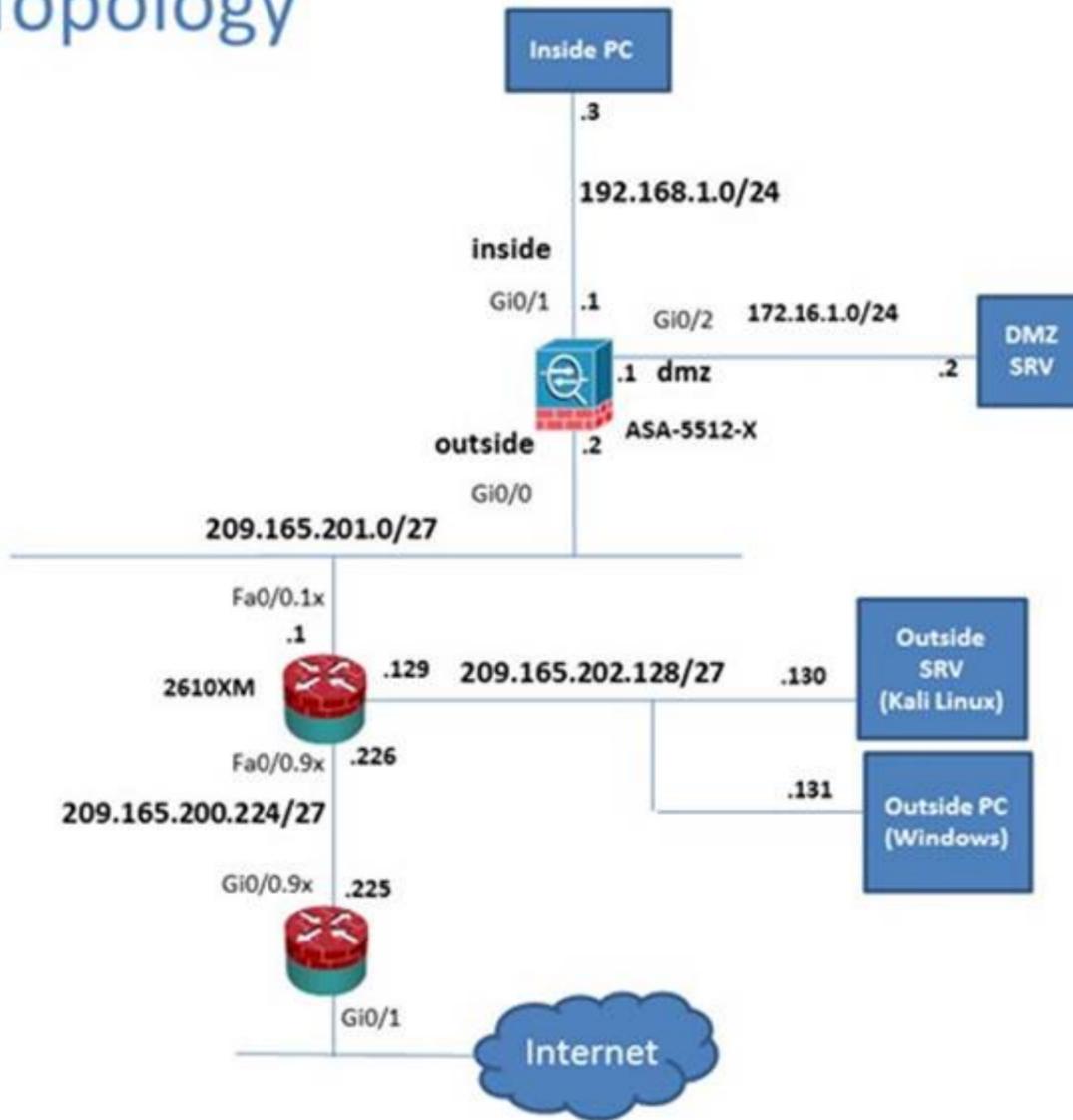
**Scenario**

In this simulation, you have access to ASDM only. Review the various ASA configurations using ASDM then answer the five multiple choice questions about the ASA SSLVPN configurations.

To access ASDM, click the ASA icon in the topology diagram. Note: Not all ASDM functionalities are enabled in this simulation.

To see all the menu options available on the left navigation pane, you may also need to un-expand the expanded menu first.

# Lab Topology



The screenshot shows the Cisco ASDM 7.5 interface for ASA - 192.168.1.1. The main dashboard includes several sections:

- Device Information:** Host Name: P17-ASA.secure-x.local, ASA Version: 100.14(6)13, ASDM Version: 7.5(1)1, Firewall Mode: Routed, Environment Status: OK, Device Uptime: 11d 23h 42m 47s, Device Type: ASA 5512, Context Mode: Single, Total Flash: 4096 MB.
- Interface Status:**

Interface	IP Address/Mask	Line	Link	Kbps
dmz	172.16.1.1/24	up	up	0
inside	192.168.1.1/24	up	up	4
mgmt	10.10.10.2/24	up	up	0
outside	209.165.201.2/24	up	up	0
- VPN Sessions:** IPsec: 0, Cleartext SSL VPN: AnyConnect Client: 0.
- System Resources Status:** Total Memory Usage, Total CPU Usage, Core Usage.
- Traffic Status:** Connections Per Second Usage and 'outside' Interface Traffic Usage (Kbps) graphs.
- Latest ASDM Syslog Messages:**

Severity	Date	Time	Syslog ID	Source IP	Source	Destination IP	Destina	Description
6	May 13 2015	12:35:09	302016	10.81.254.202	123	209.165.201.2	65535	Tear down UDP connection 15136525 for outside: 10.81.254.202/123 to identity: 209.165.201.2/65535(any) duration 0:02:01 bytes 96
6	May 13 2015	12:35:08	106015	192.168.1.3	14676	192.168.1.1	443	Deny TCP (no connection) from 192.168.1.3/14676 to 192.168.1.1/443 flags FDV ACK on interface inside
6	May 13 2015	12:35:08	302014	192.168.1.3	14676	192.168.1.1	443	Tear down TCP connection 15136528 for inside: 192.168.1.3/14676 to identity: 192.168.1.1/443 duration 0:00:00 bytes 299 TCP Reset O

Cisco ASDM 7.5 for ASA - 192.168.1.1

File View Tools Wizards Window Help

Home Configuration Monitoring Save Refresh Back Forward Help

Interfaces > Monitoring > Interfaces > ARP Table

ARP Table

Each row represents one ARP table entry.

Interface	IP Address	MAC Address	Proxy Arp
outside	209.165.202.1	000c.3014.3820	No
inside	192.168.1.4	0050.5633.3333	No
inside	192.168.1.3	0050.5611.1111	No
inside	192.168.1.2	0050.5622.2222	No
inside	192.168.1.56	0050.5692.5c7b	No
inside	192.168.1.55	0006.86e6.98f3	No
dmz	172.16.1.2	0050.5644.4444	No
mgmt	10.10.10.1	000c.3014.3820	No

Clear Dynamic ARP Entries

Refresh

Last Updated: 5/19/15 9:32:02 AM

Data Refreshed Successfully.

Cisco ASDM 7.5 for ASA - 192.168.1.1

File View Tools Wizards Window Help

Home Configuration Monitoring Save Refresh Back Forward Help

VPN > Monitoring > VPN > VPN Statistics > Sessions

Type	Active	Cumulative	Peak Concurrent	Inactive
Clientless VPN	1	1	1	1
Browser	1	1	1	1

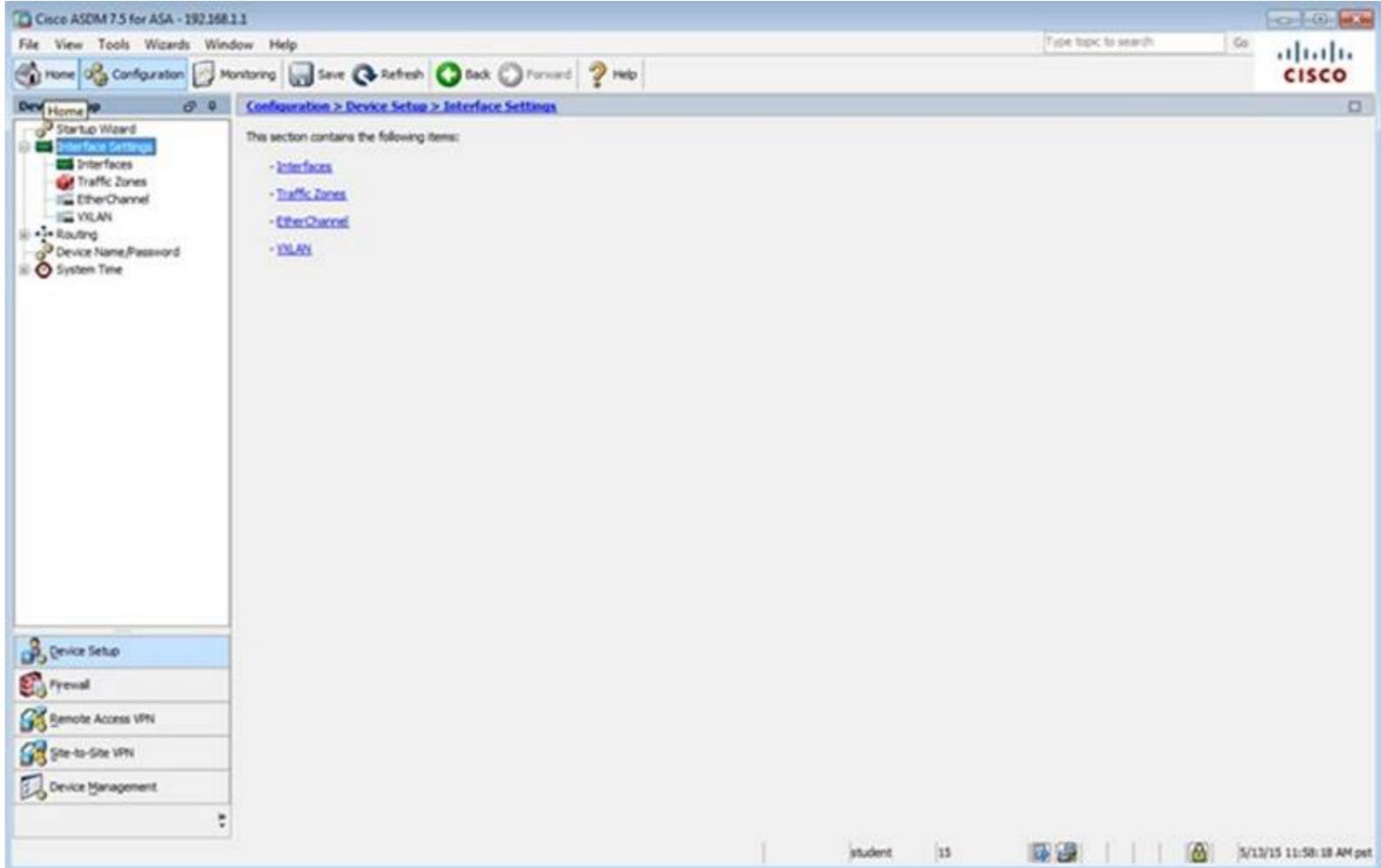
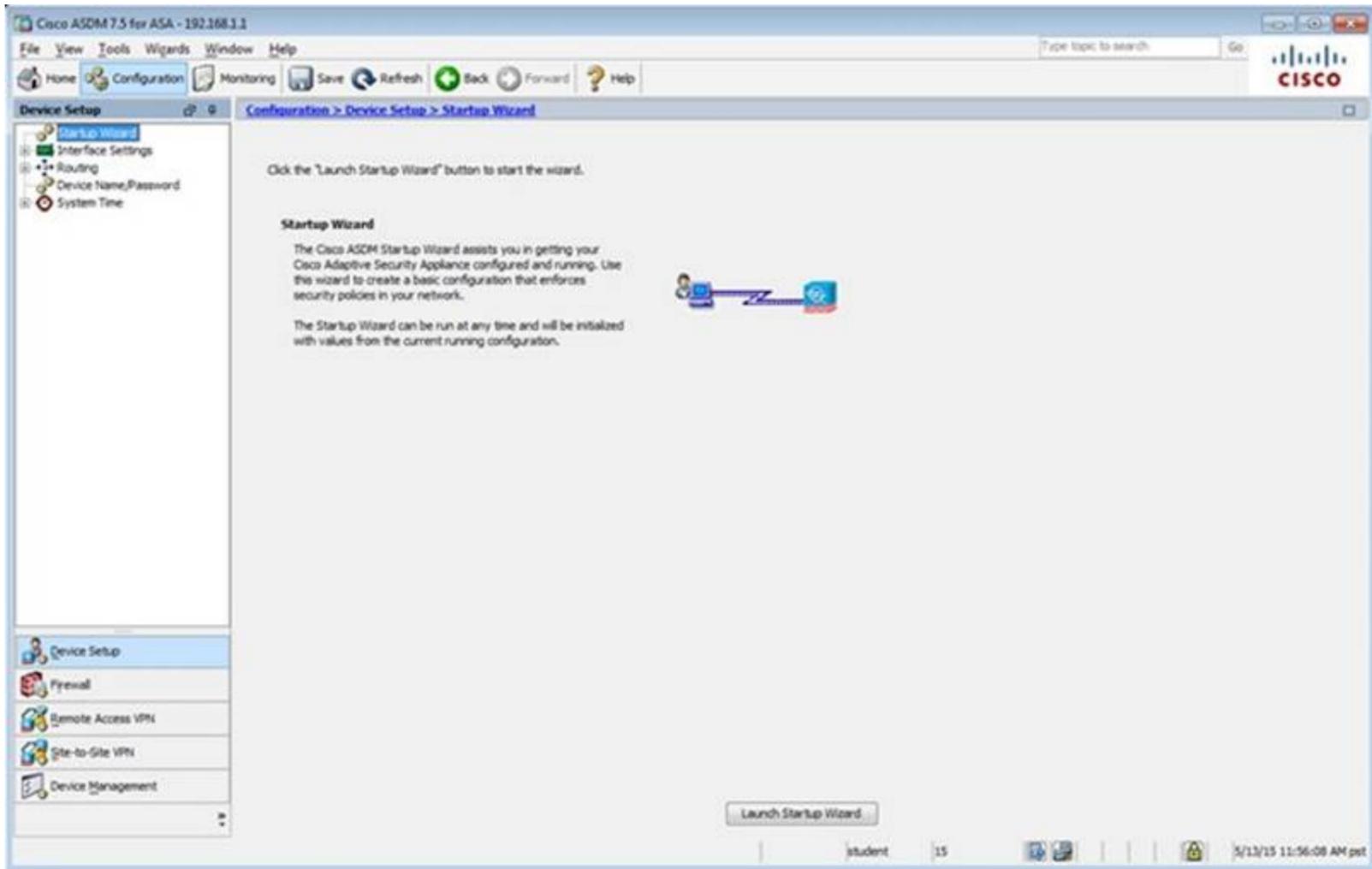
Filter By: Clientless SSL VPN -- All Sessions -- Filter

Username	Group Policy	Protocol	Login Time	Bytes Tx	Bytes Rx
IP Address	Connection Profile	Encryption	Duration		
student	sales	Clientless	08:05:46 pm Thu May 21 2015	338774	41633
209.165.202.131	Clientless	Clientless (DRC4)	07:09m:19s		

Refresh

Last Updated: 5/19/15 9:33:12 AM

Data Refreshed Successfully.



The screenshot shows the Cisco ASDM 7.5 for ASA - 192.168.1.1 interface configuration page. The left sidebar shows the navigation tree with 'Interfaces' selected. The main area displays a table of interfaces with the following data:

Interface	Name	Zone	Route Map	State	Security Level	IP Address	Subnet Mask Prefix Length	Group	Type
GigabitEthernet0/0	outside			Enabled		0.0.0.0/0.0.0.0	255.255.255.0		Hardware
GigabitEthernet0/1	inside			Enabled	100	192.168.1.1	255.255.255.0		Hardware
GigabitEthernet0/2	dmz			Enabled		172.16.1.1	255.255.255.0		Hardware
GigabitEthernet0/3				Enabled					Hardware
GigabitEthernet0/4				Enabled					Hardware
GigabitEthernet0/5	mgmt			Enabled		100.10.10.10.2	255.255.255.0		Hardware
Management0/0				Enabled					Hardware

Below the table, there are three checkboxes for advanced settings:

- Enable traffic between two or more interfaces which are configured with same security levels
- Enable traffic between two or more hosts connected to the same interface
- Enable jumbo frame reservation

Buttons for 'Apply' and 'Reset' are located at the bottom of the configuration area.

The screenshot shows the Cisco ASDM 7.5 for ASA - 192.168.1.1 management access configuration page. The left sidebar shows the navigation tree with 'Management Access' selected. The main area displays a list of items under the heading 'This section contains the following items:':

- [ASDM/HTTPS/Telnet/SSH](#)
- [HTTP Certificate Rule](#)
- [Command Line \(CLI\)](#)
- [File Access](#)
- [SCP](#)
- [Management Interface](#)
- [Management Session Quota](#)
- [SNMP](#)
- [Management Access Rules](#)

The bottom of the screen shows the user 'student' and the time '5/13/15 11:59:28 AM pdt'.

Cisco ASDM 7.5 for ASA - 192.168.1.1

Configuration > Device Management > Management Access > ASDM/HTTPS/Telnet/SSH

Specify the addresses of all hosts/networks which are allowed to access the ASA using ASDM/HTTPS/Telnet/SSH.

Type	Interface	IP Address	Mask/Prefix Length
Telnet	mgmt	10.10.10.1	255.255.255.255
SSH	inside	192.168.1.0	255.255.255.0
ASDM/HTTPS	inside	192.168.1.0	255.255.255.0

Http Settings

Enable HTTP Server

Port Number: 443

Idle Timeout: 20 minutes

Session Timeout: minutes

Require client certificate to access ASDM on the following interfaces

Interfaces: [Dropdown]

Telnet Settings

Telnet Timeout: 5 minutes

SSH Settings

Allowed SSH Version(s): 1 & 2

SSH Timeout: 5 minutes

DH Key Exchange:  Group 1  Group 14

Apply Reset

student 15 5/13/15 12:00:38 PM pet

Cisco ASDM 7.5 for ASA - 192.168.1.1

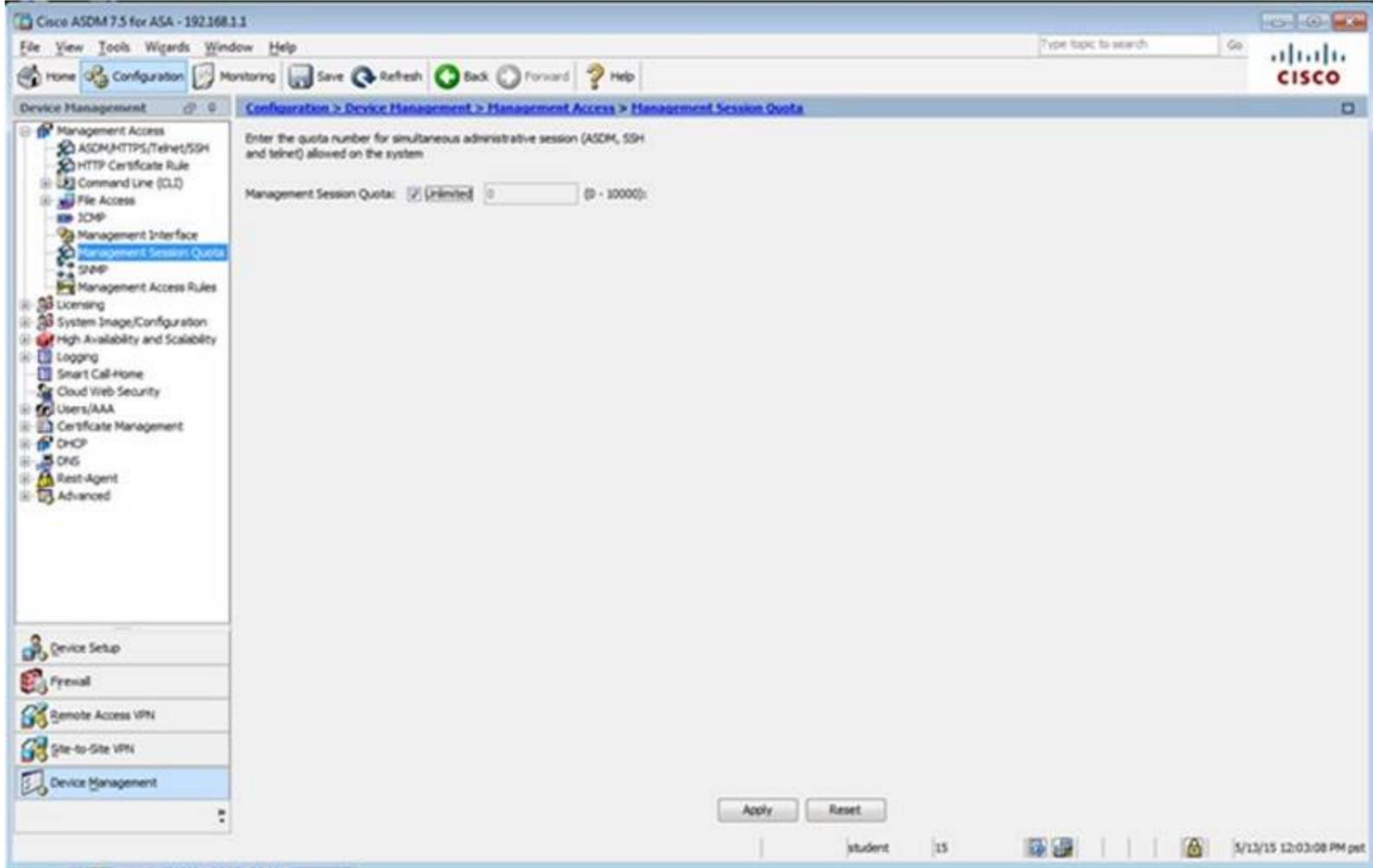
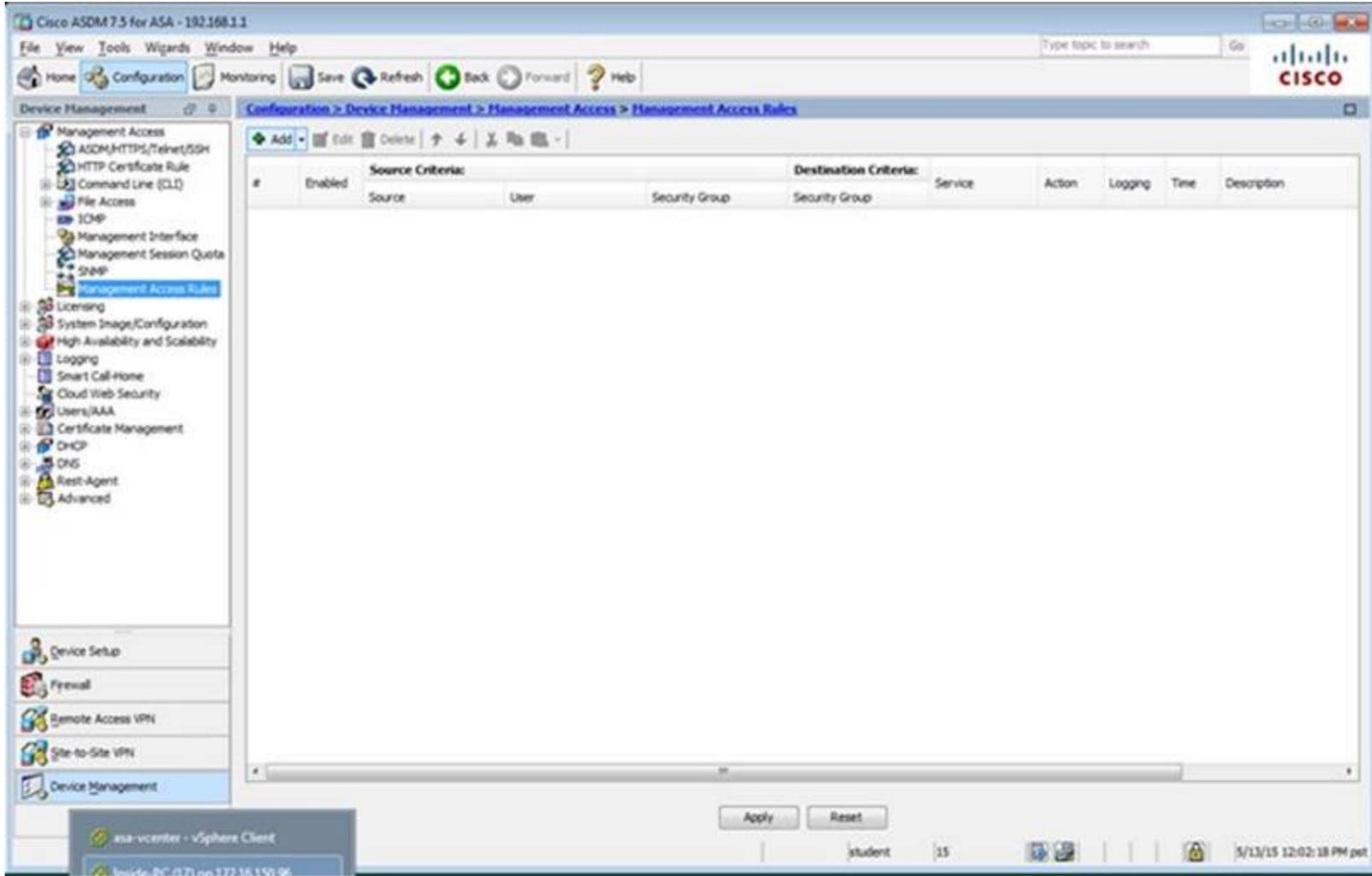
Configuration > Device Management > Management Access > Management Interface

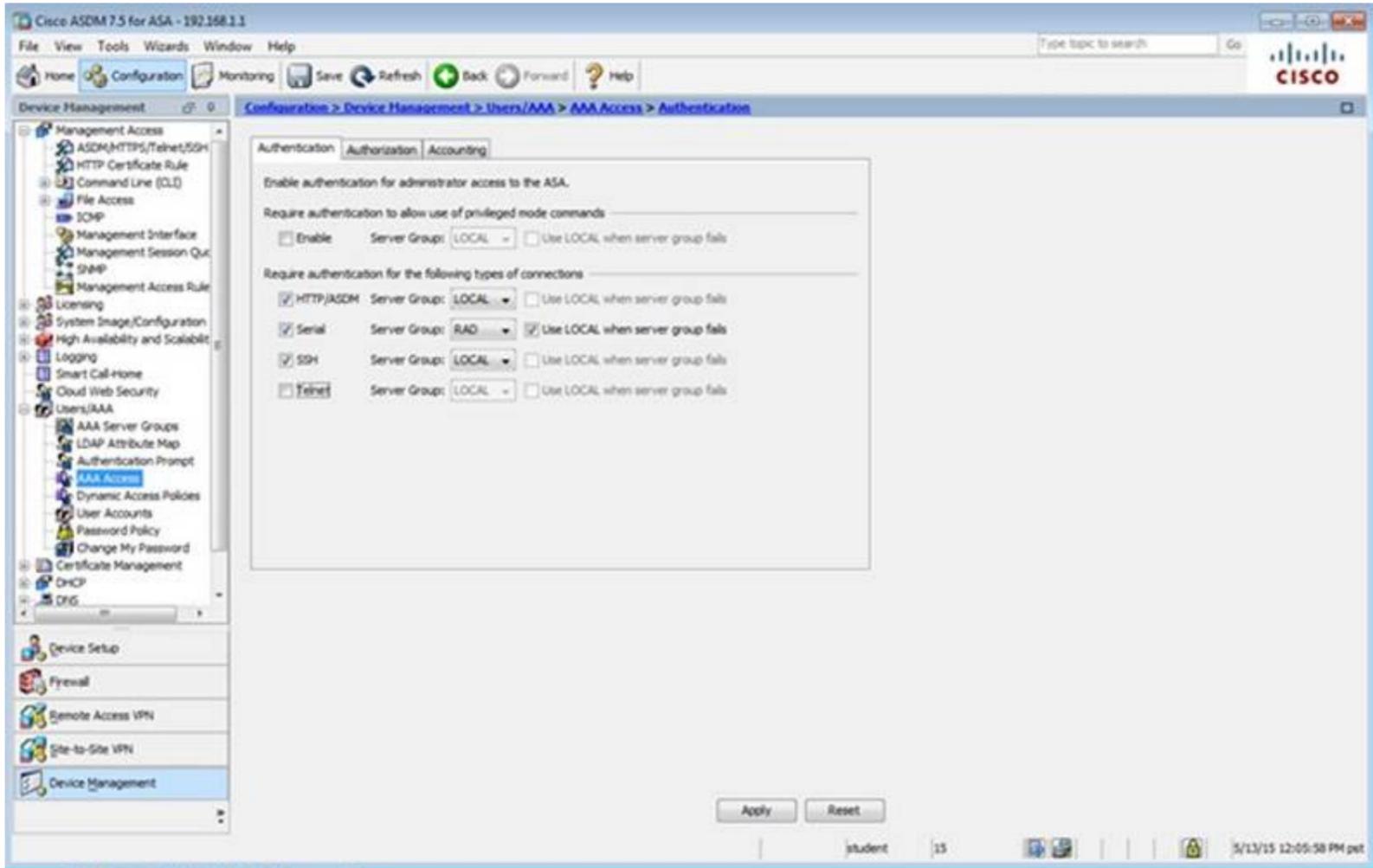
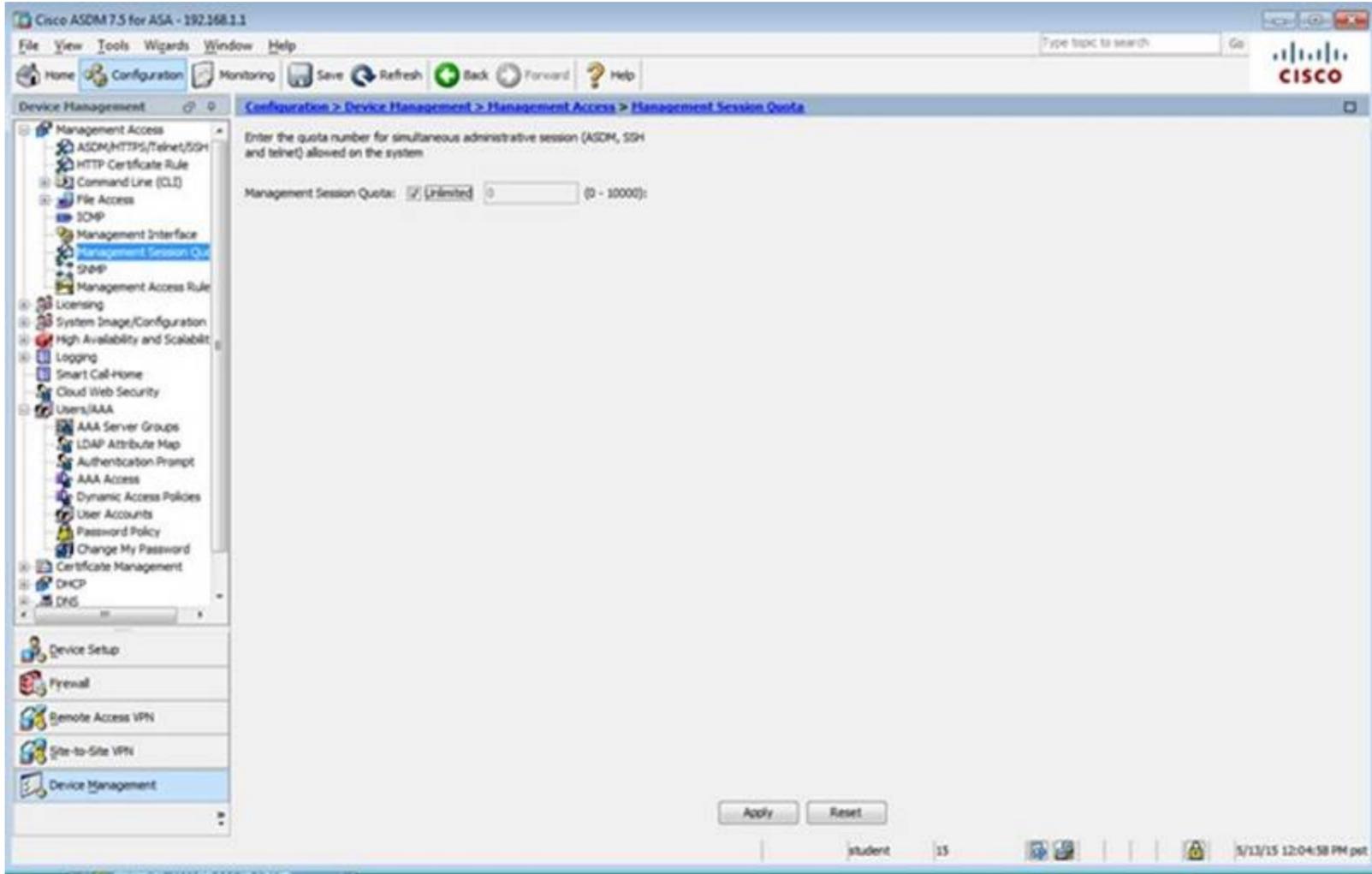
Enable or disable the Management Access feature for an interface. Once you enable this feature on an internal interface, you will be able to perform ASA management functions, such as running ASDM, on this interface using an IPsec VPN client, SSL VPN client, or a site-to-site tunnel.

Management Access Interface: [None]

Apply Reset

student 15 5/13/15 12:01:38 PM pet





The screenshot shows the Cisco ASDM 7.5 for ASA interface. The breadcrumb trail is Configuration > Device Management > Users/AAA > AAA Access > Authorization. The left-hand navigation pane shows the tree structure with 'Users/AAA' expanded to 'AAA Access' and 'Authorization' selected. The main content area has three tabs: Authentication, Authorization, and Accounting. The 'Authorization' tab is active. It contains two sections: 'Enable authorization for ASA command access' and 'Perform authorization for exec shell access'. The first section has checkboxes for 'HTTP' and 'Enable', both with 'LOCAL' in the 'Server Group' dropdown. The second section has an 'Enable' checkbox and radio buttons for 'Remote server' (selected) and 'Local server'. There is also an unchecked checkbox for 'Allow privileged users to enter into EXEC mode on login'. 'Apply' and 'Reset' buttons are at the bottom. The status bar shows 'student | 15' and the date '5/13/15 12:11:38 PM pet'.

The screenshot shows the Cisco ASDM 7.5 for ASA interface. The breadcrumb trail is Configuration > Device Management > Users/AAA > AAA Access > Accounting. The left-hand navigation pane shows the tree structure with 'Users/AAA' expanded to 'AAA Access' and 'Accounting' selected. The main content area has three tabs: Authentication, Authorization, and Accounting. The 'Accounting' tab is active. It contains three sections: 'Enable accounting for administrator and command accounting to the ASA', 'Require accounting to allow accounting of user activity', and 'Require command accounting for ASA'. The first section has an 'Enable' checkbox and 'RAD' in the 'Server Group' dropdown. The second section has checkboxes for 'Serial', 'SSH', and 'Telnet', each with 'RAD' in the 'Server Group' dropdown. The third section has an 'Enable' checkbox and 'None' in the 'Server Group' dropdown, with a 'Privilege level' dropdown set to '0'. 'Apply' and 'Reset' buttons are at the bottom. The status bar shows 'student | 15' and the date '5/13/15 12:12:18 PM pet'.

The screenshot shows the Cisco ASDM 7.5 interface for ASA - 192.168.1.1. The left sidebar shows the navigation tree with 'NAT Rules' selected under 'Firewall'. The main pane displays the configuration for 'Network Objects' NAT (Rule 1). The configuration table is as follows:

Match Criteria: Original Packet				Action: Translated Packet			Options	Description
#	Source Intf	Dest Intf	Source	Destination	Service	Source	Destination	Service
1	Any	outside	any host	any	any	outside (?)	-- Original --	-- Original --

Buttons for 'Apply' and 'Reset' are visible at the bottom of the configuration pane. The status bar at the bottom shows 'student', '15', and the date '5/13/15 12:13:18 PM pet'.

The screenshot shows the Cisco ASDM 7.5 interface for ASA - 192.168.1.1. The left sidebar shows the navigation tree with 'Objects' selected under 'Firewall'. The main pane displays the configuration for 'Objects'. The configuration area lists the following items:

- Network Objects/Groups
- Service Objects/Groups
- Local Users
- Local User Groups
- Security Group Object Groups
- Class Maps
- Inspect Maps
- Regular Expressions
- TCP Maps
- Time Ranges

The status bar at the bottom shows 'student', '15', and the date '5/13/15 2:15:08 PM pet'.

Configuration > Firewall > Objects > Local Users

Create entries in the ASA local user database.

Command authorization must be enabled in order for the user account privileges to be enforced. To enable command authorization, go to [Authorization](#).

AAA authentication console commands must be enabled in order for certain access restrictions to be enforced. To enable AAA authentication command go to [Authentication](#).

Username	Privilege Level (Role)	Access Restrictions	VPN Group Policy	VPN Group Lock
student	15	Full	-- Inherit Group Policy --	-- Inherit Group Policy --
enable_15	15	Full	N/A	N/A
plao	15	Full	-- Inherit Group Policy --	-- Inherit Group Policy --

Buttons: Add, Edit, Delete

End:  Match Case

Buttons: Apply, Reset

student 15 3/13/15 12:14:18 PM pet

Configuration > Firewall > Objects > Network Objects/Groups

Filters:  Filter/Clear

Name	IP Address	Netmask	Description	Object NAT Address
any				
any-host	0.0.0.0	0.0.0.0		outside (P)
any4				
any6				
facebook	www.facebook.com			
My_ASA_Demo_Obj	1.10.8.20			

Buttons: Add, Edit, Delete, Where Used, Not Used

Buttons: Apply, Reset

student 15 3/13/15 12:30:08 PM pet

The screenshot shows the Cisco ASDM 7.5 interface for configuration. The left sidebar contains a tree view with categories like Access Rules, NAT Rules, Service Policy Rules, AAA Rules, Filter Rules, Public Servers, LRI, Filtering Servers, Threat Detection, Identity Options, Identity by TrustSec, Botnet Traffic Filter, Objects, Network Objects/Groups, Service Objects/Groups, Local Users, Local User Groups, Security Group Object Group, Class Maps, Inspect Maps, Regular Expressions, TCP Maps, Time Ranges, Unified Communications, and Advanced. The main pane is titled "Configuration > Firewall > Service Policy Rules". It displays a table of traffic classification rules:

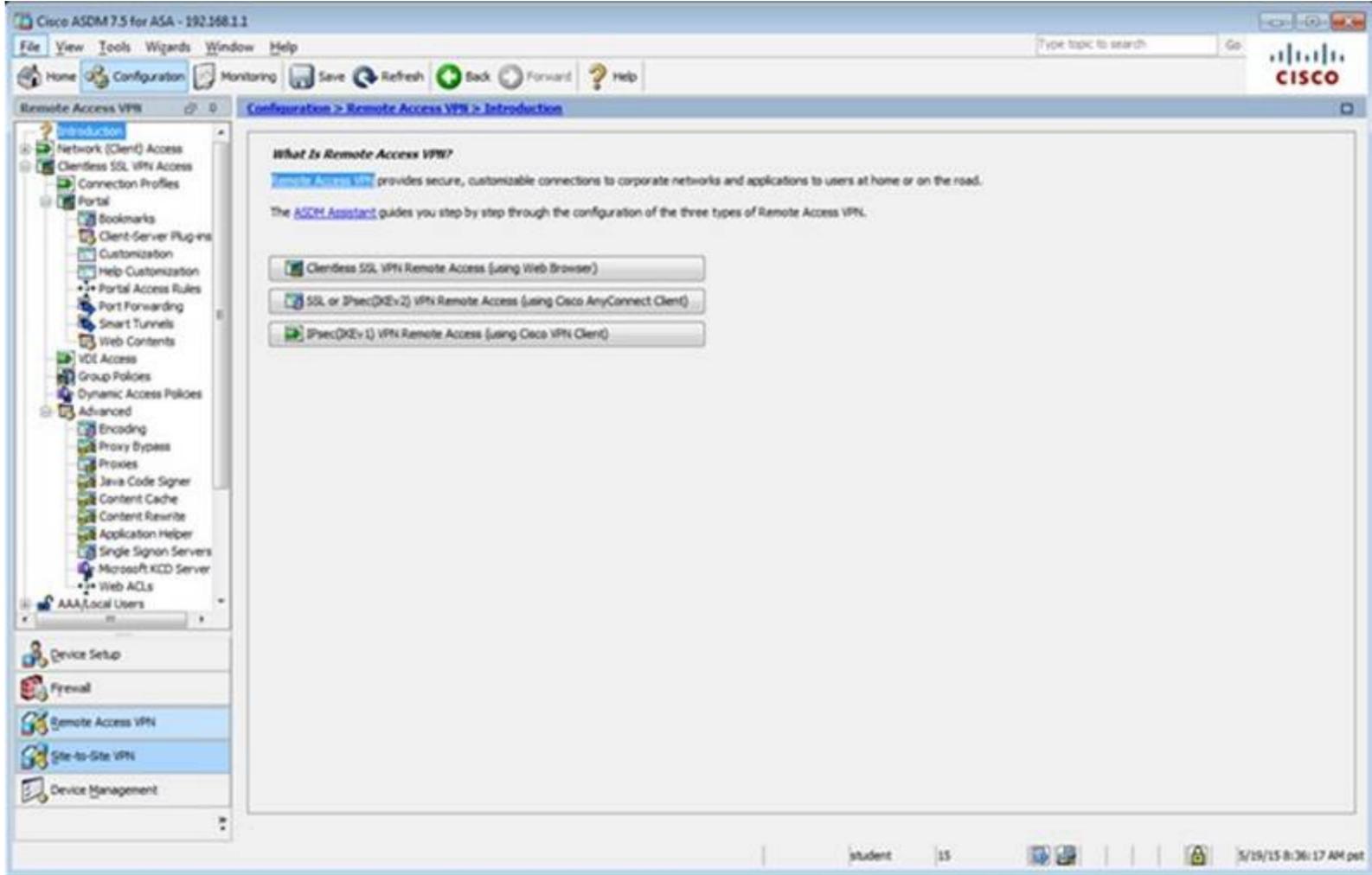
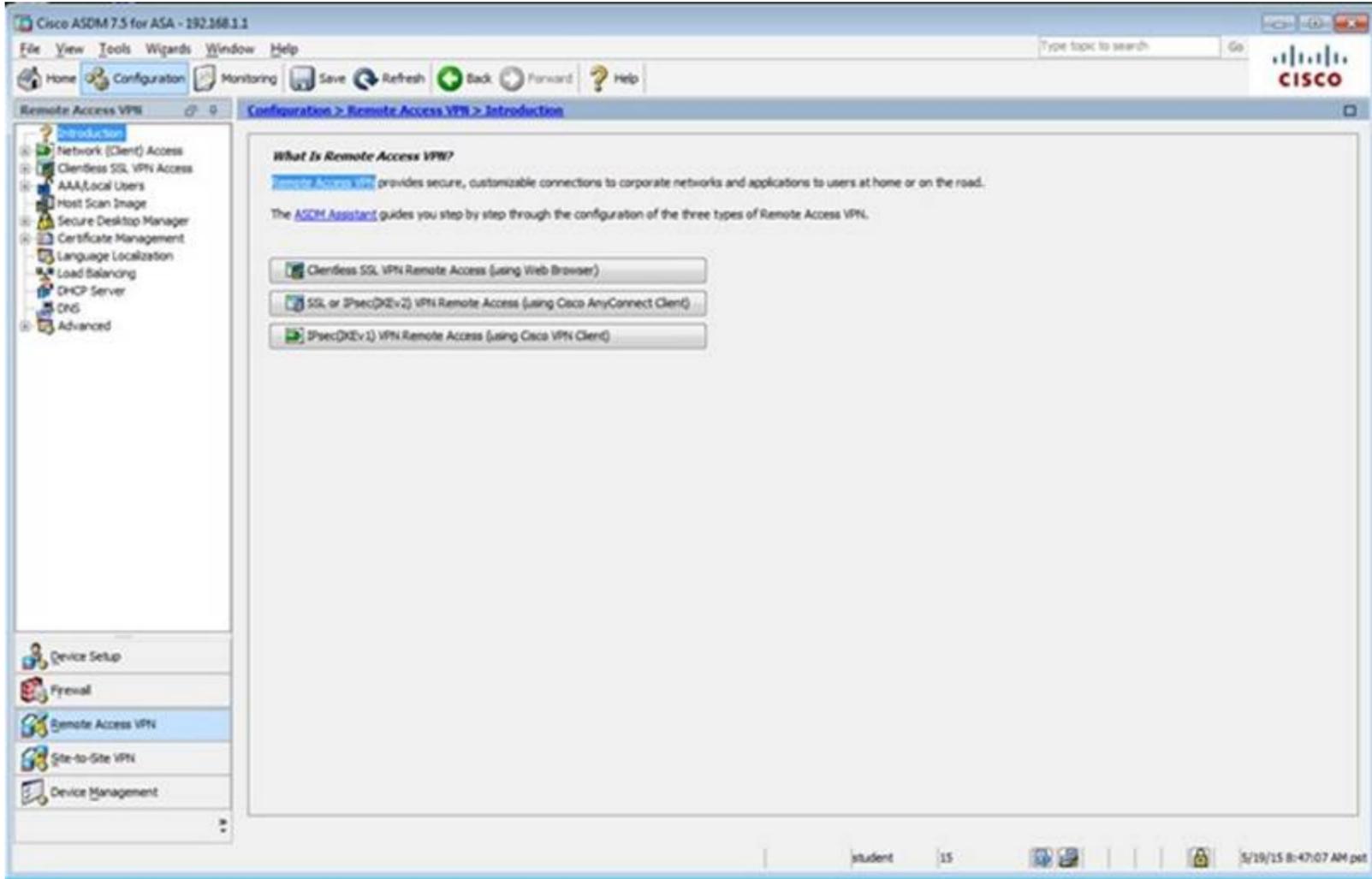
Name	#	Enabled	Match	Source	Src Security Group	Destination	Dest Security Group	Service	Time	Rule Actions	Descr
<b>Interface: any; Policy: asash_policy</b>											
class-default			Match	any		any		any traffic			
<b>Interface: inside; Policy: asaash_policy</b>											
class-default			Match	any		any		any traffic			
<b>Global; Policy: global_policy</b>											
inspection_de...			Match	any		any		default-inspec...		Inspect DNS Map preset... Inspect SMTP (14 more inspect actions)	

Buttons for "Apply" and "Reset" are visible at the bottom of the main pane. The status bar at the bottom shows "student | 15" and the date/time "5/13/15 12:15:48 PM pet".

The screenshot shows the Cisco ASDM 7.5 interface for configuration. The left sidebar is the same as in the previous screenshot. The main pane is titled "Configuration > Firewall > Access Rules". It displays a table of access rules:

#	Enabled	Source Criteria:			Destination Criteria:		Service	Action	Hits	Logging
		Source	User	Security Group	Destination	Security Group				
<b>any (1 implicit incoming rule)</b>										
1		any			Any less secure ne...		Permit			
<b>inside (1 incoming rule)</b>										
1		any			any		Permit	54...		
<b>ngint (0 implicit incoming rules)</b>										
<b>outside (0 implicit incoming rules)</b>										
<b>Global (1 implicit rule)</b>										
1		any			any		Deny			

Buttons for "Apply", "Reset", and "Advanced..." are visible at the bottom of the main pane. The status bar at the bottom shows "student | 15" and the date/time "5/13/15 12:28:58 PM pet".



The screenshot shows the Cisco ASDM 7.5 interface for configuring Clientless SSL VPN Access. The breadcrumb trail is: Configuration > Remote Access VPN > Clientless SSL VPN Access > Connection Profiles. The left sidebar shows a tree view with 'Remote Access VPN' selected. The main content area is titled 'Access Interfaces' and includes a table for enabling interfaces for clientless SSL VPN access.

Interface	Allow Access
outside	<input checked="" type="checkbox"/>
dmz	<input type="checkbox"/>
inside	<input type="checkbox"/>

Below the table, there are checkboxes for 'Bypass interface access lists for inbound VPN sessions' (checked) and 'Access lists from group policy and user policy always apply to the traffic.' (unchecked). The 'Login Page Setting' section includes 'Allow user to select connection profile on the login page.' (checked), 'Allow user to enter internal password on the login page.' (unchecked), and 'Shutdown portal login page.' (unchecked). The 'Connection Profiles' section features a table with columns: Name, Enabled, Aliases, Authentication Method, and Group Policy.

Name	Enabled	Aliases	Authentication Method	Group Policy
DefaultRAGroup	<input checked="" type="checkbox"/>		AAA(RAD)	DefGrpPolicy
DefaultVESHVPNGroup	<input checked="" type="checkbox"/>		AAA(RAD)	DefGrpPolicy
clientless	<input checked="" type="checkbox"/>	test	AAA(LOCAL)	Sales

Buttons for 'Apply' and 'Reset' are at the bottom. The status bar shows 'student' and the time '3/19/15 9:38:47 AM pet'.

The screenshot shows the 'Edit Clientless SSL VPN Connection Profile: clientless' dialog box. It has a 'Basic' tab selected. The fields are as follows:

- Name:** clientless
- Aliases:** test
- Authentication Method:** AAA (selected), Certificate, Both
- AAA Server Group:** LOCAL (dropdown), with a 'Manage...' button and a checkbox 'Use LOCAL if Server Group fails' (unchecked).
- DNS Server Group:** DefaultDNS (dropdown), with a 'Manage...' button.
- DNS Servers:** 192.168.1.2
- DNS Domain Name:** secure-x.local
- Default Group Policy:** Sales (dropdown), with a 'Manage...' button.
- Enable clientless SSL VPN protocol:**

At the bottom, there is a 'Find:' field, 'Next' and 'Previous' radio buttons, and 'OK', 'Cancel', and 'Help' buttons.

Edit Clientless SSL VPN Connection Profile: clientless

Basic

Advanced

- General
- Authentication
- Secondary Authentication
- Authorization
- Accounting
- NetBIOS Servers
- Clientless SSL VPN

Login and Logout Page Customization: DfltCustomization Manage...

Enable the display of Radius Reject-Message on the login screen when authentication is rejected

Enable the display of SecurId messages on the login screen

Connection Aliases

This SSL VPN access method will present a list of aliases configured for all connection profiles. You must enable the Login Page Setting in the main panel to complete the configuration.

+ Add - Delete (The table is in-line editable.) i

Alias	Enabled
test	<input checked="" type="checkbox"/>

Group URLs

This SSL VPN access method will automatically select the connection profile, without the need for user selection.

