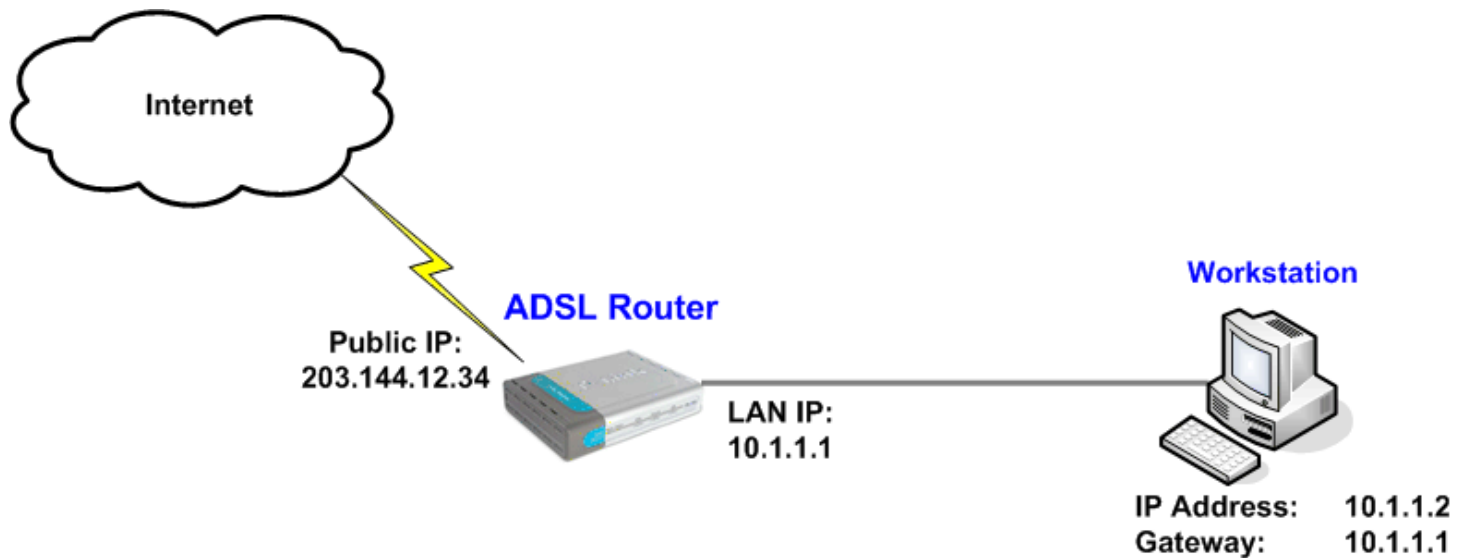


## How to open ports in the DSL router firmware version 2.xx and above



This example shows how to open port 3389 (which is used by Remote Desktop service) in the DSL router running firmware version 2.xx or above. You need to find out what ports your application is using. For example WEB server (HTTP) is using port 80 TCP, PCAnywhere uses ports 5631 TCP and 5632 UDP, etc.

### **Step 1. Set your computer with static IP address.**

Note that the computer you are trying to redirect the traffic to should have static IP address. In our example the computer is set with 10.1.1.2 address. The Default Gateway should also be specified (it should be the router's LAN address: 10.1.1.1).

### **Step 2. Log into your router.**

In order to login to the router start your Internet browser (e.g. Internet Explorer). Ensure that any proxy settings are disabled (in IE look under: Tools > Internet Options > Connection > LAN Settings). Then type the IP address of the router (the default IP address is 10.1.1.1) into the Location (for Netscape) or Address (for IE) field and press "Enter" For example: `http://10.1.1.1`. After the connection is established, you will be prompted to enter username (the factory setting is "admin") and system password (the factory setting is "admin").

### Step 3. Add LAN Client.

You first need to add a client (your Workstation) into the router before you can open any ports. Go to [Advanced > LAN Clients](#). Type in the IP address of your Workstation (in our example it is 10.1.1.2). You can specify the name of this workstation under [Host Name](#) (optional). Click [Add](#) and then [Apply](#).

