# Internet Base with TSC3 and R10 using a static IP address SIM card

1. Contact your cell provider and obtain a plan with a Static IP address. In the example below I will be using a plan from AT&T.
2. With the plan enabled you can either insert the SIM card into the TSC3 or the R10. **Either option will work since you will need to leave the data collector behind with the base receiver once the survey is started.**
3. In this example we will insert the SIM card into the R10 and then create a Bluetooth partnership to the base receiver and set it as a base and hit accept.
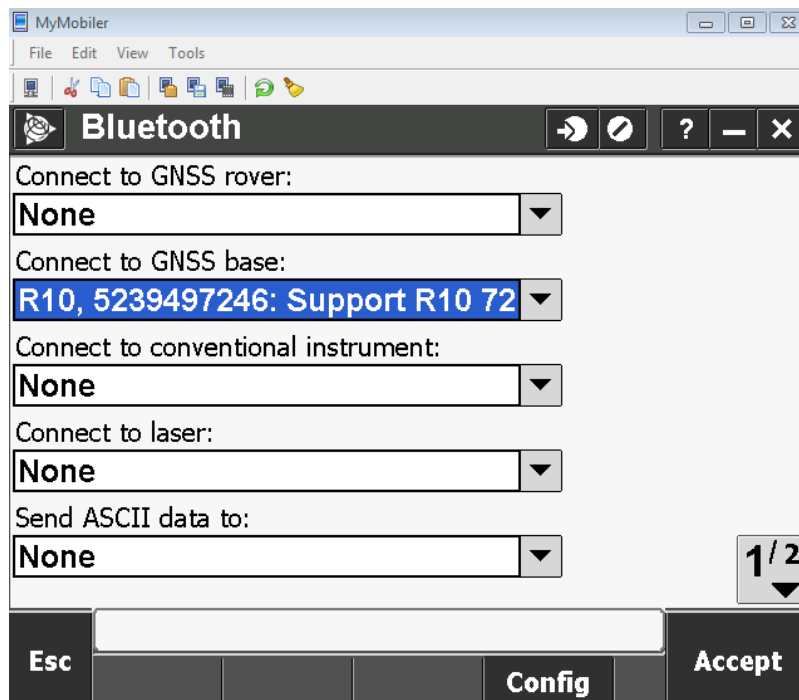
4. From the main menu in Trimble Access go to "Internet Setup". Here we will create a new connection. Select New/Edit and select "Bluetooth" for the port and in the "Bluetooth device" box, select the R10 receiver you just partnered via Bluetooth and set as the base.
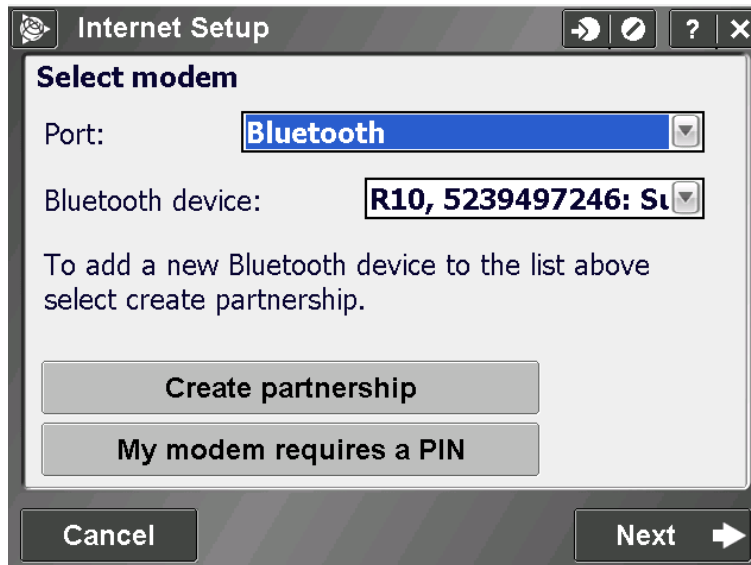
5. You will now need to select a service. In the case of AT&T Trimble Access does not have the options to automatically configure the connection when using a Static IP so you must create a custom or simply add a new provider. Tap on the "Add Service Provider" button.
