

Configuring MMCE for “The Utah Reference Network” (TURN)

By: Mark Silver

Date: May 2, 2007

0. Get TURN credentials from:

<http://www.turngps.utah.gov>

THE FIRST CONNECTION IS DIFFICULT, Subsequent connections will be simpler!

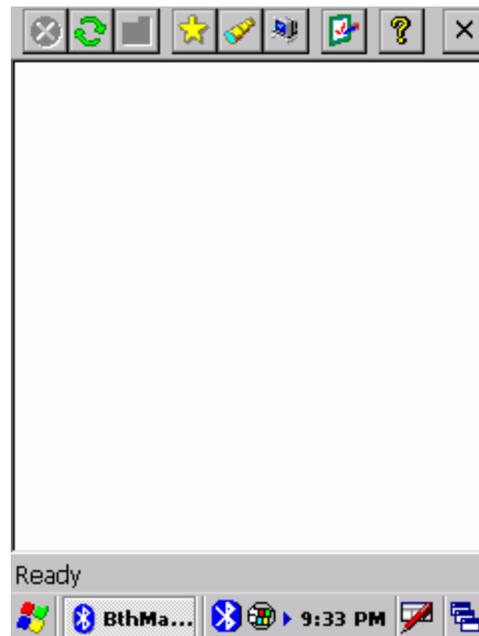
1. Double-click on the “Shortcut to BthManager” on the CE Desktop:



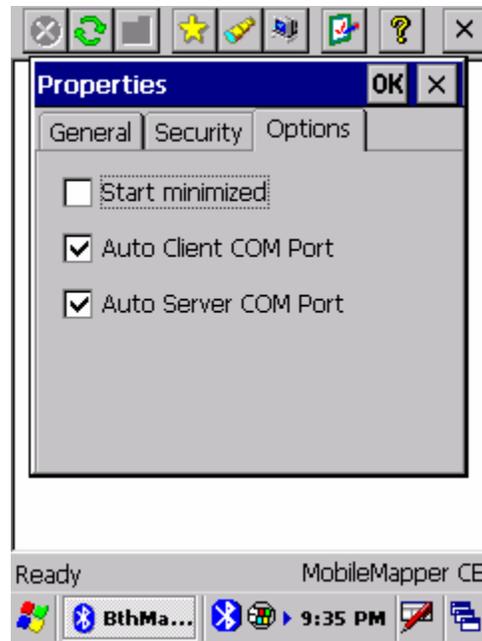
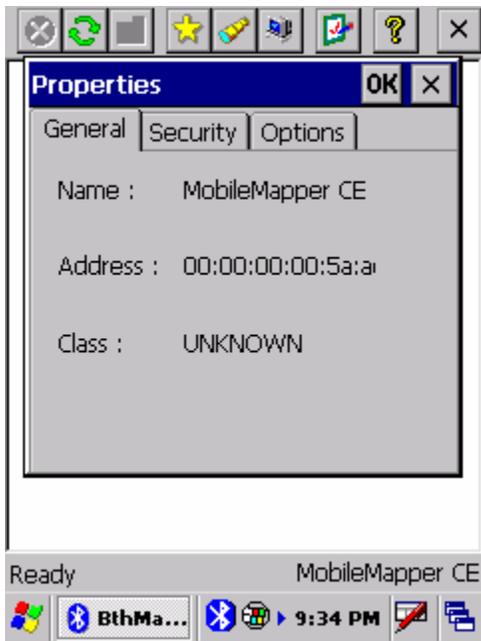
Wait for Bluetooth Manager to load. It takes a while:



The “Bluetooth Manager” will be shown:



Click on the green-framed clipboard with the red checkmark.



Select the “Security” tab and configure these settings:

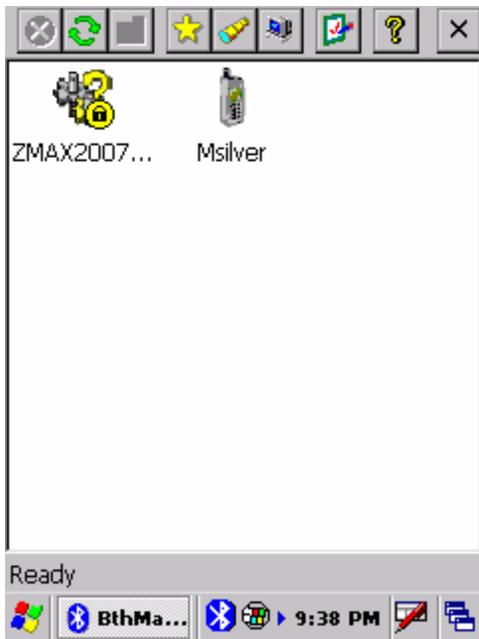
Press the OK button (upper-right) to return to the Bluetooth Manager.



