

SSL Tunnel operated with different browsers under Windows 7

In this document, we will introduce how to connect SSL tunnel between Windows 7 with the IE8 Browser or FireFox Browser and the router (e.g., Vigor2950 series router). There are two versions of IE8 for Windows 7. One is IE8 with 64-bit and the other is IE8 with 32-bit. The supported methods are listed in the below table.

Browser	Start Mode	Java Applet
IE 8 32-bit	ActiveX & Java	Need to install 32-bit JRE
IE 8 64-bit	Java 64-bit only	Need to install 64-bit JRE
Firefox	Java only	Need to install 32-bit JRE

The following figure shows different versions for IE8 (64-bit or 32-bit). If you use IE with 64-bit, the word (64 bit) will be shown obviously.



Configuring Vigor2950 for SSL Tunnel

1. Login the web configurator of Vigor2950 and open **SSL VPN >> User Account**.



2. Create an account with Index 1.

VPN and Remote Access >> Remote Dial-in User

Remote Access User Accounts:

| [Set to Factory Default](#) |

Index	User	Status	Index	User	Status
<u>1.</u>	111	V	<u>17.</u>	???	X
<u>2.</u>	???	X	<u>18.</u>	???	X
<u>3.</u>	???	X	<u>19.</u>	???	X
<u>4.</u>	???	X	<u>20.</u>	???	X
<u>5.</u>	???	X	<u>21.</u>	???	X
<u>6.</u>	???	X	<u>22.</u>	???	X

3. In Index 1, configure the following items for SSL Tunnel. The Username/Password is **111/111**. Then, click **OK**.

VPN and Remote Access >> Remote Dial-in User

Index No. 1

User account and Authentication

Enable this account
Idle Timeout second(s)

Allowed Dial-In Type

ISDN
 PPTP
 IPsec Tunnel
 L2TP with IPsec Policy
 SSL Tunnel

Username
Password
Authentication Type
 Enable Mobile One-Time Passwords(mOTP)
PIN Code
Secret

IKE Authentication Method

Pre-Shared Key
IKE Pre-Shared Key

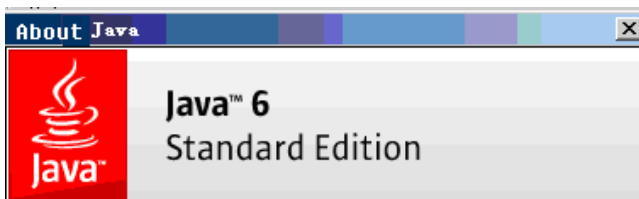
4. Open **System Maintenance>>Status**. In this example, the WAN1 IP address is 172.17.1.209.

WAN 1	
Link Status	: Connected
MAC Address	: 00-50-7F-C3-4D-81
Connection	: Static IP
IP Address	: 172.17.1.209
Default Gateway	: 172.17.1.3
Primary DNS	:
Secondary DNS	:
Mode	: NAT

Connecting SSL Tunnel with IE8 64-bit Browser

After finishing the web configuration for Vigor2950, a remote client can use a browser to connect SSL tunnel.

