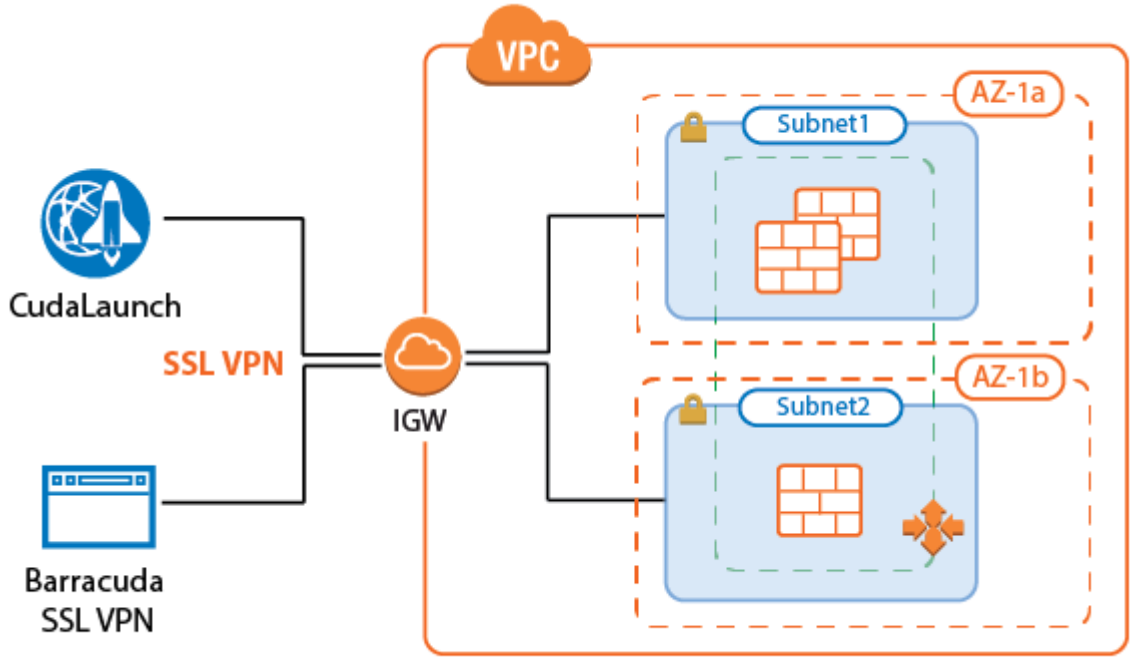
How to Configure the SSL VPN Services for AWS Auto Scaling Clusters

https://campus.barracuda.com/doc/70584567/

Let your users connect to a network in an AWS Auto Scaling cluster using SSL VPN. Enable the SSL VPN service and CudaLaunch, create a group access policy, and configure the login and authentication settings for the SSL VPN connections. To use SSL VPN, you must upload a certificate to the AWS certificate manager. For CudaLaunch on iOS, NextGen Firewall Auto Scaling Clusters are supported for CudaLaunch 2.3.0 or higher.



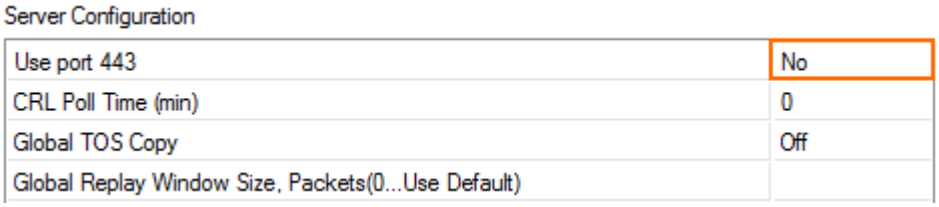
Before You Begin

- Configure an external authentication server or NGF local authentication. For more information, see Authentication.

Step 1. Disable Port 443 for Site-to-Site and Client-to-Site VPN

1. Go to **CONFIGURATION > Configuration Tree > Box > Virtual Servers > *your virtual server* > Assigned Services > VPN > VPN Settings**.
2. Click **Lock**.

3. Click the **Click here for Server Settings** link. The **Server Settings** window opens.
4. Set **Use Port 443** to **No**.

