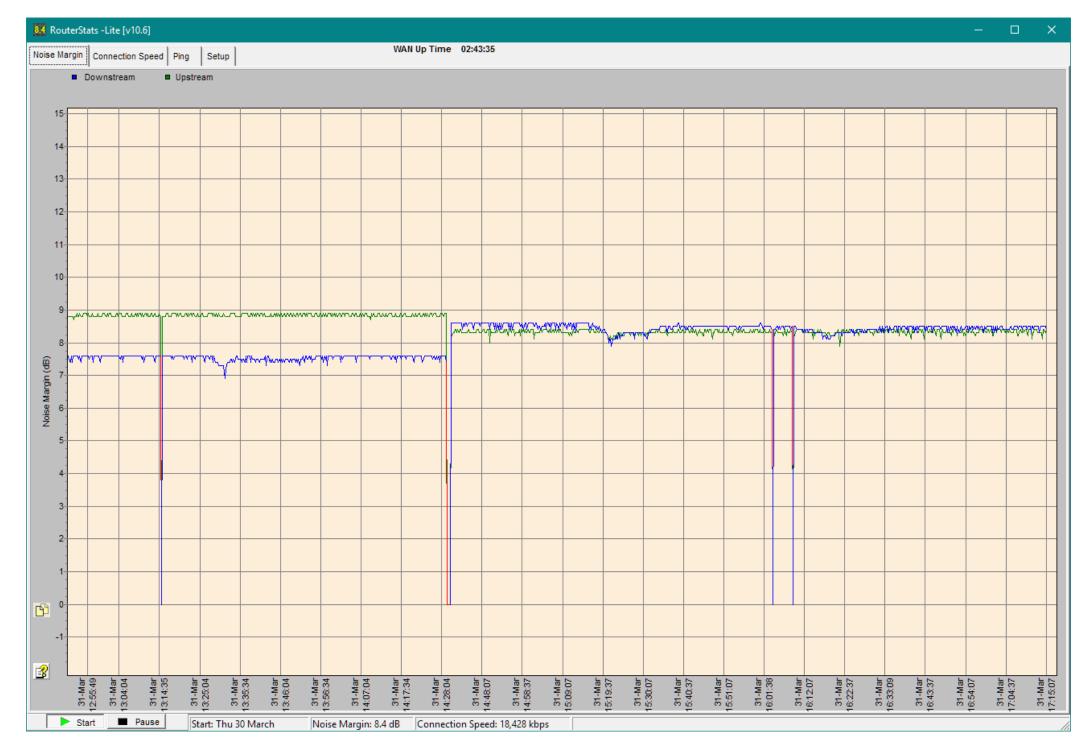
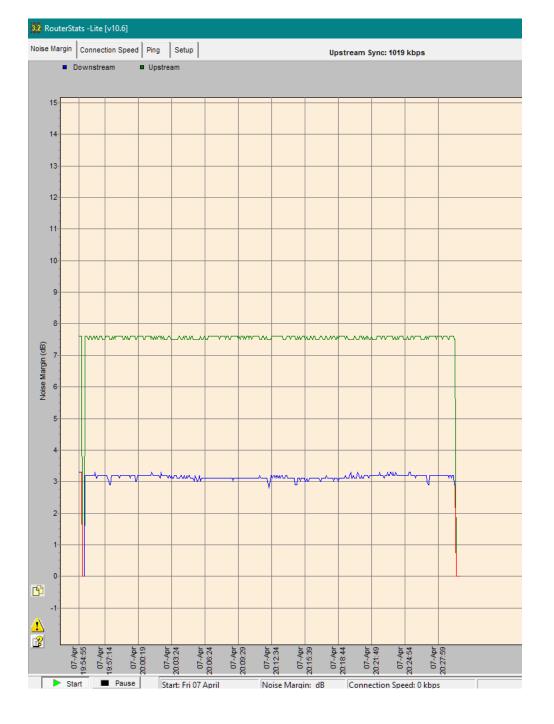
### TalkTalk DSL problems – representative log from March 31<sup>st</sup>.

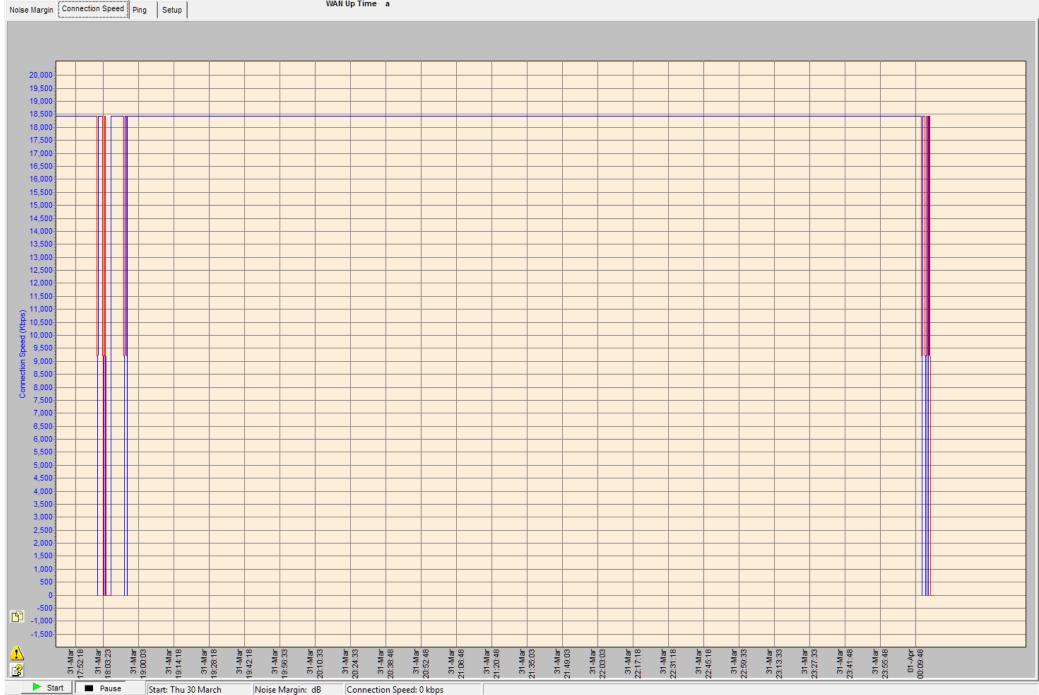
This behaviour has been ongoing for at least four years, with a six-month (approximately) period of stability when (the old) DLM was removed and S/N was set manually to 9db. It became clear that the maximum stable connection was around 11 Mb/s on both **0116 2543581** and **0116 2546198**. The behaviour of these lines is broadly similar, but they deteriorate to margins close to zero at different times.

