Congratulations on your purchase of the
Titan USB-USB Network Adapter. This unique
adapter allows you to easily construct a
network via USB port and share all the resource
such as files, printers peripheral equipment,
and more.

Package Checklist

The product package of the USB-USB Network Adapter includes the following items:

- USB-USB Network Adapter
- Two USB cables, 1.8m each
- Driver Installation Diskette
- This user's manual

Overview

The USB-USB Network Adapter provides a quick and easy solution to network up to 17 USB computers via hot Plug & Play technology without adding any Network Interface Cards. It is suitable for small offices, home offices, mobile users, and network gamers. With the USB-USB Network Adapter, users can play multi-player games, share files, printers, peripheral equipment, and more.

Features

The USB-USB Network Adapter provides the following features:

- USB host to host communication
- Single cable solution for network communication
- Standard Windows Explorer user interface
- Maximum Data transfer rate: Over 5 Mbps
- Construct USB Network up to 17 PCs
- Power management: current reduces to 450μA at suspend mode
- Sharing resources, such as Printers, CD-ROMs, Modems, Scanners, etc.
- Support TCP/IP, NetBEUI, IPX/SPX protocols
- Full NDIS driver implementation
- No external power needed
- Compliant with USB specification version 1.1
- USB full speed connection

- Support Windows 98 Second Edition, Windows Millennium Edition and Windows 2000 Professional Edition
- Hot PnP for easy use
- Suitable for SOHO and mobile network environment

System Requirements

Before you use the USB-USB Network Adapter, make sure your computer is an IBM PC-compatible PC with the following minimum system requirements:
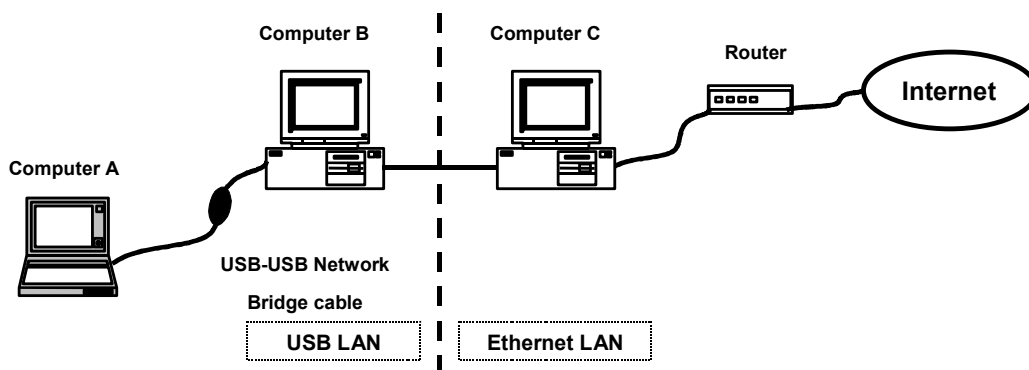
- Intel-compatible 486DX4-100 MHz CPU or higher
- One standard USB port (4-pin) and has the symbol ⬦⟵⟶
- Windows 98 Second Edition or higher

Driver Installation

Before you start installing the driver, please don't plug your USB-USB Network Bridge Cable into the USB port of your computer. Follow the steps below to install the USB-USB Network Adapter driver:

1. Power on the computers where you will connect USB-USB Network Adapter Cable and make sure that the USB port is enabled and working properly.
2. Insert the USB-USB Network Adapter driver diskette into the floppy disk drive and run the Setup program inside the driver diskette.
3. The InstallShield Wizard will guide you step-by-step to complete the installation process.
4. In Choose Destination Location Window, you can either install USB-USB Network Bridge driver to C:\program files\ USB-USB Network Bridge Driver V1.5.0.0 or you can install it to the specified directory you want. Click NEXT.
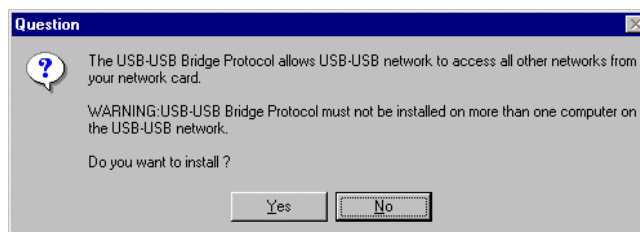5. Bridge Driver Installation: (USB LAN Access Internet via Ethernet LAN)

    With USB-USB Network Adapter cable, you can access Internet via Ethernet LAN. We have to construct an USB LAN and an Ethernet LAN environment, as the diagram shows below:

Computer B   **Computer C**   **Router**   **Internet**

Computer A

USB-USB Network
Bridge cable

| USB LAN | Ethernet LAN |

Network Construction

-Computer A: Connects Computer B with USB-USB Network Adapter cable.