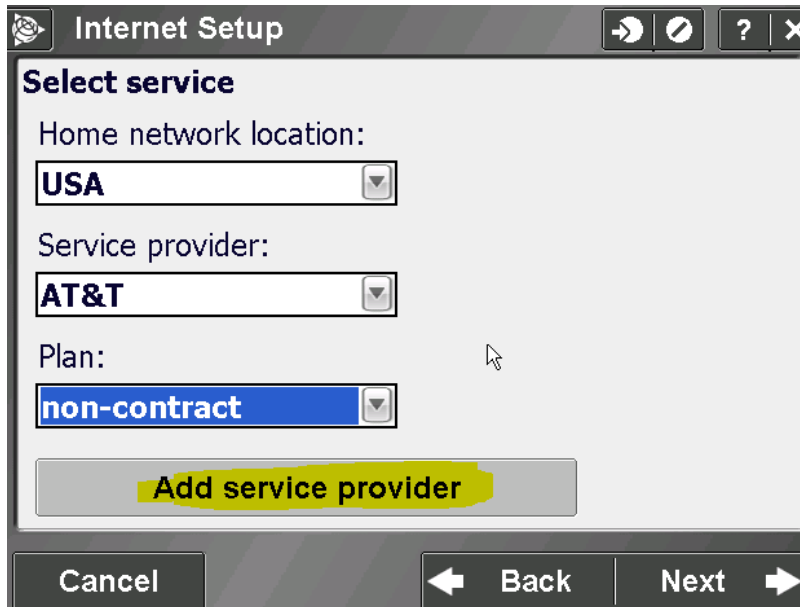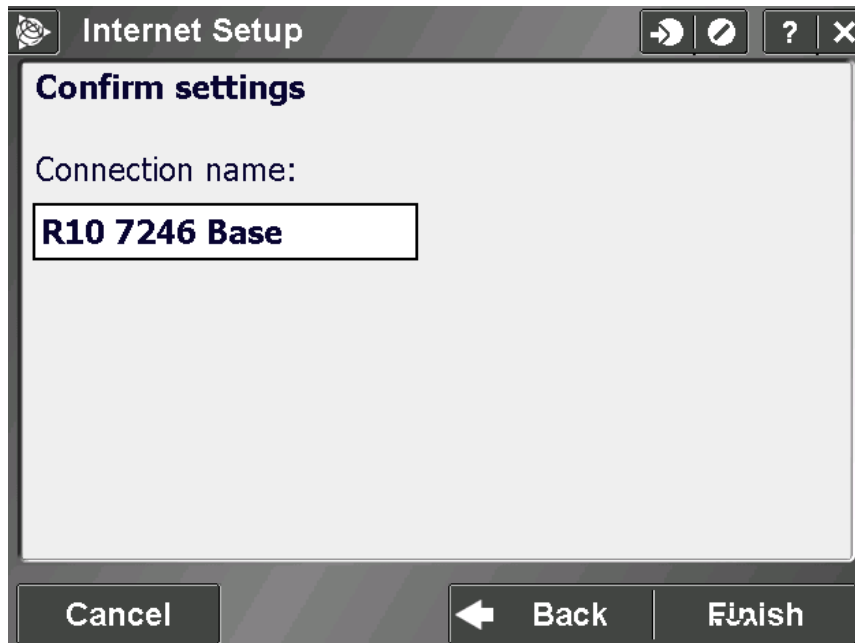
6. Enter the details in from your provider. Notice I named the "Service Provider to "ATT with Static IP". I also cleared the options for the "Username and Password" under the "User details" button because this plan does not need that information. Hit "Add"

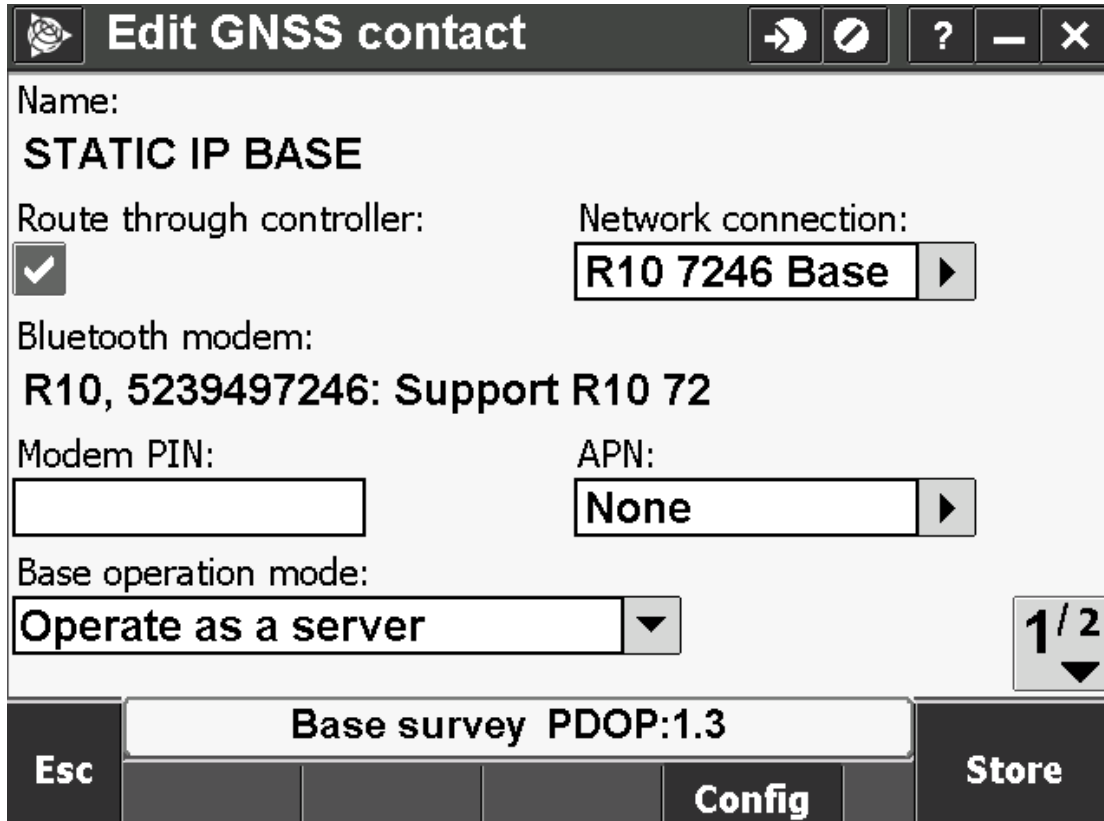You can now name the connection and hit finish.