1. Install Java 6.0 with 64-bit JRE in Windows 7 64-bit first.



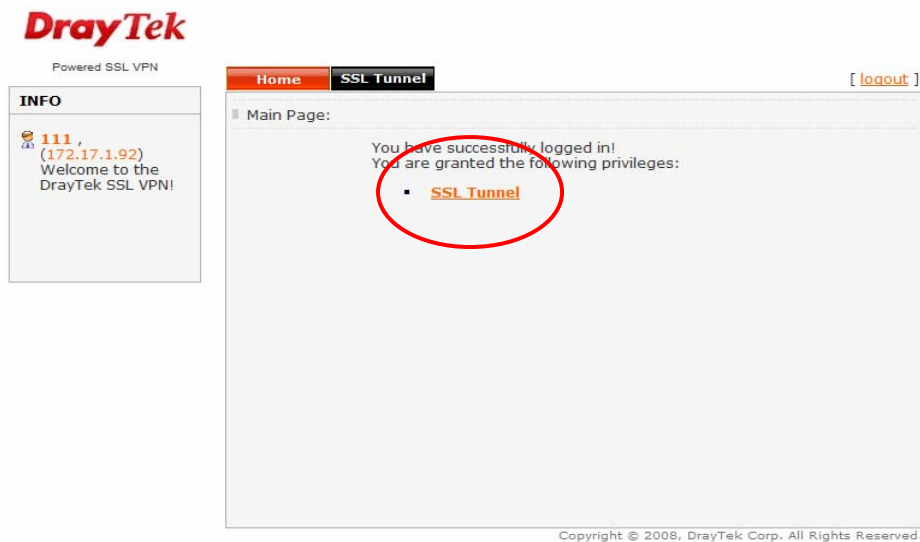
2. Open Internet Explorer 8 with 64-bit Browser, and go to <https://172.17.1.209:443>.
3. IE8 64-bit will display the following security alert. Please select the item of **Continue to this website**. After that, the login page will be popped up.



4. In the login window, please input the username/password with 111/111.



5. If login is successful, you will see a window like the one shown below. Click the link of **SSL Tunnel**.



6. IE8 64-bit only supports Java. Please press the **Connect** button.



7. Wait for a few minutes, DraySSL Tunnel Client tool will pop up and dial the connection automatically.



Powered SSL VPN

INFO

- SSL Tunnel**
 - Click the button to establish an SSL Tunnel to the remote network!

Home **SSL Tunnel** [[logout](#)]

Use SSL Tunnel:

Warning:

- Vigor SSL Tunnel requires your browser to support JavaApplet.
- If you are using Sun JRE 6.0 or newer versions. Please go to the Java Control Panel and disable TLS 1.0 in Advanced>>Security option.
- If you close the browser then the Vigor SSL Tunnel will be disconnected.

Change the default route to be the remote gateway

SSL Tunnel activated!

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Powered SSL VPN

INFO

- SSL Tunnel**
 - Click the button to establish an SSL Tunnel to the remote network!

DraySSLTunnel Client [[logout](#)]

Connection

Profile: DraySSLTunnel **DrayTek**
 Duration: 00 : 00 : 02

Activity

	Sent	Received
Bytes:	1,801	288
Packets:	24	13

Detail

Client IP: 192.168.1.10
 Server IP: 192.168.1.1

Using remote network as default gateway.

Remove Virtual Driver on disconnecting.

Status: Connected

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8. You can use the ping command to check the connection.

```
C:\Documents and Settings\Administrator>ping 192.168.1.1

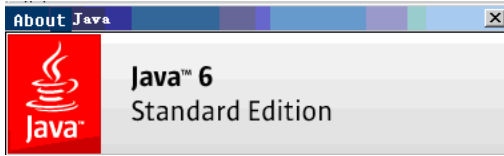
Pinging 192.168.1.1 with 32 bytes of data:

Reply from 192.168.1.1: bytes=32 time=4ms TTL=255
Reply from 192.168.1.1: bytes=32 time=4ms TTL=255
Reply from 192.168.1.1: bytes=32 time=4ms TTL=255
Reply from 192.168.1.1: bytes=32 time=4ms TTL=255
```

Connecting SSL Tunnel with IE8 32-bit Browser

After finishing the web configuration for Vigor2950, a remote client can use a browser to connect SSL tunnel.

