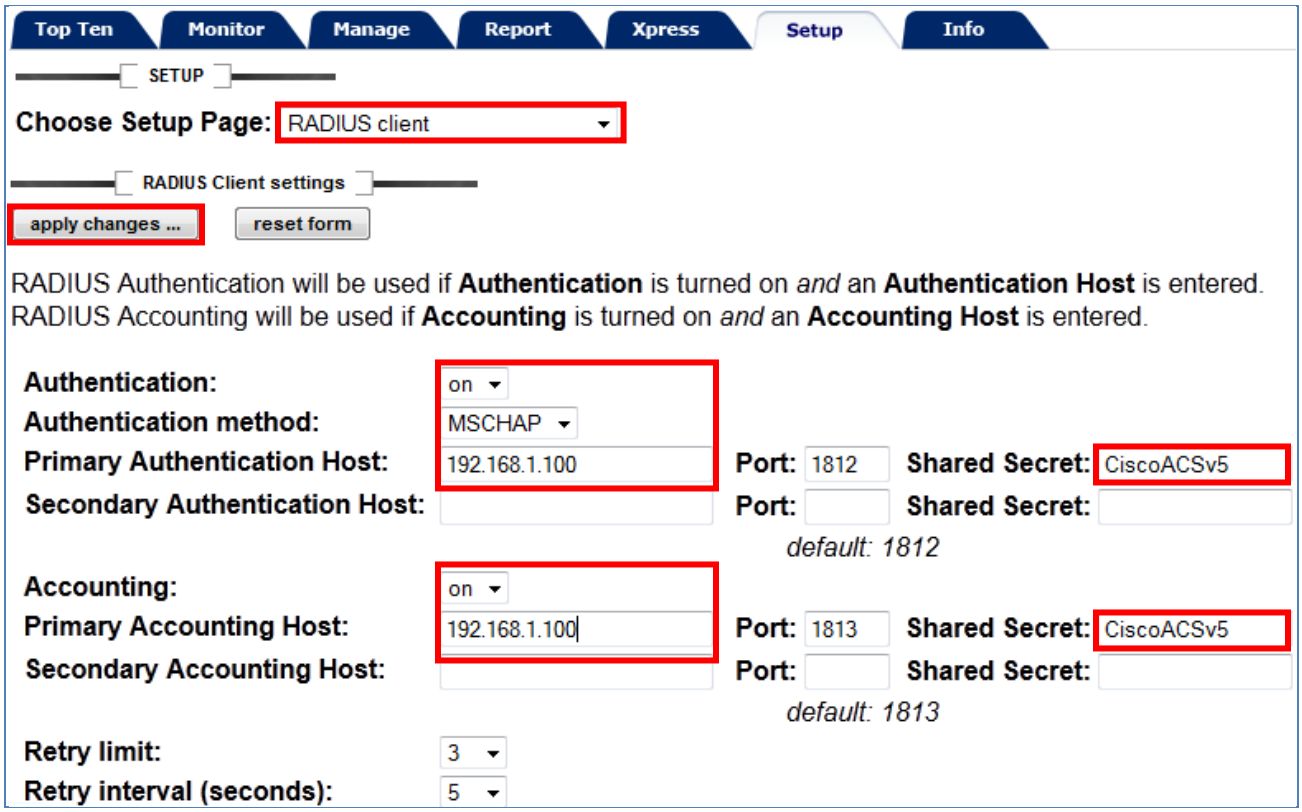
NOTE: The configuration steps listed below assume the ACS is already setup for use with Active Directory, and provides either Read-Write or Read-Only authorization based on the account used.

- An Identity Search Sequence named "User Search Sequence" has been configured to check Active Directory first, then check the local ACS user list for valid accounts.
- Two ACS Identity Groups have been configured, one for ReadWrite permissions named "Network Admin", and another for ReadOnly permissions named "Read-Only".
  - Active Directory and local ACS user account are assigned to one of the Identity Groups depending on their required level of access to enterprise network devices.

Configure the PacketShaper

1. **Login to the BlueCoat PacketShaper webGUI**
   a. Open a web browser and navigate to the https:// address of the PacketShaper.
      i. Leave the username field blank, and enter only the admin password in the password box.
         - This grants **'touch'** (read-write) access to the PacketShaper
   b. At the top right side of the screen, click the Legacy UI link to configure the device.
   c. Select the Setup tab near the top center of the screen.

