

# **ADSL Internet Connection Fault Finding**

Ver 1 October 2014

#### Overview

This document will assist you in pin-pointing the problem in the case of no Internet connection with an ADSL Modem-Router. The problem will either be with the Telkom line connection, the Telkom ADSL Network, the ISP back end, the login and configuration info on the ADSL Modem-Router, or a hardware fault with the ADSL Modem-Router. This procedure assumes a Netgear Modem-Router, but will work with others, the details on the screens will be in different places.

## Requirements

- -WiseNet ADSL account credentials: User Name and Password.
- -IP Address of the Netgear ADSL Router. The default is 192.168.0.1 but this can generally be found by looking at the IP address of your PC (in Windows, Control Panel, Network and Sharing Center, Local Area Connection, Details, IPv4 Address) and changing the last number to 1.
- -Password of the Netgear ADSL Router (default is *password*, *admin* on the most recent models or *1234* on older devices). It might be set to a custom password, which we might have on file.

## **Procedure**

# 1) Test the connection and speed from your PC or Tablet

This can be done in a number of ways, the easiest is to load <a href="www.speedtest.net">www.speedtest.net</a> into your browser and begin the test. This will test the overall connection and Internet functioning, and show the current connection speed in Mega bits per second (Mbps), which will always be less that your Telkom line speed, and will vary during the day. If there is an upstream Internet problem on the Service Provider network, this might be reflected in very slow speeds, and should be reported with the ISP. If this test fails with "url not found", then there must be a connection problem.

#### 2) Test the Line

The first thing to check after the Speedtest fails is the line. This is the physical electrical line connection between your ADSL Modem-Router and the Telkom Exchange. Some Modem-Routers will show a red light if there is a line problem, others a green light will not come on, but the most definitive way of checking the exact situation is to log in to the Modem-Routers web server. Once logged in (on the Netgear), on the Router Status page under the Modem section, you should see a "DownStream Connection Speed" and an "UpStream Connection Speed". These numbers should correspond to your Line account. DownStream is the speed at which the data is downloaded to you from the Internet, and UpStream is back to the Internet. If these numbers are zero, there is no connection and you have a line problem. You should check the connections to the wall plug, and if that is okay, the line fault should be reported with Telkom. If Telkom test the line and its okay, the Modem-Router or ADSL Line Filter could be at fault.

## 3) Check the connection to the ISP

The next thing to check is the ADSL Connection to the ISP Servers. Under the Router Status, click on "Connection Status" and you will see if your login to your ISP Account is working okay. This window should tell you the connection time, and the IP address assigned to the Modem-Router. This will also be indicated by one of the Modem-Router lights, depends on the model. If there is no connection here, there could be a problem with the Telkom ADSL Network or the ISP itself, but first your login credentials should be checked on the Modem-Router (see TechDoc 102). However its very unlikely that these would change if they were working previously, unless someone else changed them. If there is a connection and the Speedtest (as in (1)) shows little or no speed, there is an ISP or Telkom network problem, however as a first step before logging a Service Call, cycle the power of the Modem-Router and check again.

**WiseNet** is a broad range of Internet services for individuals, professionals, businesses, corporates and other organisations. We offer ADSL Accounts, Web Site Hosting and a full suite of email services

Tel 011 880 9999 Fax 011 880 2555 Email wisenet@pcb.co.za www.wisenet.co.za

