

## Bluetooth Dial-Up Networking with a Motorola Droid

The following document describes one step-by-step method of how to configure and tether a Motorola Droid (Android Operating System 2.2 or later) using Bluetooth Dial-up Networking (DUN) on the Verizon network for use as a Data Collector Internet option with the Carlson Surveyor/ Surveyor+ with Carlson SurvCE™. A common use for this practice is to obtain GPS base station corrections through the Internet:

### Download Tethering Application to the Droid

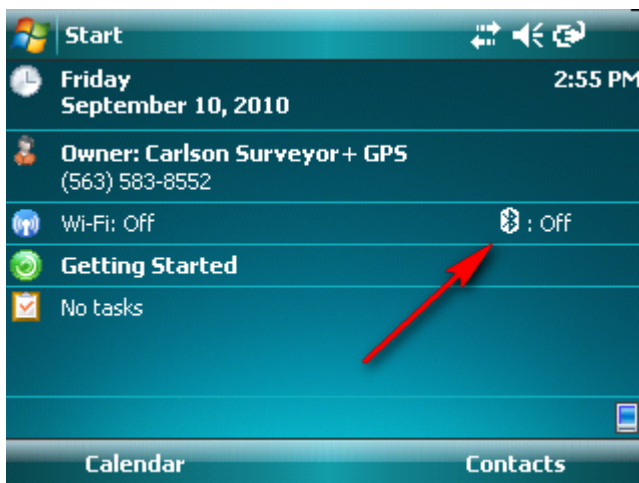
On the Motorola Droid, perform the following steps:

1. Visit the Android Market and download and install a tethering app such as PdaNet (<http://www.junefabrics.com/android/>) which is discussed in detail below.
2. Once PdaNet has been installed to the Droid, launch the application and select the **Enable Bluetooth DUN** option. A permission request might appear seeking your permission to make the Droid Bluetooth Discoverable for a short period of time (generally, 120 seconds) It is helpful to have the Surveyor(+) powered on and at the Home screen before proceeding further. Tap **Yes** to enable Bluetooth on the Droid and make it Discoverable.

### Prepare the Surveyor(+)

Perform the following on the Carlson Surveyor(+):

1. From the Home screen, tap on the Bluetooth icon to access the Wireless Manager and turn Bluetooth On.



2. In the Wireless Manager, tap Menu → Bluetooth Settings.



3. In Bluetooth Settings, tap **Add new device...**

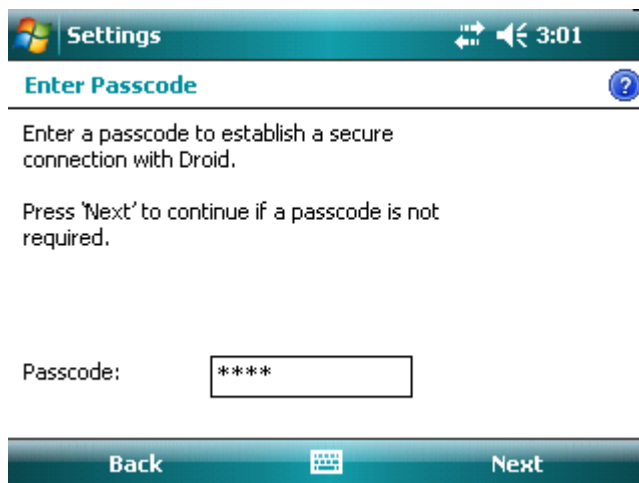


- The Surveyor(+) should scan for Discoverable Bluetooth devices and return the list of devices after a few seconds. Tap the discovered Droid device and tap **Next** to continue.

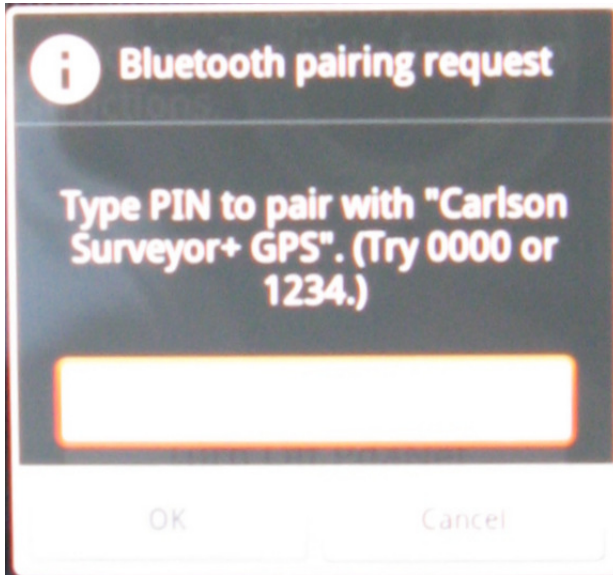
**Note:** If the Droid does not appear on the list, you may have exceeded the 120 second Discoverable period allowed by the PdaNet application. You may need to return to the Droid and turn PdaNet off and then on again to reset the 120 second Discoverable window.