You can now test the connection to see if it works. Here you can see the connection is up and running.
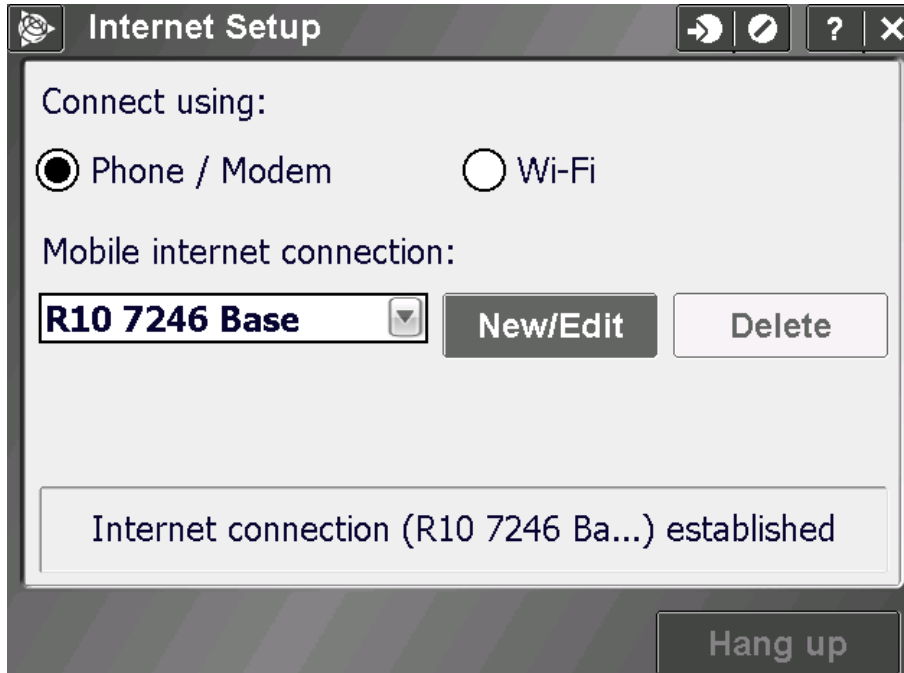
7. We will now create the Survey Style for the base receiver. Go to Settings->Survey Styles and hit "New" and give the Survey Style a new name. In this example it will be "R10 Static IP Base". Once you name it go to the "Base radio" option and set the "Type" to Internet connection and then hit the right arrow key to create a new GNSS Contact.
