

Vigor2765 Series

35b Security Router



QUICK START GUIDE (WIRED MODEL)

V1.2

Vigor2765 35b VDSL2 Router

(Wired models)

Guide Version: 1.2 Region: United Kingdom & Ireland For updates and support, visit www.draytek.co.uk March 2020 / Firmware V4.0.5 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>

Safety and Warranty Information

	Dead the installation suide the secondary hafes you get up the second set
Safety	• Read the installation guide thoroughly before you set up the router.
Instructions	 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
	DrayTek authorized dealer in the LIK/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
	unctionally 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 hereor without obligation to notify any person of such revision of changes.



((

EU Declaration of Conformity

We DrayTek Corp. , office at No.26, Fu Shing Road, HuKou County, Hsin-Chu Industry Park, Hsinchu 300, Taiwan , R.O.C., declare under our sole responsibility that the product

- Product name: <u>VDSL2 Security Router</u>
- Model number: <u>Vigor2765</u>
- Manufacturer: <u>DrayTek Corp.</u>
- Address: <u>No.26, Fu Shing Road, HuKou County, Hsin-Chu Industry</u> Park, Hsinchu 300, Taiwan, R.O.C.
- Importer: <u>SEG, 11 Capital Business Park, Borehamwood, Herts,</u> 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	2014+A11:2017
EC No. 1275/2008	2008

Calin Ma

Calvin Ma / President (Legal Signature)

<u>Hsinchu</u>

1st Oct., 2019 (date)

(place)



Join the UK mailing list	Users in the UK & Ireland can sign up to our mailing list which goes out approximately 4 times per year with products news, updates, hints & tips and offers. For details, please visit www.draytek.co.uk/list
Firmware & Tools Updates	Due to the continuous evolution of DrayTek technology and emerging risks, router firmware updates may be issued. Please consult the DrayTek web site for more information on newest firmware, tools and documents: www.draytek.co.uk (For UK/Ireland)

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.

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	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
Н	Average active	84.9%	86.2%	87.6%	87.8%	89.8%	83.7%	85.4%	88.6%	88.2%
	efficiency									
1	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.

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1. Introduction

The Vigor2765 series is a VDSL2 35b router / firewall with guest network capability for fast and secure home and small office connectivity, designed for bandwidth-intensive applications such as high-definition video streaming, online gaming and Internet telephony.

Packed with advanced features, the Vigor 2765 series offers truly comprehensive DSL connectivity and security. Compatible with all UK variants of ADSL (including ADSL2+ and Annex M), VDSL2 (BT Infinity™/FTTC/35b), the Vigor 2765 can also be used for cable-modem or fibre connections, using LAN port P4 in Ethernet WAN mode and 3G/4G cellular service with supported USB modems.



GlobalView Web Content Filtering allows blocking of websites based on the category they're determined to fit in, which is managed by the GlobalView servers, making it far simpler to block unwanted sites (e.g. Gambling and adult categories) with less maintenance required as new or changed site categorisations are continuously updated. A free 30-day trial is included with your new router.

The router's hardware accelerated IPSec/SSL/L2TP VPN (Virtual Private Networking) functionality can dial-out quickly and securely to an office VPN server for teleworking.

The SSL VPN server allows you to connect your computer, phone or tablet into your home network from anywhere, with access to network storage and secure Internet connectivity through the SSL VPN tunnel.

2. Package Contents



DrayTek Vigor 2765 router



Quick Start Guide (This document)



RJ-45 Cable (Ethernet) (Connects to your PC or Switch)



UK Power Adapter

The maximum power consumption is 15 Watts.



