

Radiolabs Client Bridge Setup

This manual will guide you through creating a client bridge network using your Radiolabs equipment.

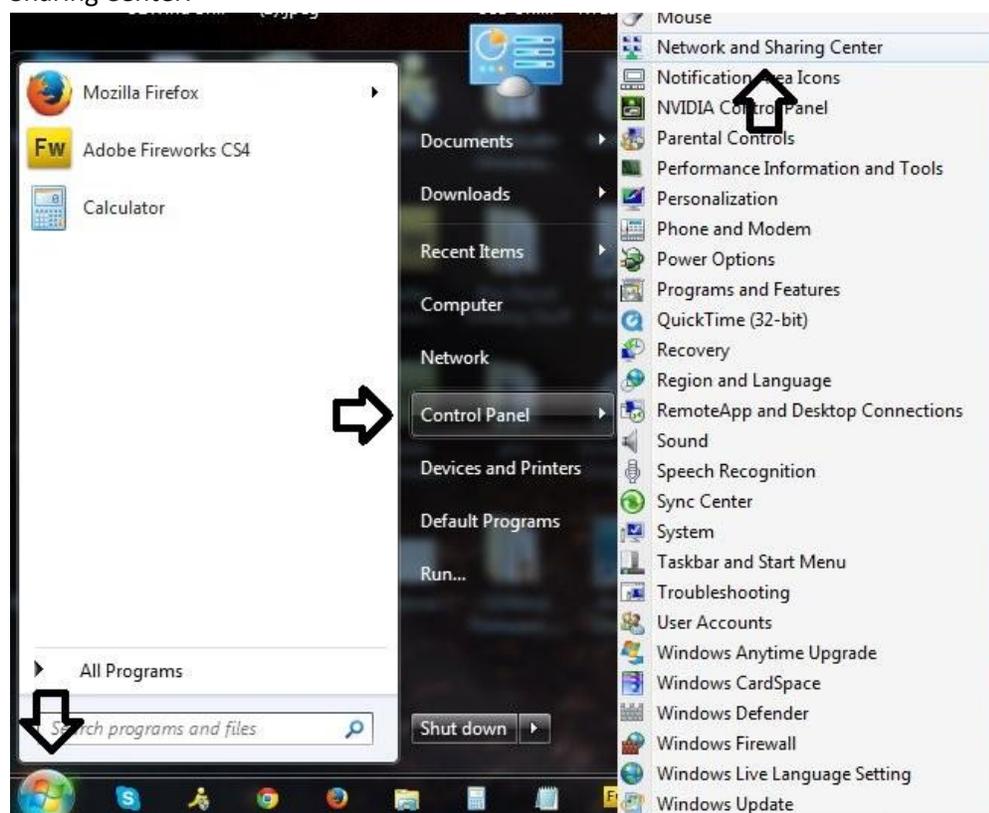
Step 1: Preparing for setup.

To set the bridge up, start by un-boxing all of your equipment. In the box there is one O2 Surf Radio, a power supply (POE), a directional or Omni directional antenna, and all the associated cables.