+ Add - Delete (The table is in-line editable.) i

URL	Enabled
https://209.165.201.2/test	<input checked="" type="checkbox"/>

You can chose not to run Cisco Secure Desktop (CSD) on client machine when using group URLs defined above to access the ASA. (If a client connects using a connection alias, this setting is ignored)

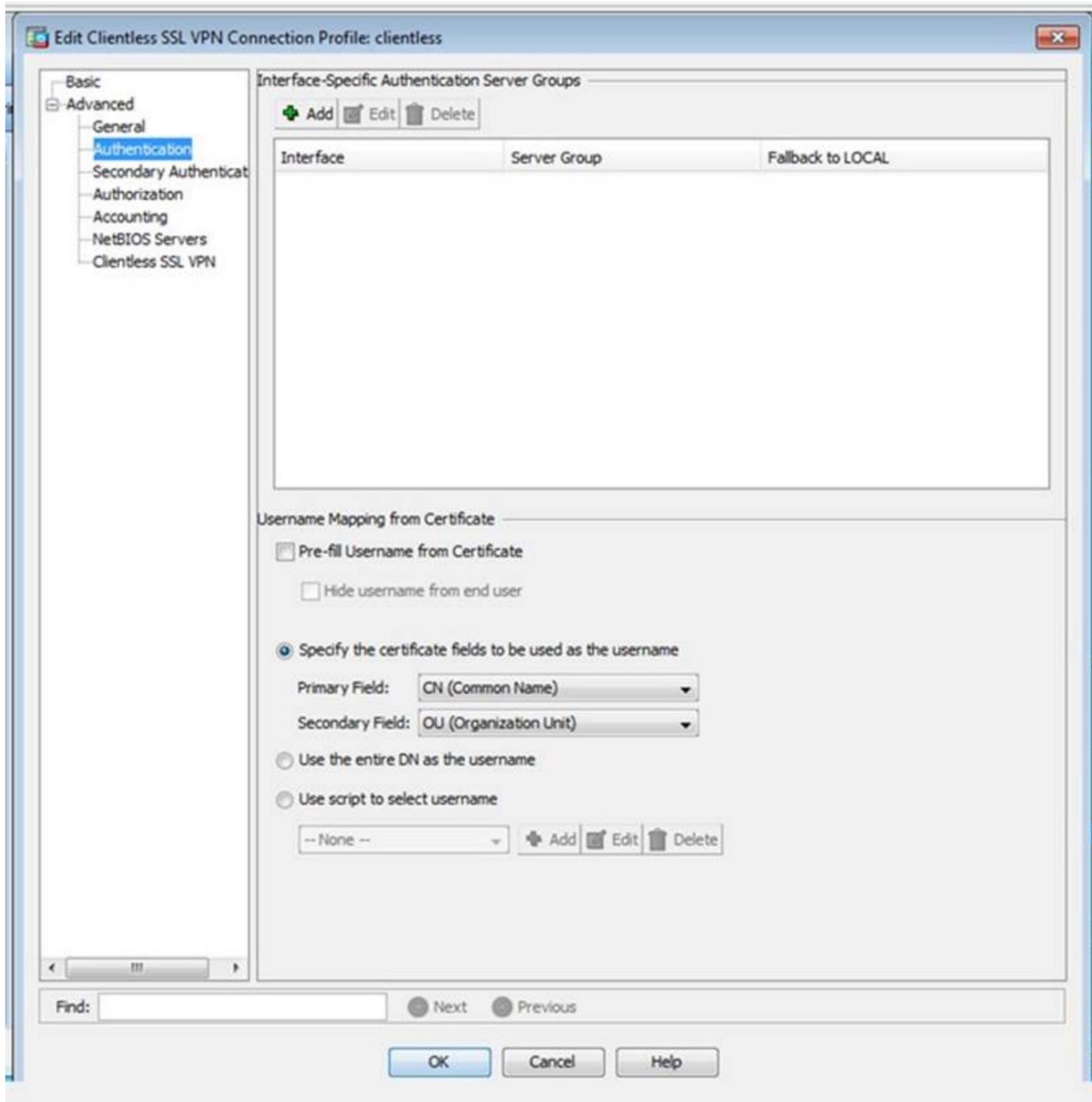
Always run CSD

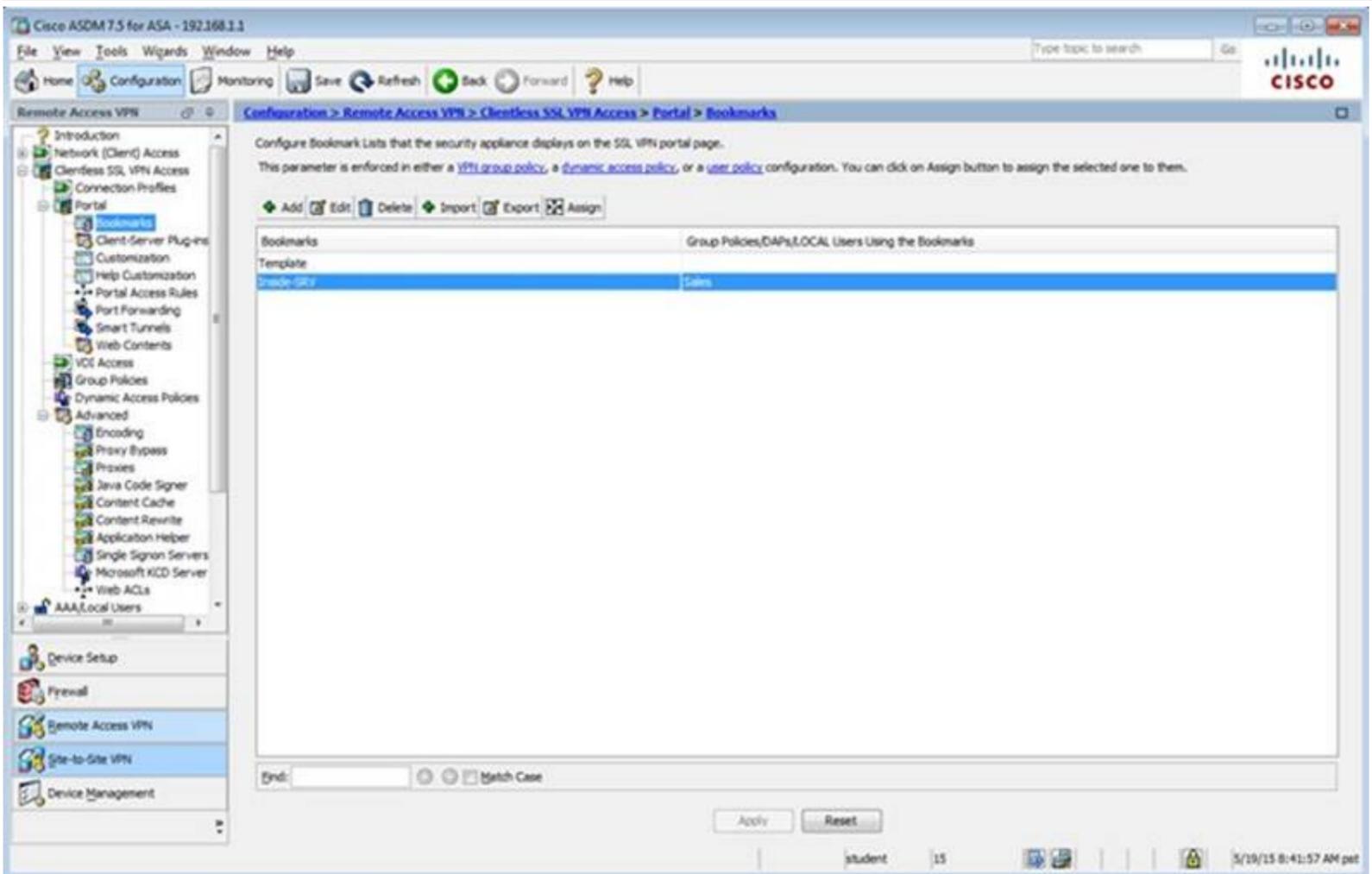
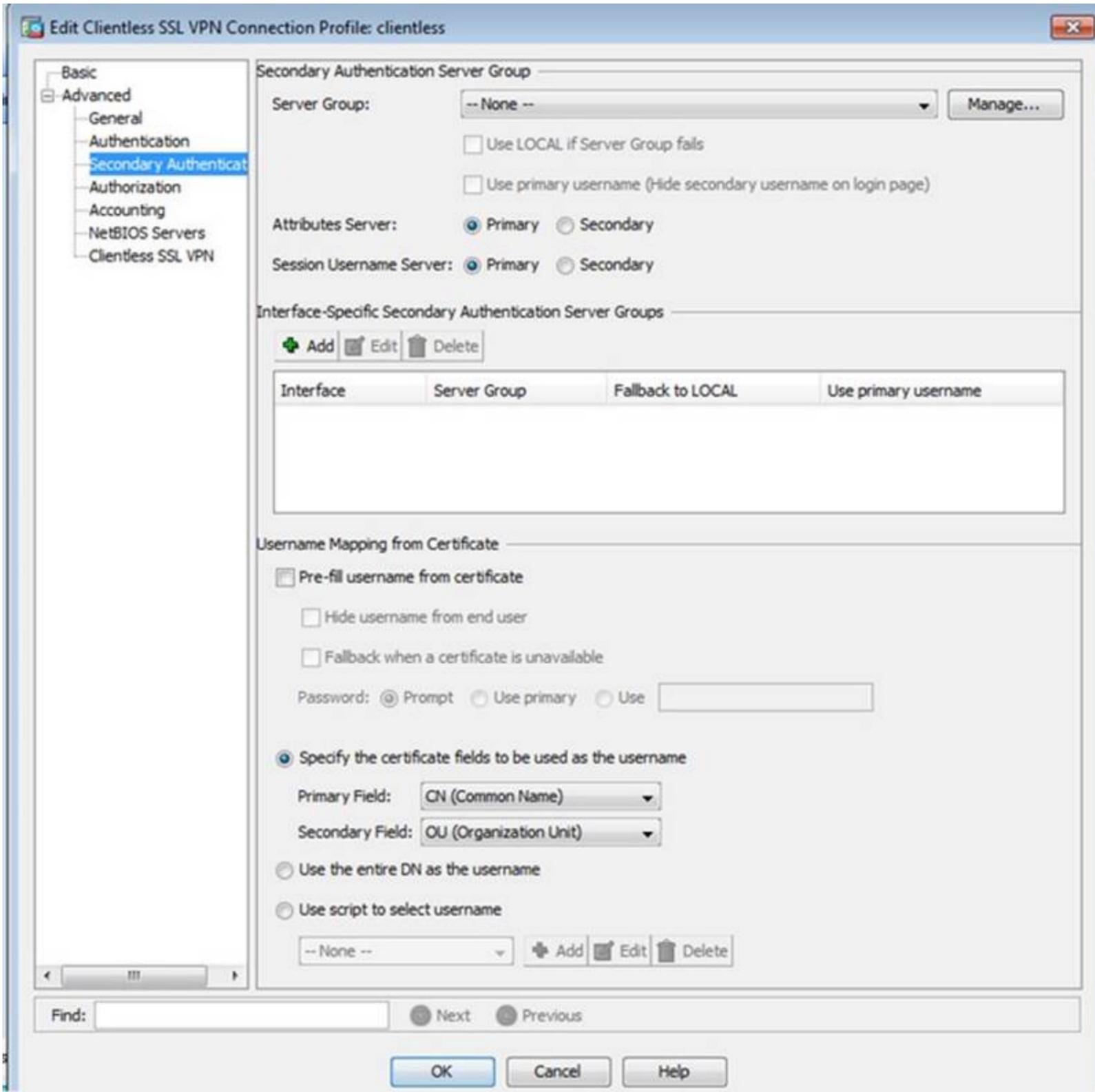
Disable CSD for both AnyConnect and Clientless SSL VPN

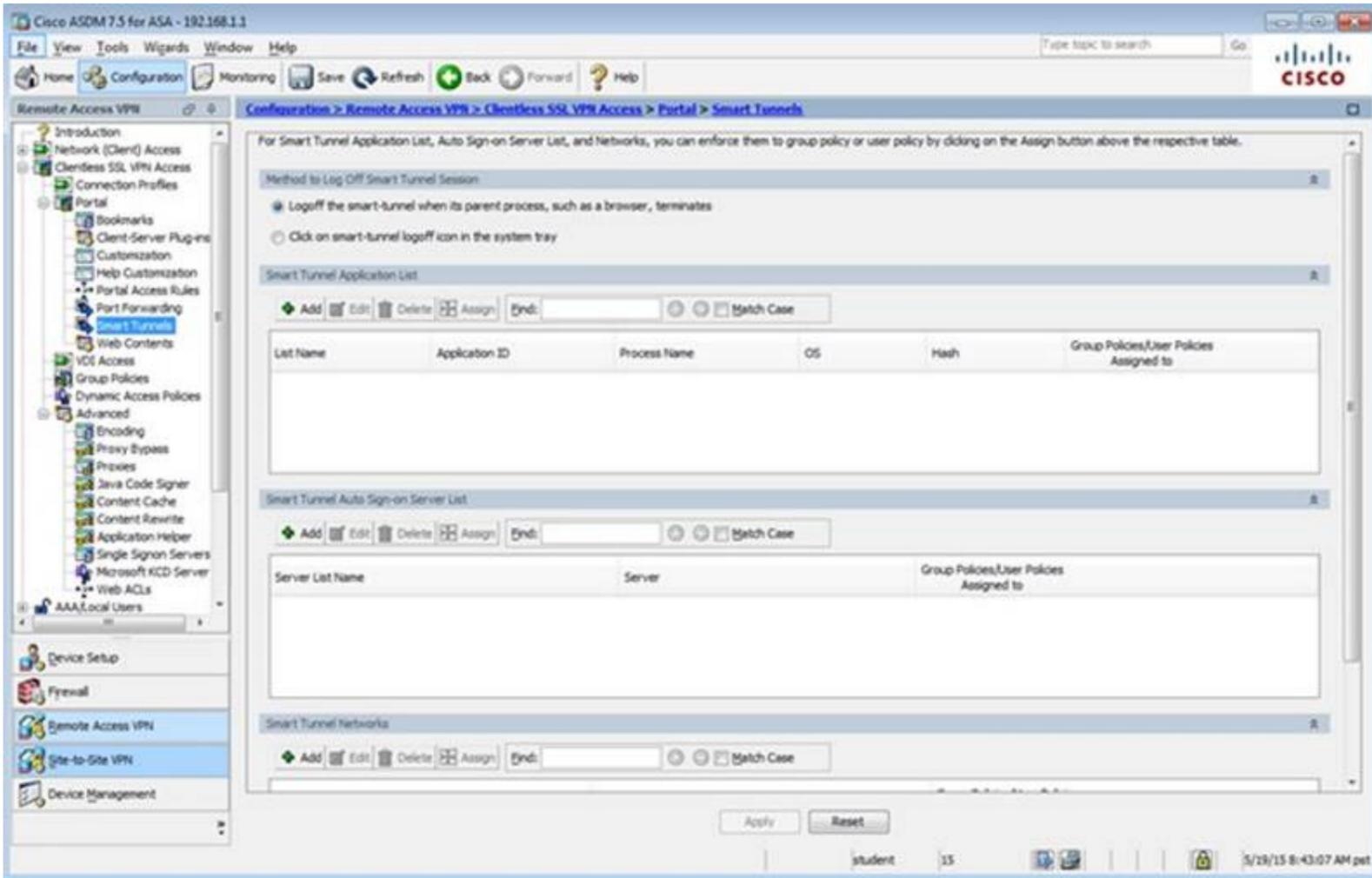
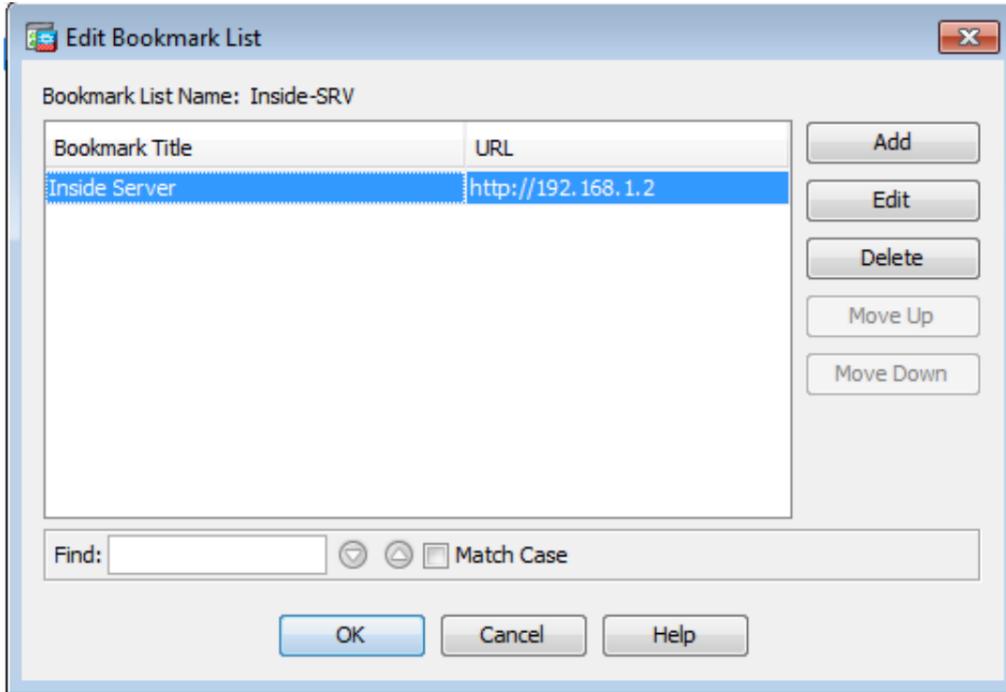
Disable CSD for AnyConnect only

Find:  Next Previous

OK Cancel Help







Cisco ASDM 7.5 for ASA - 192.168.1.1

Configuration > Remote Access VPN > Clientless SSL VPN Access > Portal > Port Forwarding

Configure Port Forwarding Lists that the security appliance uses to grant users access to TCP-based applications over a clientless SSL VPN connection. This parameter is enforced in either a [VPN group policy](#), a [dynamic access policy](#), or a [user policy](#) configuration. You can click on Assign button to assign the selected one to them.

List Name	Local TCP Port	Remote Server	Remote TCP Port	Description	Group Policies/User Policies Assigned to

Find:

student 15 5/29/15 8:43:47 AM pet

Cisco ASDM 7.5 for ASA - 192.168.1.1

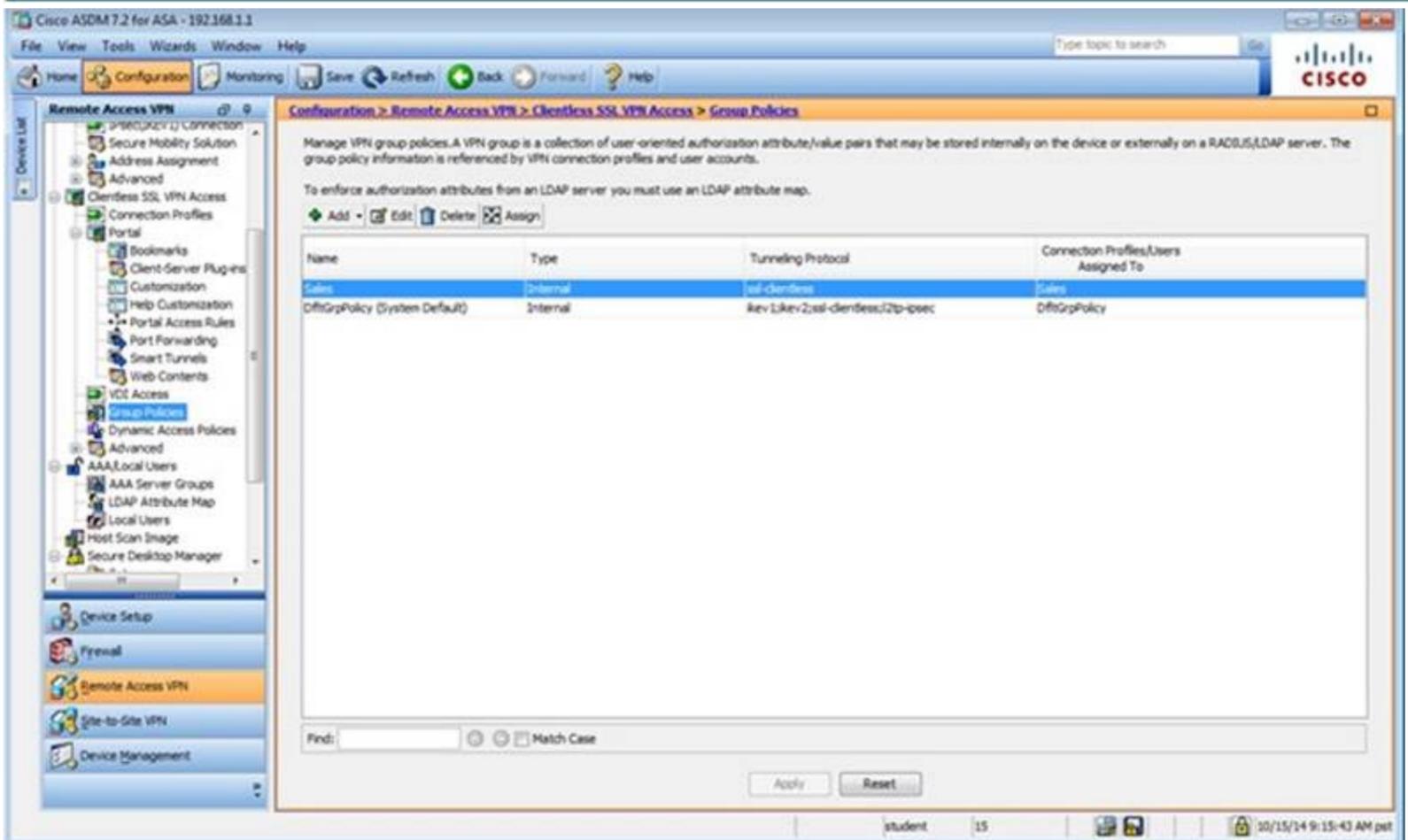
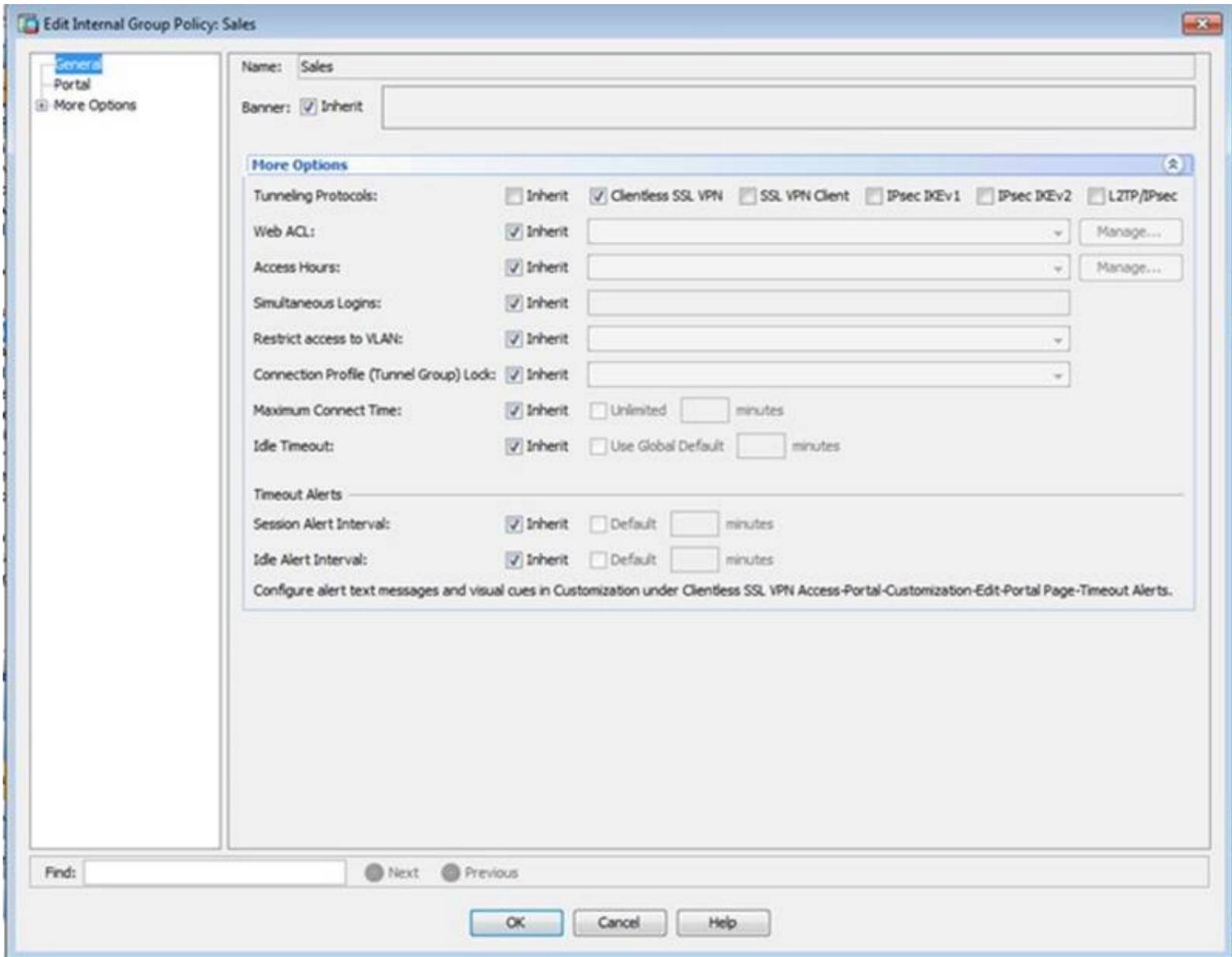
Configuration > Remote Access VPN > Clientless SSL VPN Access > Group Policies

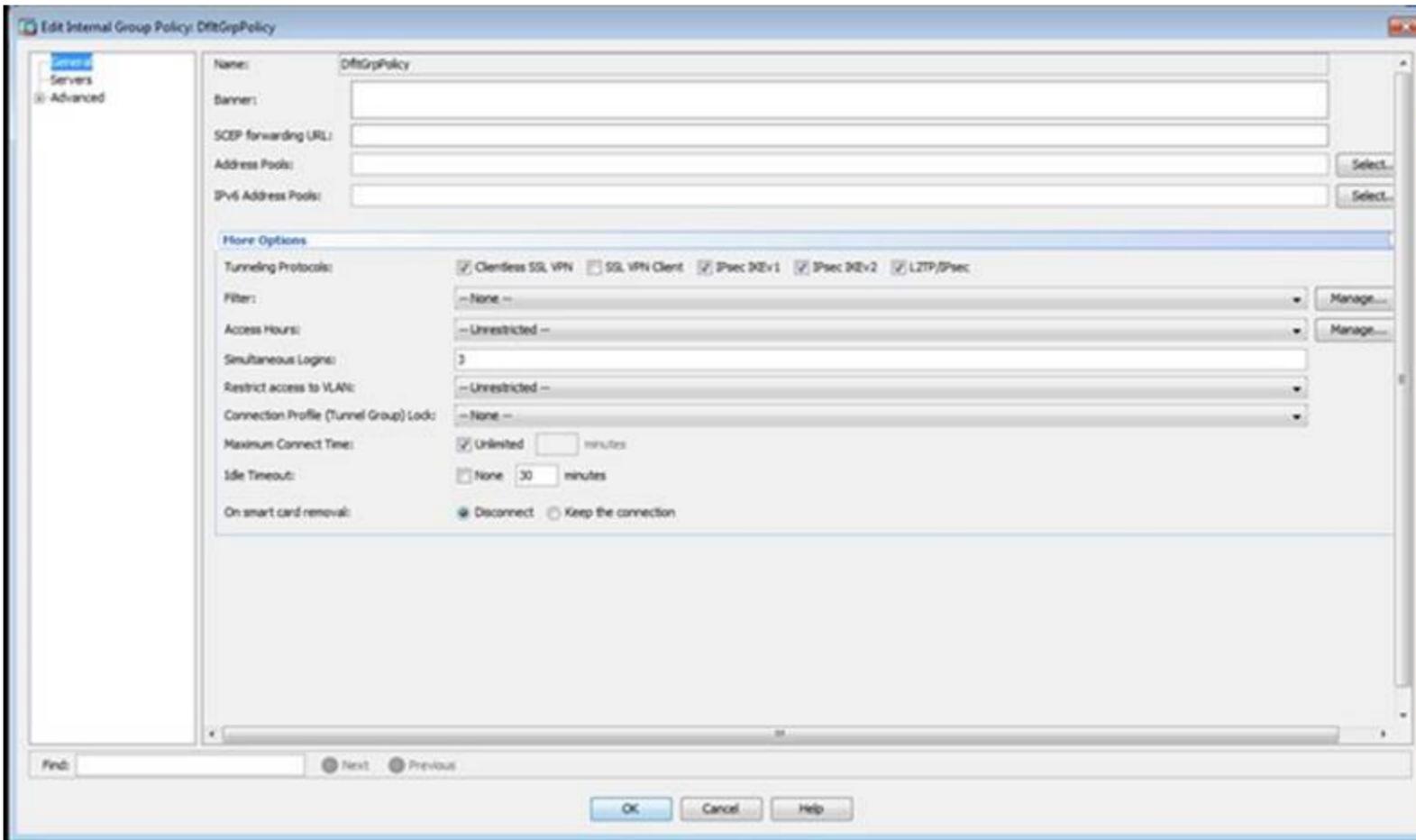
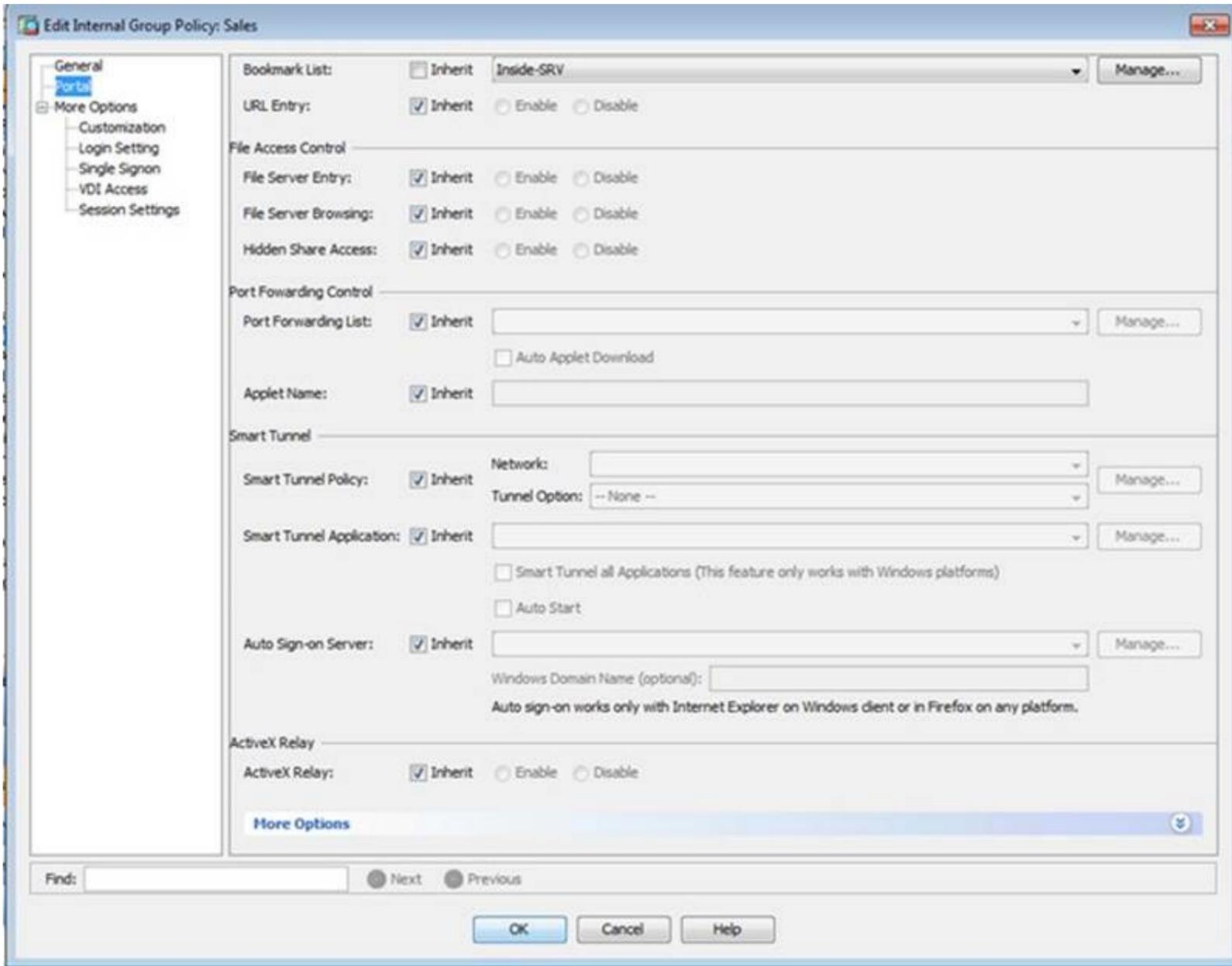
Manage VPN group policies. A VPN group is a collection of user-oriented authorization attribute/value pairs that may be stored internally on the device or externally on a RADIUS/LDAP server. The group policy information is referenced by VPN connection profiles and user accounts. To enforce authorization attributes from an LDAP server you must use an [LDAP attribute map](#).

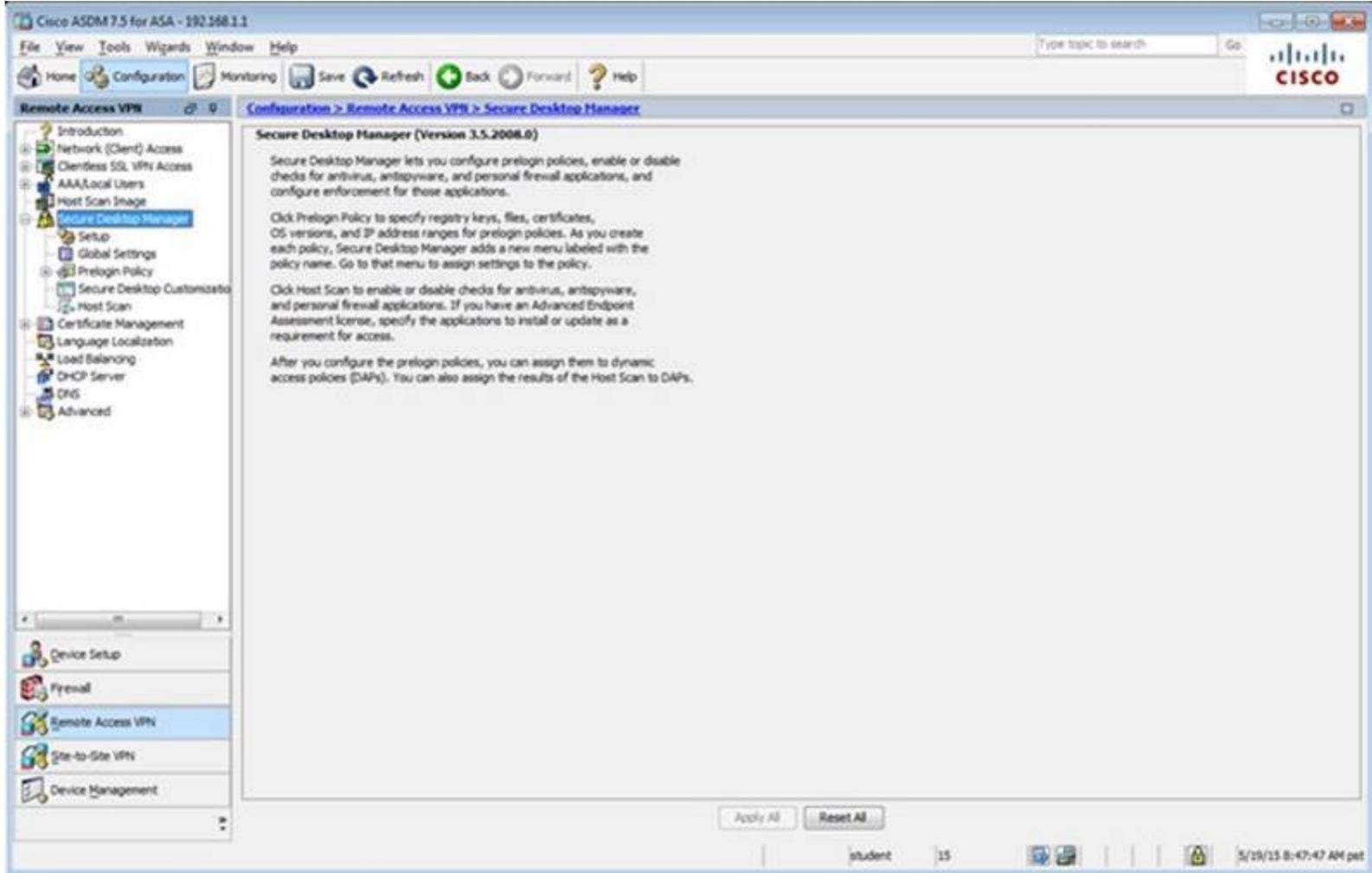
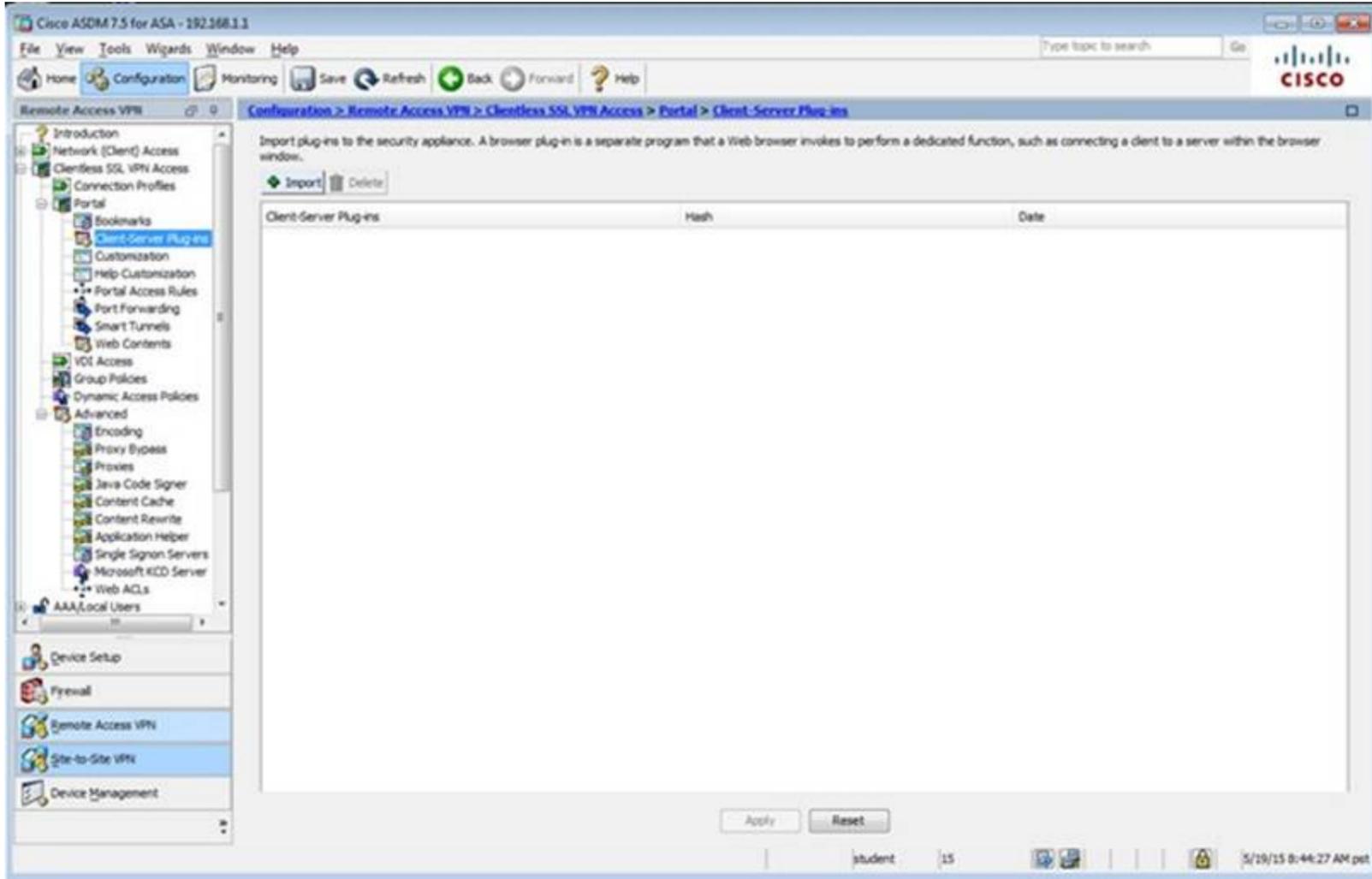
Name	Type	Tunneling Protocol	Connection Profiles/Users Assigned To
Calvin	Internal	ssl-clientless	Clientless
DefaultGroupPolicy (System Default)	Internal	Rev 1:rev 2:ssl-clientless/2ip-sec	DefaultRAGroup,DefaultL2,Group,DefaultRAMPGroup,Def...

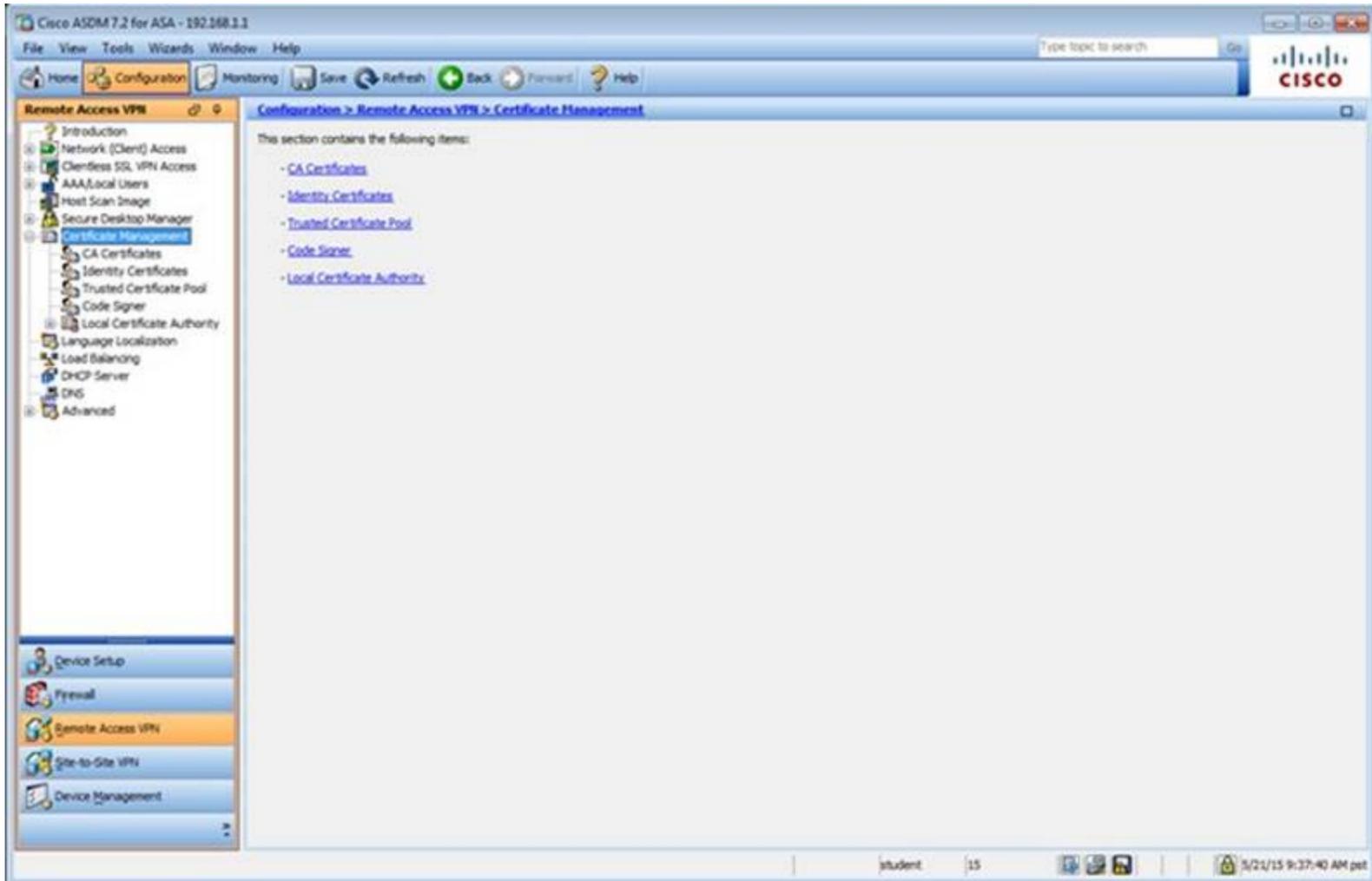
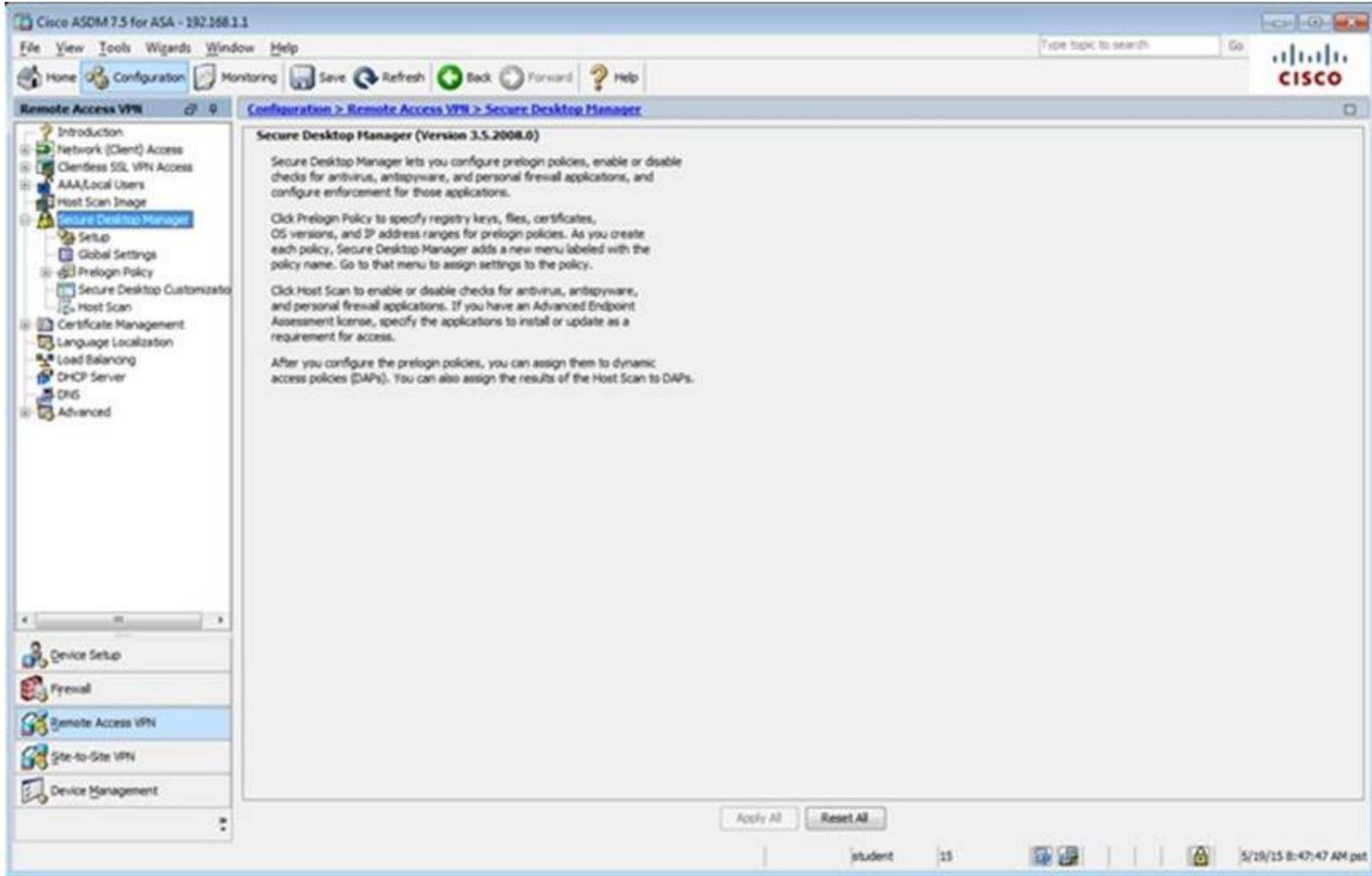
Find:

student 15 5/29/15 8:49:27 AM pet









The screenshot shows the Cisco ASDM 7.5 interface for configuration. The breadcrumb trail is: Configuration > Remote Access VPN > Certificate Management > Identity Certificates. A table lists issued certificates:

Issued To	Issued By	Expiry Date	Associated Trustpoints	Usage	Public Key Type
asdmname=IP17-ASA.sec	asdmname=IP17-ASA.sec	11: 10:33 pm Dec 20 2024	ASDM_TrustPoint1	General Purpose	RSA (2048 bits)

Below the table, there are sections for 'Certificate Expiration Alerts' (Send the first alert before: 60 days, Repeat Alert Interval: 7 days) and 'Public CA Enrollment' with buttons for 'Enroll ASA SSL certificate with Entrust' and 'Launch ASDM Identity Certificate Wizard'. The bottom status bar shows 'student 15' and the time '5/19/15 8:51:47 AM pt'.

The screenshot shows the 'Advanced' configuration page for Remote Access VPN. The breadcrumb trail is: Configuration > Remote Access VPN > Advanced. The page lists the following items:

- [Advanced Enrollment](#)
- [SSL Settings](#)
- [Certificate to AnyConnect and Clientless SSL VPN Connection Profile Maps](#)
- [HTTP Redirect](#)
- [Maximum VPN Sessions](#)
- [Crypto Engine](#)
- [E-mail Proxy](#)

The bottom status bar shows 'student 15' and the time '5/19/15 8:52:47 AM pt'.

Cisco ASDM 7.5 for ASA - 192.168.1.1

Configuration > Remote Access VPN > Advanced > SSL Settings

Configure SSL parameters. These parameters affect both ASDM and SSL VPN access.

The minimum SSL version for the security appliance to negotiate as a "server": TLS V1

The minimum SSL version for the security appliance to negotiate as a "client": TLS V1

Diffie-Hellman group to be used with SSL: Group2 - 1024-bit modAas

ECDH group to be used with SSL: Group19 - 256-bit EC

Encryption

Cipher Version	Cipher Security Level	Cipher Algorithms/ Custom String
Default	Medium	DES-CBC3-SHA AES128-SHA DHE-RSA-AES128-SHA AES256-SHA ...
TLSV1	Medium	DES-CBC3-SHA AES128-SHA DHE-RSA-AES128-SHA AES256-SHA ...
TLSV1.1	Medium	DES-CBC3-SHA AES128-SHA DHE-RSA-AES128-SHA AES256-SHA ...
TLSV1.2	Medium	DES-CBC3-SHA AES128-SHA DHE-RSA-AES128-SHA AES256-SHA ...
DTLSV1	Medium	DES-CBC3-SHA AES128-SHA DHE-RSA-AES128-SHA AES256-SHA ...

Server Name Indication (SNI)

Domain	Certificate
dmz	ASDM_TrustPoint1.h...

Certificates

Specify which certificates, if any, should be used for SSL authentication on each interface. The fallback certificate will be used on interfaces not associated with a certificate of their own.

Apply Reset

student 15 5/19/15 8:54:07 AM pet

Cisco ASDM 7.5 for ASA - 192.168.1.1

Configuration > Remote Access VPN > Advanced > Maximum VPN Sessions

Configure the maximum number of VPN sessions allowed at any given time.

Maximum AnyConnect Sessions: 2

Maximum Other VPN Sessions: 250

Apply Reset

student 15 5/19/15 8:54:47 AM pet

**Configuration > Remote Access VPN > Network (Client) Access**

**What is Network (Client) Access?**  
 After a VPN client, such as AnyConnect, is authenticated, remote users can access corporate networks or applications as if they were on-site. The data traffic between remote users and the corporate network is secured by being encrypted when going through the Internet.  
 The *ASDM Assistant* provides simple "You Do It" steps for configuring Network (Client) Access.

**Important Concepts**  
 Following are some important concepts for setting up a connection.

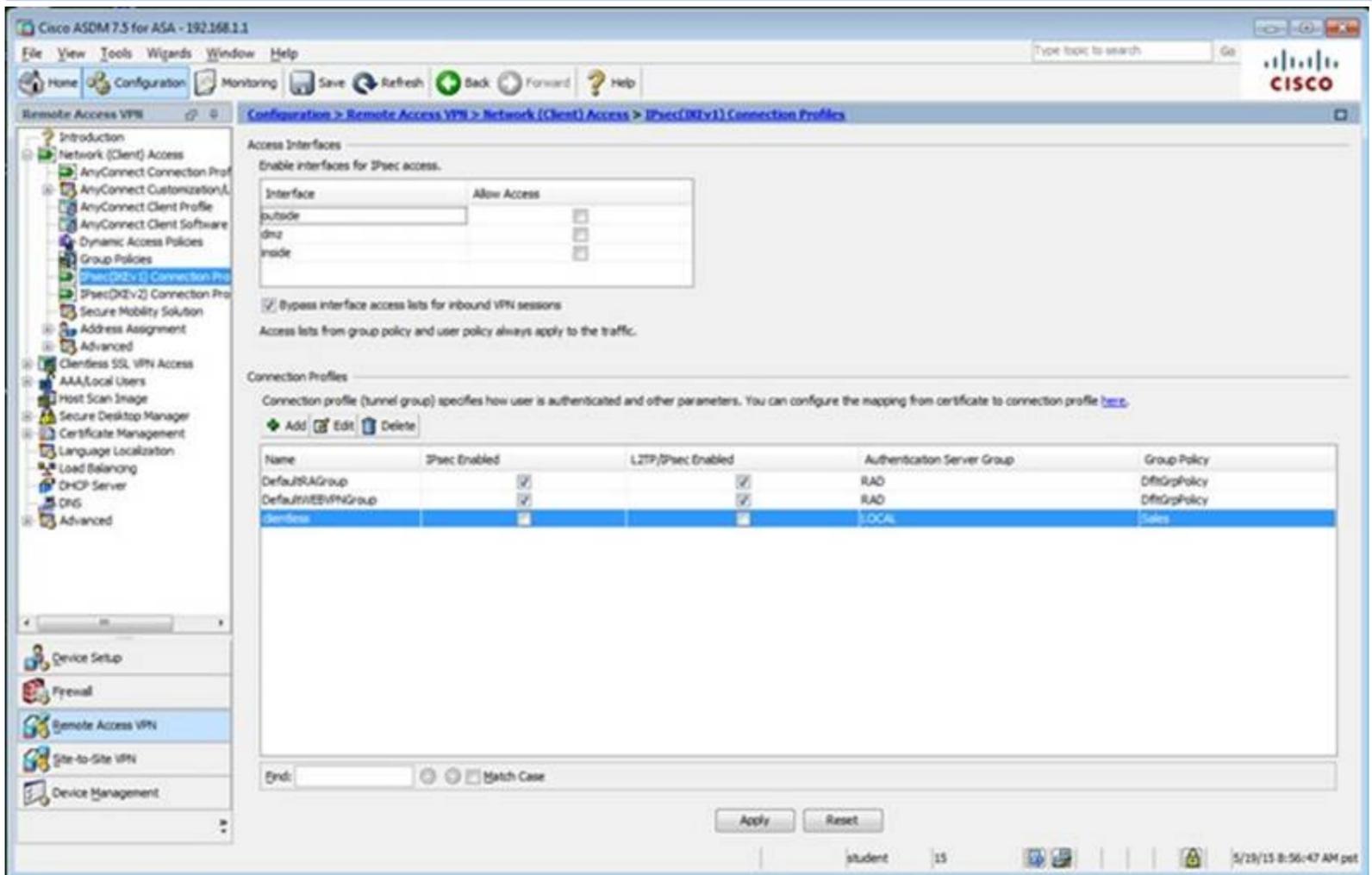
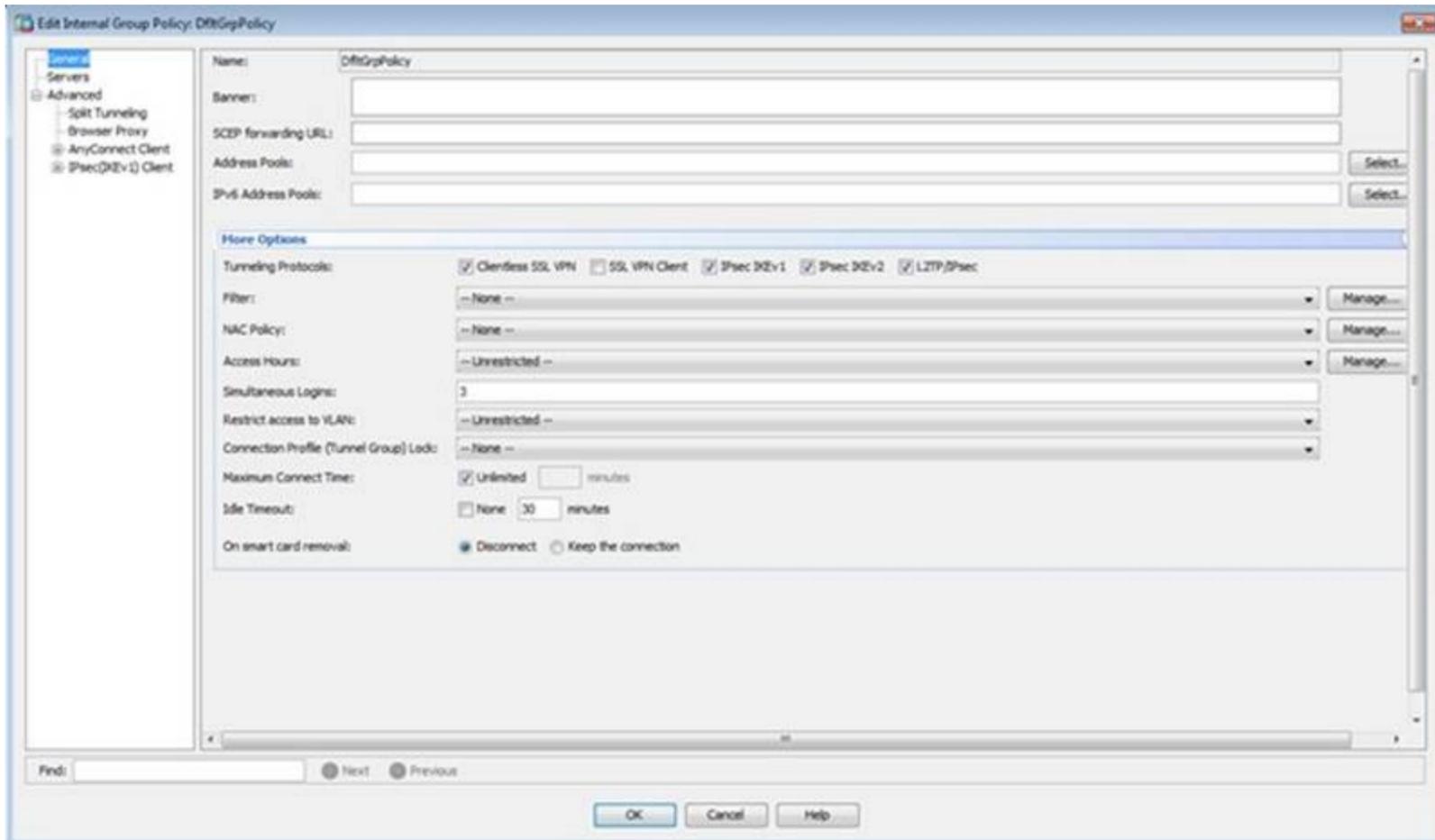
- 1. SSL tunnel and IPsec tunnel**  
 They are two different ways to encrypt data traffic. An SSL tunnel uses SSL protocol to encrypt data, while an IPsec tunnel uses IPsec protocol. Cisco AnyConnect VPN Client supports SSL and IPsec(DKv2) protocols, Cisco VPN Client supports only IPsec(DKv1) protocol.
- 2. User and connection profile**  
 To access corporate network resources, remote users must authenticate, and identify which Connection Profile (Tunnel Group) to use. This connection profile specifies how the security appliance authenticates users.  
 You configure user account database in [AAA/Local Users](#).  
 You configure AnyConnect connection profile in [AnyConnect Connection Profiles](#), IPsec connection profile in [IPsec\(DKv1\) Connection Profiles](#).
- 3. Access policy**  
 Access policies control how remote users can access corporate networks. An access policy includes the following:
  - Session control - how long a session can remain idle before it is closed.
  - Endpoint security - determines the conditions that remote PCs must satisfy to connect, for example, requiring up-to-date anti-virus software.
 You configure session control policies in [Dynamic Access Policies](#) or [Group Policies](#).  
 You configure endpoint security policies for AnyConnect client in [Secure Desktop Manager](#). You also have the option to setup [NAC](#) based endpoint security policies.