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

RJ-11 to RJ-11 Cable (Connects to your DSL line)

3. Panel Explanation

	0 2	<u>1</u> <u>2</u> <u>3</u> <u>4</u>	
ł		Vigor2765)

LED	Status		Explanation				
(h) (a)	Blinking		The router is ready and operating normally				
(Activity)	Off		The router is powered off				
	Orange	On	DSL connection synchronised, waiting for Internet connection to establish				
22	orunge	Blinking	Slowly - DSL link not detected Quickly - DSL connection synchronising				
(DSL)	Green	On	Internet connection established, ready for use				
		Blinking	Data is being transmitted over WAN				
	On		Ethernet LAN (RJ45) is connected				
	Blinking		Data is transmitting (sending/receiving)				
~ (LAN1/2/3/4)	Off		Ethernet LAN is disconnected				
	On		USB device is connected and ready for use				
(355)	Blinking		Data is being transmitted over USB				

	1	 	 	
	2			
	and the second division of the second divisio			
Facto	iy =			

Interface	Description
Factory Reset	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
Ι/Ο	Power Switch. Turns the unit on (I) or off (O)
PWR	Connector for the power adapter

4. Hardware Installation

4.1 Connecting up the Vigor 2765



- 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.

4.2 Wall-Mounting the Vigor 2765

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

- 1. A template is provided in the Vigor router packaging box to enable you to space the screws correctly on the wall
- 2. Place the template on the wall in the desired position and drill holes through the cardboard template at the marked points
- 3. Fit screws into the wall using the appropriate type of wall plug
- 4. With the screws installed, the router can be slotted into place





5. 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 www.draytek.co.uk.

8	
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.

5.1 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.

Dray Tek Vigor 2765 Series
Login
Username
Password
Login
Security Warning: You are logging in without encryption which is not recommended. To login securely <u>click here</u> .
Copyright © 2000-2018DrayTek Corp. All Rights Reserved.

The factory default login details are:

Username: admin Password: admin



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:

Dray Tek	Vi	gor	2765 Serie	es						î î	
Auto Logout 🗸 📭	Dashboard										
Dashboard Wizards Online Status Search menu WAN		2 2) 6)	Factory Reset WPS	1 2 SB	P4	P3	P2	P1 DS	BL		
Hotspot Web Portal Routing NAT											
Firewall Objects Setting	System In Model Name	format	ion Vigor2765ac			Syste	m Up Time	0:02:34			Quick Access
CSM	Router Name	e	DrayTek			Currer	<u>it Time</u>	Sat Jan 01	2000 0	0:02:21	Dynamic DNS
Bandwidth Management	Firmware Ve	ersion	r87406_beta			Build Date/Time Dec 20 2019		19 14:33	3:40	<u>TR-069</u>	
VPN and Remote Access	DSL Version		08-08-00-0F-00-07 LAN MAC Address 00-1D-AA-40-D8-9					90	Schodulo		
Certificate Management	IPv4 LAN I	nform	ation								SysLog / Mail Alert
Wireless LAN (2.4 GHz)			IP Address	1	DHCP			IP Address		DHCP	RADIUS
Wireless LAN (5 GHz)	LAN1		192.168.1.1/24	· \	v	LAN2		192.168.2	.1/24	v	Firewall Object Setting
USB Application	IP Routed St	ubnet	192.168.0.1/24	۱ ۱	v						Data Flow Monitor
Diagnostics	IPv/ Intern	het Acc	222		_		_	_		_	1
		Line / I	lode	IP 4	ddress		MAC Addres	5	Ur	Time	
Central Management	WAN1	VDSL2	/ PPPoE	Disc	connecte	d	00-1D-AA-4	0-D8-91	00:	00:00	
AP	WAN2	Ethern	et /	Disc	connecte	d	00-1D-AA-4	0-D8-92	00:	00:00	
External Devices	WAN3	USB / ·		Disc	connecte	d	00-1D-AA-4	0-D8-93	00:	00:00	
	Interference			_		_					1
MyVigor Services	Interface	Compo	sted - Dews Ctr		Ol/hpg /	Up. Chr					
Product Registration	WAN	Conne	cted : Down Str	eam:	WAN	Up Su	WAN3				
Service Status		Conne	cted: 0, ON	ort1	- Port	2	Port3	ort4			
	WLAN	Conne	cted : 0		- or c			5161			-
	WLAN5G	Conne	cted: 0								
	USB	Conne	ected : 0, 00	5B 1							1
			0, 00	2 00]



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]

5.2 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 **5.2.1 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 **5.2.2 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 **5.2.3 PPPoA connection with ADSL / ADSL2+**

5.2.1 PPPoE connection with FTTC VDSL2

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

Dray Tek	Vigor276			
Auto Logout ~ IR6	WAN >> General Setup			
Wizards Online Status	Index	Enable	Physical Mode/Type	Active Mode
Search menu	WAN1	\checkmark	VDSL2/-	Always On
	WAN2		LAN Port 4	Failover
General Setup	WAN3	\checkmark	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.

