Overview

Using the Hexago TSPTM Client is a simple and rapid way to get IPv6 connectivity from anywhere. The client needs to be installed and configured on your PC before connecting to the nearest Migration Broker[®]. The TSP Client is available for the following operating systems: Windows 2000, XP and Server 2003, Linux, FreeBSD, OpenBSD, NetBSD, VxWorks, QNX, Solaris and Mac OS X. This document is the user guide for the Windows version.

Prerequisites

- IPv6-enabled Windows workstation (use "ipv6 install" or see http://www.hexago.com/freenet6/requirements.html)
- TSP Client installer
- IPv4 connectivity from your PC to a Migration Broker (Freenet6, for example)

Installation steps

Remove any previous TSP Client installation

If the TSP Client has previously been installed, uninstall it. It is usually placed in the C:\Program Files\tsp-client folder. This folder contains a Uninstall.exe utility. Start the utility and follow the instructions. When asked if you would like to keep the configuration, click "Yes".



Run the installer

Find the provided TSP Client installer file and start it. Then follow the instructions.





License Agreement

The TSP Client has both GPL and commercial licenses. After reading the license, click "I Agree" to proceed.

6	TSP Client Version 2.0 Setup		
L	icense Agreement Please review the license terms before installing TSP Client Version 2.0.		
	Press Page Down to see the rest of the agreement.		
	GNU GENERAL PUBLIC LICENSE Version 2, June 1991		
	Copyright (C) 1989, 1991 Free Software Foundation, Inc. 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.		
	Preamble		
	The licenses for most software are designed to take away your		
If you accept the terms of the agreement, click I Agree to continue. You must accept the agreement to install TSP Client Version 2.0.			
Nul	lsoft Install System v2.0	Cancel	



Components

Usually, installing both the TSP binaries and the tunnel drivers is required.

🐨 TSP Client Version 2.0 Se	etup			
Choose Components Choose which features of TSP Client Version 2.0 you want to install.				
Check the components you want to install and uncheck the components you don't want to install. Click Next to continue.				
Select components to install:	 ✓ tspc bin ✓ ipv6 tunnel driver 	Description Hover your mouse over a component to see its description,		
Space required: 225.0KB				
Nullsoft Install System v2.0 ———	< <u>B</u> ack	Next > Cancel		

Hover is a bit weird here. On the CD you use "Move"?



Installation directory

Install in the default directory or another of your choice. The default directory is C:\Program Files\tsp-client.

🐨 TSP Client Version 2.0 Setup	
Choose Install Location Choose the folder in which to install TSP Client Version 2.0.	
Setup will install TSP Client Version 2.0 in the following folder. To install in a differen click Browse and select another folder. Click Install to start the installation. Destination Folder	t folder,
C:\Program Files\tsp-client Brows	3
Space available: 4.2GB Nullsoft Install System v2.0 < <u>Back</u> Install	Cancel



Windows compatibility testing

Click "Continue Anyway" when prompted with the Windows compatibility testing dialog.

Hardwa	re Installation
!	The software you are installing for this hardware: Tun IPv6 Adapter has not passed Windows Logo testing to verify its compatibility with Windows XP. (Tell me why this testing is important.) Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the hardware vendor for software that has passed Windows Logo testing.
	Continue Anyway STOP Installation

Verify the install

Verify the install was completed successfully and close the installer.

🐨 TSP Client Version 2.0 Setup	
Installation Complete Setup was completed successfully.	
Completed	
Create folder: C:\Program Files\tsp-client\template Rename: C:\Program Files\tsp-client\windows.bat->C:\Program Files\tsp-client\t Rename: C:\Program Files\tsp-client\tspc.conf Rename: C:\DOCUME~1\JFTREM~1\LOCALS~1\Temp\nsv2A.tmp->C:\Program Created uninstaller: C:\Program Files\tsp-client\tunv6 Extract: tunv6.sys 100% Extract: tunv6.inf 100% Extract: devcon.exe 100% Execute: "C:\Program Files\tsp-client\tunv6\devcon.exe" install "C:\Program Files Completed	templ empl n Files
Nullsoft Install System v2.0	Cancel



TSP Client configuration

If you would like to use the service in authentication mode (with a registered account), you must edit the TSP Client configuration file. Using the authenticated mode allows you to always keep the same IPv6 address and prefix, even if your IPv4 address changes. An account may be created using the Freenet6 account creation page http://www.freenet6.net/register.shtml.

