## Windows 2000

Establishing a VPN Tunnel without Nortel

Access Products June 2002.



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#### **Introduction**

This document has been put together in response to customers requirements where conflicting 3<sup>rd</sup> party software does not allow the use of Nortel Extranet, provided for by Galileo Southern Cross when installing FocalPointNet.

This guide is intended as an aid for installing and configuring FocalpointNet single or multi user environment on a Windows 2000 Professional machine. This guide is in response to customer requests and does not constitute a released or supported product. The following documentation is based on internal testing at Galileo Southern Cross. These procedures may vary depending on individual site requirements and server administration differences.

This solution is not supported by Galileo Southern Cross Service Centre, and troubles experienced by users using this method of connectivity must understand that there is no service level agreement.

#### Requirements

The following hardware and networking must be installed and functioning before FocalpointNet is configured and installed:

•ISP access and Internet connectivity.

#### **IMPORTANT:**

Windows NT Administration password is required.

#### **Assumptions**

This guide is intended to document the process for installing VPN Connectivity, however, these procedures cannot duplicate the process that will be required for every installation. The following assumptions apply to this guide:

- 1. The user has already installed Focalpoint 3.50.21 and Wingate (if multi-user environment) and found that Nortel Extranet is incompatiable.
- 2. The drive locations will vary depending on your server environment. For this document, the following standards apply:
- Drive C designates the local drive of the W2K machine.
- Drive A designates the floppy drive.
- Drive D designates the CD-ROM drive.

#### Adding VPN account

ENSURE YOU ARE LOGGED IN AS THE ADMINISTRATOR

Right click on the My Network Places icon on your desktop and select properities,



Select the <u>Make New Connection</u> icon to launch the Network Connection Wizard as pictured next.

Network Connection Wizard	
	Welcome to the Network Connection Wizard Using this wizard you can create a connection to other computers and networks, enabling applications such as e-mail, Web browsing, file sharing, and printing. To continue, click Next.
	< Back Next > Cancel

Network Connection Wizard
Network Connection Type You can choose the type of network connection you want to create, based on your network configuration and your networking needs.
<ul> <li>Dial-up to grivate network         Connect using my phone line (modem or ISDN).     </li> <li>Dial-up to the Internet         Connect to the Internet using my phone line (modem or ISDN).     </li> <li>Connect to a private network through the Internet         Create a Virtual Private Network (VPN) connection or 'tunnel' through the Internet.     </li> <li>Accept incoming connections         Let other computers connect to mine by phone line, the Internet, or direct cable.     </li> <li>Connect directly to another computer         Connect using my serial, parallel, or infrared port.     </li> </ul>
< <u>B</u> ack <u>N</u> ext > Cancel

Select the 3<sup>rd</sup> Radio option, Connet to a private network through the internet, then select <u>next</u>

The Public Window displays next.

This screen will allow the opportunity to establish the ISP connection if no connection is present when connecting the VPN tunnel.

It is recommended that you change the default to "Do not dial the initial connection".

Network Connection Wizard			
Public Network Windows can make sure the public network	is connected f	irst.	Ì
Windows can automatically dial the initial co network, before establishing the virtual conn	nnection to the lection.	Internet or other pu	ıblic
Do not dial the initial connection.			
C Automatically dial this initial connection	on:		
I			<b>Y</b>
	< <u>B</u> ack	<u>N</u> ext >	Cancel

The default is the lower radio button.

B Change this to the UPPER radio button then select <u>next</u>.

The Destination Address window will display.

Network Connection Wizard	
Destination Address What is the name or address of the destination?	Ð
Type the host name or IP address of the computer or network to which you are connecting.	
Host name or IP address (such as microsoft.com or 123.45.6.78):	
FPNETPPTP.GALILEO,COM	
,	
< <u>B</u> ack <u>N</u> ext > Cancel	

<b>Type FPNETPPTP.GALILEO.COM</b>	
and then select <u>next</u> .	

