Vigor2765/2766 Series VDSL2/G.fast Security Router Quick Start Guide

(Wired models)

Guide Version: 1.3 Region: United Kingdom & Ireland For updates and support, visit www.draytek.co.uk August 2021 / Firmware V4.2.3_BT

Note: Product specification is subject to continuous evolution which may not always be reflected in current documentation. For the formal specification and details of the supported features of your product, please refer only to the web site at <u>www.draytek.co.uk</u>

Regional and Network Compatibility

For all models, please check that you have been supplied with a device intended for your geographic region and networks. Hardware and software varies by region, as well as local support and warranty services. To be sure of compatibility and local support, ensure that you are buying the correct product through authorized channels. The outside of the product's box will state the region compatibility (e.g. "Applied Region: UK"). If you are unsure, check with DrayTek or your supplier. The use of unofficial components (e.g. PSUs) or adapting interfaces or the use of unauthorized software/firmware may cause malfunction, product damage or personal danger and invalidates your warranty and access to support services.

Safety and Warranty Information

Safety Instructions	 Read the installation guide thoroughly before you set up the router. The router is a complicated electronic unit that may be repaired only be authorized and qualified personnel. Do not try to open or repair the router yourself.
	Do not place the router in a damp or humid place, e.g. a bathroom.
	 Do not stack the routers.
	• The router should be used in a sheltered area, within a temperature range of 0 to +40 Celsius.
	 Do not expose the router to direct sunlight or other heat sources. The housing and electronic components may be damaged by direct sunlight or heat sources.
	Do not deploy the cable for LAN connection outdoor to prevent electronic shock hazards.
	Keep the package out of reach of children.
	 When you want to dispose of the router, please follow local regulations on conservation of the environment.
Warranty	We warrant to the original end user (purchaser) that the router will be free from any defects in workmanship or materials for a period of two (2) years from the date of purchase from a DrayTek authorized dealer in the UK/Ireland. Please keep your purchase receipt in a safe place as it serves as proof of date of purchase. During the warranty period, and upon proof of purchase, should the product have indications of failure due to faulty workmanship and/or materials, we will, at our discretion, repair or replace the defective products or components, without charge for either parts or labour, to whatever extent we deem necessary tore-store the product to proper operating condition. Any replacement will consist of a new or re-manufactured functionally equivalent product of equal value, and will be offered solely at our discretion. This warranty will not apply if the product is modified, misused, tampered with, damaged by external factors, used with unapproved accessories or subjected to abnormal working conditions. Warranty applies to hardware only, not software or firmware. Defects which do not significantly affect the usability of the product will not be covered by the warranty. We reserve the right to revise the manual and online documentation and to make changes from time to time in the contents hereof without obligation to notify any person of such revision or changes.

External Power Supply (Power Adapter) Information

		1	2	3	4	5	6	7	8	9
A	Manufacturer	CWT	CWT	CWT	CWT	CWT	APD	APD	APD	APD
В	Address	No. 222, Sec.	No.5, Lane 83,	No.5, Lane 83,	No.5, Lane 83,	No.5, Lane 83,				
		2, Nankan	Lung-Sou St.,	Lung-Sou St.,	Lung-Sou St.,	Lung-Sou St.,				
		Rd., Lujhu	Taoyuan City		Taoyuan City	Taoyuan City				
		Township,	Township,	Township,	Township,	Township,	330, Taiwan	330, Taiwan	330, Taiwan	330, Taiwan
		Taoyuan	Taoyuan	Taoyuan	Taoyuan	Taoyuan				
		County 338,								
		Taiwan	Taiwan	Taiwan	Taiwan	Taiwan				
C	Model identifier	2ABB012F UK	2ABB018F UK	2ABL024F UK	2ABL030F UK	2ABN036F UK	WA-12M12FG	WB-18D12FG	WA-24Q12FG	WA-36A12FG
		2ABB012F EU	2ABB018F EU	2ABL024F EU	2ABL030F EU	2ABN036F EU	WA-12M12FK	WB-18D12FK	WA-24Q12FK	WA-36A12FK
D	Input voltage	100~240V	100~240V	100~240V	100~240V	100~240V	100~240V	100~240V	100~240V	100~240V
E	Input AC frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz
	Output voltage DC	12.0V	12.0V	12.0V	12.0V	12.0V	12.0V	12.0V	12.0V	12.0V
F	Output current	1.0A	1.5A	2.0A	2.5A	3.0A	1.0A	1.5A	2.0A	3.0A
G	Output power	12.0W	18.0W	24.0W	30.0W	36.0W	12.0W	18.0W	24.0W	36.0W
H	Average active	84.9%	86.2%	87.6%	87.8%	89.8%	83.7%	85.4%	88.6%	88.2%
	efficiency									
I	Efficiency at low load	73.6%	78.0%	81.3%	83.3%	83.7%	74.5%	80.5%	86.4%	85.4%
	10%									
J	No-load power	0.07W	0.07W	0.07W	0.07W	0.07W	0.07W	0.10W	0.07W	0.10W
	consumption									

For more updates & information, please visit <u>www.draytek.co.uk</u>. The external power supply used for each product will be model dependent.



Dray Tek



Declaration of Conformity

We DrayTek Corp., office at No.26, Fushing Rd., Hukou, Hsinchu Industrial Park, Hsinchu 303, Taiwan, declare under our sole responsibility that the product

- **VDSL2 Security Router** • Product name: •
 - Model number: Vigor2765/Vigor2766 Series
 - Manufacturer: DrayTek Corp.
 - Address: No.26, Fushing Rd., Hukou, Hsinchu Industrial Park, Hsinchu 303, Taiwan Importer:

SEG, 11 Capital Business Park, Borehamwood, Herts, WD6 1GW

is in conformity with the relevant UK Statutory Instruments:

The Electromagnetic Compatibility Regulations 2016 (SI 2016 No.1091), The Electrical Equipment (Safety) Regulations 2016 (SI 2016 No.1101), The Ecodesign for Energy-Related Products and Energy Information (Amendment) (EU Exit) Regulations 2019 (SI 2019 No.539) and The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012 (SI 2012 No. 3032) with reference to the following standards:

Standard	Version / Issue date
EN 55032	2015+A1:2016 class B
EN 61000-3-2	2014
EN 61000-3-3	2013
EN 55024	2010+A1:2015
EN 62368-1	2014/A11:2017
EN IEC 63000:2018	2018
SI 2019 No.539	2019