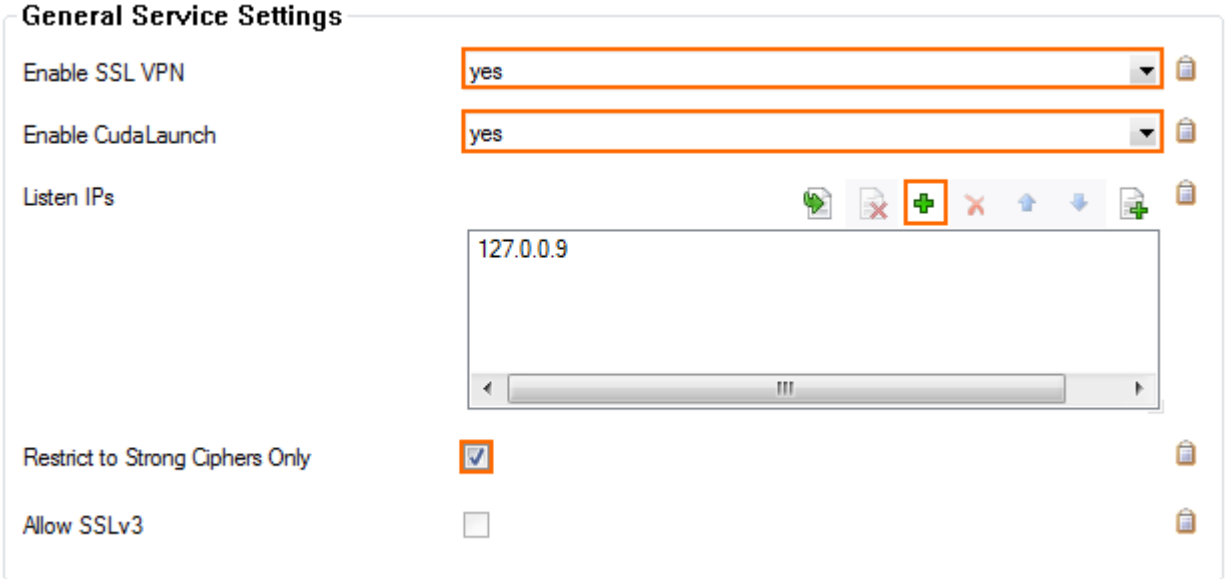


5. Click **OK**.
6. Click **Send Changes** and **Activate**.

Step 2. Configure SSL VPN General Service Settings

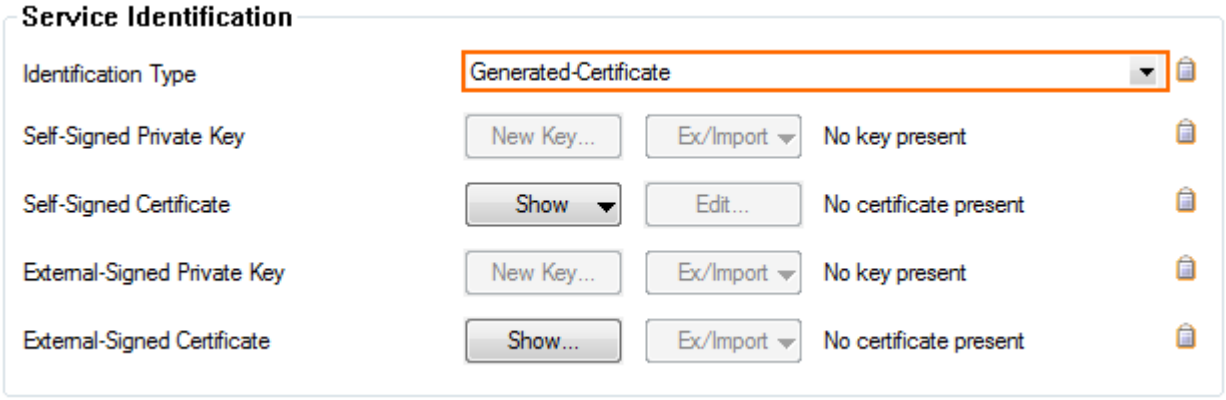
Enable the SSL VPN service and add the listening IP addresses.

