

# PcHelpWare Version 1.0

## Direct Connect Instructions

PcHelpWare is the newest release from the group that developed UltraVNC.

The current version of PcHelpWare can be downloaded by visiting the following link:  
[www.pchelpware.com](http://www.pchelpware.com)

The downloaded file is a zip file and must be unzipped. The uncompressed files and folders will be saved in a folder named PcHelpWare.

The newly created PcHelpWare folder will contain the following sub-folders:

**connections:** This folder is used to save the Viewer profiles you will create.

**myservers:** In this folder you find the generated Server exe files, each in its own sub-folder that will have the same name as the Viewer profile that generated them. The folder will be empty until you create Profiles and Servers. For example, if you create a Viewer profile called "Test" and then create a Server, this will create a sub-folder in the myservers folder called "Test" and inside that sub-folder will be your new Server exe file called "PcHelpWare\_server.exe".

**create\_server:** This folder contains the files needed to generate the Server exe

**server\_res:** Contains the background and icon of the Server exe. Can be customized.

**drivers:** Used to speed up a LAN connection, you can install special mirror drivers on w2k, XP and Vista if you think you need them.

**repeater:** This folder contains the Repeater; - not used in Direct Connection.

**cache:** Where a background cache is saved to disk, for reuse with the next connection. This folder is created *after* you run the PcHelpware\_viewer.exe

The new PcHelpware folder also contains the following files:

**1CHATDLL.dll:**

**1SCVDLL.DLL:**

**readme.txt:** This file contains a brief overview.

**PcHelpWare\_viewer.exe:** The integrated all-in-one remote Viewer, Server creator, and Viewer profile creator.

## Before You Start

To connect your computer - *the Viewer*; and your clients computer - *the Server*; the computers must be able to find each other over the Internet. Every computer on the 'net, whether Yahoo or your personal home computer, needs a unique IP address. The big boy's address never changes, it is "Static". That way everyone can always find Yahoo, Google, AOL, etc, at the same address. The IP address is a series of four 3 digit numbers separated by "dots" in the form 123.156.234.189. Each 3 digit number can be a maximum of 255 and leading "0"'s can be omitted. So the largest IP address would be 255.255.255.255 and the smallest would be 001.001.001.001 (or 1.1.1.1 if you omit the leading "0"'s). Some numbers are reserved for admin functions and are unavailable.

To make things easier for web-surfers, static IP addresses can be associated with an alpha name. This is called domain name registration, where a registered name is assigned to a static numerical IP address. When a surfer types "Yahoo.com", for example, into their browser address bar the name is "Resolved" to the numerical IP address by the Registrar and the connection is made. The surfer's current "return" IP address is automatically sent along when requesting connection.

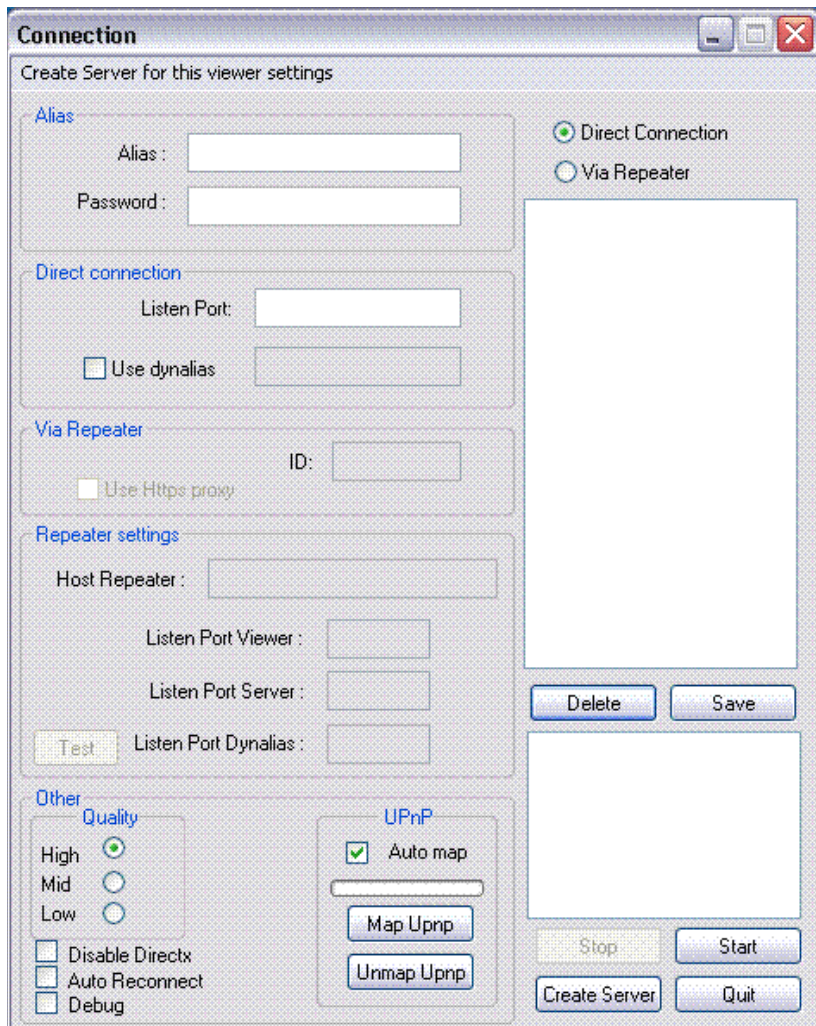
Most home users are assigned a "Dynamic" IP address by their Internet Service Provider (ISP). This address is not permanent and can change. With routers and Broadband, it is the router that is assigned an IP address. Network problems, maintenance, disconnects, or router reboots, can cause a new IP address to be assigned.