In the TSP Client directory (C:Program Files, tsp-client) double-click on the configuration file tspc.conf.



If the extension is not recognized by Windows, choose the "Select the program from a list option".

Windows	2 🔀			
Mine	dows cannot open this file:			
File:	tspc.conf			
To open this file, Windows needs to know what program created it. Windows can go online to look it up automatically, or you can manually select from a list of programs on your computer.				
What do you	i want to do?			
OUse the V	Veb service to find the appropriate program			
Select the	e program from a list			
	OK Cancel			

Then choose the WordPad program and make sure the "Always use the selected program to open this kind of file" is selected, then click "OK".

Ope	n With	? 🗙	
C	Choose the program you want to use to open this file:		
~	File: tspc.conf		
<u>⊢</u> <u>P</u> r	ograms		
	m Recommended Programs: WordPad Other Programs:		
	Adobe Photoshop		
	返 Creative MediaSource Player		
	🥭 Internet Explorer		
	📧 Microsoft Office Excel		
	Microsoft Office OneNote		
	🖾 Microsoft Office Picture Manager		
1	Type a description that you want to use for this kind of file:		
[Always use the selected program to open this kind of file		
	Browse		
If the program you want is not in the list or on your computer, you can <u>look</u> for the appropriate program on the Web.			
	OK Cance		

In the file, scroll down to the userid section. Then enter your username and your password.



If you wish to use a Migration Broker other than Freenet6, scroll down the configuration file and find the "server" item. Write the IPv4 address or the name of the Migration Broker as provided by your Internet Service Provider.



Save the configuration file and close it.



Running the TSP Client

To run the TSP Client, double-click on the executable file. A Windows command shell window appears. The window will stay visible if your PC is located behind a NAT device, since the client needs to keep the tunnel up actively in that case.

	-
1	
tspc.e	xe



Testing your IPv6 connection

Now that the tunnel has been created, let's verify if it works properly. In a normal environment, for example at home, it is possible to verify the tunnel works by connecting to an IPv6 service on the Internet. For example, when going to <u>www.hexago.com</u>, your IPv6 address will appear in the top bar. Also, the KAME logo, a turtle, on <u>www.kame.net</u>, would be dancing if IPv6 connectivity is available.



Another way to test your IPv6 connectivity is to ping the IPv6 endpoint of the tunnel.

Start a Windows command shell by going to the Start menu, than click on Run..., type cmd in the Run window and click "OK".

Run	? 🔀
-	Type the name of a program, folder, document, or Internet resource, and Windows will open it for you.
Open:	<u>rmd</u>
	OK Cancel <u>B</u> rowse

In the command window, type cd c:\Program Files\tsp-client

C:\WINDOWS\System32\cmd.exe	- 🗆 🗙
Microsoft Windows XP [Version 5.1.2600] (C) Copyright 1985-2001 Microsoft Corp.	^
C:\Documents and Settings\jftremblay>cd c:\Program Files\tsp-client	
	-

Type "netsh interface ipv6 show route" to display the IPv6 routes. The default route points on the broker endpoint of the tunnel, in this example <code>3ffe:bc0:8000::8</code>.

C:\Program Files\tsp-client>netsh interface ipv6 show route Querying active state...

Publish	Туре	Met	Prefix	Idx	Gateway/Interface Name
yes	Manual	0	::/0	11	3ffe:bc0:8000::8
no	Manual	0	3ffe:bc0:8000::8/128	11	Local Area Connection 15

Ping the tunnel endpoint. Use the "ping" command with the IPv6 address the broker endpoint. Note: the ping6 command may be used, but its use might be deprecated in the future. Using "ping" is suggested.

C:\Program Files\tsp-client>ping 3ffe:bc0:8000::8
Pinging 3ffe:bc0:8000::8 with 32 bytes of data:
Reply from 3ffe:bc0:8000::8: time=102ms
Reply from 3ffe:bc0:8000::8: time=102ms
Reply from 3ffe:bc0:8000::8: time=102ms
Ping statistics for 3ffe:bc0:8000::8:
 Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
 Minimum = 102ms, Maximum = 102ms, Average = 102ms

In this case, your IPv6 connectivity is working correctly.

For advanced troubleshooting and a complete list of errors, go on <u>www.hexago.com/support</u>.