Caluin Ma

Hsinchu (place)

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2nd September, 2019 (date)

Calvin Ma / President (Legal Signature)





EU Declaration of Conformity

We DrayTek Corp., office at No.26, Fushing Rd., Hukou, Hsinchu Industrial Park, Hsinchu 303, Taiwan, declare under our sole responsibility that the product VDSL2 Security Router

- Product name: • •
 - Model number: Vigor2765/Vigor2766 Series
- Manufacturer: DrayTek Corp.
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- No.26, Fushing Rd., Hukou, Hsinchu Industrial Park, Hsinchu 303, Taiwan • Importer: SEG, 11 Capital Business Park, Borehamwood, Herts, WD6 1GW

is in conformity with the relevant Union harmonisation legislation:

EMC Directive 2014/30/EU , Low Voltage Directive 2014/35/EU , ErP 2009/125/EC and RoHS

2011/65/EU with reference to the following standards

Standard	Version / Issue date
EN 55032	2012+AC:2013 class B
EN 61000-3-2	2014 Class A
EN 61000-3-3	2013
EN 55024	2010+A1:2015
EN 62368-1	2014/A11:2017
EN IEC 63000:2018	2018
EC No. 1275/2008	2008

<u>Hsinchu</u> (place)

1st Oct., 2019 (date)

Calvin Ma / President

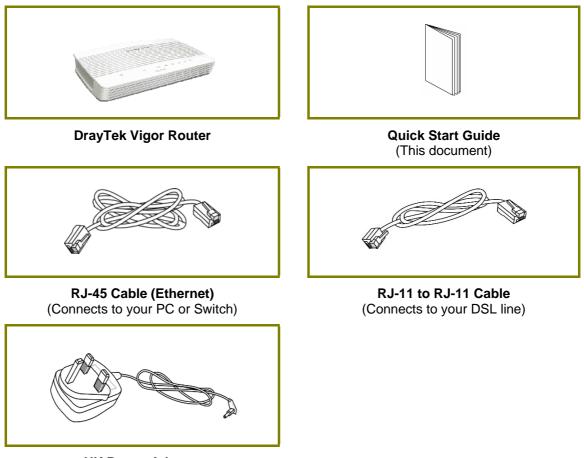
Calin Ma

⁽Legal Signature)

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1. Package Contents



UK Power Adapter

The maximum power consumption is 15 Watts.

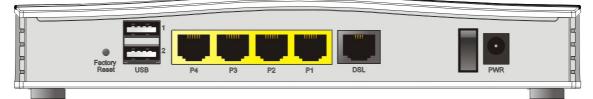


Important Note Remove the protective film from the router before use to ensure ventilation.

2. Panel Explanation for Vigor2765/Vigor2766

¢	22	Vigor27	<u>1</u> 65	2	3	4	-[]]	
Ċ	22	Vigor276		2	3	4	·[]]	

LED	Status	Explanation				
	Blinking	The router is ready and operating normally				
(Off	The router is powered off				
(Activity)						
2	On	DSL connection synchronised				
22	Blinking (Slowly)	DSL connection not currently synchronizing or not				
(DSL)		detected				
	Blinking (Quickly)	DSL connection is synchronising				
	On	Ethernet LAN (RJ45) is connected				
1 4	Blinking	Data is transmitting (sending/receiving)				
~	Off	Ethernet LAN is disconnected				
(LAN1/2/3/4)						
(USB)	On	USB device is connected and ready for use				
(USB)	Blinking	Data is being transmitted over USB				

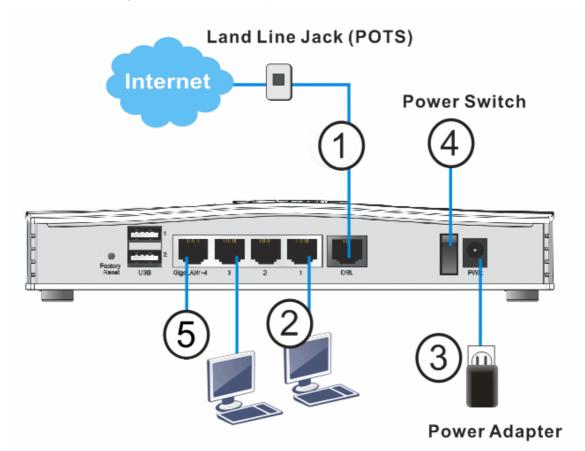


Interface Factory Reset	Description Restore the default settings. Usage: Turn on the router (ACT LED is blinking). Press gently and hold for more than 5 seconds. When the ACT LED blinks rapidly, release the button. Then the router will restart with the factory default configuration
USB1~USB2	Connector for a USB 3G/4G modem, storage, printer or USB Thermometer
P1~P4	RJ-45 Gigabit Ethernet connectors for local network devices. LAN port P4 can be configured as the Ethernet WAN port, see Section 5.3 for details
DSL	RJ-11 connector for ADSL or VDSL line
1/0	Power Switch. Turns the unit on (I) or off (O)
PWR	Connector for the power adapter

3. Hardware Installation

3.1 Connecting up the Vigor Router

Here we take Vigor2765 as an example.

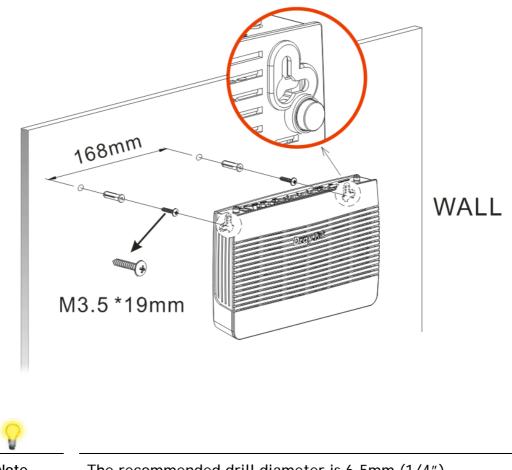


- 1. ADSL/VDSL Connections: Connect the DSL port to the Modem or DSL port of the external splitter/microfilter (not supplied) with the RJ-11 line cable. In some cases, your RJ-11 DSL socket will be built-into your phone line socket on the wall and you won't have a separate microfilter/splitter.
- 2. LAN Connections: Connect a LAN port of the router to your computer or switch.
- 3. **Power Supply**: Connect the power adapter to the Vigor 2765's **PWR** socket on the rear and plug the power adapter into a suitable mains socket. Turn the Vigor 2765 on using its power switch.
- 4. The router will start up. After completing the system test, the ACT LED will light up and start blinking once per second to indicate that it is ready for use. For more detailed information of LED status, please refer to section 3.1 Front Panel Overview.
- 5. Ethernet-based Internet Connections: LAN port P4 can be switched to operate as the Ethernet WAN port. This must be configured in the router's web interface before it can operate in this mode Section 5.3 of this Quick Start Guide details how to do that.