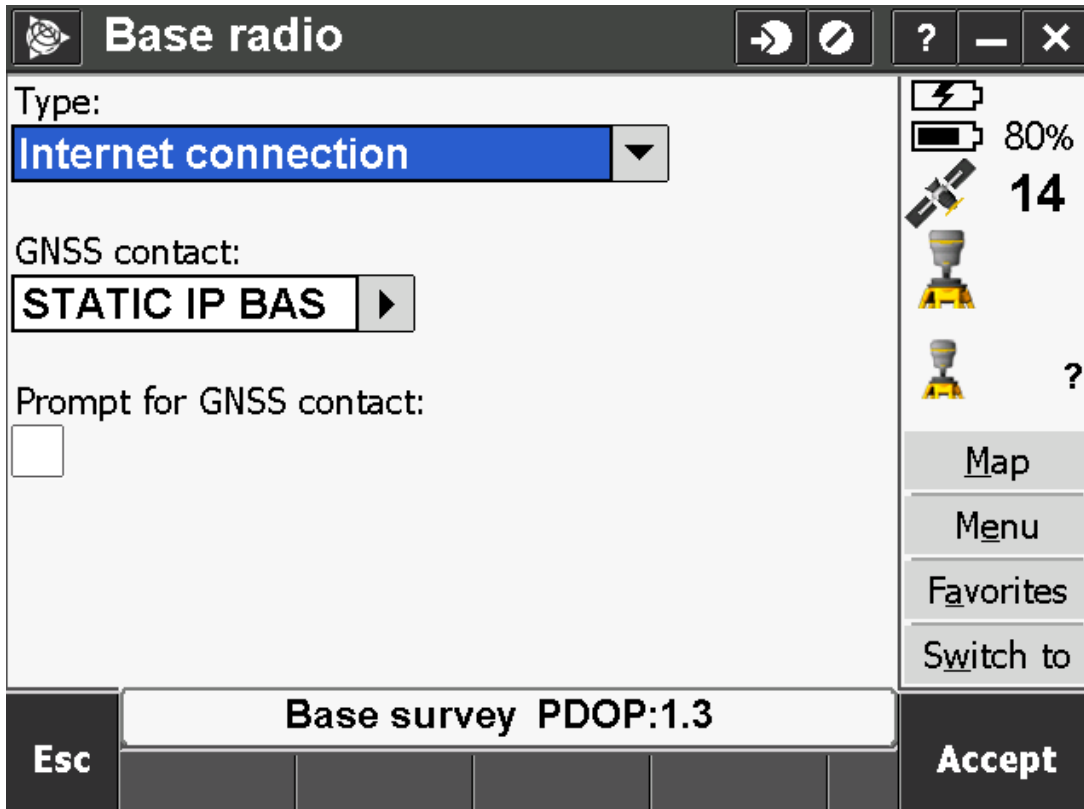
For the "Network connection" use the connection we made earlier via the "Internet Setup" in Trimble Access. You can set none for the "APN" and under "Base operation mode" we will set this to operate as a server.

For the port you can set this to anything. This will be the port used by the rover in order to connect later. You can now hit store and then accept and configure the "Base Options" to your liking and store the survey style off.
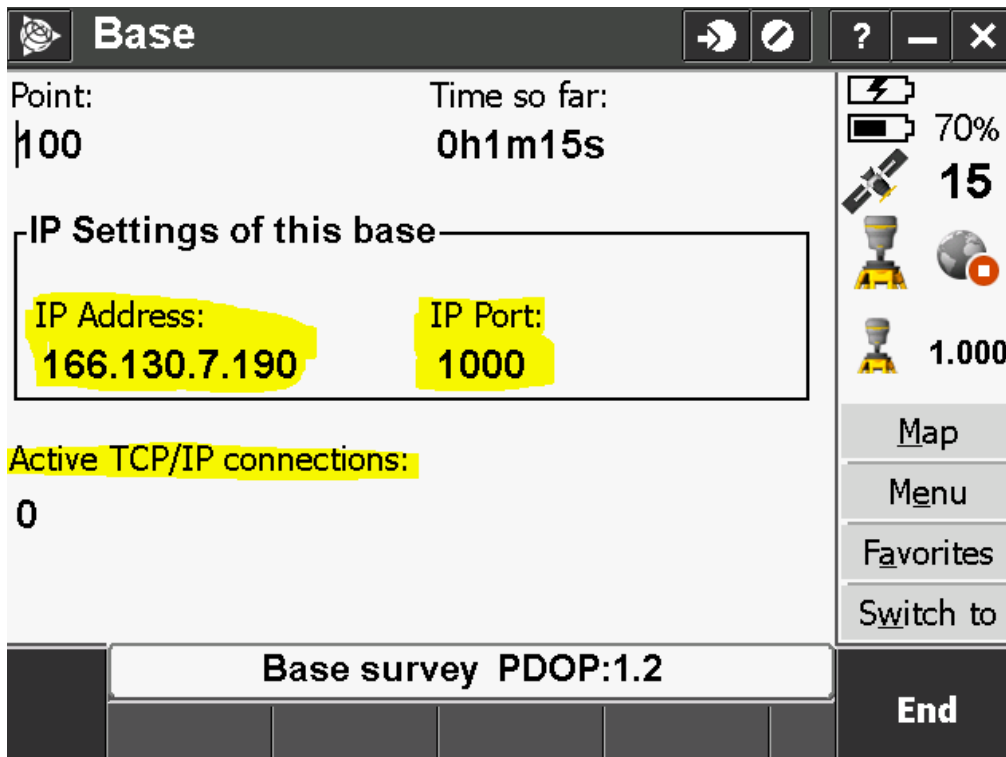
8. Now you can start the base. With the receiver powered on and ready to go, from the Main Menu in General Survey, hit measure-> and select the survey style you created and then "Start Base Receiver" You will select a point you want to use as your base and start the survey as normal. You should then see the screen below. Notice the IP address is the number you should have received from your cell provider. Also note the "IP Port". This is the value we set in the base survey style. These will be the values you will place into your survey style for the "Rover" to connect to the base.