2. **Select RADIUS client from the Choose Setup Page: drop-down box.**
   a. Configure the RADIUS client settings as follows, enabling both **Authentication** and **Accounting**, and using the correct **Authentication method**, **Authentication Host** (ACS IP address), and **Shared Secret**:



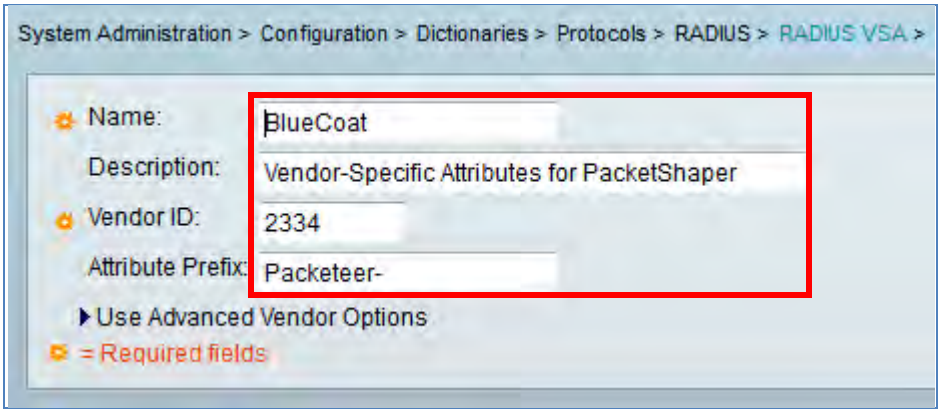
   b. Click the apply changes ... button.

3. **Click the LOG OUT link at the top right of the page.**

Configure the Cisco ACS v5.x (GUI)

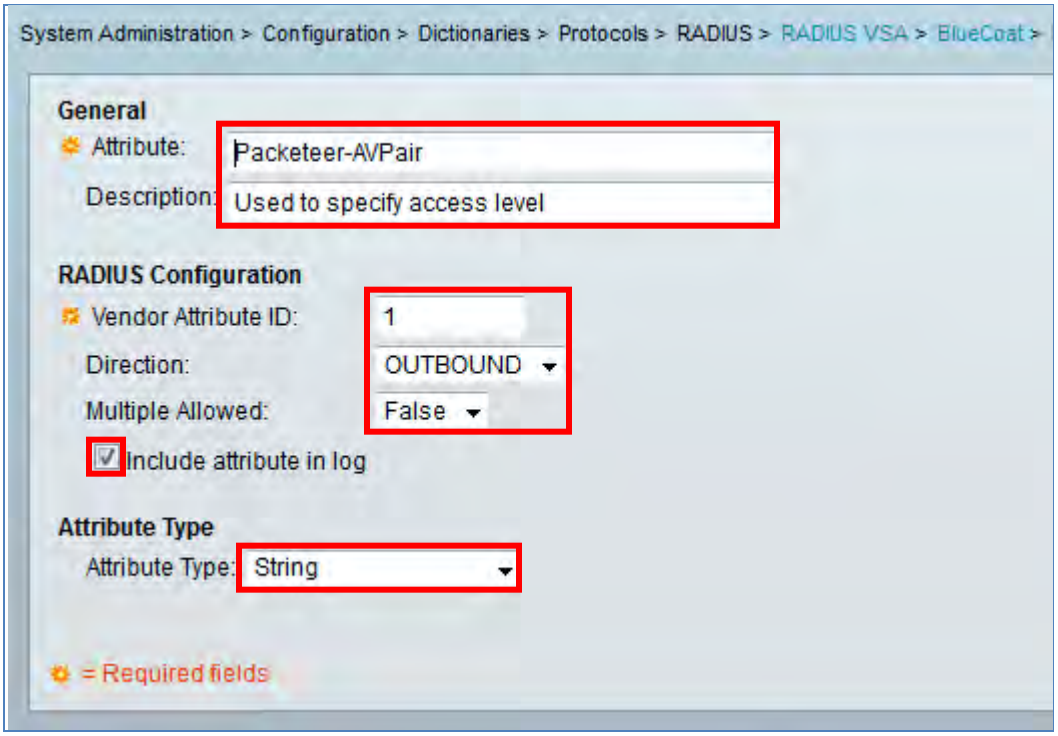
1. **Login to the Cisco ACS web GUI**

2. **Navigate to System Administration > Configuration > Dictionaries > Protocols > RADIUS > RADIUS VSA**
   a. **Create the BlueCoat Vendor**
      i. Click the **Create** button at the bottom of the page and use the following information:



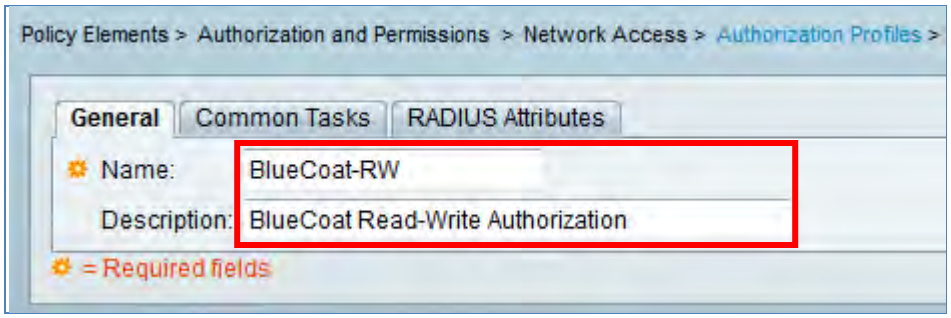
      Click the **Submit** button at the bottom of the page