VVAN 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 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			-
Wizards	Index	Physical Mode	Access Mode		۷
	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 >> Internet Access

WAN 1

Image: Construction of the sector of the	P/MP Setup PP Authentication PAP or CHAP ~ P Assignment (IPCP) O Static O Dynamic ixed IP Address WAN IP Alias Al-Out Schedule ndex(1-15) in Schedule Setup: None ~=> None ~ => None ~ POE Pass-through For Wired LAN ² 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.

5. Once the router has restarted, the [Online Status] > [Physical Connection] 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 Connectio	on IPv4			IPv6		System Uptime: 0:8:44
Quick Start Wizard	LAN Status		Primary	DNS: 194.72.0	0.98	Secondary D	NS: 213,120,234,26
Physical Connection	IP Address	TX Pa	ackets	RX Packe	ats	becondury 2	
Virtual WAN	192 168 1 1	0		0			
	WAN 1 Statue						
WAN	Enable	Line		Namo	Mode	Un Time	
LAN	Voc	VDSL2		Name	DDDoE	0:07:41	
NAT	ID	CWID		TV Dookota	TV Data/Pasa	DV Dockots	DV Data(Ppa)
Firewall		GW IP		TA Packets	TA Rate(Dps)	RA Packets	KA Rate(Dps)
User Management	217.34.0.35	217.42.14	5.215	224580	805	339568	963
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				0	0	0	0
SSI VPN	WAN 3 Status						
USB Application	Enable	Line		Name	Mode	Up Time	Signal
System Maintenance	Yes	USB				00:00:00	-
Diagnostics	IP	GW IP		TX Packets	TX Rate(Bos)	RX Packets	RX Rate(Bns)
External Devices				0	0	0	0
		<i>(</i>)				<u> </u>	<u> </u>
Support Area	VDSL2 Information	(VDSL2 F	irmware V	ersion: 8B0F0	7_A/B/C)		
Product Registration	Profile	State	UP Speed	Down	Speed S	SNR Upstream	SNR Downstream
	17A	SHOWTIME	20000 (K	ops) 80000) (Kbps) 1	L5 (0.1dB)	6 (0.1dB)



5.2.2 DHCP / Static IP connection with FTTC VDSL2

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

Dray Tek Vigor 2765 Series			중 금 ₩ 월 및 단			
Auto Logout 🗸 🛛 📭 🎸	WAN >> General Setup					
Dashboard Wizards Online Status	Index	Enable	Physical Mode/Type	Active Mode		
Search menu	WAN1	\checkmark	VDSL2/-	Always On		
ΜΑΝ	WAN2		LAN Port 4	Failover		
General Setup	WAN3	\checkmark	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

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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

WAN 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 ~	

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 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 Wirorda	Internet	Access	1		2			
Opling Status	Index	Physical Mode	Access Mode	_				
	WAN1	ADSL / VDSL2	MPoA / Static or Dynamic IP	~	Details Page			
WAN General Setup	WAN2	Ethernet	None	~	Details Page			
Internet Access	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
🔿 Enable 🔍 Disat	ble	WAN Connection Detection	on land a start
ADSL Modem Settings		Mode	ARP Detect V
Multi-PVC channel	Channel 2 ~	МТО	
Encapsulation	1483 Bridged IP LLC \sim	1492 (Max:1500)	Path MTU Discovery
VPI	0		
VCI	101		
Modulation	Multimode ~		
		Bridge Mode	
IP Network Settings		Enable Bridge Mode	
Obtain an IP address au	tomatically	Enable Full Bridge Mo	ode
More Options 💷		Bridge Subnet	LAN 1 V
○ Specify an IP address			
IP Address		MAC Address	
Subnet Mask		Default MAC Address	s

