



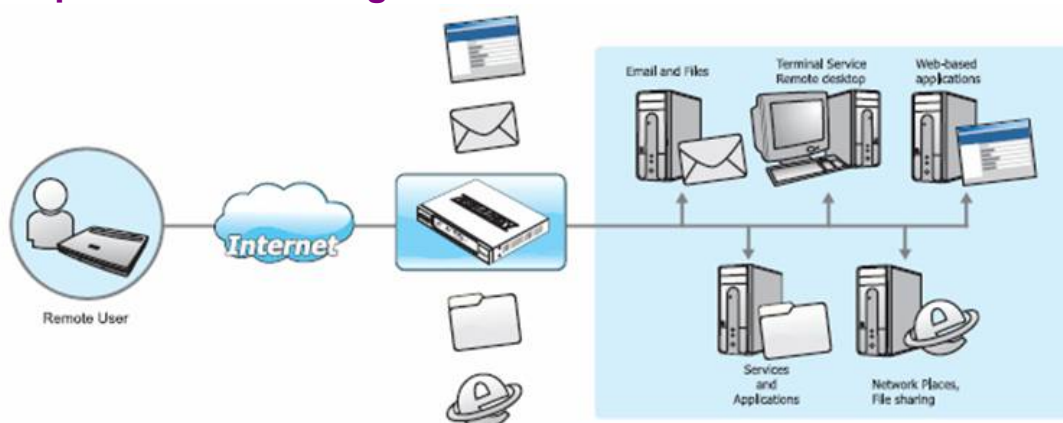
BiGuard S10 SSL VPN Security Gateway Transport Extender

What is Transport Extender Technology?

Billion BiGuard SSL Transport Extender is a transparent application for Windows users to connect to designated services through a SSL VPN connection. Transport Extender technology allows remote users to securely connect to the corporate network to access services as configured by IT administrators. The remote user does not have to change any specific settings in the web portal to make the service work.

When a user remotely accesses their MS Outlook email, for instance, the Transport Extender technology will transport the email service through the SSL VPN tunnel to the email server in the corporate network, as configured by the IT administrator. Since the remote user does not have to modify any settings in the web portal, the remote user will feel as if they are using MS Outlook in the office.

Transport Extender Diagram



Another application that makes the BiGuard SSL VPN appliances ideal for any organization is the Transport Extender technology (non-Web). By using Transport Extender, an organization can allow remote access to designated services and applications, and the specified network applications are only accessible to designated users.

Three Solutions in One



How to configure Transport Extender?

Step 1. Create the account with Transport Extender Service **enabled**

Edit Account	
General Setting	
Name	William
Group	BiGuard
Password	••••••
Retype Password	••••••
Inactivity Timeout	5 Minutes
Service	
Network Places	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Network Extender Service	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Transport Extender Service	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Web Cache Cleaner	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Network Extender IP Assignment	<input checked="" type="radio"/> Dynamic Assign <input type="radio"/> Fix IP 192.168.1.240
Greeting String	<input checked="" type="radio"/> Default <input type="radio"/> Custom Welcome to SSL VPN Se
Application Proxy	
Applications	This group has no application now.
<input type="button" value="Apply"/> <input type="button" value="Cancel"/>	

When configuring a user account, you have to enable the Transport Extender service for the user.

Step 2. Set up Transport Extender Application

Status	Transport Extender Add an Application to be Tunneled by Transport Extender Local Server IP Address <input type="radio"/> All IP Addresses <input checked="" type="radio"/> Fixed IP Address 192.168.1.254 TCP Port Number <input type="radio"/> All TCP Ports <input checked="" type="radio"/> Fixed TCP Port 110 ~ 110 <input type="button" value="Apply"/> <input type="button" value="Cancel"/>
Quick Start	
Configuration	
SSL VPN	
User Access	
Network Extender	
Transport Extender	
Application	
Host Name Resolution	
SSL Certificate	
SSL VPN Portal	
Logs & E-mail Alert	
Save Config to FLASH	

After the user account is created with the Transport Extender service enabled, the next step, is to set up the designated service port and the server's IP address. In *Local Server IP Address*, you have to choose to redirect all IP addresses or only the specified IP addresses to the office network through the secure SSL VPN connection.

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In *TCP Port Number*, you have to choose to redirect all the TCP port numbers or the designated service port numbers of the specified IP addresses to the office network through the secure SSL VPN connection.