3.2 Wall-Mounting the Vigor Router

DrayTek Vigor 2765/2766 series routers have keyhole type mounting slots on the underside to hang the router on, using screws attached to a wall or other surface.

- Drill two holes on the wall. The distance between the holes shall be 168mm. 1.
- 2. Fit screws into the wall using the appropriate type of wall plug.
- 3. With the screws installed, the router can be slotted into place.





The recommended drill diameter is 6.5mm (1/4").

4. Setup & Configuration

This section provides examples of how to initially access the router and configure internet access for the most common types of Internet connection in the UK.

If the instructions in this quick start guide do not allow you to get online with your ISP or type of Internet connection, there are additional guides available from the Product Knowledgebase on <u>www.draytek.co.uk</u>.



Note To access the router, your PC will need to either get its IP address using DHCP or have an IP address in the 192.168.1.x range. For details on how to change this, please refer to the "Trouble Shooting" section in the User Guide.

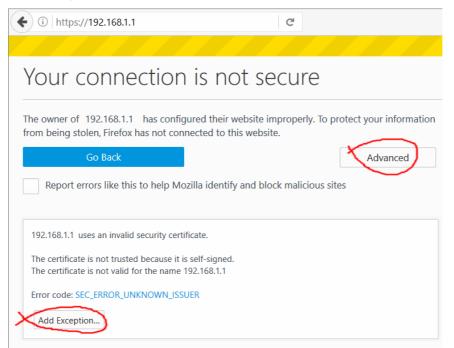
4.1 Accessing the Router Web Interface

Open a web browser on your PC and type https://192.168.1.1.

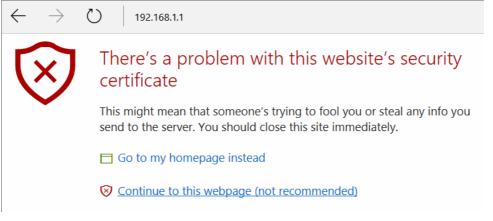
The https:// prefix ensures that your connection is encrypted using SSL so that your session data cannot be intercepted. Without that prefix, your data passes in clear text.

You may get a warning from your browser (IE, Chrome, Edge, Safari etc.) about your server (the router) having an invalid certificate. Your browser will demand further confirmation or exception before allowing access. The warnings will look something like these examples.

An example of how to access the router via HTTPS with Mozilla Firefox:



An example from Microsoft Edge, click "Continue to this webpage" to proceed:



Most other browsers will present equivalent warnings. In each case, following the prompts/links will allow you to access the router's web interface. It is still encrypted with SSL/TLS.



Note This warning appears because the router's default certificate is 'self-signed' rather than issued to you by a certificate authority who has verified your identity.
 A self-signed certificate means that you cannot verify the identity of the server, but as it's your own local router, that shouldn't be an issue - your connection is still encrypted.

The router login prompt will then request a username and password to allow access. Here we take Vigor2765 series as an example.

Dray Tek	Vigor2765 Series
Login	
Username	
Password	
	Login
	logging in without encryption which is not . To login securely <u>click here</u> .
Copyright © 2000-20	D18DrayTek Corp. All Rights Reserved.

The factory default login details are:

Username: admin Password: admin



Note If you cannot access the web interface, please go to the "Trouble Shooting" section in the User Guide to determine the cause of and solve your problem.

Upon successful login, the router will display the **Dashboard**, which shows a summary of the router model, WAN status, front panel port status and other information:

ay Tek v	igor	2765 Serie	5					r i	
t V IR6 Dashboard	1								
tus		and the second se	-						
us	20	Factory Reset							
u l	50	e e	2	⊥					
	0	WPS	B P4	P3	P2	P1 0	ISL		
b Portal									
eb Portal									
System Ir									Quick Access
tting Model Nam	-	Vigor2765ac	Vigor2765ac		System Up Time 0:02:34				System Status
Router Nam		DrayTek					01 2000 00:02:21		Dynamic DNS
Management Firmware V		r87406_beta			Build Date/Time Dec 20 201				TR-069
note Access	1	08-0B-00-0F-00	-07	LAN N	IAC Address	00-1D-AA	-40-D8-	90	IM/P2P Block
nagomont									Schedule
IPv4 LAN	Inform			-		,			SysLog / Mail Alert
.4 GHz)		IP Address	DHCP			IP Addres		DHCP	RADIUS
Hz) LAN1		192.168.1.1/24	V	LAN2		192.168.2	2.1/24	v	Firewall Object Setti
nce	Subnet	192.168.0.1/24	V						Data Flow Monitor
						1.12			1
IPv4 Inter	net Ac	cess							
	Line / I		IP Address		MAC Addres	-		p Time	
ent <u>WAN1</u>		/ PPPoE	Disconnect		00-1D-AA-4			:00:00	
WAN2		et /	Disconnect	1000	00-1D-AA-4			:00:00	
WAN3	USB /		Disconnect	ed	00-1D-AA-4	40-D8-93	00	:00:00	
									1
Interface	-							1	
ion DSL		ected : Down Stre							
WAN		ected: 0, WA			WAN3				
LAN		ected : 0, OPor	rt1 @Por	t2 🥥	Port3	ort4			
WLAN		ected: 0							
WLAN50		ected: 0							
USB	Conne	ected : 0, US 0, US	754 75						
		0, @US	02]

 Note
 We recommend configuring a secure password when first logging in to the router's administration interface.

 The router's administration password can be changed from [System Maintenance] > [Administrator Password]

4.2 WAN1 – ADSL & VDSL Connection Setup

The WAN1 interface of the Vigor 2765 router can connect to VDSL2 / 35b and ADSL2+ lines.