But if you want to establish a direct PcHelpWare remote connection between two PC's, the Server PC needs to know the Viewer PC's IP address at the time the connection is made. The Server sends along a return IP address when establishing a connection so the Viewer can return the connection. When the the Server executable file is generated in PcHelpware, the software detects the current external IP address of the Viewer computer and incorporates it into the file. Until your IP address changes the generated file will work but as soon as your IP address changes it will no longer connect and a new Server exe file must be generated.

To get around this problem you can use a service such as No-IP.com or DynDNS.com. Both offer free accounts. These services simulate a static IP address for your Server exe files by maintaining a database of customer's current, frequently updated, IP addresses that are tied to a Universal Resource Locator, or URL address that you setup with their service – petessupport.NoIP.com for example. You will use this URL when generating the Server exe for your customers. The computer running the Viewer software will also run a small updater program that notifies No-IP or DynDNS whenever your IP address changes and your new connection info is instantly updated in their database. Your client's computer, using the Server exe you supplied, will always find you at petessupport.NoIP.com (e.g.) and you won't have to constantly update the Server exe you provided your customers when your numerical dynamic IP address changes.

## Creating a Viewer Connection Profile

Open the PcHelpWare\_viewer.exe that you will find in your new PcHelpware folder. The following will appear:



There are two options available in the upper right, Direct Connection and Via Repeater. Select the Direct Connection option.



In the "Alias" section in the upper left enter a name for this Viewer profile in the Alias text box and a password in the Password text box. In the example below "Pete's Support" is the Alias and "test" is the Password. The password entry will be displayed as bars or dots for security.

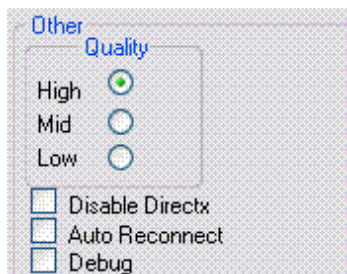


In the Direct connection section, directly below the Alias section, enter the Listen Port. 5500 is the default port.



**Do Not** enable dynalias.

Near the bottom on the left side are three Quality options: High, Mid, and Low. The High option requires faster Internet connect speeds than Mid or Low. If the Viewer seems sluggish during connection, lower this setting.



Below the Quality section are three other choices:

Disable Directx - disables Direct X when a conflict with Java is suspected.  
 Auto Reconnect - enables an auto connect feature if the connection breaks.  
 Debug - is for troubleshooting.

You can leave these blank for now.

## The UPnP Section:



Some newer routers support the UPnP protocol that allows for automatic port forwarding. If you do not know **for sure** that your router supports UPnP or if you are unsure how UPnP works with port forwarding, **disable** it by **unchecking** the Auto map box. Manual Port Forwarding is explained in the Router and Port Forwarding section.

Now you can save your Viewer profile. Click the Save button on the right. Your new Viewer profile will appear in the Window above the Save button. When you create additional Viewer profiles they will appear in this window when you start the Viewer application. You must select a profile from this window by clicking on it, the settings you entered for that profile will then appear in the appropriate text boxes. Next click the Start button located in a four-button group at the bottom of the left side of the Connection application to open the selected Viewer in Listen mode.