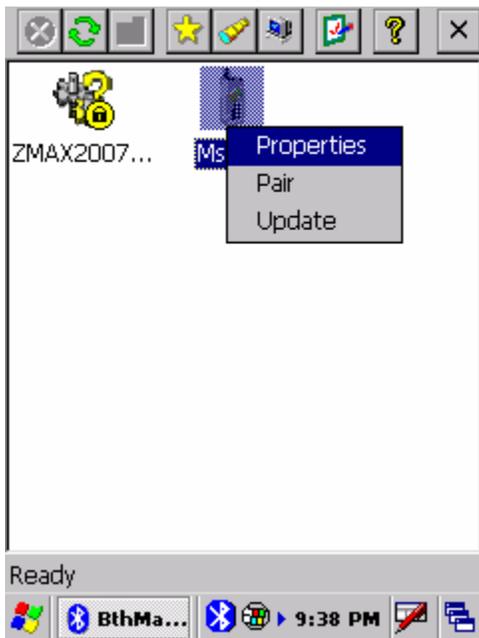
IMPORTANT: Set your cell phone’s Bluetooth to ON and DISCOVERABLE (or FIND ME). On a Motorola phone: “Center Button: Settings: Connection: Bluetooth Link: Setup” Set “Power: On”, then click on “Find Me”. A message about “Discoverable for 60 Seconds” will be displayed.

Click on the flashlight on the Bluetooth Manager toolbar, wait until your phone is shown:

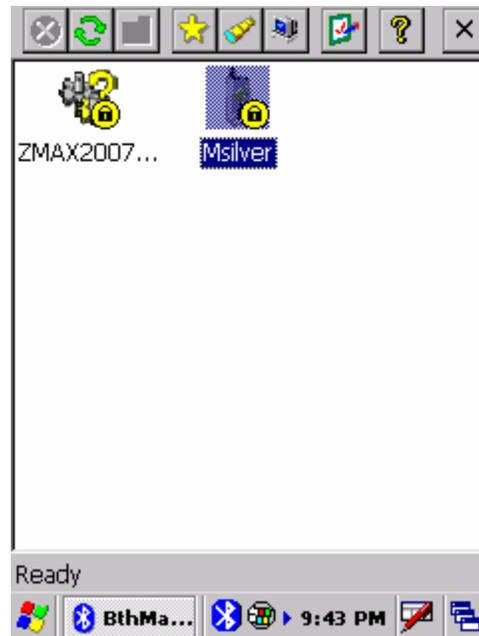
Select the “Options” tab and configure these settings:



Click and hold on the cell-phone until the “Properties, Pair, Update” menu is shown:



Click on “Pair”:

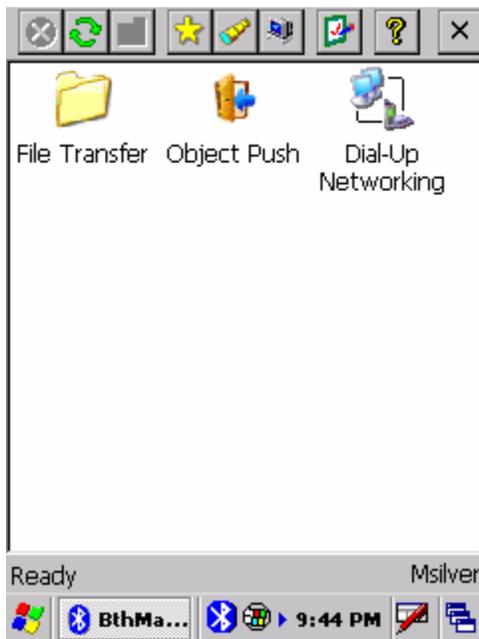


Enter a clever Pin. The Pin should be numeric, then press OK, your cell phone will ask for the pin, then show “verifying pin”. If you typed the PIN correctly, your phone will display a message like “PIN verified and saved”. If you don’t type the PIN correctly, click and hold on the phone icon and try again.

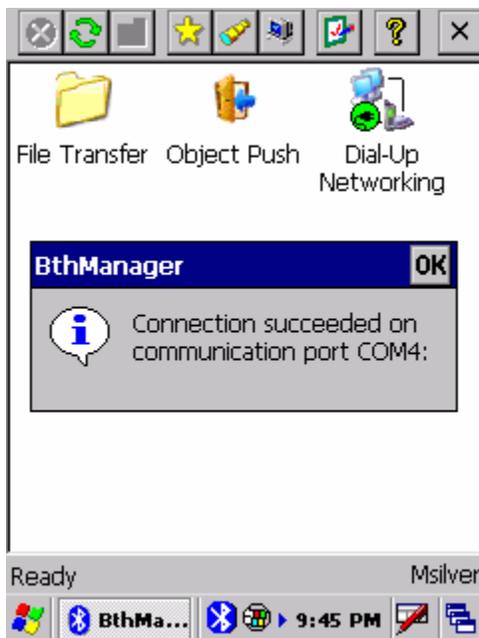
A yellow lock will appear next to the phone icon on the Mobile Mapper CE:

Double-click on the phone icon.