1. Go to **CONFIGURATION > Configuration Tree > Box > Virtual Servers > *your virtual server* > Assigned Services > VPN-Service > SSL-VPN**.
2. Click **Lock**.
3. Set **Enable SSL VPN** to **Yes**.
4. (optional) Set **Enable CudaLaunch** to **yes**.
5. Click **+** to add a **Listen IP**.
6. Enter the IP address of the VPN service. E.g., `127.0.0.9`



7. (recommended) Enable **Restrict to Strong Ciphers Only**.
8. Select the **Identification Type**:
   - **Generated-Certificate** – The certificate and the private key is automatically created by the firewall.
   - **Self-Signed-Certificate** – Click **New** to create a **Self-Signed Private Key** and then **Edit** to create the **Self-Signed Certificate**.

- **External-Certificate** – Click **Ex/Import** to import the CA-signed **External Certificate** and the **External-Signed Private Key**.



9. Click **Send Changes** and **Activate**.

Step 3. Configure User Identity Access Control Policy

1. Go to **CONFIGURATION > Configuration Tree > Box > Virtual Servers > *your virtual server*** **> Assigned Service > VPN-Service > SSL-VPN**.
2. In the left menu, click **Access Control Policies**.
3. Click **Lock**.
4. Click **+** to add an **Access Control Policy**.
5. Enter the **Name** for the access control policy.
6. Click **OK**.
7. In the **Access Control Policy** section, select the **Active** check box.

8. In the **Group Access** section, click **+** to add **Allowed Groups** and **Blocked Groups**. Click **x** to remove the entry from the table.

   In **Allowed Groups**, either add an asterisk (*) to allow all groups, or enter one or more group names. Leaving the **Allowed Groups** empty causes the **Access Control Policy** to block all authentication attempts.

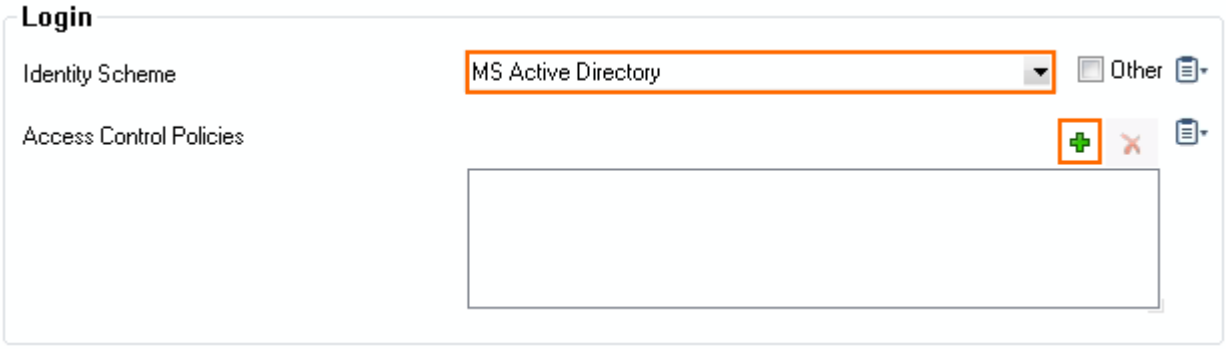
9. In the **Authentication** section, click **+** to add an **Authentication Scheme**.

10. Select **Use Identity** from the **Authentication Scheme** drop-down list.

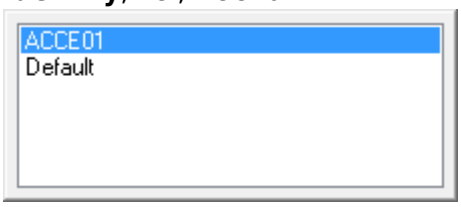
11. Click **OK**.
12. Click **Send Changes** and **Activate**.

Step 4. Configure Login to Log In with User Identity

1. Go to **CONFIGURATION > Configuration Tree > Box > Virtual Servers > *your virtual server* > Assigned Services > VPN-Service > SSL-VPN**.
2. In the left menu, click **Login**.
3. Click **Lock**.
4. In the **Login** section, set the **Identity Scheme** to your preferred authentication method, e.g., **MS-Active Directory**.
5. Click **+** to add your access control policy to the list of **Access Control Policies**.