0116 2543581 has had the copper lines swapped by Openreach for reasons unrelated to the issues at hand, which continue on the new line identically.

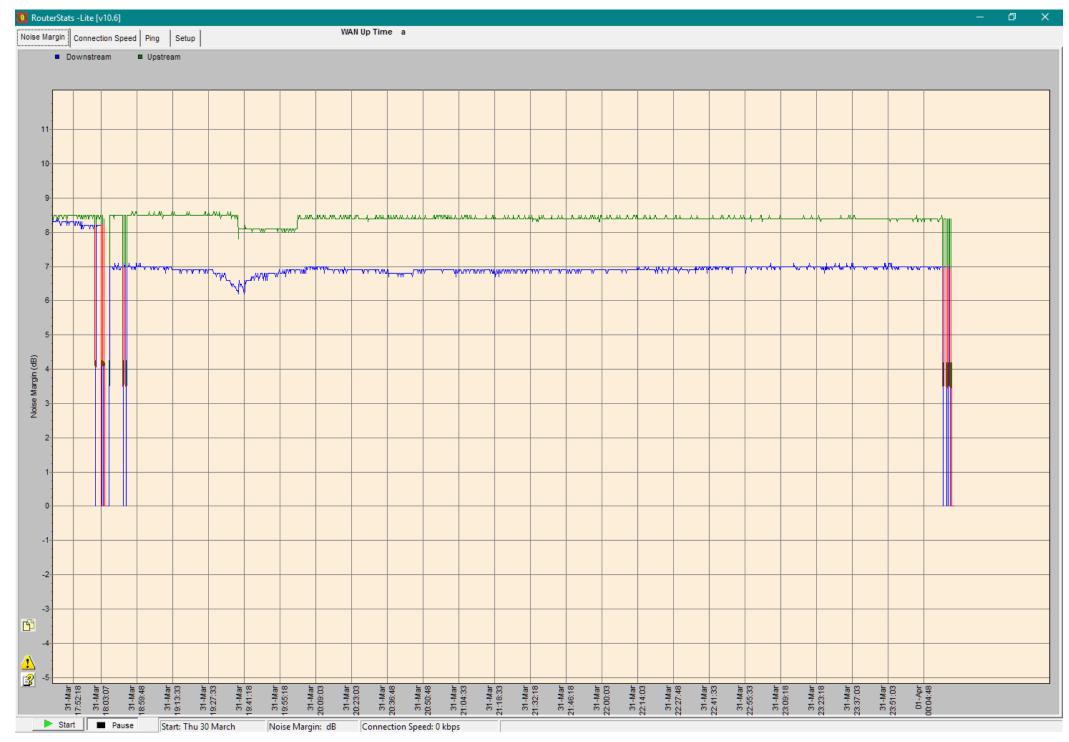
RouterSta se Margin			Ping	Setup					WAN	Up Time	02:43:35														
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0-[-	31-Mar 12:55:49	10.04	149 (49	31-Mar 13:25:34	31-Mar 13:36:19	31-Mar 13:47:04	31-Mar 13:57:34	Aar 19	lar i	14:19:04 31-Mar	t57 Aar	14:50:07	15:00:37	511:22	15:22:07	31-Mar 15:32:52 31-Mar	15:43:37 31-Mar	15:54:23 31-Mar	16:05:11 31-Mar	16:15:37 31-Mar	(22 Nar	16:37:07 31.Mar	16:47:52	31-Mar 16:58:37	31-Mar 17:09:07
	31-h 2:55	31-Mar 13:04:04	31-Mar 13:14:49	31-h 3:25	31-1	31-h 3:47	31-N 3:57	31-Mar 14:08:19	31-1	119 31-h	1:29 31-h	150		12 1	123	31-b 5:32	5:43	5:54 31-h	31-1	31-h 31-h	5:26 31-h	5:37 14 . h	. 47	31-1	31-1