Network Connection Wizard			
Connection Availability You may make the new connection available to all users, or just yourself.			
You may make this connection available to all users, or keep it only for your own use. A connection stored in your profile will not be available unless you are logged on.			
Create this connection: For all users Dnly for myself			
< <u>B</u> ack <u>N</u> ext > Cancel			
Select "For all users" and then select <u>Next</u>			

The Completing the Network Connection Wizard window will display next.

Network Connection Wizard	
Ś	Completing the Network Connection Wizard
	_ype the name you want to use for this connection:
	Galileo VPN
	To create this connection and save it in the Network and Dial-up Connections folder, click Finish. To edit this connection in the Network and Dial-up Connections folder, select it, click File, and then click Properties.
	Add a shortcut to my desktop
	< <u>B</u> ack Finish Cancel



Connect Galilee	o VPN	<u>?</u> ×
		N Y
<u>U</u> ser name:	Administrator	
Password:		
	Save Password	
<u>C</u> onnect	Cancel Properties	<u>H</u> elp

### Customising the VPN Properities

Having ended the wizard this screen will automatically display.



Select the Networking Tab	
Galileo VPN ? X	
General Options Security Networking Sharing	
Type of VPN server I am calling:	
Automatic	
<u>S</u> ettings	
Components checked are used by this connection:	
Internet Protocol (1 CPAP)     E is and Printer Sharing for Microsoft Networks	
Client for Microsoft Networks	
Install Uninstall Properties	
- Description	
Transmission Control Protocol/Internet Protocol. The default	
wide area network protocol that provides communication	
OK Cancel	

Ensure INTERNET PROTOCOL (TCP/IP) is highlight then



Internet Protocol (TCP/IP) Prope	rties <b>?</b> X
General	
You can get IP settings assigned at supports this capability. Otherwise, administrator for the appropriate IP s	utomatically if your network you need to ask your network settings.
Obtain an IP address automat	ically
C Use the following IP address:	
[P address:	
Obtain DNS server address and C Use the following DNS server     Preferred DNS server:	addresses:
Alternate DNS server:	
	Ad <u>v</u> anced
	OK Cancel

The above dialogue box will display.

Ensure that the two default options are set to obtain automatically.



Advanced TCP/IP Settings	? ×
General DNS WINS Options	
This checkbox only applies when you are connected to a local network and a dial-up network simultaneously. When checked, data that cannot be sent on the local network is forwarded to the dial-up network.	
✓ Use default gateway on remote network	
OK Car	ncel

The Advanced TCP/IP Settings window will display and it will default with the check box for "Use default gateway on remote network" selected.

Uncheck this option and click OK

This window will redisplay.

Galileo ¥PN		<u>? ×</u>
General Options Security	Networking St	naring
Type of VPN server I am cal	lling:	
Automatic	-	
		<u>S</u> ettings
Components checked are u	sed by this conne	ction:
<ul> <li>✓ ↓ Internet Protocol (T(</li> <li>✓ ↓ File and Printer Shar</li> <li>✓ □ Client for Microsoft N</li> </ul>	CP/IP) ing for Microsoft N Vetworks	letworks
Install	<u>U</u> ninstall	Properties
Description Transmission Control Prot wide area network protoc across diverse interconne	ocol/Internet Prot ol that provides ca octed networks.	ocol. The default ommunication
	0	K Cancel

🔜 Click OK	
Connect Galileo VPN ?X	
User name: Administrator	
Password:	
Save Password	
<u>Connect</u> Cancel Pr <u>o</u> perties <u>H</u> elp	

This window will redisplay.

# Setting the Galileo Userid & Password

Galileo Southern Cross will allocate a Client ID, which is also the User name and a Galileo Terminal ID (GTID), which is also the password. These fields are case sensitive and must be in UPPER case.