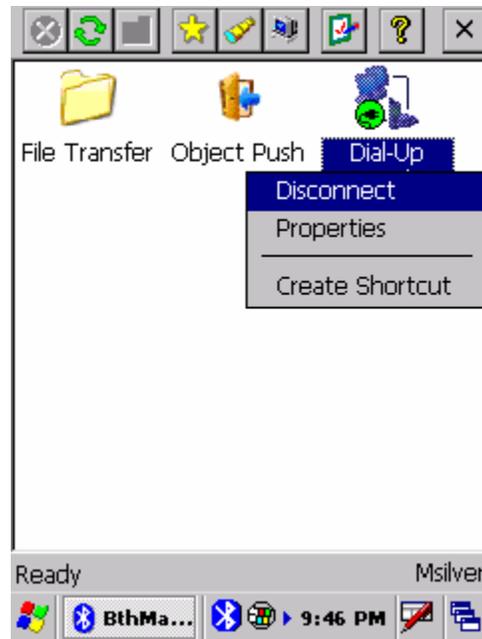
After a few seconds of 'searching' a screen similar to this one will be shown:



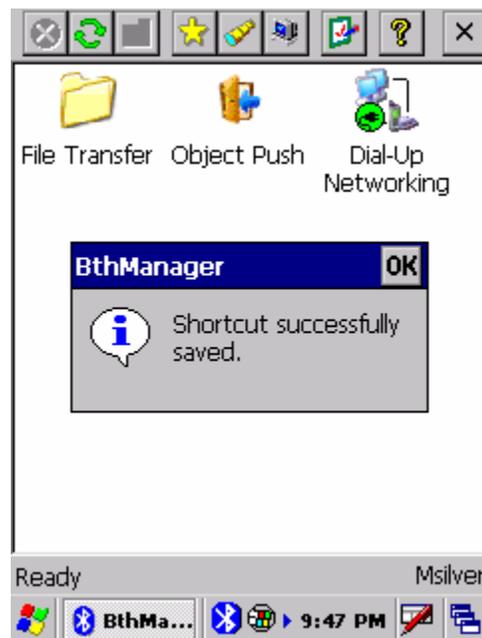
Double-click on the "Dial-Up Networking" icon, wait for a screen like this one:



Click on OK, then click-and-hold on "Dial-Up Networking":



Click on "Create Shortcut", wait for a confirmation box:



Click on OK, then click on the X in the upper-right corner to close (hide) the Bluetooth Manger.

2. Configure Dial-Up-Networking.

Click on the "Start" menu (the flag in the lower left corner):



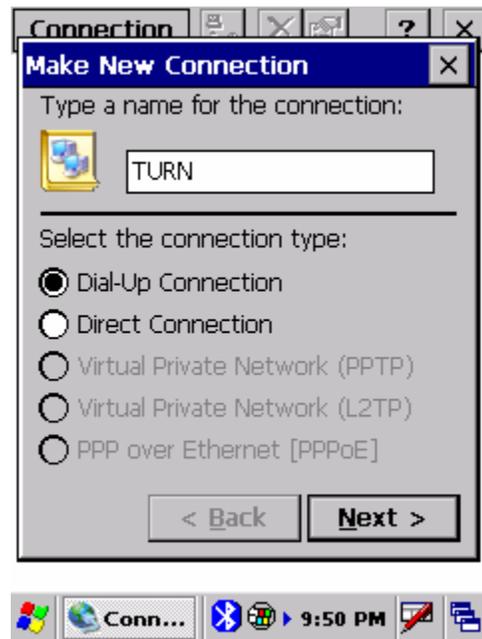
Click on Settings > Network and Dial-Up Connections:



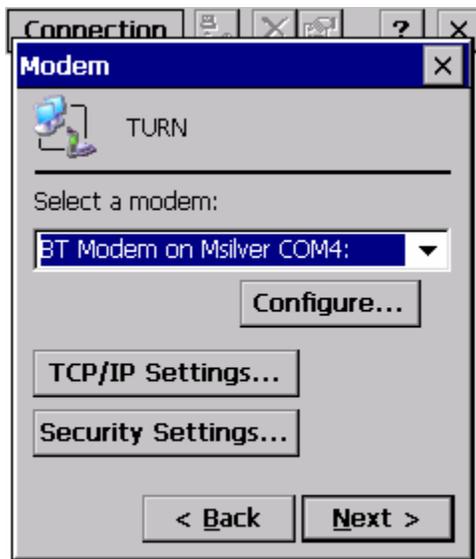
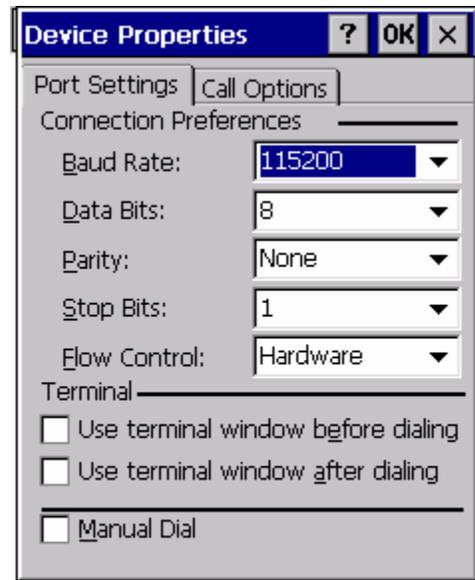
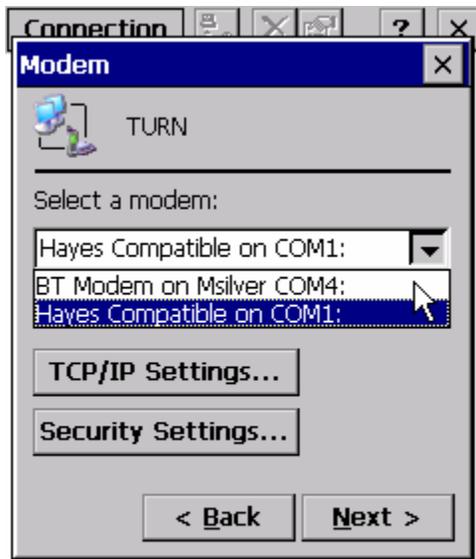
Wait for the “Connection” menu:



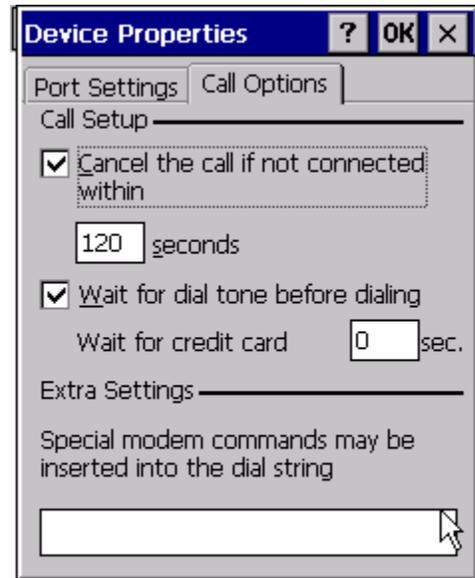
Double-click on “Make New Connection”



Name the connection “TURN”, choose Dial-Up Connection and press “Next>”
 Choose the “BT Modem on XXXXX on COM:” selection:



Set the “Call Options” to match these:



Click on “Configure...”:

Set the “Port Settings” to match these:

Click OK to return to the main “Modem” screen. Don’t mess with “TCP/IP Settings...” or “Security Settings...” the defaults are just fine.

Press the “Next” button:

Set the “Phone Number” to “*99#” as shown, don’t worry about the “Country/region code” and “Area Code”:



Press “Finish” to return to the “Connection” menu.

Highlight the “TURN” icon and press the “Two Computers” button:



Set the “User Name:” to WAP@CINGULARGPRS.COM

Set the “Password:” to CINGULAR1

Set the “Domain:” to wap.cingular

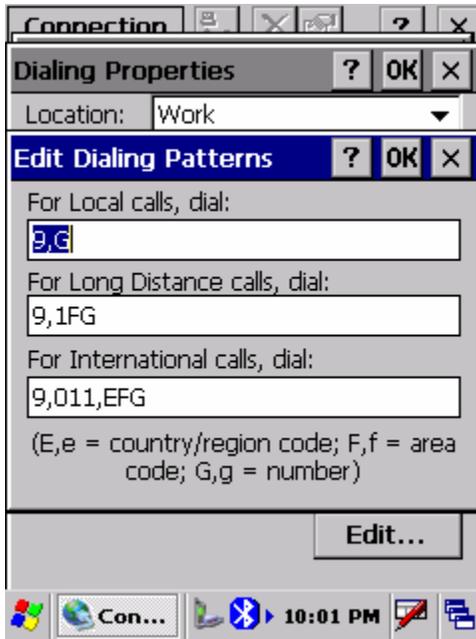
Check the “Save Password” checkbox:



Now press the “Dial Properties...” box:



Click on the “Edit...” button:



Set all three boxes to “G” as shown below:

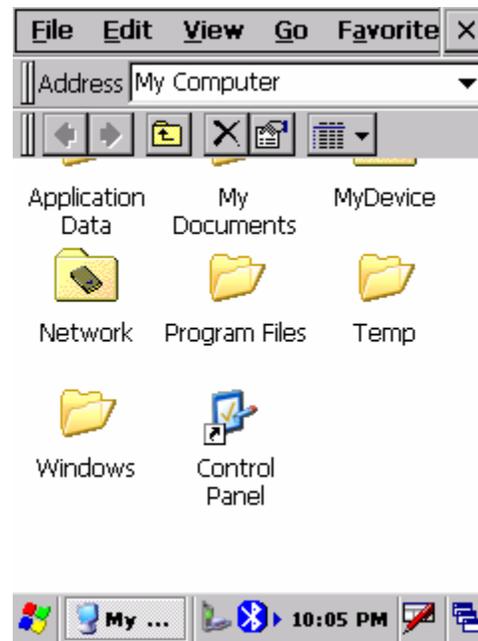
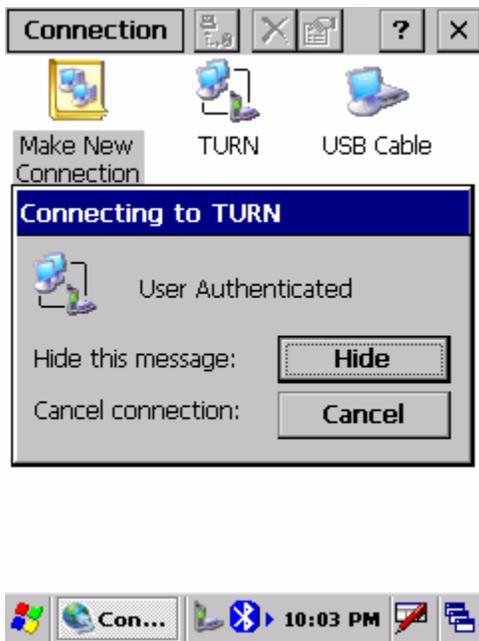
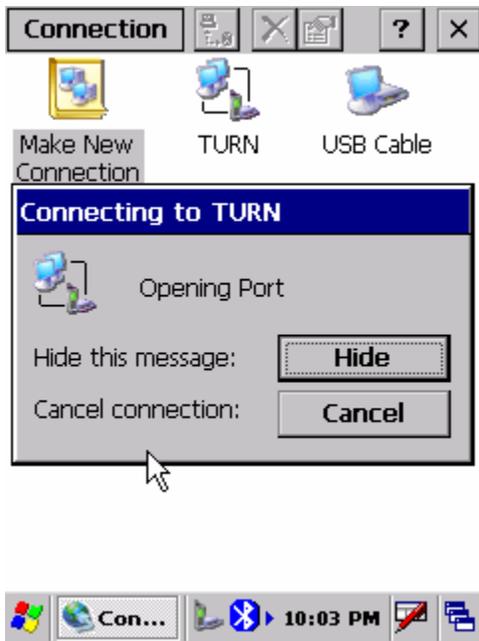


Press OK:



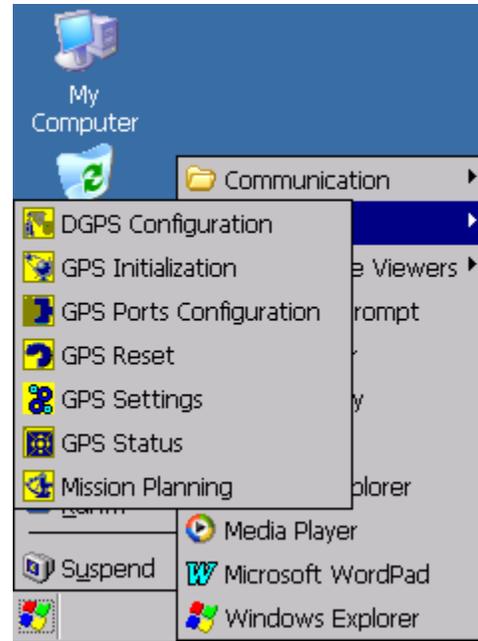
Press OK:

Press “Connect”

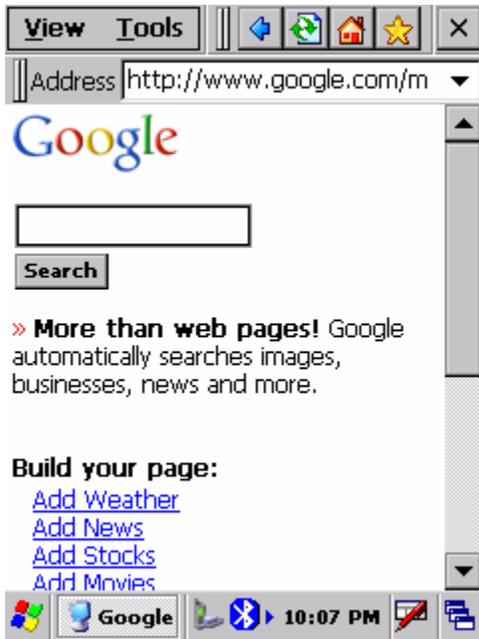


Your phone will say “GPRS Active”. You can press the “Hide” button to hide the message. Then press the X in the upper-right corner to close the “Connection Manager”. Your MMCE is now connected to the internet. You can prove this by starting the Explorer (Start: Programs: Windows Explorer):