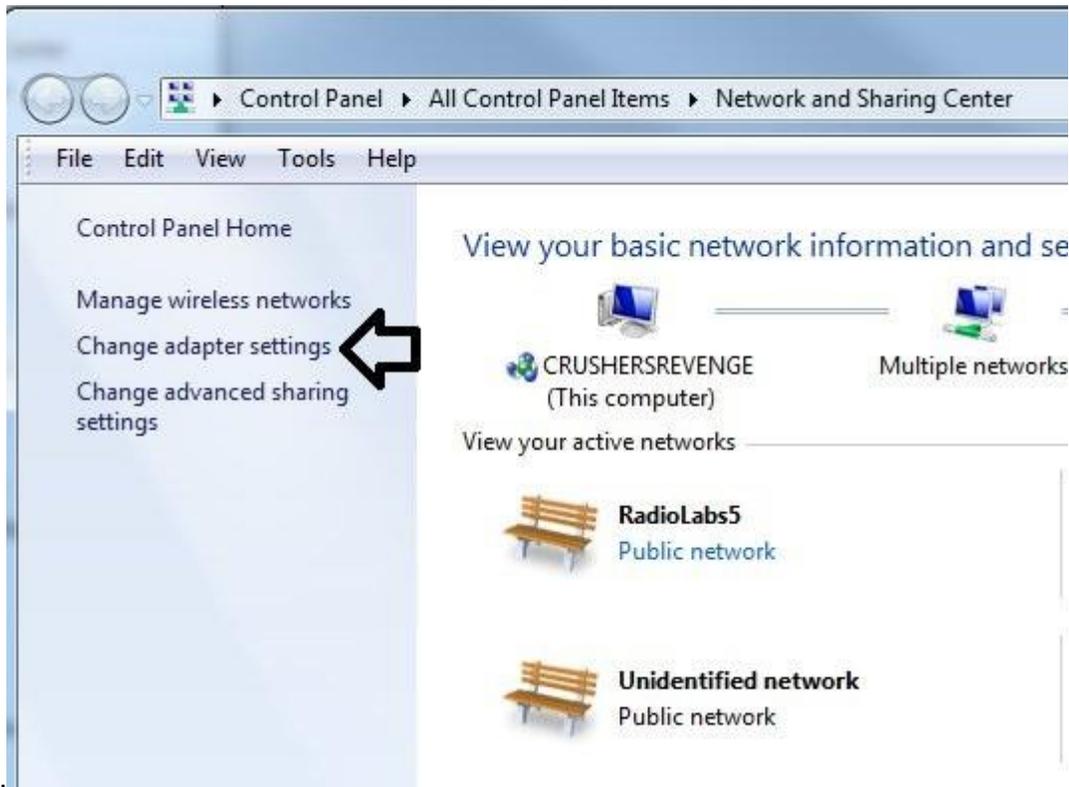
Plug in the power supply, and connect the radio to the POE port of the power supply using an Ethernet cable. Then, connect a second Ethernet cable from your computer to the O2 Surf's power supply LAN port. No other cables need to be connected at this time. **It is recommended that you connect the radio(s) to an antenna before powering them on.**

Step 2: Change your computer's TCP/IP V4 address

If you are running Windows, click the Start Menu. Then click Control Panel. Then click Network and Sharing Center.