Step 3. Set up Transport Extender Host Name Resolution

Status	<p>Transport Extender</p> <p>Add an Host Name Resolution to Transport Extender</p> <p>Local Server IP Address <input type="text" value="192.168.1.253"/></p> <p>Full Qualified Domain Name <input type="text" value="mailserver.billion.com"/></p> <p><input type="button" value="Apply"/> <input type="button" value="Cancel"/></p>
Quick Start	
Configuration	
SSL VPN	
User Access	
Network Extender	
Transport Extender	
Application	
Host Name Resolution	
SSL Certificate	
SSL VPN Portal	
Logs & E-mail Alert	
Save Config to FLASH	

In the Transport Extender, you can set up the domain name for an IP address. This will allow you to access the server's IP address by typing the domain name. In *Local Server IP Address*, please enter the IP address for this domain name. In *Full Qualified Domain Name*, please enter the domain name for this IP address.

Supported Browsers/OS Platforms

Supported browsers on Windows platform

Browsers	Version suggested	Supported
Internet Explorer	>= 6.0	Yes
Firefox	>= 1.0	Future Release
Netscape	>= 7.0	Future Release
Mozilla	>= 1.7.12	Future Release
Opera	>= 8.54	Future Release

Transport Extender is supported by I.E. 6.0 or above under Windows and will be supported by Firefox, Netscape, Mozilla, and Opera under Windows in the near future.

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Deploying Network Extender

■ Windows Prerequisites

The Windows system must meet the following prerequisites in order to install Transport Extender:

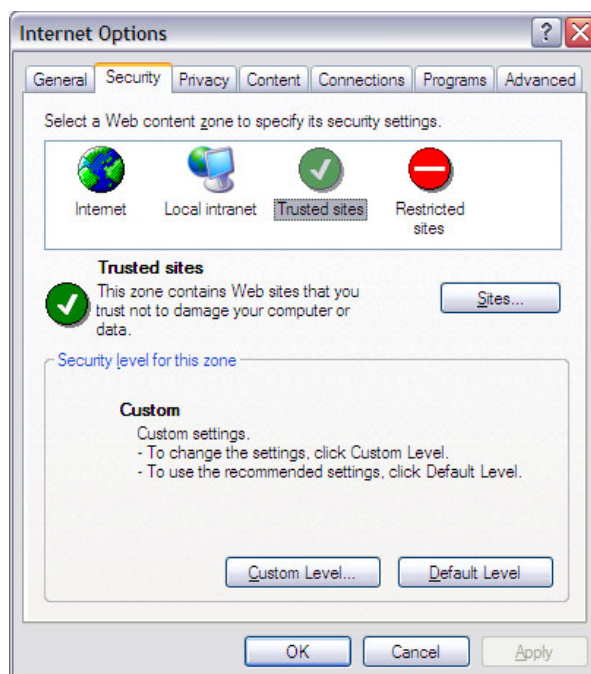
1. Windows XP Professional or XP Home, Windows 2000 Professional, Windows 2000 Server or Windows 2003 Server.
2. Internet Explorer 6.0 or above.
3. The user must be logged onto the PC with administrative privileges.
4. Downloading and running scripted ActiveX must be enabled on I.E.
5. We recommend you install the certificate from a trusted root Certificate Authority in the device configuration. This will prevent the security warning message when the user connects to the device from the remote computer.
6. By default, the system uses a self-signed SSL certificates for HTTPS authentication. When the user connects to the device, Windows will display warning messages to indicate that the connected web site is not a trusted site. To prevent the warning messages in the future, you can import the self-signed Certificate by clicking **Import Certificate** in the *View Certificate* page.