3. **Navigate to System Administration > Configuration > Dictionaries > Protocols > RADIUS > RADIUS VSA > BlueCoat**
   a. **Create the required custom attribute for ACS permissions**
      i. Click the **Create** button at the bottom of the page and use the following information:

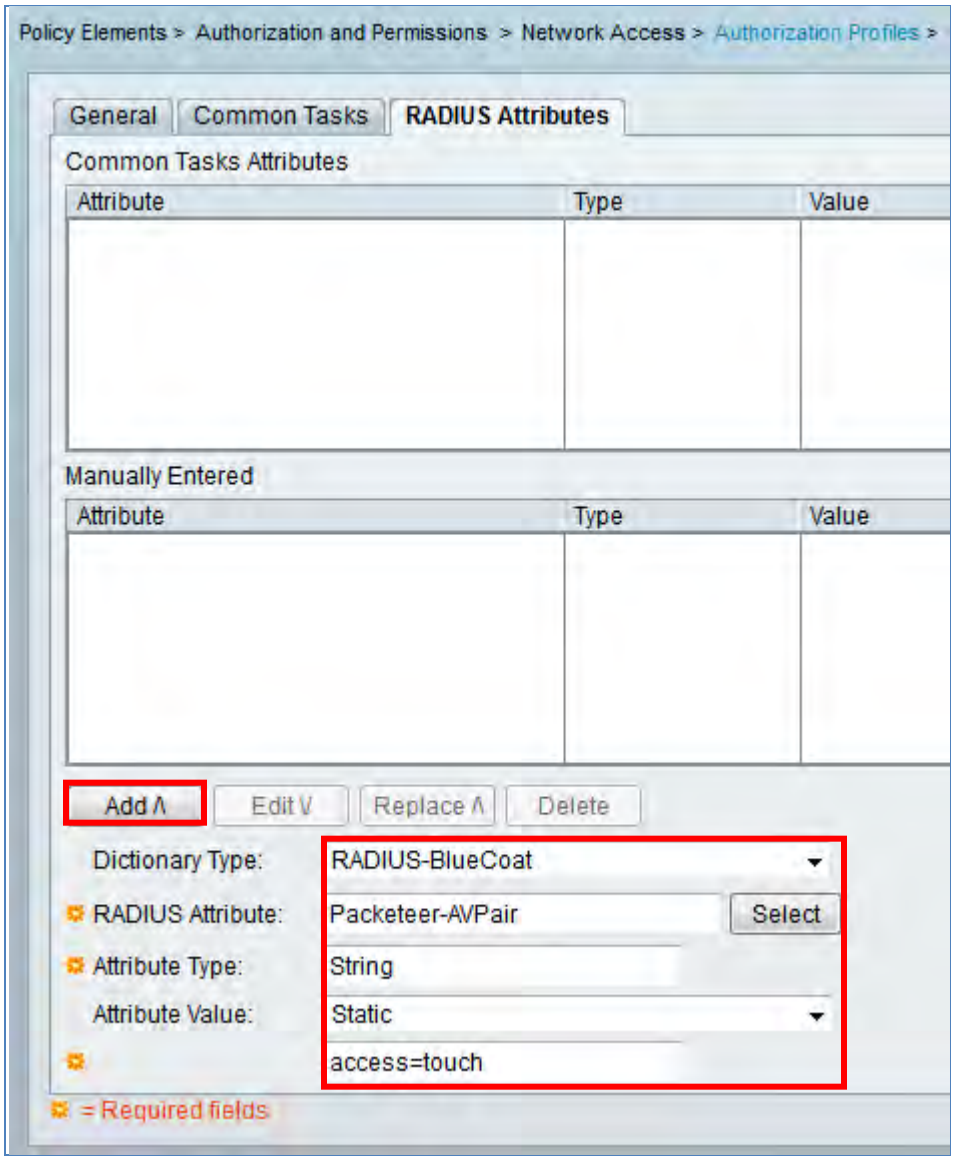


      Click the **Submit** button at the bottom of the page

4. **Navigate to Policy Elements > Authorization and Permissions > Network Access > Authorization Profiles**
   a. **Create the BlueCoat Read-Write authorization profile**
      i. Click the Create button at the bottom of the page
         - Select the **General tab**