**Configuration > Remote Access VPN > Network (Client) Access > Group Policies**

Manage VPN group policies. A VPN group is a collection of user-oriented authorization attribute/value pairs that may be stored internally on the device or externally on a RADIUS/LDAP server. The group policy information is referenced by VPN connection profiles and user accounts.  
 To enforce authorization attributes from an LDAP server you must use an [LDAP attribute map](#).

Name	Type	Tunneling Protocol	Connection Profiles/Users Assigned To
Sales	Internal	ssl-clientless	clientless
DfGryPolicy (System Default)	Internal	rev-2,rev-2,ssl-clientless/2ip-sec	DefaultRAGroup/Default_2_Group/Default/DFGryPolicyGroup

Find:



The screenshot shows the Cisco ASDM 7.5 interface for configuration. The breadcrumb path is: Configuration > Remote Access VPN > Network (Client) Access > AnyConnect Connection Profiles. The main content area includes:

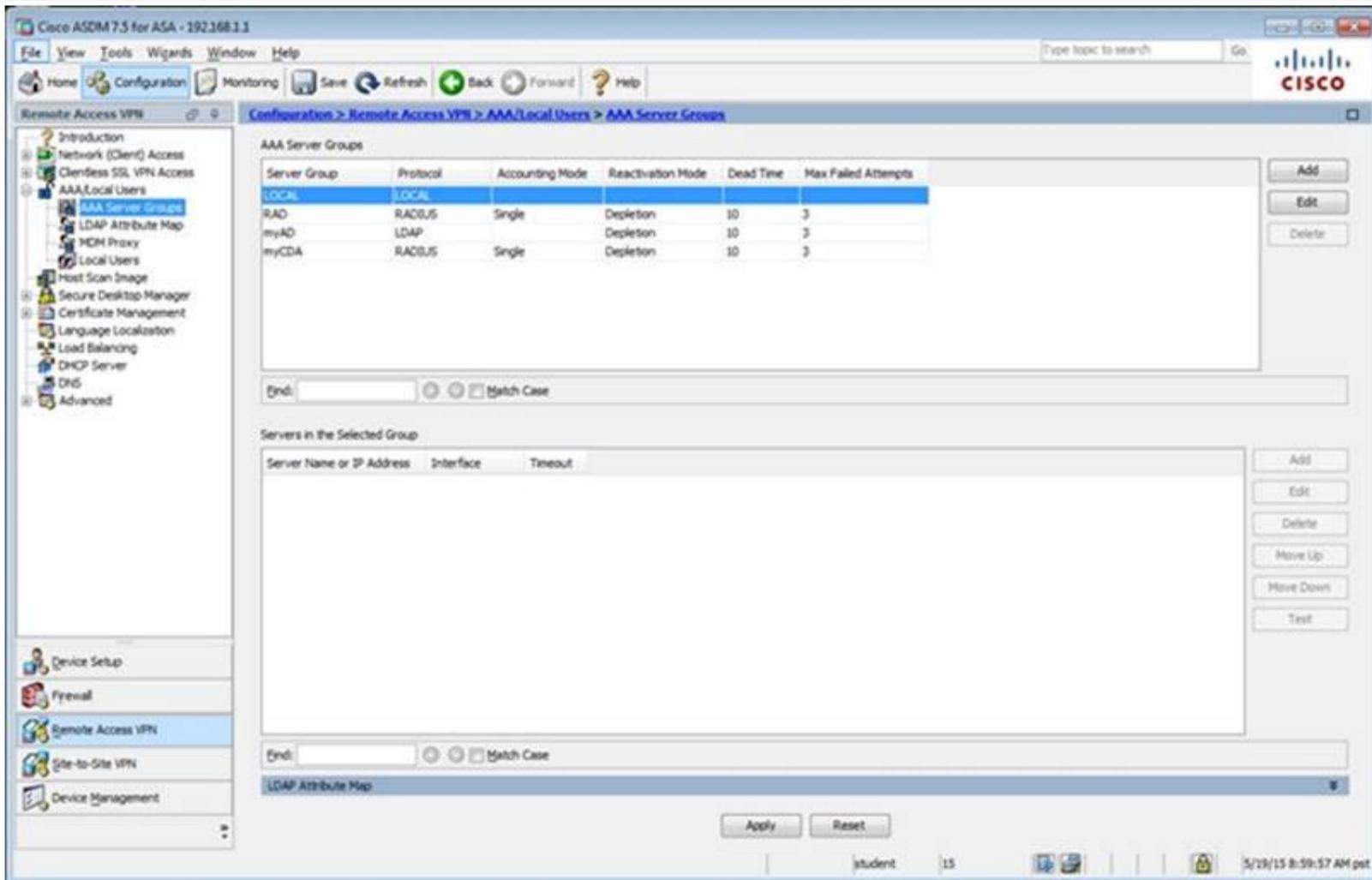
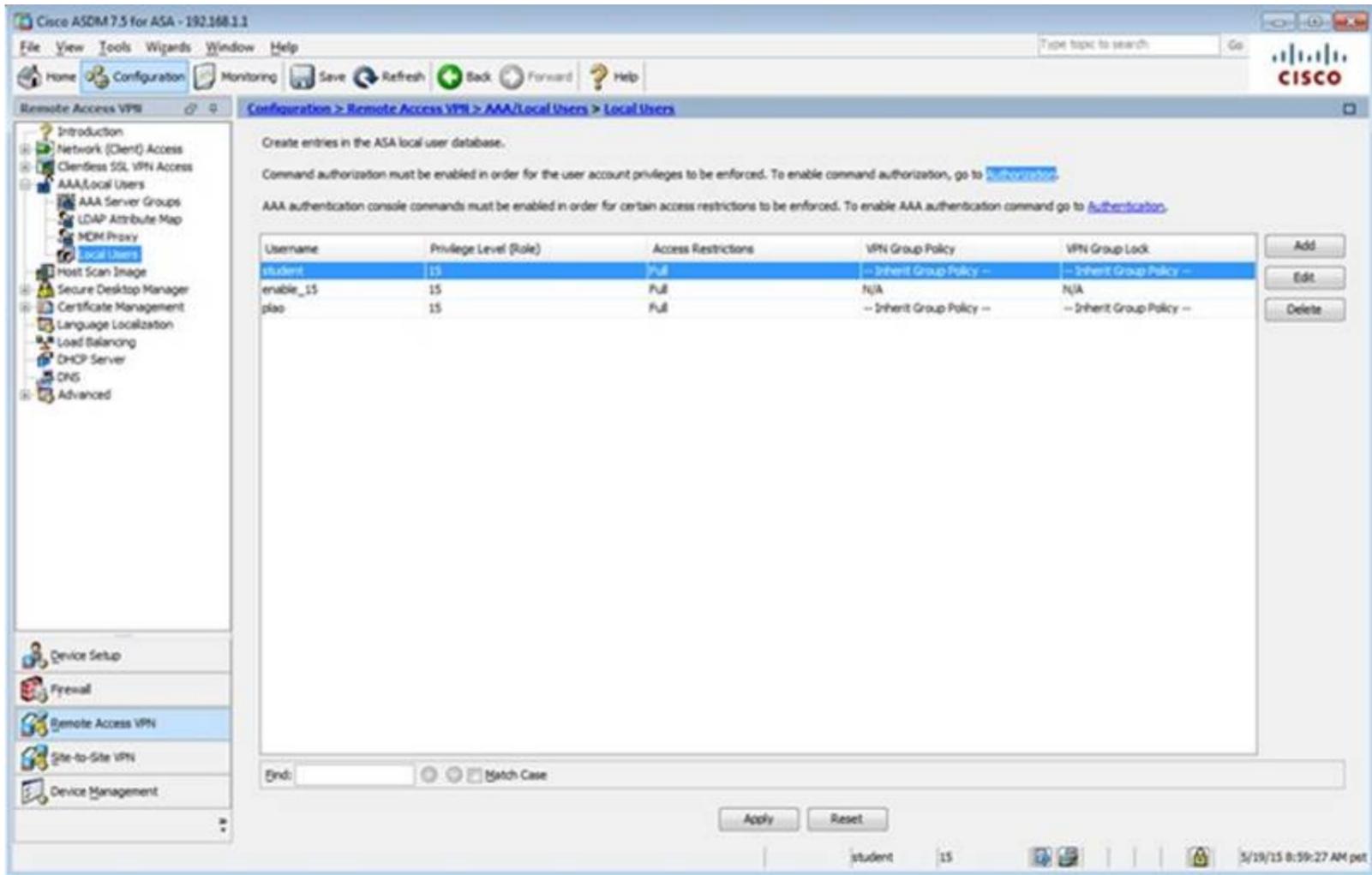
- Access Interfaces:** A table to configure access for different interfaces.
 

Interface	SSL Access		IPsec (IKEv2) Access	
	Allow Access	Enable DTLS	Allow Access	Enable Client Services
outside	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
dmz	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
inside	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- Connection Profiles:** A table listing configured profiles.
 

Name	SSL Enabled	IPsec Enabled	Aliases	Authentication Method	Group Policy
DefaultRAGroup	<input type="checkbox"/>	<input checked="" type="checkbox"/>		AAA(RAC)	DfltGrpPolicy
DefaultISEVPNGroup	<input type="checkbox"/>	<input checked="" type="checkbox"/>		AAA(RAC)	DfltGrpPolicy
anyconnect	<input type="checkbox"/>	<input type="checkbox"/>	test	AAA(LOCAL)	Sales

The screenshot shows the Cisco ASDM 7.5 interface for configuration. The breadcrumb path is: Configuration > Remote Access VPN > AAA/Local Users. The main content area includes:

- AAA/Local Users:** A list of items contained in this section:
  - AAA Server Groups
  - LDAP Attribute Map
  - MDM Proxy
  - Local Users

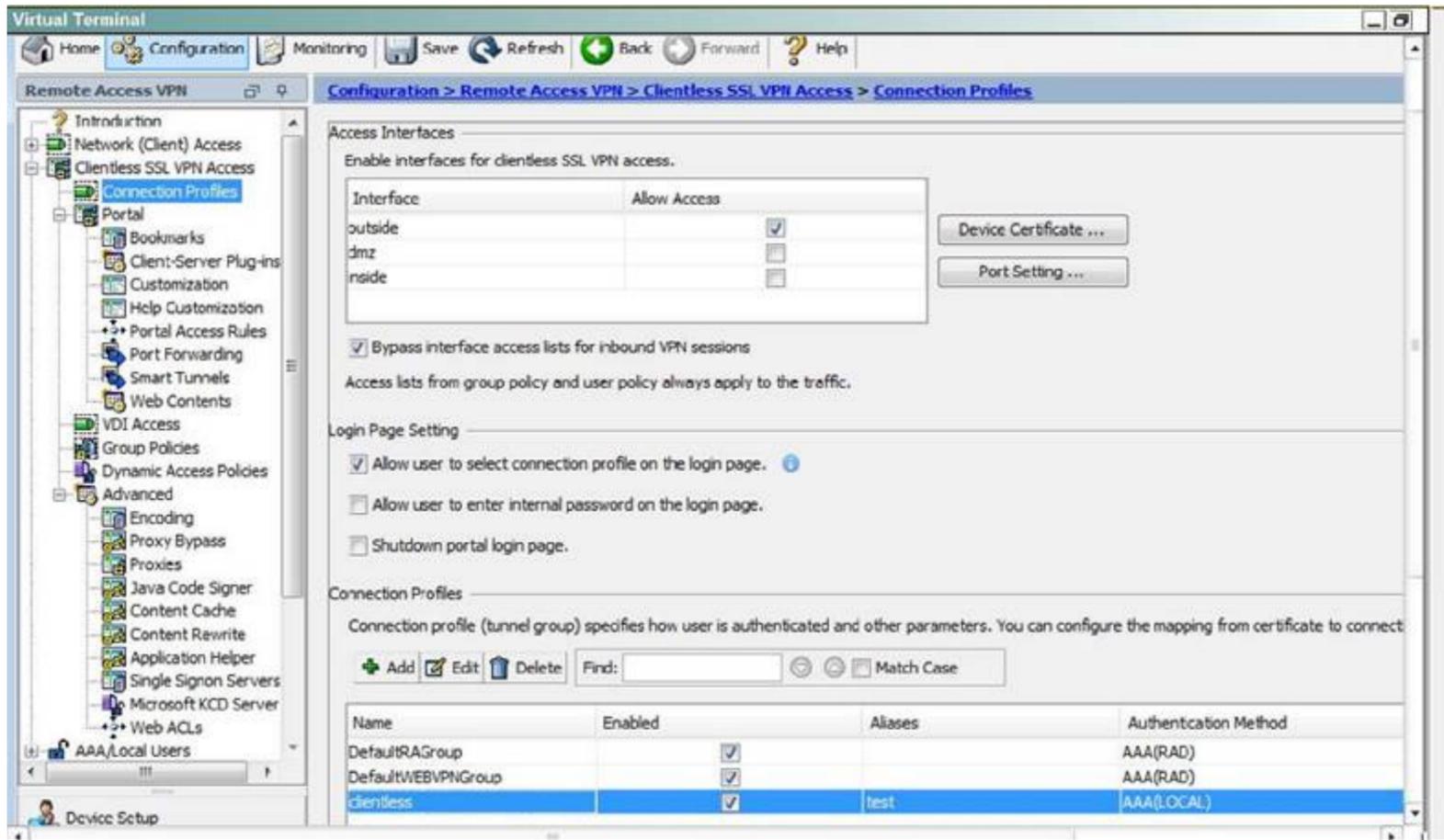


Which user authentication method is used when users login to the Clientless SSLVPN portal using <https://209.165.201.2/test?>

- A. AAA with LOCAL database
- B. AAA with RADIUS server
- C. Certificate
- D. Both Certificate and AAA with LOCAL database
- E. Both Certificate and AAA with RADIUS server

**Answer:** A

**Explanation:** This can be seen from the Connection Profiles Tab of the Remote Access VPN configuration, where the alias of test is being used,



**NEW QUESTION 17**

Which EAP method uses Protected Access Credentials?

- A. EAP-FAST
- B. EAP-TLS
- C. EAP-PEAP
- D. EAP-GTC

**Answer:** A

**Explanation:** Flexible Authentication via Secure Tunneling (EAP-FAST) is a protocol proposal by Cisco Systems as a replacement for LEAP. The protocol was designed to address the weaknesses of LEAP while preserving the "lightweight" implementation. Use of server certificates is optional in EAP-FAST. EAP-FAST uses a Protected Access Credential (PAC) to establish a TLS tunnel in which client credentials are verified.

Source: [https://en.wikipedia.org/wiki/Extensible\\_Authentication\\_Protocol](https://en.wikipedia.org/wiki/Extensible_Authentication_Protocol)

**NEW QUESTION 21**

Which two statements about stateless firewalls are true? (Choose two.)

- A. They compare the 5-tuple of each incoming packet against configurable rules.
- B. They cannot track connections.
- C. They are designed to work most efficiently with stateless protocols such as HTTP or HTTPS.
- D. Cisco IOS cannot implement them because the platform is stateful by nature.
- E. The Cisco ASA is implicitly stateless because it blocks all traffic by default.

**Answer:** AB

**Explanation:** In stateless inspection, the firewall inspects a packet to determine the 5-tuple--source and destination IP addresses and ports, and protocol--information contained in the packet. This static information is then compared against configurable rules to determine whether to allow or drop the packet. In stateless inspection the firewall examines each packet individually, it is unaware of the packets that have passed through before it, and has no way of knowing if any given packet is part of an existing connection, is trying to establish a new connection, or is a rogue packet.

Source:

[http://www.cisco.com/c/en/us/td/docs/wireless/asr\\_5000/19-0/XMART/PSF/19-PSF-Admin/19-PSF-Admin\\_chapter\\_01.html](http://www.cisco.com/c/en/us/td/docs/wireless/asr_5000/19-0/XMART/PSF/19-PSF-Admin/19-PSF-Admin_chapter_01.html)

**NEW QUESTION 23**

Which statement correctly describes the function of a private VLAN?

- A. A private VLAN partitions the Layer 2 broadcast domain of a VLAN into subdomains
- B. A private VLAN partitions the Layer 3 broadcast domain of a VLAN into subdomains
- C. A private VLAN enables the creation of multiple VLANs using one broadcast domain
- D. A private VLAN combines the Layer 2 broadcast domains of many VLANs into one major broadcast domain

**Answer:** A

**Explanation:** Private VLAN divides a VLAN (Primary) into sub-VLANs (Secondary) while keeping existing IP subnet and layer 3 configuration. A regular VLAN is a single broadcast domain, while private VLAN partitions one broadcast domain into multiple smaller broadcast subdomains.

Source: [https://en.wikipedia.org/wiki/Private\\_VLAN](https://en.wikipedia.org/wiki/Private_VLAN)

**NEW QUESTION 27**

Which type of secure connectivity does an extranet provide?

- A. other company networks to your company network
- B. remote branch offices to your company network
- C. your company network to the Internet
- D. new networks to your company network

**Answer:** A

**Explanation:** What is an Extranet? In the simplest terms possible, an extranet is a type of network that crosses organizational boundaries, giving outsiders access to information and resources stored inside the organization's internal network (Loshin, p. 14).

Source: <https://www.sans.org/reading-room/whitepapers/firewalls/securing-extranet-connections-816>

**NEW QUESTION 32**

Refer to the exhibit.

```
crypto ikev1 policy 1
encryption aes
hash md5
authentication pre-share
group 2
lifetime 14400
```

What is the effect of the given command sequence?

- A. It configures IKE Phase 1.
- B. It configures a site-to-site VPN tunnel.
- C. It configures a crypto policy with a key size of 14400.
- D. It configures IPsec Phase 2.

**Answer:** A

**Explanation:** Configure the IPsec phase1 with the 5 parameters HAGLE (Hashing-Authentication-Group-Lifetime-Encryption)

**NEW QUESTION 37**

What can the SMTP preprocessor in FirePOWER normalize?

- A. It can extract and decode email attachments in client to server traffic.
- B. It can look up the email sender.
- C. It compares known threats to the email sender.
- D. It can forward the SMTP traffic to an email filter server.
- E. It uses the Traffic Anomaly Detector.

**Answer:** A

**Explanation:** Decoding SMTP Traffic

The SMTP preprocessor instructs the rules engine to normalize SMTP commands. The preprocessor can also extract and decode email attachments in client-to-server traffic and, depending on the software version, extract email file names, addresses, and header data to provide context when displaying intrusion events triggered by SMTP traffic.

Source: <http://www.cisco.com/c/en/us/td/docs/security/firesight/541/firepower-module-user-guide/asa-firepower-module-user-guide-v541/NAP-App-Layer.html#85623>

**NEW QUESTION 40**

Refer to the exhibit.

```
UDP outside 209.165.201.225:53 inside 10.0.0.10:52464, idle 0:00:01, bytes 266, flags -
```

What type of firewall would use the given configuration line?

- A. a stateful firewall
- B. a personal firewall
- C. a proxy firewall
- D. an application firewall
- E. a stateless firewall

**Answer:** A

**Explanation:** The output is from "show conn" command on an ASA. This is another example output I've simulated `ciscoasa# show conn 20 in use, 21 most used`  
 UDP OUTSIDE 172.16.0.100:53 INSIDE 10.10.10.2:59655, idle 0:00:06, bytes 39, flags -

#### NEW QUESTION 44

A specific URL has been identified as containing malware. What action can you take to block users from accidentally visiting the URL and becoming infected with malware.

- A. Enable URL filtering on the perimeter router and add the URLs you want to block to the router's local URL list.
- B. Enable URL filtering on the perimeter firewall and add the URLs you want to allow to the router's local URL list.
- C. Enable URL filtering on the perimeter router and add the URLs you want to allow to the firewall's local URL list.
- D. Create a blacklist that contains the URL you want to block and activate the blacklist on the perimeter router.
- E. Create a whitelist that contains the URLs you want to allow and activate the whitelist on the perimeter router.

**Answer:** A

**Explanation:** URL filtering allows you to control access to Internet websites by permitting or denying access to specific websites based on information contained in an URL list. You can maintain a local URL list on the router. If the Cisco IOS image on the router supports URL filtering but does not support Zone-based Policy Firewall (ZPF), you can maintain one local URL list on the router to add or edit an URLs. Enter a full domain name or a partial domain name and choose whether to Permit or Deny requests for this URL.

Source:

[http://www.cisco.com/c/en/us/td/docs/routers/access/cisco\\_router\\_and\\_security\\_device\\_manager/24/software/user/guide/URLftr.html#wp999509](http://www.cisco.com/c/en/us/td/docs/routers/access/cisco_router_and_security_device_manager/24/software/user/guide/URLftr.html#wp999509)

#### NEW QUESTION 48

When a switch has multiple links connected to a downstream switch, what is the first step that STP takes to prevent loops?

- A. STP elects the root bridge
- B. STP selects the root port
- C. STP selects the designated port
- D. STP blocks one of the ports

**Answer:** A

**Explanation:** First when the switches are powered on all the ports are in Blocking state (20 sec), during this time the + Root Bridge is elected by exchanging BPDUs

+ The other switches will elect their Root ports

+ Every network segment will choose their Designated port Source: <https://learningnetwork.cisco.com/thread/7677>

#### NEW QUESTION 51

Refer to the exhibit.

```
crypto map mymap 20 match address 201
access-list 201 permit ip 10.10.10.0 255.255.255.0 10.100.100.0 255.255.255.0
```

What is the effect of the given command sequence?

- A. It defines IPSec policy for traffic sourced from 10.10.10.0/24 with a destination of 10.100.100.0/24.
- B. It defines IPSec policy for traffic sourced from 10.100.100.0/24 with a destination of 10.10.10.0/24.
- C. It defines IKE policy for traffic sourced from 10.10.10.0/24 with a destination of 10.100.100.0/24.
- D. It defines IKE policy for traffic sourced from 10.100.100.0/24 with a destination of 10.10.10.0/24.

**Answer:** A

**Explanation:** A crypto ACL is a case for an extended ACL where we specify the source and destination address of the networks to be encrypted.

#### NEW QUESTION 55

Which three ESP fields can be encrypted during transmission? (Choose three.)

- A. Security Parameter Index
- B. Sequence Number
- C. MAC Address
- D. Padding
- E. Pad Length
- F. Next Header

**Answer:** DEF

**Explanation:** The packet begins with two 4-byte fields (Security Parameters Index (SPI) and Sequence Number). Following these fields is the Payload Data, which has substructure that depends on the choice of encryption algorithm and mode, and on the use of TFC padding, which is examined in more detail later. Following the Payload Data are Padding and Pad Length fields, and the Next Header field. The optional Integrity Check Value (ICV) field completes the packet.

Source: <https://tools.ietf.org/html/rfc4303#page-14>

#### NEW QUESTION 57

After reloading a router, you issue the dir command to verify the installation and observe that the image file appears to be missing. For what reason could the image file fail to appear in the dir output?

- A. The secure boot-image command is configured.
- B. The secure boot-comfit command is configured.
- C. The confreg 0x24 command is configured.
- D. The reload command was issued from ROMMON.

**Answer:** A

**Explanation:** autocommand: (Optional) Causes the specified command to be issued automatically after the user logs in. When the command is complete, the session is terminated. Because the command can be any length and can contain embedded spaces, commands using the autocommand keyword must be the last option on the line.

So after successfully logs in the Admin user sees the running configuration and immediately after is disconnected by the router. So removing the command lets keeps him connected.

Source:

[http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/security/s1/sec-s1-xe-3se-3850-cr-book/sec-s1-xe-3se-3850-cr-book\\_chapter\\_0110.html](http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/security/s1/sec-s1-xe-3se-3850-cr-book/sec-s1-xe-3se-3850-cr-book_chapter_0110.html)

#### NEW QUESTION 62

If the native VLAN on a trunk is different on each end of the link, what is a potential consequence?

- A. The interface on both switches may shut down
- B. STP loops may occur
- C. The switch with the higher native VLAN may shut down
- D. The interface with the lower native VLAN may shut down

**Answer:** B

**Explanation:** Smart Tunnel is an advanced feature of Clientless SSL VPN that provides seamless and highly secure remote access for native client-server applications.

Clientless SSL VPN with Smart Tunnel is the preferred solution for allowing access from non-corporate assets as it does not require the administrative rights. Port forwarding is the legacy technology for supporting TCP based applications over a Clientless SSL VPN connection. Unlike port forwarding, Smart Tunnel simplifies the user experience by not requiring the user connection of the local application to the local port.

Source:

<http://www.cisco.com/c/dam/en/us/solutions/collateral/enterprise/design-zone-security/tunnel.pdf>

#### NEW QUESTION 67

When a company puts a security policy in place, what is the effect on the company's business?

- A. Minimizing risk
- B. Minimizing total cost of ownership
- C. Minimizing liability
- D. Maximizing compliance

**Answer:** A

**Explanation:** The first step in protecting a business network is creating a security policy. A security policy is a formal, published document that defines roles, responsibilities, acceptable use, and key security practices for a company. It is a required component of a complete security framework, and it should be used to guide investment in security defenses.

Source:

[http://www.cisco.com/warp/public/cc/so/neso/sqso/secsol/setdm\\_wp.htm](http://www.cisco.com/warp/public/cc/so/neso/sqso/secsol/setdm_wp.htm)

#### NEW QUESTION 68

Which type of IPS can identify worms that are propagating in a network?

- A. Policy-based IPS
- B. Anomaly-based IPS
- C. Reputation-based IPS
- D. Signature-based IPS

**Answer:** B

**Explanation:** An example of anomaly-based IPS/IDS is creating a baseline of how many TCP sender requests are generated on average each minute that do not get a response. This is an example of a half-opened session. If a system creates a baseline of this (and for this discussion, let's pretend the baseline is an average of 30 half-opened sessions per minute), and then notices the half-opened sessions have increased to more than 100 per minute, and then acts based on that and generates an alert or begins to deny packets, this is an example of anomaly-based IPS/IDS. The Cisco IPS/IDS appliances have this ability (called anomaly detection), and it is used to identify worms that may be propagating through the network.

Source: Cisco Official Certification Guide, Anomaly-Based IPS/IDS, p.464

#### NEW QUESTION 69

Which command is needed to enable SSH support on a Cisco Router?

- A. crypto key lock rsa
- B. crypto key generate rsa
- C. crypto key zeroize rsa
- D. crypto key unlock rsa

**Answer:** B

**Explanation:** There are four steps required to enable SSH support on a Cisco IOS router:

- + Configure the hostname command.
- + Configure the DNS domain.
- + Generate the SSH key to be used.
- + Enable SSH transport support for the virtual type terminal (vty).

!--- Step 1: Configure the hostname if you have not previously done so. hostname carter

!--- The aaa new-model command causes the local username and password on the router !--- to be used in the absence of other AAA statements.

```
aaa new-model
```

```
username cisco password 0 cisco
```

!--- Step 2: Configure the DNS domain of the router. ip domain-name rtp.cisco.com

!--- Step 3: Generate an SSH key to be used with SSH.

```
crypto key generate rsa ip ssh time-out 60
```

```
ip ssh authentication-retries 2
```

!--- Step 4: By default the vtys' transport is Telnet. In this case, !--- Telnet is disabled and only SSH is supported.

```
line vty 0 4 transport input SSH Source:
```

<http://www.cisco.com/c/en/us/support/docs/security-vpn/secure-shell-ssh/4145-ssh.html#settingupanosrouterasssh>

**NEW QUESTION 74**

What is the purpose of the Integrity component of the CIA triad?

- A. to ensure that only authorized parties can modify data
- B. to determine whether data is relevant
- C. to create a process for accessing data
- D. to ensure that only authorized parties can view data

**Answer:** A

**Explanation:** Integrity for data means that changes made to data are done only by authorized individuals/systems. Corruption of data is a failure to maintain data integrity.

Source: Cisco Official Certification Guide, Confidentiality, Integrity, and Availability, p.6

**NEW QUESTION 77**

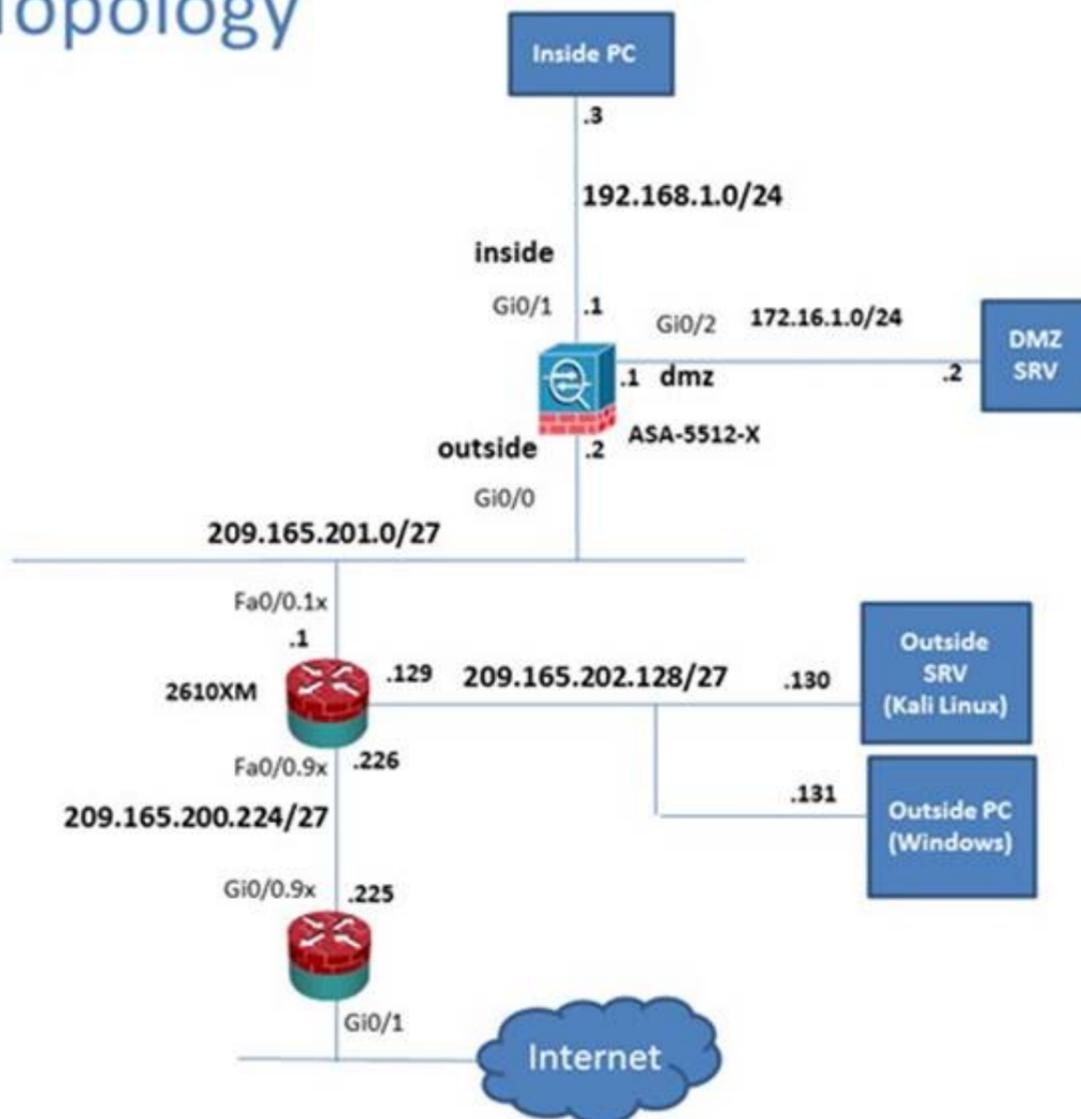
Scenario

In this simulation, you have access to ASDM only. Review the various ASA configurations using ASDM then answer the five multiple choice questions about the ASA SSLVPN configurations.

To access ASDM, click the ASA icon in the topology diagram. Note: Not all ASDM functionalities are enabled in this simulation.

To see all the menu options available on the left navigation pane, you may also need to un-expand the expanded menu first.

# Lab Topology



**Device Information**

Host Name: P17-ASA.secure-x.local  
 ASA Version: 100.14(6)13  
 ASDM Version: 7.5(1)1  
 Firewall Mode: Routed  
 Environment Status: OK  
 Device Uptime: 11d 21h 42m 47s  
 Device Type: ASA 5512  
 Context Mode: Single  
 Total Flash: 4096 MB

**Interface Status**

Interface	IP Address/Mask	Line	Link	Kbps
dmz	172.16.1.1/24	up	up	0
inside	192.168.1.1/24	up	up	4
mgmt	10.10.10.2/24	up	up	0
outside	209.165.201.2/24	up	up	0

**System Resources Status**

Total Memory Usage: 500 MB  
 Total CPU Usage: 0%  
 Core Usage: 0%

**Latest ASDM Syslog Messages**

Severity	Date	Time	Syslog ID	Source IP	Source Destination IP	Destina Description
6	May 13 2015	12:35:09	302016	10.81.254.202	123 209.165.201.2	65535 Teardown UDP connection 15136525 for outside:10.81.254.202/123 to identity:209.165.201.2/65535(any) duration 0:02:01 bytes 96
6	May 13 2015	12:35:08	106015	192.168.1.3	14676 192.168.1.1	443 Deny TCP (no connector) from 192.168.1.3/14676 to 192.168.1.1/443 flags FIN ACK on interface inside
6	May 13 2015	12:35:08	302014	192.168.1.3	14676 192.168.1.1	443 Teardown TCP connection 15136528 for inside:192.168.1.3/14676 to identity:192.168.1.1/443 duration 0:00:00 bytes 299 TCP Reset-O

**Monitoring > Interfaces > ARP Table**

Each row represents one ARP table entry.

Interface	IP Address	MAC Address	Proxy Arp
outside	209.165.201.1	000c.3014.3820	No
inside	192.168.1.4	0050.5633.3333	No
inside	192.168.1.3	0050.5611.1111	No
inside	192.168.1.2	0050.5622.2222	No
inside	192.168.1.56	0050.5692.5c7b	No
inside	192.168.1.55	0006.f6e6.98f3	No
dmz	172.16.1.2	0050.5644.4444	No
mgmt	10.10.10.1	000c.3014.3820	No

Buttons: Clear Dynamic ARP Entries, Refresh

Last Updated: 5/19/15 9:32:02 AM

Cisco ASDM 7.5 for ASA - 192.168.1.1

File View Tools Wizards Window Help

Home Configuration Monitoring Save Refresh Back Forward Help

VPN

VPN Statistics

- Sessions
- VPN Cluster Loads
- Crypto Statistics
- Compression Statistics
- Encryption Statistics
- Global IKE/Ipsec Statistics
- Protocol Statistics
- VLAN Mapping Sessions
- MDM Proxy Statistics
- MDM Proxy Sessions
- Clientless SSL VPN
- VPN Connection Graphs
- WSA Sessions

Interfaces

VPN

Internet Traffic Filter

Routing

Properties

Looping

Monitors > VPN > VPN Statistics > Sessions

Type	Active	Cumulative	Peak Concurrent	Inactive
Clientless VPN		1	1	1
Browser		1	1	1

Filter By: Clientless SSL VPN -- All Sessions -- Filter

Username	Group Policy	Protocol	Login Time	Bytes Tx	Bytes Rx
student	sales	Clientless	06:05:46 pm Thu May 21 2015	118774	41633
209.165.202.131	Clientless	Clientless (IPsec)	06:09m:19s		

Refresh

Last Updated: 5/20/15 9:33:12 AM

Data Refreshed Successfully.

student 15 5/20/15 8:33:17 AM pm

Cisco ASDM 7.5 for ASA - 192.168.1.1

File View Tools Wizards Window Help

Home Configuration Monitoring Save Refresh Back Forward Help

Device Setup

- Interface Settings
- Routing
- Device Name/Password
- System Time

Device Setup

Firewall

Remote Access VPN

Site-to-Site VPN

Device Management

Configuration > Device Setup > Startup Wizard

Click the "Launch Startup Wizard" button to start the wizard.

**Startup Wizard**

The Cisco ASDM Startup Wizard assists you in getting your Cisco Adaptive Security Appliance configured and running. Use this wizard to create a basic configuration that enforces security policies in your network.

The Startup Wizard can be run at any time and will be initialized with values from the current running configuration.

Launch Startup Wizard

student 15 5/13/15 11:56:08 AM pm

This section contains the following items:

- Interfaces
- Traffic Zones
- EtherChannel
- VLAN

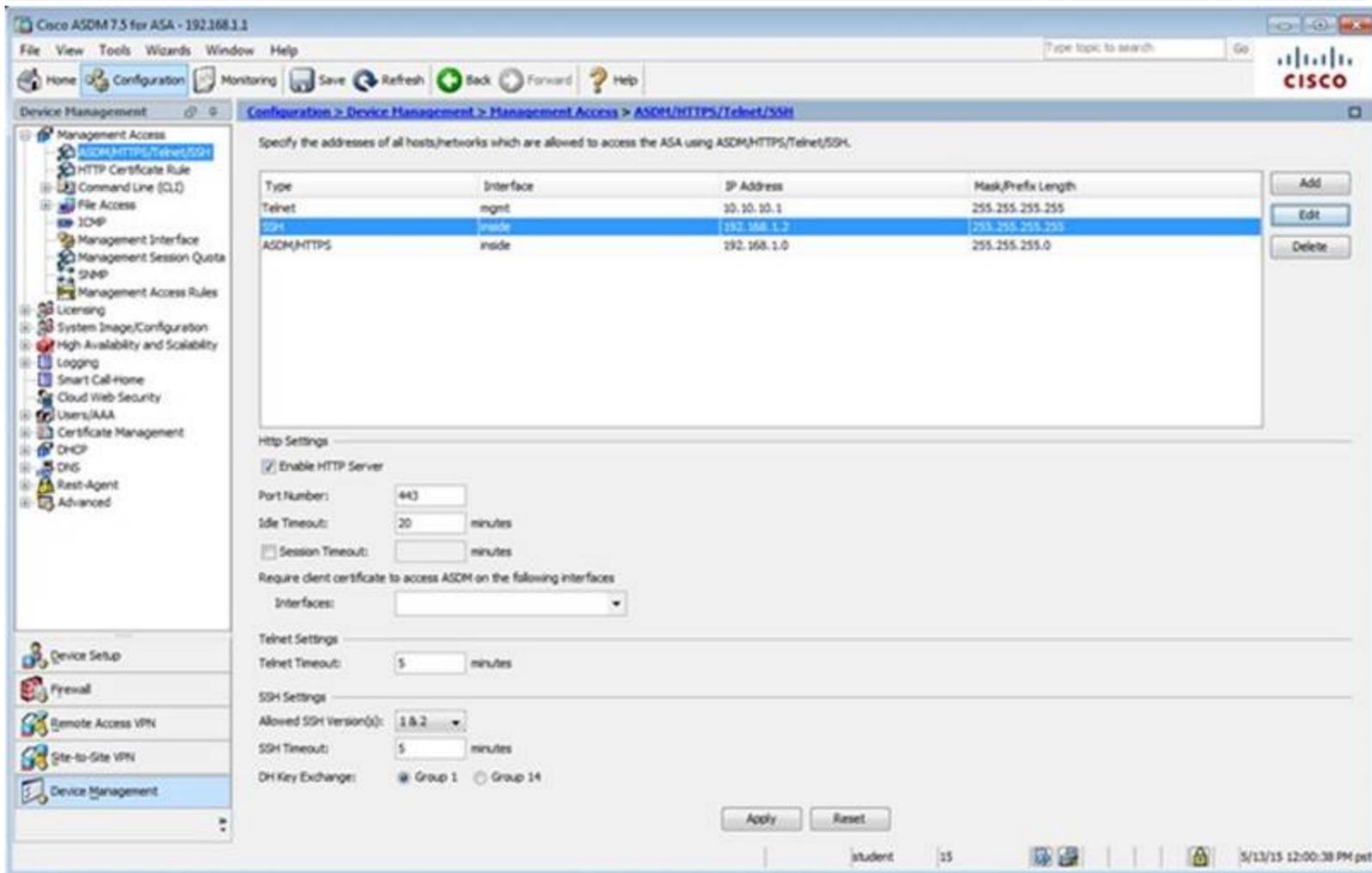
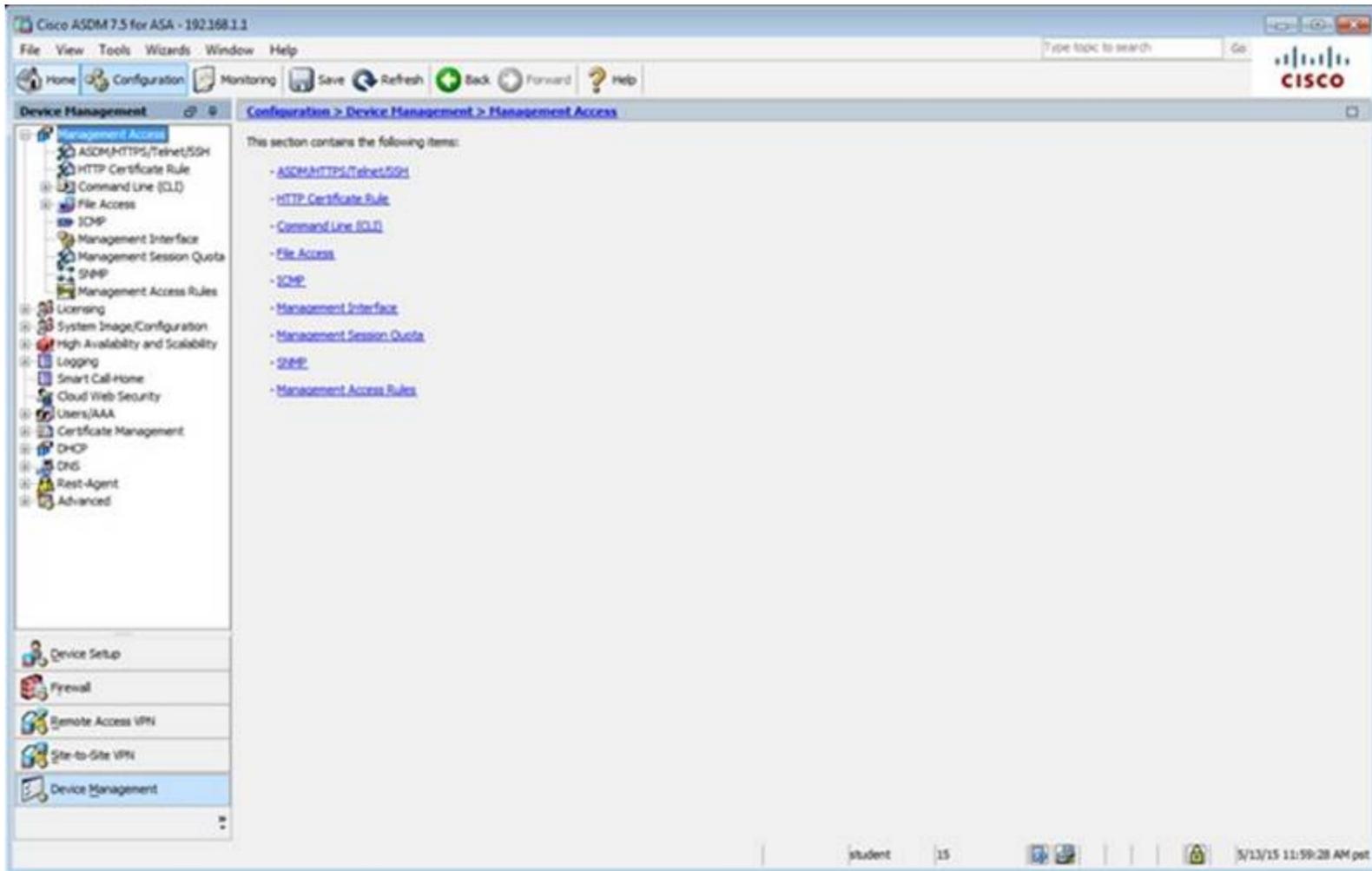
Navigation: Configuration > Device Setup > Interface Settings

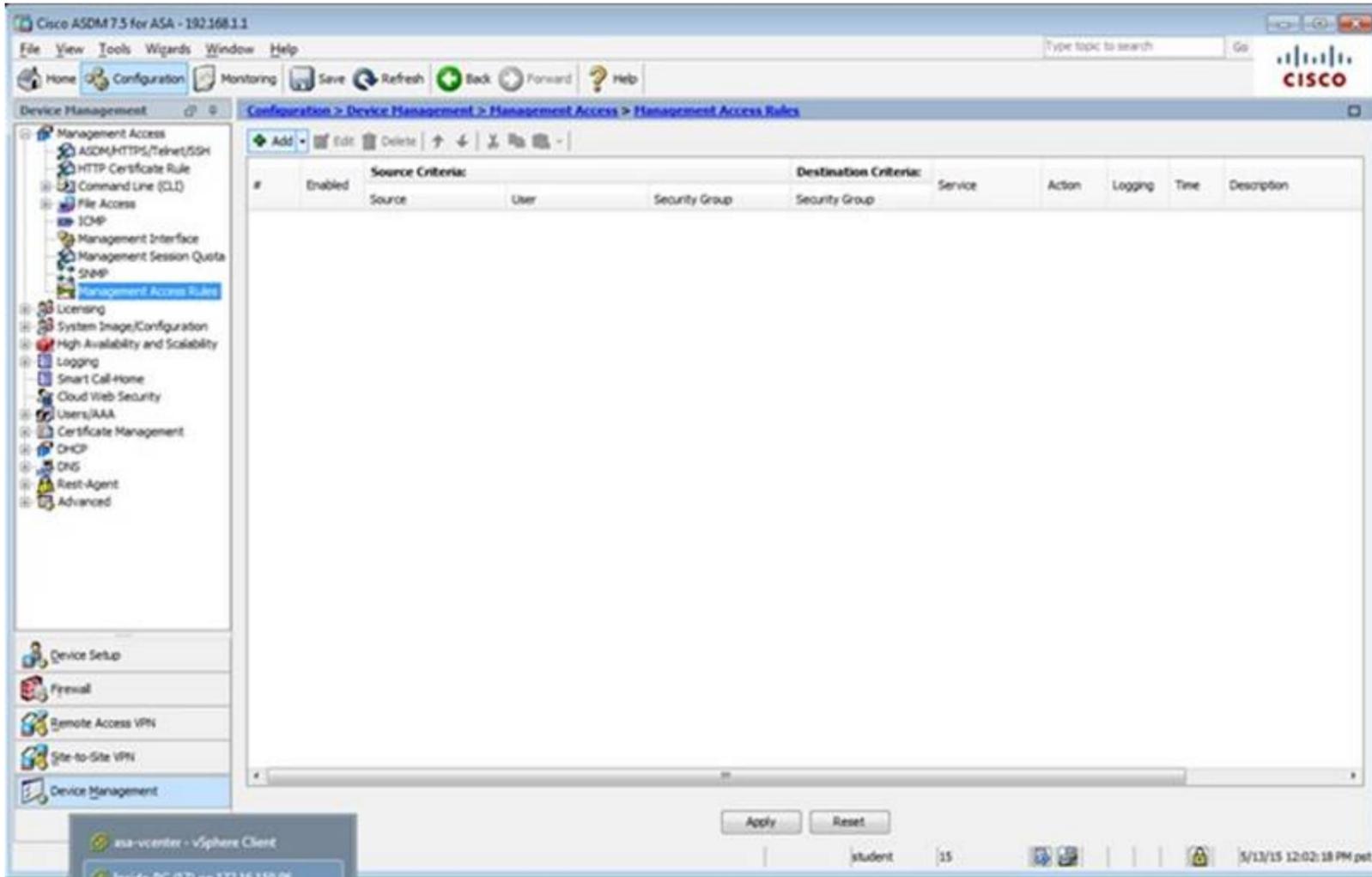
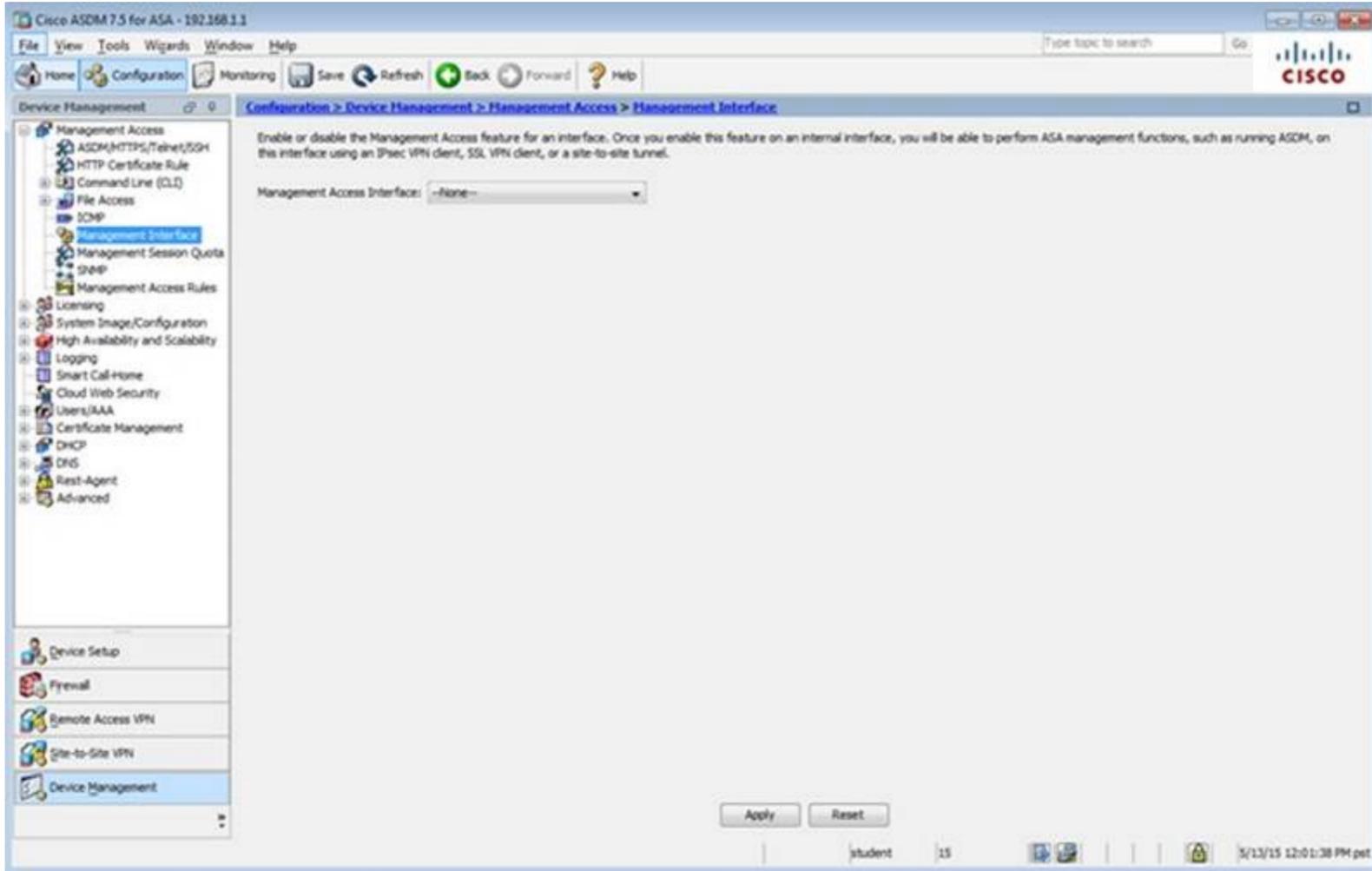
Interface	Name	Zone	Route Map	State	Security Level	IP Address	Subnet Mask Prefix Length	Group	Type
GigabitEthernet0/0	outside			Enabled		0/209.165.201.2	255.255.255.0		Hardware
GigabitEthernet0/1	inside			Enabled	100	192.168.1.1	255.255.255.0		Hardware
GigabitEthernet0/2	dmz			Enabled		172.16.1.1	255.255.255.0		Hardware
GigabitEthernet0/3				Enabled					Hardware
GigabitEthernet0/4				Enabled					Hardware
GigabitEthernet0/5	mgmt			Enabled	100	10.10.10.2	255.255.255.0		Hardware
Management0/0				Enabled					Hardware