■ Internet Explorer Prerequisites

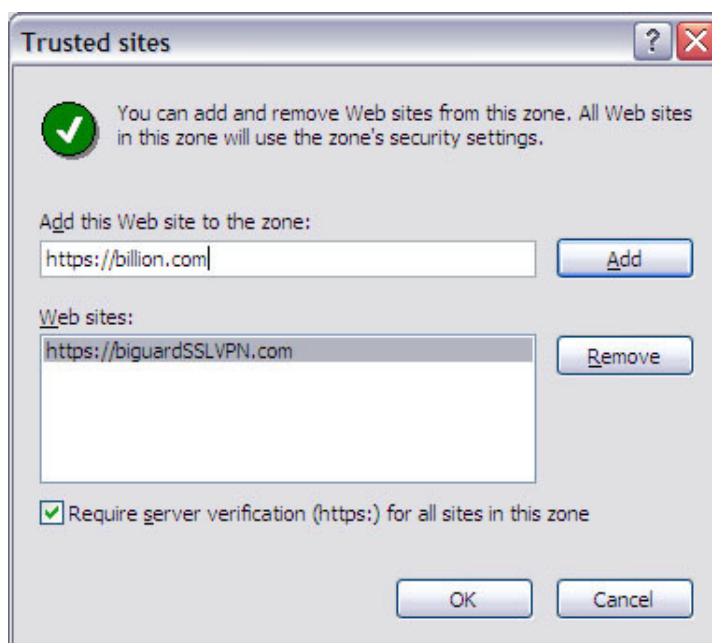
To reduce the number of security warnings, we recommend that you add the URL or domain name of the BiGuard SSL VPN WAN port to Internet Explorer's trusted sites. To add a site to Internet Explorer's trusted sites, please perform the following steps:

1. In Internet Explorer, go to **Tools** → **Internet Options**.
2. Click on the **Security** tab.
3. Click on the **Trusted Sites** icon and click on the **Sites**.

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4. The *Trusted sites* dialog box opens.



5. Enter the URL or domain name of your SSL VPN's WAN port in the *Add this Web site to the zone* field and click **Add**.
6. Click **OK** in the *Trusted Sites* and *Internet Options* dialog boxes.

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Using the Remote SSL VPN Portal

Powering communications with Security >> Logout

BiGuard S10 - SSL VPN Security Gateway

Welcome to SSL VPN Security Gateway, **username**.

Due to inactivity, your connection will timeout in 5 minutes. **RESET**

Network Extender

Click the Network Extender icon to connect to the remote network. Keep your browser open to maintain the connection. If you reload your browser, Network Extender will disconnect and reconnect.

Transport Extender

Click the Transport Extender icon to use the service. It creates an encrypted tunnel to the corporate network, and you can access pre-defined applications as if you were on the corporate network.

Network Place

Click the Network Place icon to use the service. It is similar in style to Microsoft's familiar Network Neighborhood. It allows users to browse network shares, rename, delete, retrieve, and upload files.

Application Name	Host Address	Service	Connection
There is no Application Proxy for use now.			

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Step 1: Click Transport Extender

Transport Extender

Click the Transport Extender icon to use the service. It creates an encrypted tunnel to the corporate network, and you can access pre-defined applications as if you were on the corporate network.

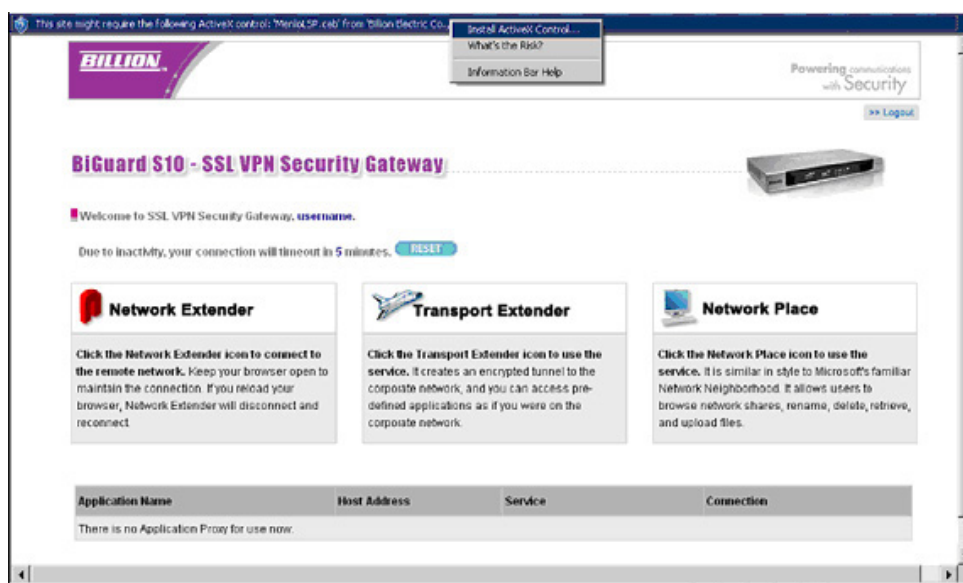
To use Transport Extender, you have to connect to the web portal first by connecting to the device by entering `https://wanipaddress`, where `wanipaddress` is the WAN IP address of the BiGuard SSL VPN appliance. After you have successfully connected to the device and successfully logged onto the device, the web portal screen will appear. Please click **Transport Extender** in order to connect to the office network. The following steps need to be completed.