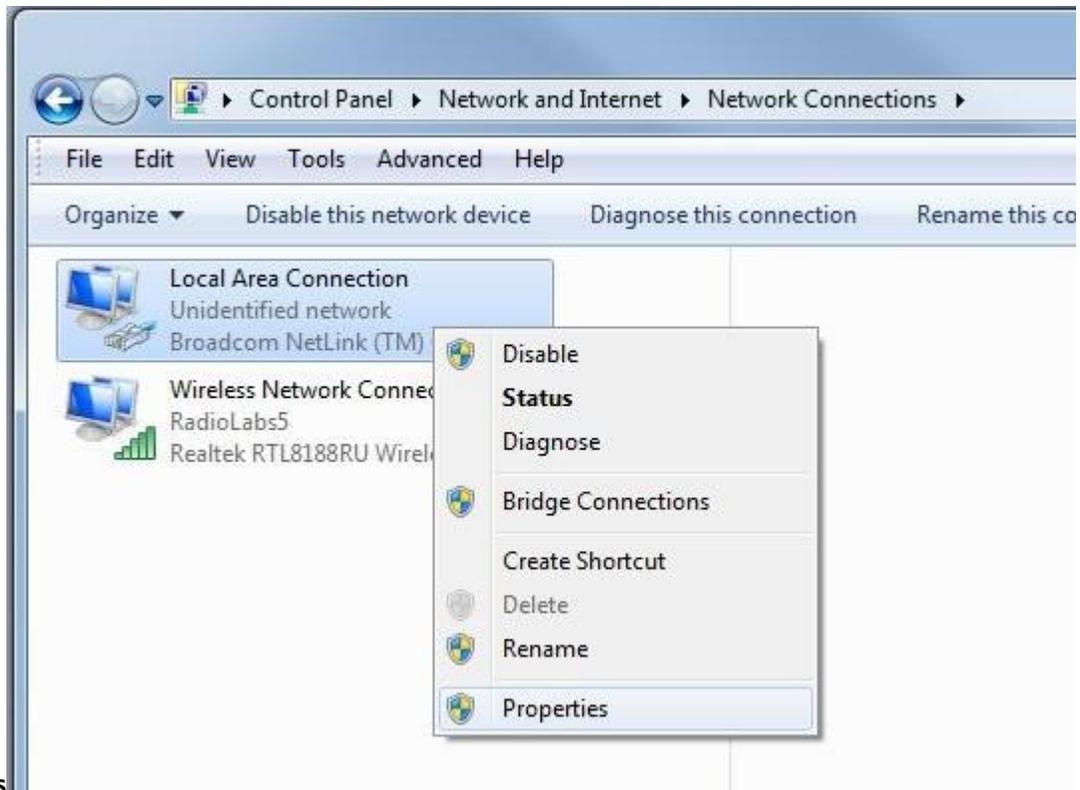


Click **Change adapter**

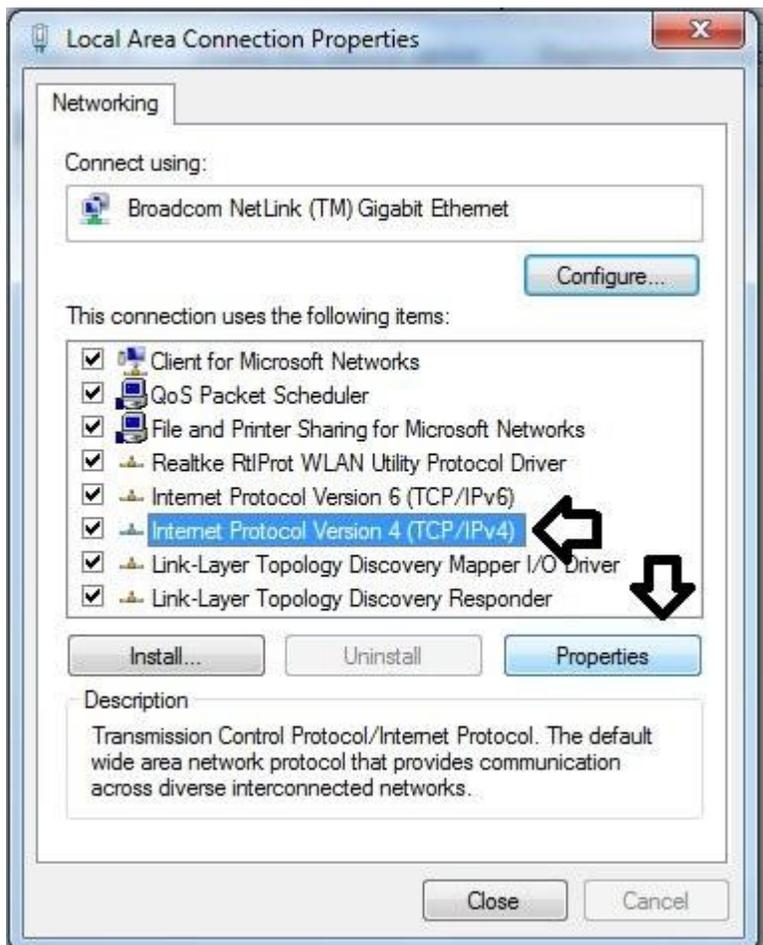


settings.