6. From the pop-up menu, select the access control policy that you configured in Step 3 for **Use Identity**, i.e., ACCE01.



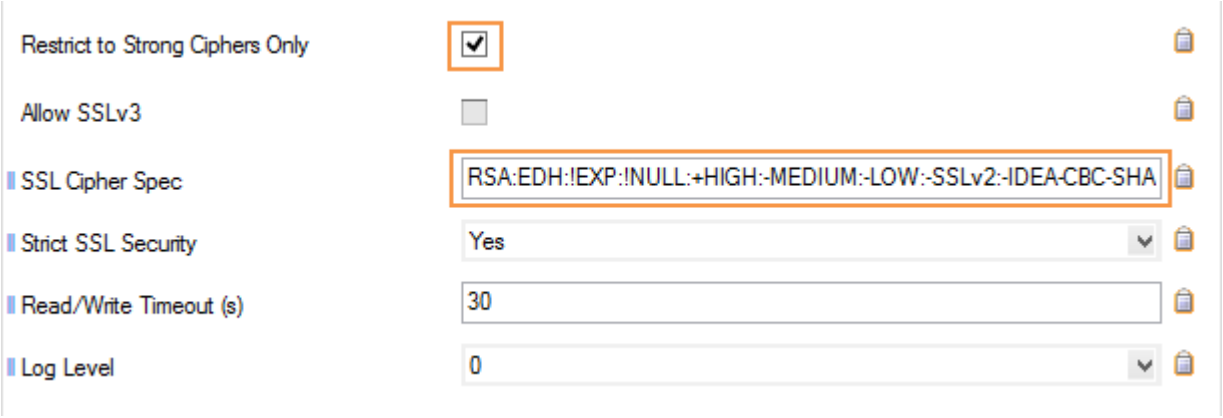
7. Configure the following settings:
   - **Use Max Concurrent Users** – Set to **no**.
   - **Session Timeout (m)** – Set to 30. This setting must match with the timeout on the ELB.

8. (optional) Customize the login messages and logos:
   - Import a 200 x 66-pixel PNG or JPG image to customize the **Logo**.
   - Enter a plain text **Login Message**. E.g., `Welcome to the Barracuda NextGen Firewall SSL VPN`.
   - Enter an HTML **Help Text**.
9. Click **Send Changes** and **Activate**.

Step 5. (optional) Use Custom Cipher String

Configure a custom cipher string to be used by the SSL VPN service.

1. Go to **CONFIGURATION > Configuration Tree > Box > Virtual Servers > *your virtual server* > Assigned Services > VPN-Service > SSL-VPN**.
2. In the left menu, click **Basic Setup**.
3. Click **Lock**.
4. In the left menu, expand **Configuration Mode** and click on **Switch to Advanced View**.
5. Disable **Allow SSLv3**.
6. Enable **Restrict to Strong Ciphers Only**.
7. Enter your custom **SSL Cipher Spec** string.