If your Internet connection uses VDSL2 and your ISP has supplied you with a Username and Password to connect to the Internet, go to section 4.2.1 PPPoE connection with FTTC VDSL2

If your Internet connection uses VDSL2 and your ISP does not supply or require a Username and Password to connect to the Internet, go to section 4.2.2 DHCP / Static IP connection with FTTC VDSL2

If your Internet connection uses ADSL or ADSL2+ and your ISP has supplied you with a Username and Password to connect to the Internet, go to section 4.2.3 PPPoA connection with ADSL / ADSL2+

4.2.1 PPPoE connection with FTTC VDSL2

1. Go to [WAN] > [General Setup] and click on the <u>WAN1</u> link:

Dray Tek	Vigor27	55 Series		
Auto Logout 🗸 📭	WAN >> General Setup	i		
Dashboard Wizards Dnline Status	Index	Enable	Physical Mode/Type	Active Mode
earch menu	WAN1	\checkmark	VDSL2/-	Always On
/AN	WAN2		LAN Port 4	Failover
General Setup	WAN3		USB/-	Failover

- 2. On the settings page:
 - Set the Enable option to Yes to activate the WAN1 connection
 - Set the Active Mode to Always On
 - Enable the Service VLAN Tag insertion
 - Set the Tag value setting to 101
 - DSL mode can be set to "VDSL2 only" but this is not required



Note	The VLAN tag value of 101 is required to connect to ISPs that operate on the Openreach VDSL2 network, if your ISP operates on a different VDSL2 network, this tag value may differ.
	Please check with your ISP or the DrayTek UK Knowledgebase for ISP specific guides.

WAN >> General Setup

V	V	Δ	Ν	l	1

Enable:	Yes ~	
Display Name:		
Physical Mode:	VDSL2	
DSL Mode:	Auto ~	
DSL Modem Code:	AnnexA_779517_773F01 ~	
Line Speed(Kbps):		
DownLink	0	
UpLink	0	
Active Mode:	Always On 🗠	
VLAN Tag insertion	Customer	Service
ADSL	Disable ~	
	Tag value Priority	
	0 0	
	(0~4095) (0~7)	
VDSL2	Disable ~	Enable ~
	Tag value Priority	Tag value Priority
	0	101 0
	(0~4095) (0~7)	(0~4095) (0~7)

Click **OK** on that page to apply the changes.

3. Go to [WAN] > [Internet Access]

Set the WAN1 Access Mode to PPPoE / PPPoA, then click the Details Page button to proceed:

Auto Logout \vee	WAN >>	Internet Access			
Dashboard	Internet	Access	1		-
Wizards	Index	Physical Mode	Access Mode		۷
Online Status	WAN1	ADSL / VDSL2	PPPoE / PPPoA	~	Details Page
WAN General Setup	WAN2	Ethernet	None	~	Details Page
Internet Access	WAN3	USB	None	~	Details Page
WAN Budget					

4. On the PPPoE / PPPoA settings tab:

Select the **Enable** radio button at the top of the page to ensure that the PPPoE interface is enabled.

In the ISP Access Setup section, input the ISP username into the Username field and password in the Password field.

If your ISP has provided a static IP address, that can be specified by setting the **Fixed IP** setting to **Yes** and entering the IP in the **Fixed IP** Address field.

WAN 1			
PPPoE / PPPoA	MPoA / Static or	Dynamic IP	IPv6
● Enable O Disa	ble	PPP/MP Setup	
		PPP Authentication	PAP or CHAP \checkmark
ADSL Modem Settings		IP Assignment (IPCP)	🔿 Static 🖲 Dynamic
Multi-PVC channel	Channel 1 V	Fixed IP Address	
VPI	0	WAN IP Alias	
VCI	38		
Encapsulating Type	VC MUX 🗸	Dial-Out Schedule	
Protocol	PPPoA ~	Index(1-15) in <u>Schedu</u>	<u>le</u> Setup:
Modulation	Multimode ~	None v => Non	ie v
		=> None ~ =>	None ~
ISP Access Setup			
Username	23456@HG01.btclick.com	PPPoE Pass-through	
Password	•••••	For Wired LAN ²	
More Options 💷		For Wireless LAN	

Click **OK** on this page to apply the changes and the router will then prompt to restart. Click the OK button to restart the router.

Once the router has restarted, the [Online Status] > [Physical Connection] 5. page will display the VDSL information and PPP connection status, if the WAN1 section shows an IP address, it has connected to the internet successfully:

Auto Logout 👻 📭 🔗	Online Status					
Dashboard	Physical Connection	on IPv4	_	IPv6	Sy	ystem Uptime: 0:8:44
Quick Start Wizard	LAN Status		y DNS: 194.72		Secondary DN	S: 213.120.234.26
Online Status Physical Connection	IP Address	TX Packets	RX Pack		Secondary Div	3. 213.120.234.20
Virtual WAN	192.168.1.1	0	0	ets		
	WAN 1 Status	•	0			>> Drop PPPoA
WAN	Enable	Line	Name	Mode	Up Time	
LAN	Yes	VDSL2	Name	PPPoE	0:07:41	
NAT	IP	GW IP	TX Packets		RX Packets	RX Rate(Bps)
Firewall	217.34.6.35	217.42.145.215		TX Rate(Bps)	339568	963
User Management Objects Setting		217.42.145.215	224580	805	339508	903
CSM	WAN 2 Status					
Bandwidth Management	Enable	Line	Name	Mode	Up Time	
Applications	Yes	Ethernet			00:00:00	
VPN and Remote Access	IP	GW IP	TX Packets	TX Rate(Bps)	RX Packets	RX Rate(Bps)
Certificate Management Wireless LAN			0	0	0	0
SSL VPN	WAN 3 Status					
USB Application	Enable	Line	Name	Mode	Up Time	Signal
System Maintenance	Yes	USB			00:00:00	-
Diagnostics External Devices	IP	GW IP	TX Packets	TX Rate(Bps)	RX Packets	RX Rate(Bps)
External Devices			0	0	0	0
Current Area	VDSL2 Information	(VDSL2 Firmware	Version: 8B0F	07_A/B/C)		
Support Area Product Registration	Profile	State UP Spee	d Dow	n Speed SN	IR Upstream	SNR Downstream
Troduct Registration	17A	SHOWTIME 20000 ((bps) 8000)0 (Kbps) 15	(0.1dB)	6 (0.1dB)



Note

If the WAN 1 IP address displayed begins with 172.16.x.x, it's possible that the ISP has not accepted the supplied Username and Password for the Internet connection.

Check that the ISP Access Setup - Username and Password match the details supplied by your ISP.