         - Select the **RADIUS Attributes tab**

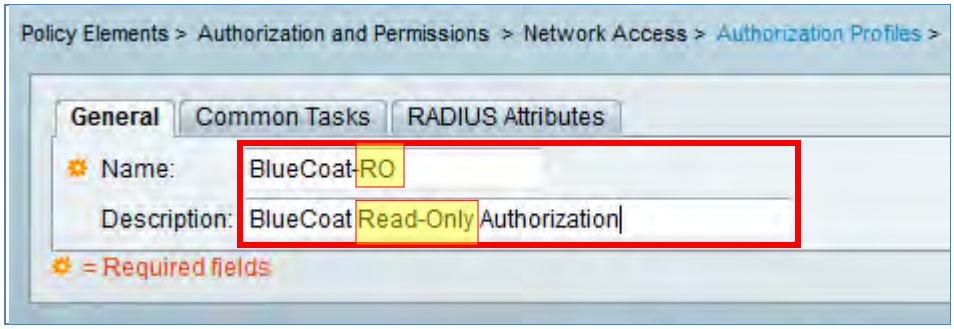


         Click the Add ^ button above the Attribute field
      ii. Click the Submit button at the bottom of the page

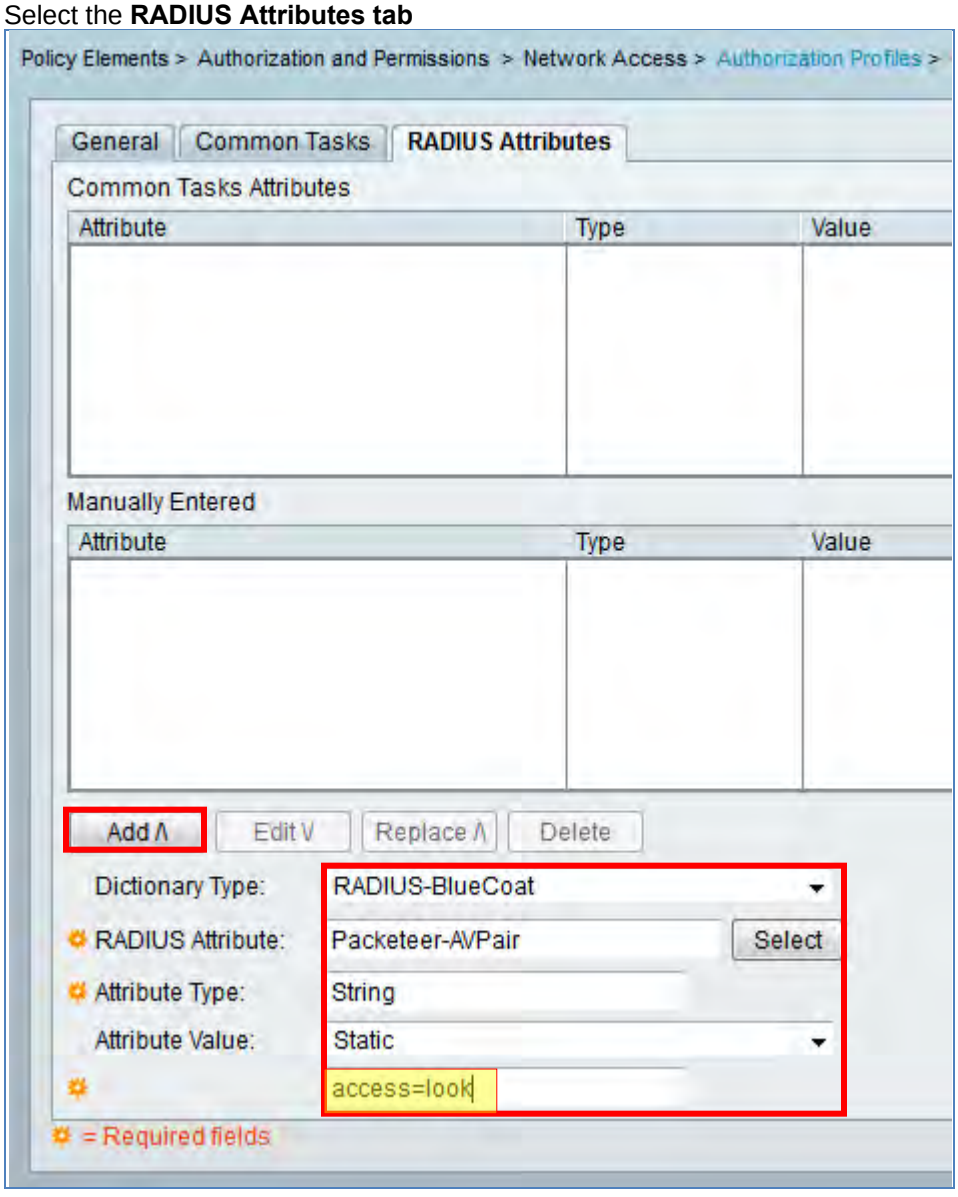
b. **Create the BlueCoat Read-Only authorization profile**