Connect Galileo	D VPN	? ×
		P P
<u>U</u> ser name:	Administrator	
Password:		
	Save Password	
<u>C</u> onnect	Cancel Properties	<u>H</u> elp

Jype your client id and GTID in upper case

In this example the Client ID is G0082880. The Password will always appear as asterixs.

Connect Galileo	VPN		<u>? ×</u>
		A	Ž.
<u>U</u> ser name:	G0082880		
<u>P</u> assword:	*****		
	🔲 <u>S</u> ave Passv	vord	
<u>C</u> onnect	Cancel	Pr <u>o</u> perties	Help

**Default VPN Properities** 

The following screen shots are of all other settings in the VPN properties.

In testing these settings were found to be the defaults and therefore should not need to be changed.

ileo ¥PN	Galileo VPN Properties         ?!
eneral Options Security Networking Sharing	General Options Security Networking Sharing
Dialing options         Image: State options         Image: State option options         Image: State option options         Redialing options         Bedial attempts:         Image: State option option options         Image: State option option option         Image: State option         I	Internet Connection Sharing allows other computers on your local network to access external resources through this connection.     Shared access     Local network operation may be momentarily disrupted.     Enable Internet Connection Sharing for this connection     Gridemand dialing.     With on-demand dialing. When another computer on your local network, attempts to access external resources, this connection will be diaded automatically.     If Enable on-demand dialing
OK	Settings
ileo ¥PN	Galileo VPN     ?
ileo YPN ieneral   Options   Security   Networking   Sharing	General Options Security Networking Sharing
ileo VPN ieneral Options Security Networking Sharing Security options (* Typical (recommended settings)	Galileo VPN     General Options Security Networking Sharing     Type of VFN server I am calling:     Autoratio
ileo VPN ieneral   Options Security   Networking   Sharing   Security options (◦ <u>Tupical (recommended settings)</u> ⊻alidate my identity as follows:	Gatileo VPN     General Options Security Networking Sharing     Type of VPN server I am calling:     Automatic
ileo VPN Seneral Options Security Networking Sharing Security options C Typical (recommended settings) Validate my identity as follows: Require secured password	Calified VPN     Calified
ileo VPN Seneral   Dptions Security   Networking   Sharing   Security options	Components checked are used by this connection:
ileo VPN ieneral Options Security Networking Sharing Security options	
Ieo VPN ieneral Options Security Networking Sharing Security options	
ileo VPN Security Options Security Networking Sharing Security options	Components checked are used by this connection:  Components checked are used by this
ileo VPN  Security options  Curve option  Curve op	Calified VPN     2       General     Options       Security     Networking       Sharing     Type of VPN server I am calling:       Automatic     Settings       Components checked are used by this connection:     Settings
ileo VPN Security options Security Networking Sharing Guity options Cyalidate my identity as follows: Require secured password Automatically use my Windows logon name and password (and domain if any) V Require data encryption (disconnect if none) Agvanced (custom settings) Using these settings requires a knowledge Setting of security protocols.	Components checked are used by this connection:  Components checked are used by this
ileo VPN Security Options Security Networking Sharing Guity options Cylical (recommended settings) Validate my identity as follows: Require secured password Automatically use my Windows logon name and password (and domain if any) V Require data encryption (disconnect if none) Advanced (custom settings) Using these settings requires a knowledge Setting of security protocols.	Calified VPN Cali
ileo VPN Security Options Security Networking Sharing Guity options Cylical (recommended settings) Validate my identity as follows: Require secured password Automatically use my Windows logon name and password (and domain if any) V Require data encryption (disconnect if none) Advanced (custom settings) Using these settings requires a knowledge Settin of security protocols.	Calified VPN Cali
ileo VPN Security options Security Networking Sharing Cuty options Cuty option Cut	Califico VPN     ?       General Options Security Networking Sharing       Type of VPN server I am calling:       Automatic       Settings       Components checked are used by this connection:       Settings       Client for Microsoft Networks       Settings       Install.       Uninstall       Properties       Description       Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication
ileo VPN Seneral Options Security Networking Sharing Security options C Typical (recommended settings) Validate my identity as follows: Require secured password Automatically use my Windows logon name and password (and domain if any) ✓ Require data encryption (disconnect if none) Advanced (custom settings) Using these settings requires a knowledge Settin of security protocols.	Sector     One     Califico VPN     ?       Ceneral     Options     Security     Networking       Type of VPN server I am calling:     Automatic     *       Sector     Sector     *
ileo VPN  Security options Security Networking Sharing  Security options  Curity options  Validate my identity as follows:  Require secured password  Automatically use my Windows logon name and password (and domain if any)  Require data encryption (disconnect if none)  Advanced (custom settings) Using these settings requires a knowledge Setting  Sett	Components checked are used by this connection:  Install  Description  Transmission Control Protocol/Internet Protocol. The default we are network protocol that provides communication across diverse interconnected networks.



