Slow Speed Faults

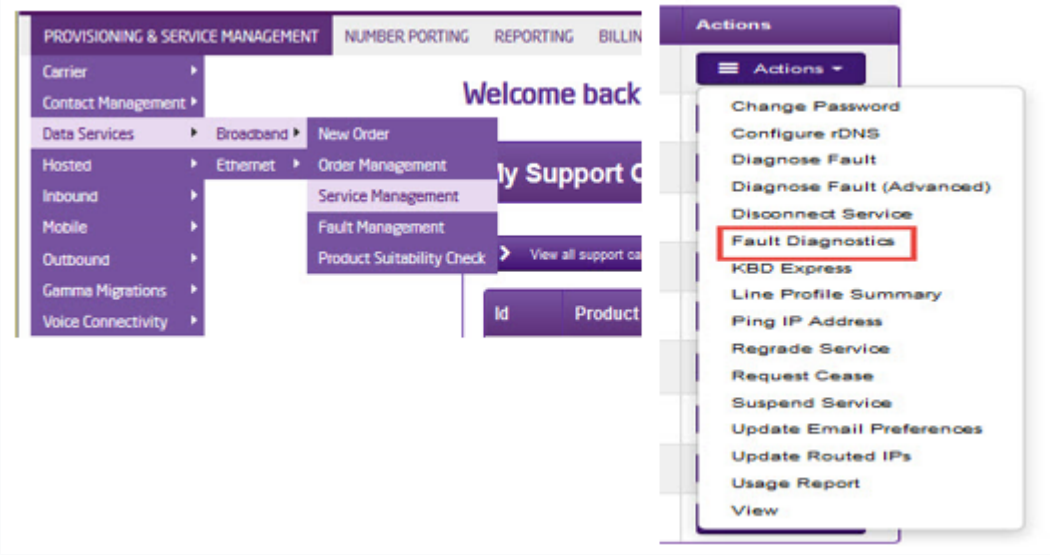
Sometimes what appears to be a slow connection issue may be an intermittent connection; where the router is constantly dropping. In these instances please follow the Intermittent Connection diagnostics.

Please note:

Before you start diagnostics, it is worth checking if there are any known outages in your area which may affect the service.

Step 1

From the Gamma Portal, go to “Provisioning and Service Management”, “Data Services”, “Broadband” and then select “Service Management”. Select the relevant account, and search for the affected line using the one of the available search options available. Once you’ve found the line, using the Actions menu select “Fault Diagnostics”.