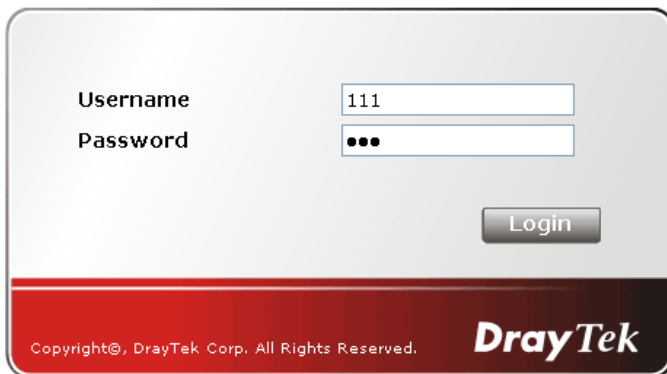
1. Install Java 6.0 with 32-bit JRE in Windows 7 64-bit first.



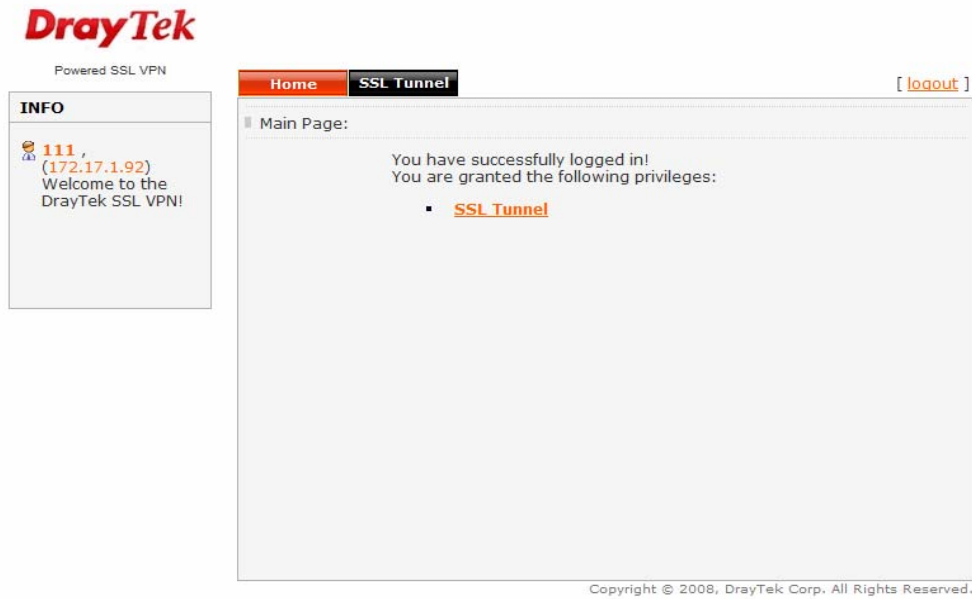
2. Open Internet Explorer 8 32-bit Browser, and go to <https://172.17.1.209:443>.
3. IE8 64-bit will display the following security alert. Please select the **Continue to this website** choice. After that, the login page will be popped up.



4. In the login window, please input the username/password with 111/111.

A screenshot of a login form. It has a light gray background with rounded corners. There are two input fields: "Username" with the text "111" and "Password" with three black dots. Below the fields is a "Login" button. At the bottom, there is a red horizontal bar with the text "Copyright©, DrayTek Corp. All Rights Reserved." and the "DrayTek" logo in white.