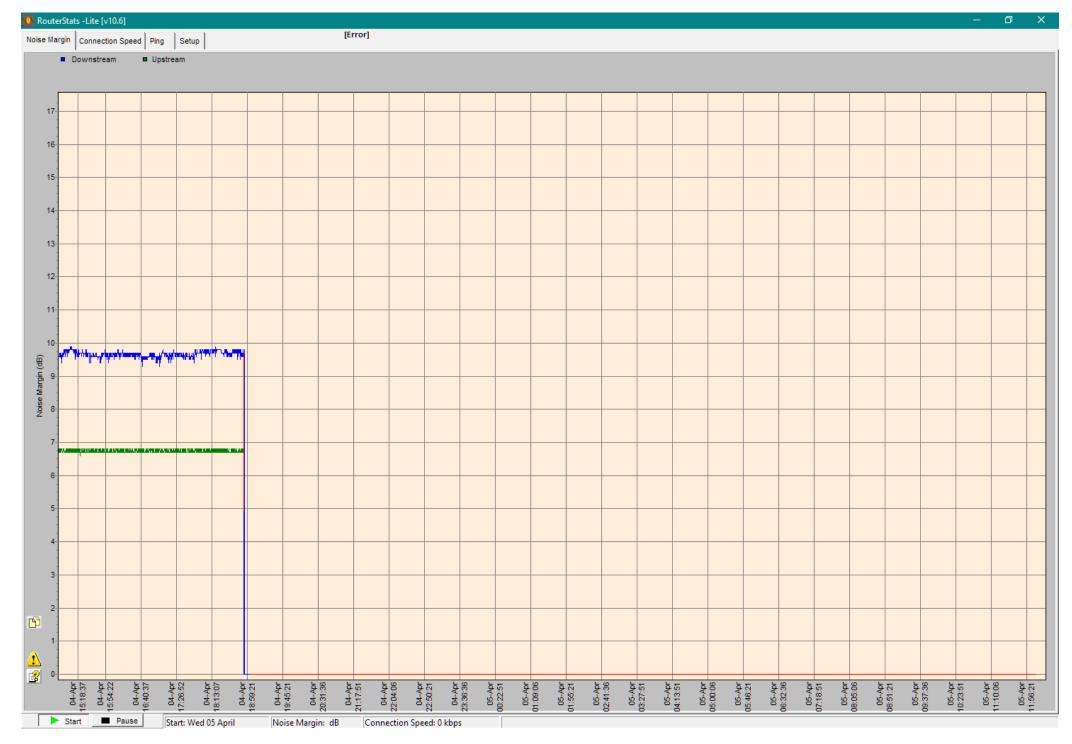




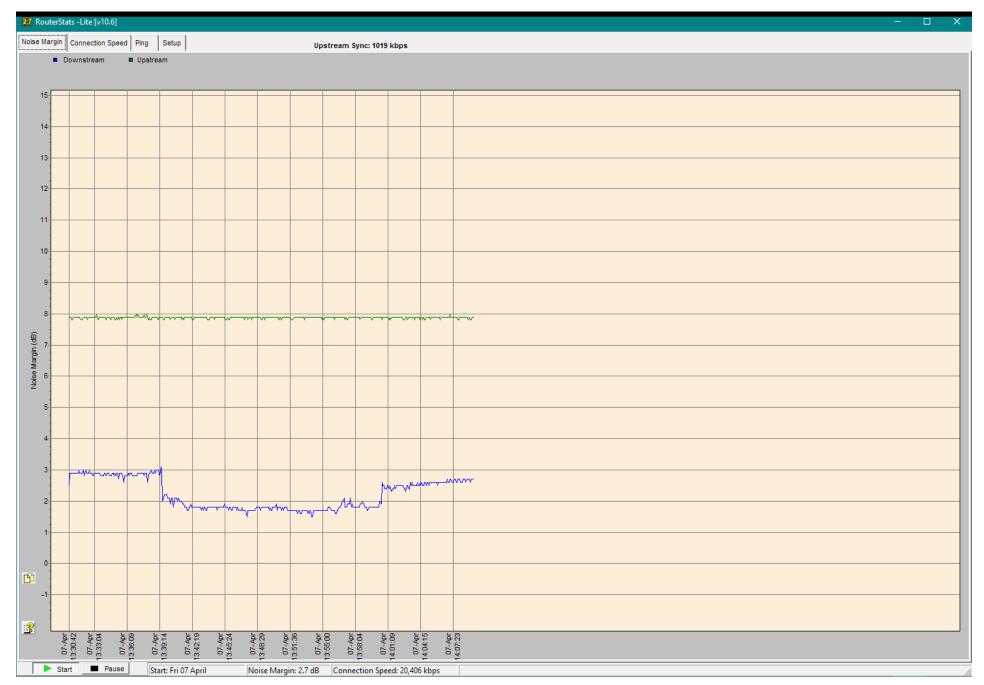
4



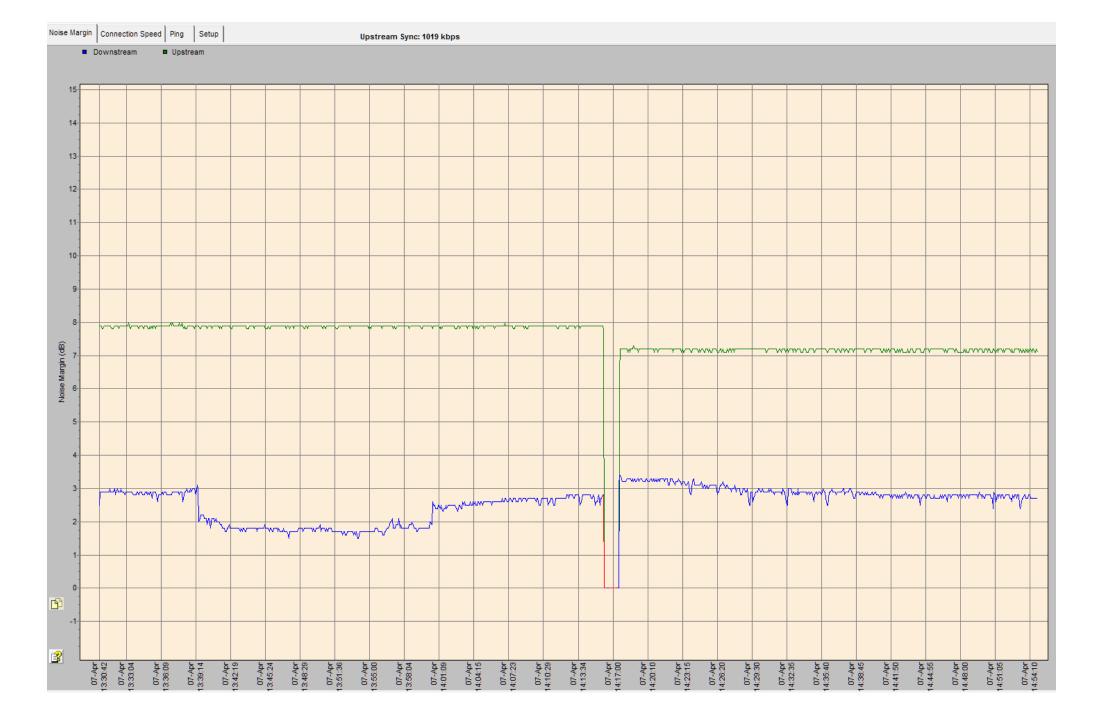
SETUP		ADVAN	CED		MAIN	TENANCE		STA	TUS	HELP
TRAFFIC STA	TISTIC	s								Helpful Hints
To ffe distance in						and the Design				This is a summary
Traffic Statistics dis	артау кес	ceive and Tran	smit packe	ts pas	sing thro	ugn the Devic	e.			This is a summary number of packets
Refresh										have passed betwe WAN and the LAN
STATISTICS										router was last initi
						1				More
Interface	•		Transmi		<u>)</u>		Receive	1		
		Bytes	Pkts			Bytes	Pkts		Drops	
LAN:	1	1655707847			0	3983108113			0	
WAN: PVC0 ~	, 	561873232			0	496844777			0	
Wireless: LLA	~	935895766	1166906	0	0	368449366	1081861	6421	0	
ADSL STATIS	TICS									
Mode					R	outing				
ADSL Mode				A	DSL2+					
ADSL Type					A	nnex A				
Status					U	р				
					D	ownstream	Upst	ream		
Rate(Kbps)					20	0406	1019			
SNR Margin(dl	•				1.	-	7.9			
Attenuation(dB	•					5.0	11.8			
Output Power(	dBm)				0		10			
Super Frames					15	394067	1894	068		
RS Correctable	Errors					)125	0			
RS Uncorrecta					0		0			
no oncorrecta					0					
HEC Errors					0		0			
Total Cells					37	774	1250			
Data Cells					1	1282170	1284	9747		
Bit Errors					0		0			



