

How to get connected to the Internet in India using a datacard from abroad

As I am now back in India, and have decided to get at datacard rather than using a mobile phone to connect my laptop to the Internet, I thought that making a small step-by-step guide on how to use a datacard bought in the UK with an Airtel SIM could be useful to one or two people. It is fairly straight forward and it should be possible to follow the instructions below even if you are not particularly computer minded. The guide is written with Windows XP laptops equipped with PCMCIA card slots in mind (some Macs do not have a PCMCIA card slot).

Disclaimer: I can't guarantee that any of this information will work for you. It is meant to be a guide for anyone wanting to take the chance on using a datacard purchased outside India with an Airtel SIM. This guide is attached as a pdf for optimal printing.

An alternative to Airtel is Hutch, who use the BPL network. This network has much better coverage than Airtel, but whereas Airtel seem to have GPRS coverage wherever they are, BPL don't. I am fairly certain that the approach described below will also work with a Hutch connection.

Buying an Airtel SIM

It is important to remember that it is illegal for mobile companies to sell a SIM to someone who hasn't got a permanent address in India. This makes getting a SIM slightly tricky. Essentially, there are three ways of getting hold of a Prepaid SIM (getting a Postpaid SIM is too complicated since you need to set up a way to transfer the monthly payments, and this is not recommend for the average person travelling in India): 1) You can get lucky. I got my Airtel SIM from a Hutch shop in Ernakulam, Kerala in November 2006 and gave the address of the hotel where we were staying. I then went to the Airtel office and set up a GPRS connection without any problems. 2) You can get an Indian or a foreigner who has a permanent address to buy the SIM and GPRS connection. 3) As a variant of 1), you can lie. Some people are convincing liars and could maybe pull it off and provide a fake address at the Airtel office.

The downside to 1) and 3) is that Airtel may just decide to do a check; they could turn up at your fictive address, and subsequently your SIM will be blocked. This is not likely to happen immediately though and won't be a problem for the average tourist.

If you are in India for a prolonged period or plan to return you may want to consider lifetime validity. In order for a Prepaid SIM to work it needs validity which means that you will be paying extra every time you recharge the card. By getting lifetime validity at a cost of around Rs. 1000, your phone will always work for incoming calls whether or not there is money on the card. The downside is that you will be paying slightly higher call charges except for foreign calls. A SIM without lifetime validity will stop working after three months without use. A SIM with lifetime validity will stop working after six months without use.

The cost of getting a Prepaid SIM is very low; a couple of hundred Rupees will get you started. A GPRS connection will cost between Rs. 250 and 350 a month for unlimited Internet access depending on the state where the connection is purchased.

Once you have bought the GPRS connection it will take between 24 and 48 hours before it is activated. When you have to renew your connection it can be done at an Airtel office (ideally in the state where you bought the SIM to avoid problems) or at a well assorted Airtel dealer. The GPRS connection is often called "Mobile Office". You will receive an SMS when the connection has been activated. Every renewal will also take 24 to 48 hours to activate.

Buying a datacard

The reason that it is recommended to bring your own datacard to India is that 1) you are less likely to get hassle from your Airtel office since you are not buying any hardware, but only a SIM; 2) The UK datacards are (assuming you purchase the right one) of much better quality than Airtel's; 3) A datacard bought on Ebay UK will be much cheaper than buying from Airtel. It is possible to get the datacards mentioned below for less than £20 on Ebay UK which is quite a saving on the approximately £60 they cost with Airtel. It is very easy to buy a Vodafone branded datacard on Ebay UK because at one point these were given away for free when people bought, for instance, Acer laptops.

Connection speeds

Connection speeds for mobile phones and datacards (and more recently usb modems) depend on the type of network they operate on. Below is a list of different ways to connect your laptop. The speeds listed are the theoretical maximums (UL is upload speed and DL is download speed). In practice you will be lucky to get half of the listed speeds.

- 1) GSM CS: UL 9.6kbps/DL 9.6kbps
- 2) GPRS: UL 42.8kbps/DL 85.6kbps
- 3) EDGE: UL 118.4kbps/DL 236.8kbps
- 4) UMTS CS: UL 64kbps/DL 64kbps
- 5) UMTS PS (3G): UL 384kbps/DL 384kbps
- 6) UL UMTS/DL HSDPA: UL 384kbps/DL 1.8Mbps

At the moment (mid 2007) only GPRS and EDGE are available in India, and EDGE only in the big cities. There are plans to roll out 3G or HSDPA within the next few years. Fingers crossed. A GPRS connection will, roughly, be equivalent to a dial-up modem, i.e. painfully slow.

First generation datacards

There are three generations of datacards. The first generation, the GSM/GPRS datacard, is still being used by Airtel. Vodafone uses two of these types: one branded Sierra and one branded Option. Airtel use the Option datacard. The way to distinguish the Sierra and Option cards is that the Option has a black circle on the top (for the SIM); the Sierra card does not.