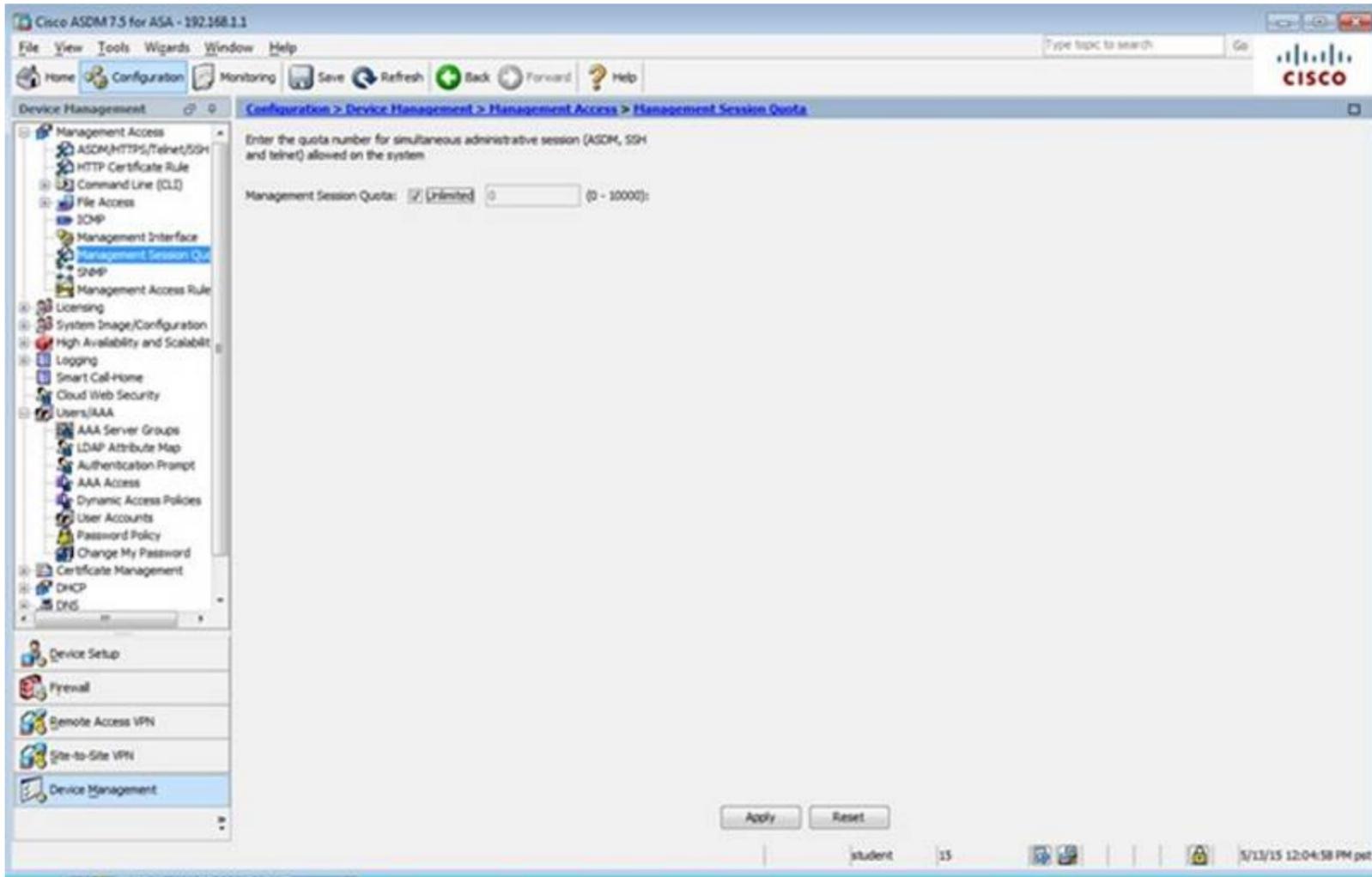
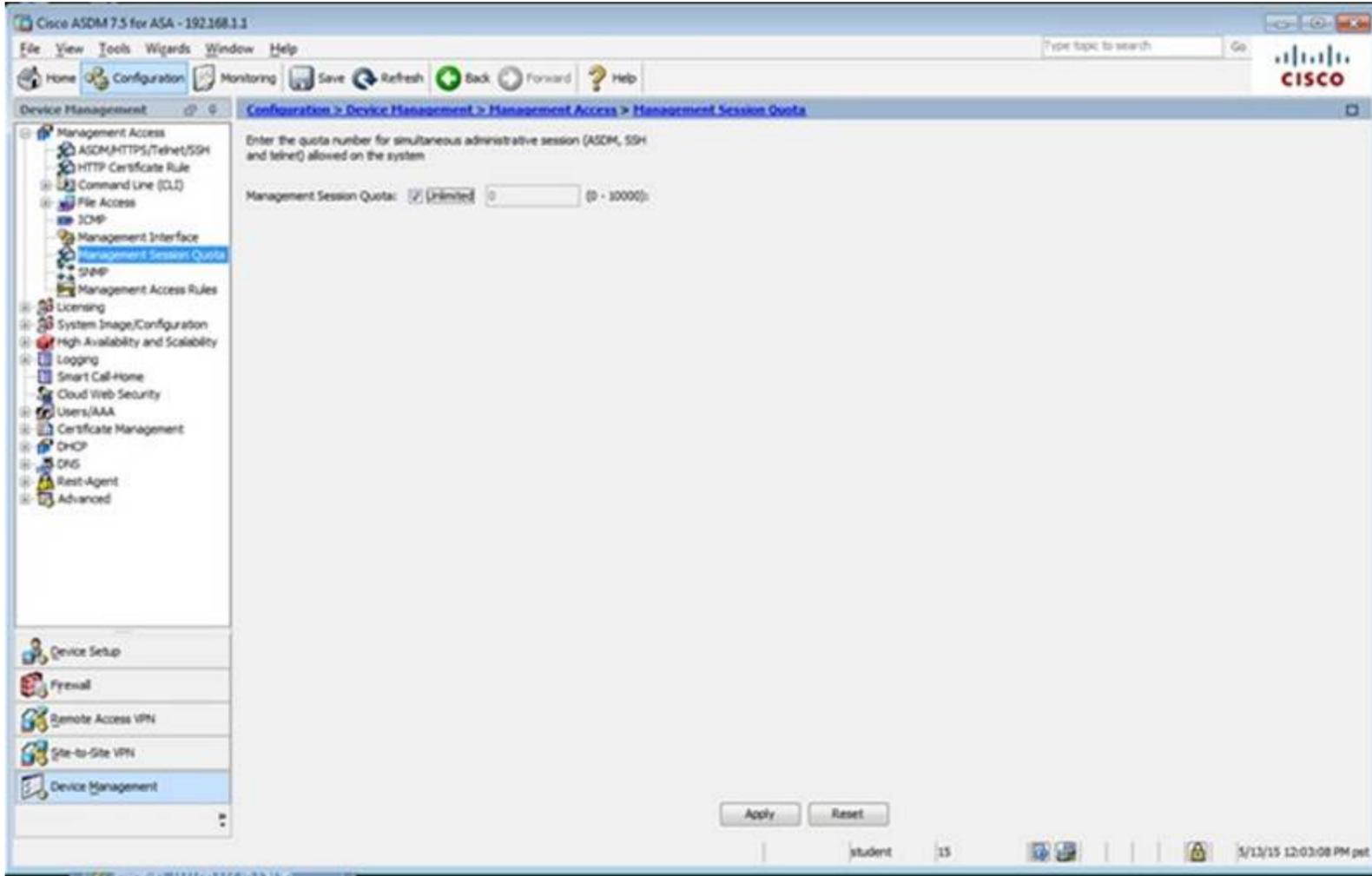
Options:

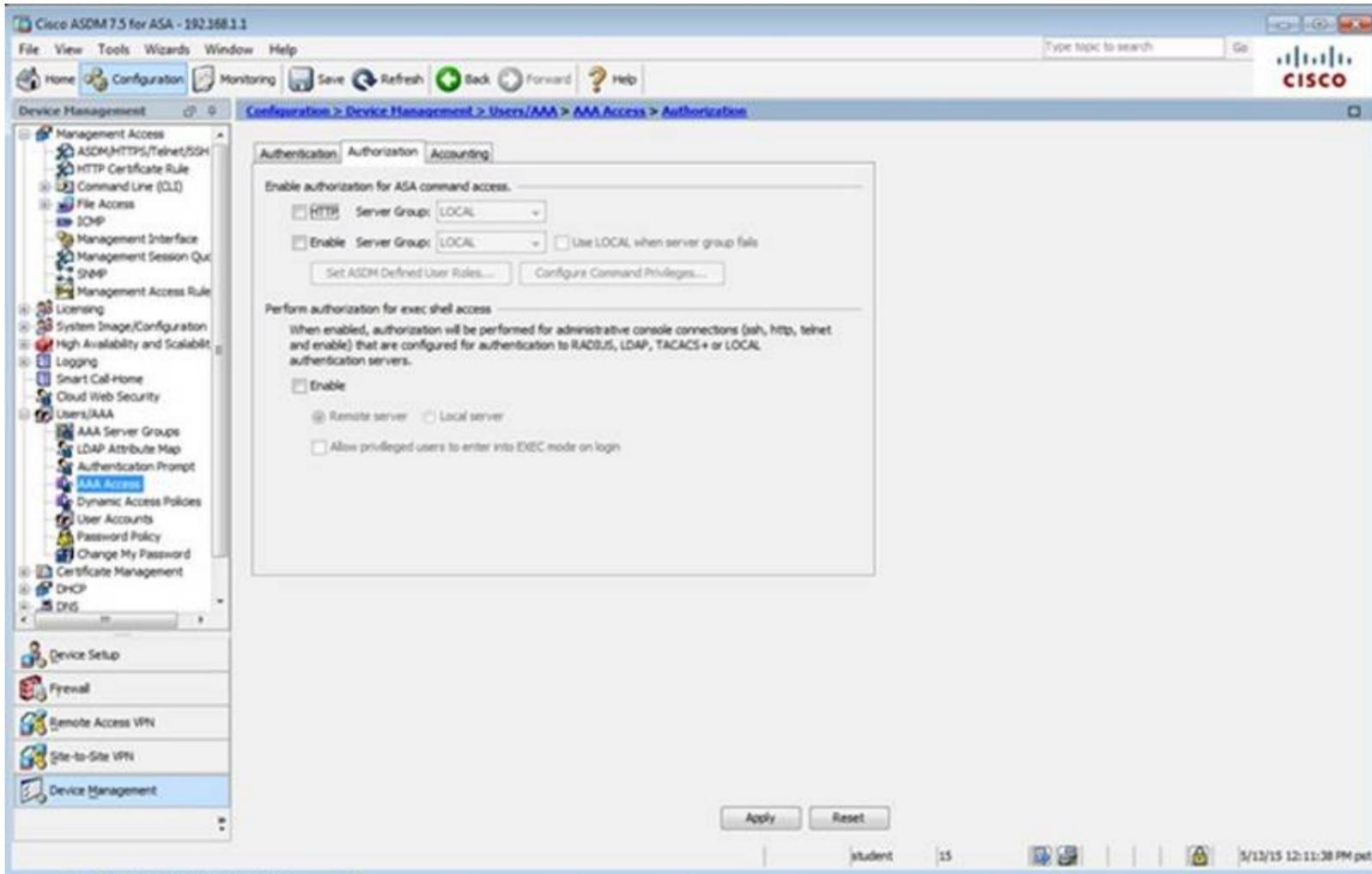
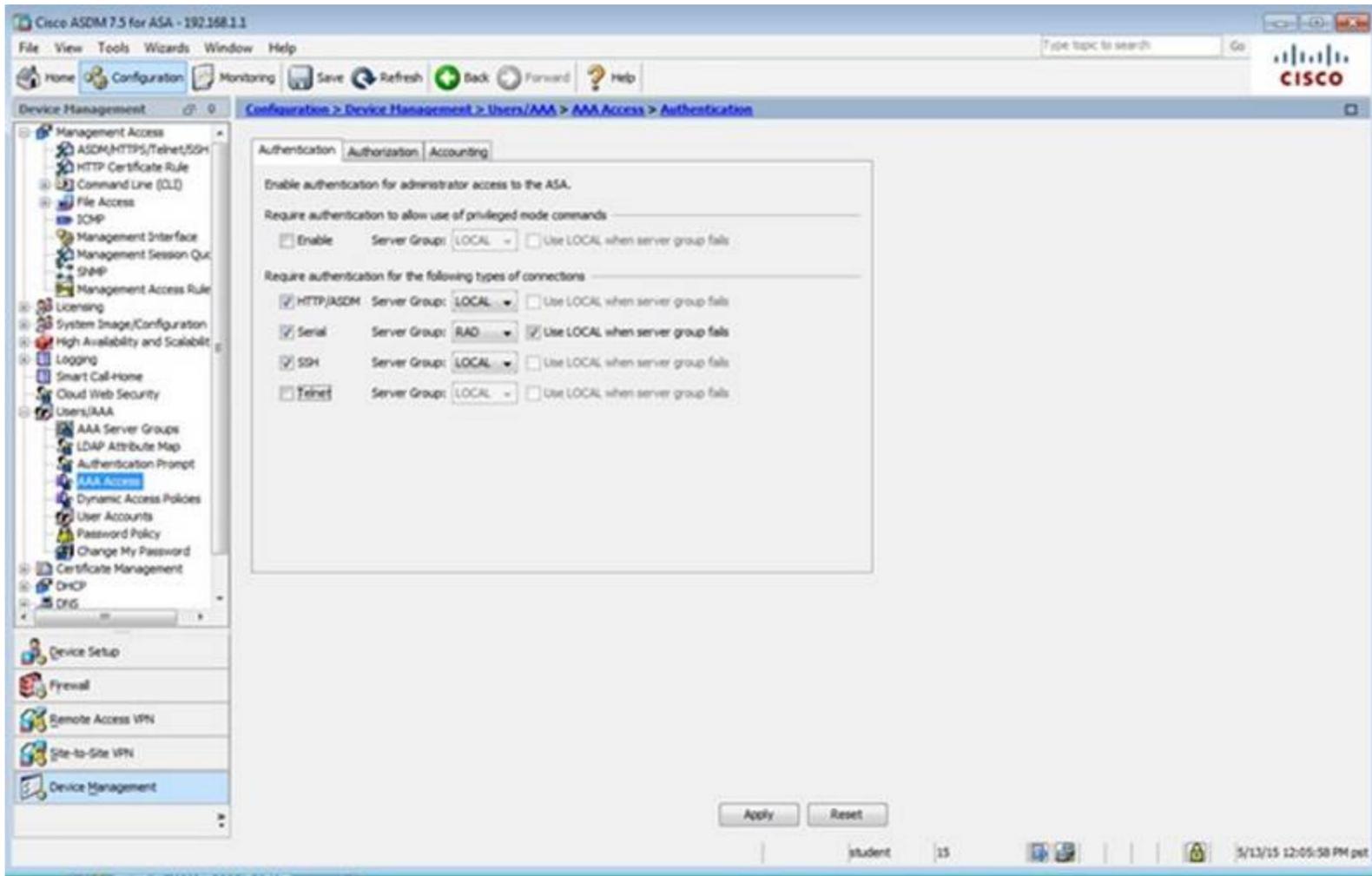
- Enable traffic between two or more interfaces which are configured with same security levels
- Enable traffic between two or more hosts connected to the same interface
- Enable jumbo frame reservation

Buttons: Apply, Reset









The screenshot shows the Cisco ASDM 7.5 for ASA interface. The breadcrumb navigation is Configuration > Device Management > Users/AAA > AAA Access > Accounting. The main content area is titled 'Accounting' and contains the following configuration options:

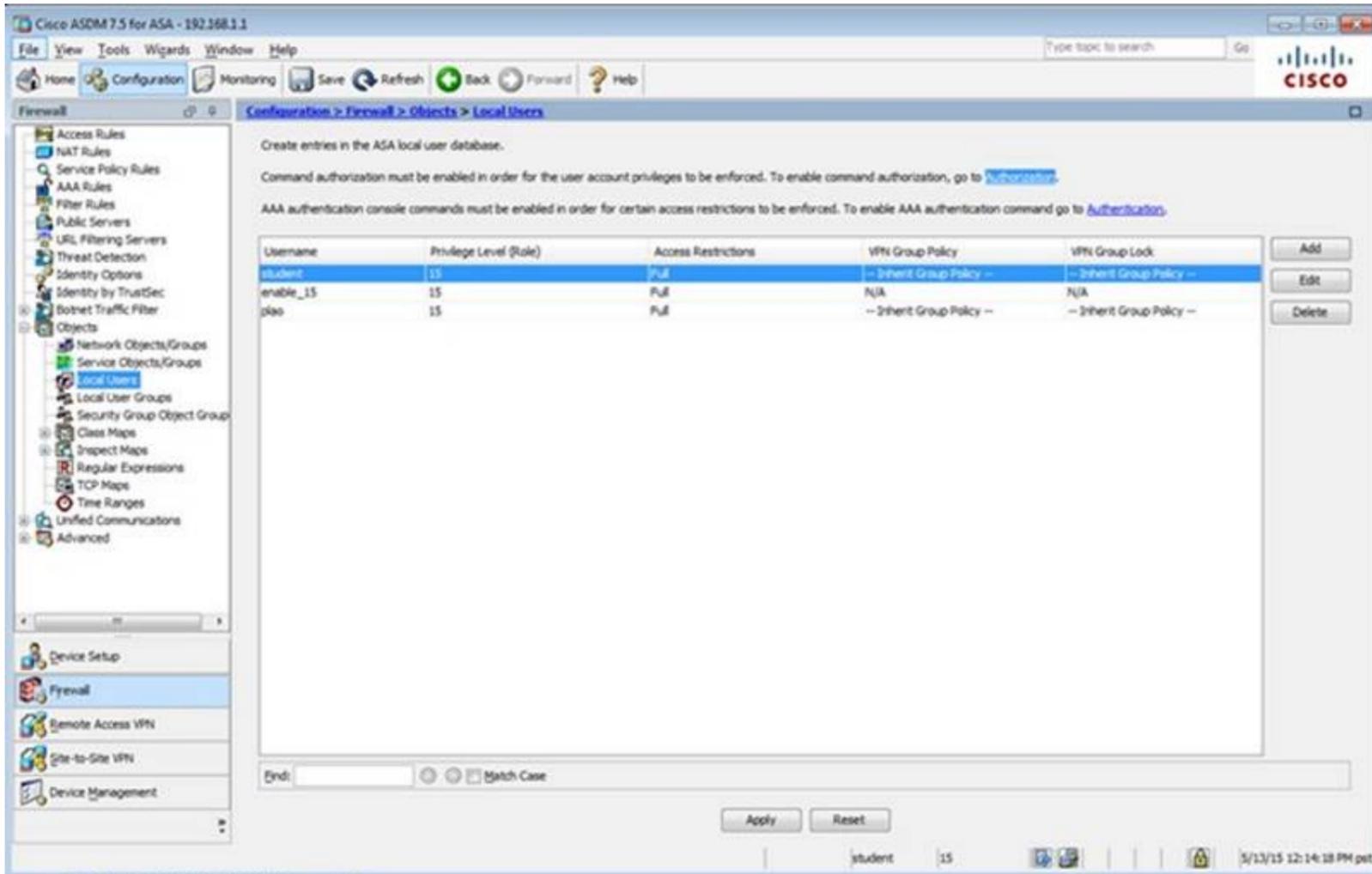
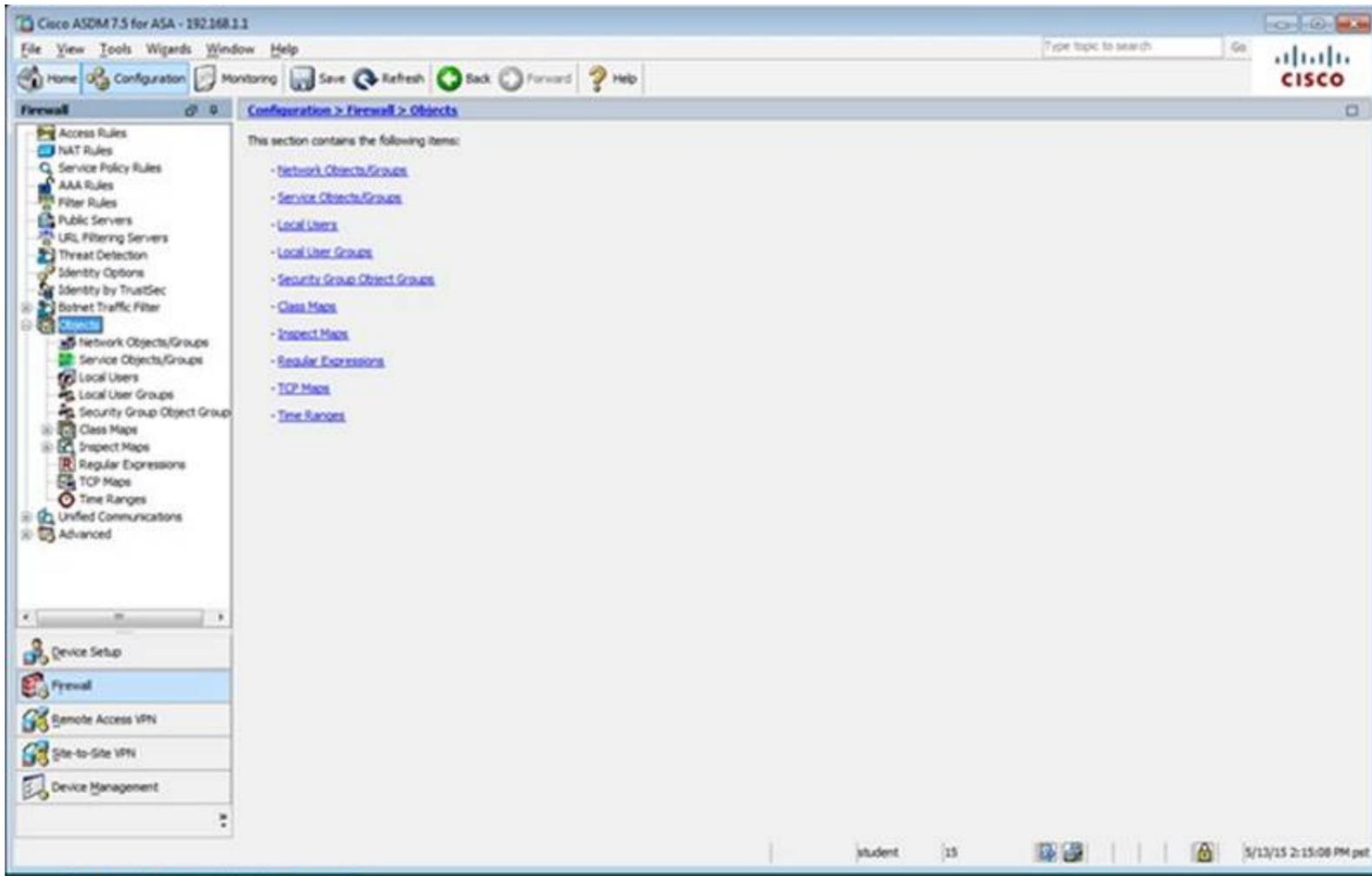
- Enable accounting for administrator and command accounting to the ASA. (checked)
- Require accounting to allow accounting of user activity:
  - Enable Server Group: RAD
- Require accounting for the following types of connections:
  - Serial Server Group: RAD
  - SSH Server Group: RAD
  - Telnet Server Group: RAD
- Require command accounting for ASA:
  - Enable Server Group: --None--
  - Privilege level: 0

Buttons for 'Apply' and 'Reset' are visible at the bottom of the configuration area. The status bar at the bottom shows 'student 15' and the date '5/13/15 12:12:18 PM pet'.

The screenshot shows the Cisco ASDM 7.5 for ASA interface. The breadcrumb navigation is Configuration > Firewall > NAT Rules. The main content area displays a table of NAT rules:

Match Criteria: Original Packet				Action: Translated Packet			Options	Description		
#	Source Intf	Dest Intf	Source	Destination	Service	Source	Destination	Service	Options	Description
1	Any	outside	any-host	any	any	outside (P)	--Original--	--Original--		

Buttons for 'Apply' and 'Reset' are visible at the bottom of the configuration area. The status bar at the bottom shows 'student 15' and the date '5/13/15 12:13:18 PM pet'.



The screenshot shows the Cisco ASDM 7.5 interface for ASA - 192.168.1.1. The left sidebar shows the configuration tree with 'Network Objects/Groups' selected. The main pane displays a table of Network Objects:

Name	IP Address	Netmask	Description	Object NAT Address
any				
any-host	0.0.0.0	0.0.0.0		outside (P)
any4				
any6				
facebook	www.facebook.com			
My_ASA_Demo_Obj	1.10.8.20			

Buttons for 'Apply' and 'Reset' are visible at the bottom of the main pane.

The screenshot shows the Cisco ASDM 7.5 interface for ASA - 192.168.1.1. The left sidebar shows the configuration tree with 'Service Policy Rules' selected. The main pane displays a table of Service Policy Rules:

Name	#	Enabled	Match	Source	Src Security Group	Destination	Dest Security Group	Service	Time	Rule Actions	Description
Interface: dmz; Policy: asdmf_policy											
class-default			Match	any		any		any traffic			
class-default								class-default			
Interface: inside; Policy: asasmf_policy											
class-default			Match	any		any		any traffic			
class-default								class-default			
Global; Policy: global_policy											
inspection_de...			Match	any		any		default-inspec...		Inspect DNS Map preset...	Inspect SMTP (14 more inspect actions)

Buttons for 'Apply' and 'Reset' are visible at the bottom of the main pane.

The screenshot shows the Cisco ASDM 7.5 interface for configuration. The left sidebar lists various configuration categories, with 'Firewall' selected. The main pane displays the 'Access Rules' configuration page. A table lists several rules:

#	Enabled	Source Criteria:	Destination Criteria:	Service	Action	Hits	Logging
		Source	User	Security Group	Destination	Security Group	
1		any			Any less secure ne...		Permit
1		inside (1 implicit rule)			any		Permit 54...
1		any			any		Permit
1		any			any		Deny

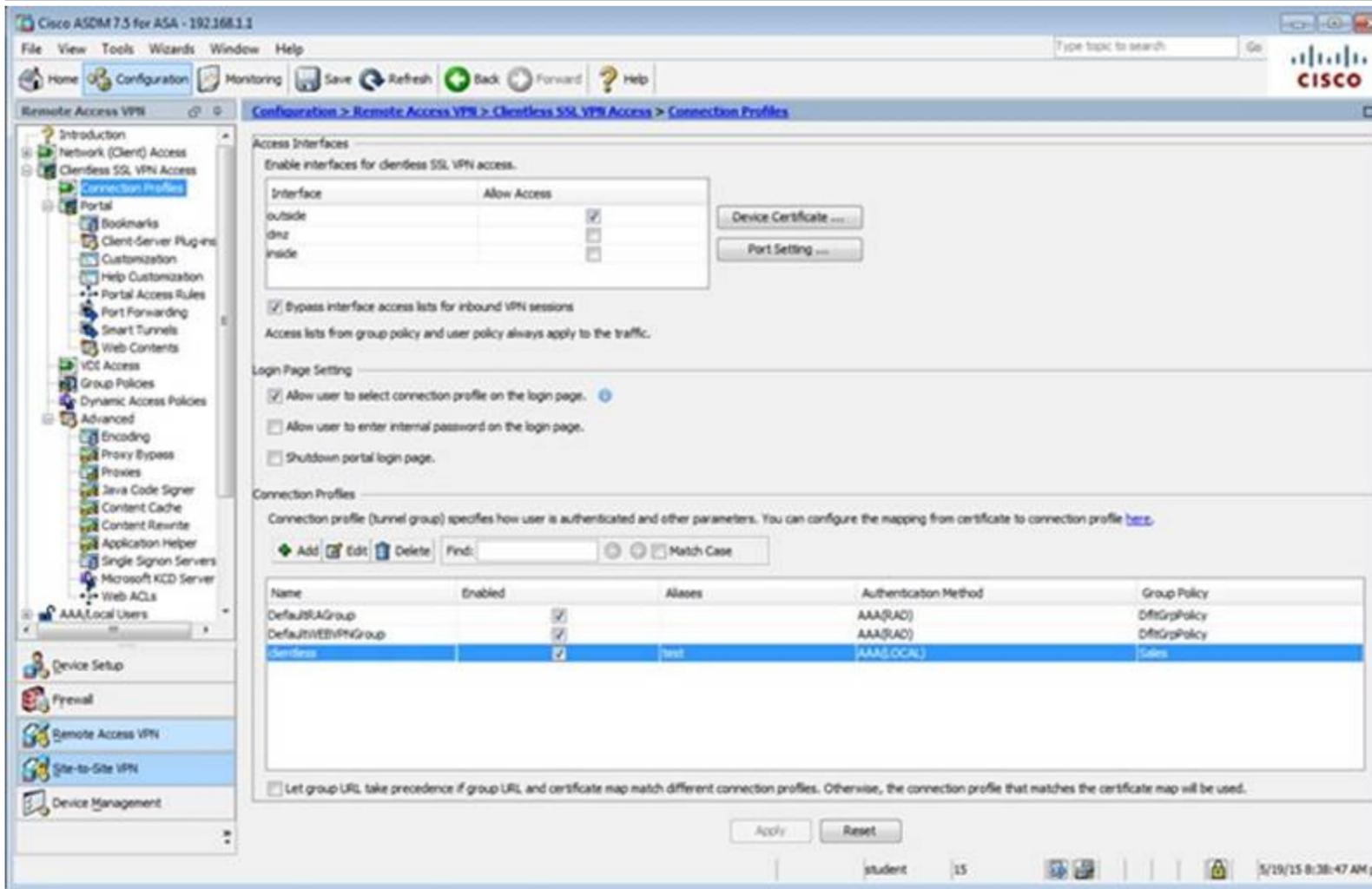
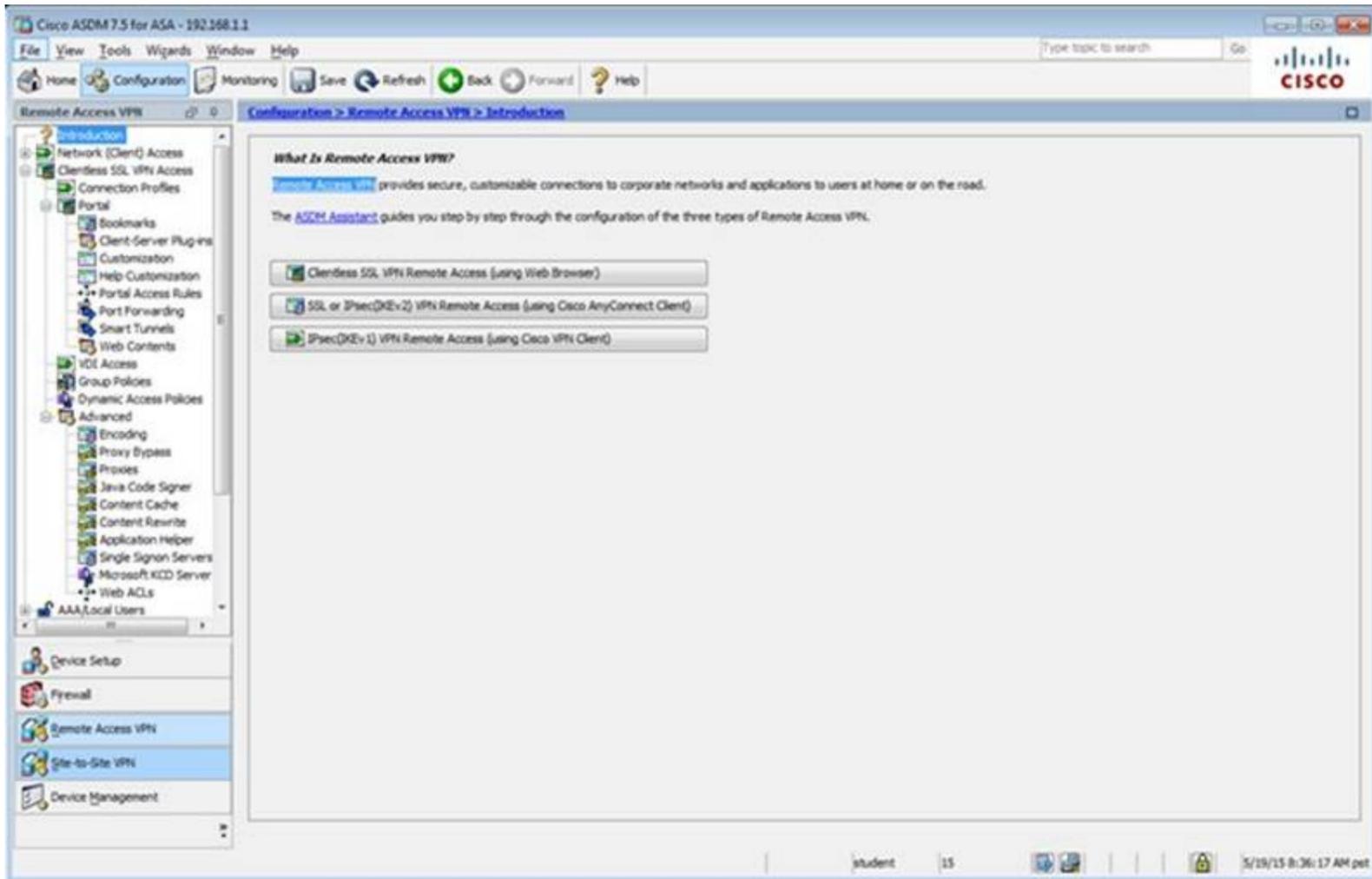
Buttons for 'Apply', 'Reset', and 'Advanced...' are visible at the bottom of the configuration pane.

The screenshot shows the 'Remote Access VPN' configuration page in Cisco ASDM 7.5. The left sidebar has 'Remote Access VPN' selected. The main pane displays an 'Introduction' page with the following text:

**What is Remote Access VPN?**  
 Remote Access VPN provides secure, customizable connections to corporate networks and applications to users at home or on the road.  
 The [ASDM Assistant](#) guides you step by step through the configuration of the three types of Remote Access VPN.

Three configuration options are listed in buttons:

- Cleartext SSL VPN Remote Access (using Web Browser)
- SSL or IPsec (IKEv2) VPN Remote Access (using Cisco AnyConnect Client)
- IPsec (IKEv1) VPN Remote Access (using Cisco VPN Client)



Edit Clientless SSL VPN Connection Profile: clientless

Basic  
Advanced

Name: clientless  
Aliases: test

Authentication  
Method:  AAA  Certificate  Both  
AAA Server Group: LOCAL   
 Use LOCAL if Server Group fails

DNS  
Server Group: DefaultDNS   
(Following fields are attributes of the DNS server group selected above.)  
Servers: 192.168.1.2  
Domain Name: secure-x.local

Default Group Policy  
Group Policy: Sales   
(Following field is an attribute of the group policy selected above.)  
 Enable clientless SSL VPN protocol

Find:   Next  Previous

Edit Clientless SSL VPN Connection Profile: clientless

Basic

Advanced

- General
- Authentication
- Secondary Authentication
- Authorization
- Accounting
- NetBIOS Servers
- Clientless SSL VPN

Login and Logout Page Customization: DfltCustomization Manage...

Enable the display of Radius Reject-Message on the login screen when authentication is rejected

Enable the display of SecurId messages on the login screen

Connection Aliases

This SSL VPN access method will present a list of aliases configured for all connection profiles. You must enable the Login Page Setting in the main panel to complete the configuration.

+ Add - Delete (The table is in-line editable.) i

Alias	Enabled
test	<input checked="" type="checkbox"/>

Group URLs

This SSL VPN access method will automatically select the connection profile, without the need for user selection.

+ Add - Delete (The table is in-line editable.) i

URL	Enabled
https://209.165.201.2/test	<input checked="" type="checkbox"/>

You can chose not to run Cisco Secure Desktop (CSD) on client machine when using group URLs defined above to access the ASA. (If a client connects using a connection alias, this setting is ignored)

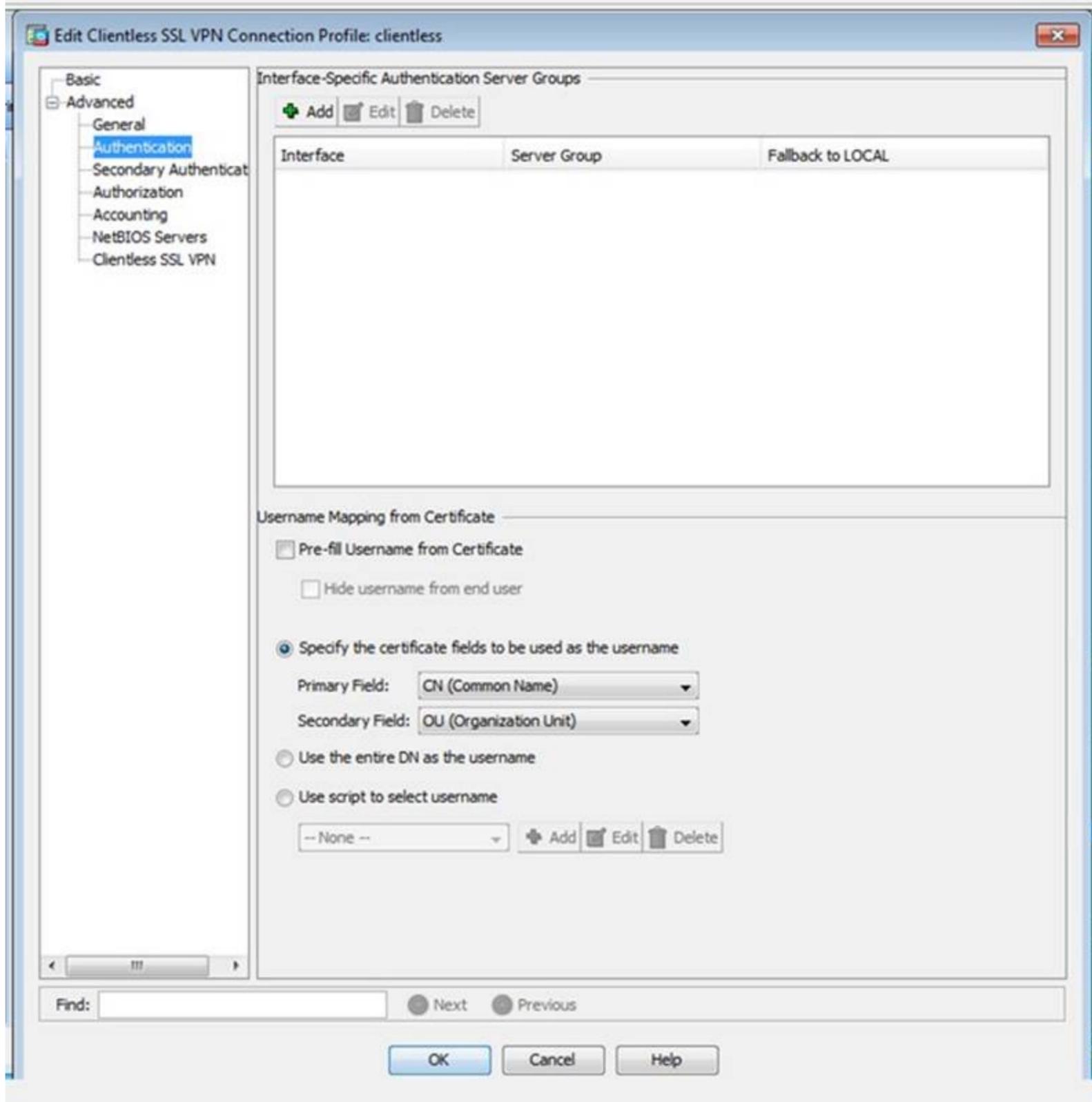
Always run CSD

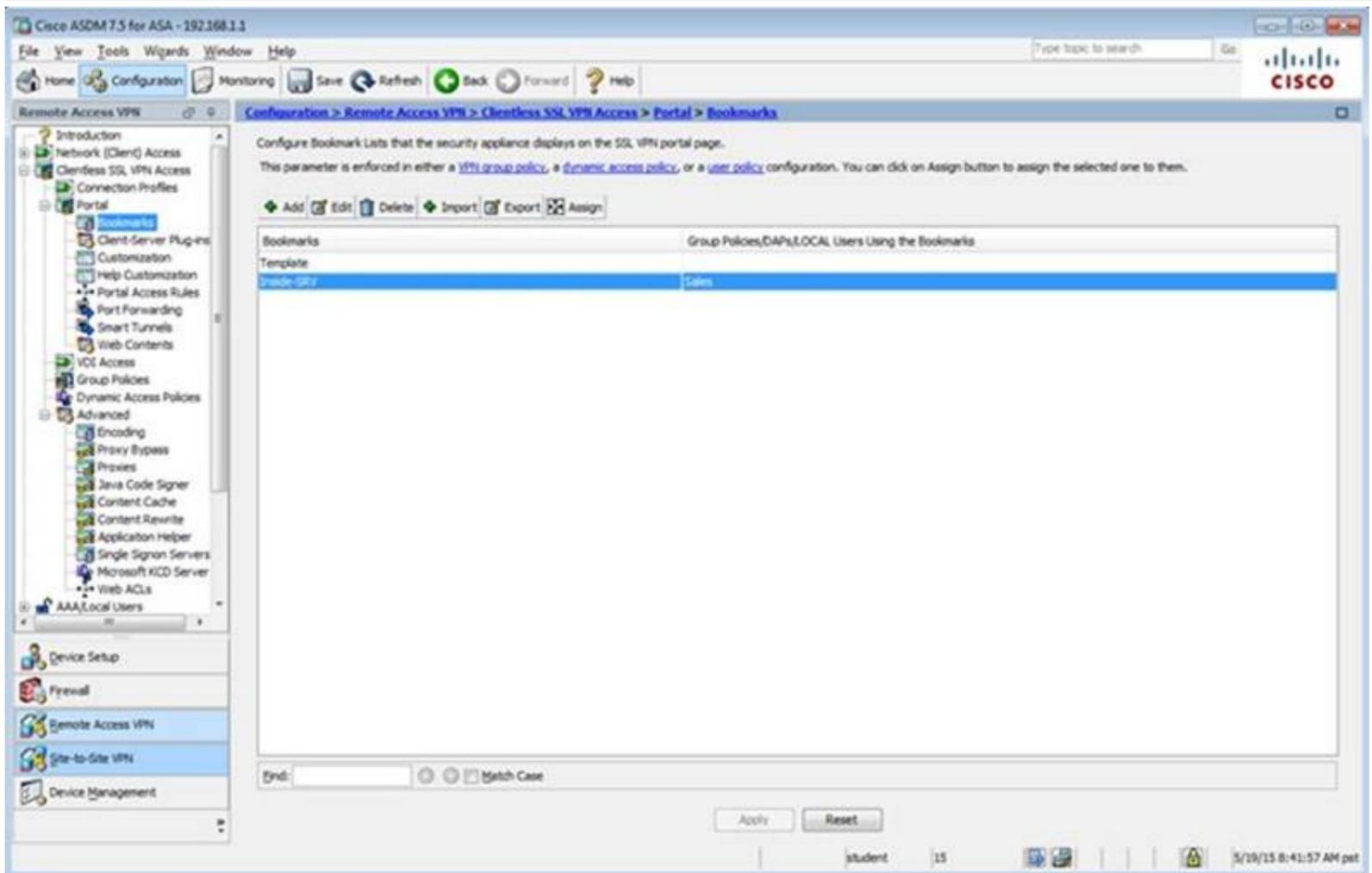
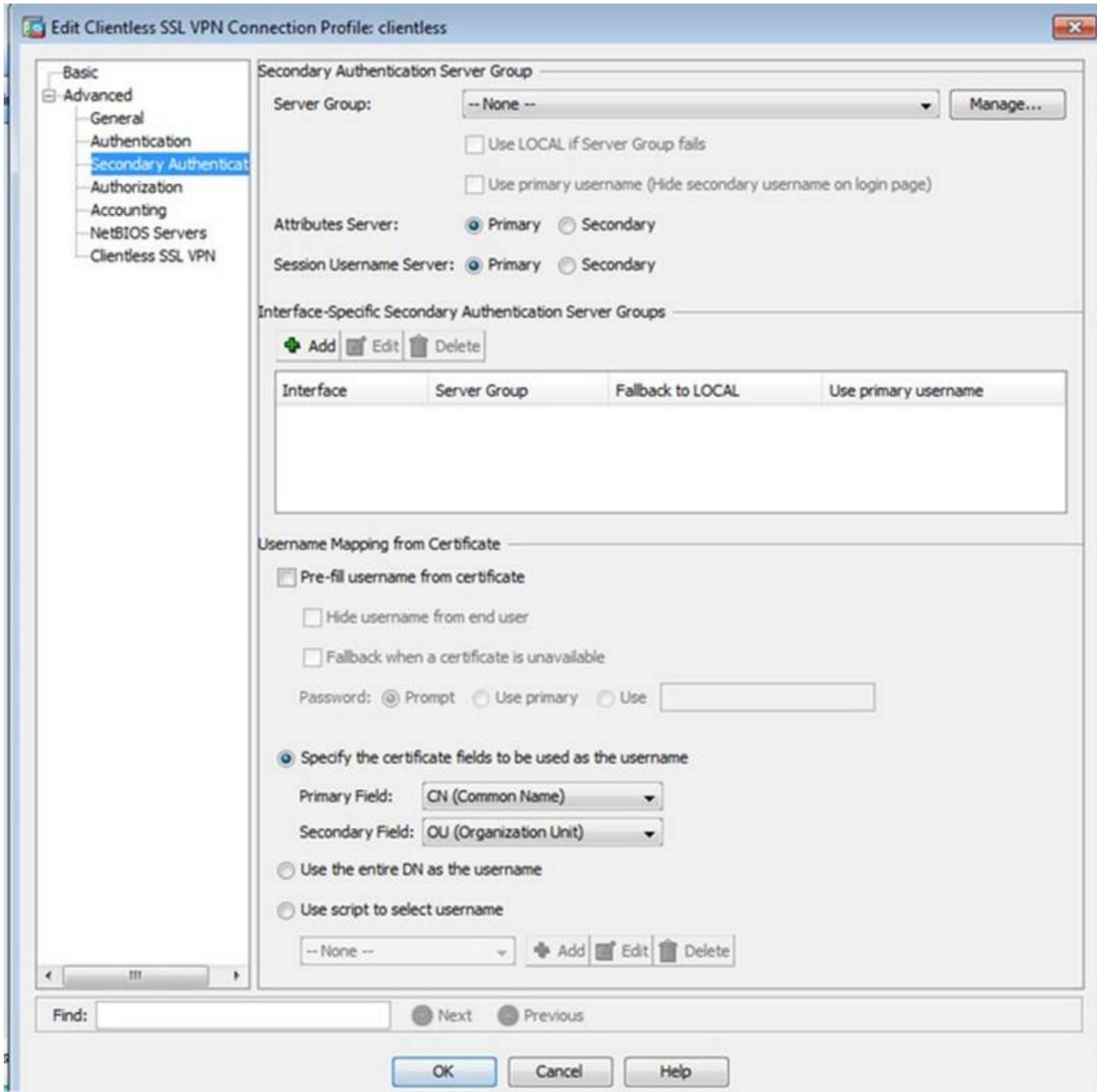
Disable CSD for both AnyConnect and Clientless SSL VPN

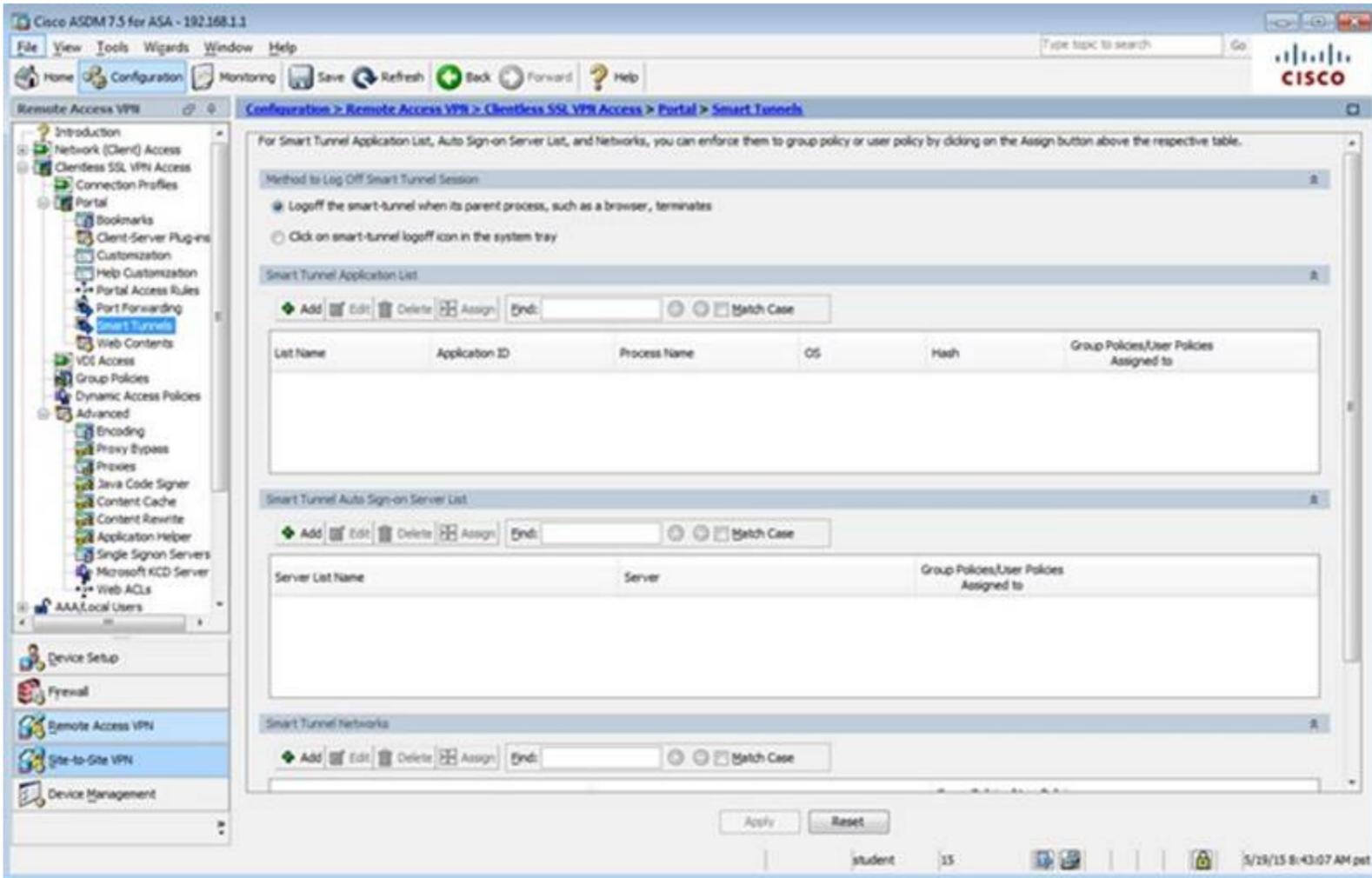
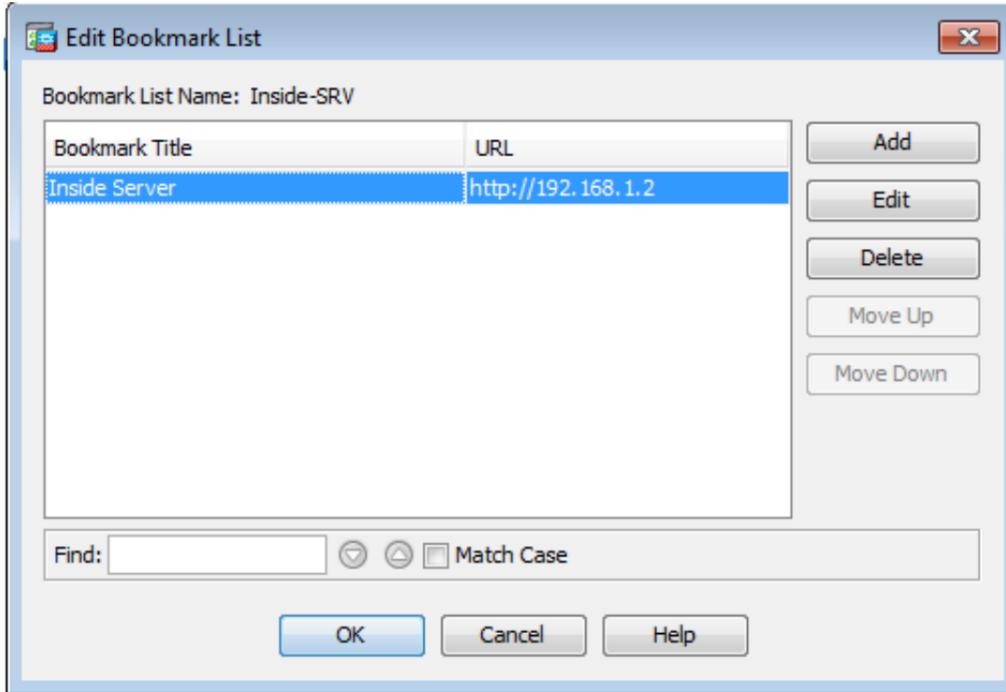
Disable CSD for AnyConnect only

Find:  Next Previous

OK Cancel Help







Configure Port Forwarding Lists that the security appliance uses to grant users access to TCP-based applications over a clientless SSL VPN connection. This parameter is enforced in either a [VPN group policy](#), a [dynamic access policy](#), or a [user policy](#) configuration. You can click on Assign button to assign the selected one to them.