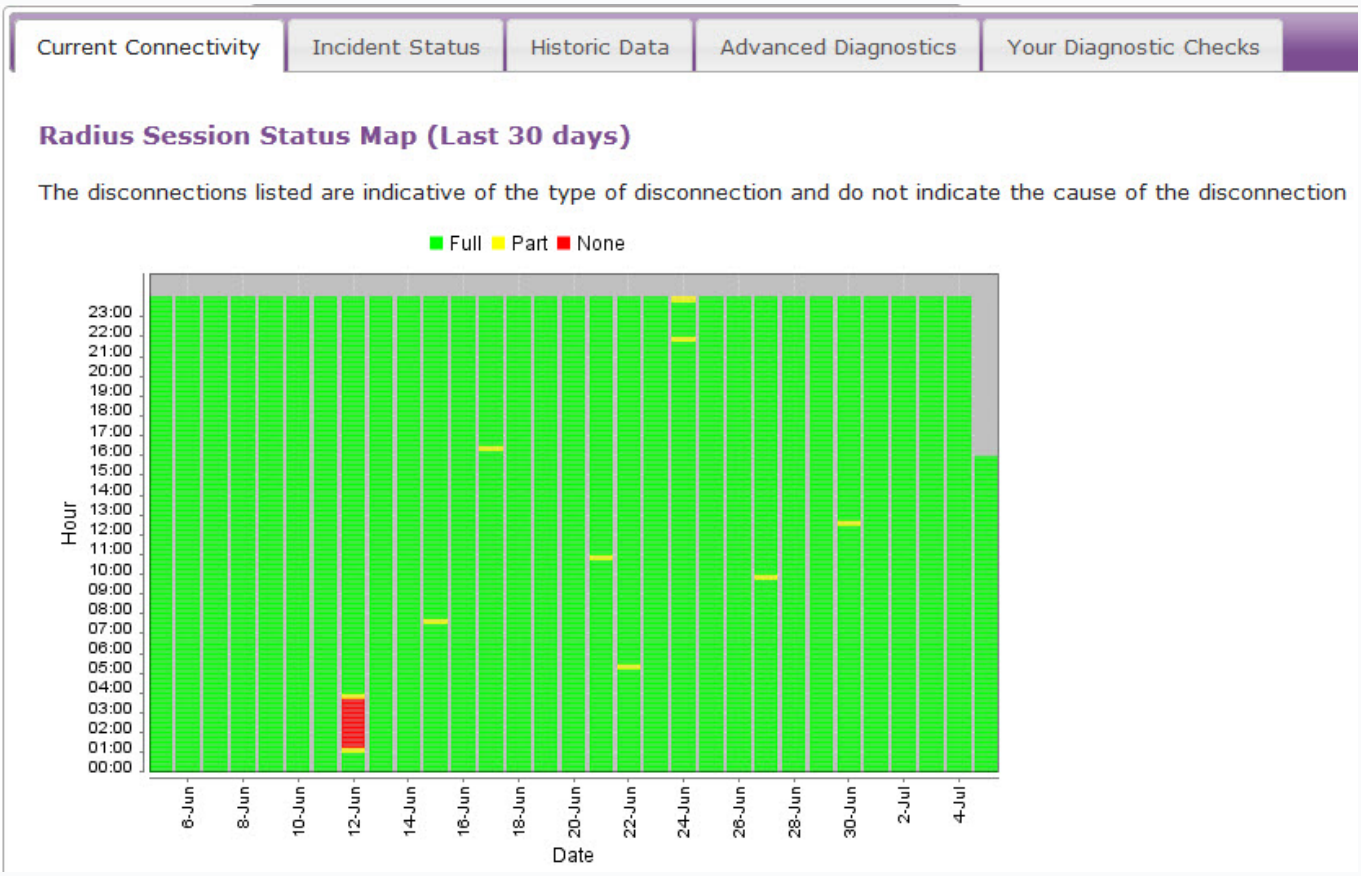


Step 2

The “Radius Session Map” will be the first screen displayed.

If the connection is stable (green segments) then continue to Step 3.

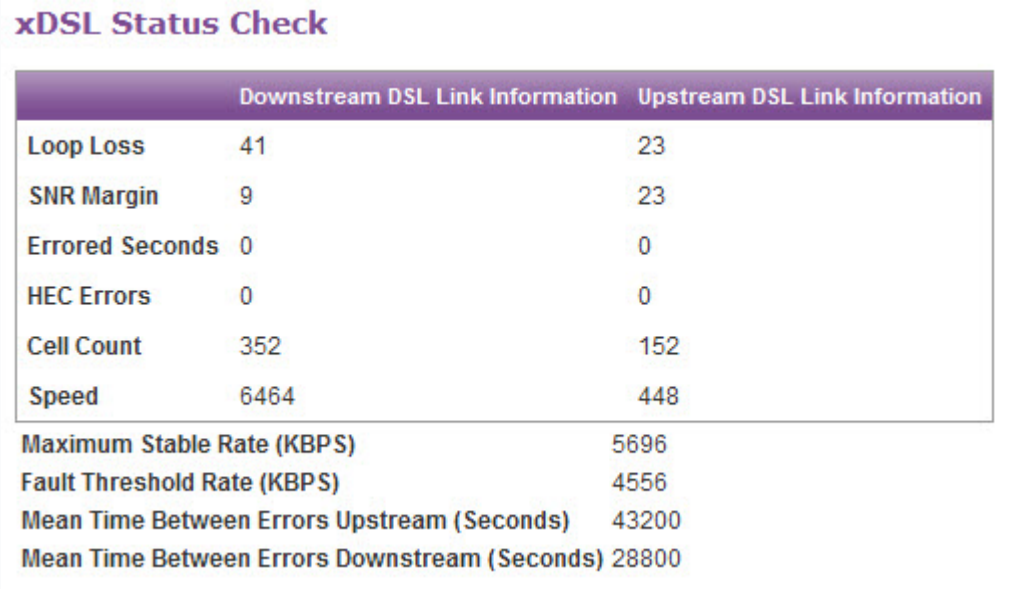
If you are seeing drops (red segments) throughout this period, then please follow the Intermittent Connection diagnostics.



Step 3 (Only Applicable for ADSL)

Now check the xDSL stats, found under the “Current Connectivity Tab”. Scroll all the way to the bottom of the page to see these stats.

We need to ensure that there are no HEC Errors or Errored Seconds. Upstream errors usually indicate a fault with the customer's equipment (run through steps 7-13). Downstream errors could still be problems with the customer's equipment or with the BT line. It is worth doing some equipment checks before raising a fault.