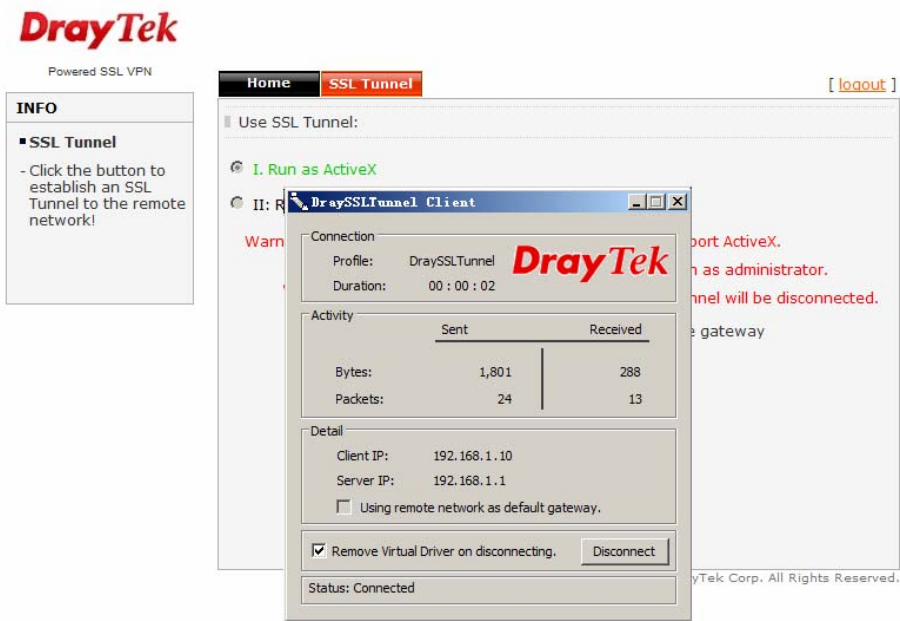
5. If login is successful, you will see a window like the one shown below. Click the link of **SSL Tunnel**.



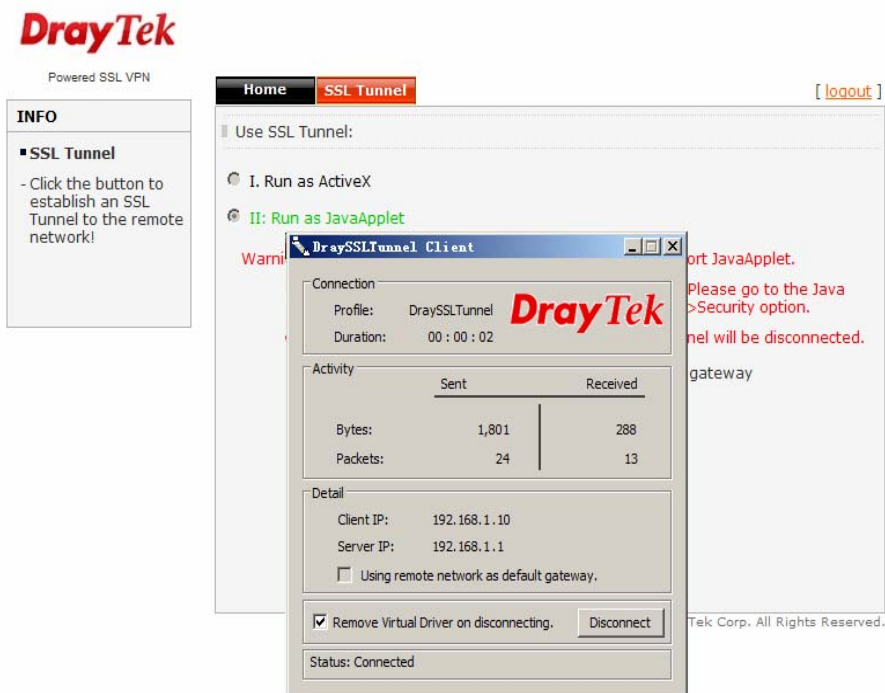
6. IE8 32-bit supports Java and Active X options for connecting SSL Tunnel. Choose either one of them.



- Select Active X and press **Connect** button. Wait a few minutes, DraySSL Tunnel Client tool will pop up and dial the connection automatically.



- Select Java and press **Connect** button. Wait a few minutes, DraySSL Tunnel Client tool will pop up and dial the connection automatically.



