Wireless Sync HOWTO

Using jpilot to sync your PalmOS device to your desktop across a wireless (802.11b) network.

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Revision History

Revision 0.13	2002–03–01
deamon mode correction	
Revision 0.12.1	2002–01–27
CVS Test	
Revision 0.12	2001–12–12
FGPL added, list of notes to booklet change begun	
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Links corrected, version tracking added, address completed	
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Initial realease for comments	

This document explains how to perform a wireless, network sync between a Handspring Visor and **jpilot** or **jpilot–sync**. Although this concentrates on specific hardware, the techniques and information should translate to all similar devices.

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1. Introduction

I had just acquired my 802.11b module for my Visor, and decided that I wanted to do away with the need for the cradle that would keep me locked to a desktop for syncing purposes. After all, the whole point of being wireless and handheld was to be mobile. After many hours of careful reading in entirely too many sources, I have distilled the necessary information into this short HOWTO. If at anytime you find yourself going through the HOWTO and have to stop and lookup how to do something I have listed, please email that to me so I can add it and help the next person who reads this.

Also, please send me reports of success (and failures) of hardware devices other than those listed so that I may append it to this document.

2. Components Used & Required Software

2.1. The Hardware components used for this document are:

- Visor Handheld Deluxe
- Xircom SpringPort Wireless Ethernet Module
- EZ Connect 11 Mbps Wireless Access Point

2.2. Software required and version used

- RedHat 7.2
- jpilot−0.99.1pre with patch to correct **jpilot−sync**
- pilot−link 0.9.5−pre3
- PalmOS v. 3.1H2

3. Setup

3.1. Visor

3.1.1. Configure a new service to use for syncing.

Click Prefs on the Visor. In the upper right–hand corner is a drop down menu. Click and select Network. Click the main drop down menu by clicking the drop down icon in the lower left corner of the visor, next to the graffiti screen. From the menu that drops down, click New and configure a new serverice according to the following.

- `Username`

  The username used to log onto the network.
- `Password`

  The username used to log onto the network.
- `Phone Number` 00

  This will tell the Visor to use a network connection.
- `Connection Type` PPP
- `Query DNS` should be checked
- `IP Address`

  Automatic should be checked if DHCP is running.

3.1.2. Configure your Primary PC Setup to the workstation that will be running jpilot.

- `Primary PC Name`

  This is the full network name of the workstation.
- `Primary PC Address`

  The IP of the workstation. If using DHCP, it is a good idea to map the number to the MAC address of the NIC so the it will remain constant. This will save you from having to re–enter this info.

3.2. SpringPort Module

3.2.1. Configure Client Settings

- `Client Name`

  Set to whatever you wish. This will be the name that the Visor announces to the network as it's own.
- `Profile`

  The Xircom module supports 3 separate setups. Select one for use in your system.

- `Network ID (SSID)`

  For maximum security, this should be a unique name shared among all the 802.11b devices that are attached to your network.
- `Encryption`

  For maximum security, this should be enabled and set to the highest available that is supported by all the devices. Use the WAP to create the key to install to all the 802.11b devices that are attached to your network.
- `MAC Address`

  Enter this into the MAC allowed list and re−enable MAC filtering.

Obtaining the MAC address on the Xircom Wireless Ethernet Module

The MAC address should be printed on the label that is sandwiched between the Visor and the module. If that is unreadable, it will have to be found out another way. The easiest way I have found to do this is to disable MAC filtering on the WAP, configure the above and connect. Clicking Status/IP Information will bring up a screen showing the MAC of the module.

3.2.2. Configure Network Settings

This is handled by the "Configure New Service" section above.

3.2.3. Configure HotSync Settings

This is handled by the "Configure New Service" section above.

3.2.4. Wireless Access Point

Setup your access point according to your manufacturer's directions. The following services are recommended:

- `128bit Encryption`
- `MAC Filtering`
- `Unique SSID enabled`
- `DHCP - Either from network or Access Point, but not both.`

3.3. Software Configuration

3.3.1. jpilot

Run **jpilot** and set the following under File/Preferences/Settings.

- `Serial Port .`

  For clarity, the setting is a single period. This will signify to underlying pilot−link subsystem to expect a network connection.
- `Serial Rate`

This can be put to the hightest setting.

3.3.2. jpilot−sync

To configure **jpilot−sync**, configure **jpilot** as describe above, then exit.

Next, use the following command to run in a daemon−like mode.

```
        jpilot-sync -l >& /dev/null &
```

Do not attempt to sync using **jpilot** while **jpilot−sync** is running by pressing Sync in **jpilot**. This may or may not work the first time, but will certainly crash both at the completion.

You can run **jpilot** while **jpilot−sync** is running, and even edit/add entries or sync. Simply allow **jpilot−sync** to run in the background to pick up the sync request.

Alternatively, for a pure command−line approach, edit the `jpilot.rc` file and change `port` to .. and `rate` to 10.

4. Operation

With all the above configured correctly, operation is quite simple. Click HotSync icon on the Visor, then click ModemSync. Allow the client to negotiate a connection with the network, then click Sync on **jpilot**.

5. License