4.2.2 DHCP / Static IP connection with FTTC VDSL2

1. Go to [WAN] > [General Setup] and click on the WAN1 link:

Dray Tek	Vigor27	55 Series	* = #	₿₽₽
Auto Logout 🗸 🛛 🛛 🛛 🗸	WAN >> General Setup	1		
Dashboard Wizards Online Status	Index	Enable	Physical Mode/Type	Active Mode
Search menu	WAN1		VDSL2/-	Always On
WAN	WAN2		LAN Port 4	Failover
General Setup	WAN3		USB/-	Failover

- 2. On the settings page:
 - Set the Enable option to Yes to activate the WAN1 connection
 - Set the Active Mode to Always On
 - Enable the Service VLAN Tag insertion
 - Set the Tag value setting to 101
 - DSL mode can be set to "VDSL2 only" but this is not required



Note The VLAN tag value of 101 is required to connect to ISPs that operate on the Openreach VDSL2 network, if your ISP operates on a different VDSL2 network, this tag value may differ. Please check with your ISP or the DrayTek UK Knowledgebase for ISP specific guides. WAN >> General Setup

۱/	IA	м	1	
v	VН			

Enable:	Yes ~	
Display Name:		
Physical Mode:	VDSL2	
DSL Mode:	Auto 🗸	
DSL Modem Code:	AnnexA_779517_773F01 ~	
Line Speed(Kbps):		
DownLink	0	
UpLink	0	
Active Mode:	Always On \vee	
VLAN Tag insertion	Customer	Service
ADSL	Disable ~	
	Tag value Priority	
	0 0	
	(0~4095) (0~7)	
VDSL2		
VDSLZ	Disable ~	Enable ~
	Tag value Priority	Tag value Priority
	0 0	101 0
	(0~4095) (0~7)	(0~4095) (0~7)

Click **OK** on that page to apply the changes.

3. Go to [WAN] > [Internet Access]

Set the WAN1 Access Mode to MPoA / Static or Dynamic IP, then click the Details Page button to proceed:

Auto Logout 🗸	WAN >> Internet Access					
Dashboard	Internet	Access	1		•	
Wizards	Index	Physical Mode	Access Mode		۷	
Online Status	WAN1	ADSL / VDSL2	MPoA / Static or Dynamic IP	~	Details Page	
WAN General Setup	WAN2	Ethernet	None	~	Details Page	
Internet Access Multi-PVC/VLAN	WAN3	USB	None	~	Details Page	
WAN Budget LAN						

4. In the MPoA / Static or Dynamic IP settings:

Select the **Enable** option and select **Obtain an IP address automatically** which will obtain an IP from the ISP using DHCP.

If your ISP has provided a static IP range, with a Network address and a Subnet Mask, specify that with the **Specify an IP address** option.

WAN >> Internet Access

WAN 1					
PPPoE / PPPoA	MPoA / Static o	r Dynamic IP	IPv6		
O Enable	le	WAN Connection Dete Mode	ARP Detect V		
ADSL Modem Settings					
Multi-PVC channel	Channel 2 ~	МТО			
Encapsulation	1483 Bridged IP LLC \sim	1492 (Max:15	00) Path MTU Discovery		
VPI	0				
VCI	101	RIP Routing			
Modulation	Multimode ~	Enable RIP			
		Bridge Mode			
IP Network Settings		Enable Bridge Mo	de		
Obtain an IP address aut	tomatically	Enable Full Bridge Mode			
More Options 💷		Bridge Subnet	LAN 1 V		
○ Specify an IP address					
IP Address		MAC Address			
Subnet Mask		Default MAC Add	Iress		

Click **OK** on this page to apply the changes and the router will then prompt to restart. Click the OK button to restart the router.

5. Once the router has restarted, the [Online Status] > [Physical Connection] page will display the VDSL information and DHCP connection status, if the WAN1 section shows an IP address, it has connected to the internet successfully:

Auto Logout 👻 IRS	Online Status					
Dashboard	Physical Connection	on IPv4		IPv6	S	ystem Uptime: 0:8:44
Quick Start Wizard	LAN Status		DNC: 104.72		Carandan DN	C. 212 120 224 26
Online Status Physical Connection			y DNS: 194.72		Secondary Div	IS: 213.120.234.26
Virtual WAN	IP Address	TX Packets	RX Pack	tets		
VIItual WAIV	192.168.1.1	0	0			
	WAN 1 Status					>> <u>Release</u>
WAN	Enable	Line	Name	Mode	Up Time	
LAN	Yes	VDSL2		DHCP Client	0:06:58	
NAT Firewall	IP	GW IP	TX Packets	TX Rate(Bps)	RX Packets	RX Rate(Bps)
User Management	217.34.6.35	217.42.145.215	224580	805	339568	963
Objects Setting	WAN 2 Status					
CSM	Enable	Line	Name	Mode	Up Time	
Bandwidth Management Applications	Yes	Ethernet	nume	moue	00:00:00	
VPN and Remote Access	IP	GW IP	TX Packets	TX Rate(Bps)	RX Packets	RX Rate(Bps)
Certificate Management			0		0	
Wireless LAN			0	0	0	0
SSL VPN	WAN 3 Status					
USB Application	Enable	Line	Name	Mode	Up Time	Signal
System Maintenance Diagnostics	Yes	USB			00:00:00	-
External Devices	IP IP	GW IP	TX Packets	TX Rate(Bps)	RX Packets	RX Rate(Bps)
			0	0	0	0
	VDSL2 Information	n (VDSL2 Firmware	Version: 8B0F	07 A/B/C)		
Support Area Product Registration	Profile	State UP Spee			IR Upstream	SNR Downstream
Froduct Registration	17A	SHOWTIME 20000 ((0.1dB)	6 (0.1dB)
		20000 (()	- (

4.2.3 PPPoA connection with ADSL / ADSL2+

1. Go to [WAN] > [Internet Access]

Set the WAN1 Access Mode to PPPoE / PPPoA and click the Details Page button to proceed:

Auto Logout \vee	WAN >>	Internet Access			
Dashboard Wizards	Internet		1 Access Mode		2
Online Status	- WAN1	ADSL / VDSL2	PPPoE / PPPoA	~	Details Page
WAN General Setup	WAN2	Ethernet	None	~	Details Page
Internet Access	WAN3	USB	None	~	Details Page
WAN Budget LAN					

2. On the PPPoE / PPPoA settings tab:

The details for the VPI and VCI settings for ADSL should be correct for UK usage, with 0 and 38 being the defaults. In most cases, it will not be necessary to change these.