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Step 2: Click **Install ActiveX control**

A drop-down message appears at the top of your browser, prompting you to install an ActiveX Control.



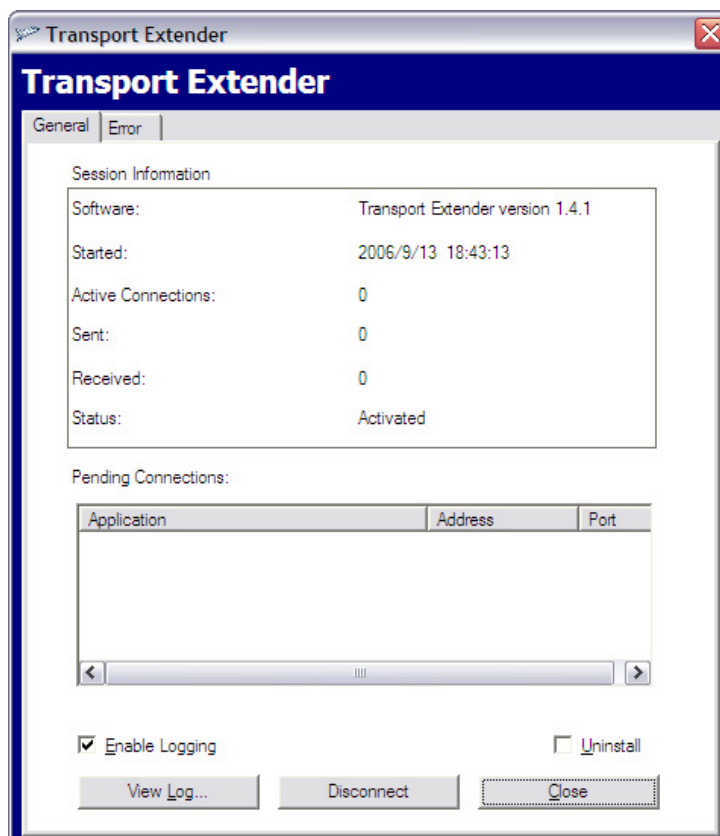
Step 3: Click **Install** when the security message appears



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Install Complete



- ✓ Click the **Error** tab to view a list of session errors.
- ✓ Check **Enable Logging** to allow the system to log all activity for the session.
- ✓ Click **View Log** to view the session log.
- ✓ Check **Uninstall** if you want to uninstall the driver upon disconnecting. If this is left un-checked, the ActiveX Control will not to be installed when you log on again. If the box is checked, the ActiveX Control will uninstall when you log off to prevent unauthorized access, for example, if a public domain terminal was used to access Transport Extender.
- ✓ Click **Disconnect** to disconnect the Transport Extender.
- ✓ Click **Close** to close the Transport Extender screen. Transport Extender will remain active and indicated in the status bar.

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View Transport Extender Status

To view the *Transport Extender* screen again, or disconnect the Transport Extender, right-click the **Transport Extender** icon and select an option from the menu.

BiGuard S10 - SSL VPN Security Gateway

Welcome to SSL VPN Security Gateway, **admin**.

Due to inactivity, your connection will timeout in 4 minutes. [RESET](#)

Network Extender
Click the Network Extender icon to connect to the remote network. Keep your browser open to maintain the connection. If you reload your browser, Network Extender will disconnect and reconnect.

Transport Extender
Click the Transport Extender icon to use the service. It creates an encrypted tunnel to the corporate network, and you can access pre-defined applications as if you were on the corporate network.

Network Place
Click the Network Place icon to use the service. It is similar in style to Microsoft's familiar Network Neighborhood. It allows users to browse network shares, rename, delete, retrieve, and upload files.

Application Name	Host Address	Service	Connection
There is no Application Proxy for use now.			

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start Internet
Open Transport Extender
Disconnect

###

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BiGuard user registration: www.biguard.com

Technical Support: biguardsupport@billion.com

Email: sales@billion.com marketing@billion.com

www.billion.com

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Technical Note – Transport Extender