-Computer B: The Bridge Computer that connects Computer A through USB-USB Network Adapter cable and connects Computer C with an Ethernet Adapter.

-Computer C: One PC of the Ethernet LAN connects Computer B with an Ethernet Adapter and can access the Internet directly.
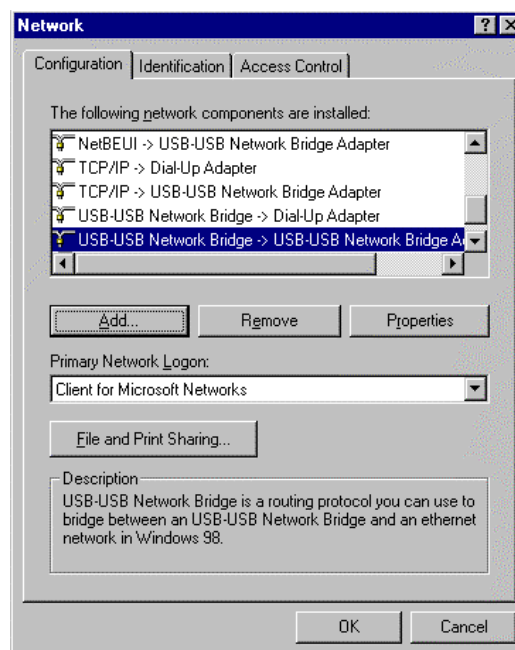
Take this Network Construction above as an example, Computer B has to be the Bridge Computer, and it needs Bridge Driver while installing. The InstallShield Wizard will pop-up a Question Window as follows:
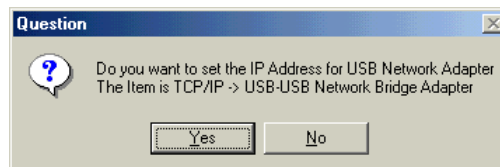

■ Computer B: It has to be the Bridge Computer, you must click "Yes".
■ Computer A: You have to click "No".

Important: Because this "USB-USB Bridge Protocol" must not be installed on more than one computer in the USB LAN. That is, In a USB LAN, only one computer can click "Yes" (to be the Bridge one), and the others must click "No".
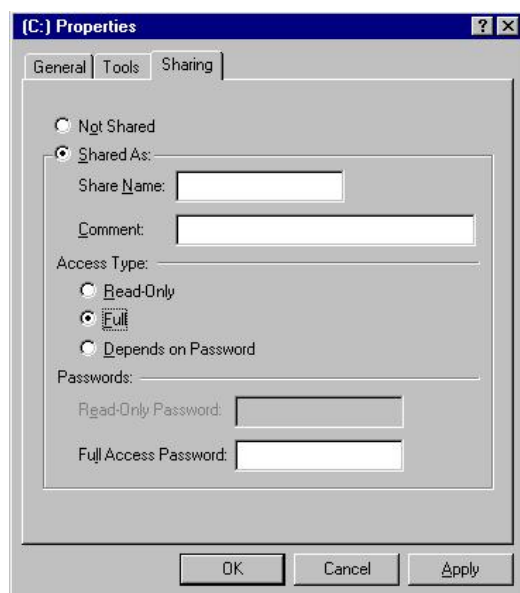
After you install this Bridge Driver on Computer B, there will be one more protocol: USB-USB Networking Bridge in the Network Configuration. This is a routing protocol, you can use it to bridge between an USB LAN and an Ethernet LAN.

6.   During the installations, the system may ask you to insert the Windows 98 CD-ROM, please insert your Windows 98 CD-ROM into your CD-ROM drive then click OK.
7.   If the system cannot find any files, please direct to your CD-ROM drive and click OK.
8.   The system will pop up a question window to ask you if you would like to set up IP address for USB Network Adapter. You could set I up now or choose to do it later. Regarding the settings, please refer to "Advanced Network Function: Communication between USB LAN and Ethernet (IP/Modem Sharing" section.