The **Modulation** setting can be left on its default of Multimode which will auto-detect the correct ADSL type to use.

WAN >> Internet Access			
WAN 1 PPPoE / PPPoA	MPoA / Static or	Dunamia ID	IPv6
		-	IFVU
Enable O Dis	able	PPP/MP Setup	
ADCI Madam Catting		PPP Authentication	PAP or CHAP \checkmark
ADSL Modem Settings		IP Assignment (IPCP)	🔿 Static 🖲 Dynamic
Multi-PVC channel	Channel 1 V	Fixed IP Address	
VPI	0	WAN IP Alias	
VCI	38		
Encapsulating Type	VC MUX V	Dial-Out Schedule	
Protocol	PPPoA ~	Index(1-15) in Sched	<u>ule</u> Setup:
Modulation	Multimode ~	None v => No	one 🗸
	Hadmode	=> None v =>	None ~
ISP Access Setup			
Username	23456@HG01.btclick.com	PPPoE Pass-through	
		For Wired LAN ²	
Password	•••••	For Wireless LAN	
More Options 🔛			

Select the **Enable** radio button at the top of the page to ensure that the PPPoA interface is enabled.

Enter the ISP credentials into the Username and Password fields.

If your ISP has provided a static IP address, that can be specified by setting the **Fixed IP** setting to **Yes** and entering the IP in the **Fixed IP** Address field.

Click **OK** on this page to apply the changes and the router will then prompt to restart. Click the OK button to restart the router.

3. Once the router has restarted, the [Online Status] > [Physical Connection] page will display the ADSL information and PPP connection status, if the WAN1 section shows an IP address, it has connected to the internet successfully:

Dashboard	Physical Connection	on			Sj	stem Uptime: 0:8:44
Quick Start Wizard		IPv4		IPv6		
Online Status	LAN Status	Prima	ry DNS: 194.72	.0.98	Secondary DN	S: 213.120.234.26
Physical Connection	IP Address	TX Packets	RX Pack	tets		
Virtual WAN	192.168.1.1	0	0			
	WAN 1 Status					>> Drop PPPoA
NAN	Enable	Line	Name	Mode	Up Time	
	Yes	VDSL2		PPPoE	0:07:41	
NAT Firewall	IP	GW IP	TX Packets	TX Rate(Bps)	RX Packets	RX Rate(Bps)
User Management	217.34.6.35	217.42.145.215	224580	805	339568	963
Objects Setting	WAN 2 Status					
CSM Bandwidth Management	Enable	Line	Name	Mode	Up Time	
Applications	Yes	Ethernet			00:00:00	
VPN and Remote Access	IP	GW IP	TX Packets	TX Rate(Bps)	RX Packets	RX Rate(Bps)
Certificate Management Wireless LAN			0	0	0	0
SSL VPN	WAN 3 Status					
USB Application	Enable	Line	Name	Mode	Up Time	Signal
System Maintenance	Yes	USB			00:00:00	-
Diagnostics External Devices	IP	GW IP	TX Packets	TX Rate(Bps)	RX Packets	RX Rate(Bps)
			0	0	0	0
C	VDSL2 Information	(VDSL2 Firmware	Version: 8B0F	07_A/B/C)		
Support Area Product Registration	Profile	State UP Spe	ed Dow	n Speed SN	IR Upstream	SNR Downstream
router Registration	17A	SHOWTIME 20000		•	(0.1dB)	6 (0.1dB)

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Note If the WAN 1 IP address displayed begins with 172.16.x.x, it's possible that the ISP has not accepted the supplied Username and Password for the Internet connection.

Check that the ISP Access Setup - Username and Password match the details supplied by your ISP.

4.3 WAN2 - Ethernet Connection Setup

The WAN2 interface of the Vigor 2765 router can connect to an ISP supplied router or another network with an Internet connection.

The Ethernet WAN port is shared with the LAN port P4 and must be configured to operate in WAN mode as shown in section 4.3.1 Enabling the Ethernet WAN Port

If you are using a modem and your ISP has supplied you with a Username and Password to connect to the Internet, see section **4.3.2 PPPoE**

If the router is connected to a modem and the ISP does not supply or require a Username and Password to connect to the Internet, or you are connecting to another router or network, see section **4.3.3 Static or Dynamic IP**

4.3.1 Enabling the Ethernet WAN Port

The Vigor 2765 series router uses port P4 to connect to an Ethernet based Internet connection. In its default state, the port P4 operates as a standard LAN port and the WAN2 (Ethernet WAN) options cannot be selected in the router's web interface.

To enable the router's Ethernet WAN port on port P4 instead of LAN mode:

Dray Tek	Vigor27	55 Series	* = #	
Auto Logout 🗸 🛛 IRÓ	WAN >> General Setup	5		
Dashboard Wizards Online Status	Index	Enable	Physical Mode/Type	Active Mode
Search menu	WAN1		VDSL2/-	Always On
WAN	WAN2		LAN Port 4	Failover
General Setup	WAN3		USB/-	Failover

1. Go to [WAN] > [General Setup] and click WAN2

2. In its default state, the Enable option is set to No, which uses port P4 as a standard LAN port:

Dray Tek	Vigor2765 Series	
Auto Logout 🗸 🛛 IRÓ	WAN >> General Setup	
Dashboard	WAN 2	
Wizards Online Status	Enable:	No ~
	Display Name:	
Search menu	Physical Mode:	Ethernet
WAN	Physical Type:	Auto negotiation \sim
General Setup	Active Mode:	Failover 🗸

3. Set the **Enable** option for WAN2 to **Yes**, this enables the other options on this page.

Set the Active Mode to Always On to make the Ethernet port the active Internet connection.