i. Click the Create button at the bottom of the page

- Select the **General tab**



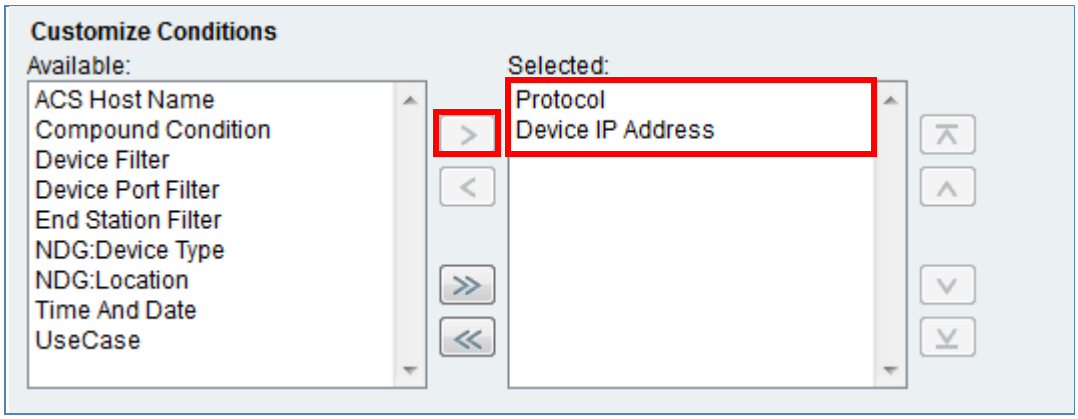
- Select the **RADIUS Attributes tab**



Click the Add ^ button above the Attribute field

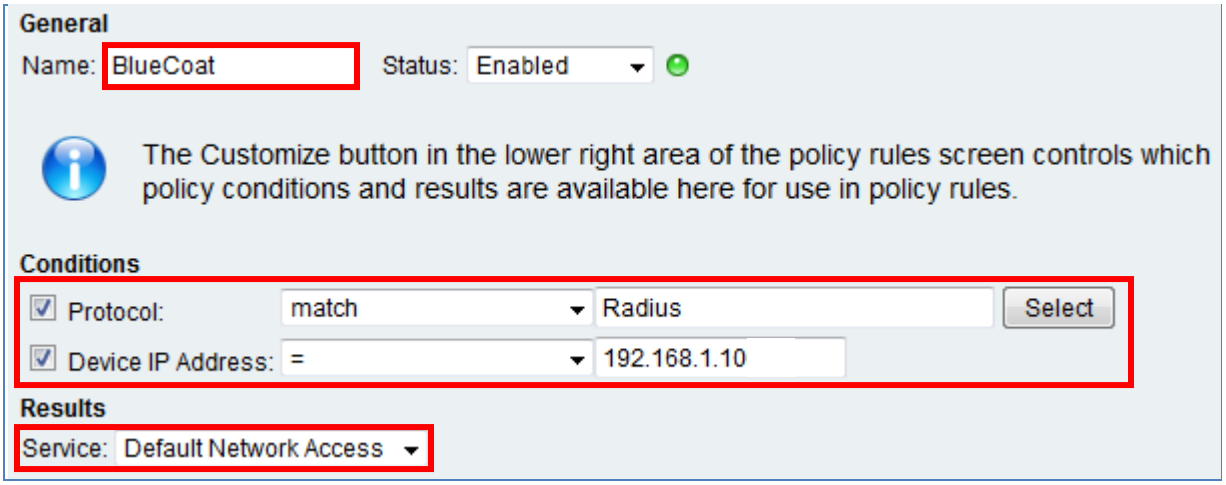
ii. Click the Submit button at the bottom of the page

5. **Navigate to Access Policies > Access Services > Service Selection Rules**
   a. **Filter by Device IP Address**
      i. Click the Customize button at the bottom right of the page and set the following:



      Click OK

   b. **Create the BlueCoat RADIUS rule**
      i. Click the Create button at the bottom of the page and set the following, using the correct **BlueCoat** IP :