7. You can use the ping command to check the connection.

```
C:\Documents and Settings\Administrator>ping 192.168.1.1

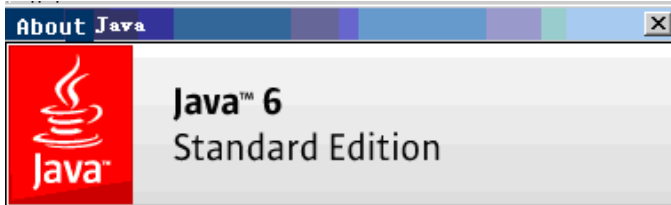
Pinging 192.168.1.1 with 32 bytes of data:

Reply from 192.168.1.1: bytes=32 time=4ms TTL=255
Reply from 192.168.1.1: bytes=32 time=4ms TTL=255
Reply from 192.168.1.1: bytes=32 time=4ms TTL=255
Reply from 192.168.1.1: bytes=32 time=4ms TTL=255
```

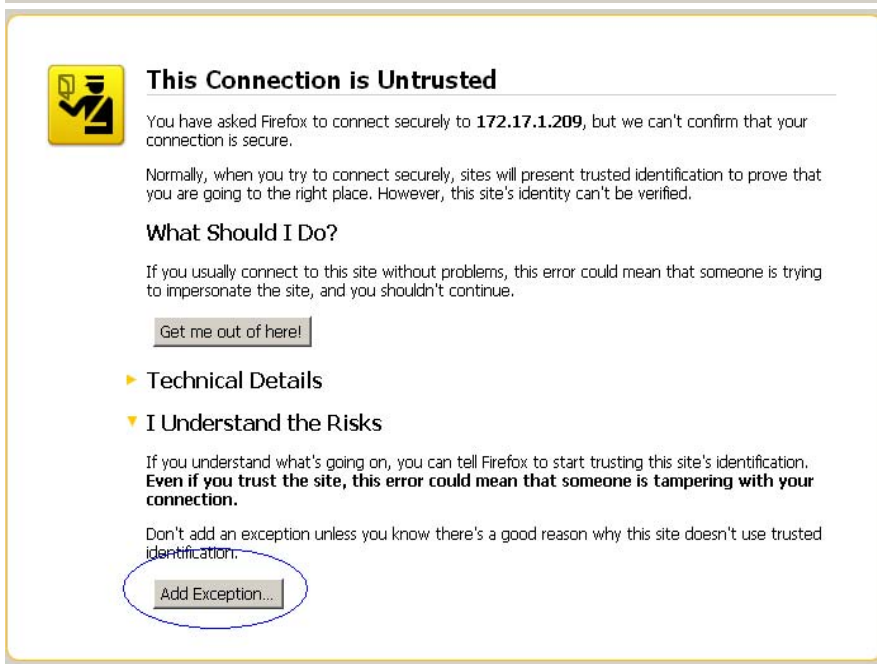
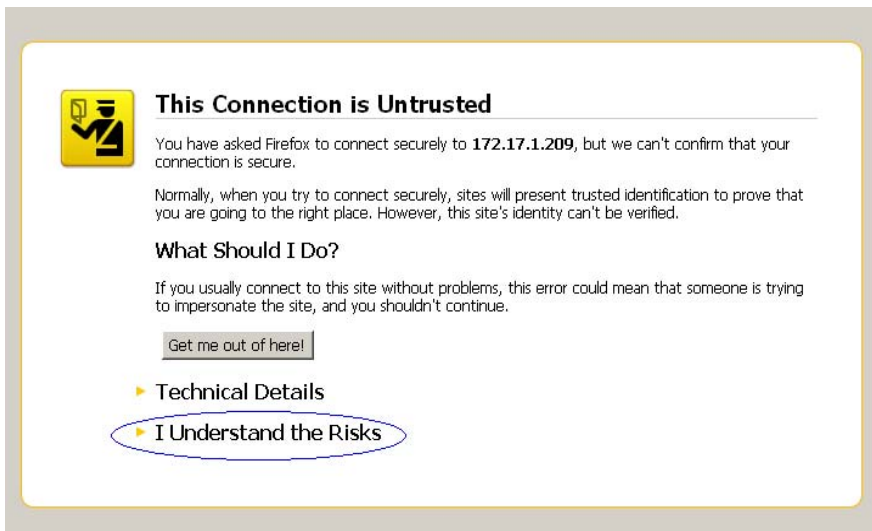

Connecting SSL Tunnel with FireFox3.6

After finishing the web configuration for Vigor2950, a remote client can use a browser to connect SSL tunnel.

