

How to Configure the SSL VPN Service

<https://campus.barracuda.com/doc/53248385/>

The SSL VPN service is part of the VPN service on the NextGen Firewall. Configure a listener for the SSL VPN on a public IP address and authenticate the users via a local or external authentication scheme. It is recommended to use signed SSL certificates to avoid SSL error messages when users access the SSL VPN portal. SSL VPN is supported for NextGen Firewall F18 and larger, as well as all NextGen Firewall F-Series Vx models except VF10.

Before You Begin

- An Advanced Remote Access subscription is required.
- Verify that the IP address you want the SSL VPN to listen on is configured as a virtual server and VPN service IP address. For more information, see [Virtual Servers and Services](#).
- 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 **Click here for Server Settings** link. The **Server Settings** window opens.
4. Set **Use Port 443** to **No**.

Server Configuration

Use port 443	No
CRL Poll Time (min)	0
Global TOS Copy	Off
Global Replay Window Size, Packets(0...Use Default)	

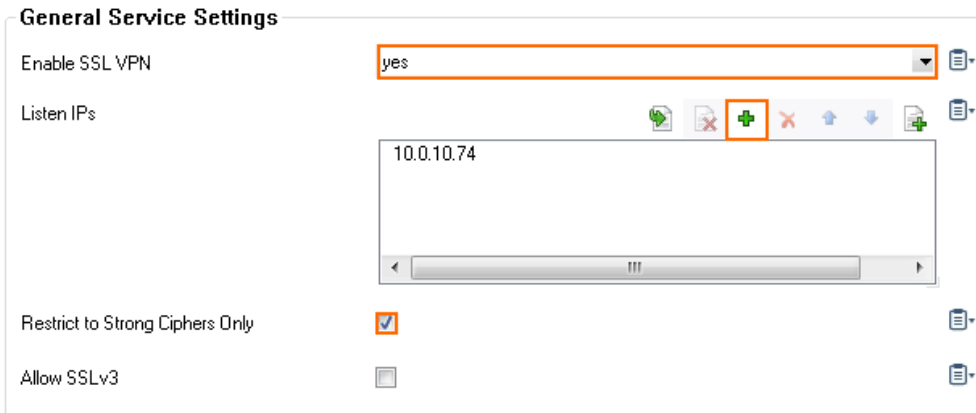
5. Click **OK**.
6. Click **Send Changes** and **Activate**.

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. Click **+** to add a **Listen IP**.



General Service Settings

Enable SSL VPN

Listen IPs

10.0.10.74

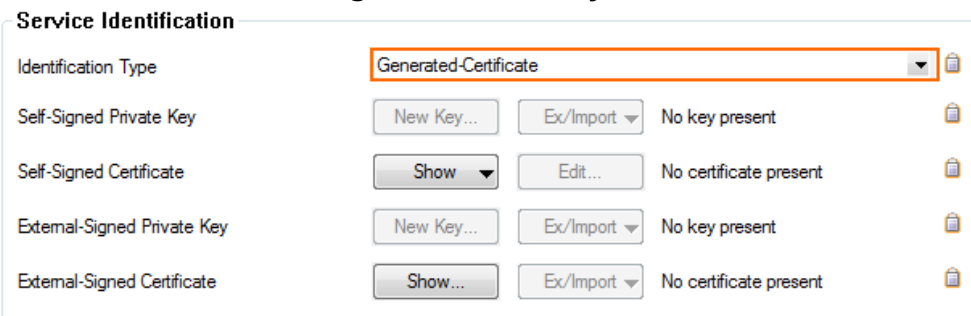
Restrict to Strong Ciphers Only

Allow SSLv3

5. (recommended) Enable **Restrict to Strong Ciphers Only**.

6. 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**.



Service Identification

Identification Type

Self-Signed Private Key No key present

Self-Signed Certificate No certificate present

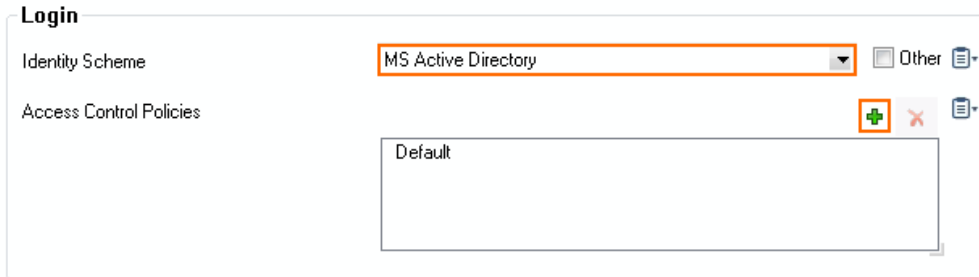
External-Signed Private Key No key present

External-Signed Certificate No certificate present

7. Click **Send Changes** and **Activate**.

Step 3. Configure Login

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. (optional) Configure the following settings as needed:
 - **Use Max Concurrent Users** - Enable to limit the number of simultaneous users using the SSL VPN service.
 - **Max Concurrent Users** - Enter the maximum number of users that can be simultaneously connected to the SSL VPN service.
 - **Cookie Timeout (Min)** - Enter the session timeout in minutes.
 - **Authentication Request Timeout (sec)** - Enter a value up to 20 seconds if you are using multi-factor authentication.
 - **Deny Remember Me** - Set to **yes** to remove the **Remember me** check box on the login page.
7. Customize the login messages and logos:
 - (optional) Import a 200 x 66-pixel PNG or JPG image to customize the **Logo**.
 - (optional) Enter a plain text **Login Message**. E.g, Welcome to the Barracuda NextGen Firewall SSL VPN.
 - (optional) Enter a HTML **Help Text**.
8. Click **Send Changes** and **Activate**.

Step 4. (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.

Restrict to Strong Ciphers Only	<input checked="" type="checkbox"/>	
Allow SSLv3	<input type="checkbox"/>	
SSL Cipher Spec	RSA:EDH:!EXP:!NULL:+HIGH:-MEDIUM:-LOW:-SSLv2:-IDEA-CBC-SHA	
Strict SSL Security	Yes	
Read/Write Timeout (s)	30	
Log Level	0	

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**.

Troubleshooting

- If the **sslvpn** log contains the following line: `http_listener: failed to listen on <IP address>@443` verify that no other service on the firewall is running on that port and that no DNAT access rules are forwarding TCP port 443 (HTTPS) traffic.
- Restart the SSL VPN service after updating or changing certificates:
 1. Set **Enable SSL VPN** to **no**.
 2. Click **Send Changes** and **Activate**.
 3. Set **Enable SSL VPN** to **yes**.
 4. Click **Send Changes** and **Activate**.

When using RADIUS authentication, the service assumes that one-time passwords can be used. This in turn disables the single sign-on functionality for at least the [native app RDP](#). The result is that the system asks for the password again when connecting to the resource.

- Use a different authentication scheme (possibly in conjunction with RADIUS), or
- Set up a user attribute that is used for logging into the RDP, and have the user configure that once logged into the portal. For more information, see [How to Configure RADIUS Authentication](#).

The downside of the latter is that it will necessitate the user adjusting the password here as well whenever it changes.

Figures

1. disable_s2s_443.png
2. sslvpn01.png
3. sslvpn02.png
4. add_access_control_polic_00.png
5. strong_ciphers_00.png

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