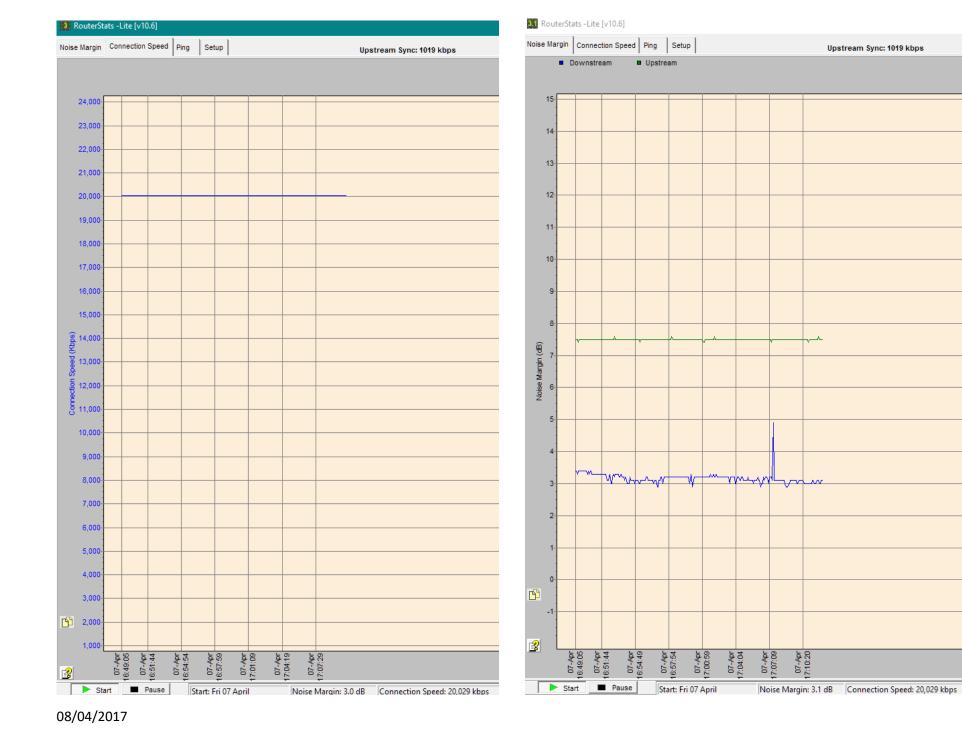
#### 07/04/2017:

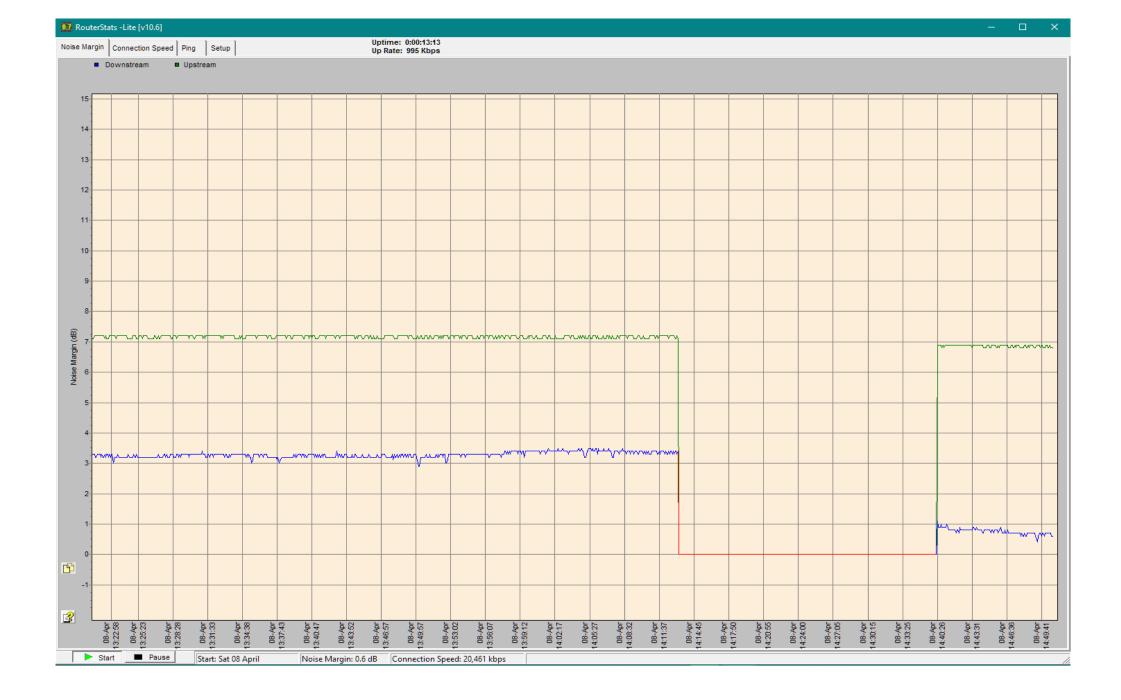


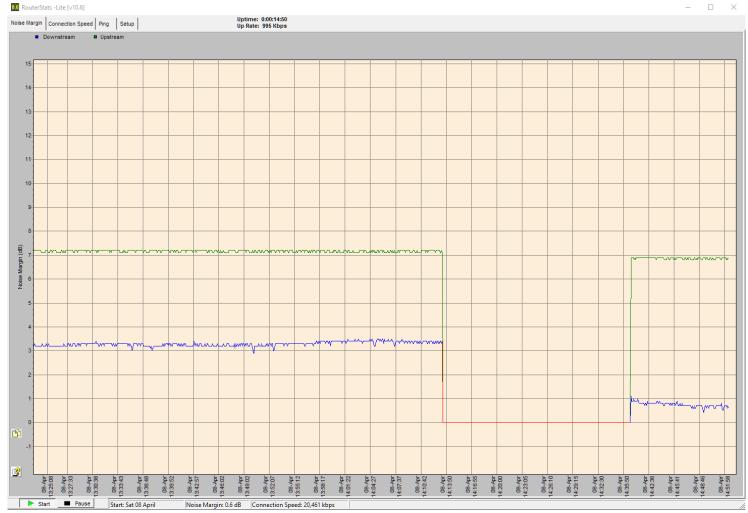
RouterSt			1. 1	. 1										
Margin	Connecti	un speed	Ping	Setup					Upstr	eam Sync	: 1019 kb	ps		
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	07-Apr 13:30:42	07-A 3:33:1	07-Apr 13:36:14	07-Apr 13:39:19	07-Apr 13:42:29	07-Apr 13:45:39	07-Apr	3:48: 07-A	13:51:56 07-Apr	13:55:25 07-Apr	3:58:	14:01:39	14:04:50	

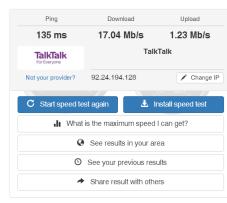


//	SETUP	ADVAN	CED		MAIN	TENANCE		STA	TUS		
	TRAFFIC STATISTI	CS									
	Traffic Statistics display R	eceive and Tran	smit nacke	ts nass	sing thro	ugh the Device	_				
		eceive and man	Sinc packe	to pase	ang uno	agir the Device					
	Refresh										
	STATISTICS										
line	Interface		Transmi	t			Receive	9			
oot		Bytes	Pkts	Errs	Drops	Bytes	Pkts	Errs	Drops		
	LAN:	1655707847	4485307	0	0	3983108113	5300131	0	0		
	WAN: PVC0 ~	561873232	1126024	0	0	496844777	1058521	0	0		
	Wireless: LLA ~	935895766	1166906	0	0	368449366	1081861	6421	0		
	ADSL STATISTICS										
	Mode				R	outing					
	ADSL Mode				A	DSL2+					
	ADSL Type	nnex A									
	Status Up										
						ownstream		ream			
	Rate(Kbps)				20	0406	1019				
	SNR Margin(dB)				1.	8	7.9				
	Attenuation(dB)				20	5.0	11.8				
	Output Power(dBm)				0		10				
	Super Frames         1894067         1894068										
	RS Correctable Erro	30	0125	0							
	RS Uncorrectable Er	rors			0		0				
	HEC Errors				0		0				
	Total Cells					774	1250				
	Data Cells					1282170		9747			
	Bit Errors				0		0				