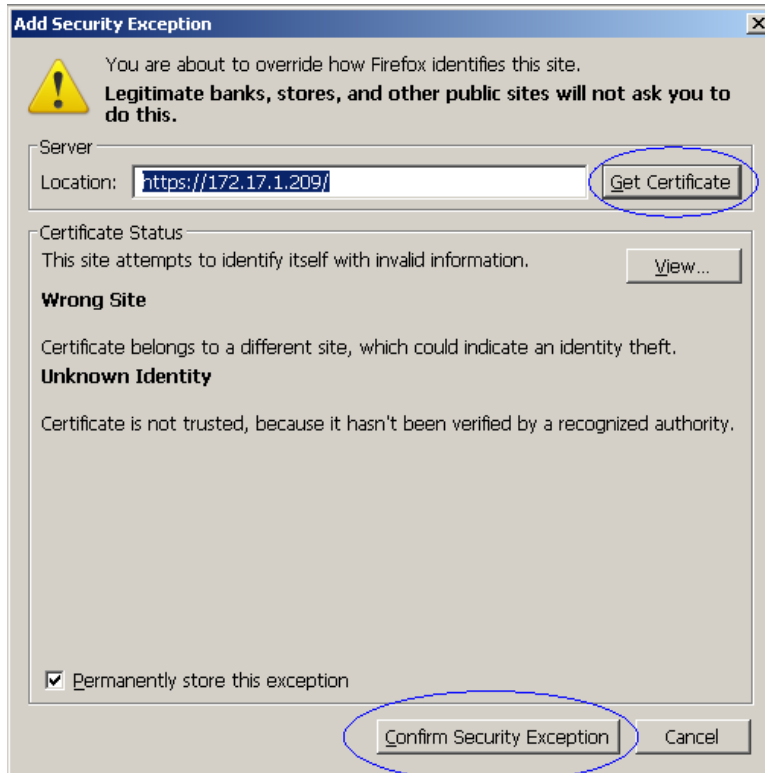
1. Install Java 6.0 with 32-bit JRE in Windows 7 64-bit first.



2. Open FireFox3.6 Browser, and go to <https://172.17.1.209:443>.
3. FireFox will display the following security alert. Please select the choice of **I understand the risks** first, and then choose **Add Exception**.



4. At the **Add Security Exception** page, you have to press the **Get Certificate** button first to specify the location of the certificate, and then press the **Confirm Security Exception** button. After that, a login page will be popped up.



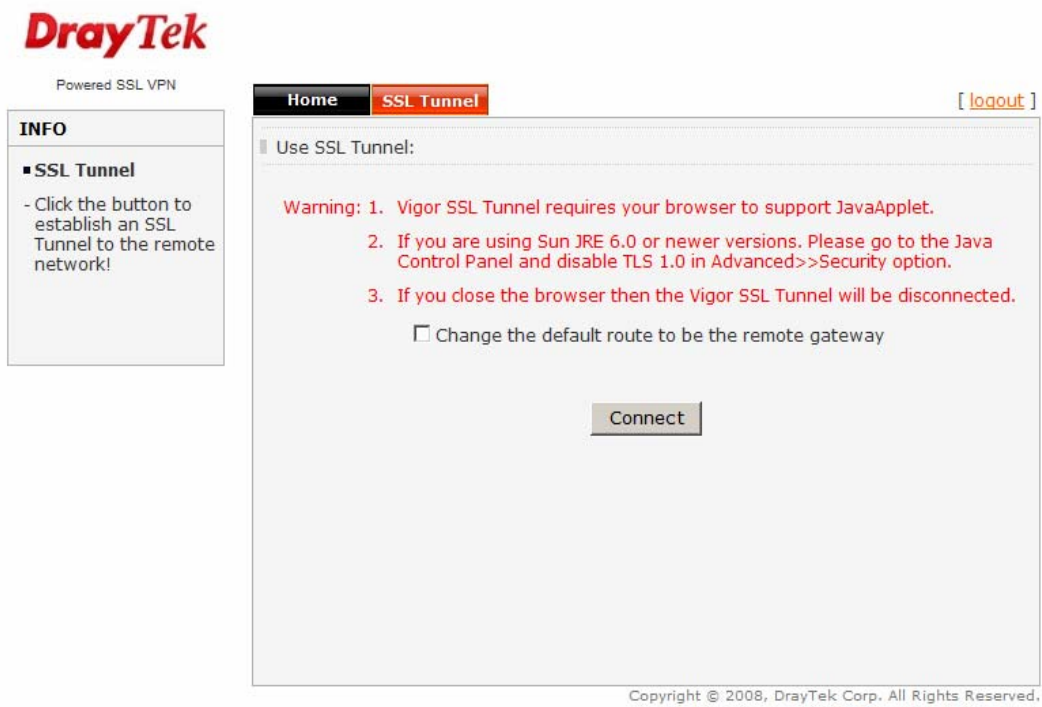
5. In the login window, please input the username/password with 111/111.