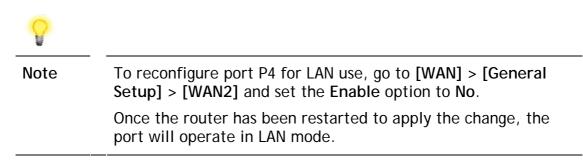
Dray Tek	Vigor2765 Se	ries 🔺 🖻 🚻 🗄 🖽 🗗
Auto Logout 🗸 🛛 📭 🖉	WAN >> General Setup	
Wizards Online Status Search menu WAN General Setup Internet Access Multi-PVC/VLAN WAN Budget LAN Hotspot Web Portal	Enable: Display Name: Physical Mode: Physical Type: Active Mode: VLAN Tag insertion	Yes v Ethernet Auto negotiation v Always On v Disable v Tag value Priority 0 0 (0~4095) (0~7)
Routing NAT Firewall Objects Setting		OK Cancel

4. Click OK to apply the change and the router will prompt to restart. Click OK to restart the router.

System Maintenance >> Reboot System

Reboot System	
	Do you want to reboot your router ?
	 Using current configuration Using factory default configuration
	ОК

Once the router has restarted, the WAN2 – Ethernet WAN interface can be configured on the router, as shown in the following two sections.



4.3.2 **PPPoE**

This connection method will typically be used with a modem such as the Vigor 130 VDSL2 modem, which passes through the PPPoE connection from the ISP to the router.

1. Go to [WAN] > [Internet Access]

Firstly set the WAN2 Access Mode to PPPoE, then click the Details Page button to proceed:

Auto Logout \vee 🛛 🛛 🛛 🛛 🛛 🖓	WAN >>	Internet Access				
Dashboard	Internet	Access				
Wizards Online Status	Index	Display Name	Physical Mode	Access Mode		
	WAN1		ADSL / VDSL2	None	~	Details Page
WAN General Setup	WAN2		Ethernet	PPPoE	\sim	Details Page
Internet Access	WAN3		USB	None	~	Details Page

2. In the PPPoE settings tab:

Select the **Enable** radio button at the top of the page to ensure that the PPPoE interface is enabled.

Input the username into the Username field and password in the Password field, as required. The Service Name does not need to be specified.

If your ISP has provided a static IP address, that can be specified by setting the **Fixed IP** setting to **Yes** and entering the IP in the **Fixed IP Address** field.

WAN 2								
PPPoE		Static or Dynamic IP		PPTP/L2TP		IPv6		
Enable	O Dis	able		MP Setup				
				uthentication	PAP or C	HAP ~		
ISP Access Setup			Idle 7	Idle Timeout -1 second(s)				
Service Name (Optional)			IP Ad	IP Address Assignment Method (IPCP)				
Username		A123456@HG00.btclick.c		IP Alias				
Password		•••••	Fixed	IP: O Yes 🖲 No	(Dynamic	c IP)		
Index(1-15) in	Schedul	e Setup:	Fixed	IP Address				
=> , , , , ,								
			 Default MAC Address 					
WAN Connectio	n Detectio	n	O Specify a MAC Address					

WAN >> Internet Access

Click **OK** on that page to save the settings and the router will then prompt to restart, allow it to restart to properly apply the changes.

Once the router has restarted, log back into the web interface and select [Online Status] > [Physical connection], if it has connected, the relevant WAN Interface status text will be in green along with an IP address which indicates that the connection is active and ready for use.

4.3.3 Static or Dynamic IP

1. Go to [WAN] > [Internet Access]

Firstly set the WAN2 Access Mode to Static or Dynamic IP, then click the Details Page button to proceed:

Auto Logout 🗸 🛛 📭 🖉	WAN >>	Internet Access				
Dashboard	Internet	Access				
Wizards	Index	Display Name	Physical Mode	Access Mode		
Online Status	WAN1		ADSL / VDSL2	None	~	Details Page IP
WAN General Setup	WAN2		Ethernet	Static or Dynamic IP	~	Details Page IP
Internet Access	WAN3		USB	None	~	Details Page IP

2. In the Static or Dynamic IP settings:

Select the **Enable** option and select **Obtain an IP address automatically** which will obtain an IP from the ISP with DHCP.

If your ISP has provided a static IP range, with a Network address and a Subnet Mask, specify that with the **Specify an IP address** option.

PPTP/L2TP IPv6
WAN IP Network Settings WAN IP Alias
Obtain an IP address automatically
Router Name *
Domain Name *
□ DHCP Client Identifier *
Username
Password
○ Specify an IP address
IP Address
Subnet Mask
Gateway IP Address

Click **OK** on this page to apply the changes and the router will then prompt to restart. Click to restart the router.

Once the router has restarted, log back into the web interface and select [Online Status] > [Physical connection], if it has connected, the relevant WAN Interface status text will be in green along with an IP address which indicates that the connection is active and ready for use.

4.4 WAN3 / WAN4 - 3G / 4G USB Modem Setup

The 3G / 4G USB modem facility can be used either as a primary Internet connection or as a backup that will only activate when other WAN interfaces are offline. It allows a supported USB modem to provide internet access through the router.

The list of supported modems can be found under: [USB Application] > [Modem Support List]

or on the DrayTek UK site:

https://www.draytek.co.uk/support/guides/usb-3g-4g-modem-support-list

There are two USB modem connection modes available:

PPP mode is used where the modem provides a dial-up interface and would typically require software to perform dialing and provide status information and diagnostics when used with a PC.

DHCP mode is used where the modem operates as a virtual network adapter / router and will usually have diagnostics and usage information shown in a web interface.

When configuring the 3G / 4G modem, the router will require the correct APN (Access Point Name) details and a username and password with some ISPs. If those details are not set, the mobile network may reject the connection attempts of the router, which will result in the router showing no signal / no IP address.

4.4.1 PPP Mode

To set up the USB WAN for PPP mode, go to [WAN] > [Internet Access] Select 3G/4G USB Modem (PPP mode) from the drop-down box

Click the **Details Page** button to continue:

Auto Logout 🗸 🛛 🛛 🛛 🗸	WAN >>	Internet Access				
Dashboard	Internet	Access				
Wizards Online Status	Index	Display Name	Physical Mode	Access Mode		
	WAN1		ADSL / VDSL2	PPPoE / PPPoA	\sim	Details Page I
WAN General Setup	WAN2		Ethernet	Static or Dynamic IP	\sim	Details Page I
Internet Access Multi-PVC/VLAN	WAN3		USB	3G/4G USB Modem(PPP mode)	~	Details Page I

In the USB WAN settings, select the Enable option to enable the WAN interface.

The Modem String values typically do not need to be changed. Enter the **PPP Username** and **PPP Password** if your ISP requires these to authenticate.

Enter a SIM PIN code only if your SIM card has a PIN set on it, otherwise leave this blank.

