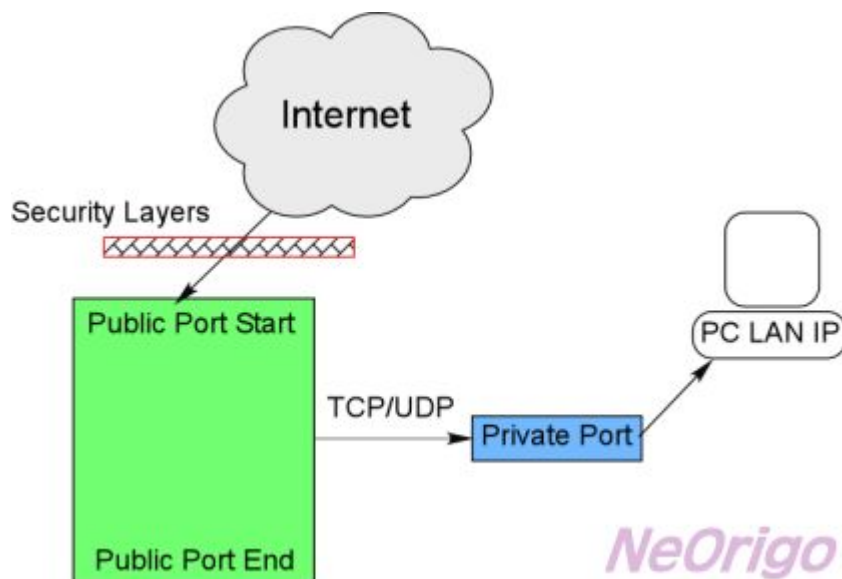


Port forwarding / Virtual Servers

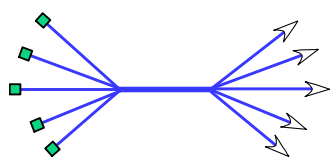
Guide to setting up port-forwarding for software on the Origo range of routers

This diagram shows the basics of port forwarding. By port-forwarding you open a port on the router and allow a PC (or another device connected to your router) access through that port:



It shows the rather silly state of the current firmware where you can only forward many-to-one (i.e. a range of ports to just one port).

Update (April 2005)



Some of the unofficial firmwares (produced by other manufacturers) have many-to-many port forwarding

These simplify forwarding large ranges, since you only need to type in the start and end port values. For example if you wanted to forward ports 1000 to 2000 (TCP) to your PC on 10.0.0.8, you would enter the following:

Virtual Server Configuration							
Use the following form to add special port that you want to be opened for your special application							
ID	Public Port (From)	Public Port (To)	Port Type	Map To	Host IP Address	Private Port	
1	1000	2000	<input checked="" type="radio"/> TCP <input type="radio"/> UDP	--->	10.0.0.8	1000	Add This Setting

The 'Private Port' setting specifies where you want the private ports to start.

Case study - PalTalk

Taking the information from http://www.practicallynetworked.com/sharing/app_port_list.htm the ports that are used by PalTalk are as follows:

IN	UDP 2090	[voice]
IN	UDP 2091	[control stream]
IN	TCP 2090	[file transfer]
IN	TCP 2091	[video listening]
IN	TCP 2095	[file transfer- older versions]
OUT	TCP 5001 - 50015	[text messaging]
OUT	TCP 8200 - 8700	[Firewall / network mode group voice]
OUT	UDP 8200 - 8700	[Firewall / network mode group voice]
OUT	UDP 1025 - 2500	[outbound voice & control stream (user configurable)]

Port-forwarding generally only applies to **in**-coming connections. Thus we can ignore the OUT ports.