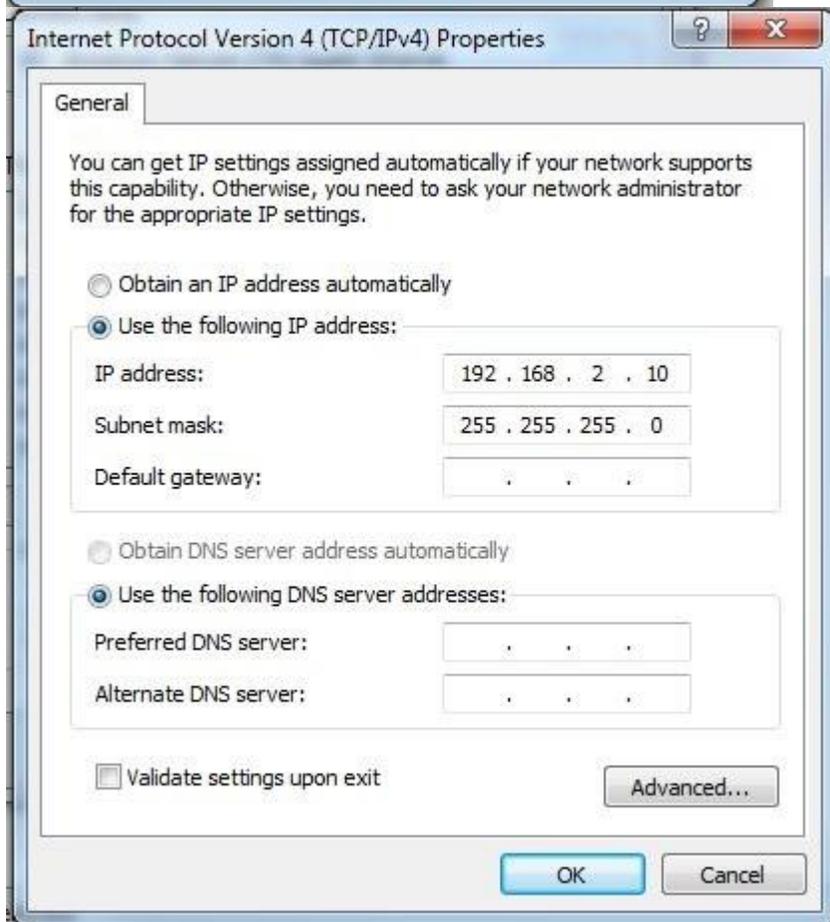
Right click on **Local Area Connection**, then click



Properties



Click **Internet Protocol Version 4 (TCP/IPv4)**, then click **Properties**



Click **Use the following IP address** and match the info as seen here. Then click **OK**.

Step 3: Configure the O2 Surf

Open up a web browser (Google Chrome or Mozilla Firefox recommended), and navigate to **192.168.2.1**