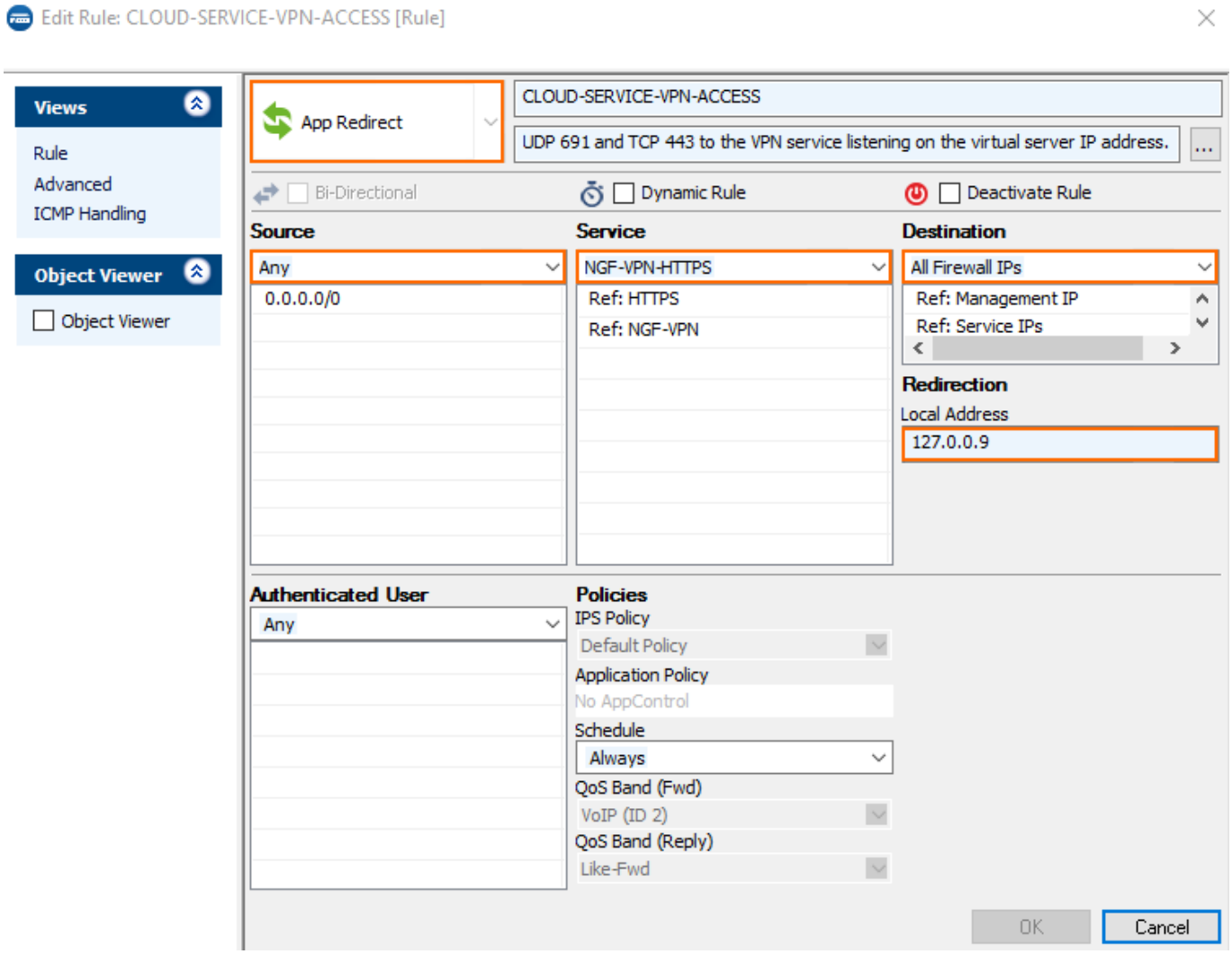


8. Set **Strict SSL Security** to **yes**.
   This setting might break access for some older client SSL implementation. Disable if you experience problems when using older browsers.
9. Click **Send Changes** and **Activate**.

Step 5. Create Access Rules

Verify the the access rule CLOUD-SERVICE-VPN-ACCESS is present in the forwarding ruleset. If not, create the rule. Use the following settings:

- **Action** – Select **App Redirest**.
- **Source** – Select **Any**.
- **Service** – Select **NGF-VPN-HTTPS**.
- **Destination** – Select the network object containing all firewall IPs.
- **Redirection** – Enter the IP address of the VPN service. E.g., `127.0.0.9`.



Troubleshooting

- If the **sslvpn** log contains the following line: `http_listener: failed to listen on @443` verify that no other service on the firewall is running on that port and that no Dst NAT access rules are forwarding TCP port 443 (HTTPS) traffic.
- Updating certificates requires the SSL VPN service to be restarted. To do this in an ASG, scale the ASG to a size of one. Then restart the VPN (SSL VPN) service. Then scale out, or wait for the scaling policies to scale your ASG out to the desired size.

Figures

1. aws_autoscale_cluster_sslvpn.png
2. disable_s2s_443.png
3. sslvpn01.png
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5. activate_auth_scheme_00.png
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