The rover survey style will be the same as any other internet survey. Under the rover radio you will select "Internet Connection" for the type. You will then need to create a new GNSS Contact. Hit the right arrow key and select new and create a new one. You will then enter the IP address and port to connect to the base. The IP address will be the value given to you by the provider. You can also determine the IP address after the base has been started as seen in the previous screen snap. The port used will be the same as you defined in the survey style for the base. If you have doubts, again it will be displayed once the base has been started.
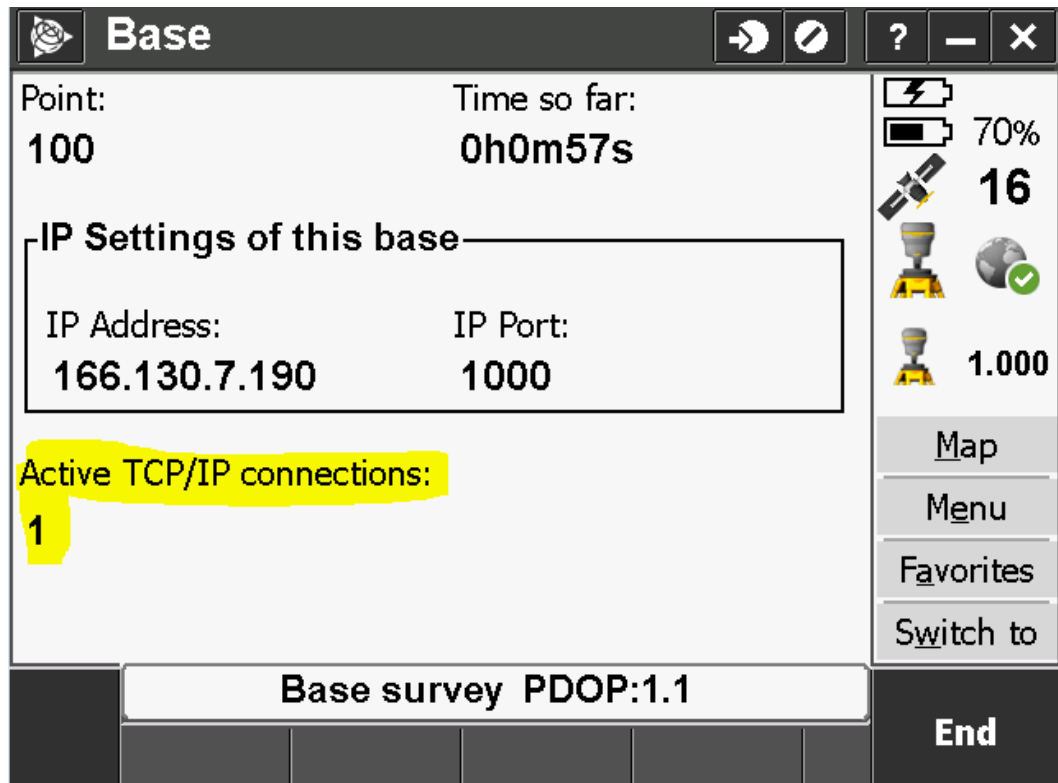
You will note when a rover dials into the base, you will see the following. Note there is one user connected under the "Active TCP/IP connections" You will also see there is now an active connection as displayed by the green/globe icon.