List Name	Local TCP Port	Remote Server	Remote TCP Port	Description	Group Policies/User Policies Assigned to
-----------	----------------	---------------	-----------------	-------------	--

Find:

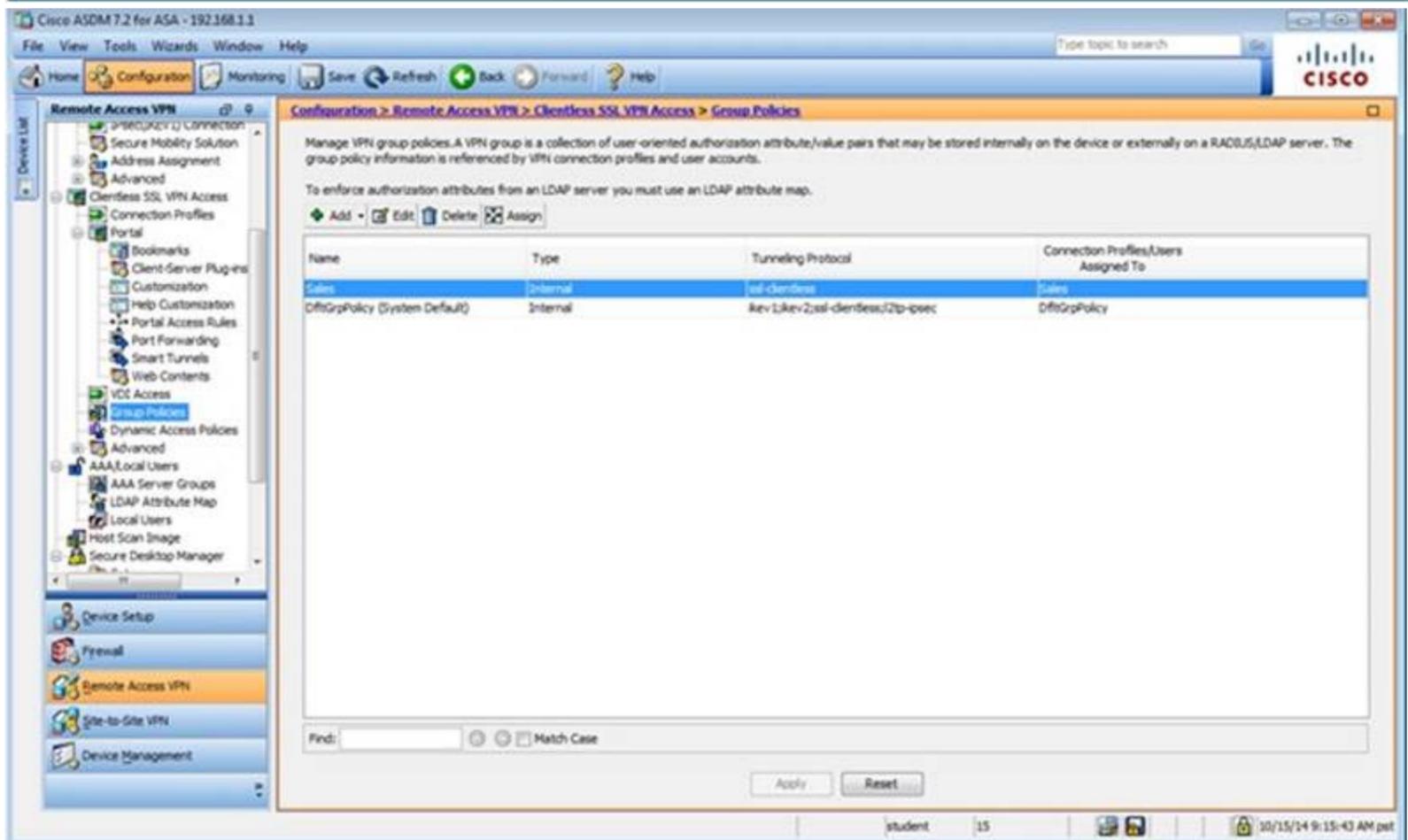
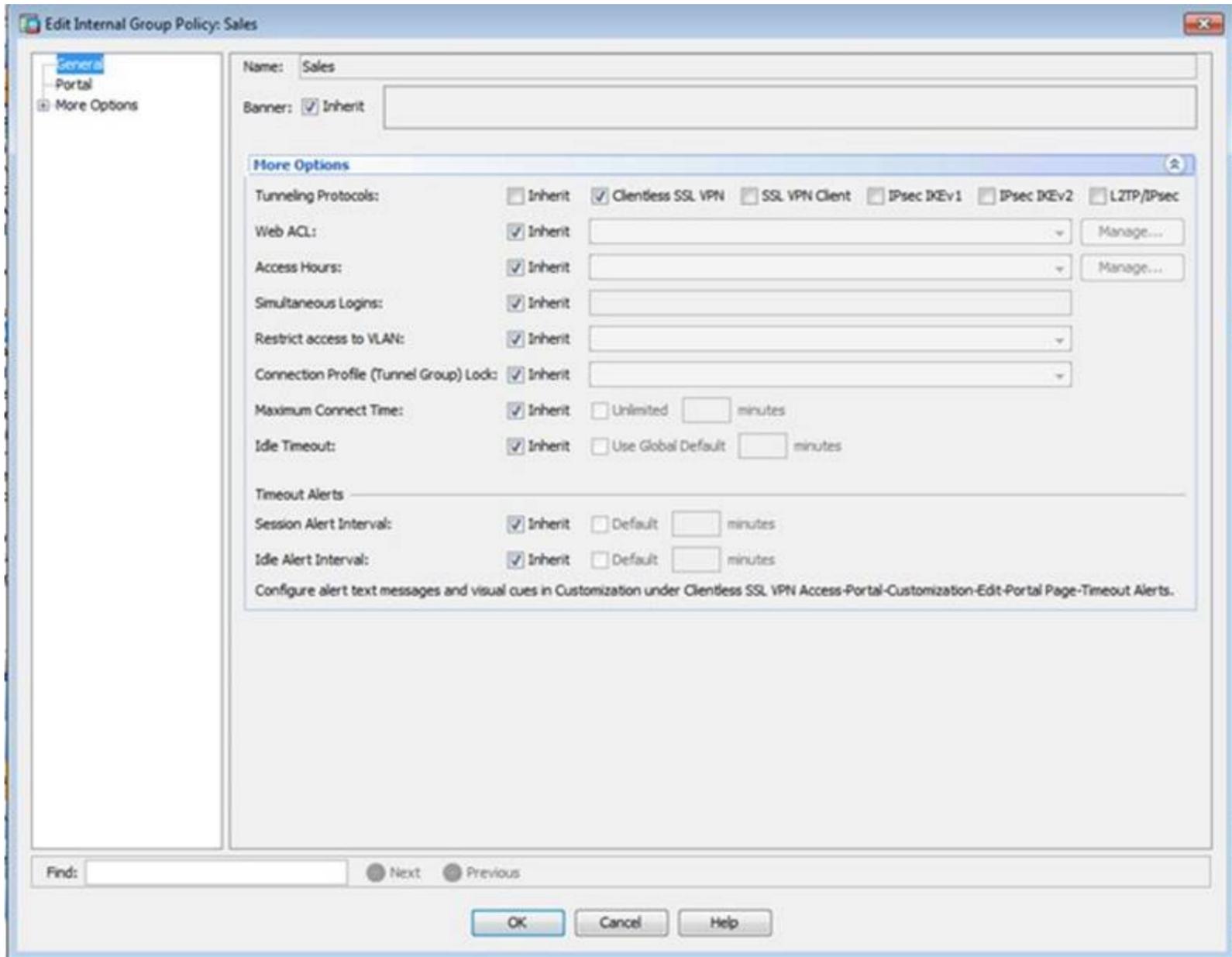
student 15 5/19/15 8:43:47 AM pet

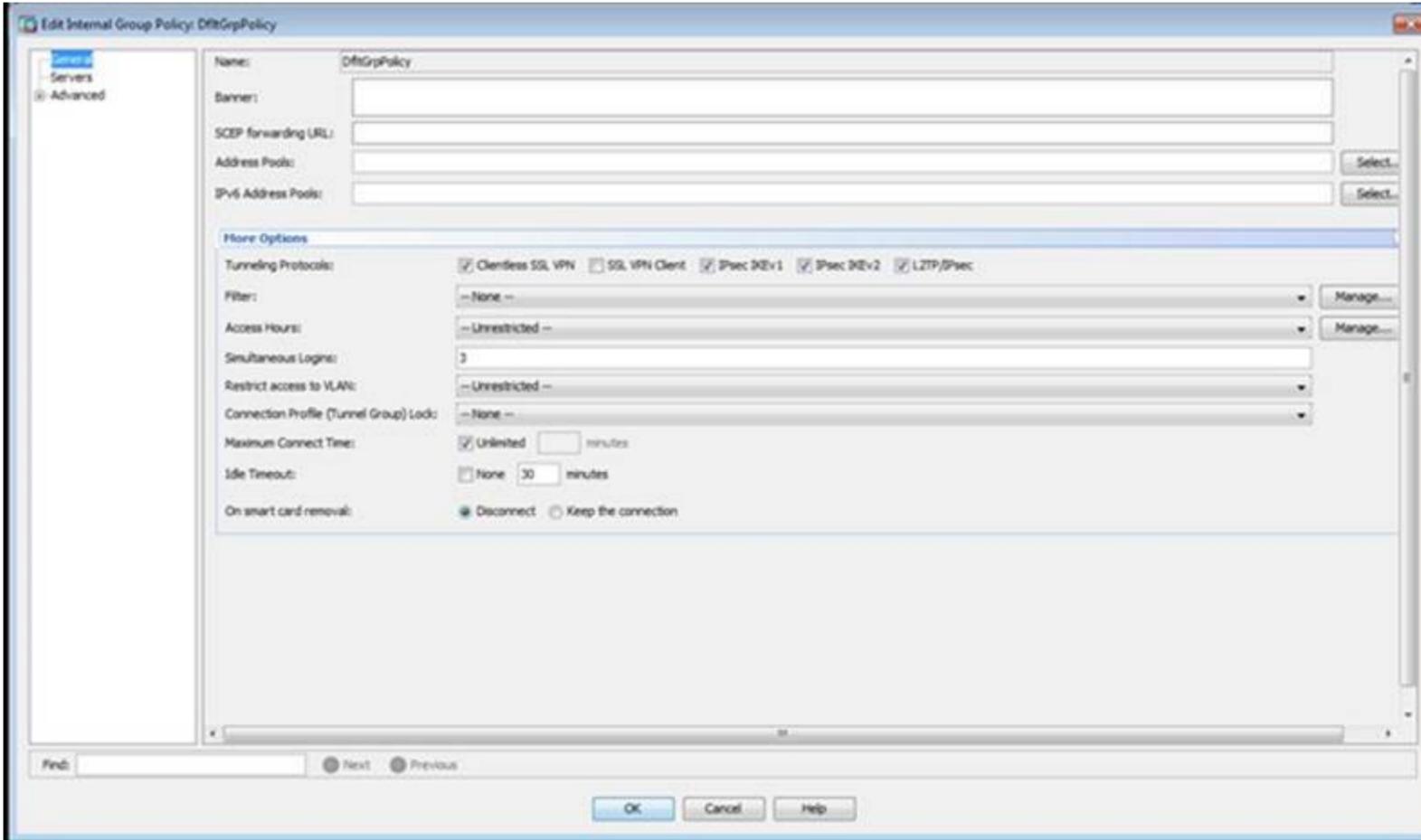
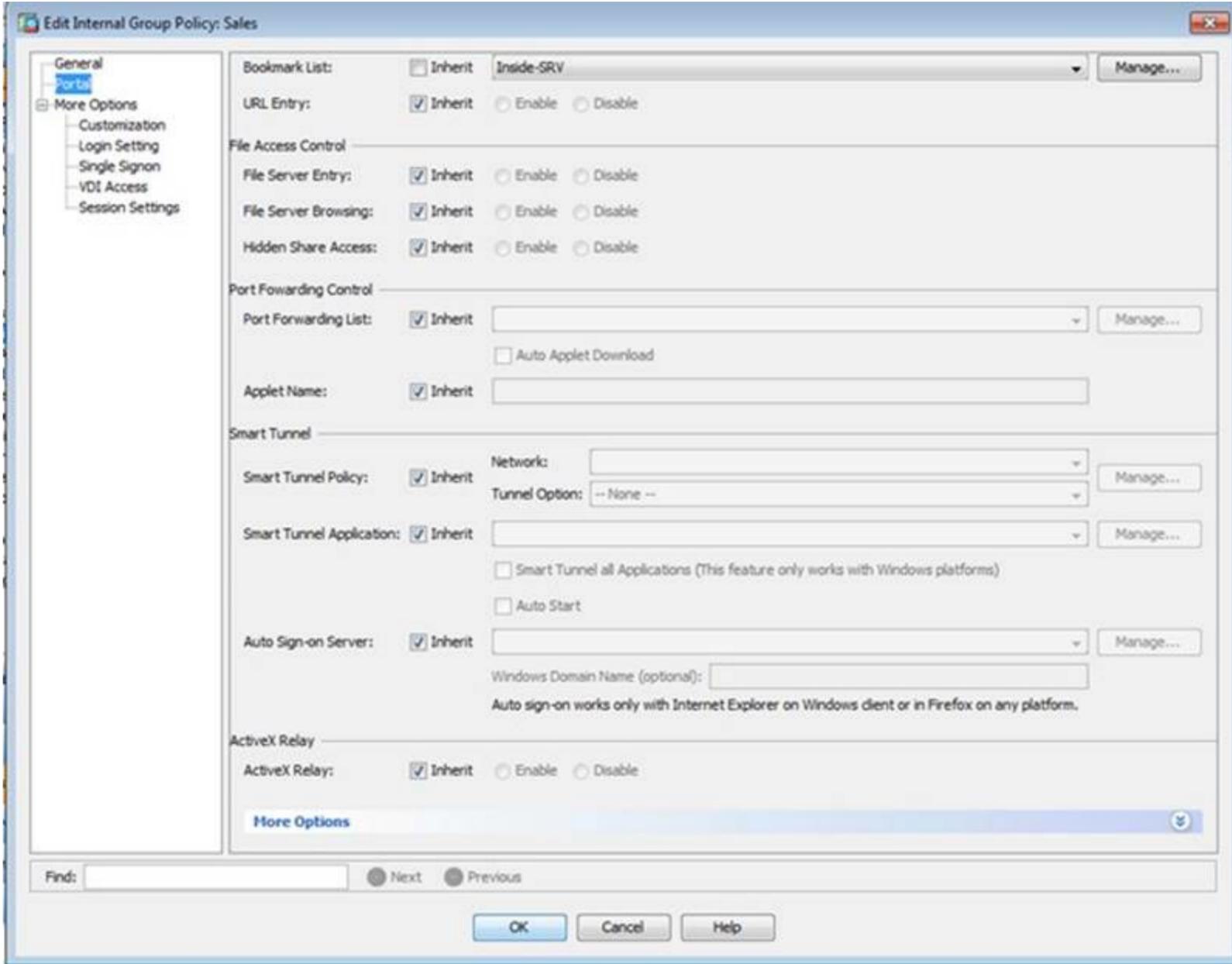
Manage VPN group policies. A VPN group is a collection of user-oriented authorization attribute/value pairs that may be stored internally on the device or externally on a RADIUS/LDAP server. The group policy information is referenced by VPN connection profiles and user accounts. To enforce authorization attributes from an LDAP server you must use an [LDAP attribute map](#).

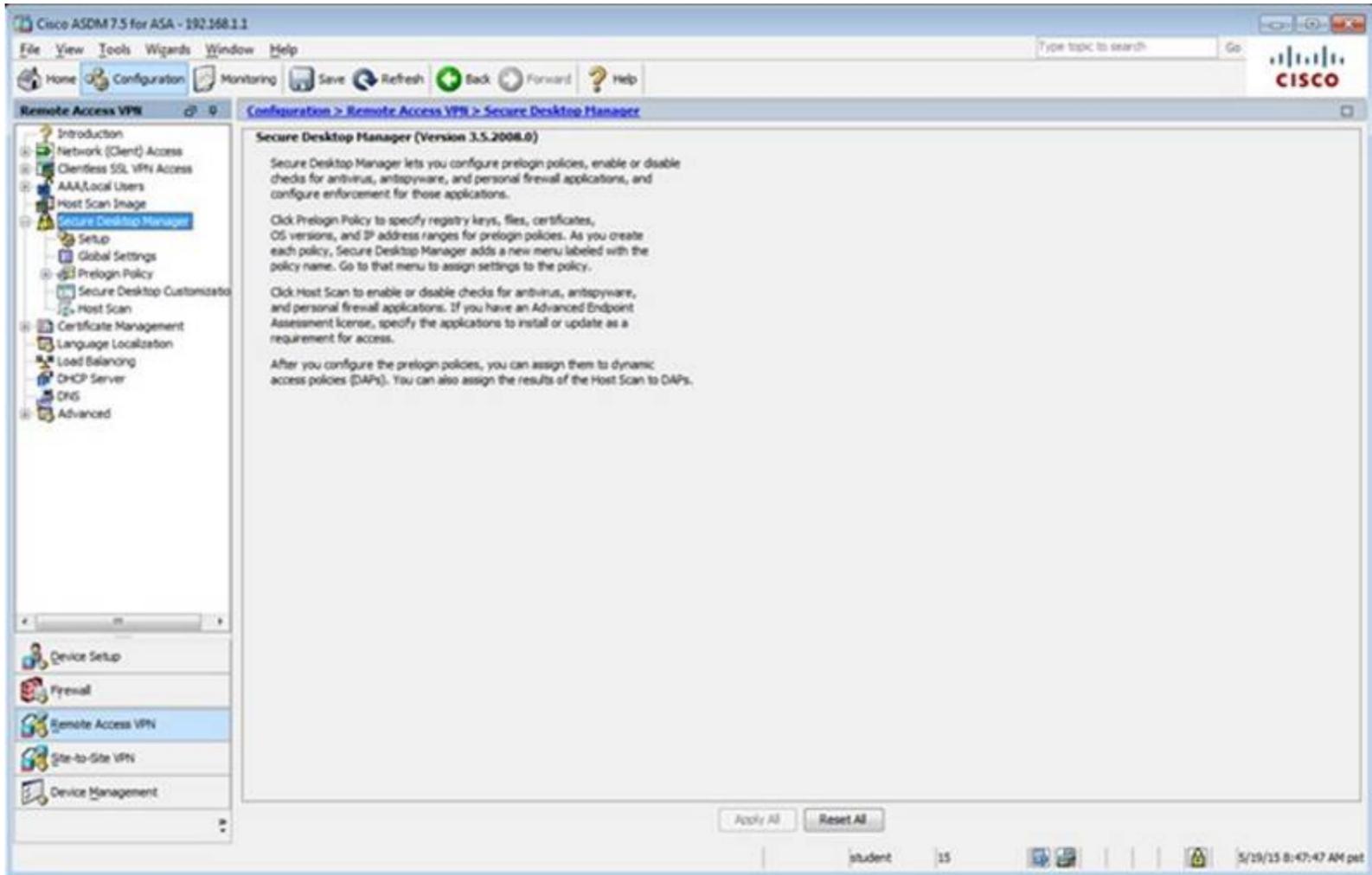
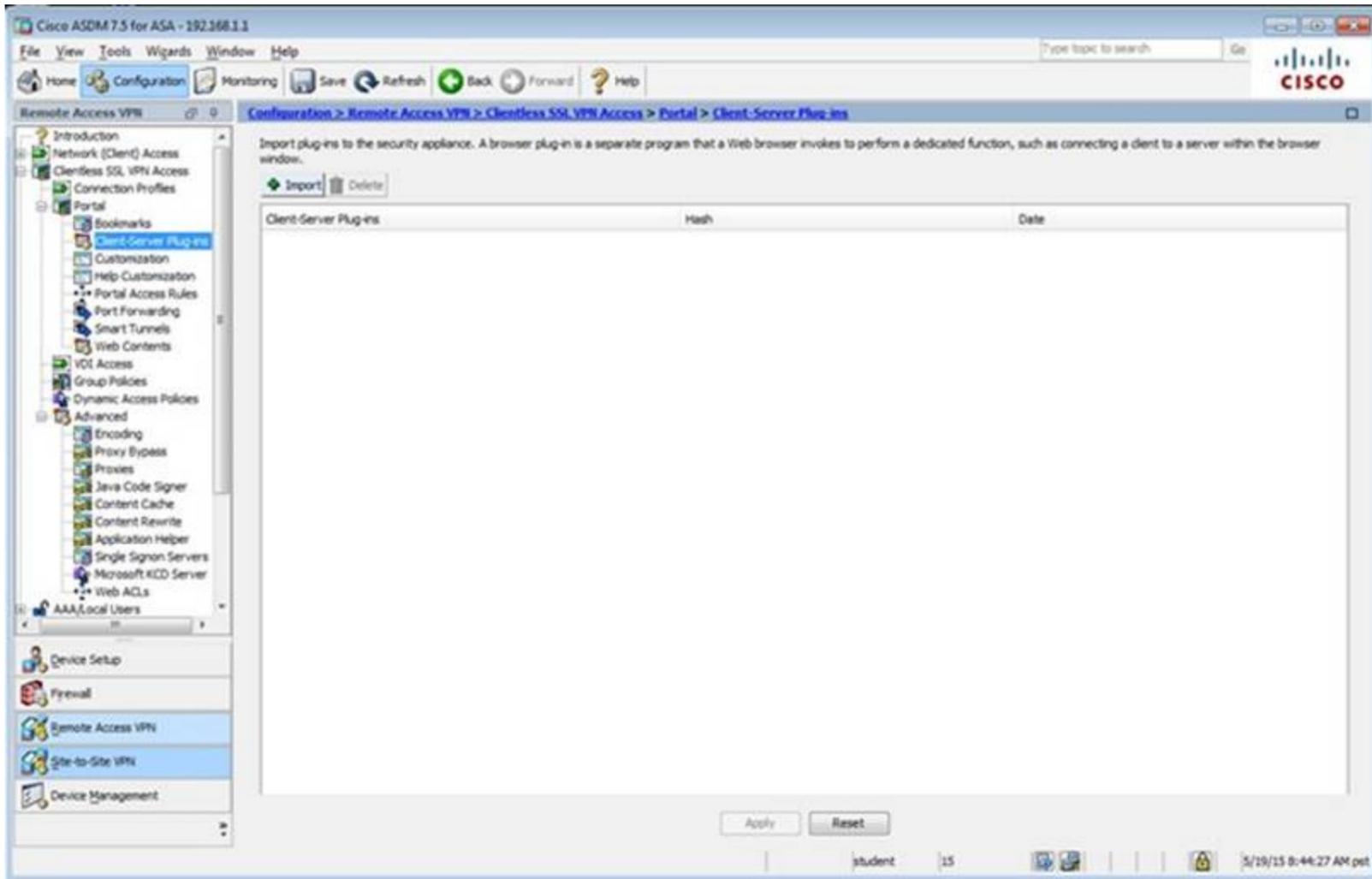
Name	Type	Tunneling Protocol	Connection Profiles/Users Assigned To
calm	Internal	ssl-clientless	Clientless
DefaultPolicy (System Default)	Internal	Rev 1:rev 2:ssl-clientless/2tp-espsec	DefaultRAGroup;DefaultL2;Group;DefaultRAMP;Group;Def...

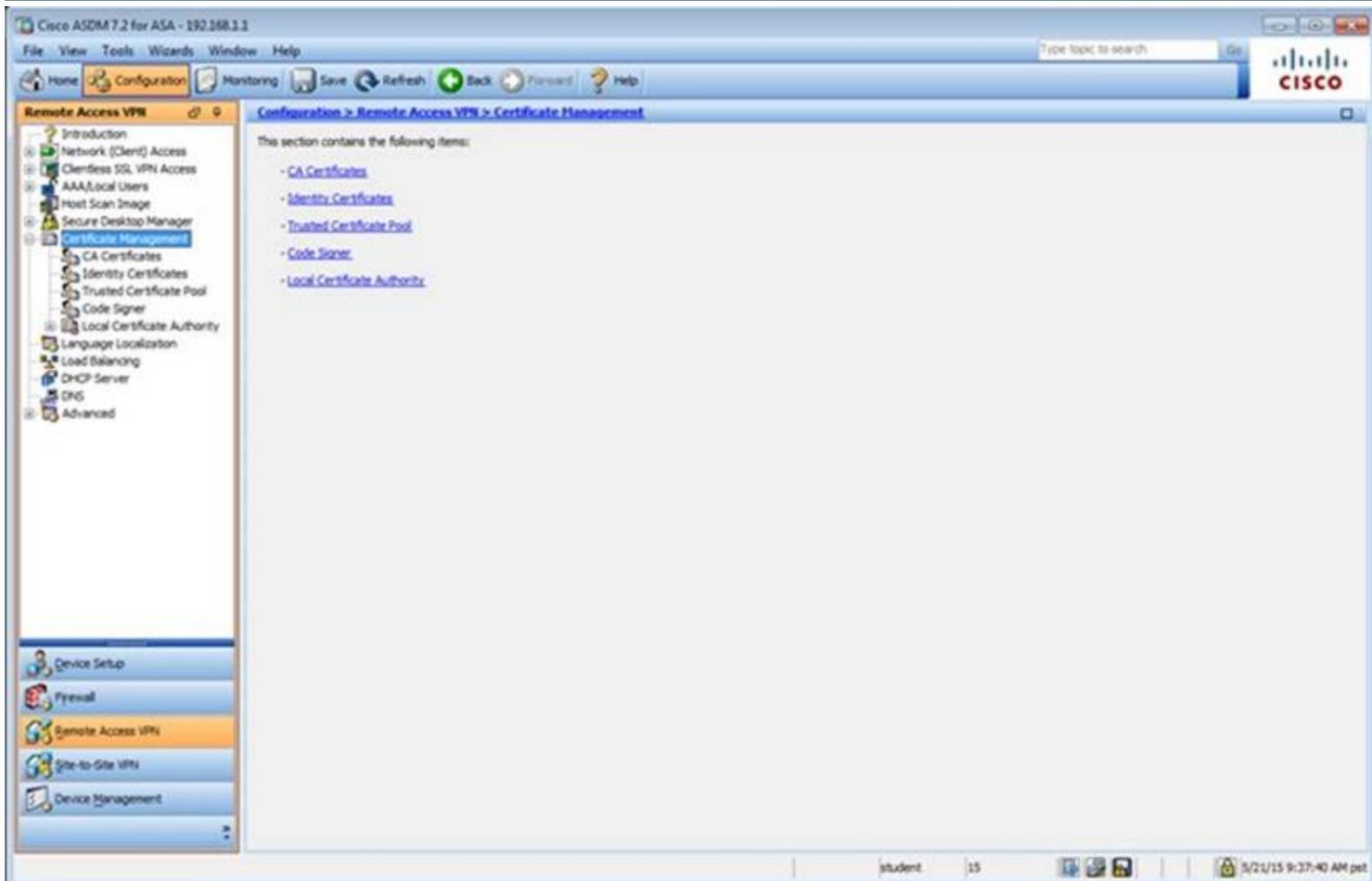
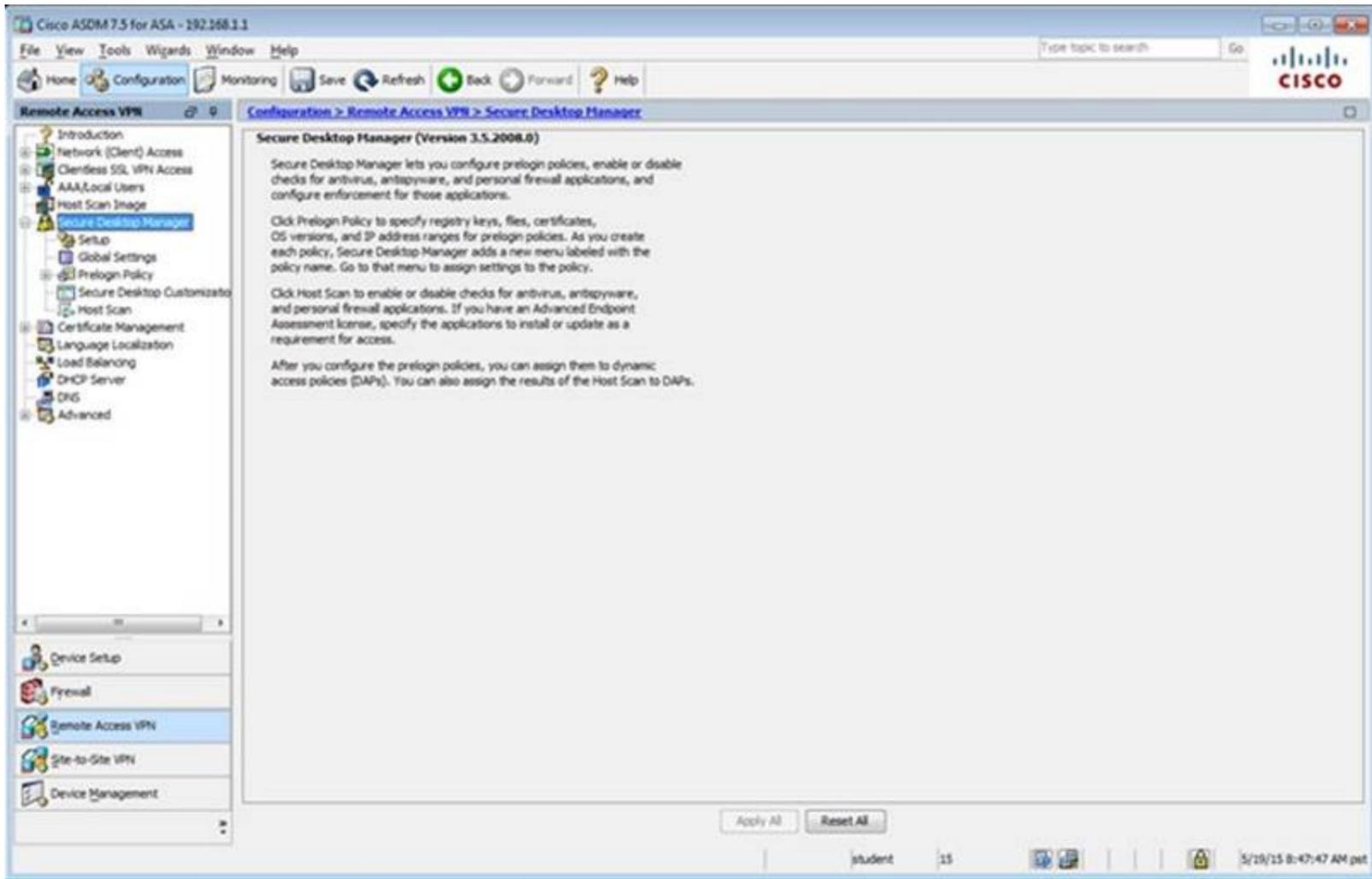
Find:

student 15 5/19/15 8:49:27 AM pet









The screenshot shows the Cisco ASDM 7.5 interface for configuration. The breadcrumb trail is: Configuration > Remote Access VPN > Certificate Management > Identity Certificates. A table lists issued certificates:

Issued To	Issued By	Expiry Date	Associated Trustpoints	Usage	Public Key Type
asdmname@17-ASA.sec	asdmname@17-ASA.sec	11:10:33 pm Dec 20 2024	ASDM_TrustPoint1	General Purpose	RSA (2048 bits)

Below the table, there are sections for 'Certificate Expiration Alerts' (Send the first alert before: 60 days, Repeat Alert Interval: 7 days) and 'Public CA Enrollment' with buttons for 'Enroll ASA SSL certificate with Entrust' and 'Launch ASDM Identity Certificate Wizard'.

The screenshot shows the 'Advanced' configuration page for Remote Access VPN. The breadcrumb trail is: Configuration > Remote Access VPN > Advanced. The page lists several configuration items:

- [Advanced Enrollment](#)
- [SSL Settings](#)
- [Certificate to AnyConnect and Clientless SSL VPN Connection Profile Maps](#)
- [HTTP Redirect](#)
- [Maximum VPN Sessions](#)
- [Crypto Engine](#)
- [E-mail Proxy](#)

Configure SSL parameters. These parameters affect both ASDM and SSL VPN access.

The minimum SSL version for the security appliance to negotiate as a "server":

The minimum SSL version for the security appliance to negotiate as a "client":

Diffie-Hellman group to be used with SSL:

ECDH group to be used with SSL:

Encryption

Cipher Version	Cipher Security Level	Cipher Algorithms/ Custom String
Default	Medium	DES-CBC3-SHA AES128-SHA DHE-RSA-AES128-SHA AES256-SHA ...
TLSV1	Medium	DES-CBC3-SHA AES128-SHA DHE-RSA-AES128-SHA AES256-SHA ...
TLSV1.1	Medium	DES-CBC3-SHA AES128-SHA DHE-RSA-AES128-SHA AES256-SHA ...
TLSV1.2	Medium	DES-CBC3-SHA AES128-SHA DHE-RSA-AES128-SHA AES256-SHA ...
DTLSV1	Medium	DES-CBC3-SHA AES128-SHA DHE-RSA-AES128-SHA AES256-SHA ...

Server Name Indication (SNI)

Domain	Certificate
dmz	ASDM_TrustPoint1.h...

Certificates

Specify which certificates, if any, should be used for SSL authentication on each interface. The fallback certificate will be used on interfaces not associated with a certificate of their own.

Apply Reset

Configure the maximum number of VPN sessions allowed at any given time.

Maximum AnyConnect Sessions:

Maximum Other VPN Sessions:

Apply Reset

**Configuration > Remote Access VPN > Network (Client) Access**

**What is Network (Client) Access?**  
 After a VPN client, such as AnyConnect, is authenticated, remote users can access corporate networks or applications as if they were on-site. The data traffic between remote users and the corporate network is secured by being encrypted when going through the Internet.

The **ASDM Assistant** provides simple "You Do It" steps for configuring Network (Client) Access.

**Important Concepts**  
 Following are some important concepts for setting up a connection.

**1. SSL tunnel and IPsec tunnel**  
 There are two different ways to encrypt data traffic. An SSL tunnel uses SSL protocol to encrypt data, while an IPsec tunnel uses IPsec protocol. Cisco AnyConnect VPN Client supports SSL and IPsec (IKEv2) protocols. Cisco VPN Client supports only IPsec (IKEv1) protocol.

**2. User and connection profile**  
 To access corporate network resources, remote users must authenticate, and identify which Connection Profile (Tunnel Group) to use. This connection profile specifies how the security appliance authenticates users.

You configure user account database in [AAA/Local Users](#).  
 You configure AnyConnect connection profile in [AnyConnect Connection Profiles](#), IPsec connection profile in [IPsec \(IKEv1\) Connection Profiles](#).

**3. Access policy**  
 Access policies control how remote users can access corporate networks. An access policy includes the following:

- Session control - how long a session can remain idle before it is closed.
- Endpoint security - determines the conditions that remote PCs must satisfy to connect, for example, requiring up-to-date anti-virus software.

You configure session control policies in [Dynamic Access Policies](#) or [Group Policies](#).  
 You configure endpoint security policies for AnyConnect client in [Secure Desktop Manager](#). You also have the option to setup **NAC** based endpoint security policies.

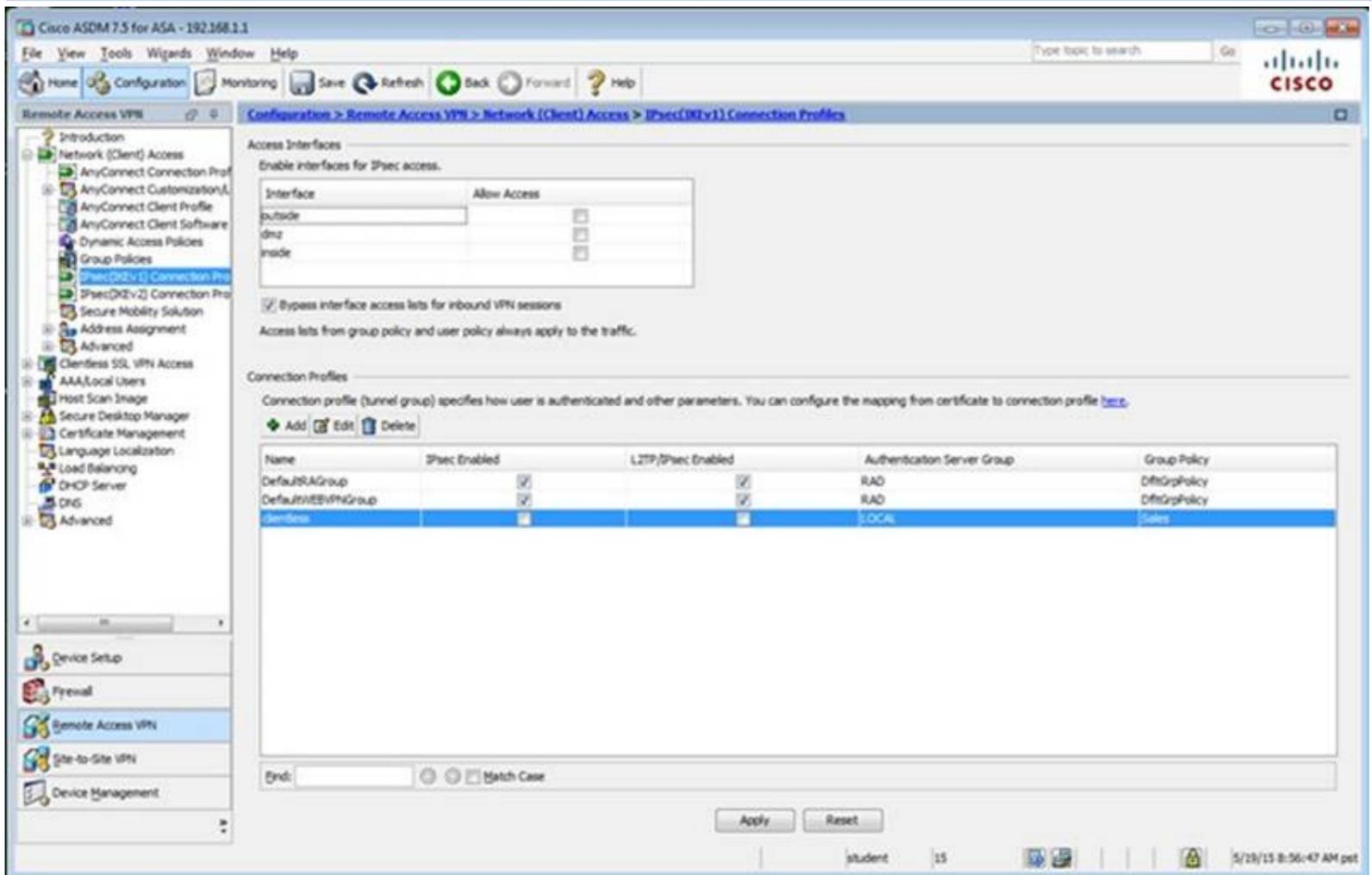
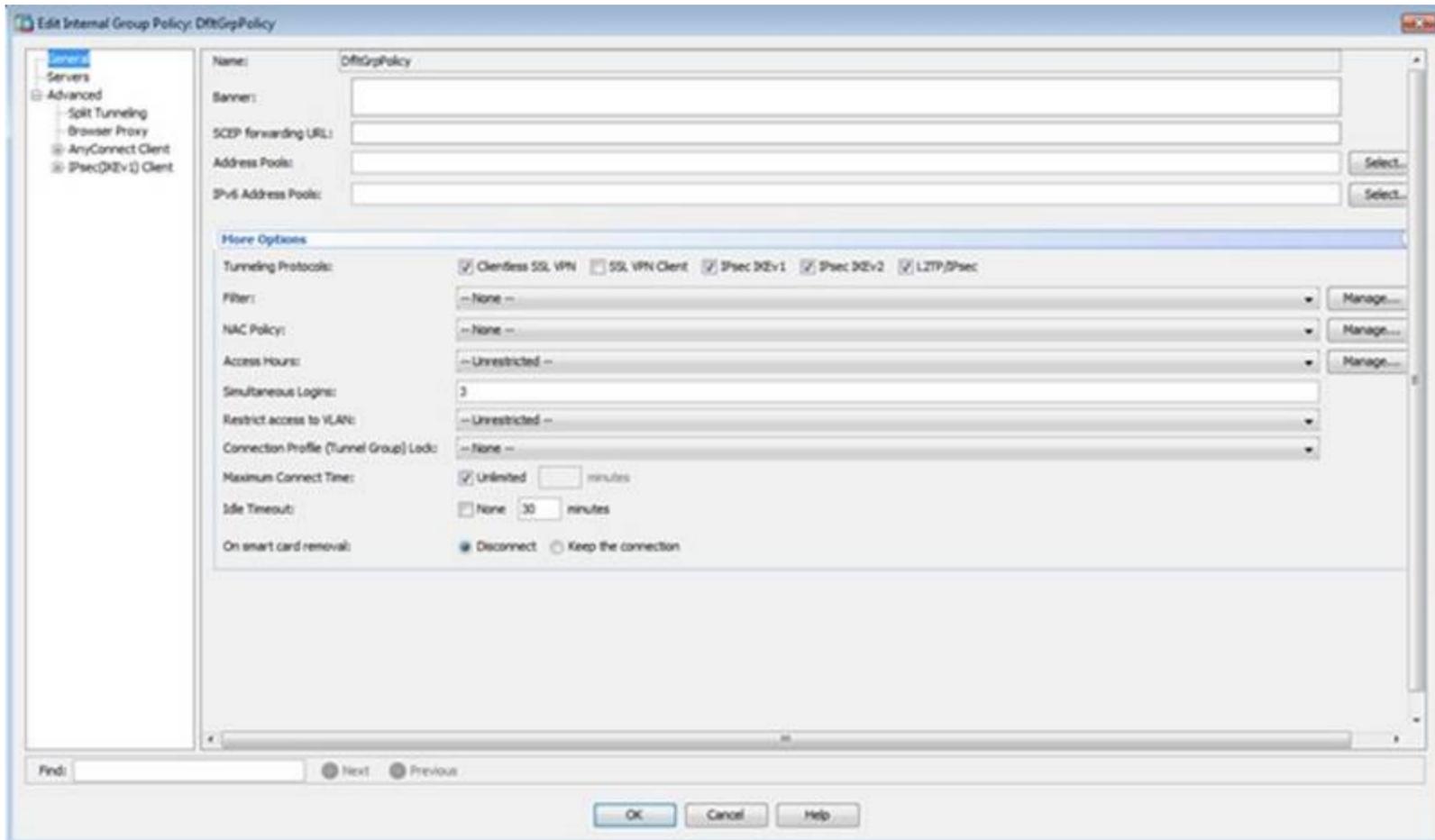
**Configuration > Remote Access VPN > Network (Client) Access > Group Policies**

Manage VPN group policies. A VPN group is a collection of user-oriented authorization attribute/value pairs that may be stored internally on the device or externally on a RADIUS/LDAP server. The group policy information is referenced by VPN connection profiles and user accounts.

To enforce authorization attributes from an LDAP server you must use an [LDAP attribute map](#).

Name	Type	Tunneling Protocol	Connection Profiles/Users Assigned To
Sales	Internal	ssl-clientless	clientless
DfGryPolicy (System Default)	Internal	rev-2,ikev2,ssl-clientless/2ip-sec	DefaultRAGroup/Default_2_Group/Default/10101VPNGroup

Find:



The screenshot shows the Cisco ASDM 7.5 interface for configuration. The breadcrumb trail is: Configuration > Remote Access VPN > Network (Client) Access > AnyConnect Connection Profiles. The main content area includes:

- Introduction:** The security appliance automatically deploys the Cisco AnyConnect VPN Client to remote users upon connection. The initial client deployment requires end-user administrative rights. The Cisco AnyConnect VPN Client supports IPsec (IKEv2) tunnel as well as SSL tunnel with Datagram Transport Layer Security (DTLS) tunneling options.
- Access Interfaces:**
  - Enable Cisco AnyConnect VPN Client access on the interfaces selected in the table below.
  - SSL access must be enabled if you allow AnyConnect client to be launched from a browser (Web Launch).

Interface	SSL Access		IPsec (IKEv2) Access	
	Allow Access	Enable DTLS	Allow Access	Enable Client Services
outside	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
dmz	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
inside	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

  - Bypass interface access lists for inbound VPN sessions.
  - Access lists from group policy and user policy always apply to the traffic.
- Login Page Setting:**
  - Allow user to select connection profile on the login page.
  - Shutdown portal login page.
- Connection Profiles:**
  - Connection profile (tunnel group) specifies how user is authenticated and other parameters. You can configure the mapping from certificate to connection profile [here](#).
  - Buttons: Add, Edit, Delete, End: [input type="text"], Match Case.

Name	SSL Enabled	IPsec Enabled	Aliases	Authentication Method	Group Policy
DefaultRAGroup	<input type="checkbox"/>	<input checked="" type="checkbox"/>		AAA(RAC)	DfltGrpPolicy
DefaultISEVPNGroup	<input type="checkbox"/>	<input checked="" type="checkbox"/>		AAA(RAC)	DfltGrpPolicy
test	<input type="checkbox"/>	<input type="checkbox"/>	test	AAA(OCA)	Test

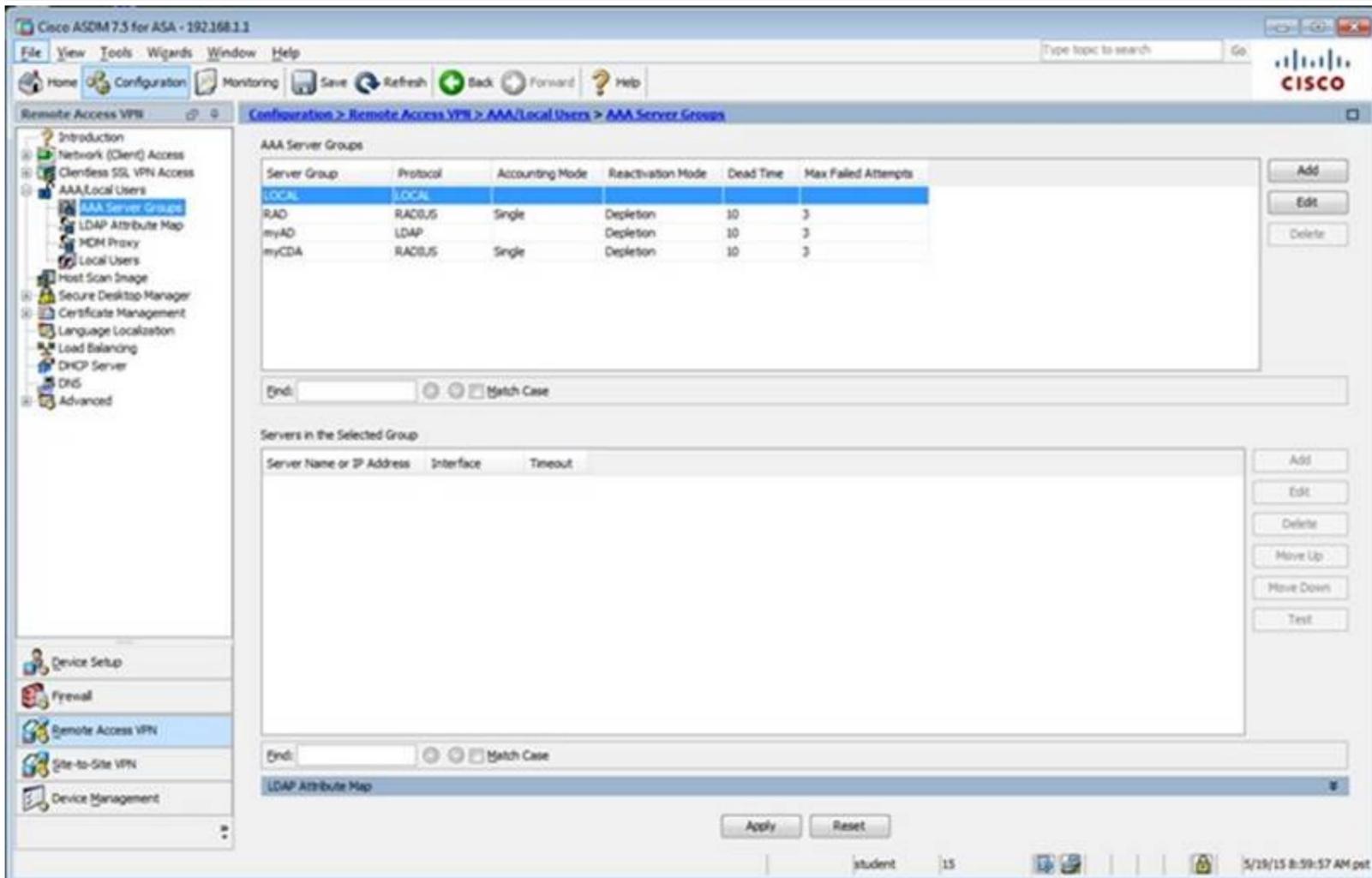
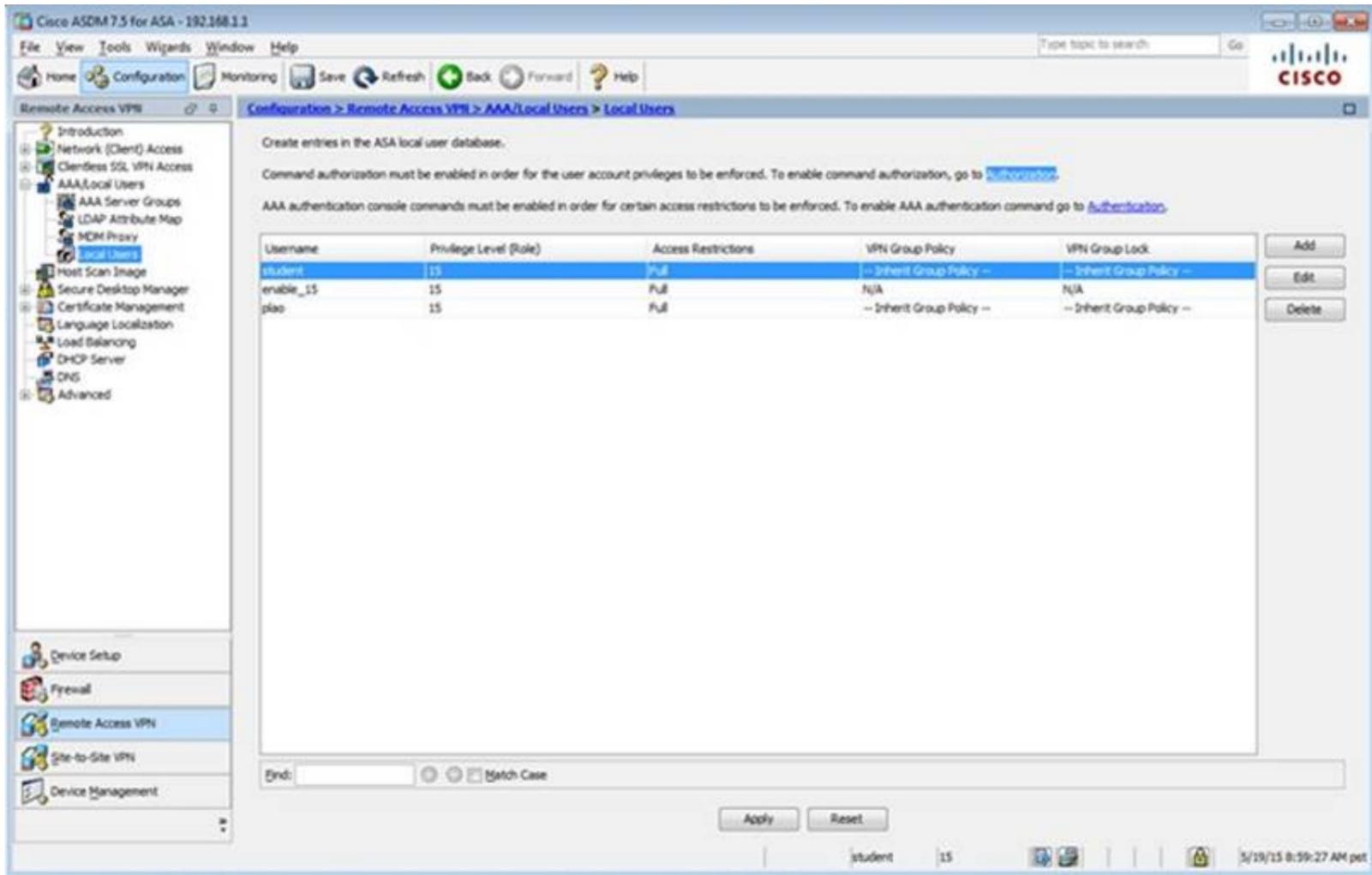
  - Let group URL take precedence if group URL and certificate map match different connection profiles. Otherwise, the connection profile that matches the certificate map will be used.

Buttons: Apply, Reset. Status bar: student | 15 | 5/19/15 8:58:17 AM pet

The screenshot shows the Cisco ASDM 7.5 interface for configuration. The breadcrumb trail is: Configuration > Remote Access VPN > AAA/Local Users. The main content area includes:

- Introduction:** This section contains the following items:
- [AAA Server Groups](#)
  - [LDAP Attribute Map](#)
  - [MDM Proxy](#)
  - [Local Users](#)

Status bar: student | 15 | 5/19/15 8:58:57 AM pet

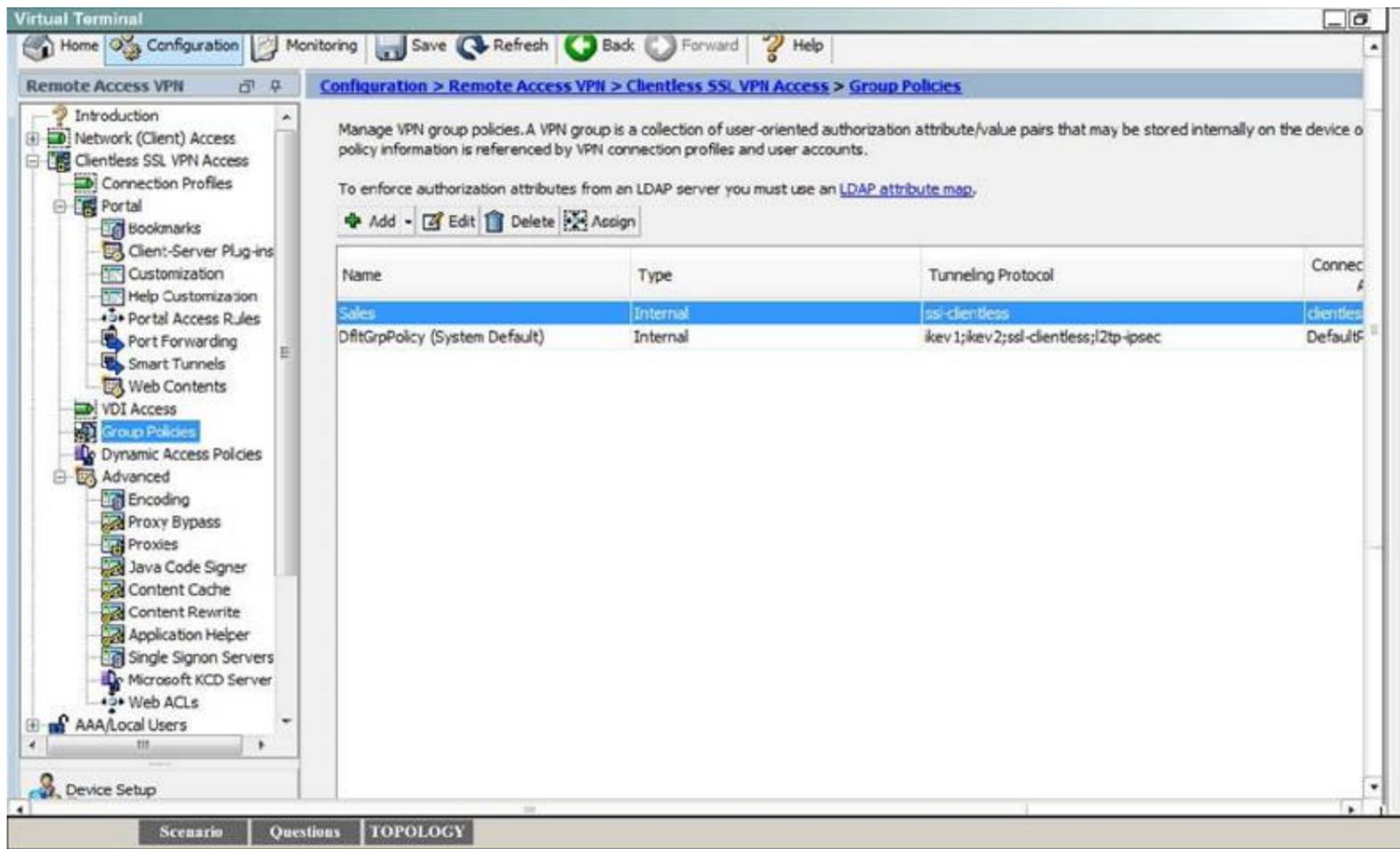


Which for tunneling protocols are enabled in the DfltGrpPolicy group policy? (Choose four)

- A. Clientless SSL VPN
- B. SSL VPN Client
- C. PPTP
- D. L2TP/IPsec
- E. IPsec IKEv1
- F. IPsec IKEv2

**Answer:** ADEF

**Explanation:** By clicking one the Configuration-> Remote Access -> Clientless CCL VPN Access-> Group Policies tab you can view the DfltGrpPolicy protocols as shown below:



**NEW QUESTION 81**

What type of attack was the Stuxnet virus?