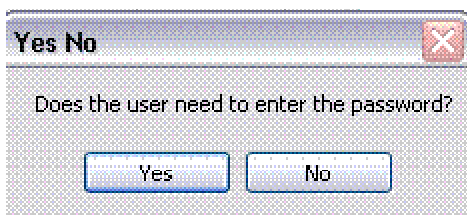
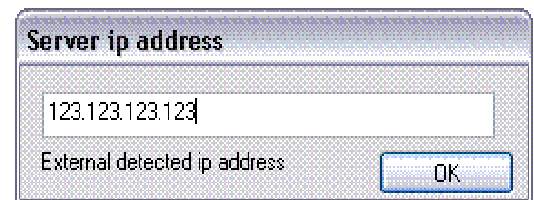


The Quit button closes the application and the connection. The Stop button closes the connection without closing the application. The Create Server button is explained below.

## Creating A Direct Connect Server from your Saved Viewer Profile

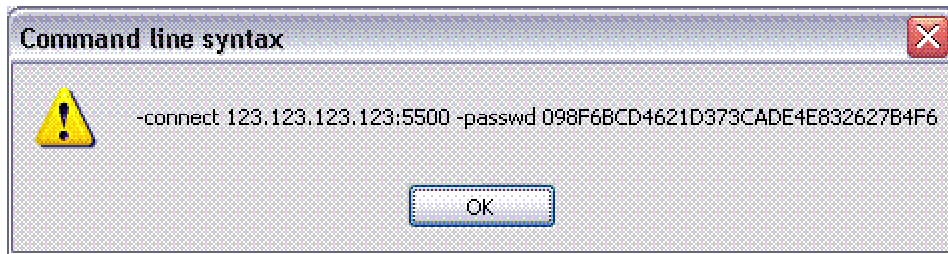
With a Viewer profile selected and open, click on the Create Server button (See above for location)

A Server ip address selection box will open with your current external ip address, shown as 123.123.123.123 in the example on the right. If you have static public IP address (unlikely) just Click OK. If you have a dynamic IP address (more likely) and will be using an IP provider such as No-IP.com, delete the detected address and insert your provided URL – petessupport.noip.com – for example. Then Click OK.



Next you can enhance security by the requiring the user to enter a password. This is optional. But if you select Yes the user will be required to use the password you entered during the Viewer profile setup. So be sure to remember it. Keep in mind for security purposes it does not show up in the Viewer profile Password box.

Finally, you will see the window below. 123.123.123.123 will be replaced by your static IP address (or URL) and the passwd will be an encrypted string. This string is **not** the same as the Password users must enter if you clicked Yes on the above screen. This is an informational screen; no input is necessary. Just click OK



The generated self-extracting exe, called "PcHelpWare\_server.exe" can be found in a sub-folder of the myservers folder. The sub-folder will have the same name as Viewer profile connection that generated it. You can deploy this exe on PCs you want to remotely assist, but keep in mind all Server exe files will have the same name (PcHelpWare\_server.exe). Since they are only compatible with the Viewer profile used to create them it might be a good idea to rename the file to match the appropriate Viewer – Petessupportserver.exe – for example. You can create different Viewer/Server combinations for different locations, PC's etc.

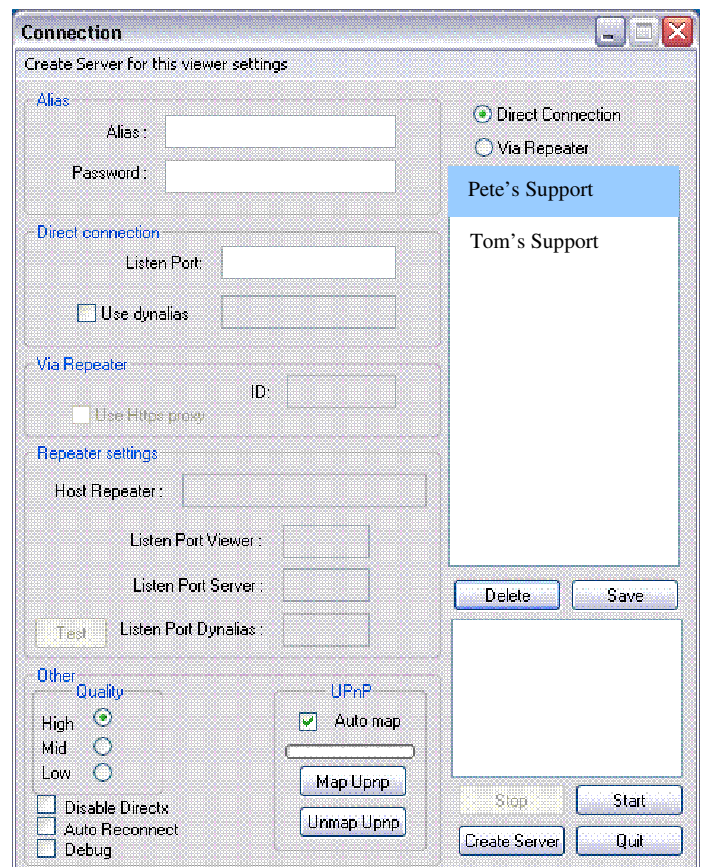
## Using PcHelpWare

**Important:** Always start the Viewer before the Server

Open the PcHelpWare\_viewer.exe file. The application window will look as it did when you first opened the Viewer to create a viewer profile except any profiles you created will now be listed in the open area on the right just above the Delete and Save buttons.