9. The system will ask you to reboot the computer when the installation is complete. Please remove the diskette from your floppy disk drive, connect the USB-USB Network Bridge cable and restart Windows system.

10. Since USB-USB Network Bridge Driver V1.5.0.0 has finished installing the network driver during the installation, your USB network environment is set up automatically when the installation is complete. Now you can see all the computers in your network in Network Neighbourhood and you can share programs, files and other peripheral devices through the standard Windows interfaces, e.g. Windows Explorer and Network Neighbourhood.

11. To start sharing the resources, please follow the instructions below. Click the Start menu, point to Programs\Windows Explorer.
   a. Expand the desktop and select the drive, folder, file or printer you want to share.
   b. Right click on the resource.
   c. Select Sharing.
   d. Select Shared As and enter the Shared Name to be recognized by other computers.
   e. Select an access type. For example, choose Full to give the complete access right to this resource or Read-Only to give others the read-only right to the resource.
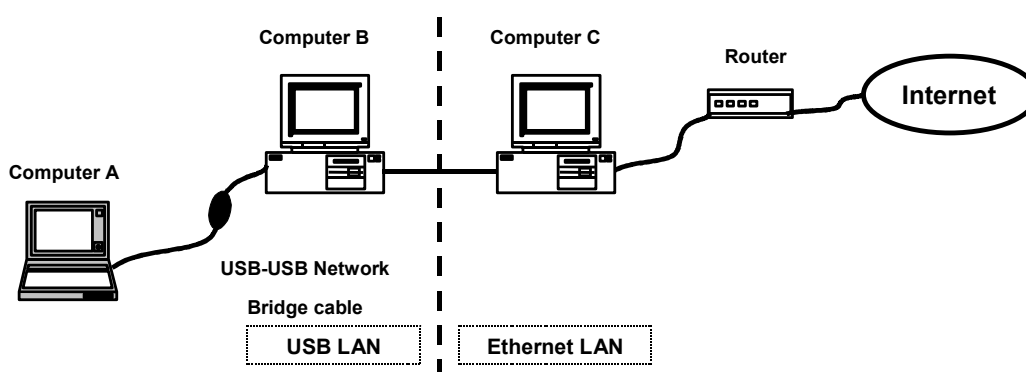   f. Click OK.

Advanced Network Function: Communication between USB LAN and Ethernet (IP/Modem Sharing)

Definition:

With USB-USB Network Bridge cable, you can access Internet via Ethernet. Take this diagram as an example again:
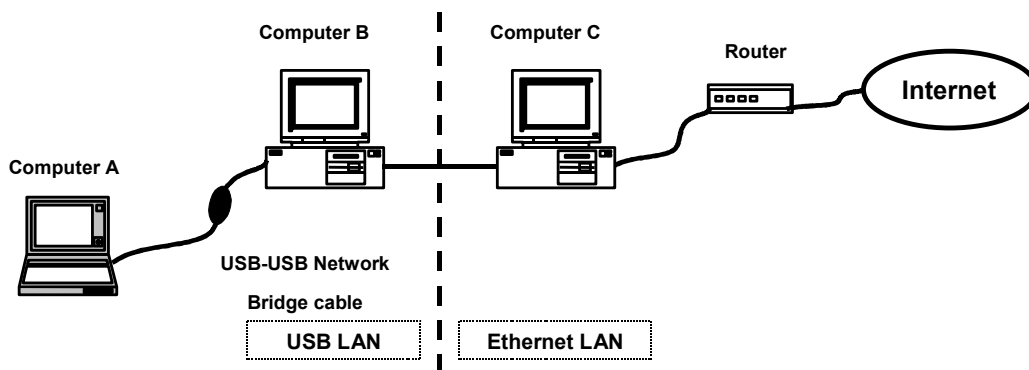

Network Construction

-Computer A: Connects Computer B with USB-USB Network Bridge cable.

-Computer B: The Bridge Computer that connects Computer A through USB-USB Network Bridge cable and connects Computer C with an Ethernet Adapter.

-Computer C: One PC of the Ethernet LAN, connects Computer B with an Ethernet Adapter and can access the Internet directly.

Part 1: USB to Ethernet

This function allows you to access the resource of Ethernet.