- A. cyber warfare
- B. hacktivism
- C. botnet
- D. social engineering

**Answer:** A

**Explanation:** Stuxnet is a computer worm that targets industrial control systems that are used to monitor and control large scale industrial facilities like power plants, dams, waste processing systems and similar operations. It allows the attackers to take control of these systems without the operators knowing. This is the first attack we've seen that allows hackers to manipulate real-world equipment, which makes it very dangerous.

Source: <https://us.norton.com/stuxnet>

**NEW QUESTION 83**

Which tasks is the session management path responsible for? (Choose three.)

- A. Verifying IP checksums
- B. Performing route lookup
- C. Performing session lookup
- D. Allocating NAT translations
- E. Checking TCP sequence numbers
- F. Checking packets against the access list

**Answer:** BDF

**Explanation:** The ASA has to check the packet against access lists and perform other tasks to determine if the packet is allowed or denied. To perform this check, the first packet of the session goes through the "session management path," and depending on the type of traffic, it might also pass through the "control plane path." The session management path is responsible for the following tasks:

- + Performing the access list checks
- + Performing route lookups
- + Allocating NAT translations (xlates)
- + Establishing sessions in the "fast path"

Source:

<http://www.cisco.com/c/en/us/td/docs/security/asa/asa82/configuration/guide/config/intro.html>

**NEW QUESTION 87**

When is the best time to perform an anti-virus signature update?

- A. Every time a new update is available.
- B. When the local scanner has detected a new virus.
- C. When a new virus is discovered in the wild.
- D. When the system detects a browser hook.

**Answer:** A

**Explanation:** Source:

<http://www.techrepublic.com/article/four-steps-to-keeping-current-with-antivirus-signature-updates/>

#### NEW QUESTION 90

What is an advantage of implementing a Trusted Platform Module for disk encryption?

- A. It provides hardware authentication.
- B. It allows the hard disk to be transferred to another device without requiring re-encryption.
- C. It supports a more complex encryption algorithm than other disk-encryption technologies.
- D. It can protect against single points of failure.

**Answer:** A

**Explanation:** Trusted Platform Module (TPM) is an international standard for a secure cryptoprocessor, which is a dedicated microcontroller designed to secure hardware by integrating cryptographic keys into devices.

Software can use a Trusted Platform Module to authenticate hardware devices. Since each TPM chip has a unique and secret RSA key burned in as it is produced, it is capable of performing platform authentication.

Source: [https://en.wikipedia.org/wiki/Trusted\\_Platform\\_Module#Disk\\_encryption](https://en.wikipedia.org/wiki/Trusted_Platform_Module#Disk_encryption)

#### NEW QUESTION 94

If a router configuration includes the line `aaa authentication login default group tacacs+ enable`, which events will occur when the TACACS+ server returns an error? (Choose two.)

- A. The user will be prompted to authenticate using the enable password
- B. Authentication attempts to the router will be denied
- C. Authentication will use the router's local database
- D. Authentication attempts will be sent to the TACACS+ server

**Answer:** AB

#### NEW QUESTION 98

Which statement about application blocking is true?

- A. It blocks access to specific programs.
- B. It blocks access to files with specific extensions.
- C. It blocks access to specific network addresses.
- D. It blocks access to specific network services.

**Answer:** A

**Explanation:** How do you block unknown applications on Cisco Web Security Appliance If Application Visibility Controls (AVC) are enabled (Under GUI > Security Services > Web Reputation and Anti- Malware), then we can block access based on application types like Proxies, File Sharing, Internet utilities.

We can do this under Web Security Manager > Access Policies > 'Applications' column <for the required access policy>.

Source:

<http://www.cisco.com/c/en/us/support/docs/security/web-security-appliance/118486-technote-wsa-00.html>

#### NEW QUESTION 101

You want to allow all of your company's users to access the Internet without allowing other Web servers to collect the IP addresses of individual users. What two solutions can you use? (Choose two).

- A. Configure a proxy server to hide users' local IP addresses.
- B. Assign unique IP addresses to all users.
- C. Assign the same IP address to all users.
- D. Install a Web content filter to hide users' local IP addresses.
- E. Configure a firewall to use Port Address Translation.

**Answer:** AE

**Explanation:** In computer networks, a proxy server is a server (a computer system or an application) that acts as an intermediary for requests from clients seeking resources from other servers.[1] A client connects to the proxy server, requesting some service, such as a file, connection, web page, or other resource available from a different server and the proxy server evaluates the request as a way to simplify and control its complexity.

Proxies were invented to add structure and encapsulation to distributed systems.[2] Today, most proxies are web proxies, facilitating access to content on the World Wide Web and providing anonymity.

Source: [https://en.wikipedia.org/wiki/Proxy\\_server](https://en.wikipedia.org/wiki/Proxy_server)

Port Address Translation (PAT) is a subset of NAT, and it is still swapping out the source IP address as traffic goes through the NAT/PAT device, except with PAT everyone does not get their own unique translated address. Instead, the PAT device keeps track of individual sessions based on port numbers and other unique identifiers, and then forwards all packets using a single source IP address, which is shared. This is often referred to as NAT with overload; we are hiding multiple IP addresses on a single global address.

Source: Cisco Official Certification Guide, Port Address Translation, p.368

#### NEW QUESTION 103

A clientless SSL VPN user who is connecting on a Windows Vista computer is missing the menu option for Remote Desktop Protocol on the portal web page. Which action should you take to begin troubleshooting?

- A. Ensure that the RDP2 plug-in is installed on the VPN gateway
- B. Reboot the VPN gateway
- C. Instruct the user to reconnect to the VPN gateway
- D. Ensure that the RDP plug-in is installed on the VPN gateway

**Answer:** D

**Explanation:** + RDP plug-in: This is the original plug-in created that contains both the Java and ActiveX Client. + RDP2 plug-in: Due to changes within the RDP protocol, the Proper Java RDP Client was updated in order to support Microsoft Windows 2003 Terminal Servers and Windows Vista Terminal Servers.

Source:

<http://www.cisco.com/c/en/us/support/docs/security/asa-5500-x-series-next-generation-firewalls/113600-technote-product-00.html>

#### NEW QUESTION 106

In what type of attack does an attacker virtually change a device's burned-in address in an attempt to circumvent access lists and mask the device's true identity?

- A. gratuitous ARP
- B. ARP poisoning
- C. IP spoofing
- D. MAC spoofing

**Answer:** D

**Explanation:** If a switch receives an inferior BPDU, nothing changes. Receiving a superior BPDU will kick off a reconvergence of the STP topology. So the rogue switch may become a root bridge.

Source:

<http://www.networkpcworld.com/what-are-inferior-and-superior-bpdus-of-stp/>

#### NEW QUESTION 109

Which statement about Cisco ACS authentication and authorization is true?

- A. ACS servers can be clustered to provide scalability.
- B. ACS can query multiple Active Directory domains.
- C. ACS uses TACACS to proxy other authentication servers.
- D. ACS can use only one authorization profile to allow or deny requests.

**Answer:** A

**Explanation:** ACS can join one AD domain. If your Active Directory structure has multi-domain forest or is divided into multiple forests, ensure that trust relationships exist between the domain to which ACS is connected and the other domains that have user and machine information to which you need access. So B is not correct.

Source:

[http://www.cisco.com/c/en/us/td/docs/net\\_mgmt/cisco\\_secure\\_access\\_control\\_system/5-8/ACS-](http://www.cisco.com/c/en/us/td/docs/net_mgmt/cisco_secure_access_control_system/5-8/ACS-ADIntegration/guide/Active_Directory_Integration_in_ACS_5-8.pdf)

[ADIntegration/guide/Active\\_Directory\\_Integration\\_in\\_ACS\\_5-8.pdf](http://www.cisco.com/c/en/us/td/docs/net_mgmt/cisco_secure_access_control_system/5-8/ACS-ADIntegration/guide/Active_Directory_Integration_in_ACS_5-8.pdf) + You can define multiple authorization profiles as a network access policy result. In this way, you maintain a smaller number of authorization profiles, because you can use the authorization profiles in combination as rule results, rather than maintaining all the combinations themselves in individual profiles. So D. is not correct + ACS 5.1 can function both as a RADIUS and RADIUS proxy server. When it acts as a proxy server, ACS receives authentication and accounting requests from the NAS and forwards the requests to the external RADIUS server. So C. is nor correct.

Source:

[http://www.cisco.com/c/en/us/td/docs/net\\_mgmt/cisco\\_secure\\_access\\_control\\_system/5-1/user/guide/acsuserguide/policy\\_mod.html](http://www.cisco.com/c/en/us/td/docs/net_mgmt/cisco_secure_access_control_system/5-1/user/guide/acsuserguide/policy_mod.html)

#### NEW QUESTION 113

What three actions are limitations when running IPS in promiscuous mode? (Choose three.)

- A. deny attacker
- B. deny packet
- C. modify packet
- D. request block connection
- E. request block host
- F. reset TCP connection

**Answer:** ABC

**Explanation:** In promiscuous mode, packets do not flow through the sensor. The disadvantage of operating in promiscuous mode, however, is the sensor cannot stop malicious traffic from reaching its intended target for certain types of attacks, such as atomic attacks (single-packet attacks). The response actions implemented by promiscuous sensor devices are post-event responses and often require assistance from other networking devices, for example, routers and firewalls, to respond to an attack.

Source:

[http://www.cisco.com/c/en/us/td/docs/security/ips/7-0/configuration/guide/cli/cliguide7/cli\\_interfaces.html](http://www.cisco.com/c/en/us/td/docs/security/ips/7-0/configuration/guide/cli/cliguide7/cli_interfaces.html)

#### NEW QUESTION 117

What is the most common Cisco Discovery Protocol version 1 attack?

- A. Denial of Service
- B. MAC-address spoofing
- C. CAM-table overflow
- D. VLAN hopping

**Answer:** A

**Explanation:** CDP contains information about the network device, such as the software version, IP address, platform, capabilities, and the native VLAN. When this information is available to an attacker computer, the attacker from that computer can use it to find exploits to attack your network, usually in the form of a Denial of Service (DoS) attack.

Source: <https://howdoesinternetwork.com/2011/cdp-attack>

#### NEW QUESTION 120

Which two statements about Telnet access to the ASA are true? (Choose two).

- A. You may VPN to the lowest security interface to telnet to an inside interface.
- B. You must configure an AAA server to enable Telnet.
- C. You can access all interfaces on an ASA using Telnet.
- D. You must use the command virtual telnet to enable Telnet.
- E. Best practice is to disable Telnet and use SSH.

**Answer:** AE

**Explanation:** The ASA allows Telnet and SSH connections to the ASA for management purposes. You cannot use Telnet to the lowest security interface unless you use Telnet inside an IPsec tunnel.

Source:

[http://www.cisco.com/c/en/us/td/docs/security/asa/asa82/configuration/guide/config/access\\_management.html#wp1054101](http://www.cisco.com/c/en/us/td/docs/security/asa/asa82/configuration/guide/config/access_management.html#wp1054101)

#### NEW QUESTION 125

In which two situations should you use out-of-band management? (Choose two.)

- A. when a network device fails to forward packets
- B. when you require ROMMON access
- C. when management applications need concurrent access to the device
- D. when you require administrator access from multiple locations
- E. when the control plane fails to respond

**Answer:** AB

**Explanation:** OOB management is used for devices at the headquarters and is accomplished by connecting dedicated management ports or spare Ethernet ports on devices directly to the dedicated OOB management network hosting the management and monitoring applications and services. The OOB management network can be either implemented as a collection of dedicated hardware or based on VLAN isolation.

Source:

[http://www.cisco.com/c/en/us/td/docs/solutions/Enterprise/Security/SAFE\\_RG/SAFE\\_rg/chap9.html](http://www.cisco.com/c/en/us/td/docs/solutions/Enterprise/Security/SAFE_RG/SAFE_rg/chap9.html)

#### NEW QUESTION 130

Which protocol provides security to Secure Copy?

- A. IPsec
- B. SSH
- C. HTTPS
- D. ESP

**Answer:** B

**Explanation:** The SCP is a network protocol, based on the BSD RCP protocol,[3] which supports file transfers between hosts on a network. SCP uses Secure Shell (SSH) for data transfer and uses the same mechanisms for authentication, thereby ensuring the authenticity and confidentiality of the data in transit.

Source: [https://en.wikipedia.org/wiki/Secure\\_copy](https://en.wikipedia.org/wiki/Secure_copy)

#### NEW QUESTION 133

Which command will configure a Cisco ASA firewall to authenticate users when they enter the enable syntax using the local database with no fallback method?

- A. aaa authentication enable console LOCAL SERVER\_GROUP
- B. aaa authentication enable console SERVER\_GROUP LOCAL
- C. aaa authentication enable console local
- D. aaa authentication enable console LOCAL

**Answer:** D

**Explanation:** The local database must be referenced in all capital letters when AAA is in use. If lower case letters are used, the ASA will look for an AAA server group called "local".

#### NEW QUESTION 136

Which type of mirroring does SPAN technology perform?

- A. Remote mirroring over Layer 2
- B. Remote mirroring over Layer 3

- C. Local mirroring over Layer 2
- D. Local mirroring over Layer 3

**Answer:** C

**Explanation:** You can analyze network traffic passing through ports or VLANs by using SPAN or RSPAN to send a copy of the traffic to another port on the switch or on another switch that has been connected to a network analyzer or other monitoring or security device.

Local SPAN supports a SPAN session entirely within one switch; all source ports or source VLANs and destination ports are in the same switch or switch stack. Each local SPAN session or RSPAN destination session must have a destination port (also called a monitoring port) that receives a copy of traffic from the source ports or VLANs and sends the SPAN packets to the user, usually a network analyzer:

+ If ingress traffic forwarding is enabled for a network security device, the destination port forwards traffic at Layer 2.

Source:

[http://www.cisco.com/c/en/us/td/docs/switches/lan/catalyst2960/software/release/12-2\\_55\\_se/configuration/guide/scg\\_2960/swspan.html](http://www.cisco.com/c/en/us/td/docs/switches/lan/catalyst2960/software/release/12-2_55_se/configuration/guide/scg_2960/swspan.html)

#### NEW QUESTION 139

Which two services define cloud networks? (Choose two.)

- A. Infrastructure as a Service
- B. Platform as a Service
- C. Security as a Service
- D. Compute as a Service
- E. Tenancy as a Service

**Answer:** AB

**Explanation:** The NIST's definition of cloud computing defines the service models as follows:[2] + Software as a Service (SaaS). The capability provided to the consumer is to use the provider's applications running on a cloud infrastructure. The applications are accessible from various client devices through either a thin client interface, such as a web browser (e.g., web-based email), or a program interface. The consumer does not manage or control the underlying cloud infrastructure including network, servers, operating systems, storage, or even individual application capabilities, with the possible exception of limited user-specific application configuration settings.

+ Platform as a Service (PaaS). The capability provided to the consumer is to deploy onto the cloud infrastructure consumer-created or acquired applications created using programming languages, libraries, services, and tools supported by the provider. The consumer does not manage or control the underlying cloud infrastructure including network, servers, operating systems, or storage, but has control over the deployed applications and possibly configuration settings for the application-hosting environment.

+ Infrastructure as a Service (IaaS). The capability provided to the consumer is to provision processing, storage, networks, and other fundamental computing resources where the consumer is able to deploy and run arbitrary software, which can include operating systems and applications. The consumer does not manage or control the underlying cloud infrastructure but has control over operating systems, storage, and deployed applications; and possibly limited control of select networking components (e.g., host firewalls).

Source: [https://en.wikipedia.org/wiki/Cloud\\_computing#Service\\_models](https://en.wikipedia.org/wiki/Cloud_computing#Service_models)

#### NEW QUESTION 144

Which address block is reserved for locally assigned unique local addresses?

- A. 2002::/16
- B. FD00::/8
- C. 2001::/32
- D. FB00::/8

**Answer:** B

**Explanation:** The address block fc00::/7 is divided into two /8 groups:

+ The block fc00::/8 has not been defined yet. It has been proposed to be managed by an allocation authority, but this has not gained acceptance in the IETF

+ The block fd00::/8 is defined for /48 prefixes, formed by setting the 40 least-significant bits of the prefix to a randomly generated bit string

Prefixes in the fd00::/8 range have similar properties as those of the IPv4 private address ranges:

+ They are not allocated by an address registry and may be used in networks by anyone without outside involvement.

+ They are not guaranteed to be globally unique.

+ Reverse Domain Name System (DNS) entries (under ip6.arpa) for fd00::/8 ULAs cannot be delegated in the global DNS.

Source: [https://en.wikipedia.org/wiki/Unique\\_local\\_address](https://en.wikipedia.org/wiki/Unique_local_address)

#### NEW QUESTION 147

If a packet matches more than one class map in an individual feature type's policy map, how does the ASA handle the packet?

- A. The ASA will apply the actions from only the first matching class map it finds for the feature type.
- B. The ASA will apply the actions from only the most specific matching class map it finds for the feature type.
- C. The ASA will apply the actions from all matching class maps it finds for the feature type.
- D. The ASA will apply the actions from only the last matching class map it finds for the feature type.

**Answer:** A

**Explanation:** I suppose this could be an Explanation:. Not 100% confident about this. The Explanation: refers to an interface, but the question doesn't specify that. See the following information for how a packet matches class maps in a policy map for a given interface:

1. A packet can match only one class map in the policy map for each feature type.

2. When the packet matches a class map for a feature type, the ASA does not attempt to match it to any subsequent class maps for that feature type.

3. If the packet matches a subsequent class map for a different feature type, however, then the ASA also applies the actions for the subsequent class map, if supported. See the "Incompatibility of Certain Feature Actions" section for more information about unsupported combinations.

If a packet matches a class map for connection limits, and also matches a class map for an application inspection, then both actions are applied.

If a packet matches a class map for HTTP inspection, but also matches another class map that includes HTTP inspection, then the second class map actions are

not applied.

Source:

[http://www.cisco.com/c/en/us/td/docs/security/asa/asa84/configuration/guide/asa\\_84\\_cli\\_config/mpf\\_service\\_policy.html](http://www.cisco.com/c/en/us/td/docs/security/asa/asa84/configuration/guide/asa_84_cli_config/mpf_service_policy.html)

#### NEW QUESTION 151

Which accounting notices are used to send a failed authentication attempt record to a AAA server? (Choose two.)

- A. start-stop
- B. stop-record
- C. stop-only
- D. stop

**Answer:** AC

**Explanation:** aaa accounting { auth-proxy | system | network | exec | connection | commands level | dot1x } { default | list- name | guarantee-first } [ vrf vrf-name ] { start-stop | stop-only | none } [broadcast] { radius | group group-name } + stop-only: Sends a stop accounting record for all cases including authentication failures regardless of whether the aaa accounting send stop-record authentication failure command is configured. + stop-record: Generates stop records for a specified event.

For minimal accounting, include the stop-only keyword to send a "stop" accounting record for all cases including authentication failures. For more accounting, you can include the start-stop keyword, so that RADIUS or TACACS+ sends a "start" accounting notice at the beginning of the requested process and a "stop" accounting notice at the end of the process.

Source:

<http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/security/a1/sec-a1-cr-book/sec-cr-a1.html>

#### NEW QUESTION 154

Which two next-generation encryption algorithms does Cisco recommend? (Choose two.)

- A. AES
- B. 3DES
- C. DES
- D. MD5
- E. DH-1024
- F. SHA-384

**Answer:** AF

**Explanation:** The Suite B next-generation encryption (NGE) includes algorithms for authenticated encryption, digital signatures, key establishment, and cryptographic hashing, as listed here:

- + Elliptic Curve Cryptography (ECC) replaces RSA signatures with the ECDSA algorithm + AES in the Galois/Counter Mode (GCM) of operation
- + ECCDigital Signature Algorithm
- + SHA-256, SHA-384, and SHA-512

Source: Cisco Official Certification Guide, Next-Generation Encryption Protocols, p.97

#### NEW QUESTION 156

Which options are filtering options used to display SDEE message types? (Choose two.)

- A. stop
- B. none
- C. error
- D. all

**Answer:** CD

**Explanation:** SDEE Messages

- + All -- SDEE error, status, and alert messages are shown.
- + Error -- Only SDEE error messages are shown.
- + Status -- Only SDEE status messages are shown.
- + Alerts -- Only SDEE alert messages are shown.

Source:

[http://www.cisco.com/c/en/us/td/docs/routers/access/cisco\\_router\\_and\\_security\\_device\\_manager/24/software/user/guide/IPS.html#wp1083698](http://www.cisco.com/c/en/us/td/docs/routers/access/cisco_router_and_security_device_manager/24/software/user/guide/IPS.html#wp1083698)

#### NEW QUESTION 157

What are purposes of the Internet Key Exchange in an IPsec VPN? (Choose two.)

- A. The Internet Key Exchange protocol establishes security associations
- B. The Internet Key Exchange protocol provides data confidentiality
- C. The Internet Key Exchange protocol provides replay detection
- D. The Internet Key Exchange protocol is responsible for mutual authentication

**Answer:** AD

**Explanation:** IPsec uses the Internet Key Exchange (IKE) protocol to negotiate and establish secured site-to-site or remote access virtual private network (VPN) tunnels. IKE is a framework provided by the Internet Security Association and Key Management Protocol (ISAKMP) and parts of two other key management protocols, namely Oakley and Secure Key Exchange Mechanism (SKEME).

In IKE Phase 1 IPsec peers negotiate and authenticate each other. In Phase 2 they negotiate keying materials and algorithms for the encryption of the data being transferred over the IPsec tunnel.

Source: Cisco Official Certification Guide, The Internet Key Exchange (IKE) Protocol, p.123

#### NEW QUESTION 160

Which type of firewall can act on the behalf of the end device?

- A. Stateful packet
- B. Application
- C. Packet
- D. Proxy

**Answer:** D

**Explanation:** Application firewalls, as indicated by the name, work at Layer 7, or the application layer of the OSI model. These devices act on behalf of a client (aka proxy) for requested services.

Because application/proxy firewalls act on behalf of a client, they provide an additional "buffer" from port scans, application attacks, and so on. For example, if an attacker found a vulnerability in an application, the attacker would have to compromise the application/proxy firewall before attacking devices behind the firewall. The application/proxy firewall can also be patched quickly in the event that a vulnerability is discovered. The same may not hold true for patching all the internal devices.

Source:

<http://www.networkworld.com/article/2255950/lan-wan/chapter-1--types-of-firewalls.html>

#### NEW QUESTION 161

Which wildcard mask is associated with a subnet mask of /27?

- A. 0.0.0.31
- B. 0.0.0.27
- C. 0.0.0.224
- D. 0.0.0.255

**Answer:** A

**Explanation:** Slash Netmask Wildcard Mask

/27 255.255.255.224 0.0.0.31

Further reading

Source: [https://en.wikipedia.org/wiki/Wildcard\\_mask](https://en.wikipedia.org/wiki/Wildcard_mask)

#### NEW QUESTION 162

According to Cisco best practices, which three protocols should the default ACL allow on an access port to enable wired BYOD devices to supply valid credentials and connect to the network? (Choose three.)

- A. BOOTP
- B. TFTP
- C. DNS
- D. MAB
- E. HTTP
- F. 802.1x

**Answer:** ABC

**Explanation:** ACLs are the primary method through which policy enforcement is done at access layer switches for wired devices within the campus.

ACL-DEFAULT--This ACL is configured on the access layer switch and used as a default ACL on the port. Its purpose is to prevent un-authorized access.

An example of a default ACL on a campus access layer switch is shown below: Extended IP access list ACL-DEFAULT

```
10 permit udp any eq bootpc any eq bootps log (2604 matches) 20 permit udp any host 10.230.1.45 eq domain 30 permit icmp any any
```

```
40 permit udp any any eq tftp
```

```
50 deny ip any any log (40 matches)
```

As seen from the output above, ACL-DEFAULT allows DHCP, DNS, ICMP, and TFTP traffic and denies everything else.

Source:

[http://www.cisco.com/c/en/us/td/docs/solutions/Enterprise/Borderless\\_Networks/Unified\\_Access/BYOD\\_Design\\_Guide/BYOD\\_Wired.html](http://www.cisco.com/c/en/us/td/docs/solutions/Enterprise/Borderless_Networks/Unified_Access/BYOD_Design_Guide/BYOD_Wired.html)

MAB is an access control technique that Cisco provides and it is called MAC Authentication Bypass.

#### NEW QUESTION 164

Which network device does NTP authenticate?

- A. Only the time source
- B. Only the client device
- C. The firewall and the client device
- D. The client device and the time source

**Answer:** A

**Explanation:** You can configure the device to authenticate the time sources to which the local clock is synchronized. When you enable NTP authentication, the device synchronizes to a time source only if the source carries one of the authentication keys specified by the ntp trusted-key command. The device drops any packets that fail the authentication check and prevents them from updating the local clock. NTP authentication is disabled by default.

Source:  
[http://www.cisco.com/c/en/us/td/docs/switches/datacenter/sw/5\\_x/nx-os/system\\_management/configuration/guide/sm\\_nx\\_os\\_cg/sm\\_3ntp.html#wp1100303%0A](http://www.cisco.com/c/en/us/td/docs/switches/datacenter/sw/5_x/nx-os/system_management/configuration/guide/sm_nx_os_cg/sm_3ntp.html#wp1100303%0A)

#### NEW QUESTION 166

What type of algorithm uses the same key to encrypt and decrypt data?

- A. a symmetric algorithm
- B. an asymmetric algorithm
- C. a Public Key Infrastructure algorithm
- D. an IP security algorithm

**Answer:** A

**Explanation:** A symmetric encryption algorithm, also known as a symmetrical cipher, uses the same key to encrypt the data and decrypt the data.  
Source: Cisco Official Certification Guide, p.93

#### NEW QUESTION 167

Which option is the most effective placement of an IPS device within the infrastructure?

- A. Inline, behind the internet router and firewall
- B. Inline, before the internet router and firewall
- C. Promiscuously, after the Internet router and before the firewall
- D. Promiscuously, before the Internet router and the firewall

**Answer:** A

**Explanation:** Firewalls are generally designed to be on the network perimeter and can handle dropping a lot of the non- legitimate traffic (attacks, scans etc.) very quickly at the ingress interface, often in hardware.  
An IDS/IPS is, generally speaking, doing more deep packet inspections and that is a much more computationally expensive undertaking. For that reason, we prefer to filter what gets to it with the firewall line of defense before engaging the IDS/IPS to analyze the traffic flow.  
Source: <https://supportforums.cisco.com/discussion/12428821/correct-placement-idsips-network-architecture>

#### NEW QUESTION 169

For what reason would you configure multiple security contexts on the ASA firewall?

- A. To separate different departments and business units.
- B. To enable the use of VRFs on routers that are adjacently connected.
- C. To provide redundancy and high availability within the organization.
- D. To enable the use of multicast routing and QoS through the firewall.

**Answer:** A

**Explanation:** You can partition a single ASA into multiple virtual devices, known as security contexts. Each context is an independent device, with its own security policy, interfaces, and administrators. Multiple contexts are similar to having multiple standalone devices.

Common Uses for Security Contexts

- + You are a service provider and want to sell security services to many customers. By enabling multiple security contexts on the ASA, you can implement a cost-effective, space-saving solution that keeps all customer traffic separate and secure, and also eases configuration.
- + You are a large enterprise or a college campus and want to keep departments completely separate.
- + You are an enterprise that wants to provide distinct security policies to different departments.
- + You have any network that requires more than one ASA.

Source:

[http://www.cisco.com/c/en/us/td/docs/security/asa/asa84/configuration/guide/asa\\_84\\_cli\\_config/mode\\_contexts.html](http://www.cisco.com/c/en/us/td/docs/security/asa/asa84/configuration/guide/asa_84_cli_config/mode_contexts.html)

#### NEW QUESTION 173

In which three ways does the TACACS protocol differ from RADIUS? (Choose three.)

- A. TACACS uses TCP to communicate with the NAS.
- B. TACACS can encrypt the entire packet that is sent to the NAS.
- C. TACACS supports per-command authorization.
- D. TACACS authenticates and authorizes simultaneously, causing fewer packets to be transmitted.
- E. TACACS uses UDP to communicate with the NAS.
- F. TACACS encrypts only the password field in an authentication packet.

**Answer:** ABC

#### NEW QUESTION 175

Which components does HMAC use to determine the authenticity and integrity of a message? (Choose two.)

- A. The password
- B. The hash
- C. The key
- D. The transform set

**Answer:** BC

**Explanation:** In cryptography, a keyed-hash message authentication code (HMAC) is a specific type of message authentication code (MAC) involving a cryptographic hash function and a secret cryptographic key. It may be used to simultaneously verify both the data integrity and the authentication of a message.  
Source: [https://en.wikipedia.org/wiki/Hash-based\\_message\\_authentication\\_code](https://en.wikipedia.org/wiki/Hash-based_message_authentication_code)

#### NEW QUESTION 179

What is a reason for an organization to deploy a personal firewall?

- A. To protect endpoints such as desktops from malicious activity.
- B. To protect one virtual network segment from another.
- C. To determine whether a host meets minimum security posture requirements.
- D. To create a separate, non-persistent virtual environment that can be destroyed after a session.
- E. To protect the network from DoS and syn-flood attacks.

**Answer:** A

**Explanation:** The term personal firewall typically applies to basic software that can control Layer 3 and Layer 4 access to client machines. HIPS provides several features that offer more robust security than a traditional personal firewall, such as host intrusion prevention and protection against spyware, viruses, worms, Trojans, and other types of malware.

Source: Cisco Official Certification Guide, Personal Firewalls and Host Intrusion Prevention Systems , p.499

#### NEW QUESTION 182

Which RADIUS server authentication protocols are supported on Cisco ASA firewalls? (Choose three.)

- A. EAP
- B. ASCII
- C. PAP
- D. PEAP
- E. MS-CHAPv1
- F. MS-CHAPv2

**Answer:** CEF

**Explanation:** The ASA supports the following authentication methods with RADIUS servers:

+ PAP -- For all connection types.

+ CHAP and MS-CHAPv1 -- For L2TP-over-IPsec connections.

+ MS-CHAPv2 - For L2TP-over-IPsec connections

Source:

[http://www.cisco.com/c/en/us/td/docs/security/asa/asa91/asdm71/general/asdm\\_71\\_general\\_config/aaa\\_radius.pdf](http://www.cisco.com/c/en/us/td/docs/security/asa/asa91/asdm71/general/asdm_71_general_config/aaa_radius.pdf)

#### NEW QUESTION 183

Which Cisco product can help mitigate web-based attacks within a network?

- A. Adaptive Security Appliance
- B. Web Security Appliance
- C. Email Security Appliance
- D. Identity Services Engine

**Answer:** B

**Explanation:** Web-based threats continue to rise. To protect your network you need a solution that prevents them. Cisco Advanced Malware Protection (AMP) for Web Security goes beyond the basics in threat detection, URL filtering, and application control. It provides continuous file analysis, retrospective security, and sandboxing to help your security team catch even the stealthiest threats.

Source:

<http://www.cisco.com/c/en/us/products/security/advanced-malware-protection/amp-for-web-security.html>

#### NEW QUESTION 187

Which of the following are features of IPsec transport mode? (Choose three.)

- A. IPsec transport mode is used between end stations
- B. IPsec transport mode is used between gateways
- C. IPsec transport mode supports multicast
- D. IPsec transport mode supports unicast
- E. IPsec transport mode encrypts only the payload
- F. IPsec transport mode encrypts the entire packet

**Answer:** ADE

**Explanation:** + IPSec Transport mode is used for end-to-end communications, for example, for communication between a client and a server or between a workstation and a gateway (if the gateway is being treated as a host). A good example would be an encrypted Telnet or Remote Desktop session from a workstation to a server. + IPsec supports two encryption modes: Transport mode and Tunnel mode. Transport mode encrypts only the data portion (payload) of each packet and leaves the packet header untouched. Transport mode is applicable to either gateway or host implementations, and provides protection for upper layer protocols as well as selected IP header fields.

Source:

<http://www.firewall.cx/networking-topics/protocols/870-ipsec-modes.html>

[http://www.cisco.com/c/en/us/td/docs/net\\_mgmt/vpn\\_solutions\\_center/2-0/ip\\_security/provisioning/guide/IPsecPG1.html](http://www.cisco.com/c/en/us/td/docs/net_mgmt/vpn_solutions_center/2-0/ip_security/provisioning/guide/IPsecPG1.html)

Generic Routing Encapsulation (GRE) is often deployed with IPsec for several reasons, including the following:

+ IPsec Direct Encapsulation supports unicast IP only. If network layer protocols other than IP are to be supported, an IP encapsulation method must be chosen so that those protocols can be transported in IP packets.

+ IPmc is not supported with IPsec Direct Encapsulation. IPsec was created to be a security protocol between two and only two devices, so a service such as multicast is problematic. An IPsec peer encrypts a packet so that only one other IPsec peer can successfully perform the de-encryption. IPmc is not compatible with this mode of operation.

Source: [https://www.cisco.com/application/pdf/en/us/guest/netsol/ns171/c649/ccmigration\\_09186a008074f26a.pdf](https://www.cisco.com/application/pdf/en/us/guest/netsol/ns171/c649/ccmigration_09186a008074f26a.pdf)

#### NEW QUESTION 190

Which source port does IKE use when NAT has been detected between two VPN gateways?

- A. TCP 4500
- B. TCP 500
- C. UDP 4500
- D. UDP 500

**Answer: C**

**Explanation:** The IKE protocol uses UDP packets, usually on port 500

NAT traversal: The encapsulation of IKE and ESP in UDP port 4500 enables these protocols to pass through a device or firewall performing NAT

Source: [https://en.wikipedia.org/wiki/Internet\\_Key\\_Exchange](https://en.wikipedia.org/wiki/Internet_Key_Exchange)

#### NEW QUESTION 194

Which statements about smart tunnels on a Cisco firewall are true? (Choose two.)

- A. Smart tunnels can be used by clients that do not have administrator privileges
- B. Smart tunnels support all operating systems
- C. Smart tunnels offer better performance than port forwarding
- D. Smart tunnels require the client to have the application installed locally

**Answer: AC**

#### NEW QUESTION 198

What is the FirePOWER impact flag used for?

- A. A value that indicates the potential severity of an attack.
- B. A value that the administrator assigns to each signature.
- C. A value that sets the priority of a signature.
- D. A value that measures the application awareness.

**Answer: A**

**Explanation:** Impact Flag: Choose the impact level assigned to the intrusion event .

Because no operating system information is available for hosts added to the network map from NetFlow data, the system cannot assign Vulnerable (impact level 1: red) impact levels for intrusion events involving those hosts. In such cases, use the host input feature to manually set the operating system identity for the hosts.

Source:

[http://www.cisco.com/c/en/us/td/docs/security/firepower/60/configuration/guide/fpmc-config-guide-v60/Correlation\\_Policies.html](http://www.cisco.com/c/en/us/td/docs/security/firepower/60/configuration/guide/fpmc-config-guide-v60/Correlation_Policies.html)

Impact

The impact level in this field indicates the correlation between intrusion data, network discovery data, and vulnerability information.

Impact Flag See Impact. Source:

<http://www.cisco.com/c/en/us/td/docs/security/firesight/541/firepower-module-user-guide/asa-firepower-module-user-guide-v541/ViewingEvents.html>

#### NEW QUESTION 201

When an IPS detects an attack, which action can the IPS take to prevent the attack from spreading?

- A. Deny the connection inline.
- B. Perform a Layer 6 reset.
- C. Deploy an antimalware system.
- D. Enable bypass mode.

**Answer: A**

**Explanation:** Deny connection inline: This action terminates the packet that triggered the action and future packets that are part of the same TCP connection. The attacker could open up a new TCP session (using different port numbers), which could still be permitted through the inline IPS.

Available only if the sensor is configured as an IPS.

Source: Cisco Official Certification Guide, Table 17-4 Possible Sensor Responses to Detected Attacks, p.465

#### NEW QUESTION 202

Refer to the exhibit.

dst	src	state	conn-id	slot
10.10.10.2	10.1.1.5	QM_IDLE	1	0

While troubleshooting site-to-site VPN, you issued the show crypto isakmp sa command. What does the given output show?

- A. IPSec Phase 1 is established between 10.10.10.2 and 10.1.1.5.
- B. IPSec Phase 2 is established between 10.10.10.2 and 10.1.1.5.
- C. IPSec Phase 1 is down due to a QM\_IDLE state.
- D. IPSec Phase 2 is down due to a QM\_IDLE state.

**Answer:** A

**Explanation:** This is the output of the #show crypto isakmp sa command. This command shows the Internet Security Association Management Protocol (ISAKMP) security associations (SAs) built between peers - IPsec Phase1.

The "established" clue comes from the state parameter QM\_IDLE - this is what we want to see.

More on this

<http://www.cisco.com/c/en/us/support/docs/security-vpn/ipsec-negotiation-ike-protocols/5409-ipsec-debug-00.html>

#### NEW QUESTION 204

Which syslog severity level is level number 7?

- A. Warning
- B. Informational
- C. Notification
- D. Debugging

**Answer:** D

**Explanation:** Remember: There is a mnemonic device for remembering the order of the eight syslog levels: "Every Awesome Cisco Engineer Will Need Icecream Daily"

0 - Emergency

1 - Alert

2 - Critical

3 - Error

4 - Warning

5 - Notification

6 - Informational

7 - Debugging

#### NEW QUESTION 208

Which option describes information that must be considered when you apply an access list to a physical interface?

- A. Protocol used for filtering
- B. Direction of the access class
- C. Direction of the access group
- D. Direction of the access list

**Answer:** C

**Explanation:** Applying an Access List to an Interface

#interface type number

#ip

access-group {access-list-number | access-list-name} { in | out} Source: [http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/sec\\_data\\_acl/configuration/xr-3s/sec-data-acl-xr-3s-book/sec-create-ip-apply.html](http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/sec_data_acl/configuration/xr-3s/sec-data-acl-xr-3s-book/sec-create-ip-apply.html)

#### NEW QUESTION 209

Which three statements about host-based IPS are true? (Choose three.)

- A. It can view encrypted files.
- B. It can have more restrictive policies than network-based IPS.
- C. It can generate alerts based on behavior at the desktop level.
- D. It can be deployed at the perimeter.
- E. It uses signature-based policies.
- F. It works with deployed firewalls.

**Answer:** ABC

**Explanation:** If the network traffic stream is encrypted, HIPS has access to the traffic in unencrypted form.

HIPS can combine the best features of antivirus, behavioral analysis, signature filters, network firewalls, and application firewalls in one package.

Host-based IPS operates by detecting attacks that occur on a host on which it is installed. HIPS works by intercepting operating system and application calls, securing the operating system and application configurations, validating incoming service requests, and analyzing local log files for after-the-fact suspicious activity.

Source:

<http://www.ciscopress.com/articles/article.asp?p=1336425&seqNum=3>

#### NEW QUESTION 210

What command can you use to verify the binding table status?

- A. show ip dhcp snooping database

- B. show ip dhcp snooping binding
- C. show ip dhcp snooping statistics
- D. show ip dhcp pool
- E. show ip dhcp source binding
- F. show ip dhcp snooping

**Answer:** A

**Explanation:** A device's burned-in address is its MAC address. So by changing it to something else may trick hosts on the network into sending packets to it.

#### NEW QUESTION 213

Which Sourcefire logging action should you choose to record the most detail about a connection?

- A. Enable logging at the end of the session.
- B. Enable logging at the beginning of the session.
- C. Enable alerts via SNMP to log events off-box.
- D. Enable eStreamer to log events off-box.

**Answer:** A

**Explanation:** FirePOWER (former Sourcefire)

Logging the Beginning And End of Connections

When the system detects a connection, in most cases you can log it at its beginning and its end.

For a single non-blocked connection, the end-of-connection event contains all of the information in the beginning-of-connection event, as well as information gathered over the duration of the session.

Source:

<http://www.cisco.com/c/en/us/td/docs/security/firesight/541/firepower-module-user-guide/asa-firepower-module-user-guide-v541/AC-Connection-Logging.html#15726>

Topic 2, Exam Pool B

#### NEW QUESTION 215

Which feature filters CoPP packets?

- A. access control lists
- B. class maps
- C. policy maps
- D. route maps

**Answer:** A

#### NEW QUESTION 220

Which security measures can protect the control plane of a Cisco router? (Choose two.)

- A. CCPr
- B. Parser views
- C. Access control lists
- D. Port security
- E. CoPP

**Answer:** AE

**Explanation:** Three Ways to Secure the Control Plane

+ Control plane policing (CoPP): You can configure this as a filter for any traffic destined to an IP address on the router itself.

+ Control plane protection (CPPr): This allows for a more detailed classification of traffic (more than CoPP) that is going to use the CPU for handling.

+ Routing protocol authentication

For example, you could decide and configure the router to believe that SSH is acceptable at 100 packets per second, syslog is acceptable at 200 packets per second, and so on. Traffic that exceeds the thresholds can be safely dropped if it is not from one of your specific management stations.

You can specify all those details in the policy.

You learn more about control plane security in Chapter 13, "Securing Routing Protocols and the Control Plane."

Selective Packet Discard (SPD) provides the ability to Although not necessarily a security feature, prioritize certain types of packets (for example, routing protocol packets and Layer 2 keepalive messages, route processor [RP]). SPD provides priority of critical control plane traffic which are received by the over traffic that is less important or, worse yet, is being sent maliciously to starve the CPU of resources required for the RP.

Source: Cisco Official Certification Guide, Table 10-3 Three Ways to Secure the Control Plane , p.269

#### NEW QUESTION 222

Which technology can be used to rate data fidelity and to provide an authenticated hash for data?

- A. file reputation
- B. file analysis
- C. signature updates
- D. network blocking

**Answer:** A

#### NEW QUESTION 224

What do you use when you have a network object or group and want to use an IP address?

- A. Static NAT
- B. Dynamic NAT
- C. identity NAT
- D. Static PAT

**Answer:** B

**Explanation:** Adding Network Objects for Mapped Addresses

For dynamic NAT, you must use an object or group for the mapped addresses. Other NAT types have the option of using inline addresses, or you can create an object or group according to this section.

\* Dynamic NAT:

+ You cannot use an inline address; you must configure a network object or group. + The object or group cannot contain a subnet; the object must define a range; the group can include hosts and ranges.

+ If a mapped network object contains both ranges and host IP addresses, then the ranges are used for dynamic NAT, and then the host IP addresses are used as a PAT fallback.

\* Dynamic PAT (Hide):

+ Instead of using an object, you can optionally configure an inline host address or specify the interface address.

+ If you use an object, the object or group cannot contain a subnet; the object must define a host, or for a PAT pool, a range; the group (for a PAT pool) can include hosts and ranges.

\* Static NAT or Static NAT with port translation:

+ Instead of using an object, you can configure an inline address or specify the interface address (for static NAT-with-port-translation).

+ If you use an object, the object or group can contain a host, range, or subnet.

\* Identity NAT

+ Instead of using an object, you can configure an inline address. + If you use an object, the object must match the real addresses you want to translate.

Source:

[http://www.cisco.com/c/en/us/td/docs/security/asa/asa90/configuration/guide/asa\\_90\\_cli\\_config/nat\\_objects.html#61711](http://www.cisco.com/c/en/us/td/docs/security/asa/asa90/configuration/guide/asa_90_cli_config/nat_objects.html#61711)

#### NEW QUESTION 227

Which two authentication types does OSPF support? (Choose two.)

- A. plaintext
- B. MD5
- C. HMAC
- D. AES 256
- E. SHA-1
- F. DES

**Answer:** AB

#### NEW QUESTION 230

Which statement about IOS privilege levels is true?

- A. Each privilege level supports the commands at its own level and all levels below it.
- B. Each privilege level supports the commands at its own level and all levels above it.
- C. Privilege-level commands are set explicitly for each user.
- D. Each privilege level is independent of all other privilege levels.

**Answer:** A

#### NEW QUESTION 235

In which three ways does the RADIUS protocol differ from TACACS? (Choose three.)

- A. RADIUS uses UDP to communicate with the NAS.
- B. RADIUS encrypts only the password field in an authentication packet.
- C. RADIUS authenticates and authorizes simultaneously, causing fewer packets to be transmitted.
- D. RADIUS uses TCP to communicate with the NAS.
- E. RADIUS can encrypt the entire packet that is sent to the NAS.
- F. RADIUS supports per-command authorization.

**Answer:** ABC

**Explanation:** Cisco Official Certification Guide, Table 3-2 TACACS+ Versus RADIUS, p.40

#### NEW QUESTION 239

A proxy firewall protects against which type of attack?

- A. cross-site scripting attack
- B. worm traffic
- C. port scanning
- D. DDoS attacks

**Answer:** A

**Explanation:** Cross-site scripting (XSS) is a type of computer security vulnerability typically found in web applications. XSS enables attackers to inject client-side scripts into web pages viewed by other users. A cross-site scripting vulnerability may be used by attackers to bypass access controls such as the same-origin

policy. Cross-site scripting carried out on websites accounted for roughly 84% of all security vulnerabilities documented by Symantec as of 2007.

Source: [https://en.wikipedia.org/wiki/Cross-site\\_scripting](https://en.wikipedia.org/wiki/Cross-site_scripting)

A proxy firewall is a network security system that protects network resources by filtering messages at the application layer. A proxy firewall may also be called an application firewall or gateway firewall. Proxy firewalls are considered to be the most secure type of firewall because they prevent direct network contact with other systems.

Source:

<http://searchsecurity.techtarget.com/definition/proxy-firewall>

#### NEW QUESTION 242

Which command initializes a lawful intercept view?

- A. username cisco1 view lawful-intercept password cisco
- B. parser view cisco li-view
- C. Cli-view cisco user cisco1 password cisco
- D. parser view li-view inclusive

**Answer: C**

**Explanation:** Like a CLI view, a lawful intercept view restricts access to specified commands and configuration information.

Specifically, a lawful intercept view allows a user to secure access to lawful intercept commands that are held within the TAP-MIB, which is a special set of simple network management protocol (SNMP) commands that store information about calls and users.

#li-view li-password user username password password

Source:

[http://www.cisco.com/en/US/docs/ios/12\\_3t/12\\_3t7/feature/guide/gtclivws.html](http://www.cisco.com/en/US/docs/ios/12_3t/12_3t7/feature/guide/gtclivws.html)

Before you initialize a lawful intercept view, ensure that the privilege level is set to 15 via the privilege command.

#### SUMMARY STEPS

1. enable view
2. configure terminal
3. li-view li-password user username password password
4. username lawful-intercept [name] [privilege privilege-level] view view-name] password password
5. parser view view-name
6. secret 5 encrypted-password
7. name new-name

#### NEW QUESTION 247

How does PEAP protect the EAP exchange?

- A. It encrypts the exchange using the server certificate.
- B. It encrypts the exchange using the client certificate.
- C. It validates the server-supplied certificate, and then encrypts the exchange using the client certificate.
- D. It validates the client-supplied certificate, and then encrypts the exchange using the server certificate.

**Answer: A**

**Explanation:** PEAP is similar in design to EAP-TTLS, requiring only a server-side PKI certificate to create a secure TLS tunnel to protect user authentication, and uses server-side public key certificates to authenticate the server. It then creates an encrypted TLS tunnel between the client and the authentication server. In most configurations, the keys for this encryption are transported using the server's public key.

Source: [https://en.wikipedia.org/wiki/Protected\\_Extensible\\_Authentication\\_Protocol](https://en.wikipedia.org/wiki/Protected_Extensible_Authentication_Protocol)

#### NEW QUESTION 249

You have been tasked with blocking user access to websites that violate company policy, but the sites use dynamic IP addresses. What is the best practice for URL filtering to solve the problem?

- A. Enable URL filtering and use URL categorization to block the websites that violate company policy.
- B. Enable URL filtering and create a blacklist to block the websites that violate company policy.
- C. Enable URL filtering and create a whitelist to block the websites that violate company policy.
- D. Enable URL filtering and use URL categorization to allow only the websites that company policy allows users to access.
- E. Enable URL filtering and create a whitelist to allow only the websites that company policy allows users to access.

**Answer: A**

**Explanation:** Each website defined in the URL filtering database is assigned one of approximately 60 different URL categories. There are two ways to make use of URL categorization on the firewall:

Block or allow traffic based on URL category --You can create a URL Filtering profile that specifies an action for each URL category and attach the profile to a policy. Traffic that matches the policy would then be subject to the URL filtering settings in the profile. For example, to block all gaming websites you would set the block action for the URL category games in the URL profile and attach it to the security policy rule(s) that allow web access.

See Configure URL Filtering for more information.

Match traffic based on URL category for policy enforcement --If you want a specific policy rule to apply only

to web traffic to sites in a specific category, you would add the category as match criteria when you create the policy rule. For example, you could use the URL category streaming-media in a QoS policy to apply bandwidth controls to all websites that are categorized as streaming media. See URL Category as Policy Match Criteria for more information.

By grouping websites into categories, it makes it easy to define actions based on certain types of websites. Source:

<https://www.paloaltonetworks.com/documentation/70/pan-os/pan-os/url-filtering/url-categories>

#### NEW QUESTION 253

Refer to the exhibit.

dst	src	state	conn-id	slot
10.10.10.2	10.1.1.5	MM_NO_STATE	1	0

While troubleshooting site-to-site VPN, you issued the show crypto isakmp sa command. What does the given output show?

- A. IKE Phase 1 main mode was created on 10.1.1.5, but it failed to negotiate with 10.10.10.2.
- B. IKE Phase 1 main mode has successfully negotiated between 10.1.1.5 and 10.10.10.2.
- C. IKE Phase 1 aggressive mode was created on 10.1.1.5, but it failed to negotiate with 10.10.10.2.
- D. IKE Phase 1 aggressive mode has successfully negotiated between 10.1.1.5 and 10.10.10.2.

**Answer:** A

**Explanation:** This is the output of the #show crypto isakmp sa command. This command shows the Internet Security Association Management Protocol (ISAKMP) security associations (SAs) built between peers - IPsec Phase1.

MM\_NO\_STATE means that main mode has failed. QM\_IDLE - this is what we want to see.

More on this

<http://www.cisco.com/c/en/us/support/docs/security-vpn/ipsec-negotiation-ike-protocols/5409-ipsec-debug-00.html>

#### NEW QUESTION 254

How can the administrator enable permanent client installation in a Cisco AnyConnect VPN firewall configuration?

- A. Issue the command anyconnect keep-installer under the group policy or username webvpn mode
- B. Issue the command anyconnect keep-installer installed in the global configuration
- C. Issue the command anyconnect keep-installer installed under the group policy or username webvpn mode
- D. Issue the command anyconnect keep-installer installer under the group policy or username webvpn mode

**Answer:** C

#### NEW QUESTION 258

Refer to the exhibit.

dst	src	state	conn-id	slot
10.10.10.2	10.1.1.5	QM_IDLE	1	0

While troubleshooting site-to-site VPN, you issued the show crypto isakmp sa command. What does the given output show?

- A. IPsec Phase 1 is established between 10.10.10.2 and 10.1.1.5.
- B. IPsec Phase 2 is established between 10.10.10.2 and 10.1.1.5.
- C. IPsec Phase 1 is down due to a QM\_IDLE state.
- D. IPsec Phase 2 is down due to a QM\_IDLE state.

**Answer:** A

#### NEW QUESTION 261

What mechanism does asymmetric cryptography use to secure data?

- A. a public/private key pair
- B. shared secret keys
- C. an RSA nonce
- D. an MD5 hash

**Answer:** A

**Explanation:** Public key cryptography, or asymmetric cryptography, is any cryptographic system that uses pairs of keys: public keys which may be disseminated widely, and private keys which are known only to the owner. This accomplishes two functions: authentication, which is when the public key is used to verify that a holder of the paired private key sent the message, and encryption, whereby only the holder of the paired private key can decrypt the message encrypted with the public key.

Source: [https://en.wikipedia.org/wiki/Public-key\\_cryptography](https://en.wikipedia.org/wiki/Public-key_cryptography)

#### NEW QUESTION 263

Which Sourcefire event action should you choose if you want to block only malicious traffic from a particular end user?

- A. Allow with inspection
- B. Allow without inspection
- C. Block
- D. Trust
- E. Monitor

**Answer:** A

**Explanation:** A file policy is a set of configurations that the system uses to perform advanced malware protection and file control, as part of your overall access control configuration.

A file policy, like its parent access control policy, contains rules that determine how the system handles files that match the conditions of each rule. You can configure separate file rules to take different actions for different file types, application protocols, or directions of transfer. You can associate a single file policy with an access control rule whose action is Allow, Interactive Block, or Interactive Block with reset. The system then uses that file policy to inspect network traffic that meets the conditions of the access control rule.

Source:

<http://www.cisco.com/c/en/us/td/docs/security/firesight/541/firepower-module-user-guide/asa-firepower-module-user-guide-v541/AMP-Config.html>

#### NEW QUESTION 268

Which statement about the communication between interfaces on the same security level is true?

- A. Interfaces on the same security level require additional configuration to permit inter-interface communication.
- B. Configuring interfaces on the same security level can cause asymmetric routing.
- C. All traffic is allowed by default between interfaces on the same security level.
- D. You can configure only one interface on an individual security level.

**Answer:** A

**Explanation:** By default, if two interfaces are both at the exact same security level, traffic is not allowed between those two interfaces.

To permit communication between interfaces with equal security levels, or to allow traffic to enter and exit the same interface, use the same-security-traffic command in global configuration mode.