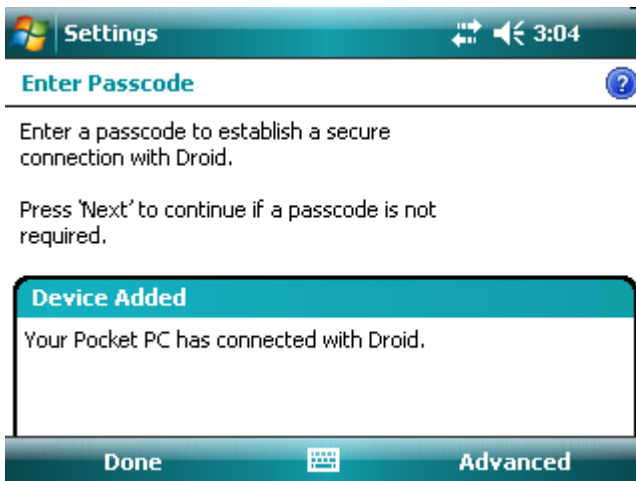
- Provide a Passcode for more secure Bluetooth connections and tap **Next** when ready. Common passcodes are 0000, 1111 and 1234.



6. On the Droid, you will be prompted to supply the same passcode as specified above. Place this information into the Droid.



7. Once the passcodes have been accepted, the Droid and the Surveyor(+) will be paired and should be ready to use. It is suggested that Dialup Networking is available as a service. Tap the **Advanced** button.



- Examine the Partnership Settings and make sure **Dialup Networking** is enabled as a service and tap **Save** when ready and return to the Home screen of the Surveyor(+).



## Define Connection Setting

Perform the following on the Surveyor(+) to establish a Connection Setting to the Internet:

- Tap the Wireless Manager icon to the immediate left of the Sound control icon and then tap **Settings**.

**Note:** The Wireless Manager icon will not likely look like the one shown below due to the ActiveSync connection status used while producing this document.



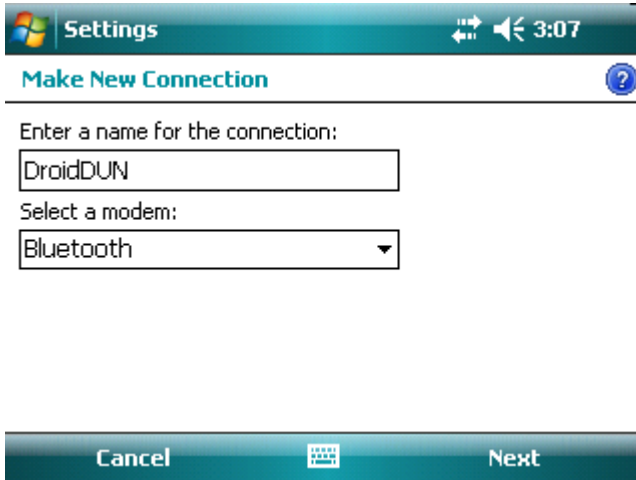
2. Tap on the Connections icon found in the Connections tab.



3. Tap on the **Add a new modem connection** link.



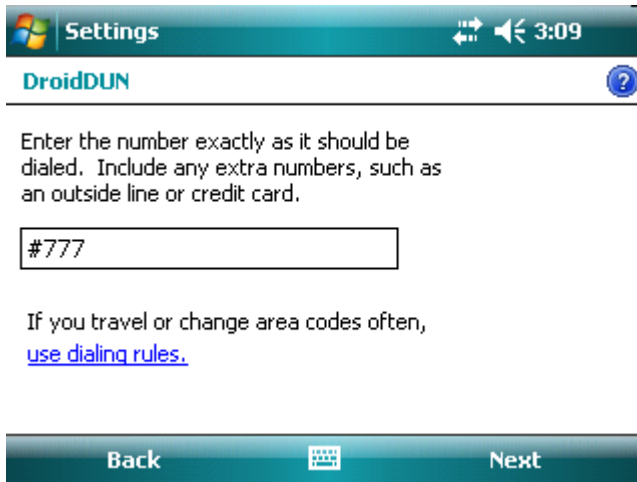
4. Provide a name for the Connection and specify **Bluetooth** as the modem type. Tap **Next** when ready.