Though I haven't tried using this Vodafone first generation Option datacard it should be fully compatible with the Airtel Mobility software which is used for the Airtel datacard. The Mobility software can be downloaded here: <http://www.airtelworld.com/datacard/downloads.htm>. The important point concerning datacards is that they need drivers to work. The drivers are included in the Airtel Mobility software, and since the Vodafone and Airtel datacards are similar there shouldn't be any compatibility problems.

So, if you decide to get a first generation datacard, the approach is as follows: 1) Buy the Vodafone datacard before you go to India. 2) Download and save the Airtel Mobility software on your laptop before you go to India. 3) Buy or get someone to buy a Prepaid Airtel SIM from an Airtel office when you arrive in India. 4) Buy a GPRS connection at the same Airtel office for your SIM.

Second generation datacards

The second generation of datacards, the GSM/GPRS/EDGE/3G datacard, which was popular in the UK a couple of years ago, comes in different shapes and forms. I am certain that the Vodafone Option cards will work with an Airtel SIM (I am posting this using one such datacard). They can be distinguished from other datacards in that they all have a square bit sticking out when inserted in the PCMCIA slot. There are three different ones:



Below is a detailed instruction on how to make these work with an Airtel SIM.

The problem with using the second generation Vodafone datacards with an Airtel SIM is that the

Airtel Mobility software isn't compatible with these datacards. The reason for this is that the Mobility software doesn't contain the drivers that are necessary for running the Vodafone datacard. The easiest way around this problem is to use Vodafone's Mobile Connect software and discard the Airtel Mobility software.

Therefore, download the software (approximately 60 mb) that is compatible with your Vodafone datacard. The datacard I am using is the Vodafone Option 3G Wlan datacard. The software for this datacard used to be easy to find on Vodafone's homepage, but they continuously change the links on there rather hopeless site, and I have been unable to track down the Mobile Connect software (the site is very slow on a GPRS connection).

Run the software by double clicking on the file. When asked, click "Unzip" to extract the files to the default location. By default files included in the software are extracted to your "Temp" folder which is normally located at C:\DOCUMENTS AND SETTINGS\ YOURNAME\LOCAL SETTINGS\Temp. Click "Close" once it has finished unzipping. Open Windows Explorer by right-clicking on "Start" (at the bottom left on your monitor) and choose "Explore". Go to the Temp folder mentioned above. There should be a folder called "VMC6_excl_WLAN_a" or something to that effect. Double-click on this folder. Double-click on the "Run" file. IMPORTANT: if you already have installed the Vodafone software, a re-installation will probably not succeed. You will have to uninstall the software before you attempt a new installation.

On the screen that follows you can choose between various networks and languages. The choice of network is irrelevant, but the language could be an issue for some. Click "Next" once you are happy with the choice of language.

The following screen will do some tests on your computer. This shouldn't cause any problems. Click "Next" when the testing has finished.

Click "Accept" on the Licence Agreement screen unless you have reason to not do so.

After a short delay, the software will be installed on your computer. You have to click "next" a couple of times , "install" and "finish".

Finally, you will be asked to restart the computer. Click "Yes".

When the computer has restarted, Vodafone Mobile Connect should start automatically, If not, double-click on the Vodafone icon which should have been created on your desktop. The "Profile Manager" will open. Choose "PC Datacard" and click "Next".

On the following screen, you will be asked to insert your SIM into you datacard (step 1), and to insert the datacard into the PCMCIA slot (step 2). Do this. In step 3 your have to choose between different services. You can choose the default ("Prefer 3G but also allow GPRS network") or which ever one you prefer as long as it has "GPRS" in its description. Click "Next".

The following screen describes the "connection settings". No changes are necessary, but you can choose to change the default profile name. Click "finished" when you have finished.

You have now finished setting up a Vodafone connection. However, before you can use the Vodafone datacard with your Airtel SIM, you have to enter the Airtel SIM settings in the Vodafone software. This is done in the following way.

To add the Airtel settings, go to menu/tools/mobile profiles/edit. Double-click on the profile you made above. An "edit profile" screen will open. Choose "PC Datacard" and click "Next". The 3 step screen described above will open. Click "Next". In the next screen you have to enter the Airtel APN settings. Type "airtelgprs.com" without the ". Delete the username and password and untick the two boxes. Click "Next".

On the following screen click "Security Settings". Tick the three top boxes only. Click "Ok". Click "next".

On the following screen click "Finish".

You should now be able to connect to the Internet with the Airtel SIM in the Vodafone datacard by clicking "Mobile" in the software. When you have disconnected

In Vodafone Mobile Connect, you should go to menu/tools/options/preferences/usage and change the data limits from 50 to 9999. Click "Ok".

Finally, when you have disconnected by clicking "mobile", you should go to start/control panel/network connections and right-click on the connection you created above and choose "properties" to make sure that the phone number is "*99***1#" or similar. You should be able to change the "1" in this phone number if needed (it may speed up the connection) to anything between 1 and 6.

Third generation datacards

The third generation of datacards are broadband datacards. They are distinguishable from the second generation datacards by having rounded corners on the part that sticks out of the PCMCIA slot.



They will connect to all the network types mentioned above. I have no experience with these, but seem to remember that they are locked to the card provider. Of course, someone could buy one, test it in India and reply to this thread describing how to make it work.