## Connecting the VPN

Display the Galileo VPN icon by right clicking on My Network places and selecting properties.

📴 Network and Dial-up Connections				J	- 🗆 🗵
<u>File E</u> dit <u>V</u> iew F <u>a</u> vorites <u>T</u> ool	s Adva <u>n</u> ce	d <u>H</u> elp			-
📙 🖨 Back 🔻 🔿 👻 💽 🛛 🔞 Search	🔁 Folders	🕃 History 🛛 🖗	$1$ $\times$ $\times$ $1$	Ω   ≣∙	
Address 🔁 Network and Dial-up Conne	ections			•	∂G0
	B Make New	L 🚣 L Local Area	L 🏈	Galileo VPN	
Network and Dial- up Connections	Connection	Connection			
Galileo ¥PN					
Type: Virtual Private Network Connection					
Status: Disconnected					
1 object(s) selected					11.

You may also have a shortcut on your desktop as per the wizard step mentioned on page 10.

🔲 Click on the Galileo VP	'N icon
Connect Galileo ¥PN	?×



The following will appear during the connection process.

Connecti	ng Galileo ¥PN
	Connecting to FPNET.GALILEO.COM
	Cancel
Connecti	ng Galileo ¥PN
	Registering your computer on the network
	Cancel
-	
Connecti	ng Galileo ¥PN
	Verifying username and password
	Cancel

When the connection is successful it will minimise itself onto the task bar.

Care should be taken when troubleshooting as this icon will look the same as the bigpond icon and the eternet card icon.

Floating your mouse over the icons will display which is which.



#### **Route Add Statement**

Display your IP addresses via the command prompt

C:\WINNT\System32\cmd.exe
C:\>IPCONFIG
Windows 2000 IP Configuration
Ethernet adapter {80E3A116-1EBB-4B32-991F-531FF34E8093}:
Connection-specific DNS Suffix . : IP Address 0.0.0.0 Subnet Mask 0.0.0.0 Default Gateway
Ethernet adapter Local Area Connection:
Media State : Cable Disconnected
PPP adapter Galileo VPN:
Connection-specific DNS Suffix . : IP Address : 172.20.51.210 Subnet Mask : 255.255.255.255 Default Gateway :

The PPP Adapter Galileo VPN IP address will display.

Galileo will advise your IP address.

In the above example 172.20.51.210 has been allocated to the machine.

If the IP address that is allocated to yourself is 172.20.X.X then you can ignore the rest of this chapter.

If your IP address is 172.21.0.0 or higher you will need to add a route command to your machine.

In the above example the IP address allocated by the Galileo VPN is 172.21.80.111. As this is higher than 172.21.0.0 a ROUTE ADD command needs to be added.





Refer http://support/APS/files/1%20KnowledgeBase/KBx%20-%20FPN%20New%20DB%20with%20PPTP/APISD-FPN%20NewDB%20with%20PPTP.htm

The /p will make this entry permanent and therefore only needs to be done once.

The GALILEO VPN connection must be connected when making this entry.