The screenshot displays the router's configuration interface for LAN Clients. The sidebar on the left contains buttons for various services: UPnP, Virtual Server, Lan Clients (highlighted in yellow), SNMP, DMZ, Filters, Bridge Filters, and Firewall. The main content area has a navigation bar with tabs for Home, Advanced, Tools, Status, and Help. Under the 'LAN Clients' section, there are two input fields: 'IP Address' and 'Host Name', followed by an 'Add' button. Below this, it indicates a 'Valid IP Range: 10.1.1.2 - 10.1.1.254'. There are two tables: 'Static Addresses' and 'Dynamic Addresses'. The 'Static Addresses' table has columns for 'Delete', 'IP Address', 'Host Names', and 'Type', and contains one entry with IP 10.1.1.2 and Type 'Static'. The 'Dynamic Addresses' table has columns for 'Reserve', 'IP Address', 'Host Names', and 'Type' but is currently empty. At the bottom of the page are 'Apply' and 'Cancel' buttons.

Delete	IP Address	Host Names	Type
<input type="checkbox"/>	10.1.1.2		Static

Reserve	IP Address	Host Names	Type
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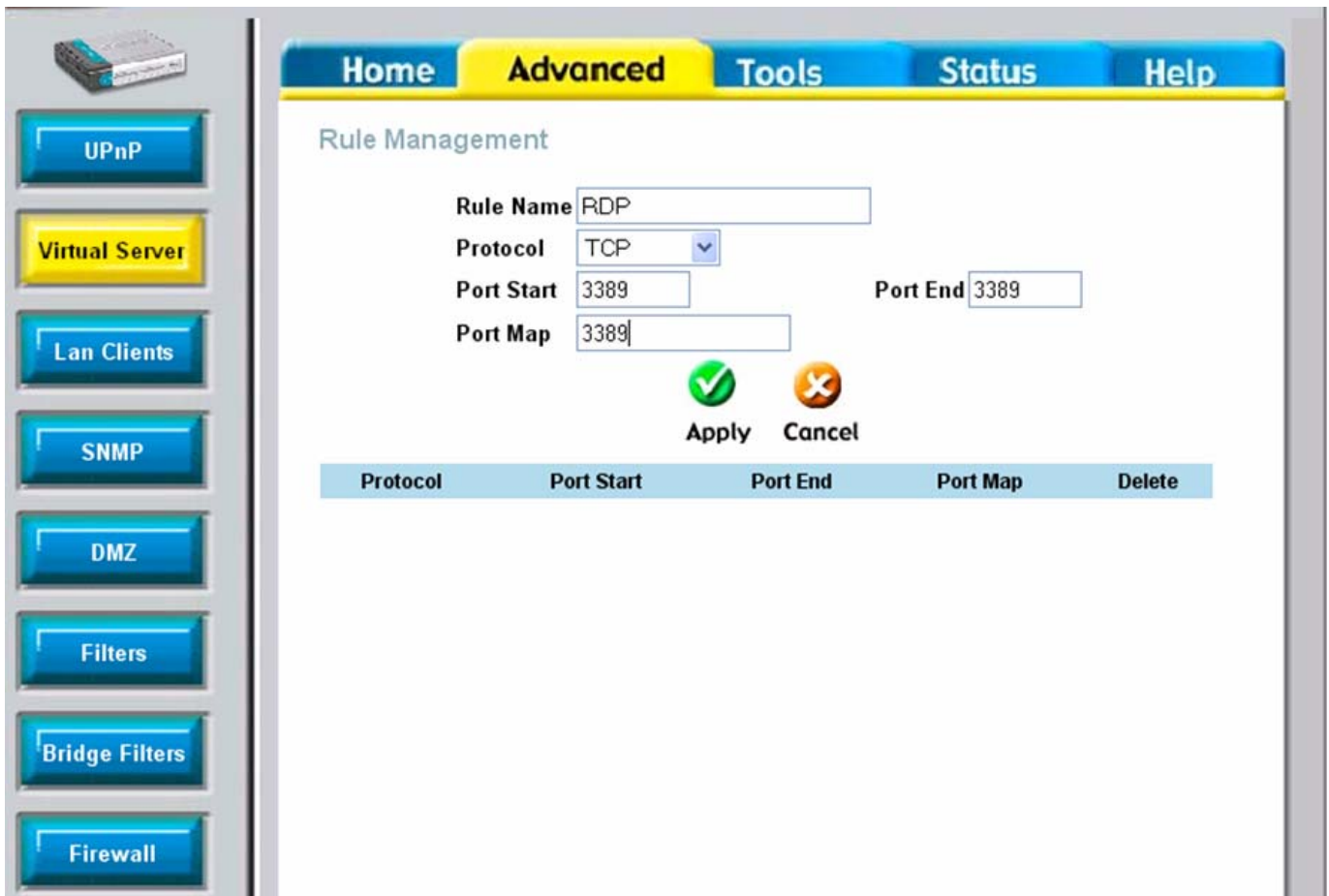
#### Step 4. Adding ports.

