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Article applies to – WL60s and Wi-Connects with PCs running Windows 7/8 or Macs running OSx 10.6 or higher

ISSUE: Sharing a Long Range Internet Connection

The Digital Yacht WL60 and Wi-Connect Long Range Wifi Adaptors are popular because of their simple "plug and play" USB connection, easy installation and entry level price. However, normally they are limited to just providing a single PC with the long range Wi-Fi connection to the hotspot.

Many people, particularly on a boat, now want a fully integrated router type solution, where the long range internet connection is shared with everyone onboard (even smart phones and tablets) via a router or wireless access point. Our more expensive and powerful WL450, WL510 and iNavConnect products provide the perfect solution to this type of installation, but for some people the following simple solution of using your computer to share the internet connection might be a suitable compromise.

This Tech Note explains how to use the laptop's internal wireless adaptor to create a "personal hotspot" on your boat or in your caravan, that shares the WL60/Wi-Connect long range Wi-Fi internet connection, with anyone that connects to your personal hotspot.

This Tech Note assumes that you are using a PC/Mac with an internal Wi-Fi adaptor and that you have already installed the WL60/Wi-Connect drivers. For simplicity, in the following procedures, we refer to the long range adaptor as "WL60" but this is also applicable for the Wi-Connect version for caravans and motorhomes.

SOLUTION FOR WINDOWS PCs:

With Windows 7, Microsoft introduced the Internet Connection Sharing (ICS) service but then decided to remove it again in Windows 8, so the best way to share your internet connection now on Windows PCs is to install a free program that turns your PC in to a wireless hotspot. There are a few programs available and they change all of the time, as we found with the original program that we use to recommend "Virtual Router Plus" which now comes with hidden Adware/Malware, so be careful and read the reviews.

The most recent program that we have used and would recommend is mHotspot. Even this program asks you if you want to install a toolbar program and a couple of other tools that it recommends, so take your time installing the program and make sure you say no to each of the three tools it suggests.



Aside from this minor irritation during installation, mHotspot is easy to setup and performed will in our tests.

Another program Connectify is also very good but the free version has a 90min usage limit, where it will shut down its hotspot after 90mins and you have to run the program, however you do have the option to pay for the Pro version (\$35 USD) that gives unlimited use.

To download mHotspot, the best source is the popular Download.Com site and we have included a link below....

http://download.cnet.com/mHotspot/3000-18508 4-75452123.html

Once downloaded, run the installer remembering to not install the recommended "extras" and then once installed, run mHotspot and you will see a window appear like the one shown.

You will need to give your hotspot a name (SSID) and a password and then tell it what Internet source to use. In the example shown this is set for Ethernet, which would be fine for our WL450 or WL510 long range Wi-Fi adaptors but for our WL60 you will need to select whatever name Windows has given our WL60, which will be something like "Wireless Network 2" or "WiFi 2" depending upon the version of Windows you have.

Once everything is setup, click on the "Start Hotspot" button and your PC will apply the settings and create your wireless personal hotspot. In the bottom right corner of the screen, you should see a status window pop up indicating that everything is OK.



Now you should be able to scan for wireless networks on your smart phone or tablet and see your new wireless hotspot, that you can connect to using the password you entered.

| mHotspot | | | - x |
|-----------------------------|------------------------------------|------------------|-----------------------------|
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| Data Received (MB) | | | 0 |
| Total Data Transmitted (MB) | | 3) | 0 |
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SOLUTION FOR MACs:

With Macs, Apple have built-in the Internet Sharing feature in to the OSX operating system so there is no need to download any 3rd party apps to do this.

You need to have a Mac with OSX 10.6 or higher and an internal Airport wireless adaptor which will create the personal hotspot, while your WL60 will provide the long range Wi-Fi connection.

Before you start, plug in the WL60 and turn off the Airport wireless adaptor. Now follow the procedure below.

1) From the Apple Menu, select "System Preferences" and click the "Sharing" icon. You should see the window shown below, which shows the computer functions that can be shared. We are only interested in the "Internet Sharing" so click on this option to select it but do not click on the Tick Box yet.

| 000 | Sharing | | | | |
|--|--|--|--|--|--|
| Show All | ٩ | | | | |
| Computer Name: Paul Sumpner's MacBook Computers on your local network can access your computer at: Paul- Sumpners-MacBook.local Edit | | | | | |
| On Service DVD or CD Sharing Screen Sharing File Sharing Printer Sharing Scanner Sharing Web Sharing Remote Login Remote Apple Events Xgrid Sharing Internet Sharing | Internet Sharing: Off You cannot start Internet Sharing because you have not selected a port to share your connection. Share your connection from: RTL8188S WLAN Adapt To computers using: On Ports FireWire RTL8188S WLAN Adapter AirPort Ethernet | | | | |
| Click the lock to prevent fur | AirPort Options | | | | |

- 2) If the padlock is locked, click on it and then enter your system/admin password.
- 3) Choose the WL60 as the Internet connection to share in the "Share your connection from" pop-up menu. The WL60 will be labelled "RTL8188S WLAN Adaptor" which is chip we use in the WL60.
- 4) Select "Airport" in the "To computers using" list, unless you have another Wifi Adaptor connected to the Mac. Make sure the relevant tick box is ticked.
- 5) Assuming you are using the AirPort, click AirPort Options and you will see the window below. Click "Enable Encryption" and then enter a network name and password (5 digit). The network name is the wireless network name (SSID) that people will see when they try to connect.

| | Show All | Sharing | |
|--|----------------------|---|---------|
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| | | ✓ Enable encryption (using WEP) | |
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| | Pri | If you plan to share your Internet connection with non-Apple | |
| | Sc: We | computers, use a 5 character password for a 40-bit WEP key, and a 13 character password for a 128-bit WEP key. | |
| | Re | Cancel | |
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| Click the lock to prevent further changes. | | | (? |

- 6) Once the network name and password are set, click "OK" and you will be returned to the previous window. Click the check box next to the Internet Sharing entry in the service list and you will see a pop up window telling you that the AirPort is Off click to turn the Airport On
- 7) You will now see a pop up window asking if you want to turn on Internet Sharing Click "Start"

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| 000 | Sharing | | | | | |
| Show All | Q | | | | | |
| Computer Name: Paul Sumpner's MacBook Computers on your local network can access your computer at: Paul- Sumpners-MacBook.local | | | | | | |
| On Service DVD or CD Sharing Screen Sharing File Sharing Printer Sharing Scanner Sharing Web Sharing Remote Login Remote Management Remote Apple Events Xgrid Sharing Internet Sharing Bluetooth Sharing | Internet Sharing: On Internet Sharing allows other computers to share your connection to the Internet. Share your connection from: RTL8188S WLAN Adag \$ To computers using: On Ports FireWire RTL8188S WLAN Adapter AirPort Ethernet | | | | | |
| Click the lock to prevent fur | ther changes. | | | | | |

8) You should see that the normal AirPort Icon rhas changed to the Internet Sharing symbol as shown in the screen shot above.

Now you should be able to scan for wireless networks on your smart phone or tablet and see your new wireless hotspot, that you can connect to using the password you entered.

IMPORTANT NOTE

Only the PC/Mac physically wired to the Digital Yacht WL60/Wi-Connect Adaptor can control which Wifi Hotspots to connect to and this PC/Mac must be turned on and connected to the Wifi Hotspot in order for the other devices to connect to the internet.