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 👻 IR.6	Online Status						
Dashboard	Physical Connectio	on IPv4			IPv6	S	ystem Uptime: 0:8:44
Online Status	LAN Status		Primary	DNS: 194.72.	0.98	Secondary DN	IS: 213.120.234.26
Physical Connection	IP Address	TX Pa	ckets	RX Pack	ets	,	
Virtual WAN	192.168.1.1	0		0			
	WAN 1 Status						>> Release
WAN	Enable	Line		Name	Mode	Up Time	
LAN	Yes	VDSL2			DHCP Client	0:06:58	
NAI Firewall	IP	GW IP		TX Packets	TX Rate(Bps)	RX Packets	RX Rate(Bps)
User Management	217.34.6.35	217.42.14	5.215	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				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 F	irmware V	ersion: 8B0F0	7_A/B/C)		
Product Registration	Profile	State	UP Speed	Dowr	n Speed S	SNR Upstream	SNR Downstream
	17A	SHOWTIME	20000 (K	ops) 8000	0 (Kbps) 1	.5 (0.1dB)	6 (0.1dB)

5.2.3 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 >>	WAN >> Internet Access							
Dashboard Wizards	Internet	Access	1		2				
Opling Status	Index	Physical Mode	Access Mode						
	WAN1	ADSL / VDSL2	PPPoE / PPPoA	~	Details Page				
WAN General Setup	WAN2	Ethernet	None	~	Details Page				
Internet Access	WAN3	USB	None	~	Details Page				
WAN Budget									

2. On the PPPoE / PPPoA settings tab:

WAN >> Internet Access

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.

PPPoE / PPPoA	MPoA / Static or	Dynamic IP	IPv6
● Enable ○ Disa	ble	PPP/MP Setup	
ADSL Modem Settings		IP Assignment (IPCF	P) O Static O Dynamic
Multi-PVC channel	Channel 1 ~	Fixed IP Address	
VPI	0	WAN IP Alias	
VCI	38		
Encapsulating Type	VC MUX V	Dial-Out Schedule	
Protocol	PPPoA ~	Index(1-15) in Sch	edule Setup:
Modulation	Multimode ~	None v=>	None
ISP Access Setup			
Username	23456@HG01.btclick.com	PPPoE Pass-through	
Password	•••••	For Wired LAN ²	
More Options		For Wireless LAN	

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:

Auto Logout 👻 📭 🖉	Online Status						
Dashboard Quick Start Wizard	Physical Connection	n IPv4			IPv6	S	ystem Uptime: 0:8:44
Online Status	LAN Status		Primary	DNS: 194.72.	0.98	Secondary DN	IS: 213.120.234.26
Physical Connection	IP Address	TX Pa	ackets	RX Pack	ets	-	
Virtual WAN	192.168.1.1	0		0			
	WAN 1 Status						>> Drop PPPoA
WAN	Enable	Line		Name	Mode	Up Time	
LAN	Yes	VDSL2			PPPoE	0:07:41	
NAI Firewall	IP	GW IP		TX Packets	TX Rate(Bps) RX Packets	RX Rate(Bps)
User Management	217.34.6.35	217.42.14	5.215	224580	805	339568	963
Objects Setting	WAN 2 Status						
CSM Bandwidth Managomont	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				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
Cunnert Area	VDSL2 Information	(VDSL2 F	irmware V	ersion: 8B0F0	7_A/B/C)		
Product Registration	Profile	State	UP Speed	Dowr	Speed	SNR Upstream	SNR Downstream
rouder registration	17A	SHOWTIME	20000 (Ki	ops) 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.