Installed Items description:

Computer A:

    a. **USB-USB Network Bridge Driver V1.5.0.0 (When installing "USB-USB Bridge Protocol", please press "No").**

    b. **"NetBEUI" protocol, keep all the settings as default value.**

    c. **Computer Name: Please use an unique one.**

    d. **Workgroup: Please make sure the group name is the same as the computers in the Ethernet.**

    e. **"File and printer sharing service for Microsoft Networks" should be installed.**

Computer B:

    a. **USB-USB Network Bridge Driver V1.5.0.0 (When installing "USB-USB Bridge Protocol", please press "Yes").**

    b. **"NetBEUI-> LAN Card" protocol, keep all the settings as default value.**

    c. **"NetBEUI-> USB-USB Network Bridge Adapter" protocol, keep all the settings as default value.**

    d. **Computer Name: Please use an unique one.**

    e. **Workgroup: Please make sure the group name is the same as the computers in the Ethernet.**
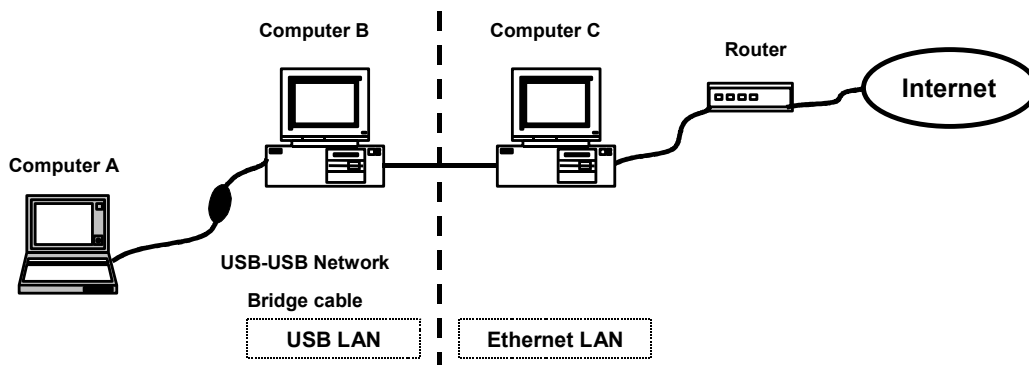
f. **"File and printer sharing service for Microsoft Networks" should be installed.**

After these items above are installed, Computer A can:

(1) **See all the computers in your network(USB LAN and Ethernet) in Network Neighbourhood.**

(2) **Share programs, files and other peripheral devices through the standard Windows interfaces, e.g. Windows Explorer and Network Neighbourhood.**

Part 2: USB to Internet via Ethernet (Use Real IP Address)

This function allows you to access Internet via Ethernet, the operating condition is that every computer has an unique IP Address in the Network (USB LAN and Ethernet).

Computer B   Computer C   Router   Internet

Computer A

USB-USB Network

Bridge cable

USB LAN   Ethernet LAN

Installed Items description:

Computer A:

a. **USB-USB Network Bridge Driver V1.5.0.0 (When installing "USB-USB Bridge Protocol", please press "No").**

b. **"NetBEUI" protocol, keep all the settings as default value.**

c. **"TCP/IP-> USB-USB Network Bridge Adapter" protocol, choose "Specify an IP Address", fill in an unique IP Address and Subnet Mask of the**

Ethernet. Press "WINS Configuration", select "Disable WINS Resolution". Press "Gateway", fill in the Gateway address of the Ethernet.

d. **Computer Name: Please use an unique one.**

e. **Workgroup: Please make sure the group name is the same as the computers in the Ethernet.**

f. **"File and printer sharing service for Microsoft Networks" should be installed.**

Computer B:

a. **USB-USB Network Bridge Driver V1.5.0.0 (When installing "USB-USB Bridge Protocol", please press "Yes").**

b. **"NetBEUI-> LAN Card" protocol, keep all the settings as default value.**

c. **"NetBEUI-> USB-USB Network Bridge Adapter" protocol, keep all the settings as default value.**

d. **"TCP/IP-> LAN Card" protocol, choose "Specify an IP Address", fill in an unique IP Address and Subnet Mask of the Ethernet. Press "WINS Configuration", select "Disable WINS Resolution". Press "Gateway", fill in the Gateway address of the Ethernet.**

e. **"TCP/IP-> USB-USB Network Bridge Adapter" protocol, keep all the settings as default value.**

f. **Computer Name: Please use an unique one.**

g. **Workgroup: Please make sure the group name is the same as the computers in the Ethernet.**

h. **"File and printer sharing service for Microsoft Networks" should be installed.**