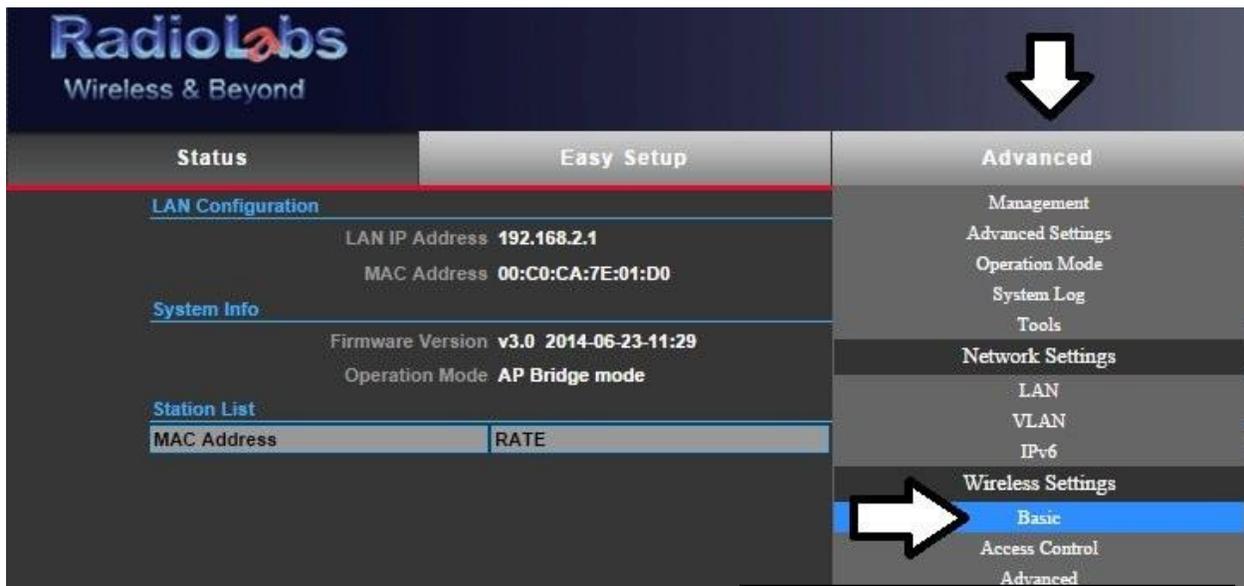


Log in information

User Name: admin

Password: admin

Click **Advanced**, and then click **Basic**

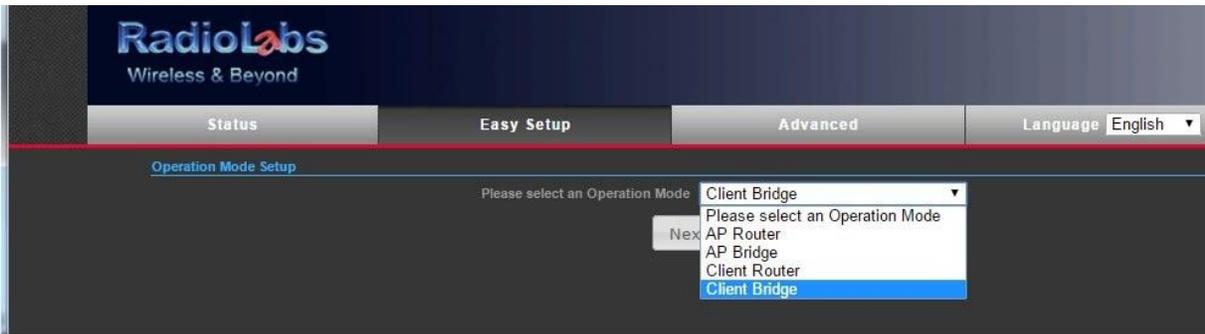


Click **Set Country Code**

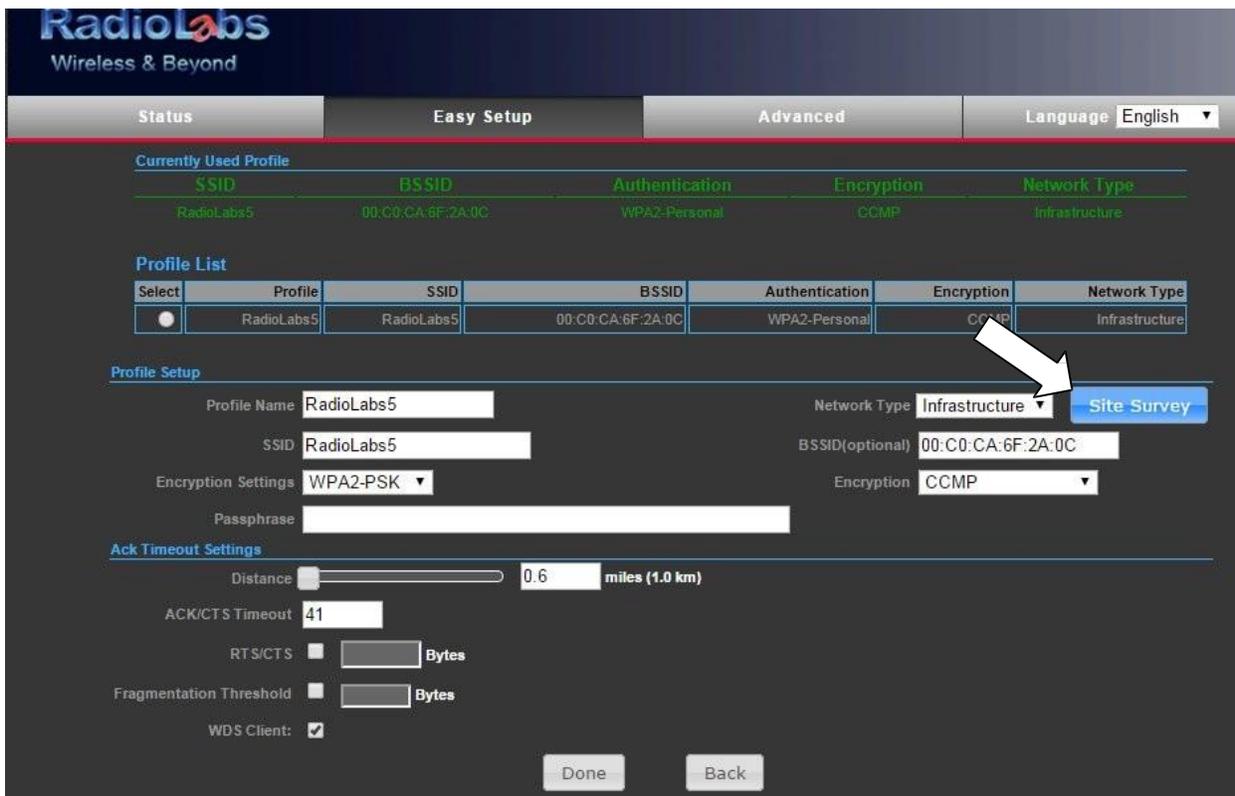
Select your country of residence, and click Apply.