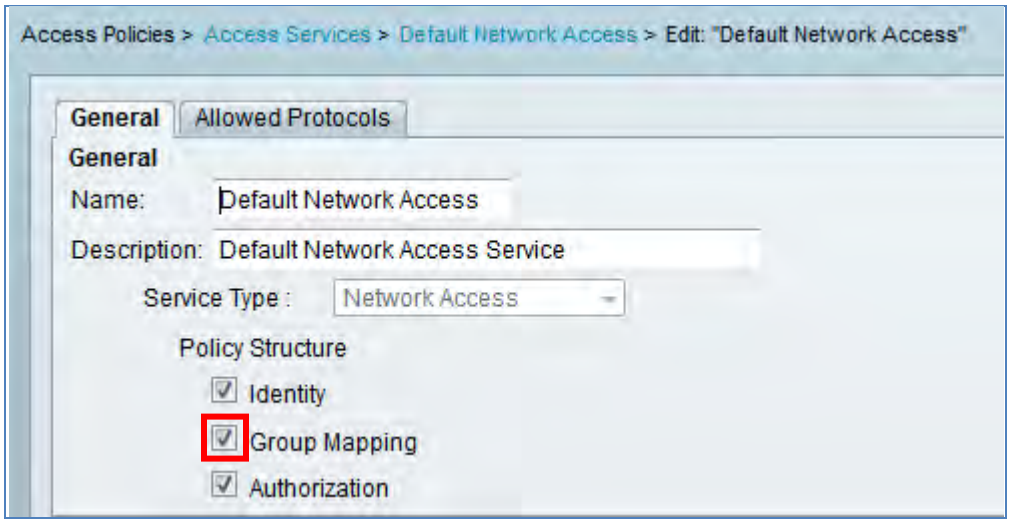


      Click the OK button at the bottom of the page

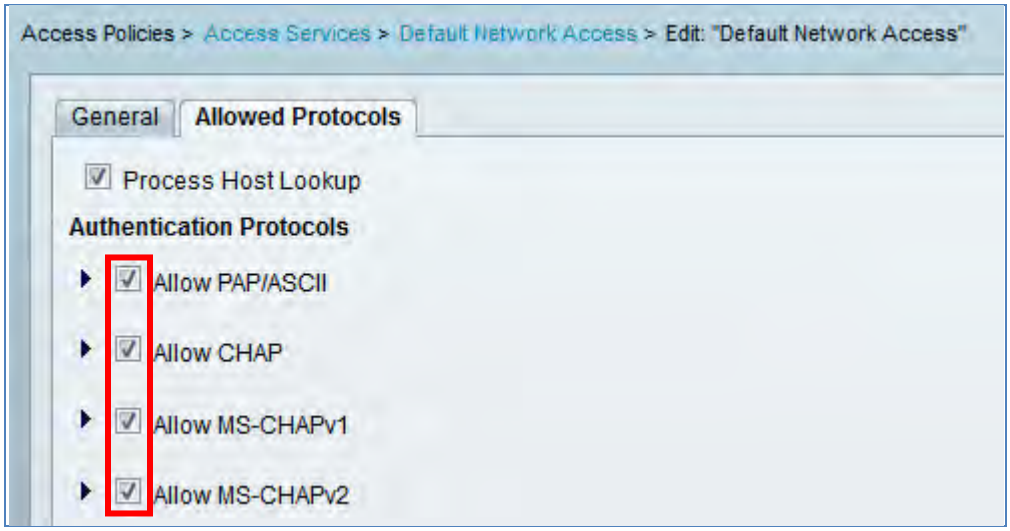
   c. Check the box next to the **BlueCoat** service selection policy, then use the ^ button near the bottom of the page to move the policy to position #1 (top) in the list.

   d. Click the Save Changes button at the bottom of the page

6. **Navigate to Access Policies > Access Services > Default Network Access**
   a. **Configure Group Mapping for the policy**
      i. Select the **General tab**
         - Check the box next to Group Mapping (Applies to Active Directory configurations)

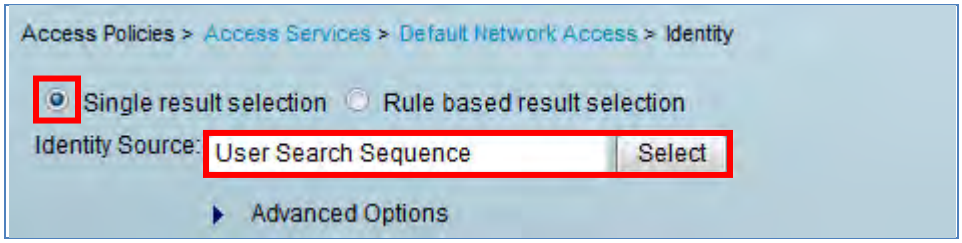


      ii. Select the **Allowed Protocols tab** and check the following boxes:



         - Click Submit

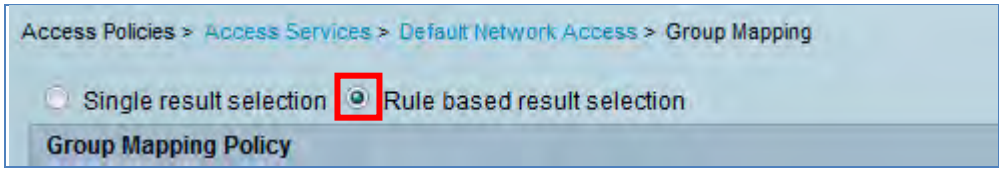
7. **Navigate to Access Policies > Access Services > Default Network Access > Identity**
   a. **Set the ACS to authenticate using the User Search Sequence (Active Directory and Local Users)**
      i. Ensure the radio button next to **Single result selection** is selected, then set to whatever Identity Source you are currently using. In this example, we have setup an Identity Store Sequence that checks Active Directory and local ACS user accounts, and have named it "User Search Sequence" :



      ii. Click the Save Changes button at the bottom of the page

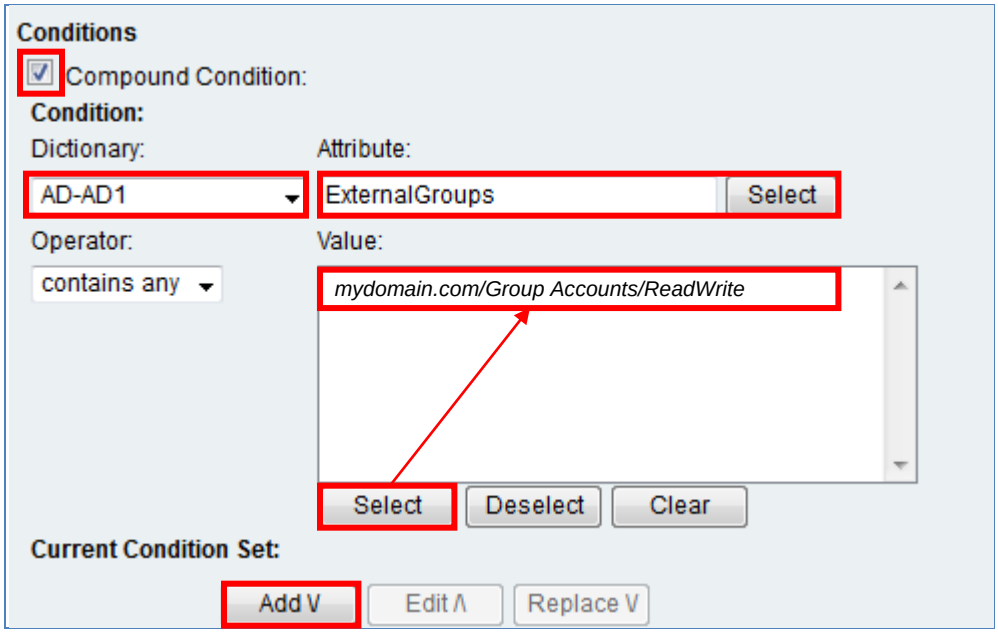
NOTE: This section only applies if you use Active Directory integration:

8. **Navigate to Access Policies > Access Services > Default Device Admin > Group Mapping**
   a. Select the radio button for **Rule based result selection**, and click OK on the pop-up dialog box.

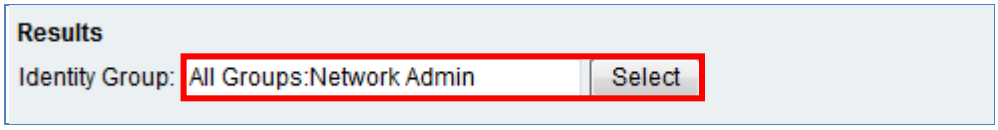


   b. **Create the Read-Write Rule**
      i. Click the Create button at the bottom of the page

         1. Under **General**, name the new rule **Read-Write**, and ensure it is Enabled
         2. Under **Conditions**, check the box next to **Compound Condition,** then set **Dictionary: *AD-AD1***, **Attribute: *ExternalGroups***, and **Value:*<Active Directory Domain>/ReadWrite*** group as shown:



         3. Click Add V to add the condition to the **Current Condition Set**
         4. Under **Results**, set the **Identity Group** field to the **All Groups: Network Admin** group