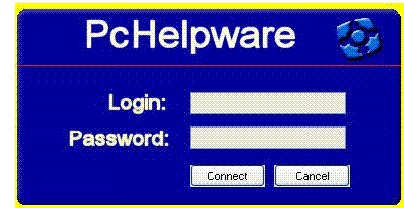
The top profile may be highlighted but that does **not** indicate it is selected. Click on a profile to load the connection profile into the Alias and Password fields, as well as the Listen Port field. The Quality and UpnP settings will also be configured. You can change the settings for this session, Quality settings for example, if necessary before clicking the Start button. The Viewer will now be running in Listen mode.

Your client's computer initiates the connection by running the unique Server executable file that you provide. The Server exe file is pre-configured to match the Viewer exe file running on your machine.




## On the Client Side:

On the remote machine, have the client run the PcHelpWare\_server.exe file (or the renamed version if applicable). This can be emailed or downloaded from a website to the clients machine. Running this file will open a Server application window on their machine. The client may see one or two Windows Security screens requesting permission to run the program. They must allow the program to run. The PcHelpware screen shown to the right will display. If you enabled the password requirement when creating the Server the client must enter it now, if not they can just click the Connect button. No input is required in the Login box.

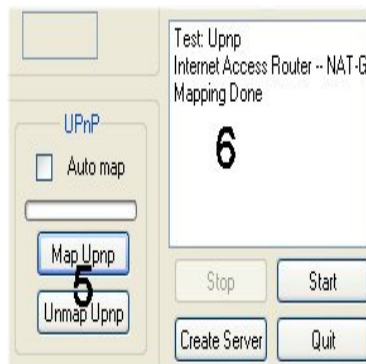


On the clients monitor a small application window will appear, usually in the upper left. The green Traffic light in the lower left corner of the application window indicates the connection is active and you should see their screen on your monitor. You can use your mouse and keyboard to control their machine.

The client can terminate the session at anytime by **left** Clicking on the PcHelpWare icon  in their system tray and selecting Exit. This will bring up the PcHelpwareLogon Screen. Click the Cancel (or Quit) button.

## Router and Port Forwarding.

If your router supports the MS implementation of UPnP, the Viewer dialog can attempt to automatically open and forward the router ports.



Enable Auto map in the UPnP section (5) to open the selected Viewer Listen port and forward it to your PC when the Viewer is started. The result will be displayed in the Viewer dialog window (6). If UPnP is not supported you must manually configure port forwarding. By default, the Server exe you generate through PcHelpWare is set to connect through the Viewer's Port 5500. This means the Viewer's router must have Port 5500 available to the Internet. The client's computer will be using the standard, always open, Internet port and no configuration is required on their end.

Firewalls, stand-alone software, and router configurations, keep most ports closed for security. To use PcHelpWare you must open your routers Port 5500 and Forward it to the internal IP address for your computer.

The two types of IP addresses, Static and Dynamic, have been explained above in the Before You Start section, but there are actually two variations of each, Public and Private.

A Public IP address is the one used to connect computers. A commercial domain, Google or Yahoo for example, has a Public Static address. The network side of a personal router has a Public IP address assigned by the Internet Service Provider (ISP), Verizon, Earthlink, Comcast, etc. This is usually Dynamic and that is why you need a service like No-IP to simulate a static address to the network. On the internal side of the router are the Private IP addresses, the ones usually beginning with 192.168.0.0, 10.0.0.0, or 172.16.0.0. These are blocks of IP numbers reserved for routers to use for internal network distribution. Your router assigns each computer or device connected to it a private IP address and that can be dynamic, changing each time you reboot your router or computer. So even if you set up port forwarding correctly, your router can assign a different Private IP address to devices connected to it and input will be forwarded to the wrong internal port/device.

You must configure your router/computer to assign a static Private IP addresses to the computer running the Viewer. All routers are different and have different set-up procedures. You can find details for your router setup at [www.portforward.com](http://www.portforward.com). Some of the set-up may take place in your computer's network configuration as well as your router so read the instructions carefully.