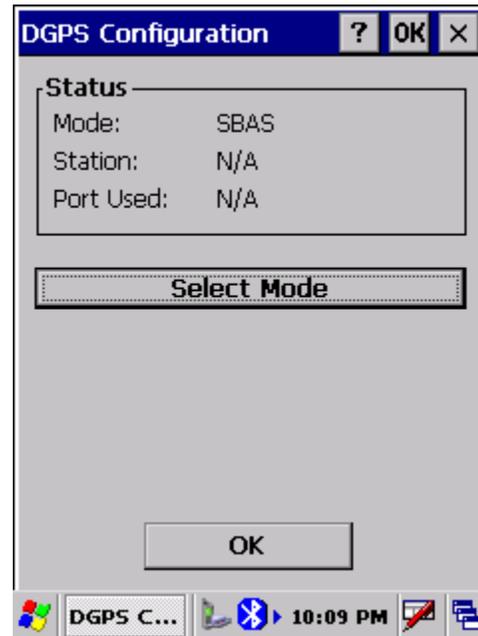
Type www.google.com into the “Address” field:



then press the “Enter” key:



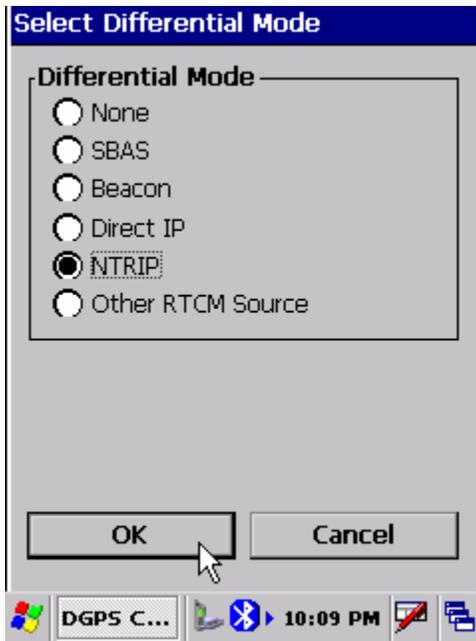
Wait for the “DGPS Configuration” tool to load:



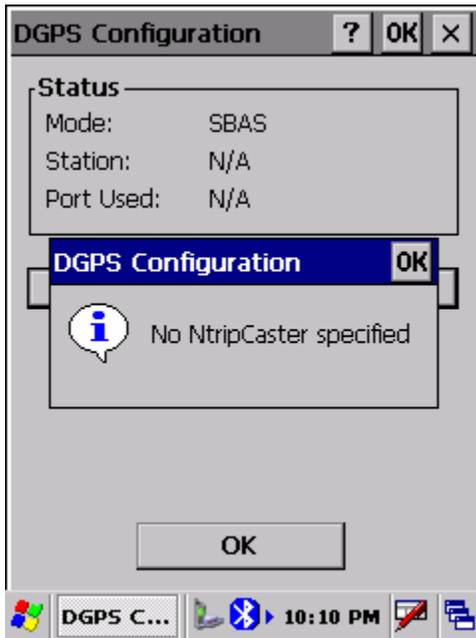
Google should be displayed, just like on a PC.

Press “Select Mode”:
Choose “NTRIP”

Close the Windows Explorer, then click on “Start: Programs: GPS Utilities: DGPS Configuration”:



then press OK. MMCE will complain that “No NtripCaster specified”



Click on OK:

Click on “NtripCaster”:



Click on “Add” and fill in the blanks:

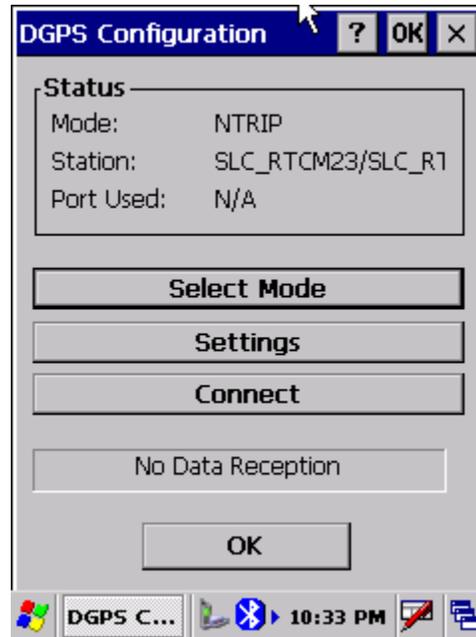


Press OK:



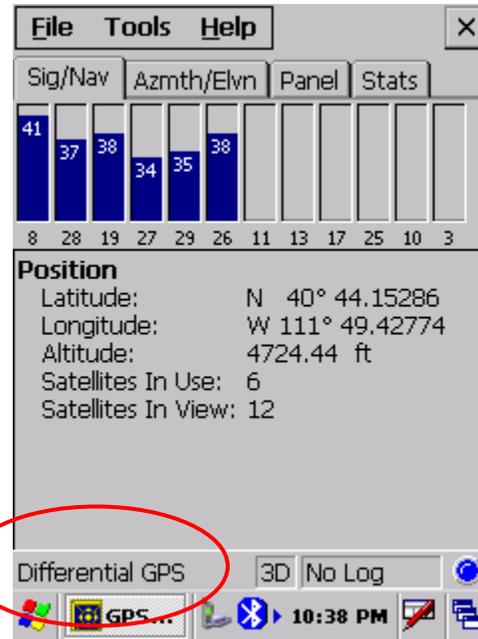
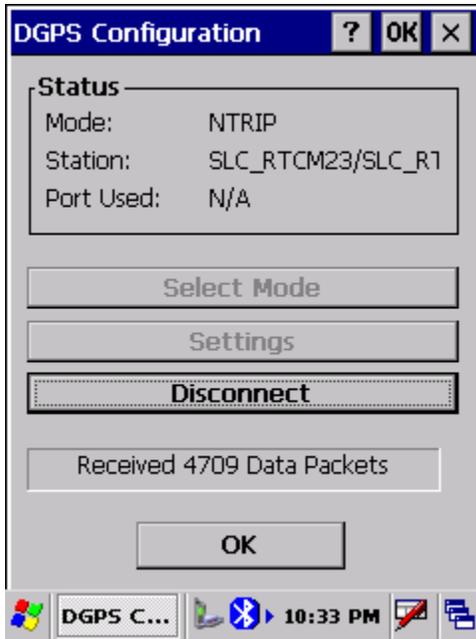
Press OK, choose your mount point:

Press OK:

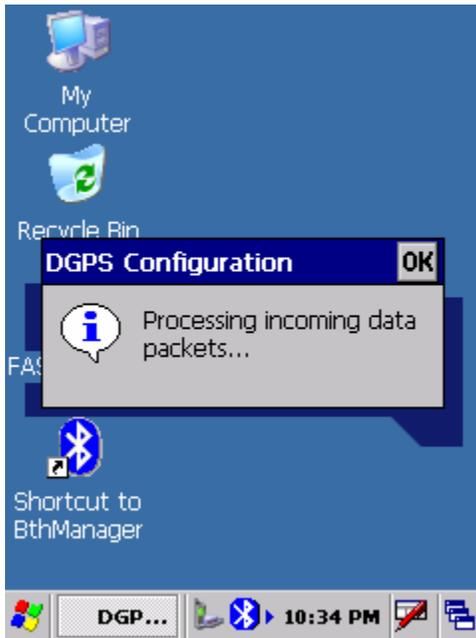


Finally (yes we are almost done), click on "Connect".

If all is well, after a few moment the status box will show an increasing character count:



Click OK. MMCE will show confirmation message:

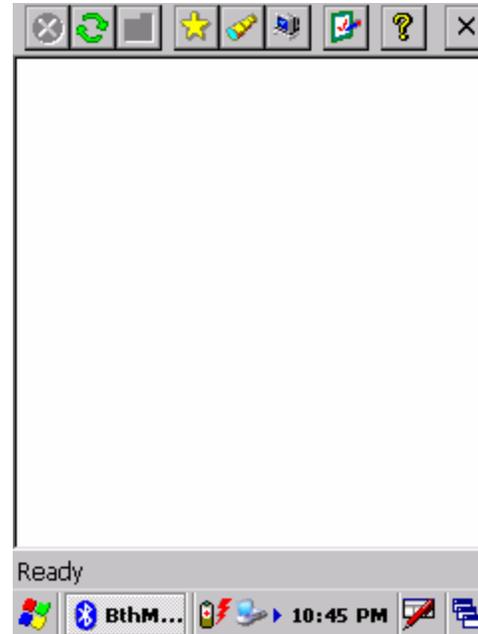


Press OK.