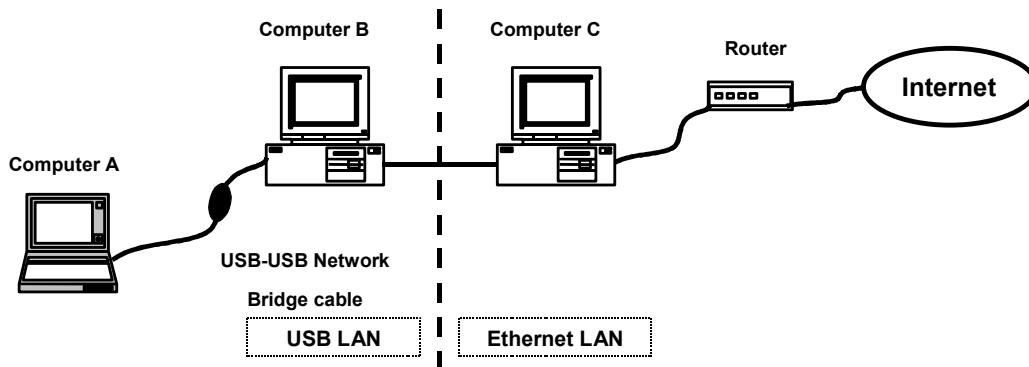Note: "LAN Card" is the "Network Adapter" , ex. "Intel 21140 based 10/100 mbps Ethernet Controller".

After these items above are installed, Computer A can:

(1) **See all the computers in your network(USB LAN and Ethernet) in Network Neighbourhood.**

(2) **Share programs, files and other peripheral devices through the standard Windows interfaces, e.g. Windows Explorer and Network Neighbourhood.**

(3) **Execute all the applications on Internet (WWW, Email, FTP, Telnet, Gopher… etc.).**

Part 3: USB to Internet via Ethernet (Use "Internet Connection Sharing" Service)

This function allows you to access Internet via Ethernet, the operating condition is:

(1) OS: Windows 98 Second Edition (Provide"Internet Connection Sharing" service).

(2) Bridge computer (Computer B) has an IP Address to access Internet.

Installed Items description:

Computer A:

> a. **USB-USB Network Bridge Driver V1.5.0.0 (When installing "USB-USB Bridge Protocol", please press "No").**
>
> b. **"NetBEUI" protocol, keep all the settings as default value.**
>
> c. **"TCP/IP-> USB-USB Network Bridge Adapter" protocol, press "IP Address", select "Obtain an IP address automatically". Press "WINS Configuration", select "Use DHCP for WINS Resolution". Press "Gateway", Empty the Gateway address.**
>
> d. **Go to "Control Panel", select "Internet", choose "Connections", press "LAN settings". In "Automatic configuration", enable "Automatically detect settings" and keep other settings empty.**
>
> e. **Computer Name: Please use an unique one.**
>
> f. **Workgroup: Please make sure the group name is the same as the computers in the Ethernet.**

g. **"File and printer sharing service for Microsoft Networks" should be installed.**

Computer B:

a. **USB-USB Network Bridge Driver V1.5.0.0 (When installing "USB-USB Bridge Protocol", please press "Yes").**

b. **"NetBEUI-> LAN Card" protocol, keep all the settings as default value.**

c. **"NetBEUI-> USB-USB Network Bridge Adapter" protocol, keep all the settings as default value.**

d. **"TCP/IP-> LAN Card" protocol, choose "Specify an IP Address", fill in an unique IP Address and Subnet Mask of the Ethernet. Press "WINS Configuration", select "Disable WINS Resolution". Press "Gateway", fill in the Gateway address of the Ethernet.**

e. **"TCP/IP-> USB-USB Network Bridge Adapter" protocol, keep all the settings as default value.**

f. **Go to "Control Panel", select "Add/Remove Programs", press "Windows Setup", choose "Internet tools" and enable "Internet Connection Sharing" item. Follow the Setup procedure to complete the installation: When Installing "Internet Connection", choose "LAN Card, Ex. Intel 21140 based 10/100 mbps Ethernet Controller". When Installing "Local Connection", choose "USB-USB Network Bridge Adapter".**