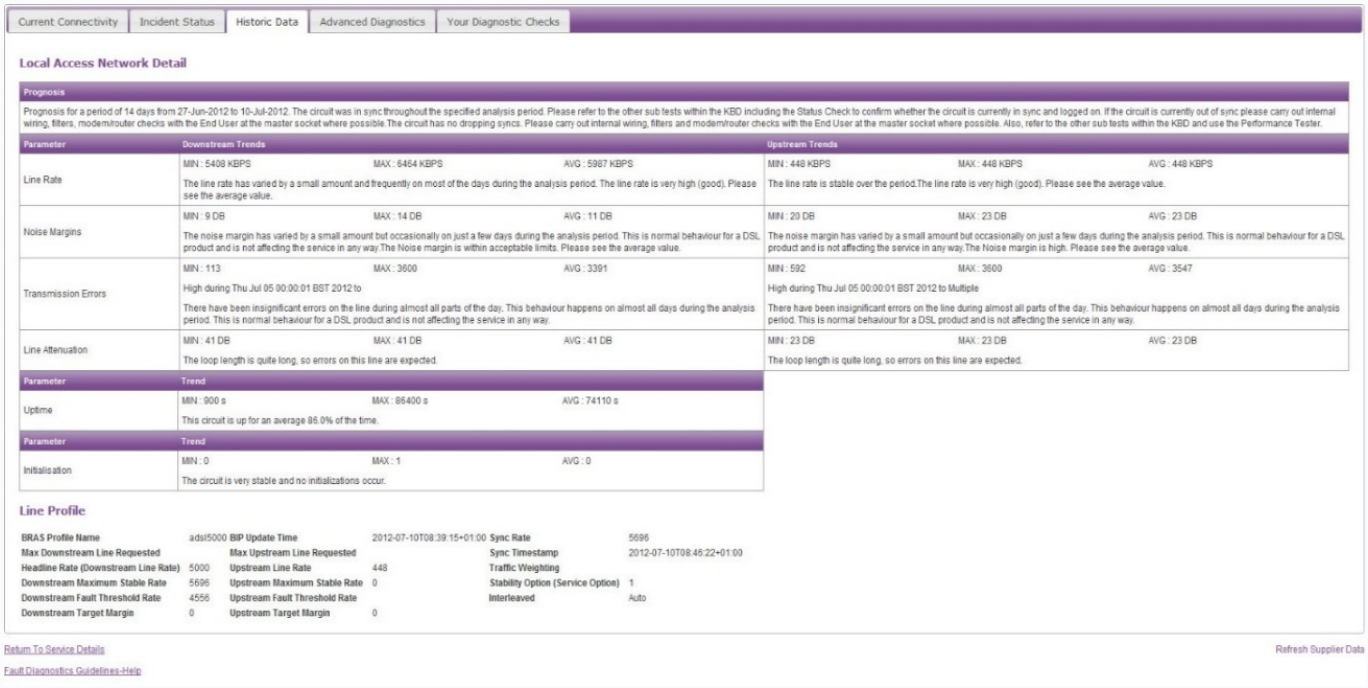
xDSL Status Check

	Downstream DSL Link Information	Upstream DSL Link Information
Loop Loss	41	23
SNR Margin	9	23
Errored Seconds	0	0
HEC Errors	0	0
Cell Count	352	152
Speed	6464	448

Maximum Stable Rate (KBPS)	5696
Fault Threshold Rate (KBPS)	4556
Mean Time Between Errors Upstream (Seconds)	43200
Mean Time Between Errors Downstream (Seconds)	28800

Step 4

Check the Historic Data tab and check the sync speed max/min/average results and compare with the xDSL status. These will indicate if the sync speed is fluctuating. If the sync speed is fluctuating, go to Step 5.



Step 5

Run speed tests to identify if the connection is facing throughput issues. Please run the test on the following speedtest.btwholesale.com and speedtest.gammatelecom.com*

* speedtest.gammatelecom.com/ethernettest (to be used for FTTC)

The full test needs to be run via the further diagnostics option entering the CLI. If this is not fully completed then we are unable to raise a speed fault on the line with our supplier.

Step 6

Please note:

All checks should be run with everything removed from the router with only a single PC connected via ethernet. You should also disconnect all devices connected via wireless. This is to eliminate the possibility of malware or viruses or software using the internet connection which would affect the lines true throughput (for example torrents).

Check the physical phone line.

****Please note that this test only applies to ADSL & VDSL and do not apply to SOGEA and FTTP as there is no voice component of the line to carry these tests out on. Skip these tests SOGEA & FTTP circuits.**

To check the phoneline:

- Plug a telephone into the test socket, lift the receiver and listen for any audible noise
- Dial 17070 and press option 2, this will carry out a quiet line test
- Make a phone call and ensure the quality of the call is good
- If you own the line, carry out a WLR line test

If all of these checks are OK, proceed to Step 7.