	WAN	>>	Internet	Access
--	-----	----	----------	--------

VAN 3		
3G/4G USB Modem(PPP mode)	3G/4G USB Modem(DHCP mode)	IPv6
		Modem Su
3G/4G USB Modem(PPP mode)	Enable Opisable	
SIM PIN code]
Modem Initial String	AT&FE0V1X1&D2&C1S0=0]
Modelli Inidal String	(Default:AT&FE0V1X1&D2&C1S	0=0)
APN Name		Apply
Modem Initial String2	AT]
Modem Dial String	ATDT*99#]
	(Default:ATDT*99#, CDMA:ATI TD-SCDMA:ATDT*98*1#)	DT#777,
Service Name		(Optional)
PPP Username		(Optional)
PPP Password		(Optional)
PPP Authentication	PAP or CHAP $$	

To set the **APN Name**, enter the APN required by the SIM card / network into the APN Name field and click the **Apply** button:

3G/4G USB Modem(PPP mode)	Enable O Disable	
SIM PIN code]
Modem Initial String	AT&FE0V1X1&D2&C1S0=0 (Default:AT&FE0V1X1&D2&C1S]
APN Name	exampleAPN	Apply
Modem Initial String2	AT	
Modem Dial String	ATDT*99#	

This will move the APN Name into the **Modem Initial String** to indicate that it has been saved.

3G/4G USB Modem(PPP mode)	Enable O Disable			
SIM PIN code				
Modem Initial String	APN:exampleAPN			
	(Default:AT&FE0VIX1&D2&C150=0)			
APN Name	exampleAPN	Apply		
Modem Initial String2	AT			
Modem Dial String	ATDT*99#			

Click **OK** to save and apply the changes.

If the modem is detected successfully, the WAN interface should be able to connect. Status information can be viewed on the [Online Status] > [Physical Connection] section as WAN3. If there is a successful connection, the WAN interface text will show in green and will show an IP address.

4.4.2 DHCP Mode

To set up the USB WAN for DHCP mode, go to [WAN] > [Internet Access] Select 3G/4G USB Modem (DHCP mode) from the drop-down box Click the Details Page button to continue:

Auto Logout 🗸 🛛 🛛 🛛 🗸	WAN >>	Internet Access			
Dashboard	ashboard Internet Access				
Wizards Online Status	Index	Display Name	Physical Mode	Access Mode	
	WAN1		ADSL / VDSL2	PPPoE / PPPoA ~	Details Page 1
WAN General Setup	WAN2		Ethernet	Static or Dynamic IP V	Details Page 1
Internet Access Multi-PVC/VLAN	WAN3		USB	3G/4G USB Modem(DHCP mode) 🗸	Details Page

In the USB WAN settings, select the Enable option to enable the WAN interface.

Enter a SIM PIN code only if your SIM card has a PIN set on it, otherwise leave this blank.

Network Mode defaults to 4G/3G/2G which will auto-select the network type to connect to and will use whichever mode the base station recommends. Setting this to a specific mode will force that connection type, for instance "4G Only" will connect using 4G specifically

The APN Name will typically not need to be set with a USB modem that uses DHCP mode, however if the modem cannot connect then enter the APN for the SIM card used in the modem.

WAN >> Internet Access				
WAN 3				
3G/4G USB Modem(PPP mode)	3G/4G USB M	lodem(DHCP mode)	IPv	/6
			1	Modem Support List
● Enable ○ Disable		Authentication	PAP or CHAP $ \lor $]
		Username		(Optional)
SIM PIN code		Password		(Optional)
Network Mode 4G/3G/2G V (Def	ault:4G/3G/2G)			
APN Name exampleAPN				
LTE hardware version	_			
WAN Connection Detection				
Mode ARP De	etect 🗸			
MTU 1500	(Default:1500)			
Path MTU Discovery Choos	se IP			
Click OK to save and an	nly the change	c.		

Click **OK** to save and apply the changes.

If the modem is detected successfully, the WAN interface should be able to connect. Status information can be viewed on the [Online Status] > [Physical Connection] section as WAN3. If there is a successful connection, the WAN interface text will show in green and will show an IP address.

5. Getting Further Help

If the router does not appear to be operating correctly or you cannot get online to the Internet, please visit our web site (www.draytek.co.uk) for further troubleshooting advice or to contact our support technicians. Always have your serial number to hand.

Users in the UK/Ireland using qualifying products should visit for support options including email support, telephone support, our help knowledgebase and access to the UK user support forums.

If you are **outside** of the UK/Ireland, please contact your own local supplier, email to support@draytek.com or visit www.draytek.com/support

For warranty service, in the first instance, please contact the support services, as listed above, for help in diagnosing or eliminating the problem or issue. The support department can arrange repair or service if then deemed necessary.

The standard Vigor 2765 series warranty is 'Return to base' (RTB) unless you have VigorCare which provides enhanced services (see www.draytek.co.uk/vigorcare).

You should keep your proof of purchase (original invoice) safely in case warranty or other service is ever required.

5.1 Additional Feature Setup

This is a quick setup guide to get you online with your new router. Your Vigor 2765 series router is capable of very much more and has a plethora of other features.

These are covered in the main user manual, which is available on the Downloads page:

https://www.draytek.co.uk/support/downloads

The online knowledgebase has additional information on how to configure the router's Internet connectivity and more advanced features:

https://www.draytek.co.uk/support/product-knowledgebase

5.2 Keep up to date with our mailing list

Now that you have your DrayTek product, you should keep up to date with product updates (firmware), security advisories and other product news, advice or special offers. Users in the UK/Ireland can subscribe to our mailing list. For details and to subscribe, please visit

In other countries or regions, please contact your local distributor/supplier for local options.

5.3 Firmware Updates

It is strongly recommended that you keep your router firmware up to date with the latest version in order to have all of the latest security and feature improvements.

Always obtain firmware from official sources, i.e. (for UK/Ireland users).

There are two firmware file types:

- .all upgrade retaining all previous settings
- .rst upgrade and reset to factory default

It is recommended to take a configuration backup prior to upgrading the firmware.

5.4 Security & Router Best Practice

Your router is the gateway to an entire business network and data. Even the best security equipment requires correct usage in order to ensure that its features are effective.

There are many simple practices that every router user should adopt to help reduce the risk to their network or business as well as some very common and simple mistakes that people habitually make - simple mistakes which could then be exploited by others.

We've produced our free guide "Router Best Practice" which contains essential information for anyone installing, configuring or using a broadband router or wireless LAN.

Available to download: <u>https://www.draytek.co.uk/best</u>