g. **After re-start Windows, "Internet Connection Sharing" will setup all the other Network configuration properly. That is, keep all the Network Protocol settings as default value.**

h. **Go to "Control Panel", select "Internet", choose "Connections", press "LAN settings". In "Automatic configuration", enable "Automatically detect settings" and keep other settings empty.**

i. **Computer Name: Please use an unique one.**

j. **Workgroup: Please make sure the group name is the same as the computers in the Ethernet.**

k. **"File and printer sharing service for Microsoft Networks" should be installed.**

Make sure:

(1) The USB-USB Network Bridge Cable has been connected on Computer A and Computer B properly.

(2) Turn on Computer B first, after logging on the Ethernet, then turn on Computer A.
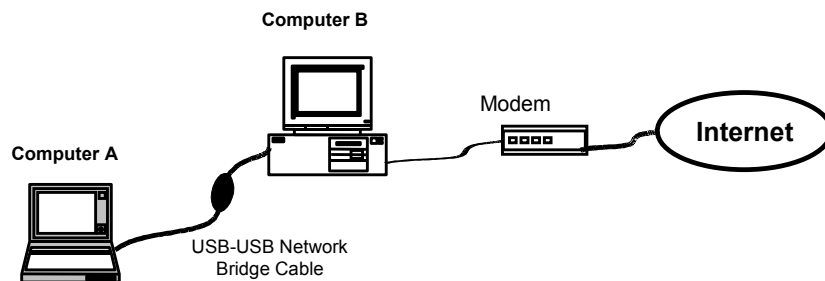
After these items above are installed, Computer A can:

(1) **See all the computers in your network(USB LAN and Ethernet) in Network Neighbourhood.**

(2) **Share programs, files and other peripheral devices through the standard Windows interfaces, e.g. Windows Explorer and Network Neighbourhood.**

(3) **Execute all the applications on Internet (WWW, Email, FTP, Telnet, Gopher… etc.).**

Part 4: USB to Internet via Modem (Use Wingate, Sygate IP Sharing Software)

This function allows you to access Internet via Ethernet, the operating condition is:

(1) **Modem, for Internet connection of Bridge Computer (Computer B).**

(2) **Wingate, or Sygate IP Sharing Software.**

Installed Items description:

Computer A:

a. **USB-USB Network Bridge Driver V1.5.0.0 (When installing "USB-USB Bridge Protocol", please press "No").**

b. **"NetBEUI" protocol, keep all the settings as default value.**

c. **"TCP/IP-> USB-USB Network Bridge Adapter" protocol, choose "Specify an IP Address", fill in an Intranet IP Address(Ex. 192.168.1.2) and Subnet Mask(255.255.255.0). Press "WINS Configuration", select "Disable WINS Resolution". Press "Gateway", fill in: 192.168.1.1(Computer B).**

d. **Go to "Control Panel", select "Internet", choose "Connections", press "LAN settings". In "Automatic configuration", enable "Automatically detect settings" and keep other settings empty.**

e. **Computer Name: Please use an unique one.**

f. **Workgroup: Please make sure the group name is the same as Computer B.**

g. **"File and printer sharing service for Microsoft Networks" should be installed.**

h. **Wingate Client Service.**

Computer B:

a. **USB-USB Network Bridge Driver V1.5.0.0 (When installing "USB-USB Bridge Protocol", please press "Yes").**

b. **"NetBEUI-> Dial-Up Adapter" protocol, keep all the settings as default value.**

c. **"NetBEUI-> USB-USB Network Bridge Adapter" protocol, keep all the settings as default value.**

d. **"TCP/IP-> Up-Up Adapter" protocol, press "IP Address", select "Obtain an IP address automatically". Press "WINS Configuration", select "Disable WINS Resolution". Press "Gateway", Empty the Gateway address.**

e. **"TCP/IP-> USB-USB Network Bridge Adapter" protocol, choose "Specify an IP Address", fill in an Intranet IP Address(192.168.1.1) and Subnet Mask(255.255.255.0). Press "WINS Configuration", select "Disable WINS Resolution". Press "Gateway", Empty the Gateway address.**

f. **Go to "Control Panel", select "Internet", choose "Connections", press "LAN settings". In "Automatic configuration", enable "Automatically detect settings" and keep other settings empty.**

g. **Computer Name: Please use an unique one.**

h. **Workgroup: Please make sure the group name is the same as the Computer A.**

i. **"File and printer sharing service for Microsoft Networks" should be installed.**

j. **Wingate Server, enable all binding service of Internet connections. (Please refer to the Manual of Wingate.)**