Go to [Advanced](#) > [Virtual Server](#). There is a list of pre-set ports in the router which you can choose from. If your specific application is not listed there, you can add the necessary ports yourself. Select the "User" Category and click on [Add](#) button below.

The screenshot shows the 'Virtual Server' configuration page in a router's web interface. The page has a navigation bar with 'Home', 'Advanced', 'Tools', 'Status', and 'Help'. The 'Advanced' tab is selected. On the left, there is a sidebar with buttons for 'UPnP', 'Virtual Server', 'Lan Clients', 'SNMP', 'DMZ', 'Filters', 'Bridge Filters', and 'Firewall'. The 'Virtual Server' button is highlighted in yellow. The main content area is titled 'Virtual Server' and contains the following elements:

- Connection:** A dropdown menu showing 'pvc0'.
- LAN IP:** A dropdown menu showing '10.1.1.2' and a 'New IP' button.
- Category:** A list of radio buttons for 'Games', 'VPN', 'Audio/Video', 'Apps', 'Servers', and 'User'. The 'User' category is selected.
- Available Rules:** An empty rectangular box for listing available rules.
- Applied Rules:** An empty rectangular box for listing applied rules.
- Buttons:** 'Add >' and '< Remove' buttons are positioned between the 'Available Rules' and 'Applied Rules' boxes. Below the 'Available Rules' box are 'Add', 'Edit', and 'Delete' buttons.
- Footer:** Three icons: a green checkmark for 'Apply', an orange 'X' for 'Cancel', and a red plus sign for 'Help'.

Enter the name for this entry under **Rule Name**. Then select the necessary protocol (on our case it is TCP). If there is a range of ports to open, specify the starting port under **Port Start** and the ending port under **Port End**. If you need to open just one port (like in our example), specify this port in all fields including the **Port Map**. Click **Apply**.



The screenshot shows a network management interface with a sidebar on the left containing buttons for UPnP, Virtual Server, Lan Clients, SNMP, DMZ, Filters, Bridge Filters, and Firewall. The main area has a navigation bar with tabs for Home, Advanced (selected), Tools, Status, and Help. Below the navigation bar is the 'Rule Management' section. The configuration fields are as follows:

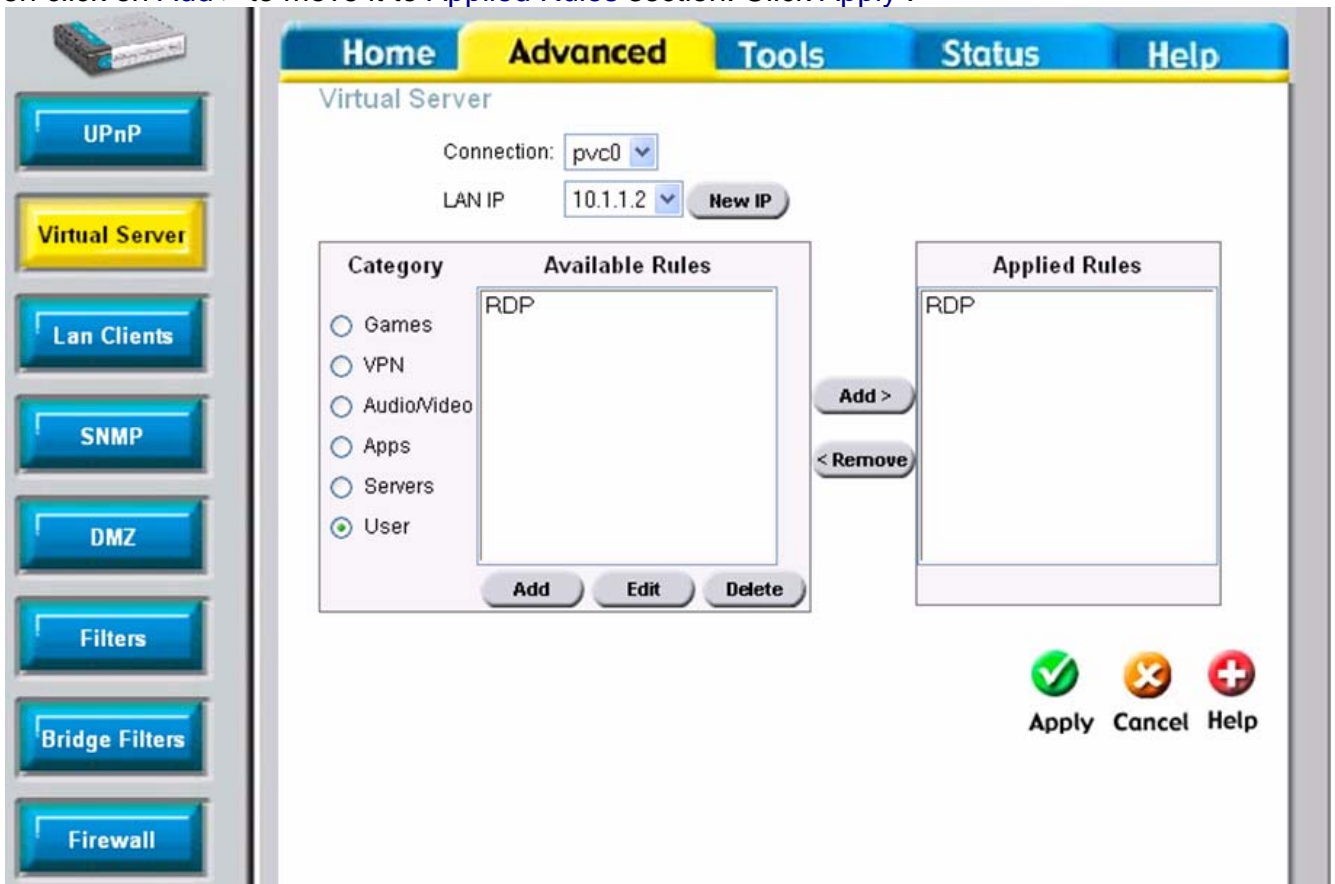
Rule Name	RDP		
Protocol	TCP		
Port Start	3389	Port End	3389
Port Map	3389		

Below the fields are two buttons: 'Apply' (with a green checkmark icon) and 'Cancel' (with an orange 'X' icon).

Protocol	Port Start	Port End	Port Map	Delete
TCP	3389	3389	3389	

### Step 5. Opening ports.

Go to [Advanced](#) > [Virtual Server](#) and under LAN IP select your LAN Client (which we added in Step 3). This is the computer where the required traffic will be redirected to. Select "User" Category and you should see the rule which you have created in Step 4. Select it and then click on [Add >](#) to move it to [Applied Rules](#) section. Click [Apply](#) .



**Step 6. Saving settings.**

To save the new settings into the router's memory go to [Tools > \[System\] > Save & Reboot](#). Click on [Save & Reboot](#) button. The router will save the settings and restart.

Now users on the Internet who will be accessing your public IP (in our example it is 203.144.12.34) using the certain application which utilises the specified ports (Remote Desktop with port 3389 in our example), will be redirected to the specific computer on your LAN.

Please note that from inside your LAN you will not be able to access your server using its public IP address (WAN IP on the router, e.g. 203.144.12.34). You need to use its local IP address instead (10.1.1.2).

Be aware that many Internet Providers are blocking commonly used ports like 80 and 21, hence you will not be able to host a WEB site or FTP site even if you will open the necessary ports in the router.

~ End of document ~