Go to the **Easy Setup** tab and select **Client Bridge** from the dropdown list.



Navigate to the Site Survey button, seen below, and hit it. *The Surf and antenna should be aimed at the desired location at this time in order to see the network and select it.



Find the network that you want to access and select the bubble next to it. Then hit select in the lower right corner.

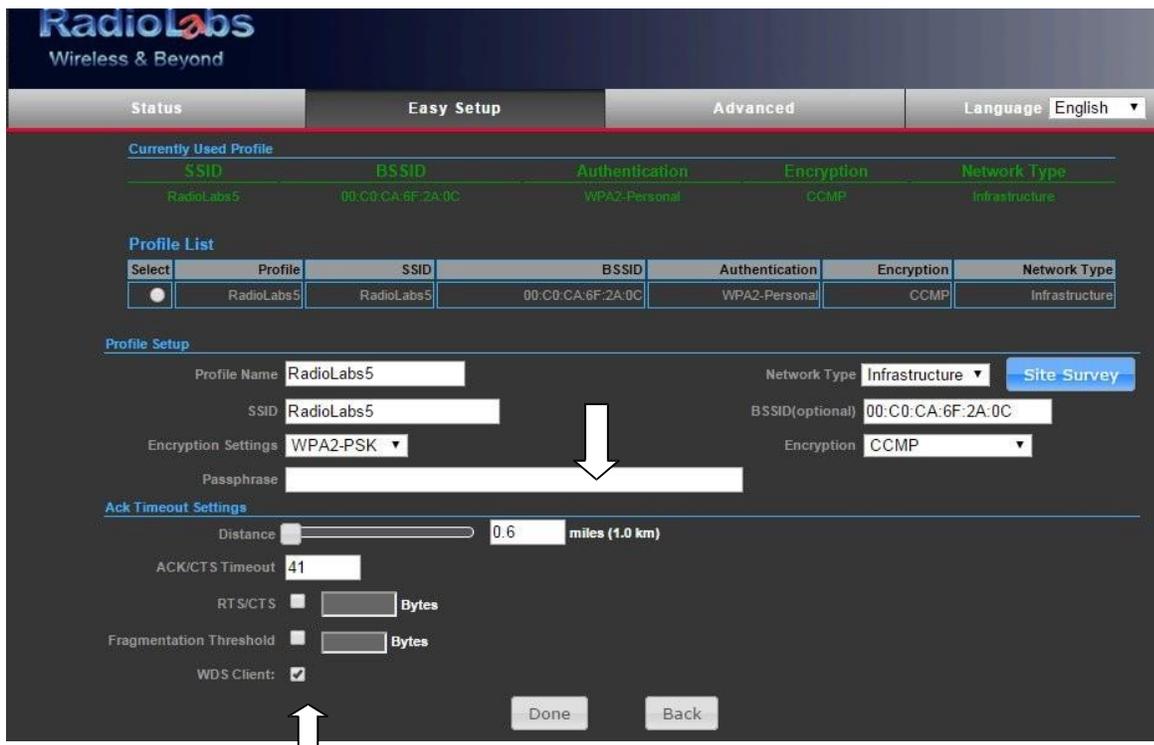
The screenshot shows the RadioLabs Wireless & Beyond interface. At the top, there are tabs for 'Status', 'Easy Setup', and 'Advanced', along with a language dropdown set to 'English'. Below the tabs, the 'Currently Used Profile' section displays the following details:

SSID	BSSID	Authentication	Encryption	Network Type
RadioLabs5	00:C0:CA:6F:2A:0C	WPA2-Personal	CCMP	Infrastructure

Below this is a 'Profile List' section with a table that is mostly obscured. A 'Wireless Site Survey' window is open, displaying a table of detected networks:

Select	SSID	BSSID	Rate	Signal Strength	Channel	Authentication	Encryption	Network Type
<input checked="" type="checkbox"/>	RadioLabs5	00:C0:CA:6F:2A:0C	54 Mb/s	90/94(-59 dBm)	11	WPA2-Personal	CCMP	Infrastructure

A white arrow points to the 'Select' checkbox in the first row of the 'Wireless Site Survey' table. At the bottom right of the survey window, there are three buttons: 'Select', 'Rescan', and 'Close'.



If the network you are joining is encrypted then enter the password into the passphrase field. Then make sure the WDS box is checked and hit done. **Only check the WDS box if you are connecting to an O2 Surf enabled antenna or device that is utilizing the WDS feature, or the client bridge will not function properly.** Once the unit has rebooted you will be directed to the status page; on this page you should have a "Completed" on the Wifi Link Status (upper right hand corner of the window). Lastly, you can turn the TX power of the unit up to 27; this can be done on the **“Advanced, Advanced”** page. This will maximize the output power of the O2 Surf, ensuring you are achieving the best signal strength and quality possible. Have fun, and enjoy!

Step 6: Revert IP Address

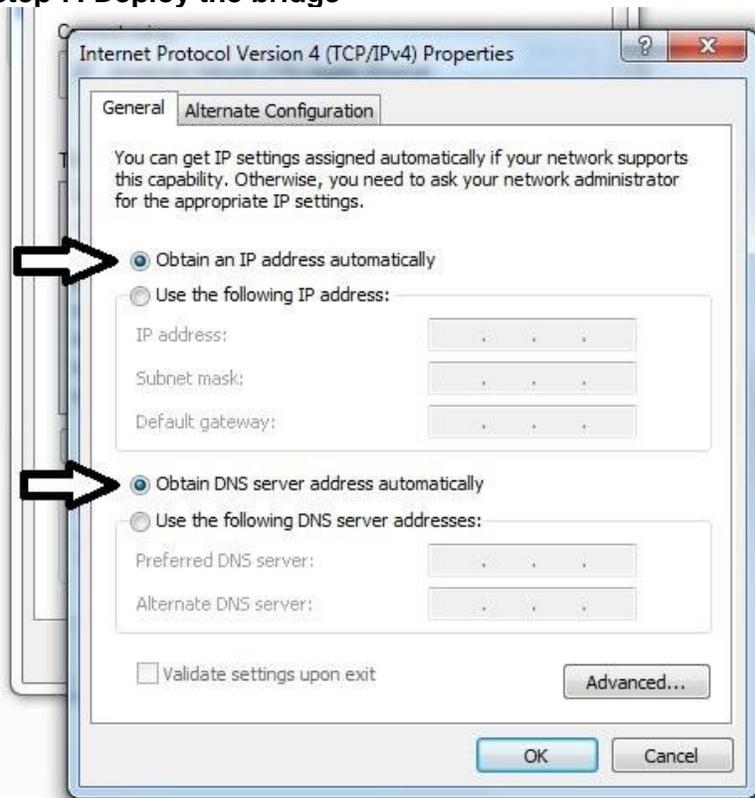
Following the steps on **Page 1** of this guide, navigate back into **Network and Sharing Center**.

Click on **Change Adapter Settings**.

Right-click on **Local Area Connection**, then click **Properties**.

Click **Internet Protocol Version 4 (TCP/IPv4)**, then click **Properties**.

Step 7: Deploy the bridge



You should now have full internet connectivity through the **O2 Surfs** Power over Ethernet LAN port, and you should be able to browse the web with the unit still connected to your PC. Next you can plug an Ethernet cable from this port into a wired device for direct internet connectivity, or plug it into the LAN port of a router. If you plug this into a router, it is recommended you disable the DHCP function of that router.