Release Notes for DrayTek Vigor2860 series (UK/Ireland)

Firmware Version	3.8.4.4_BT (Formal Release)
Release Type	**Regular** – Upgrade recommended when convenient Note: A previous firmware (3.8.4.2BT) was a **critical release**. This f/w includes all changes/improvements that were in 3.8.4.2BT.
Build Date	17th February 2017
Release Date	23rd March 2017
Revision	62655
Applicable Models	Vigor2860, Vigor2860n, Vigor2860Vn, Vigor 2860n+, Vigor 2860Vn+ Vigor 2860ac, Vigor 2860Vac, Vigor 2860L, Vigor 2860Ln
Locale	UK & Ireland Only

New Features

(None)

Improvements

1. SNMP Manager Host IP(IPv4) setting did not take effect with a Subnet Mask of "255.255.255.255 / 32"
2. TCP 8001 and TCP 8043 were responding on the WAN interface (all connections were rejected)
3. Resolved an interoperability issue with 3.35 firmware on the VigorSwitch G2260 / P2261
4. Bandwidth Limit settings were not applied to Routed LAN interfaces
5. Resolved an issue with Hardware Acceleration that could cause problems with web browsing & TCP session handling

Known Issues

1. Configuration settings in 3.8.4.4BT firmware are not backwards compatible with 3.7.8.3. It is not possible to downgrade from 3.8.x to 3.7.8.3 and retain settings. To downgrade, use the .rst file to clear settings.
   Before upgrade to 3.8.4.4BT we recommend taking a backup of the previous configuration. To downgrade to 3.7.8.3 onto a unit running 3.8.4.4BT, first .rst reflash 3.7.8.3 and then restore a previously saved .cfg from 3.7.8.3 or earlier.
2. Fax Mechanism will fail to send multiple papers/files from Phone1 to Phone 2 (Vac model)

Modem Codes

There are five firmware variants available for download.

Download Filename	Firmware Filename	Modem Code	G.INP	Vector
v2860_3844_vector1.zip	v2860_3844_567517.all	567517		●
v2860_3844_vector2.zip	v2860_3844_574307.all	574307	●	●
v2860_3844_vector3.zip	v2860_3844_576D17.all	576D17	●	●
v2860_3844_nonvector.zip	v2860_3844_548006.all	548006		
v2860_3844_BT.zip	v2860_3844BT_576D17.all	576D17	●	●

We recommend using firmware "v2860_3844BT_576D17.all" unless you have specific line issues.

G.INP: G.998.4 TX and RX retransmission support
Vector: G.993.5 Vectoring support. If your line does not support vectoring then the modem code will operate without.

Firmware File Types

The ZIP file contains the firmware with two different file extensions, .ALL and .RST. The firmware is identical but the RST file contains factory default settings. If you install the ALL file, your router will retain all existing settings. If you use the RST file, all settings will be wiped from your router.

Upgrade Instructions

It is recommended that you take a configuration backup prior to upgrading the firmware. This can be done from the router's system maintenance menu.

To upgrade firmware, select *'firmware upgrade'* from the router's system maintenance menu and select the correct file. Ensure that you select the ALL file underline unless you want to wipe out your router's settings back to factory default.

Manual Upgrade

 If you cannot access the router's menu, you can put the router into 'TFTP' mode by holding the RESET whilst turning the unit on and then use the Firmware Utility. That will enable TFTP mode. TFTP mode is indicated by all LEDs flashing. This mode will also be automatically enabled by the router if there is a firmware/settings abnormality. Upgrading from the web interface is easier and recommended – this manual mode is only needed if the web interface is inaccessible.