#same-security-traffic

permit {inter-interface | intra-interface} Source: Cisco Official Certification Guide, The Default Flow of Traffic, p.422

<http://www.cisco.com/c/en/us/td/docs/security/asa/asa82/command>

#### NEW QUESTION 270

What is a valid implicit permit rule for traffic that is traversing the ASA firewall?

- A. ARPs in both directions are permitted in transparent mode only.
- B. Unicast IPv4 traffic from a higher security interface to a lower security interface is permitted in routed mode only.
- C. Unicast IPv6 traffic from a higher security interface to a lower security interface is permitted in transparent mode only.
- D. Only BPDUs from a higher security interface to a lower security interface are permitted in transparent mode.
- E. Only BPDUs from a higher security interface to a lower security interface are permitted in routed mode.

**Answer:** A

**Explanation:** ARPs are allowed through the transparent firewall in both directions without an ACL. ARP traffic can be controlled by ARP inspection.

Source: <http://www.cisco.com/c/en/us/td/docs/security/asa/asa93/configuration/general/asa-general-cli/intro-fw.html>

#### NEW QUESTION 271

Which three statements describe DHCP spoofing attacks? (Choose three.)

- A. They can modify traffic in transit.
- B. They are used to perform man-in-the-middle attacks.
- C. They use ARP poisoning.
- D. They can access most network devices.
- E. They protect the identity of the attacker by masking the DHCP address.
- F. They can physically modify the network gateway.

**Answer:** ABC

**Explanation:** DHCP spoofing occurs when an attacker attempts to respond to DHCP requests and trying to list themselves (spoofs) as the default gateway or DNS server, hence, initiating a man in the middle attack. With that, it is possible that they can intercept traffic from users before forwarding to the real gateway or perform DoS by flooding the real DHCP server with request to choke ip address resources.

Source: <https://learningnetwork.cisco.com/thread/67229> <https://learningnetwork.cisco.com/docs/DOC-24355>

Also when i took the exam, it asked me for only 2 options. AB is correct

#### NEW QUESTION 274

What is the best way to confirm that AAA authentication is working properly?

- A. Use the test aaa command.
- B. Ping the NAS to confirm connectivity.
- C. Use the Cisco-recommended configuration for AAA authentication.
- D. Log into and out of the router, and then check the NAS authentication log.

**Answer:** A

**Explanation:** #test aaa group tacacs+ admin cisco123 legacy - A llow verification of the authentication function working between the AAA client (the router) and the ACS server (the AAA server).

Source: Cisco Official Certification Guide, Table 3-6 Command Reference, p.68

#### NEW QUESTION 275

What are two uses of SIEM software? (Choose two.)

- A. collecting and archiving syslog data
- B. alerting administrators to security events in real time
- C. performing automatic network audits
- D. configuring firewall and IDS devices
- E. scanning email for suspicious attachments

**Answer:** AB

**Explanation:** Security Information Event Management SIEM

+ Log collection of event records from sources throughout the organization provides important forensic tools and helps to address compliance reporting requirements.

+ Normalization maps log messages from different systems into a common data model, enabling the organization to connect and analyze related events, even if they are initially logged in different source formats.

+ Correlation links logs and events from disparate systems or applications, speeding detection of and reaction to security threats.

+ Aggregation reduces the volume of event data by consolidating duplicate event records. + Reporting presents the correlated, aggregated event data in real-time monitoring and long-term summaries.

Source:

[http://www.cisco.com/c/dam/en/us/solutions/collateral/enterprise/design-zone-smart-business-architecture/sbaSIEM\\_deployG.pdf](http://www.cisco.com/c/dam/en/us/solutions/collateral/enterprise/design-zone-smart-business-architecture/sbaSIEM_deployG.pdf)

#### NEW QUESTION 277

Which statement provides the best definition of malware?

- A. Malware is unwanted software that is harmful or destructive.
- B. Malware is software used by nation states to commit cyber crimes.
- C. Malware is a collection of worms, viruses, and Trojan horses that is distributed as a single package.
- D. Malware is tools and applications that remove unwanted programs.

**Answer:** A

**Explanation:** Malware, short for malicious software, is any software used to disrupt computer or mobile operations, gather sensitive information, gain access to private computer systems, or display unwanted advertising.[1] Before the term malware was coined by Yisrael Radai in 1990, malicious software was referred to as computer viruses.

Source: <https://en.wikipedia.org/wiki/Malware>

#### NEW QUESTION 278

When an administrator initiates a device wipe command from the ISE, what is the immediate effect?

- A. It requests the administrator to choose between erasing all device data or only managed corporate data.
- B. It requests the administrator to enter the device PIN or password before proceeding with the operation.
- C. It notifies the device user and proceeds with the erase operation.
- D. It immediately erases all data on the device.

**Answer:** A

**Explanation:** Cisco ISE allows you to wipe or turn on pin lock for a device that is lost. From the MDM Access drop-down list, choose any one of the following options:

+ Full Wipe -- Depending on the MDM vendor, this option either removes the corporate apps or resets the device to the factory settings.

+ Corporate Wipe -- Removes applications that you have configured in the MDM server policies + PIN Lock

-- Locks the device

Source:

[http://www.cisco.com/c/en/us/td/docs/security/ise/1-4/admin\\_guide/b\\_ise\\_admin\\_guide\\_14/b\\_ise\\_admin\\_guide\\_14\\_chapter\\_01001.html#task\\_820C9C2A1A6647E995CA5AAB01E1CDEF](http://www.cisco.com/c/en/us/td/docs/security/ise/1-4/admin_guide/b_ise_admin_guide_14/b_ise_admin_guide_14_chapter_01001.html#task_820C9C2A1A6647E995CA5AAB01E1CDEF)

#### NEW QUESTION 282

Which protocols use encryption to protect the confidentiality of data transmitted between two parties? (Choose two.)

- A. FTP
- B. SSH
- C. Telnet
- D. AAA
- E. HTTPS
- F. HTTP

**Answer:** BE

**Explanation:** + Secure Shell (SSH) provides the same functionality as Telnet, in that it gives you a CLI to a router or switch; unlike Telnet, however, SSH encrypts all the packets that are used in the session.

+ For graphical user interface (GUI) management tools such as CCP, use HTTPS rather than HTTP because, like SSH, it encrypts the session, which provides confidentiality for the packets in that session.

Source: Cisco Official Certification Guide, Encrypted Management Protocols, p.287

#### NEW QUESTION 285

Which three statements about Cisco host-based IPS solutions are true? (Choose three.)

- A. It can view encrypted files.

- B. It can have more restrictive policies than network-based IPS.
- C. It can generate alerts based on behavior at the desktop level.
- D. It can be deployed at the perimeter.
- E. It uses signature-based policies.
- F. It works with deployed firewalls.

**Answer:** ABC

**NEW QUESTION 289**

Your security team has discovered a malicious program that has been harvesting the CEO's email messages and the company's user database for the last 6 months. What type of attack did your team discover?

- A. advanced persistent threat
- B. targeted malware
- C. drive-by spyware
- D. social activism

**Answer:** AB

**Explanation:** An Advanced Persistent Threat (APT) is a prolonged, aimed attack on a specific target with the intention to compromise their system and gain information from or about that target.

The target can be a person, an organization or a business. Source:

<https://blog.malwarebytes.com/cybercrime/malware/2016/07/explained-advanced-persistent-threat-apt/> One new malware threat has emerged as a definite concern, namely, targeted malware. Instead of blanketing the Internet with a worm, targeted attacks concentrate on a single high-value target.

Source:

[http://crissp.poly.edu/wissp08/panel\\_malware.htm](http://crissp.poly.edu/wissp08/panel_malware.htm)

**NEW QUESTION 292**

In which three cases does the ASA firewall permit inbound HTTP GET requests during normal operations? (Choose three).

- A. when matching NAT entries are configured
- B. when matching ACL entries are configured
- C. when the firewall receives a SYN-ACK packet
- D. when the firewall receives a SYN packet
- E. when the firewall requires HTTP inspection
- F. when the firewall requires strict HTTP inspection

**Answer:** ABD

**Explanation:** <https://supportforums.cisco.com/discussion/11809846/asa-5505-using-nat-allowing-incoming-traffic-https>  
<https://supportforums.cisco.com/discussion/12473551/asa-what-allowing-return-http-traffic>

**NEW QUESTION 293**

Refer to the exhibit.

```

209.114.111.1 configured, ipv4, sane, valid, stratum 2
ref ID 132.163.4.103 , time D7AD124D.9D6FC576 (03:17:33.614 UTC Sun Aug 31 2014)
our mode client, peer mode server, our poll intvl 64, peer poll intvl 64
root delay 46.34 msec, root disp 23.52, reach 1, sync dist 268.59
delay 63.27 msec, offset 7.9817 msec, dispersion 187.56, jitter 2.07 msec
precision 2**23, version 4

204.2.134.164 configured, ipv4, sane, valid, stratum 2
ref ID 241.199.164.101, time D7AD1419.9E85272B (03:25:13.619 UTC Sun Aug 31 2014)
our mode client, peer mode server, our poll intvl 64, peer poll intvl 256
root delay 30.83 msec, root disp 4.88, reach 1, sync dist 223.80
delay 28.69 msec, offset 6.4331 msec, dispersion 187.55, jitter 1.39 msec
precision 2**20, version 4

192.168.10.7 configured, ipv4, our_master, sane, valid, stratum 3
ref ID 108.61.73.243 , time D7AD0D8F.AE79A23A (02:57:19.681 UTC Sun Aug 31 2014)
our mode client, peer mode server, our poll intvl 64, peer poll intvl 64
root delay 86.45 msec, root disp 87.82, reach 377, sync dist 134.25
delay 0.89 msec, offset 19.5087 msec, dispersion 1.69, jitter 0.84 msec
precision 2**32, version 4

```

With which NTP server has the router synchronized?

- A. 192.168.10.7
- B. 108.61.73.243
- C. 209.114.111.1
- D. 132.163.4.103
- E. 204.2.134.164
- F. 241.199.164.101

**Answer:** A

**Explanation:** The output presented is generated by the show ntp association detail command. Attributes:

+ configured: This NTP clock source has been configured to be a server. This value can also be dynamic, where the peer/server was dynamically discovered.

+ our\_master: The local client is synchronized to this peer

+ valid: The peer/server time is valid. The local client accepts this time if this peer becomes the master.

Source:

<http://www.cisco.com/c/en/us/support/docs/ip/network-time-protocol-ntp/116161-trouble-ntp-00.html>

#### NEW QUESTION 295

What are the three layers of a hierarchical network design? (Choose three.)

- A. access
- B. core
- C. distribution
- D. user
- E. server
- F. Internet

**Answer:** ABC

**Explanation:** A typical enterprise hierarchical LAN campus network design includes the following three layers:

+ Access layer: Provides workgroup/user access to the network + Distribution layer: Provides policy-based connectivity and controls the boundary between the access and core layers

+ Core layer: Provides fast transport between distribution switches within the enterprise campus Source: <http://www.ciscopress.com/articles/article.asp?p=2202410&seqNum=4>

#### NEW QUESTION 297

Which feature of the Cisco Email Security Appliance can mitigate the impact of snowshoe spam and sophisticated phishing attacks?

- A. contextual analysis
- B. holistic understanding of threats
- C. graymail management and filtering
- D. signature-based IPS

**Answer:** A

**Explanation:** Snowshoe spamming is a strategy in which spam is propagated over several domains and IP addresses to weaken reputation metrics and avoid filters. The increasing number of IP addresses makes recognizing and capturing spam difficult, which means that a certain amount of spam reaches their destination email inboxes.

Specialized spam trapping organizations are often hard pressed to identify and trap snowshoe spamming via conventional spam filters.

The strategy of snowshoe spamming is similar to actual snowshoes that distribute the weight of an individual over a wide area to avoid sinking into the snow.

Likewise, snowshoe spamming delivers its weight over a wide area to remain clear of filters.

Source: <https://www.techopedia.com/definition/1713/snowshoe-spamming> Snowshoe spam, as mentioned above, is a growing concern as spammers distribute spam attack origination across a broad range of IP addresses in order to evade IP reputation checks. The newest AsyncOS 9 for ESA enables enhanced anti-spam scanning through contextual analysis and enhanced automation, as well as automatic classification, to provide a stronger defense against snowshoe campaigns and phishing attacks.

Source:

<http://blogs.cisco.com/security/cisco-email-security-stays-ahead-of-current-threats-by-adding-stronger-snowshoe-spam-defense-amp-enhancements-and-more>

#### NEW QUESTION 300

On which Cisco Configuration Professional screen do you enable AAA

- A. AAA Summary
- B. AAA Servers and Groups
- C. Authentication Policies
- D. Authorization Policies

**Answer:** A

#### NEW QUESTION 303

What improvement does EAP-FASTv2 provide over EAP-FAST?

- A. It allows multiple credentials to be passed in a single EAP exchange.
- B. It supports more secure encryption protocols.
- C. It allows faster authentication by using fewer packets.
- D. It addresses security vulnerabilities found in the original protocol.

**Answer:** A

**Explanation:** As an enhancement to EAP-FAST, a differentiation was made to have a User PAC and a Machine PAC. After a successful machine-authentication, ISE will issue a Machine-PAC to the client. Then, when processing a user- authentication, ISE will request the Machine-PAC to prove that the machine was successfully authenticated, too. This is the first time in 802.1X history that multiple credentials have been able to be authenticated within a single EAP transaction, and it is known as "EAP Chaining".

Source:

<http://www.networkworld.com/article/2223672/access-control/which-eap-types-do-you-need-for-which-identity-projects.html>

#### NEW QUESTION 307

A data breach has occurred and your company database has been copied. Which security principle has been violated?

- A. confidentiality
- B. availability
- C. access
- D. control

**Answer:** A

**Explanation:** Confidentiality: There are two types of data: data in motion as it moves across the network; and data at rest, when data is sitting on storage media (server, local workstation, in the cloud, and so forth). Confidentiality means that only the authorized individuals/ systems can view sensitive or classified information.

Source: Cisco Official Certification Guide, Confidentiality, Integrity, and Availability, p.6

#### NEW QUESTION 311

In which type of attack does the attacker attempt to overload the CAM table on a switch so that the switch acts as a hub?

- A. MAC spoofing
- B. gratuitous ARP
- C. MAC flooding
- D. DoS

**Answer:** C

**Explanation:** MAC address flooding is an attack technique used to exploit the memory and hardware limitations in a switch's CAM table.

Source:

[http://hakipedia.com/index.php/CAM\\_Table\\_Overflow](http://hakipedia.com/index.php/CAM_Table_Overflow)

#### NEW QUESTION 315

What are the primary attack methods of VLAN hopping? (Choose two.)

- A. VoIP hopping
- B. Switch spoofing
- C. CAM-table overflow
- D. Double tagging

**Answer:** BD

**Explanation:** VLAN hopping is a computer security exploit, a method of attacking networked resources on a virtual LAN (VLAN). The basic concept behind all VLAN hopping attacks is for an attacking host on a VLAN to gain access to traffic on other VLANs that would normally not be accessible. There are two primary methods of VLAN hopping: switch spoofing and double tagging.

+ In a switch spoofing attack, an attacking host imitates a trunking switch by speaking the tagging and trunking protocols (e.g. Multiple VLAN Registration Protocol, IEEE 802.1Q, Dynamic Trunking Protocol) used in maintaining a VLAN. Traffic for multiple VLANs is then accessible to the attacking host.

+ In a double tagging attack, an attacking host connected on a 802.1q interface prepends two VLAN tags to packets that it transmits.

Source: [https://en.wikipedia.org/wiki/VLAN\\_hopping](https://en.wikipedia.org/wiki/VLAN_hopping)

#### NEW QUESTION 316

How does a device on a network using ISE receive its digital certificate during the new-device registration process?

- A. ISE acts as a SCEP proxy to enable the device to receive a certificate from a central CA server.
- B. ISE issues a certificate from its internal CA server.
- C. ISE issues a pre-defined certificate from a local database.
- D. The device requests a new certificate directly from a central CA.

**Answer:** A

**Explanation:** SCEP Profile Configuration on ISE

Within this design, ISE is acting as a Simple Certificate Enrollment Protocol (SCEP) proxy server, thereby allowing mobile clients to obtain their digital certificates from the CA server. This important feature of ISE allows all endpoints, such as iOS, Android, Windows, and MAC, to obtain digital certificates through the ISE. This feature combined with the initial registration process greatly simplifies the provisioning of digital certificates on endpoints.

Source:

[http://www.cisco.com/c/en/us/td/docs/solutions/Enterprise/Borderless\\_Networks/Unified\\_Access/BYOD\\_Design\\_Guide/BYOD\\_ISE.html](http://www.cisco.com/c/en/us/td/docs/solutions/Enterprise/Borderless_Networks/Unified_Access/BYOD_Design_Guide/BYOD_ISE.html)

#### NEW QUESTION 317

In which stage of an attack does the attacker discover devices on a target network?

- A. Reconnaissance
- B. Covering tracks
- C. Gaining access
- D. Maintaining access

**Answer:** A

**Explanation:** Reconnaissance: This is the discovery process used to find information about the network. It could include scans of the network to find out which IP addresses respond, and further scans to see which ports on the devices at these IP addresses are open. This is usually the first step taken, to discover what is on the network and to determine potential vulnerabilities.

Source: Cisco Official Certification Guide, Table 1-5 Attack Methods, p.13

#### NEW QUESTION 322

How can FirePOWER block malicious email attachments?

- A. It forwards email requests to an external signature engine.
- B. It scans inbound email messages for known bad URLs.
- C. It sends the traffic through a file policy.
- D. It sends an alert to the administrator to verify suspicious email messages.

**Answer:** C

**Explanation:** A file policy is a set of configurations that the system uses to perform advanced malware protection and file control, as part of your overall access control configuration.

A file policy, like its parent access control policy, contains rules that determine how the system handles files that match the conditions of each rule. You can configure separate file rules to take different actions for different file types, application protocols, or directions of transfer.

You can associate a single file policy with an access control rule whose action is Allow, Interactive Block, or Interactive Block with reset. The system then uses that file policy to inspect network traffic that meets the conditions of the access control rule.

Source:

<http://www.cisco.com/c/en/us/td/docs/security/firesight/541/firepower-module-user-guide/asa-firepower-module-user-guide-v541/AMP-Config.html>

#### NEW QUESTION 324

Which of the following statements about access lists are true? (Choose three.)

- A. Extended access lists should be placed as near as possible to the destination
- B. Extended access lists should be placed as near as possible to the source
- C. Standard access lists should be placed as near as possible to the destination
- D. Standard access lists should be placed as near as possible to the source
- E. Standard access lists filter on the source address
- F. Standard access lists filter on the destination address

**Answer:** BCE

**Explanation:** Source:

<http://www.ciscopress.com/articles/article.asp?p=1697887> Standard ACL

- 1) Able Restrict, deny & filter packets by Host Ip or subnet only.
- 2) Best Practice is put Std. ACL restriction near from Source Host/Subnet (Interface-In-bound).
- 3) No Protocol based restriction. (Only HOST IP). Extended ACL
- 1) More flexible then Standard ACL.
- 2) You can filter packets by Host/Subnet as well as Protocol/TCP/Port/UDP/Port.
- 3) Best Practice is put restriction near from Destination Host/Subnet. (Interface-Outbound)

Topic 3, Exam Pool C

#### NEW QUESTION 329

Which ports must be open between a AAA server and a Microsoft server to permit active directory authentication?

- A. 445 and 389
- B. 888 and 3389
- C. 636 and 4445
- D. 363 and 983

**Answer:** A

#### NEW QUESTION 330

What is the highest security level can be applied to an ASA interface?

- A. 50
- B. 100
- C. 200

**Answer:** C

#### NEW QUESTION 335

What does the command `crypto isakmp nat-traversal` do?

- A. Enables udp port 4500 on all IPsec enabled interfaces
- B. rebooting the ASA the global command

**Answer:** A

#### NEW QUESTION 338

Which type of Cisco ASA access list entry can be configured to match multiple entries in a single statement?

- A. nested object-class
- B. class-map
- C. extended wildcard matching
- D. object groups

**Answer:** D

**Explanation:** :

Reference: <http://www.cisco.com/en/US/docs/security/asa/asa82/configuration/guide/objectgroups.html>

Information About Object Groups

By grouping like objects together, you can use the object group in an ACE instead of having to enter an ACE for each object separately. You can create the following types of object groups:

- Protocol
- Network
- Service
- ICMP type

For example, consider the following three object groups:

- MyServices — Includes the TCP and UDP port numbers of the service requests that are allowed access to the internal network.
- TrustedHosts — Includes the host and network addresses allowed access to the greatest range of services and servers.
- PublicServers — Includes the host addresses of servers to which the greatest access is provided.

After creating these groups, you could use a single ACE to allow trusted hosts to make specific service requests to a group of public servers.

You can also nest object groups in other object groups.

**NEW QUESTION 341**

Which of the following pairs of statements is true in terms of configuring MD authentication?

- A. Interface statements (OSPF, EIGRP) must be configured; use of key chain in OSPF
- B. Router process (OSPF, EIGRP) must be configured; key chain in EIGRP
- C. Router process (only for OSPF) must be configured; key chain in EIGRP
- D. Router process (only for OSPF) must be configured; key chain in OSPF

**Answer:** C

**NEW QUESTION 344**

Which line in the following OSPF configuration will not be required for MD5 authentication to work?

```
interface GigabitEthernet0/1
ip address 192.168.10.1 255.255.255.0
ip ospf authentication message-digest
ip ospf message-digest-key 1 md5 CCNA
!
router ospf 65000
router-id 192.168.10.1
area 20 authentication message-digest network 10.1.1.0 0.0.0.255 area 10
network 192.168.10.0 0.0.0.255 area 0
!
```

- A. ip ospf authentication message-digest
- B. network 192.168.10.0 0.0.0.255 area 0
- C. area 20 authentication message-digest
- D. ip ospf message-digest-key 1 md5 CCNA

**Answer:** C

**NEW QUESTION 349**

Which two features of Cisco Web Reputation tracking can mitigate web-based threats? (Choose Two)

- A. outbreak filter
- B. buffer overflow filter
- C. bayesian filter
- D. web reputation filter
- E. exploit filtering

**Answer:** AD

**Explanation:** Cisco IronPort Outbreak Filters provide a critical first layer of defense against new outbreaks. With this proven preventive solution, protection begins hours before signatures used by traditional antivirus solutions are in place. Real-world results show an average 14-hour lead time over reactive antivirus solutions. SenderBase, the world's largest email and web traffic monitoring network, provides real-time protection. The Cisco IronPort SenderBase Network captures data from over 120,000 contributing organizations around the world.

Source: [http://www.cisco.com/c/en/us/products/security/email-security-appliance/outbreak\\_filters\\_index.html](http://www.cisco.com/c/en/us/products/security/email-security-appliance/outbreak_filters_index.html)

**NEW QUESTION 351**

Which two statements about the self zone on Cisco zone based policy firewall are true ? (Choose two)

- A. multiple interfaces can be assigned to the self zone .
- B. traffic entering the self zone must match a rule.

- C. zone pairs that include the self zone apply to traffic transiting the device.
- D. it can be either the source zone or destination zone .
- E. it supports statefull inspection for multicast traffic

**Answer:** AD

#### NEW QUESTION 354

When setting up a site-to-site VPN with PSK authentication on a Cisco router, which two elements must be configured under crypto map? (Choose two.)

- A. nat
- B. transform-set
- C. reverse-route
- D. peer
- E. pfs

**Answer:** BD

#### NEW QUESTION 357

Within an 802.1X enabled network with the Auth Fail feature configured, when does a switch port get placed into a restricted VLAN?

- A. When 802.1X is not globally enabled on the Cisco catalyst switch
- B. When AAA new-model is enabled
- C. When a connected client fails to authenticate after a certain number of attempts
- D. If a connected client does not support 802.1X
- E. After a connected client exceeds a specific idle time

**Answer:** C

#### NEW QUESTION 360

What port option in a PVLAN that can communicate with every other port?

- A. Promiscuous ports
- B. Community ports
- C. Ethernet ports
- D. Isolate ports

**Answer:** A

**Explanation:** + Promiscuous -- A promiscuous port belongs to the primary VLAN. The promiscuous port can communicate with all interfaces, including the community and isolated host ports, that belong to those secondary VLANs associated to the promiscuous port and associated with the primary VLAN.  
+ Isolated -- An isolated port is a host port that belongs to an isolated secondary VLAN. This port has complete isolation from other ports within the same private VLAN domain, except that it can communicate with associated promiscuous ports  
+Community -- A community port is a host port that belongs to a community secondary VLAN. Community ports communicate with other ports in the same community VLAN and with associated promiscuous ports Source: <http://www.cisco.com/c/en/us/td/docs/switches/datacenter/nexus5000/sw/configuration/guide/cli/CLIConfigurationGuide/PrivateVLANs.html>

#### NEW QUESTION 362

Referencing the CIA model, in which scenario is a hash-only function most appropriate?

- A. securing wireless transmissions.
- B. securing data in files.
- C. securing real-time traffic
- D. securing data at rest

**Answer:** A

#### NEW QUESTION 364

Which type of encryption technology has the broadcast platform support?

- A. Middleware
- B. Hardware
- C. Software
- D. File-level

**Answer:** C

#### NEW QUESTION 369

What encryption technology has broadest platform support

- A. hardware
- B. middleware
- C. Software
- D. File level

**Answer:** C

#### NEW QUESTION 370

With which technology do apply integrity, confidentiality and authenticate the source

- A. IPSec
- B. IKE
- C. Certificate authority
- D. Data encryption standards

**Answer:** A

**Explanation:** IPsec is a collection of protocols and algorithms used to protect IP packets at Layer 3 (hence the name of IP Security [IPsec]). IPsec provides the core benefits of confidentiality through encryption, data integrity through hashing and HMAC, and authentication using digital signatures or using a pre-shared key (PSK) that is just for the authentication, similar to a password.

Source: Cisco Official Certification Guide, IPsec and SSL, p.97

#### NEW QUESTION 373

What is example of social engineering

- A. Gaining access to a building through an unlocked door.
- B. something about inserting a random flash drive.
- C. gaining access to server room by posing as IT
- D. Watching other user put in username and password (something around there)

**Answer:** C

#### NEW QUESTION 376

SSL certificates are issued by Certificate Authority(CA) are?

- A. Trusted root
- B. Not trusted

**Answer:** A

#### NEW QUESTION 377

Which two actions can a zone based firewall take when looking at traffic? (Choose two)

- A. Filter
- B. Forward
- C. Drop
- D. Broadcast
- E. Inspect

**Answer:** CE

#### NEW QUESTION 380

If a switch port goes directly into a blocked state only when a superior BPDU is received, what mechanism must be in use?

- A. STP BPDU guard
- B. loop guard
- C. STP Root guard
- D. EtherChannel guard

**Answer:** A

#### NEW QUESTION 385

When is the default deny all policy an exception in zone-based firewalls?

- A. When traffic traverses two interfaces in in the same zone
- B. When traffic terminates on the router via the self zone
- C. When traffic sources from the router via the self zone
- D. When traffic traverses two interfaces in different zones

**Answer:** A

#### NEW QUESTION 390

What feature defines a campus area network?

- A. It has a single geographic location.
- B. It has limited or restricted Internet access.
- C. It has a limited number of segments.
- D. it lacks external connectivity.

**Answer:** A

**NEW QUESTION 395**

When is "Deny all" policy an exception in Zone Based Firewall

- A. traffic traverses 2 interfaces in same zone
- B. traffic sources from router via self zone
- C. traffic terminates on router via self zone
- D. traffic traverses 2 interfaces in different zones
- E. traffic terminates on router via self zone

**Answer: A**

**Explanation:** + There is a default zone, called the self zone, which is a logical zone. For any packets directed to the router directly (the destination IP represents the packet is for the router), the router automatically considers that traffic to be entering the self zone. In addition, any traffic initiated by the router is considered as leaving the self zone.

By default, any traffic to or from the self zone is allowed, but you can change this policy.

+ For the rest of the administrator-created zones, no traffic is allowed between interfaces in different zones.

+ For interfaces that are members of the same zone, all traffic is permitted by default. Source: Cisco Official Certification Guide, Zones and Why We Need Pairs of Them, p.380

**NEW QUESTION 400**

Which command is used to verify a VPN connection is operational?

- A. sh crypto ipsec sa
- B. sh crypto isakmp sa
- C. debug crypto isakmp
- D. sh crypto session

**Answer: A**

**Explanation:** #show crypto ipsec sa - This command shows IPsec SAs built between peers In the output you see

#pkts encaps: 345, #pkts encrypt: 345, #pkts digest 0

#pkts decaps: 366, #pkts decrypt: 366, #pkts verify 0

which means packets are encrypted and decrypted by the IPsec peer.

Source:

[http://www.cisco.com/c/en/us/support/docs/security-vpn/ipsec-negotiation-ike-protocols/5409-ipsec-debug-00.html#ipsec\\_sa](http://www.cisco.com/c/en/us/support/docs/security-vpn/ipsec-negotiation-ike-protocols/5409-ipsec-debug-00.html#ipsec_sa)

**NEW QUESTION 403**

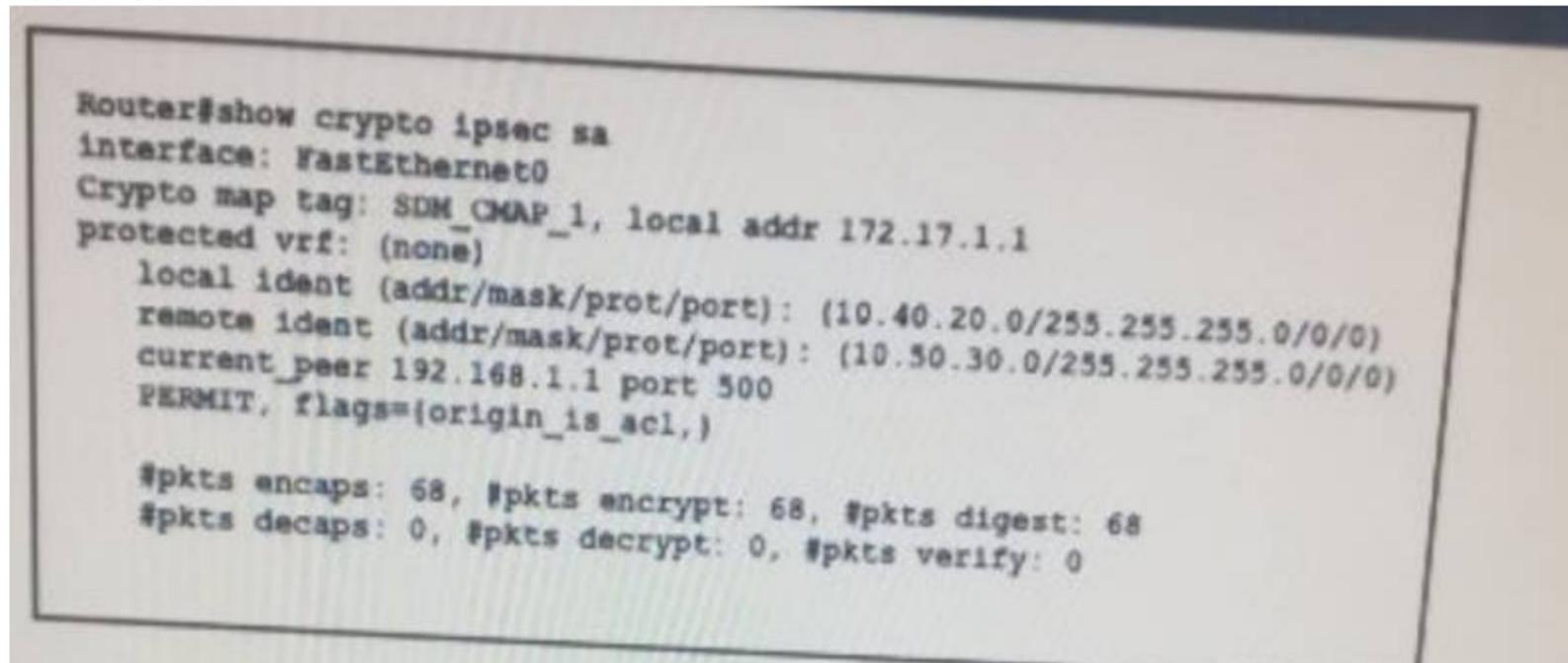
Which command do you enter to verify that a VPN connection is established between two endpoints and that the connection is passing traffic?

- A. Firewall#sh crypto ipsec sa
- B. Firewall#sh crypto isakmp sa
- C. Firewall#debug crypto isakmp
- D. Firewall#sh crypto session

**Answer: A**

**NEW QUESTION 408**

Refer to the exhibit.



For which reason is the tunnel unable to pass traffic?

- A. UDP port 500 is blocked.
- B. The IP address of the remote peer is incorrect.
- C. The tunnel is failing to receive traffic from the remote peer.
- D. The local peer is unable to encrypt the traffic.

**Answer: C**

#### NEW QUESTION 411

Which type of attack is directed against the network directly:

- A. Denial of Service
- B. phishing
- C. trojan horse

**Answer:** A

**Explanation:** Denial of service refers to willful attempts to disrupt legitimate users from getting access to the resources they intend to. Although no complete solution exists, administrators can do specific things to protect the network from a DoS attack and to lessen its effects and prevent a would-be attacker from using a system as a source of an attack directed at other systems. These mitigation techniques include filtering based on bogus source IP addresses trying to come into the networks and vice versa. Unicast reverse path verification is one way to assist with this, as are access lists. Unicast reverse path verification looks at the source IP address as it comes into an interface, and then looks at the routing table. If the source address seen would not be reachable out of the same interface it is coming in on, the packet is considered bad, potentially spoofed, and is dropped.

Source: Cisco Official Certification Guide, Best Practices Common to Both IPv4 and IPv6, p.332

#### NEW QUESTION 413

In which configuration mode do you configure the ip ospf authentication-key 1 command?

- A. Interface
- B. routing process
- C. global
- D. privileged

**Answer:** A

**Explanation:** ip ospf authentication-key is used under interface configuration mode, so it's in interface level, under global configuration mode. If it asks about interface level then choose that.

```
interface Serial0
```

```
ip address 192.16.64.1 255.255.255.0
```

```
ip ospf authentication-key c1$c0
```

#### NEW QUESTION 414

Which type of layer 2 attack enables the attacker to intercept traffic that is intended for one specific recipient?

- A. BPDU attack
- B. DHCP Starvation
- C. CAM table overflow
- D. MAC address spoofing

**Answer:** D

#### NEW QUESTION 418

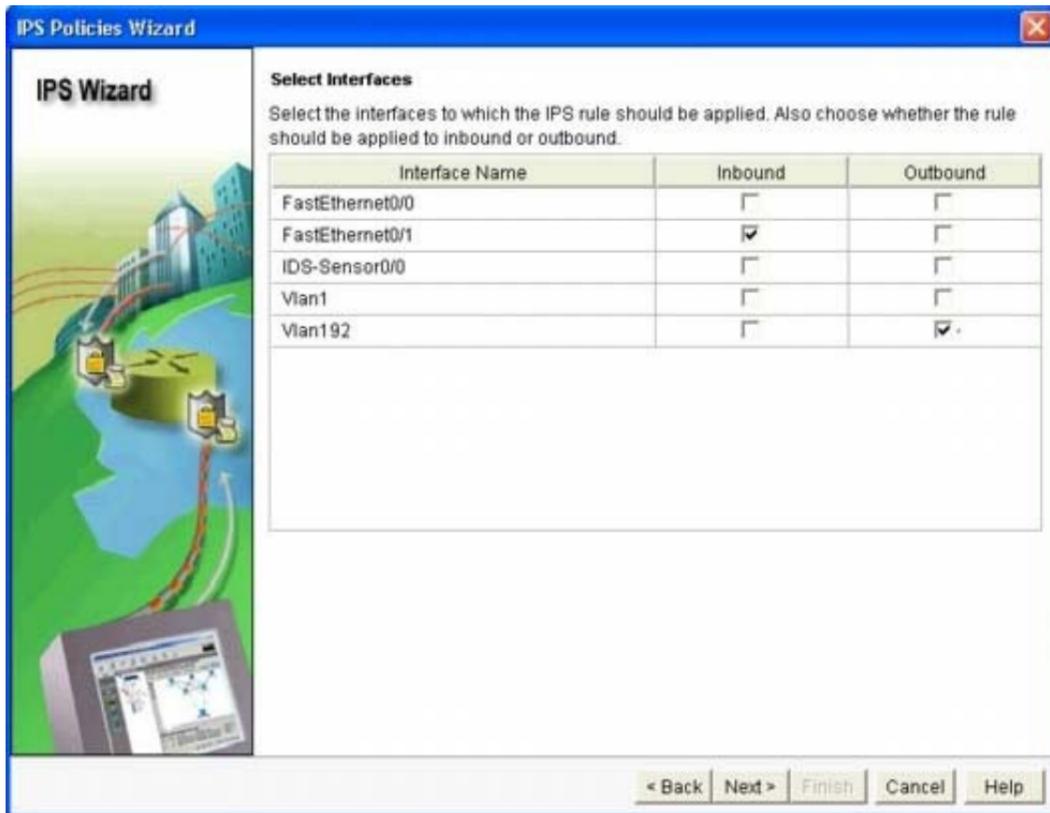
Which four tasks are required when you configure Cisco IOS IPS using the Cisco Configuration Professional IPS wizard? (Choose four.)

- A. Select the interface(s) to apply the IPS rule.
- B. Select the traffic flow direction that should be applied by the IPS rule.
- C. Add or remove IPS alerts actions based on the risk rating.
- D. Specify the signature file and the Cisco public key.
- E. Select the IPS bypass mode (fail-open or fail-close).
- F. Specify the configuration location and select the category of signatures to be applied to the selected interface(s).

**Answer:** ABDF

**Explanation:** [http://www.cisco.com/en/US/prod/collateral/iosswrel/ps6537/ps6586/ps6634/prod\\_white\\_paper0900ae cd8066d265.html](http://www.cisco.com/en/US/prod/collateral/iosswrel/ps6537/ps6586/ps6634/prod_white_paper0900ae cd8066d265.html)

Step 11. At the `Select Interfaces' screen, select the interface and the direction that IOS IPS will be applied to, then click `Next' to continue.

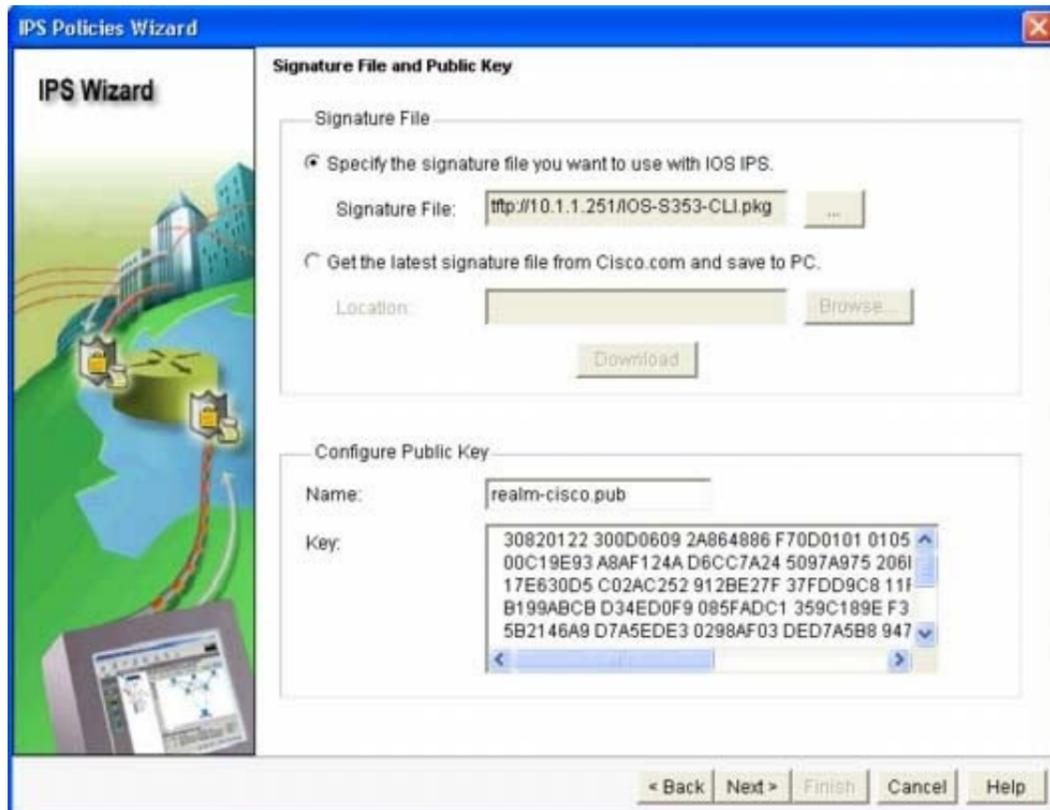


Step 12. At the 'IPS Policies Wizard' screen, in the 'Signature File' section, select the first radio button "Specify the signature file you want to use with IOS IPS", then click the "..." button to bring up a dialog box to specify the location of the signature package file, which will be the directory specified in Step 6. In this example, we use tftp to download the signature package to the router.



Step 13. In the 'Configure Public Key' section, enter 'realm-cisco.pub' in the 'Name' text field, then copy and paste the following public key's key-string in the 'Key' text field. This public key can be downloaded from Cisco.com at: <http://www.cisco.com/cgi-bin/tablebuild.pl/ios-v5sigup>. Click 'Next' to continue.

```
30820122 300D0609 2A864886 F70D0101 01050003 82010F00 3082010A 02820101
00C19E93 A8AF124AD6CC7A24 5097A975 206BE3A2 06FBA13F 6F12CB5B 4E441F16
17E630D5 C02AC252 912BE27F 37FDD9C8 11FC7AF7 DCDD81D9 43CDABC3 6007D128 B199ABCBD34ED0F9 085FADC1 359C189EF30AF10AC0EFB624
7E0764BF 3E53053E 5B2146A9 D7A5EDE3 0298AF03 DED7A5B8 9479039D 20F30663 9AC64B93 C0112A35 FE3F0C87 89BCB7BB 994AE74C
FA9E481DF65875D6 85EAF974 6D9CC8E3 F0B08B85 50437722 FFBE85B9 5E4189FF CC189CB9 69C46F9C A84DFBA5 7A0AF99E AD768C36
006CF498 079F88F8 A3B3FB1F 9FB7B3CB 5539E1D1 9693CCBB 551F78D2 892356AE
2F56D826 8918EF3C 80CA4F4D 87BFCA3B BFF668E9 689782A5 CF31CB6E B4B094D3 F3020301 0001
```



#### NEW QUESTION 422

What data is transferred during DH for making public and private key?

- A. Random prime Integer
- B. Encrypted data transfer
- C. Prime integer
- D. Random number

Answer: A

#### NEW QUESTION 426

Which command should be used to enable AAA authentication to determine if a user can access the privilege command level?

- A. aaa authentication enable level
- B. aaa authentication enable default local
- C. aaa authentication enable method default
- D. aaa authentication enable local

Answer: B

Explanation: [https://www.cisco.com/c/en/us/td/docs/ios/12\\_2/security/command/reference/fsecur\\_r/srfathen.html](https://www.cisco.com/c/en/us/td/docs/ios/12_2/security/command/reference/fsecur_r/srfathen.html)

#### NEW QUESTION 429

Which security term refers to a person, property, or data of value to a company?

- A. Risk
- B. Asset
- C. Threat prevention
- D. Mitigation technique

Answer: B

#### NEW QUESTION 433

Which two characteristics of symmetric encryption are true? (Choose two)

- A. It uses digital certificates.
- B. It uses a public key and a private key to encrypt and decrypt traffic.
- C. it requires more resources than asymmetric encryption
- D. it is faster than asymmetric encryption
- E. It uses the same key to encrypt and decrypt the traffic.

Answer: BE

Explanation: <http://searchsecurity.techtarget.com/definition/secret-key-algorithm>

#### NEW QUESTION 438

The purpose of the RSA SecureID server/application is to provide what?

- A. Authentication, authorization, accounting (AAA) functions
- B. One-time password (OTP) capabilities
- C. 802.1X enforcement
- D. VPN access

**Answer:** B

**NEW QUESTION 443**

SYN flood attack is a form of ?

- A. Denial of Service attack
- B. Man in the middle attack
- C. Spoofing attack

**Answer:** A

**Explanation:** A SYN flood is a form of denial-of-service attack in which an attacker sends a succession of SYN requests to a target's system in an attempt to consume enough server resources to make the system unresponsive to legitimate traffic.

Source: [https://en.wikipedia.org/wiki/SYN\\_flood](https://en.wikipedia.org/wiki/SYN_flood)

**NEW QUESTION 447**

Refer to the exhibit.

```
crypto ipsec transform-set myset esp-md5-hmac esp-aes-256
```

What are two effects of the given command? (Choose two.)

- A. It configures authentication to use AES 256.
- B. It configures authentication to use MD5 HMAC.
- C. It configures authorization use AES 256.
- D. It configures encryption to use MD5 HMAC.
- E. It configures encryption to use AES 256.

**Answer:** BE

**Explanation:** To define a transform set -- an acceptable combination of security protocols and algorithms -- use the crypto ipsec transform-set global configuration command.

ESP Encryption Transform

+ esp-aes 256: ESP with the 256-bit AES encryption algorithm. ESP Authentication Transform

+ esp-md5-hmac: ESP with the MD5 (HMAC variant) authentication algorithm. (No longer recommended) Source: <http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/security/a1/sec-a1-cr-book/sec-cr-c3.html#wp2590984165>

**NEW QUESTION 449**

With which preprocessor do you detect incomplete TCP handshakes

- A. rate based prevention
- B. portscan detection

**Answer:** A

**Explanation:** Rate-based attack prevention identifies abnormal traffic patterns and attempts to minimize the impact of that traffic on legitimate requests. Rate-based attacks usually have one of the following characteristics:

+ any traffic containing excessive incomplete connections to hosts on the network, indicating a SYN flood attack

+ any traffic containing excessive complete connections to hosts on the network, indicating a TCP/IP connection flood attack

+ excessive rule matches in traffic going to a particular destination IP address or addresses or coming from a particular source IP address or addresses.

+ excessive matches for a particular rule across all traffic.

Source:

<http://www.cisco.com/c/en/us/td/docs/security/firesight/541/firepower-module-user-guide/asa-firepower-module-user-guide-v541/Intrusion-Threat-Detection.html>

**NEW QUESTION 453**

What command could you implement in the firewall to conceal internal IP address?

- A. no source-route
- B. no cdp run
- C. no broadcast...
- D. no proxy-arp

**Answer:** D

**Explanation:** The Cisco IOS software uses proxy ARP (as defined in RFC 1027) to help hosts with no knowledge of routing determine the media addresses of hosts on other networks or subnets. For example, if the router receives an ARP request for a host that is not on the same interface as the ARP request sender,

and if the router has all of its routes to that host through other interfaces, then it generates a proxy ARP reply packet giving its own local data-link address. The host that sent the ARP request then sends its packets to the router, which forwards them to the intended host. Proxy ARP is enabled by default.

Router(config-if)# ip proxy-arp - Enables proxy ARP on the interface.

Source:

[http://www.cisco.com/c/en/us/td/docs/ios/12\\_2/ip/configuration/guide/fipr\\_c/1cfipadr.html#wp1001233](http://www.cisco.com/c/en/us/td/docs/ios/12_2/ip/configuration/guide/fipr_c/1cfipadr.html#wp1001233)

#### NEW QUESTION 457

Which IDS/IPS is used for monitoring system?

- A. HIPS
- B. WIPS
- C. visibility tool

**Answer: A**

#### NEW QUESTION 459

Which cisco IOS device support firewall, antispysware, anti-phishing, protection, etc.

- A. Cisco IOS router
- B. Cisco 4100 IOS IPS appliance
- C. Cisco 5500 series ASA
- D. Cisco 5500x next generation ASA

**Answer: D**

#### NEW QUESTION 463

Which label is given to a person who uses existing computer scripts to hack into computers lacking the expertise to write their own?

- A. white hat hacker
- B. hacktivist
- C. phreaker
- D. script kiddy

**Answer: D**

#### NEW QUESTION 465

What are characteristics of the Radius Protocol? choose Two

- A. Uses TCP port 49
- B. Uses UDP Port 49
- C. Uses TCP 1812/1813
- D. Uses UDP 1812/1813
- E. Comines authentication and authorization

**Answer: DE**

#### NEW QUESTION 468

What is true about the Cisco IOS Resilient Configuration feature?

- A. The feature can be disabled through a remote session
- B. There is additional space required to secure the primary Cisco IOS Image file
- C. The feature automatically detects image and configuration version mismatch
- D. Remote storage is used for securing files

**Answer: C**

**Explanation:** The following factors were considered in the design of Cisco IOS Resilient Configuration:

- + The configuration file in the primary bootset is a copy of the running configuration that was in the router when the feature was first enabled.
- + The feature secures the smallest working set of files to preserve persistent storage space. No extra space is required to secure the primary Cisco IOS image file.
- + The feature automatically detects image or configuration version mismatch .
- + Only local storage is used for securing files, eliminating scalability maintenance challenges from storing multiple images and configurations on TFTP servers.
- + The feature can be disabled only through a console session Source: [http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/sec\\_usr\\_cfg/configuration/15-mt/sec-usr-cfg-15-mt-book/sec-resil-config.html](http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/sec_usr_cfg/configuration/15-mt/sec-usr-cfg-15-mt-book/sec-resil-config.html)

#### NEW QUESTION 469

What show command can see vpn tunnel establish with traffic passing through.

- A. show crypto ipsec sa
- B. show crypto session
- C. show crypto isakmp sa
- D. show crypto ipsec transform-set

**Answer: A**

**Explanation:**

#show crypto ipsec sa - This command shows IPsec SAs built between peers In the output you see  
#pkts encaps: 345, #pkts encrypt: 345, #pkts digest 0  
#pkts decaps: 366, #pkts decrypt: 366, #pkts verify 0  
which means packets are encrypted and decrypted by the IPsec peer.  
Source:  
[http://www.cisco.com/c/en/us/support/docs/security-vpn/ipsec-negotiation-ike-protocols/5409-ipsec-debug-00.html#ipsec\\_sa](http://www.cisco.com/c/en/us/support/docs/security-vpn/ipsec-negotiation-ike-protocols/5409-ipsec-debug-00.html#ipsec_sa)

#### NEW QUESTION 474

Which type of attack can exploit design flaws in the implementation of an application without going noticed?

- A. Volume-based DDoS attacks.
- B. application DDoS flood attacks.
- C. DHCP starvation attacks
- D. low-rate DoS attacks

**Answer: D**

#### NEW QUESTION 478

The first layer of defense which provides real-time preventive solutions against malicious traffic is provided by?

- A. Banyan Filters
- B. Explicit Filters
- C. Outbreak Filters

**Answer: C**

#### NEW QUESTION 482

Security well known terms Choose 2

- A. Trojan
- B. Phishing
- C. Something LC
- D. Ransomware

**Answer: BD**

**Explanation:** The following are the most common types of malicious software:

- + Computer viruses
- + Worms
- + Mailers and mass-mailer worms
- + Logic bombs
- + Trojan horses
- + Back doors
- + Exploits
- + Downloaders
- + Spammers
- + Key loggers
- + Rootkits
- + Ransomware

#### NEW QUESTION 484

Which statement is a benefit of using Cisco IOS IPS?

- A. It uses the underlying routing infrastructure to provide an additional layer of security.
- B. It works in passive mode so as not to impact traffic flow.
- C. It supports the complete signature database as a Cisco IPS sensor appliance.
- D. The signature database is tied closely with the Cisco IOS image.

**Answer: A**

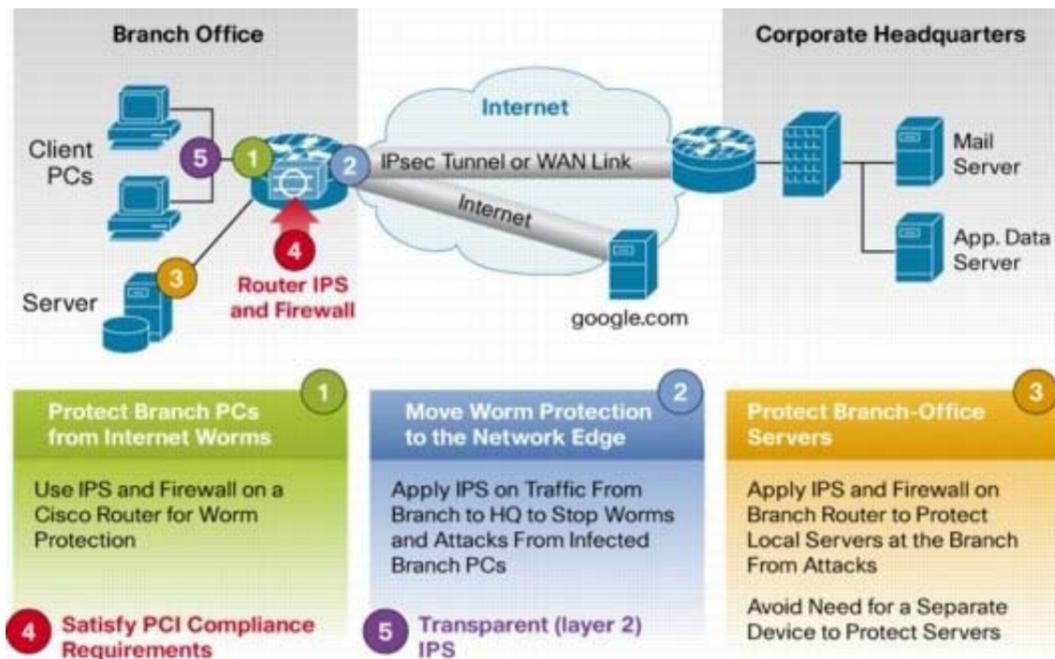
**Explanation:** [http://www.cisco.com/en/US/prod/collateral/iosswrel/ps6537/ps6586/ps6634/product\\_data\\_sheet0900aecd80313](http://www.cisco.com/en/US/prod/collateral/iosswrel/ps6537/ps6586/ps6634/product_data_sheet0900aecd80313) Product Overview

In today's business environment, network intruders and attackers can come from outside or inside the network.

They can launch distributed denial-of-service attacks, they can attack Internet connections, and they can exploit network and host vulnerabilities. At the same time, Internet worms and viruses can spread across the world in a matter of minutes. There is often no time to wait for human intervention-the network itself must possess the intelligence to recognize and mitigate these attacks, threats, exploits, worms and viruses.

Cisco IOS Intrusion Prevention System (IPS) is an inline, deep-packet inspection-based solution that enables Cisco IOS Software to effectively mitigate a wide range of network attacks. While it is common practice to defend against attacks by inspecting traffic at data centers and corporate headquarters, distributing the network level defense to stop malicious traffic close to its entry point at branch or telecommuter offices is also critical.