Make sure:

(1) **The USB-USB Network Bridge Cable has been connected on Computer A and Computer B properly.**

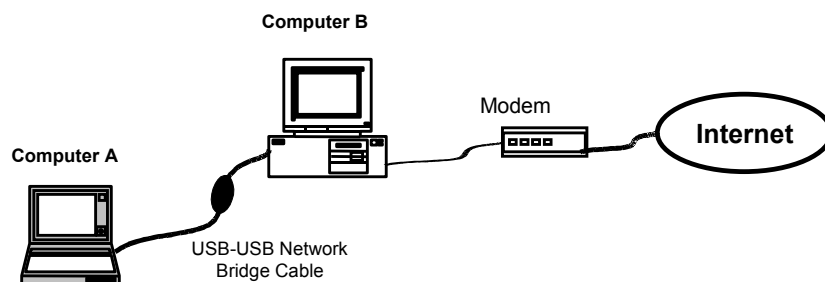(2) **Computer B can dial up with Modem and connect Internet properly.**

After these items above are installed, Computer A can:

(1) **See all the computers in your network(USB LAN) in Network Neighbourhood.**

(2) **Share programs, files and other peripheral devices through the standard Windows interfaces, e.g. Windows Explorer and Network Neighbourhood.**

(3) **Execute all the applications on Internet (WWW, Email, FTP, Telnet, Gopher… etc.).**

Part 5: USB to Internet via Modem (Use "Internet Connection Sharing" Service)

This function allows you to access Internet via Ethernet, the operating condition is:

(1) **Modem, for Internet connection of Bridge Computer (Computer B).**

(2) **OS: Windows 98 Second Edition (Provide"Internet Connection Sharing" service).**

Installed Items description:

Computer A:

a. **USB-USB Network Bridge Driver V1.5.0.0 (When installing "USB-USB Bridge Protocol", please press "No").**

b. **"NetBEUI" protocol, keep all the settings as default value.**

c. **"TCP/IP-> USB-USB Network Bridge Adapter" protocol, press "IP Address", select "Obtain an IP address automatically". Press "WINS Configuration", select "Use DHCP for WINS Resolution". Press "Gateway", Empty the Gateway address.**

d. **Go to "Control Panel", select "Internet", choose "Connections", press "LAN settings". In "Automatic configuration", enable "Automatically detect settings" and keep other settings empty.**

e. **Computer Name: Please use an unique one.**

f. **Workgroup: Please make sure the group name is the same as the Computer B.**

g. **"File and printer sharing service for Microsoft Networks" should be installed.**

Computer B:

a. **USB-USB Network Bridge Driver V1.5.0.0 (When installing "USB-USB Bridge Protocol", please press "Yes").**

b. **"NetBEUI-> Up-Up Adapter" protocol, keep all the settings as default value.**

c. **"NetBEUI-> USB-USB Network Bridge Adapter" protocol, keep all the settings as default value.**

d. **"TCP/IP-> Up-Up Adapter" protocol, press "IP Address", select "Obtain an IP address automatically". Press "WINS Configuration", select "Disable WINS Resolution". Press "Gateway", Empty the Gateway address.**

e. **"TCP/IP-> USB-USB Network Bridge Adapter" protocol, keep all the settings as default value.**

f. **Go to "Control Panel", select "Add/Remove Programs", press "Windows Setup", choose "Internet tools" and enable "Internet Connection Sharing" item. Follow the Setup procedure to complete the installation: When Installing "Internet Connection", choose "Up-Up Adapter". When**

Installing "Local Connection", choose "USB-USB Network Bridge Adapter".

g. After re-start Windows, "Internet Connection Sharing" will setup all the other Network configuration properly. That is, keep all the Network Protocol settings as default value.

h. Go to "Control Panel", select "Internet", choose "Connections", press "LAN settings". In "Automatic configuration", enable "Automatically detect settings" and keep other settings empty.

i. Computer Name: Please use an unique one.

j. Workgroup: Please make sure the group name is the same as the Computer A.

k. "File and printer sharing service for Microsoft Networks" should be installed.