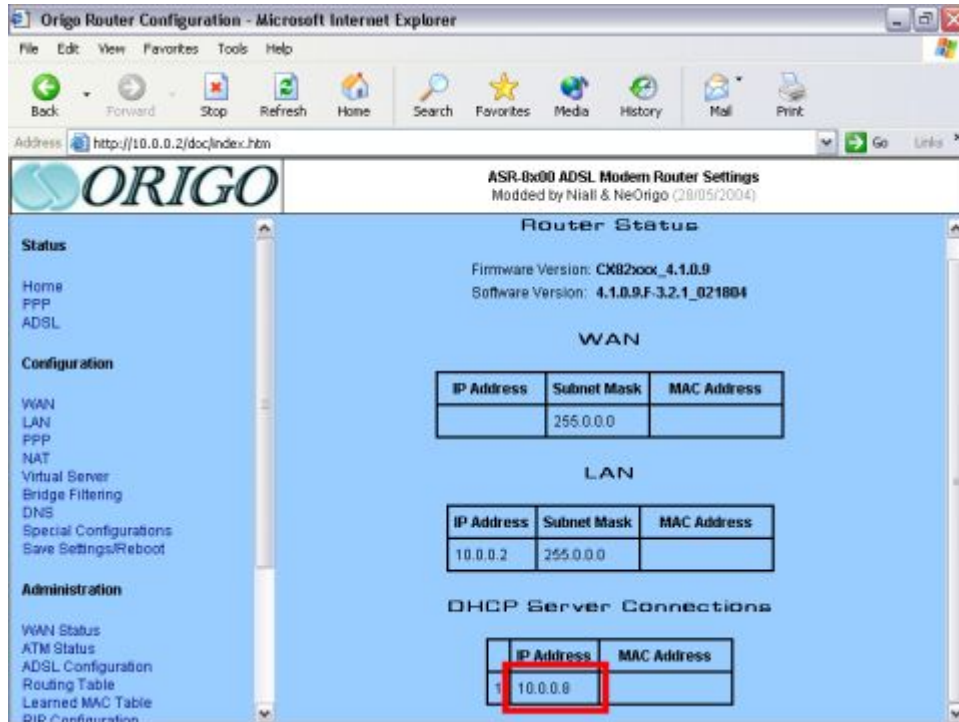
Therefore, to use PalTalk with your router, you need to open ports like this:

ID	Public Port - Start	Public Port - End	Private Port	Port Type	Host IP Address
1	2090	2090	2090	UDP	10.0.0.8
2	2091	2091	2091	UDP	10.0.0.8
3	2090	2090	2090	TCP	10.0.0.8
4	2091	2091	2091	TCP	10.0.0.8
5	2095	2095	2095	TCP	10.0.0.8

Ignore the colour scheme - that was the result of some cosmetic tinkering 😊.

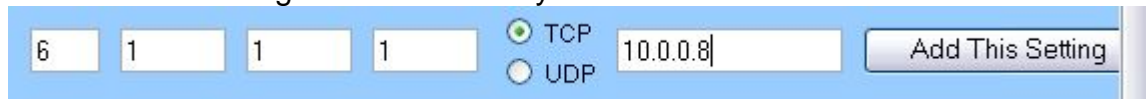
In this example I have used the Host IP Address of 10.0.0.8. This is because in your case, you want your PC to receive information on these ports - therefore these ports need to be 'forwarded' to your PC. As you will recall the router has an address of 10.0.0.2 by default. All things on a network will have their own address (like houses in a city) and therefore your PC will normally have a local address like 10.0.0.8. You can find yours by using ipconfig (winicpfg for Win98) or by going to <http://10.0.0.2/doc/home.htm> - there will be an entry at the bottom like this, which will show the number (which we can refer to as your **PC LAN IP**):

Software-based Port-forwarding guide



So, once you have your PC LAN IP, you can enter the port forwards in the table above, substituting 10.0.0.8 for your PC LAN IP.

Just to make it clear how one enters a port-forward (it's quite easy really) see this example. Say I want to forward port 1 to my PC which resides at 10.0.0.8, using the TCP protocol: I type 1,1,1,10.0.0.8, click on TCP and then click on the button on the right to add the entry.



Once all the ports have been entered, you must go to <http://10.0.0.2/doc/save.htm> and click on 'Save & Reboot'. When the router reboots, the ports should be nicely forwarded 😊

You may need to give permission to PalTalk etc in your software firewall if any warnings come up.

The same procedure applies to several other software products that you may wish to use (communication/chat/file-sharing etc). The ports they use should be listed in the relevant documentation and/or on websites like one above from PracticallyNetworked.com.

This guide was produced by NeOrigo - thanks to Kieran, Kashif and to Chris18 for motivating me to write it.

In the examples using 10.0.0.2, they assume that your router IP is 10.0.0.2 – if it is different then obviously substitute your router IP in place of 10.0.0.2