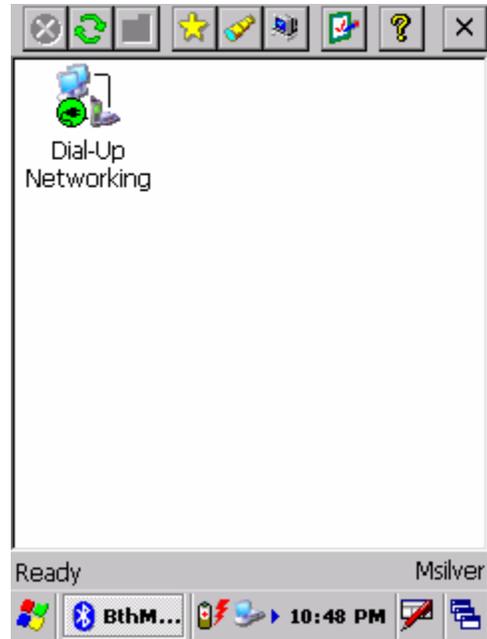
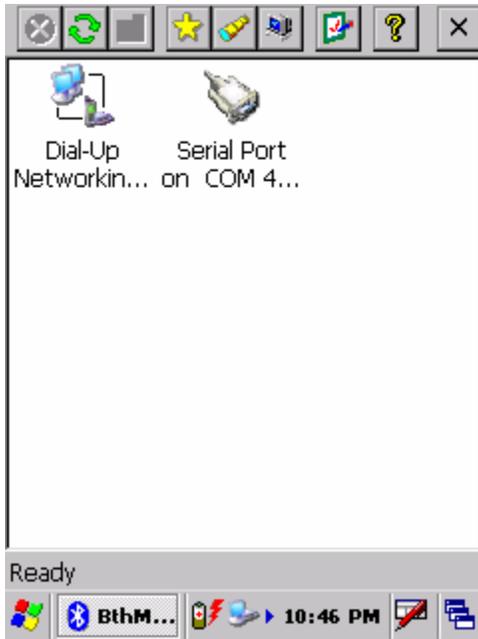
You can check your differential correction by selecting "Start: Programs: GPS Utilities: GPS Status" if all is well, the lower left corner will show "Differential GPS":

Restarting Connection

1. Turn on MMCE.
2. Start Bluetooth Manager:



Click on the yellow star:



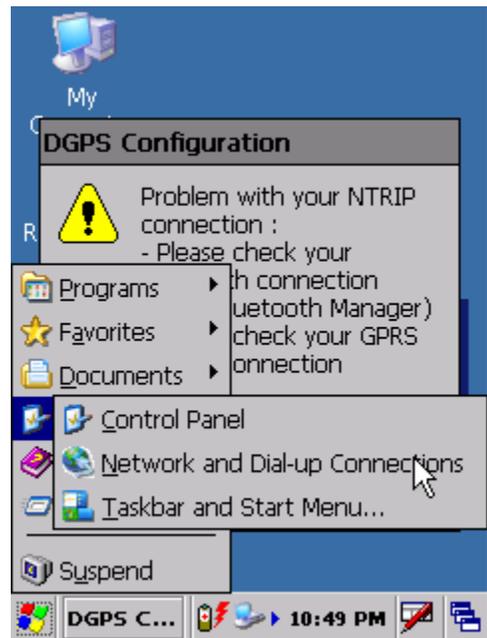
Double-click on “Dial-Up Networking”:

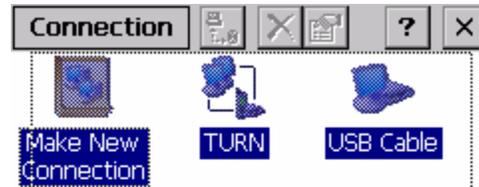


Click OK:

Click on X in upper-right corner:

Click on “Start: Settings: Network and Dial-Up Connections”:





Double-click on TURN:

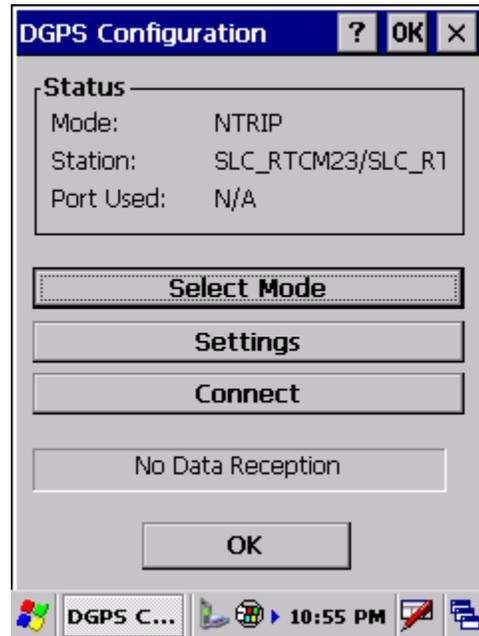


Click on "Connect":

Wait a bit, your phone will show "GPRS Connected", hide the Connected window on the MMCE:

Click on the X in upper-right corner:

Click on "Start: Programs: GPS Utilites: DGPS Configuration":



Click on "Connect".

The status line should show increasing data packets.