Make sure:

(1) The USB-USB Network Bridge Cable has been connected on Computer A and Computer B properly.

(2) Computer B can dial up with Modem and connect Internet properly.

After these items above are installed, Computer A can:

(1) See all the computers in your network(USB LAN and Ethernet) in Network Neighbourhood.

(2) Share programs, files and other peripheral devices through the standard Windows interfaces, e.g. Windows Explorer and Network Neighbourhood.

(3) Execute all the applications on Internet (WWW, Email, FTP, Telnet, Gopher… etc.).
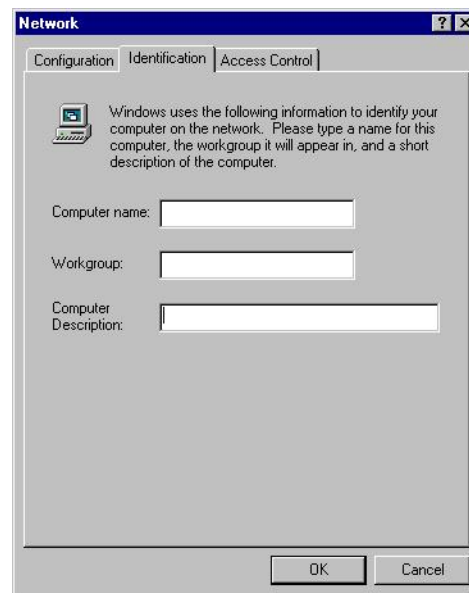
Driver Uninstallation
Follow the steps below to remove the USB-USB Network Bridge driver from Windows system:
1. Click the Start menu, point to Setting\Control Panel. Double click Add/Remove Programs icon.
2. In Install/Uninstall tab, select USB-USB Network Bridge Driver V1.5.0.0.
3. Click Add/Remove button and then click OK.
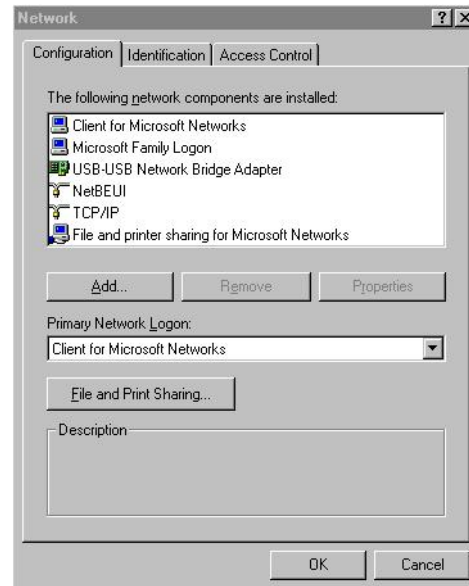4. Restart Windows system.

Troubleshooting

If you have successfully installed the driver, but can't see either your or the other computers' names in Window's Network Neighbourhood, please check the following points.

1. Make sure the USB-USB Network Bridges Cables are firmly connected to the USB ports of your computers or USB hubs.
2. Click the **Start** menu, point to **Setting\Control Panel**. Double click **Network** icon. In **Identification** tab, ensure each computer has been given a unique name, not to conflict with each other. Make sure the **Workgroup** name is the same for all the computers in the network.

3. In **Configuration** tab, check the **USB-USB Network Bridge Adapter** is in **The following network compenents are installed** list.

4. In **Configuration** tab, click **File and Print Sharing** button. Make sure both **I want to be able to give others access to my files** and **I want to be able to allow others to print to my printer(s)** functions are selected. It would cause the **File and printer sharing for Microsoft networks service** be installed and enable this computer to share its files and printers to the others.

Network	? X
Configuration	Identification	Access Control

The following network components are installed:

- Client for Microsoft Networks
- Microsoft Family Logon
- USB-USB Network Bridge Adapter
- NetBEUI
- TCP/IP
- File and printer sharing for Microsoft Networks

Add... | Remove | Properties

Primary Network Logon:

Client for Microsoft Networks

File and Print Sharing...

Description

OK | Cancel

After checking all these points, if the network is still not working properly, please contact your supplier instead of revising the settings by yourself unless you are an expert network user.