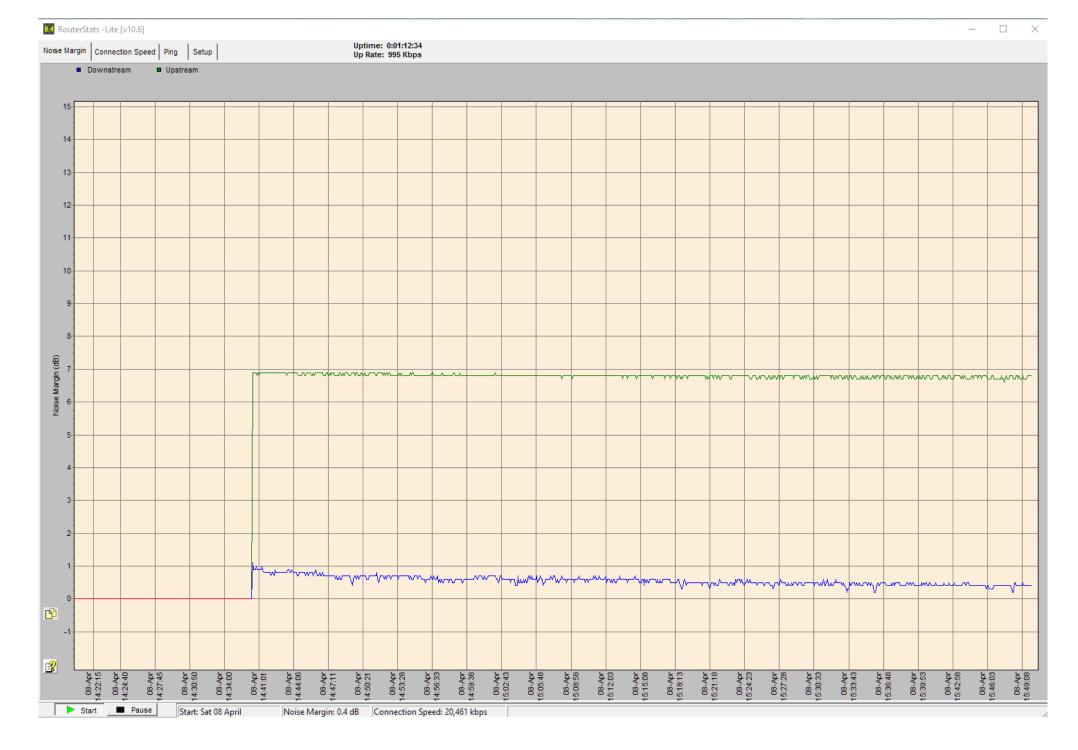


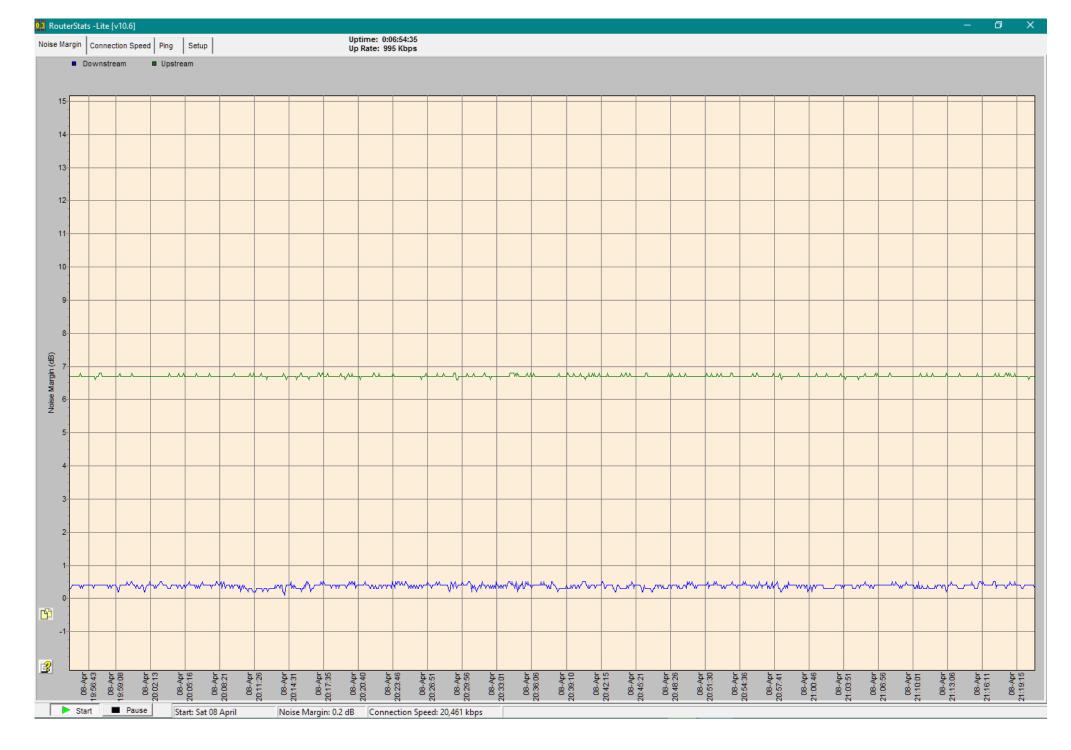


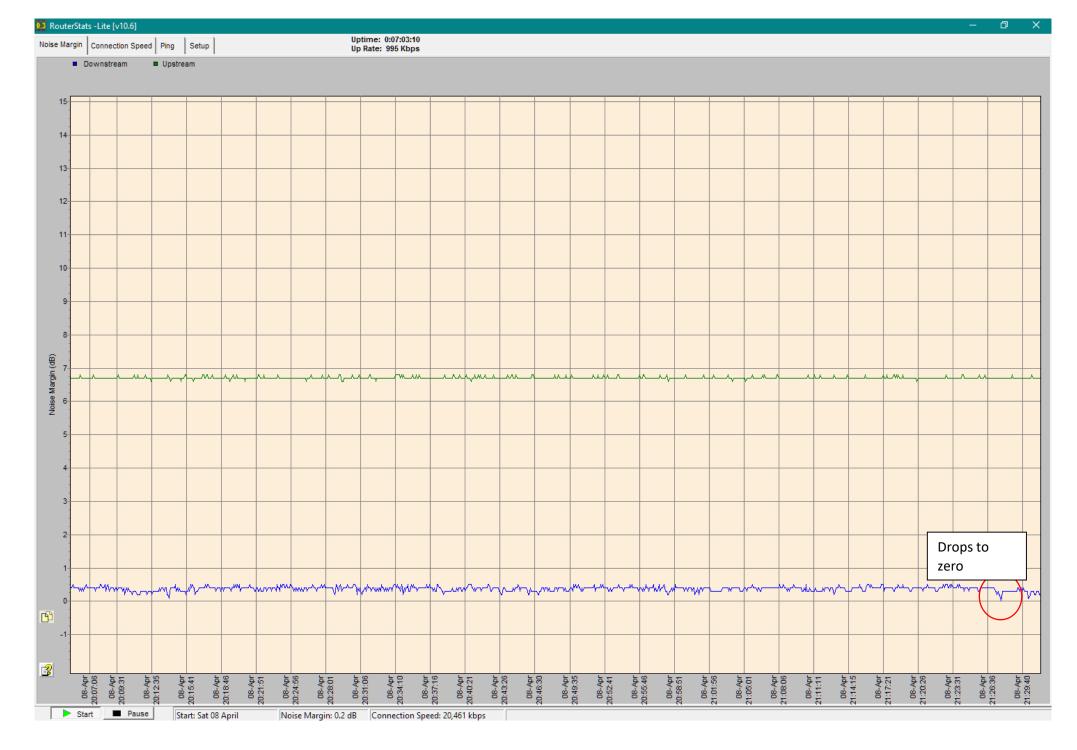




Finally figured out what it's doing – whatever it takes to achieve the advertised 17Mb/s.







DLM reset sometime after Saturday 8<sup>th</sup> April, 11pm?????

#### Monday:

Drop out 4pm.