- If you hear noise or the line test fails, you should raise a fault with the line provider before further diagnosing any broadband issues

Step 7

Power off the router for 30 seconds, then power back on. This can be done by removing the power supply.

You should then monitor your connection for any improvements. To refresh the data, click the “Refresh Supplier Data” at the bottom of the screen. If the service has stabilised the issue has been resolved.

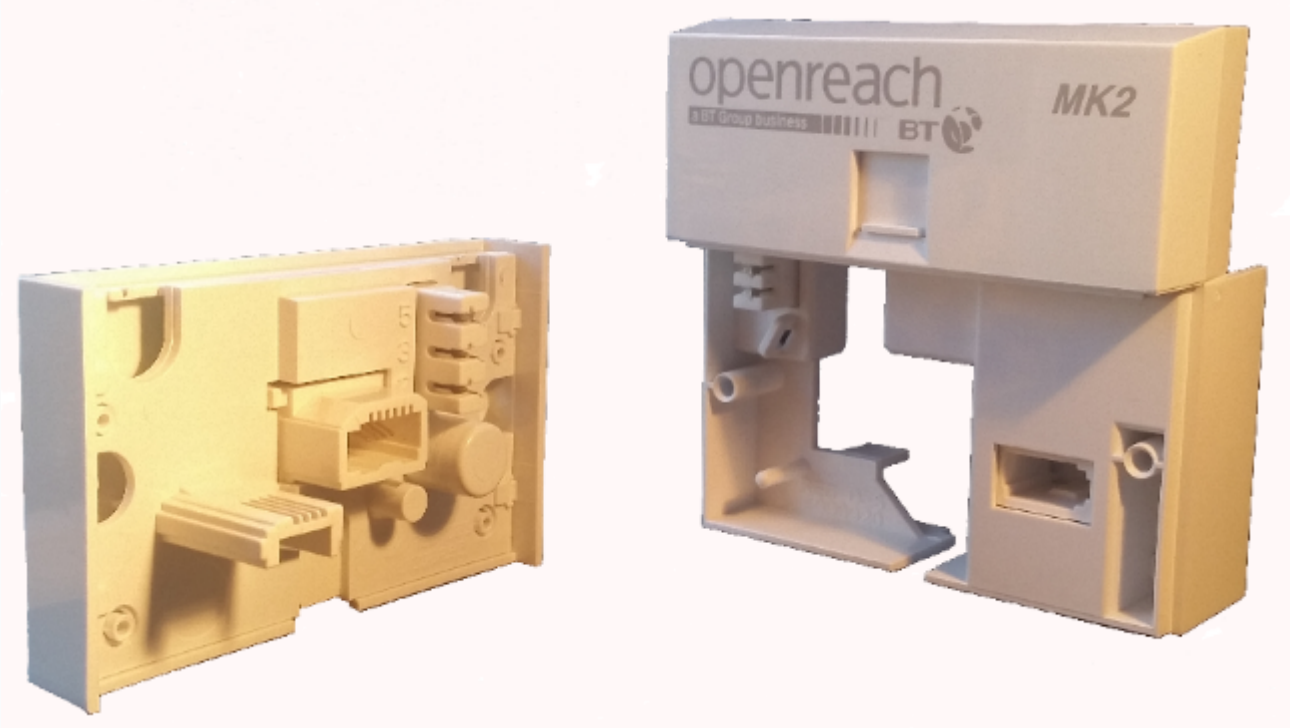
If you are still experiencing slow speed please proceed to Step 8.

Step 8

Connect your broadband to the NTE5 test socket and monitor. You should remove the faceplate of your socket and connect your broadband to the socket as shown. This will bypass any internal wiring issues. You should then monitor your connection for any improvements.

If the service has stabilised the issue has been resolved and the problem lies with internal wiring, not the broadband.

If you are still experiencing slow speed please proceed to Step 9.



Step 9

Change the filter, Gamma routers come with 2 x micro filters, you should switch to the second or use a different one.

If the service has stabilised the issue has been resolved and the problem lies with a faulty micro filter.

If you are still experiencing slow speed please proceed to Step 10.

Step 10

Try an alternate router on the connection. If you have an alternate router, test this on the connection. If this is not possible, proceed to Step 12.

You should then monitor your connection for any improvements. If the service has stabilised the issue has been resolved and the problem lies with a faulty router.

If you are still experiencing an intermittent connection please proceed to Step 11.

Step 11

If none of these checks have worked, you'll need to raise a fault on the Advance Diagnostics page.

Please note:

If you already have a fault raised for this service, you'll be unable to raise a new fault.

Select the "Your Diagnostic Checks" tab and follow the drop down menus.