5. Tap the Droid device that was paired earlier and tap **Next** when ready.



6. Indicate the Verizon number to dial of **#777** and tap **Next** when ready.



Settings 3:09

DroidDUN

Enter the number exactly as it should be dialed. Include any extra numbers, such as an outside line or credit card.

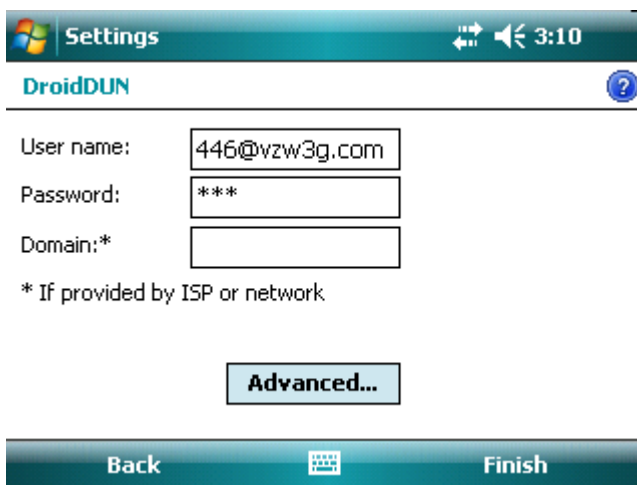
#777

If you travel or change area codes often, [use dialing rules.](#)

Back Next

7. Provide the following User name and Password settings for the Verizon account and tap **Finish** when complete and return to the Home screen:

- User name: [10digitphone#@vzw3g.com](mailto:10digitphone#@vzw3g.com)
- Password: **vzw**



Settings 3:10

DroidDUN

User name: 446@vzw3g.com

Password: \*\*\*

Domain:\*

\* If provided by ISP or network

Advanced...

Back Finish

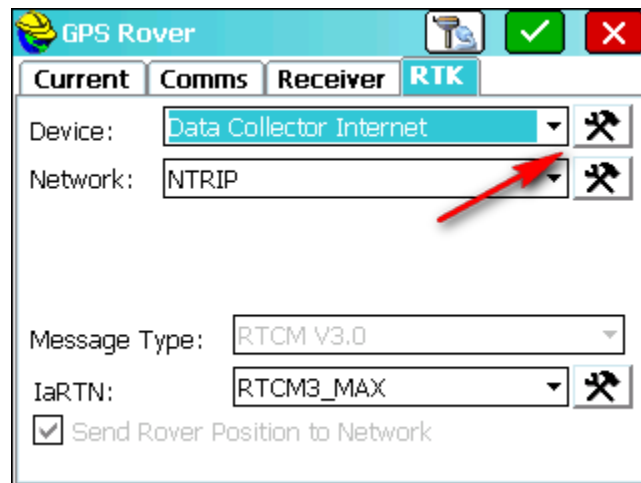


## Launch Carlson SurvCE™

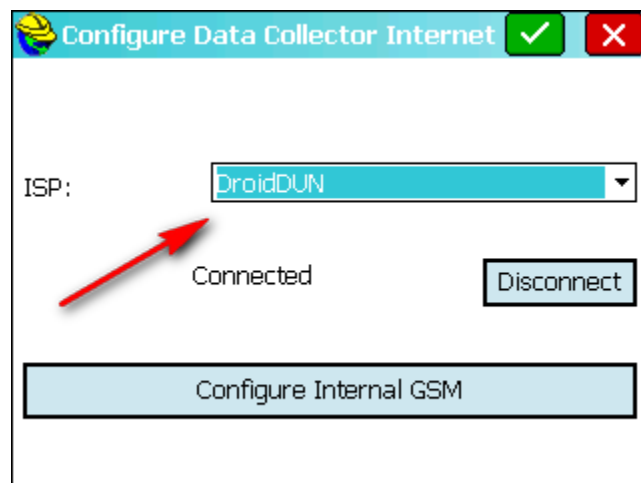
The following information was written showing Carlson SurvCE 2.51. Subsequent releases of SurvCE should be very similar to that shown below.

1. Launch SurvCE and proceed through the Job Setup menus to the main SurvCE screen.
2. Tap the Equipment tab and then tap **GPS Rover** and tap the **RTK** tab.

3. Set the Device to **Data Collector Internet** and then tap the **Device Tools** button.



4. Identify the Droid DUN Connection as established earlier and Connect as needed. Tap the Green Check button to complete the SurvCE connection to the Internet.



5. Complete the GPS Rover configuration settings as outlined in the SurvCE documentation.

Once the Bluetooth DUN/Internet connection has been established, mountpoints and base information can be established to obtain GPS base station corrections.