Wednesday: 11:55am 10:05am

Thursday: 9:33am

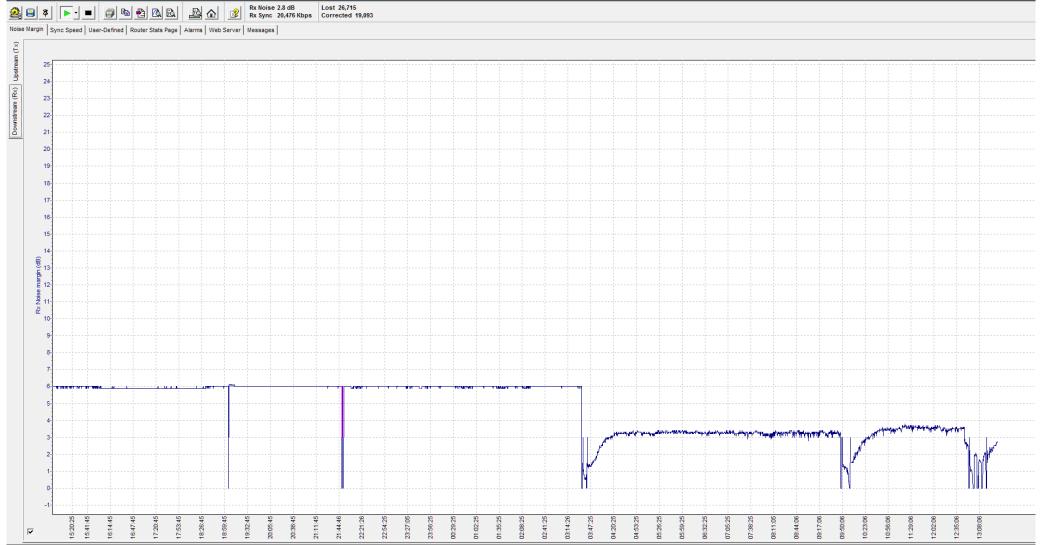
10/5/17 – Back to normal.

## 

#### Noise Margin Sync Speed User-Defined Router Stats Page Alarms Web Server Messages



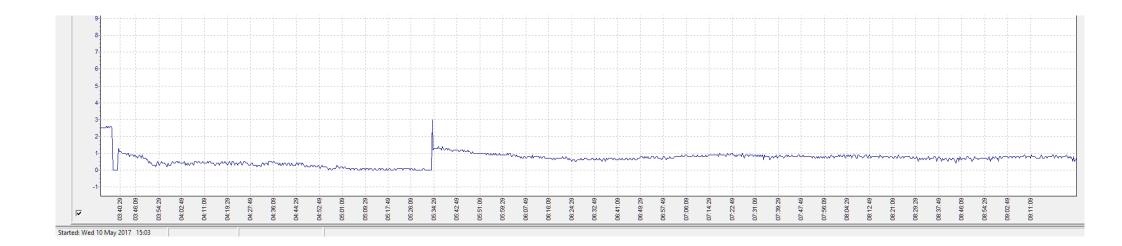
	14:56:45 15:18:45	5:52:05	6:58:45	17:32:25	18:05:45	8:39:05	19:12:25 19:45:45	0:19:05	0:62:26	21:25:45	22:02:45	2:36:26	23:09:45 23:43:06	00:12:45	00:46:05	01:19:25 01:52:45	02:26:05	02:59:46	03:33:05	4:39:45	6:13:05	05:46:25	06:53:05	7:26:45	08:00:05 08:33:25	09:06:46	9:40:06	10:13:26 10:46:46	1:20:06	11:53:26 12:27:06	3:00:26
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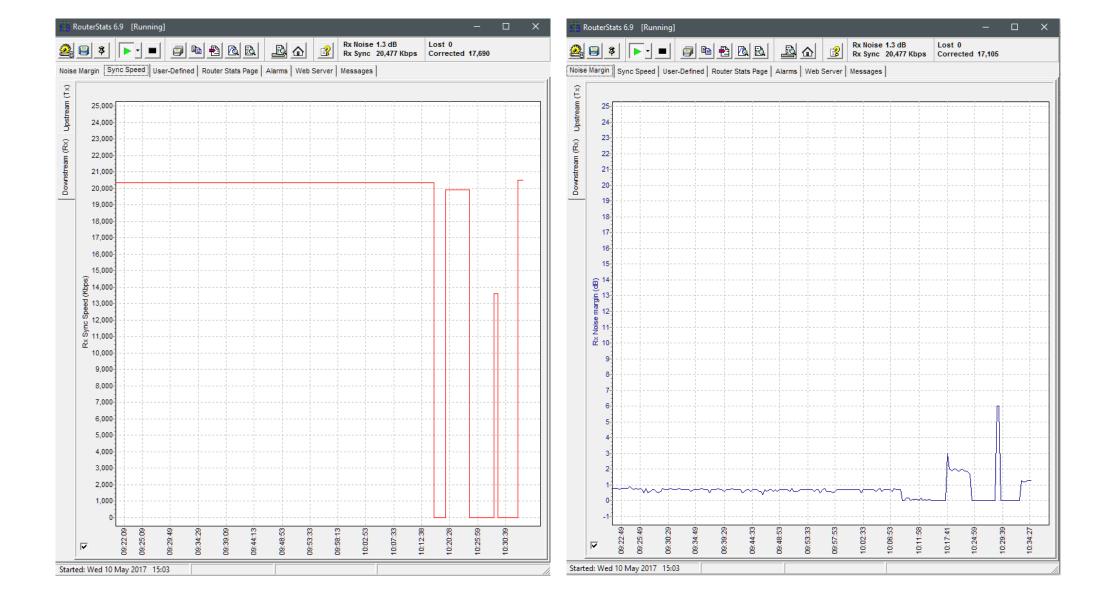
Started: Sat 06 May 2017 20:25