         5. Click the OK button at the bottom of the page

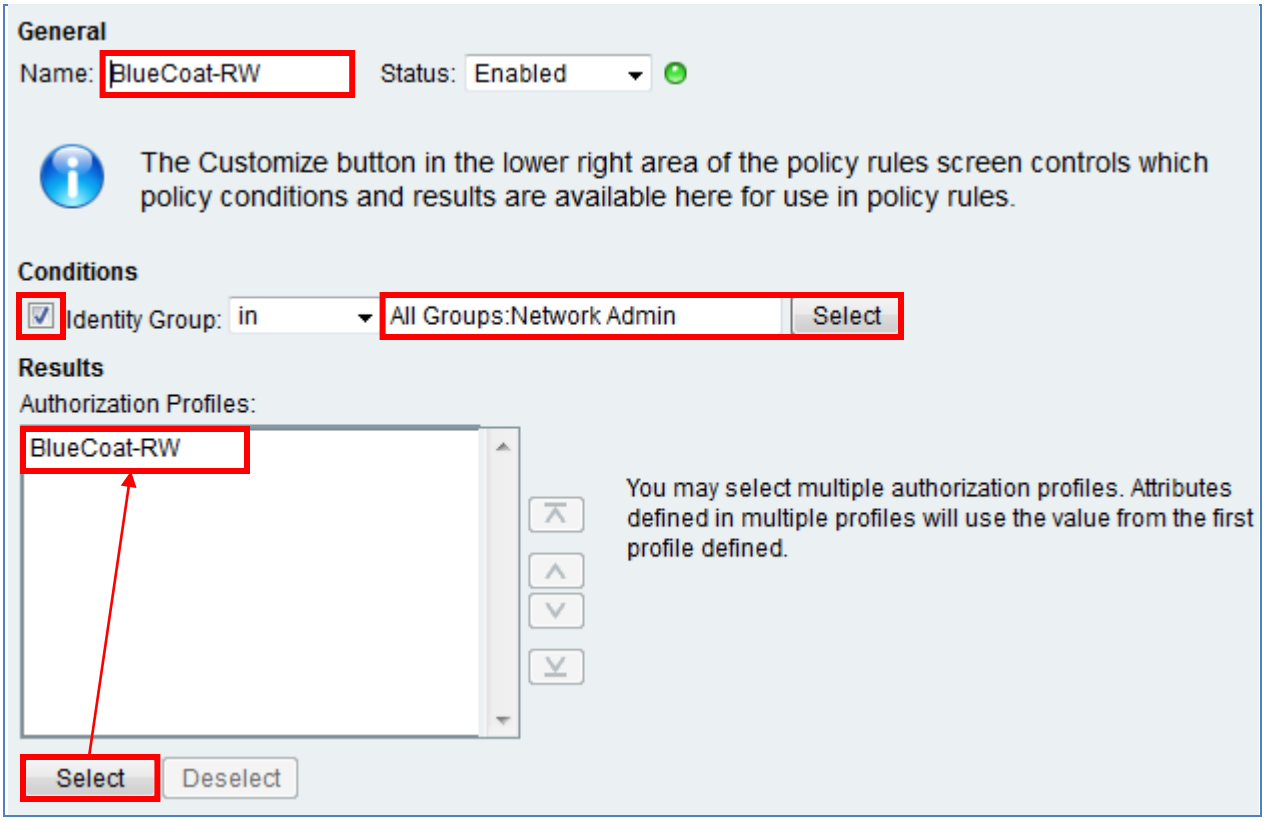
   c. **Create the Read-Only Rule**
      i. Click the Create button at the bottom of the page and repeat the steps with the highlighted changes:

         1. Under **General**, name the new rule **Read-Only**, and ensure it is Enabled
         2. Under **Conditions**, check the box next to **Compound Condition,** then set **Dictionary: AD-AD1**, **Attribute: ExternalGroups**, and **Value: *<Active Directory Domain>/ReadOnly*** group:
         3. Click Add V to add the condition to the **Current Condition Set**
         4. Under **Results**, set the **Identity Group** field to the **All Groups: Read-Only** group
         5. Click the OK button at the bottom of the page

   d. Click the Save Changes button

9. **Navigate to Access Policies > Access Services > Default Network Access > Authorization**
   a. **Use Identity Groups**
      i. Click the Customize button at the bottom right of the page
         - Under **Customize Conditions**, select **Identity Group** from the left window, click the > button to add it, then click the OK button to close the window

   b. **Create the BlueCoat-RW Authorization Rule**
      i. Click the Create button at the bottom of the page
         - Under **General**, name the new rule **BlueCoat-RW**, and ensure it is Enabled
         - Under **Conditions**, check the box next to **Identity Group**, and set it to **All Groups: Network Admin**
         - Under **Results**, set the **Authorization Profile** to **BlueCoat-RW**



         - Click the OK button at the bottom of the page to close the window

   c. **Create the BlueCoat-RO Authorization Rule**
      i. Click the Create button at the bottom of the page and repeat the steps with the highlighted changes:
         - Under **General**, name the new rule **BlueCoat-RO**, and ensure it is Enabled
         - Under **Conditions**, check the box next to **Identity Group**, and set it to **All Groups: Read-Only**
         - Under **Results**, set the **Authorization Profile** to **BlueCoat-RO**
         - Click the OK button at the bottom of the page to close the window

   d. Verify that both rules are listed before the 'Default' rule at the bottom, then click Save Changes

10. **Verify successful configuration by logging into the BlueCoat web GUI using an Active Directory account.**