6. If login is successful, you will see a window like the one shown below. Click the link of **SSL Tunnel**.



7. FireFox3.6 only supports Java, so press the **Connect** button directly.



8. Wait for a few minutes, DraySSL Tunnel Client tool will pop up and dial the connection automatically.

The screenshot shows the DrayTek web interface for the Powered SSL VPN. On the left, there is an 'INFO' section with a sub-section for 'SSL Tunnel' containing instructions: '- Click the button to establish an SSL Tunnel to the remote network!'. The main content area has a 'Home' and 'SSL Tunnel' tab, with a '[logout]' link in the top right. Below the tabs, there is a 'Use SSL Tunnel:' section with a warning: 'Warning: 1. Vigor SSL Tunnel requires your browser to support JavaApplet. 2. If you are using Sun JRE 6.0 or newer versions. Please go to the Java Control Panel and disable TLS 1.0 in Advanced>>Security option. 3. If you close the browser then the Vigor SSL Tunnel will be disconnected.' There is a checkbox for 'Change the default route to be the remote gateway' which is currently unchecked. A large button labeled 'SSL Tunnel activated!' is centered below the text. At the bottom, there is a copyright notice: 'Copyright © 2008, DrayTek Corp. All Rights Reserved.'

This screenshot shows the same DrayTek web interface as above, but with the 'DraySSL Tunnel Client' application window open in the foreground. The application window has a title bar and a 'DrayTek' logo. It displays connection details: 'Profile: DraySSLTunnel', 'Duration: 00 : 00 : 02'. Below this is an 'Activity' table showing data transfer statistics:

	Sent	Received
Bytes:	1,801	288
Packets:	24	13

The 'Detail' section shows 'Client IP: 192.168.1.10' and 'Server IP: 192.168.1.1'. There is a checkbox for 'Using remote network as default gateway' which is unchecked. At the bottom, there is a checkbox for 'Remove Virtual Driver on disconnecting.' which is checked, and a 'Disconnect' button. The status at the bottom of the window is 'Status: Connected'. The background web interface is partially visible, showing the same warning and checkbox as in the previous screenshot. The copyright notice 'Copyright © 2008, DrayTek Corp. All Rights Reserved.' is also present at the bottom.

9. You can use the ping command to check the connection.

```
C:\Documents and Settings\Administrator>ping 192.168.1.1

Pinging 192.168.1.1 with 32 bytes of data:

Reply from 192.168.1.1: bytes=32 time=4ms TTL=255
Reply from 192.168.1.1: bytes=32 time=4ms TTL=255
Reply from 192.168.1.1: bytes=32 time=4ms TTL=255
Reply from 192.168.1.1: bytes=32 time=4ms TTL=255
```