WAN: 3 d, 02:35:57

20



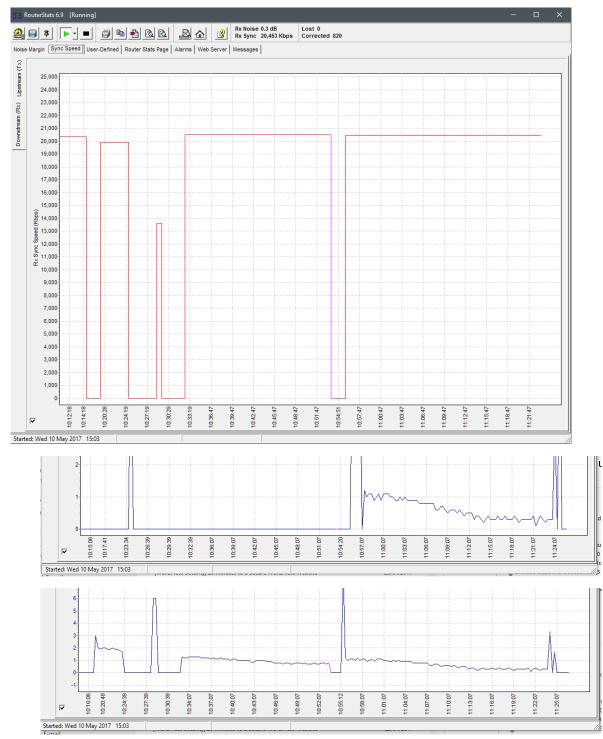
\$		•	•	à 🔼	B.	۵ 🗠	3	Rx Noi Rx Syn	se 1.9 d nc 19,91	5 7 Kbps	Corre	57 ected 24	1,554																									
Sync	Speed	User-Defi	ned Rout	er Stats F	Page Ala	rms   We	b Server	Messag	es																													
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	5:26	5:46	6:16:	÷ ÷	47	9	<del>8</del>	9:18:	<del>8</del>	6	0:49:	1:19:	8	8	8	50	5	00:21:	5	1:22	01:52	02:22	5	3:23:	3:53:2	8	54	24	54	24	22	52	8	26	8	9:26	è.	

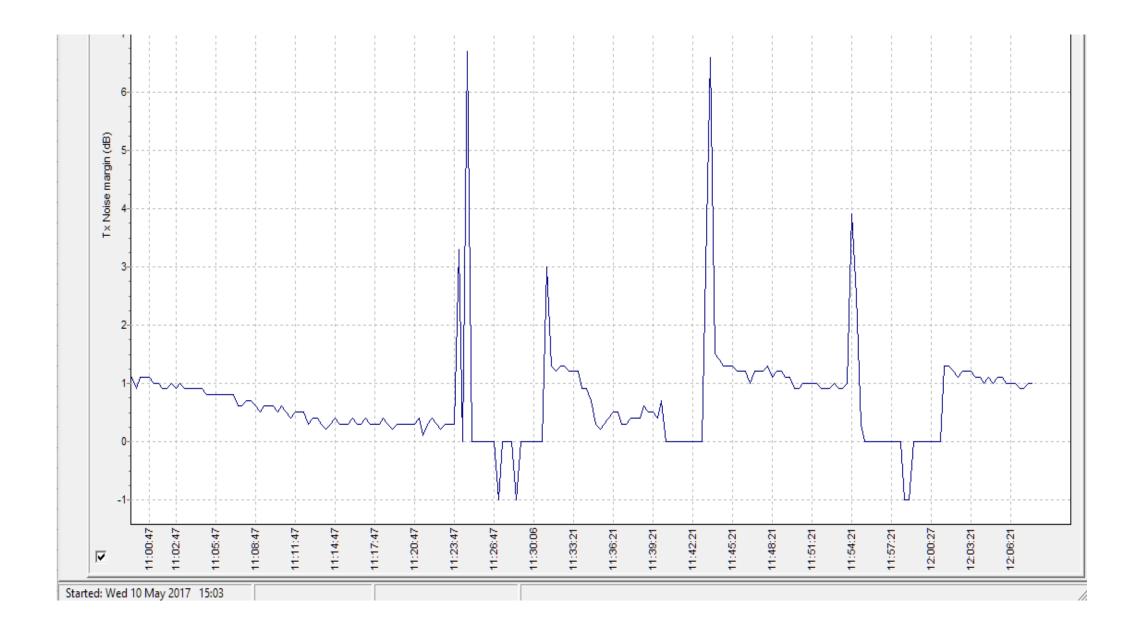


## Interesting...sync but no IP issued. Had to reboot 11/5/2017 : 10:53

## **INTERNET STATUS**

ADSL Modulation :	ADSL2 PLUS	
Cable Status :	ADSL Link Up	
Virtual Circuit :	PVC-0 ~	
Connection Type :	PPPoE/PPPoA	
Network Status :	Not Connected	
Connection Up Time :	N/A	
Downstream Line Rate :	20477 kbps	
Upstream Line Rate :	1016 kbps	
	DHCP Renew	DHCP Release
MAC Address :	DHCP Renew 1c:af:f7:79:69:ba	
MAC Address : IP Address :		
	1c:af:f7:79:69:ba	
IP Address :	1c:af:f7:79:69:ba 0.0.0.0	
IP Address : Subnet Mask :	1c:af:f7:79:69:ba 0.0.0.0 0.0.0.0	
IP Address : Subnet Mask : Default Gateway :	1c:af:f7:79:69:ba 0.0.0.0 0.0.0.0 0.0.0.0	





#### Product: DSL-2640R

# **D-Link**

DSL-2640R	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Password	DIAGNOSTICS		· · · · · · · · · · · · · · · · · · ·		Helpful Hints
Save/Restore Settings					This page shows the
Firmware Update	Your router is capable of fail status, click "Re-run	f testing your DSL connection Diagnostics Tests" at the bot	<ul> <li>The individual tests are listed to tom of this page to make sure far</li> </ul>	below. If a test displays a ail status is consistent.	result of your router's se diagnostic and
Diagnostics	SYSTEM CHECK				connection test results. The Internet connectivi status will only show
System Log	Test your Ethernet(1	L-4) Connection:		PASS	PASS if you have correctly configured you
.ogout	Test ADSL Synchron	•		PASS	Internet connection and your router is currently online.
Online		ЕСТІVІТҮ СНЕСК			More
Reboot					
	Test the assigned IP			FAIL	
	Ping ISP Default Gat	•		FAIL	
	Ping Preferred DNS Re_run Diagnostics Te			FAIL	
	Re_run Diagnostics re	5.5			
BROADBAND					