Cisco IOS IPS: Major Use Cases and Key Benefits IOS IPS helps to protect your network in 5 ways:



**Key Benefits:**

- Provides network-wide, distributed protection from many attacks, exploits, worms and viruses exploiting vulnerabilities in operating systems and applications.
- Eliminates the need for a standalone IPS device at branch and telecommuter offices as well as small and medium-sized business networks.
- Unique, risk rating based signature event action processor dramatically improves the ease of management of IPS policies.
- Offers field-customizable worm and attack signature set and event actions.
- Offers inline inspection of traffic passing through any combination of router LAN and WAN interfaces in both directions.
- Works with Cisco IOS® Firewall, control-plane policing, and other Cisco IOS Software security features to protect the router and networks behind the router.
- Supports more than 3700 signatures from the same signature database available for Cisco Intrusion Prevention System (IPS) appliances.

**NEW QUESTION 486**

Which product can be used to provide application layer protection for TCP port 25 traffic?

- A. ESA
- B. CWS
- C. WSA
- D. ASA

**Answer: A**

**NEW QUESTION 487**

Which type of PVLAN port allows a host in the same VLAN to communicate only with promiscuous hosts?

- A. Community host in the PVLAN
- B. Isolated host in the PVLAN
- C. Promiscuous host in the PVLAN
- D. Span for host in the PVLAN

**Answer: B**

**Explanation:** The types of private VLAN ports are as follows:

- + Promiscuous - The promiscuous port can communicate with all interfaces, including the community and isolated host ports, that belong to those secondary VLANs associated to the promiscuous port and associated with the primary VLAN
  - + Isolated - This port has complete isolation from other ports within the same private VLAN domain, except that it can communicate with associated promiscuous ports.
  - + Community -- A community port is a host port that belongs to a community secondary VLAN. Community ports communicate with other ports in the same community VLAN and with associated promiscuous ports.
- These interfaces are isolated from all other interfaces in other communities and from all isolated ports within the private VLAN domain.

Source:

<http://www.cisco.com/c/en/us/td/docs/switches/datacenter/nexus5000/sw/configuration/guide/cli/CLIConfigurationGuide/PrivateVLANs.html#42874>

**NEW QUESTION 491**

What IPsec mode is used to encrypt traffic between a server and VPN endpoint?

- A. tunnel
- B. Trunk
- C. Aggregated
- D. Quick
- E. Transport

**Answer: E**

**Explanation:** @Tullipp on securitytut.com commented:

"the IPSEC Mode question did come up. It has been very badly worded in the dumps and I knew it can't be right.

The question that comes in the exam is "between client and server vpn endpoints".

So the keyword here is vpn endpoints. Not the end points like it's worded in the dumps. So the answer is transport mode."

+ IPsec Transport mode is used for end-to-end communications, for example, for communication between a client and a server or between a workstation and a

gateway (if the gateway is being treated as a host). A good example would be an encrypted Telnet or Remote Desktop session from a workstation to a server. + IPsec supports two encryption modes: Transport mode and Tunnel mode. Transport mode encrypts only the data portion (payload) of each packet and leaves the packet header untouched. Transport mode is applicable to either gateway or host implementations, and provides protection for upper layer protocols as well as selected IP header fields.

Source:  
<http://www.firewall.cx/networking-topics/protocols/870-ipsec-modes.html>  
[http://www.cisco.com/c/en/us/td/docs/net\\_mgmt/vpn\\_solutions\\_center/2-0/ip\\_security/provisioning/guide/IPsecPG1.html](http://www.cisco.com/c/en/us/td/docs/net_mgmt/vpn_solutions_center/2-0/ip_security/provisioning/guide/IPsecPG1.html)  
Generic Routing Encapsulation (GRE) is often deployed with IPsec for several reasons, including the following:  
+ IPsec Direct Encapsulation supports unicast IP only. If network layer protocols other than IP are to be supported, an IP encapsulation method must be chosen so that those protocols can be transported in IP packets.  
+ IPmc is not supported with IPsec Direct Encapsulation. IPsec was created to be a security protocol between two and only two devices, so a service such as multicast is problematic. An IPsec peer encrypts a packet so that only one other IPsec peer can successfully perform the de-encryption. IPmc is not compatible with this mode of operation.  
Source: [https://www.cisco.com/application/pdf/en/us/guest/netsol/ns171/c649/ccmigration\\_09186a008074f26a.pdf](https://www.cisco.com/application/pdf/en/us/guest/netsol/ns171/c649/ccmigration_09186a008074f26a.pdf)

#### NEW QUESTION 495

which are two valid TCP connection states (pick 2) is the gist of the question.

- A. SYN-RCVD
- B. Closed
- C. SYN-WAIT
- D. RCVD
- E. SENT

**Answer:** AB

**Explanation:** TCP Finite State Machine (FSM) States, Events and Transitions + CLOSED: This is the default state that each connection starts in before the process of establishing it begins.

The state is called "fictional" in the standard.

- + LISTEN
- + SYN-SENT
- + SYN-RECEIVED: The device has both received a SYN (connection request) from its partner and sent its own SYN. It is now waiting for an ACK to its SYN to finish connection setup.
- + ESTABLISHED
- + CLOSE-WAIT
- + LAST-ACK
- + FIN-WAIT-1
- + FIN-WAIT-2
- + CLOSING
- + TIME-WAIT

Source:  
[http://tcpipguide.com/free/t\\_TCPOperationalOverviewandtheTCPFiniteStateMachineF-2.htm](http://tcpipguide.com/free/t_TCPOperationalOverviewandtheTCPFiniteStateMachineF-2.htm)

#### NEW QUESTION 496

Which is not a function of mobile device management (MDM)?

- A. Enforce strong passwords on BYOD devices
- B. Deploy software updates to BYOD devices
- C. Remotely wipe data from BYOD devices
- D. Enforce data encryption requirements on BYOD devices

**Answer:** B

#### NEW QUESTION 499

Which statement about an ASA in transparent mode is true?

- A. It requires a management IP address.
- B. It allows the use of dynamic NAT.
- C. It supports OSPF
- D. It requires an IP address for each interface.

**Answer:** A

#### NEW QUESTION 502

Diffie-Hellman key exchange question

- A. IKE
- B. IPSEC
- C. SPAN
- D. STP

**Answer:** A

#### NEW QUESTION 507

Which of the following are IKE modes? (choose all and apply)

- A. Main Mode
- B. Fast Mode
- C. Aggressive Mode
- D. Quick Mode
- E. Diffie-Hellman Mode

**Answer:** ACD

**Explanation:** <https://supportforums.cisco.com/t5/security-documents/main-mode-vs-aggressive-mode/ta-p/3123382>

Main Mode - An IKE session begins with the initiator sending a proposal or proposals to the responder. The proposals define what encryption and authentication protocols are acceptable, how long keys should remain active, and whether perfect forward secrecy should be enforced, for example. Multiple proposals can be sent in one offering. The first exchange between nodes establishes the basic security policy; the initiator proposes the encryption and authentication algorithms it is willing to use. The responder chooses the appropriate proposal (we'll assume a proposal is chosen) and sends it to the initiator. The next exchange passes Diffie-Hellman public keys and other data. All further negotiation is encrypted within the IKE SA. The third exchange authenticates the ISAKMP session. Once the IKE SA is established, IPSec negotiation (Quick Mode) begins.

Aggressive Mode - Aggressive Mode squeezes the IKE SA negotiation into three packets, with all data required for the SA passed by the initiator. The responder sends the proposal, key material and ID, and authenticates the session in the next packet. The initiator replies by authenticating the session. Negotiation is quicker, and the initiator and responder ID pass in the clear.

Quick Mode - IPSec negotiation, or Quick Mode, is similar to an Aggressive Mode IKE negotiation, except negotiation must be protected within an IKE SA. Quick Mode negotiates the SA for the data encryption and manages the key exchange for that IPSec SA.

#### NEW QUESTION 510

Which two characteristics apply to an Intrusion Prevention System (IPS) ? Choose two

- A. Does not add delay to the original traffic.
- B. Cabled directly inline with the flow of the network traffic.
- C. Can drop traffic based on a set of rules.
- D. Runs in promiscuous mode.
- E. Cannot drop the packet on its own

**Answer:** BC

**Explanation:** + Position in the network flow: Directly inline with the flow of network traffic and every packet goes through the sensor on its way through the network.

+ Mode: Inline mode

+ The IPS can drop the packet on its own because it is inline. The IPS can also request assistance from another device to block future packets just as the IDS does.

Source: Cisco Official Certification Guide, Table 17-2 IDS Versus IPS, p.461

#### NEW QUESTION 511

Which IDS/IPS solution can monitor system processes and resources?

- A. IDS
- B. HIPS
- C. PROXY
- D. IPS

**Answer:** B

#### NEW QUESTION 516

Which command enable ospf authentication on an interface?

- A. ip ospf authentication message-digest
- B. network 192.168.10.0 0.0.0.255 area 0
- C. area 20 authentication message-digest
- D. ip ospf message-digest-key 1 md5 CCNA

**Answer:** A

**Explanation:** <https://supportforums.cisco.com/document/22961/ospf-authentication>

#### NEW QUESTION 517

Which 2 NAT type allows only objects or groups to reference an IP address?

- A. dynamic NAT
- B. dynamic PAT
- C. static NAT
- D. identity NAT

**Answer:** AC

**Explanation:** [http://www.cisco.com/c/en/us/td/docs/security/asa/asa90/configuration/guide/asa\\_90\\_cli\\_config/nat\\_objects.htm](http://www.cisco.com/c/en/us/td/docs/security/asa/asa90/configuration/guide/asa_90_cli_config/nat_objects.htm)

#### NEW QUESTION 522

What is the primary purpose of the Integrated Services Routers (ISR) in the BYOD solution?

- A. Provide connectivity in the home office environment back to the corporate campus
- B. Provide WAN and Internet access for users on the corporate campus
- C. Enforce firewall-type filtering in the data center
- D. Provide connectivity for the mobile phone environment back to the corporate campus

**Answer:** A

#### NEW QUESTION 526

Which type of PVLAN port allows communication from all port types?

- A. isolated
- B. community
- C. in-line
- D. promiscuous

**Answer:** D

**Explanation:** The types of private VLAN ports are as follows:

+ Promiscuous – The promiscuous port can communicate with all interfaces, including the community and isolated host ports, that belong to those secondary VLANs associated to the promiscuous port and associated with the primary VLAN

+ Isolated – This port has complete isolation from other ports within the same private VLAN domain, except that it can communicate with associated promiscuous ports.

+ Community — A community port is a host port that belongs to a community secondary VLAN.

Community ports communicate with other ports in the same community VLAN and with associated promiscuous ports.

These interfaces are isolated from all other interfaces in other communities and from all isolated ports within the private VLAN domain.

Source: <http://www.cisco.com/c/en/us/td/docs/switches/datacenter/nexus5000/sw/configuration/guide/cli/CLIConfigurationGuide/PrivateVLANs.html#42874>

#### NEW QUESTION 531

How does a zone pair handle traffic if the policy definition of the zone pair is missing?

- A. It permits all traffic without logging.
- B. it drops all traffic
- C. it permits and logs all traffic
- D. it inspects all traffic

**Answer:** B

#### NEW QUESTION 533

Which statement about zone-based firewall configuration is true?

- A. Traffic is implicitly denied by default between interfaces the same zone.
- B. Traffic that is desired to or sourced from the self-zone is denied by default.
- C. The zone must be configured before a can be assigned.
- D. You can assign an interface to more than one interface.

**Answer:** C

#### NEW QUESTION 538

What configure mode you used for the command ip ospf authentication-key c1\$c0?

- A. global
- B. privileged
- C. in-line
- D. Interface

**Answer:** D

**Explanation:** ip ospf authentication-key is used under interface configuration mode, so it's in interface level, under global configuration mode. If it asks about interface level then choose that.

interface Serial0

ip address 192.16.64.1 255.255.25

#### NEW QUESTION 540

Which aaa accounting command is used to enable logging of the start and stop records for user terminal sessions on the router?

- A. aaa accounting network start-stop tacacs+
- B. aaa accounting system start-stop tacacs+
- C. aaa accounting exec start-stop tacacs+
- D. aaa accounting connection start-stop tacacs+
- E. aaa accounting commands 15 start-stop tacacs+

**Answer:** C

**Explanation:** [http://www.cisco.com/en/US/docs/ios/security/command/reference/sec\\_book.html](http://www.cisco.com/en/US/docs/ios/security/command/reference/sec_book.html) aaa accounting

To enable authentication, authorization, and accounting (AAA) accounting of requested services for billing or security purposes when you use RADIUS or TACACS+, use the aaa accounting command in global configuration mode or template configuration mode. To disable AAA accounting, use the no form of this command.

aaa accounting {auth-proxy | system | network | exec | connection | commands level | dot1x} {default | list-name

| guarantee-first} [vrf vrf-name] {start-stop | stop-only | none} [broadcast] {radius | group group-name} no aaa accounting {auth-proxy | system | network | exec | connection | commands level | dot1x} {default | listname

| guarantee-first} [vrf vrf-name] {start-stop | stop-only | none} [broadcast] {radius | group group-name} exec Runs accounting for the EXEC shell session.

start-stop

Sends a "start" accounting notice at the beginning of a process and a "stop" accounting notice at the end of a process. The "start" accounting record is sent in the background. The requested user process begins regardless of whether the "start" accounting notice was received by the accounting server.

#### NEW QUESTION 543

What is the command to authenticate an NTP time source?

- A. #ntp authentication-key 1 md5 141411050D 7
- B. #ntp authenticate
- C. #ntp trusted-key 1
- D. #ntp trusted-key 2

**Answer:** B

**Explanation:** ntp authentication-key,,,,Defines the authentication keys.

ntp authenticate,,,,Enables or disables the NTP authentication feature.

ntp trusted-key #,,, Specifies one or more keys that a time source must provide in its NTP packets in order for the device to synchronize to it

#### NEW QUESTION 546

What is the highest security level that can be configured for an interface on an ASA?

- A. 50
- B. 100
- C. 200

**Answer:** C

**Explanation:** Security level 100: This is the highest security level on our ASA and by default this is assigned to the "inside" interface. Normally we use this for our "LAN". Since this is the highest security level, by default it can reach all the other interfaces.

<https://networklessons.com/cisco/asa-firewall/cisco-asa-security-levels/>

#### NEW QUESTION 551

The Oakley cryptography protocol is compatible with following for managing security?

- A. IPSec
- B. ISAKMP
- C. Port security

**Answer:** B

**Explanation:** A key management protocol standard that is used in conjunction with the IPSec standard. IPSec is an IP security feature that provides robust authentication and encryption of IP packets. IPSec can be configured without IKE, but IKE enhances IPSec by providing additional features, flexibility, and ease of configuration for the IPSec standard. IKE is a hybrid protocol that implements the Oakley key exchange and Skeme key exchange inside of the Internet Security Association and Key Management Protocol (ISAKMP) framework.

ISAKMP, Oakley, and Skeme are security protocols implemented by IKE.

Source: [https://www.symantec.com/security\\_response/glossary/define.jsp?letter=i&word=ike-internet-key-exchange](https://www.symantec.com/security_response/glossary/define.jsp?letter=i&word=ike-internet-key-exchange)

#### NEW QUESTION 556

Which cloud-based security service from Cisco provides URL filtering, web browsing content security, and roaming user protection?

- A. Cloud web security
- B. Cloud web Protection
- C. Cloud web Service
- D. Cloud advanced malware protection

**Answer:** A

#### NEW QUESTION 559

What are two challenges when deploying host-level IPS? (Choose Two)

- A. The deployment must support multiple operating systems.
- B. It does not provide protection for offsite computers.
- C. It is unable to provide a complete network picture of an attack.
- D. It is unable to determine the outcome of every attack that it detects.
- E. It is unable to detect fragmentation attacks.

**Answer:** AC

**Explanation:** Advantages of HIPS: The success or failure of an attack can be readily determined. A network IPS sends an alarm upon the presence of intrusive activity but cannot always ascertain the success or failure of such an attack. HIPS does not have to worry about fragmentation attacks or variable Time to Live (TTL) attacks

because the host stack takes care of these issues. If the network traffic stream is encrypted, HIPS has access to the traffic in unencrypted form.

Limitations of HIPS: There are two major drawbacks to HIPS:

+ HIPS does not provide a complete network picture: Because HIPS examines information only at the local host level, HIPS has difficulty constructing an accurate network picture or coordinating the events happening across the entire network.

+ HIPS has a requirement to support multiple operating systems: HIPS needs to run on every system in the network. This requires verifying support for all the different operating systems used in your network.

Source:

<http://www.ciscopress.com/articles/article.asp?p=1336425&seqNum=3>

#### NEW QUESTION 560

Which two options are the primary deployment models for mobile device management? (Choose two)

- A. Single-site
- B. hybrid cloud-based
- C. on-permises
- D. Cloud based
- E. Multisite

**Answer:** CD

**Explanation:** [https://www.cisco.com/c/en/us/td/docs/solutions/Enterprise/Borderless\\_Networks/Unified\\_Access/BYOD\\_Desig.html](https://www.cisco.com/c/en/us/td/docs/solutions/Enterprise/Borderless_Networks/Unified_Access/BYOD_Desig.html)

#### NEW QUESTION 563

Which firepower preprocessor block traffic based on IP?

- A. Signature-Based
- B. Policy-Based
- C. Anomaly-Based
- D. Reputation-Based

**Answer:** D

**Explanation:** Access control rules within access control policies exert granular control over network traffic logging and handling. Reputation-based conditions in access control rules allow you to manage which traffic can traverse your network, by contextualizing your network traffic and limiting it where appropriate. Access control rules govern the following types of reputation-based control:

+ Application conditions allow you to perform application control, which controls application traffic based on not only individual applications, but also applications' basic characteristics: type, risk, business relevance, categories, and tags.

+ URL conditions allow you to perform URL filtering, which controls web traffic based on individual websites, as well as websites' system-assigned category and reputation.

The ASAFirePOWER module can perform other types of reputation-based control, but you do not configure these using access control rules. For more information, see:

+ Blacklisting Using Security Intelligence IP Address Reputation explains how to limit traffic based on the reputation of a connection's origin or destination as a first line of defense.

+ Tuning Intrusion Prevention Performance explains how to detect, track, store, analyze, and block the transmission of malware and other types of prohibited files.

Source:

<http://www.cisco.com/c/en/us/td/docs/security/firesight/541/firepower-module-user-guide/asa-firepower-module-user-guide-v541/AC-Rules-App-URL-Reputation.html>

#### NEW QUESTION 566

Which option is the resulting action in a zone-based policy firewall configuration with these conditions?

```
Source: Zone 1
Destination: Zone 2
Zone pair exists?: Yes
Policy exists?: No
```

- A. no impact to zoning or policy
- B. no policy lookup (pass)
- C. drop
- D. apply default policy

**Answer:** C

**Explanation:** [http://www.cisco.com/en/US/docs/ios-xml/ios/sec\\_data\\_zbf/configuration/xr-3s/sec-zone-pol-fw.html](http://www.cisco.com/en/US/docs/ios-xml/ios/sec_data_zbf/configuration/xr-3s/sec-zone-pol-fw.html)

Zone Pairs

A zone pair allows you to specify a unidirectional firewall policy between two security zones.

To define a zone pair, use the zone-pair security command. The direction of the traffic is specified by source and destination zones. The source and destination zones of a zone pair must be security zones.

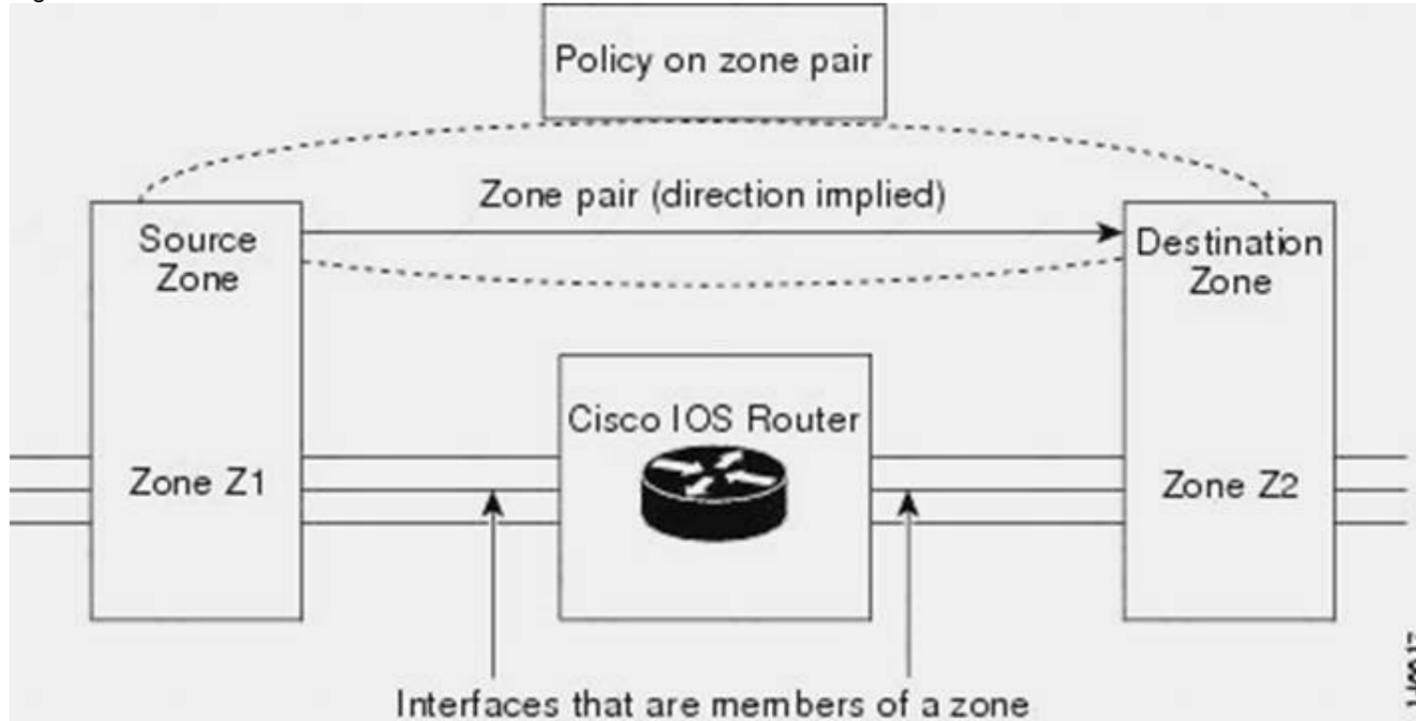
You can select the default or self zone as either the source or the destination zone. The self zone is a systemdefined zone which does not have any interfaces as members. A zone pair that includes the self zone, along with the associated policy, applies to traffic directed to the device or traffic generated by the device. It does not apply to traffic through the device.

The most common usage of firewall is to apply them to traffic through a device, so you need at least two zones (that is, you cannot use the self zone).

To permit traffic between zone member interfaces, you must configure a policy permitting (or inspecting) traffic between that zone and another zone. To attach a firewall policy map to the target zone pair, use the servicepolicy type inspect command.

The figure below shows the application of a firewall policy to traffic flowing from zone Z1 to zone Z2, which means that the ingress interface for the traffic is a member of zone Z1 and the egress interface is a member of zone Z2.

Figure 2. Zone Pairs



If there are two zones and you require policies for traffic going in both directions (from Z1 to Z2 and Z2 to Z1), you must configure two zone pairs (one for each direction).

If a policy is not configured between zone pairs, traffic is dropped. However, it is not necessary to configure a zone pair and a service policy solely for the return traffic. By default, return traffic is not allowed. If a service policy inspects the traffic in the forward direction and there is no zone pair and service policy for the return traffic, the return traffic is inspected. If a service policy passes the traffic in the forward direction and there is no zone pair and service policy for the return traffic, the return traffic is dropped. In both these cases, you need to configure a zone pair and a service policy to allow the return traffic. In the above figure, it is not mandatory that you configure a zone pair source and destination for allowing return traffic from Z2 to Z1. The service policy on Z1 to Z2 zone pair takes care of it.

**NEW QUESTION 567**

The purpose of the certificate authority (CA) is to ensure what?

- A. BYOD endpoints are posture checked
- B. BYOD endpoints belong to the organization
- C. BYOD endpoints have no malware installed
- D. BYOD users exist in the corporate LDAP directory

**Answer: B**

**NEW QUESTION 570**

Which type of social-engineering attacks uses normal telephone service as the attack vector?

- A. vishing
- B. phishing
- C. smishing
- D. war dialing

**Answer: A**

**NEW QUESTION 575**

Which two primary security concerns can you mitigate with a BYOD solution? (Choose two)

- A. Schedule for patching the device
- B. compliance with applicable policies
- C. device lagging and inventory
- D. Connections to public Wi-Fi networks
- E. Securing access to a trusted corporate network.

**Answer: BE**

**NEW QUESTION 577**

Which two options are Private-VLAN secondary VLAN types?

- A. Isolated

- B. Secured
- C. Community
- D. Common
- E. Segregated

**Answer:** AC

**NEW QUESTION 578**

What technology can you use to provide data confidentiality, data integrity and data origin authentication on your network?

- A. Certificate Authority
- B. IKE
- C. IPSec
- D. Data Encryption Standards

**Answer:** C

**NEW QUESTION 580**

# nat (inside,outside) dynamic interface

Refer to the above. Which translation technique does this configuration result in?

- A. Static NAT
- B. Dynamic NAT
- C. Dynamic PAT
- D. Twice NAT

**Answer:** C

**Explanation:** Configuring Dynamic NAT

nat (inside,outside) dynamic my-range-obj Configuring Dynamic PAT (Hide)

nat (inside,outside) dynamic interface

Source: [http://www.cisco.com/c/en/us/td/docs/security/asa/asa83/configuration/guide/config/nat\\_objects.html](http://www.cisco.com/c/en/us/td/docs/security/asa/asa83/configuration/guide/config/nat_objects.html)

**NEW QUESTION 585**

With which type of Layer 2 attack can you intercept traffic that is destined for one host?

- A. MAC spoofing
- B. CAM overflow....

**Answer:** A

**NEW QUESTION 586**

Which primary security attributes can be achieved by BYOD Architecture?

- A. Trusted enterprise network
- B. public wireless network
- C. checking compliance with policy
- D. pushing patches

**Answer:** AC

**NEW QUESTION 590**

What is the actual IOS privilege level of User Exec mode?

- A. 1
- B. 5
- C. 15

**Answer:** A

**Explanation:** By default, the Cisco IOS software command-line interface (CLI) has two levels of access to commands: user EXEC mode (level 1) and privileged EXEC mode (level 15). However, you can configure additional levels of access to commands, called privilege levels, to meet the needs of your users while protecting the system from unauthorized access. Up to 16 privilege levels can be configured, from level 0, which is the most restricted level, to level 15, which is the least restricted level.

Source: [http://www.cisco.com/c/en/us/td/docs/ios/12\\_2/security/configuration/guide/fsecur\\_c/scfpass.html](http://www.cisco.com/c/en/us/td/docs/ios/12_2/security/configuration/guide/fsecur_c/scfpass.html)

**NEW QUESTION 594**

Which type of VLANs can communicate to PVLANS? (something like this) (choose 2)

- A. promiscuous
- B. isolated
- C. community
- D. backup
- E. secondary

Answer: AB

**NEW QUESTION 595**

which will auto-nat process first (the focus is on auto-nat)

- A. dynamic Nat shortest prefix
- B. dynamic nat longest prefix
- C. static nat shortest prefix
- D. static nat longest prefix

Answer: D

**NEW QUESTION 600**

Which command is to make sure that AAA Authentication is configured and to make sure that user can access the exec level to configure?

- A. AAA authentication enable default local
- B. AAA authentication enable local
- C. AAA authentication enable tacacs+ default

Answer: A

**NEW QUESTION 604**

Which IPS detection method can you use to detect attacks that based on the attackers IP addresses?

- A. Policy-based
- B. Anomaly-based
- C. Reputation-based
- D. Signature-based

Answer: D

**NEW QUESTION 606**

Which option is a characteristic of the RADIUS protocol?

- A. uses TCP
- B. offers multiprotocol support
- C. combines authentication and authorization in one process
- D. supports bi-directional challenge

Answer: C

**Explanation:** [http://www.cisco.com/en/US/tech/tk59/technologies\\_tech\\_note09186a0080094e99.shtml](http://www.cisco.com/en/US/tech/tk59/technologies_tech_note09186a0080094e99.shtml) Authentication and Authorization RADIUS combines authentication and authorization. The access-accept packets sent by the RADIUS server to the client contain authorization information. This makes it difficult to decouple authentication and authorization. TACACS+ uses the AAA architecture, which separates AAA. This allows separate authentication solutions that can still use TACACS+ for authorization and accounting. For example, with TACACS+, it is possible to use Kerberos authentication and TACACS+ authorization and accounting. After a NAS authenticates on a Kerberos server, it requests authorization information from a TACACS+ server without having to re-authenticate. The NAS informs the TACACS+ server that it has successfully authenticated on a Kerberos server, and the server then provides authorization information. During a session, if additional authorization checking is needed, the access server checks with a TACACS+ server to determine if the user is granted permission to use a particular command. This provides greater control over the commands that can be executed on the access server while decoupling from the authentication mechanism.

**NEW QUESTION 611**

Which type of firewall can serve as the intermediary between a client and a server?

- A. Application firewall
- B. stateless firewall
- C. Personal firewall
- D. Proxy firewall

Answer: D

**Explanation:** <http://searchsecurity.techtarget.com/definition/proxy-firewall>

**NEW QUESTION 615**

Which of Diffie-Hellman group(s) is/are support(ed) by CISCO VPN Product (Choose all that apply?)

- A. Group1
- B. Group2
- C. Group3
- D. Group5
- E. Group7
- F. Group8

G. Group9

**Answer:** ABDE

**NEW QUESTION 620**

By default, how does a zone-based firewall handle traffic to and from the self zone?

- A. It permits all traffic without inspection.
- B. It inspects all traffic to determine how it is handled.
- C. it permits all traffic after inspection
- D. it drops all traffic.

**Answer:** A

**NEW QUESTION 625**

Which description of the nonsecret numbers that are used to start a Diffie-Hellman exchange is true?

- A. They are large pseudorandom numbers.
- B. They are very small numbers chosen from a table of known values
- C. They are numeric values extracted from hashed system hostnames.
- D. They are preconfigured prime integers

**Answer:** D

**NEW QUESTION 629**

With Cisco IOS zone-based policy firewall, by default, which three types of traffic are permitted by the router when some of the router interfaces are assigned to a zone? (Choose three.)

- A. traffic flowing between a zone member interface and any interface that is not a zone member
- B. traffic flowing to and from the router interfaces (the self zone)
- C. traffic flowing among the interfaces that are members of the same zone
- D. traffic flowing among the interfaces that are not assigned to any zone
- E. traffic flowing between a zone member interface and another interface that belongs in a different zone
- F. traffic flowing to the zone member interface that is returned traffic

**Answer:** BCD

**Explanation:** [http://www.cisco.com/en/US/products/sw/secursw/ps1018/products\\_tech\\_note09186a00808bc994.shtml](http://www.cisco.com/en/US/products/sw/secursw/ps1018/products_tech_note09186a00808bc994.shtml) Rules For Applying Zone-Based Policy Firewall

Router network interfaces' membership in zones is subject to several rules that govern interface behavior, as is the traffic moving between zone member interfaces:

A zone must be configured before interfaces can be assigned to the zone. An interface can be assigned to only one security zone.

All traffic to and from a given interface is implicitly blocked when the interface is assigned to a zone, except traffic to and from other interfaces in the same zone, and traffic to any interface on the router.

Traffic is implicitly allowed to flow by default among interfaces that are members of the same zone. In order to permit traffic to and from a zone member interface, a policy allowing or inspecting traffic must be configured between that zone and any other zone.

The self zone is the only exception to the default deny all policy. All traffic to any router interface is allowed until traffic is explicitly denied.

Traffic cannot flow between a zone member interface and any interface that is not a zone member. Pass, inspect, and drop actions can only be applied between two zones.

Interfaces that have not been assigned to a zone function as classical router ports and might still use classical stateful inspection/CBAC configuration.

If it is required that an interface on the box not be part of the zoning/firewall policy. It might still be necessary to put that interface in a zone and configure a pass all policy (sort of a dummy policy) between that zone and any other zone to which traffic flow is desired.

From the preceding it follows that, if traffic is to flow among all the interfaces in a router, all the interfaces must be part of the zoning model (each interface must be a member of one zone or another).

The only exception to the preceding deny by default approach is the traffic to and from the router, which will be permitted by default. An explicit policy can be configured to restrict such traffic.

**NEW QUESTION 631**

Which two features are supported in a VRF-aware software infrastructure before VRF-lite? (Choose two)

- A. priority queuing
- B. EIGRP
- C. multicast
- D. WCCP
- E. fair queuing

**Answer:** BC

**NEW QUESTION 634**

Which NAT option is executed first during in case of multiple nat translations?

- A. dynamic nat with shortest prefix
- B. dynamic nat with longest prefix
- C. static nat with shortest prefix
- D. static nat with longest prefix

**Answer:** D

#### NEW QUESTION 636

How can you protect CDP from reconnaissance attacks?

- A. Enable dot1x on all ports that are connected to other switches.
- B. Disable CDP on ports connected to endpoints.
- C. Enable dynamic ARP inspection on all untrusted ports.
- D. Disable CDP on trunk ports.

**Answer: B**

#### NEW QUESTION 640

Which option is the default value for the Diffie–Hellman group when configuring a site-to-site VPN on an ASA device?

- A. Group 1
- B. Group 2
- C. Group 5
- D. Group 7

**Answer: B**

#### NEW QUESTION 644

Which type of address translation supports the initiation of communications bidirectionally?

- A. multi-session PAT
- B. static NAT
- C. dynamic PAT
- D. dynamic NAT

**Answer: D**

#### NEW QUESTION 647

Which two characteristics of the TACACS+ protocol are true? (Choose two.)

- A. uses UDP ports 1645 or 1812
- B. separates AAA functions
- C. encrypts the body of every packet
- D. offers extensive accounting capabilities
- E. is an open RFC standard protocol

**Answer: BC**

**Explanation:** [http://www.cisco.com/en/US/tech/tk59/technologies\\_tech\\_note09186a0080094e99.shtml](http://www.cisco.com/en/US/tech/tk59/technologies_tech_note09186a0080094e99.shtml) Packet Encryption

RADIUS encrypts only the password in the access-request packet, from the client to the server. The remainder of the packet is unencrypted. Other information, such as username, authorized services, and accounting, can be captured by a third party.

TACACS+ encrypts the entire body of the packet but leaves a standard TACACS+ header. Within the header is a field that indicates whether the body is encrypted or not. For debugging purposes, it is useful to have the body of the packets unencrypted. However, during normal operation, the body of the packet is fully encrypted for more secure communications.

Authentication and Authorization RADIUS combines authentication and authorization. The access-accept packets sent by the RADIUS server to the client contain authorization information. This makes it difficult to decouple authentication and authorization.

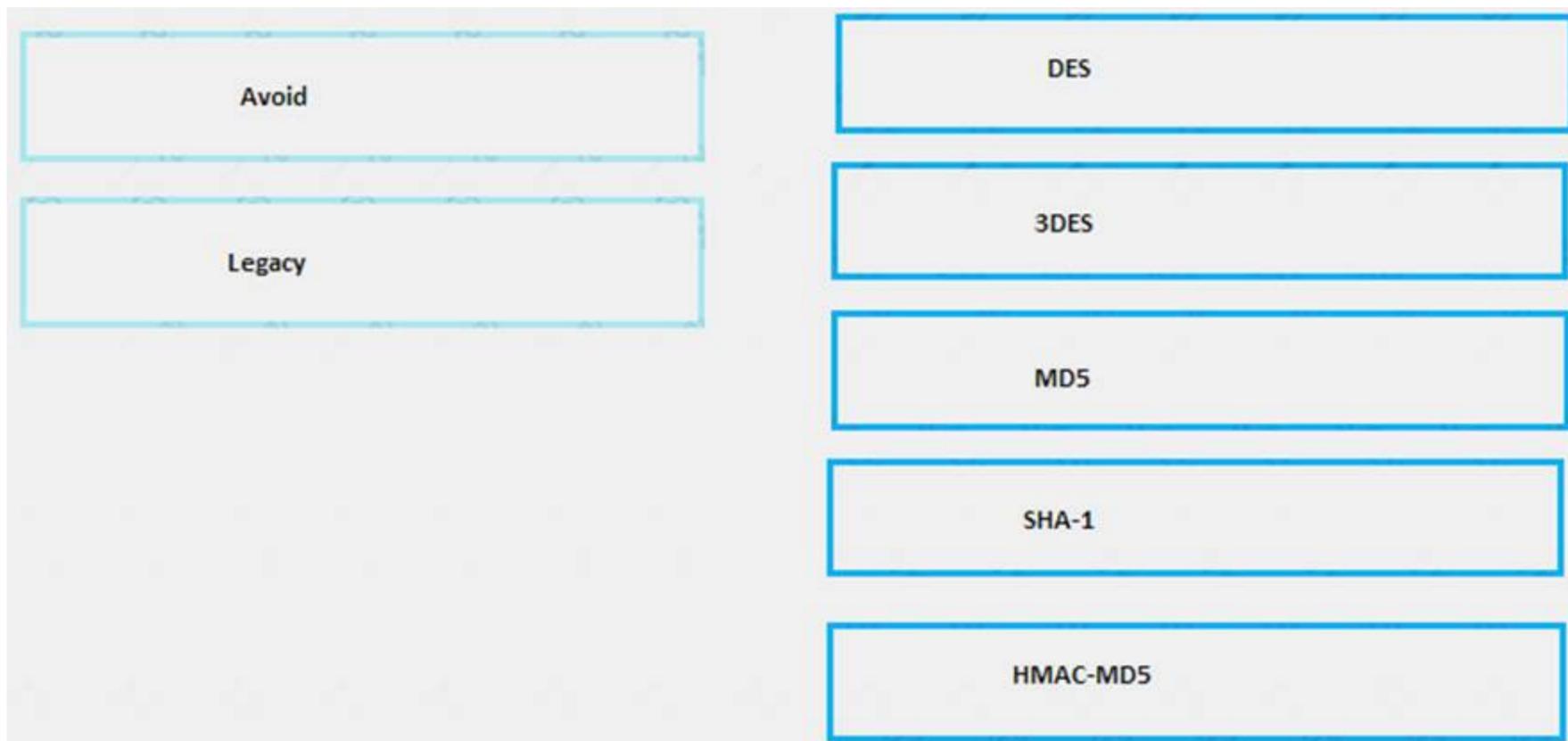
TACACS+ uses the AAA architecture, which separates AAA. This allows separate authentication solutions that can still use TACACS+ for authorization and accounting. For example, with TACACS+, it is possible to use Kerberos authentication and TACACS+ authorization and accounting. After a NAS authenticates on a Kerberos server, it requests authorization information from a TACACS+ server without having to re-authenticate. The

NAS informs the TACACS+ server that it has successfully authenticated on a Kerberos server, and the server then provides authorization information.

During a session, if additional authorization checking is needed, the access server checks with a TACACS+ server to determine if the user is granted permission to use a particular command. This provides greater control over the commands that can be executed on the access server while decoupling from the authentication mechanism.

#### NEW QUESTION 649

Drag the recommendations on the left to the Cryptographic Algorithms on the right. Options will be used more than once.



**Answer:**

**Explanation:** DES = Avoid 3DES = Legacy MD5 = Avoid  
 SHA-1 = Legacy HMAC-MD5 = Legacy  
<https://www.cisco.com/c/en/us/about/security-center/next-generation-cryptography.html>

**NEW QUESTION 653**

Which two characteristics of a PVLAN are true?

- A. isolated ports cannot communicate with other ports on the same VLAN.
- B. They require VTP to be enabled in server mode.
- C. Promiscuous ports can communicate with PVLAN ports
- D. PVLAN ports can be configured as EtherChannel ports.
- E. Community ports have to be a part of the trunk.

**Answer:** CE

**Explanation:** <https://www.cisco.com/c/en/us/td/docs/switches/lan/catalyst6500/ios/12-2SX/configuration/guide/book/pvlans.p>

**NEW QUESTION 658**

Which statement about college campus is true?

- A. College campus has geographical position.
- B. College campus Hasn't got internet access.
- C. College campus Has multiple subdomains.
- D. College campus Has very beautiful girls

**Answer:** A

**NEW QUESTION 660**

The command debug crypto isakmp results in ?

- A. Troubleshooting ISAKMP (Phase 1) negotiation problems

**Answer:** A

**NEW QUESTION 662**

Which prevent the company data from modification even when the data is in transit?

- A. Confidentiality
- B. Integrity
- C. Vailability

**Answer:** B

**Explanation:** Integrity: Integrity for data means that changes made to data are done only by authorized individuals/systems. Corruption of data is a failure to maintain data integrity.  
 Source: Cisco Official Certification Guide, Confidentiality, Integrity, and Availability, p.6

#### NEW QUESTION 666

What are the two characteristics of IPS?

- A. Can drop traffic
- B. Does not add delay to traffic
- C. It is cabled directly inline
- D. Can't drop packets on its own

**Answer:** AC

**Explanation:** + Position in the network flow: Directly inline with the flow of network traffic and every packet goes through the sensor on its way through the network.

+ Mode: Inline mode

+ The IPS can drop the packet on its own because it is inline. The IPS can also request assistance from another device to block future packets just as the IDS does.

Source: Cisco Official Certification Guide, Table 17-2 IDS Versus IPS, p.461

#### NEW QUESTION 671

How to verify that TACACS+ connectivity to a device?

- A. You successfully log in to the device by using the local credentials.
- B. You connect to the device using SSH and receive the login prompt.
- C. You successfully log in to the device by using ACS credentials.
- D. You connect via console port and receive the login prompt.

**Answer:** B

#### NEW QUESTION 676

Which Firepower Management Center feature detects and blocks exploits and hack attempts?

- A. intrusion prevention
- B. advanced malware protection (AMP)
- C. content blocker
- D. file control

**Answer:** B

**Explanation:** <https://www.cisco.com/c/en/us/td/docs/security/firesight/541/firepower-module-user-guide/asa-firepower-modul>

#### NEW QUESTION 681

What type of Diffie-Hellman group would you expect to be utilized on a wireless device?

- A. Group4
- B. Group7
- C. Group5
- D. Group3

**Answer:** B

#### NEW QUESTION 686

Which two advantages does the on-premise model for MDM deployment have over the cloud-based model? (Choose two )

- A. The on-premise model provides more control of the MDM solution than the cloud-based model
- B. The on-premise model is more scalable than the cloud-based model
- C. The on-premise model is generally less expensive than the cloud-based model
- D. The on-premise model is easier and faster to deploy than the cloud-based model
- E. The on-premise model generally has less latency than the cloud-based model

**Answer:** AE

#### NEW QUESTION 688

Which two roles of the Cisco WSA are true? (Choose two.)

- A. web proxy
- B. URL filter
- C. antispam
- D. IPS
- E. firewall

**Answer:** AB

**NEW QUESTION 692**

Which two attack types can be prevented with the implementation of a Cisco IPS solution?(Choose two.)

- A. VLAN hooping
- B. DDos
- C. Worms
- D. ARP spoofing
- E. man-in-the -middle

**Answer:** CE

**NEW QUESTION 697**

Which IKE phase 1 parameter can you use to require the site-to-site VPN to us a pre-shared key?

- A. group
- B. hash
- C. authentication
- D. encryption

**Answer:** C

**NEW QUESTION 702**

On an ASA, which maps are used to identify traffic?

- A. Policy maps
- B. Class maps
- C. Route maps
- D. Service maps

**Answer:** B

**NEW QUESTION 704**

Which two types of VLANs using PVLANS are valid? (Choose two.)

- A. secondary
- B. community
- C. isolated
- D. promiscuous
- E. backup

**Answer:** CD

**Explanation:**

**Promiscuous (P) :-** Usually connects to a router – a type of a port which is allowed to send and receive frames from any other port on the VLAN.

**Isolated (I) :** This type of port is only allowed to communicate with P ports – they are “stub”. This typ of ports usually connects to hosts.  
<https://learningnetwork.cisco.com/docs/DOC-16110>

**NEW QUESTION 707**

Drag and drop each feature that can protect against DHCP attacks from the left onto the correct description on the right.

DHCP snooping	blocks DHCP messages from untrusted sources
dynamic ARP inspection	mitigates MAC-address spoofing at the access interface
IP source guard	provides Layer 2 interface security with port ACLs
port security	verifies IP-to-MAC traffic on untrusted ports

**Answer:**

**Explanation:** 1:1

3:2

4:3

2:4

**NEW QUESTION 712**

Refer to the exhibit.

```
ASA#show nat
Manual NAT Policies (Section 1)
1 (inside) to (outside) source dynamic LOCALUSERS GLBPOOL
   translate_hits=3218, untranslate_hits=0
2 (inside) to (outside) source static REAL_SERVER GLB_SERVER
   translate_hits=0, untranslate_hits= 108764

Auto NAT Policies (Section 2)
1 (inside) to (outside) source static SSL_SERVER 88.1.115.1
   translate_hits=0, untranslate_hits=0

Manual NAT Policies (Section 3)
1 (inside) to (outside) source dynamic NEW_USERS GLBPOOL2
   translate_hits=0, untranslate_hits=0
```

A network security administrator checks the ASA firewall NAT policy table with the show nat command. Which statement is false?

- A. There are only reverse translation matches for the REAL\_SERVER object.
- B. First policy in the Section 1 is as dynamic nat entry defined in the object configuration.
- C. NAT policy in Section 2 is a static entry defined in the object configuration
- D. Translation in Section 3 used when a connection does not match any entries in first two sections.

**Answer:** A

**NEW QUESTION 715**

Which two are considered basic security principles? (Choose two.)

- A. Integrity
- B. Confidentiality
- C. Redundancy
- D. Accountability
- E. High Availability

**Answer:** AB

**NEW QUESTION 717**

How can you mitigate attacks in which the attacker attaches more than one VLAN tag to a packet?

- A. Disable EtherChannel on the switch.
- B. Assign an access VLAN to every active port on the switch.
- C. Enable transparent VTP on the switch.
- D. Explicitly identify each VLAN allowed across the trunk.

**Answer:** B

**NEW QUESTION 721**

Which IDS/IPS state misidentifies acceptable behavior as an attack?

- A. false positive
- B. false negative
- C. true positive
- D. true negative

**Answer:** A

**NEW QUESTION 722**

Which two options are primary deployment model for mobile device management (Choose two)

- A. Cloud-based
- B. Hybrid-cloud based
- C. Multisite
- D. On-Perimeter
- E. Single site

**Answer:** AD

**NEW QUESTION 725**

Which STP feature can prevent an attacker from becoming the root bridge by immediately shutting down the interface when it receives a BPDU?

- A. BPDU filtering
- B. root guard
- C. BPDU guard
- D. portFast

**Answer: C**

**NEW QUESTION 730**

Which attack involves large numbers of ICMP packets with a spoofed source IP address?

- A. Teardrop attack
- B. smurf attack
- C. Nuke attack
- D. SYN Flood attack

**Answer: B**

**NEW QUESTION 733**

What is the effect of the ip scp server enable command?

- A. It allows the router to become an SCP server.
- B. It adds SCP to the list of allowed copy functions.
- C. It allows the router to initiate requests to an SCP server.
- D. It references an access list that allows specific SCP servers.

**Answer: A**

**NEW QUESTION 736**

What is the most common implementation of PAT in a standard networked environment?

- A. configuring an any any rule to enable external hosts to communicate inside the network.
- B. configuring multiple internal hosts to communicate outside of the network by using the inside interface IP address
- C. configuring multiple external hosts to join the self zone and to communicate with one another
- D. configuring multiple internal hosts to communicate outside of the network using the outside interface IP address

**Answer: D**

**NEW QUESTION 740**

Which action does standard antivirus software perform as part of the file-analysis process?

- A. execute the file in a simulated environment to examine its behavior
- B. flag the unexamined file as a potential threat
- C. examine the execution instructions in the file
- D. create a backup copy of the file

**Answer: A**

**NEW QUESTION 742**

A user on your network inadvertently activates a botnet program that was received as an email attachment Which type of mechanism does Cisco Firepower use to detect and block only the botnet attack?

- A. network-based access control rule
- B. botnet traffic filter
- C. reputation-based
- D. user-based access control rule

**Answer: B**

**NEW QUESTION 744**

Why does ISE require its own certificate issued by a trusted CA?

- A. ISE's certificate allows guest devices to validate it as a trusted network device.
- B. It generates certificates for guest devices based on its own certificate
- C. ISE's certificate allows it to join the network security framework
- D. It requests certificates for guest devices from the CA server based on its own certificate.

**Answer: A**

**NEW QUESTION 745**

Which two commands are used to implement Cisco IOS Resilient Configuration? (Choose two.)

- A. secure boot-image
- B. copy running-config startup-config
- C. secure boot-config
- D. copy flash:/ios.bin tftp
- E. copy running-config tftp

**Answer:** AC

**Explanation:** The Cisco IOS Resilient Configuration feature enables a router to secure and maintain a working copy of the running image and configuration so that those files can withstand malicious attempts to erase the contents of persistent storage (NVRAM and flash).

In 12.3(8)T this feature was introduced.

The following commands were introduced or modified: secure boot-config, secure boot-image, showsecure bootset.

[https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/sec\\_usr\\_cfg/configuration/15-mt/sec-usr-cfg-15-mt-book/sec](https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/sec_usr_cfg/configuration/15-mt/sec-usr-cfg-15-mt-book/sec)

#### NEW QUESTION 749

What does the policy map do in CoPP?

- A. defines the action to be performed
- B. defines packet selection parameters
- C. defines the packet filter
- D. defines service parameters

**Answer:** C

#### NEW QUESTION 754

When an IPS device detects an email threat, which action can it take in response?

- A. request an SNMP trace
- B. request an SNMP fail
- C. request an SNMP block
- D. request an SNMP trap

**Answer:** D

#### NEW QUESTION 755

You are configuring a NAT rule on a Cisco ASA. Which description of a mapped interface is true?

- A. It is mandatory for all fire wall modes.
- B. It is mandatory for identity NAT only.
- C. It is optional in transparent mode.
- D. It is optional in routed mode.

**Answer:** D

#### NEW QUESTION 758

Which type of social engineering attack targets top executives?

- A. baiting
- B. vishing
- C. whaling
- D. spear phishing

**Answer:** A

#### NEW QUESTION 759

Which command successfully creates an administrative user with a password of "Cisco" on a Cisco router?

- A. username Operator privilege 7 password Cisco
- B. username Operator privilege 1 password cisco
- C. user name Operator privilege 15 password cisco
- D. username Operator password cisco privilege 15

**Answer:** C

#### NEW QUESTION 762

Which command enables authentication at the OSPFv2 routing process level?

- A. area 0 authentication message-digest
- B. area 0 authentication ipsec spi 500 md5 1 234567890ABCDEF1234567890ABCDEF
- C. ip ospf authentication message-digest
- D. ip ospf message-digest-key 1 md5 C1sc0!

**Answer:** A

#### NEW QUESTION 766

Which two parameters can you view in the Cisco ASDM Protocol Statistics window? (Choose two )

- A. the number of active tunnels
- B. the number of rejected connection attempts
- C. the number of tunnels that have been established since the Cisco ASA was rebooted
- D. the number of closed tunnels
- E. the user attempting the connection

**Answer:** AE

#### NEW QUESTION 770

Which security term refers to the likelihood that a weakness will be exploited to cause damage to an asset?

- A. threat
- B. vulnerability
- C. risk
- D. countermeasure

**Answer:** B

#### NEW QUESTION 775

Which feature can help a router or switch maintain packet forwarding and protocol states despite an attack or heavy traffic load on the router or switch?

- A. Control Plane Policing
- B. Service Policy
- C. Cisco Express Forwarding
- D. Policy Map

**Answer:** A

#### NEW QUESTION 779

Which two types of firewalls work at Layer 4 and above? (Choose two.)

- A. application-level firewall
- B. static packet filter
- C. stateful inspection
- D. Network Address Translation
- E. circuit-level gateway

**Answer:** BC

#### **Explanation:** Dynamic or Stateful Packet-Filtering Firewalls

Stateful inspection is a firewall architecture classified at the network layer; although, for some applications it can analyze traffic at Layers 4 and 5, too.

Unlike static packet filtering, stateful inspection tracks each connection traversing all interfaces of the firewall and confirms that they are valid. Stateful packet filtering maintains a state table and allows modification to the security rules dynamically. The state table is part of the internal structure of the firewall. It tracks all sessions and inspects all packets passing through the firewall.

Although this is the primary Cisco Firewall technology, it has some limitations:

Cannot prevent application layer attacks.

Not all protocols are stateful.

Some applications open multiple connections.

Does not support user authentication.

<http://www.ciscopress.com/articles/article.asp?p=1888110>

#### NEW QUESTION 781

Which two actions can a zone-based firewall apply to a packet as it transits a zone pair? (Choose two.)

- A. drop
- B. inspect
- C. queue
- D. quarantine
- E. block

**Answer:** AB

#### NEW QUESTION 786

Which technology can you implement to centrally mitigate potential threats when users on your network download files that might be malicious?

- A. Enable file-reputation services to inspect all files that traverse the company network and block files with low reputation scores.
- B. Verify that the company IPS blocks all known malicious websites.
- C. Verify that antivirus software is installed and up to date for all users on your network.
- D. Implement URL filtering on the perimeter firewall.

**Answer:** D

#### NEW QUESTION 790

What are two advanced features of the Cisco AMP solution for endpoints? (Choose two)

- A. reflection
- B. foresight
- C. sandboxing
- D. contemplation
- E. reputation

**Answer:** CE

**NEW QUESTION 792**

Which technology can best protect data at rest on a user system?

- A. network IPS
- B. router ACL
- C. full-disk encryption
- D. IPsec tunnel

**Answer:** C

**NEW QUESTION 793**

What are two limitations of the self-zone policies on a zone-based firewall? (Choose two)

- A. They restrict SNMP traffic
- B. They are unable to implement application inspection
- C. They are unable to block HTTPS traffic
- D. They are unable to support HTTPS traffic
- E. They are unable to perform rate limiting.

**Answer:** CE

**NEW QUESTION 798**

Which protocol offers data integrity, encryption, authentication, and antireplay functions for IPsec VPN?

- A. AH protocol
- B. ESP protocol
- C. IKEv2 protocol
- D. IKEv1 protocol

**Answer:** C

**Explanation:** IP Security Protocol—Encapsulating Security Payload (ESP)

Encapsulating Security Payload (ESP) is a security protocol used to provide confidentiality (encryption), data origin authentication, integrity, optional antireplay service, and limited traffic flow confidentiality by defeating traffic flow analysis.

<http://www.ciscopress.com/articles/article.asp?p=24833&seqNum=3>

**NEW QUESTION 800**

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