5.3 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 **5.3.1 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 **5.3.2 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 **5.3.3 Static or Dynamic IP**

5.3.1 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	Vigor276	5 Series	* = 111	
Auto Logout V IR6	WAN >> General Setup			
Wizards Online Status	Index	Enable	Physical Mode/Type	Active Mode
Search menu	WAN1		VDSL2/-	Always On
Μ/Α Ν	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 Seri	ies 🕋 🖻 া 🗄 🖽 🗗
Auto Logout 🗸 🛛 IRÓ	WAN >> General Setup	
Dashboard	WAN 2	
Wizards Opling Status	Enable:	No v
	Display Name:	
Search menu	Physical Mode:	Ethernet
ΜΑΝ	Physical Type:	Auto negotiation \sim
General Setup	Active Mode:	Failover \lor

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	
Dashboard	WAN 2	
Wizards Online Status Search menu WAN General Setup Internet Access Multi-PVC/VLAN WAN Budget LAN Hotspot Web Portal Routing NAT Firewall	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) 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

eboot System		
	Do you want to reboot your router ?	
	Output 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.



Once the router has been restarted to apply the change, the port will operate in LAN mode.

5.3.2 **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 Opling Status	Index	Display Name	Physical Mode	Access Mode			
	WAN1		ADSL / VDSL2	None	~	Details Page 1	
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 Disable	PPP/MP Setup				
		PPP Authentication PAP or CHAP \vee				
ISP Access Set	up	Idle Timeout -1 second(s)				
Service Name	(Optional)	IP Address Assignment Method (IPCP)				
Username	A123456@HG00.btclick.c	WAN IP Alias				
Password	•••••	Fixed IP: O Yes No (Dynamic IP)				
Index(1-15) in	Schedule Setup:	Fixed IP Address				
=> ,						
		 Default MAC Address 				
WAN Connectio	n Detection	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.

5.3.3 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		
	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

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.

WAN >> Internet A	ccess				
WAN 2					
PPPoE	Static or Dynamic IP		PPTP/L2TP		IPv6
Enable	O Disable	WAN	IP Network Settings	WAN IP A	ias
Keep WAN Conne	ction	• •	btain an IP address a	utomatical	ly
	to keep alive	Rou	ter Name		*
PING to the IP			ain Name		*
			DHCP Client Identifier *		
		Use	rname		
WAN Connection	Detection	Pas	sword		
Mode	ARP Detect $\ \lor$	0 s	pecify an IP address		
		- IP A	ddress		
мти	1500 (Max:1500)	Sub	net Mask		
Path MTU Disco	Detect	Gat	eway 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.

5.4 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.

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

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

WAN 3					
3G/4G USB Modem(PPP mode)	3G/4G USB Modem(DHCP mode)	IPv6			
		Modem Support List			
3G/4G USB Modem(PPP mode)	Enable Disable				
SIM PIN code					
Modem Initial String	AT&FE0V1X1&D2&C1S0=0				
Modelli Inda Schilg	(Default:AT&FE0V1X1&D2&C1S	(Default:AT&FE0V1X1&D2&C1S0=0)			
APN Name		Apply			
Modem Initial String2	AT				
Modem Dial String	ATDT*99#]			
	(Default:ATDT*99#, CDMA:ATI	DT#777,			
	TD-SCDMA:ATDT*98*1#)	_			
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&C1S0	=0)
	· · · · · · · · · · · · · · · · · · ·	
APN Name	exampleAPN	Apply
APN Name Modem Initial String2	exampleAPN AT	Apply

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 Oisable	
SIM PIN code		
Modem Initial String	APN:exampleAPN	
5	(Detault:AT&FE0V1X1&D2	&CI50=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.

5.4.2 DHCP Mode

WAN >> Internet Access

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	Internet	Access			
Wizards	Index	Display Name	Physical Mode	Access Mode	
	WAN1		ADSL / VDSL2	PPPoE / PPPoA ~	Details Page
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 3		
3G/4G USB Modem(PPP mode)	3G/4G USB Modem(DHCP mode)	IPv6
		Modem Support List
Enable O Disable	Authentication	PAP or CHAP \checkmark
	Username	(Optional)
SIM PIN code	Password	(Optional)
Network Mode 4G/3G/2G (Default: APN Name exampleAPN LTE hardware version	4G/3G/2G)	
WAN Connection Detection Mode ARP Detect	~	
MTU 1500 (D Path MTU Discovery Choose IP	efault:1500)	

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.

6. 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.

6.1 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

6.2 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.

6.3 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.

6.4 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>