Firmware Version	3.8.4.3_BT (Formal Release)
Release Type	**Regular** – Upgrade recommended when convenient Note: The previous firmware (3.8.4.2BT) was a **critical release**. This f/w includes all changes/improvements that were in 3.8.4.2BT.
Build Date	17th January 2017
Release Date	25th January 2017
Revision	61999
Applicable Models	Vigor2860, Vigor2860n, Vigor2860Vn, Vigor 2860n+, Vigor 2860Vn+ Vigor 2860ac, Vigor 2860Vac, Vigor 2860L, Vigor 2860Ln
Locale	UK & Ireland Only

New Features

1. Hotspot Web Portal added in [Hotspot Web Portal] > [Profile Setup] to authenticate users via click-through, SMS PIN code or Facebook / Google

Improvements

1. TLS_RSA_WITH_3DES_EDE_CBC_SHA cipher disabled for SSL VPN & HTTPS management
2. WPS could not be used with 2.4GHz WLAN devices when WAN2 was configured for Wireless WAN on 2.4GHz band
3. WAN2 Wireless WAN mode could not connect to iPhone hotspot
4. Validation improved for WAN IP address settings, the WAN IP address cannot be the same as the Gateway address
5. PPPoE connection could not be established after upgrading firmware from 3.8.2.3 to 3.8.4.x
6. Resolved a USB storage issue with reading data from the USB device in some circumstances
7. VoIP models only – Faxes could not be sent through VoIP using WAN1 interface
8. LTE models only – Improved the display of Signal on the Dashboard
9. LTE models only – Improved display of LTE WAN settings
10. LTE models only – Added options in LTE WAN settings to specify preferred LTE Bands
11. Resolved a web interface issue that caused a login failure for the local "admin" user if the password configured exceeded 15 characters
12. Configuration backup filename format updated i.e.
    v2860_<date (yyyymmdd)>_<router name>_<firmware version>.cfg
13. Resolved an issue with PPTP VPN Passthrough for NAT to some types of internal PPTP VPN server

Known Issues

1. SNMP Manager Host IP(IPv4) setting does not take effect with a Subnet Mask of "255.255.255.255 / 32", use a Subnet Mask of "255.255.255.254 / 31" as a work-around.
2. Configuration settings in 3.8.4.3BT firmware are not backwards compatible with 3.7.8.3. It is not possible to downgrade from 3.8.x to 3.7.8.3 and retain settings. To downgrade, use the .rst file to clear settings.
   Before upgrade to 3.8.4.3BT we recommend taking a backup of the previous configuration. To downgrade to 3.7.8.3 onto a unit running 3.8.4.3BT, first .rst reflash 3.7.8.3 and then restore a previously saved .cfg from 3.7.8.3 or earlier.
3. On VDSL, if experiencing delays in web browsing then disable H/W Acceleration via [Hardware Acceleration] > [Setup]. This will not impact the throughput performance.
4. Fax Mechanism will fail to send multiple papers/files from Phone1 to Phone 2 (Vac model)

Firmware Version	3.8.4.2BT (Formal Release)
Release Type	**Critical** – Upgrade recommended immediately
Build Date	16th December 2016
Release Date	19th December 2016
Applicable Models	Vigor2860, Vigor2860n, Vigor2860Vn, Vigor 2860n+, Vigor 2860Vn+ Vigor 2860ac, Vigor 2860Vac, Vigor 2860L, Vigor 2860Ln
Locale	UK & Ireland Only

New Features in this Firmware

(None)

Improvements in this firmware

1. Security improvements including one or more considered critical.
2. Misc. minor WUI changes/corrections.

Known Issues

1. SNMP Manager Host IP(IPv4) setting does not take effect with a Subnet Mask of "255.255.255.255 / 32", use a Subnet Mask of "255.255.255.254 / 31" as a work-around.

2. Configuration settings in 3.8.4.2BT firmware are not backwards compatible with 3.7.8.3. It is not possible to downgrade from 3.8.x to 3.7.8.3 and retain settings. To downgrade, use the .rst file to clear settings.
   Before upgrade to 3.8.4.2BT we recommend taking a backup of the previous configuration. To downgrade to 3.7.8.3 onto a unit running 3.8.4.2BT, first .rst reflash 3.7.8.3 and then restore a previously saved .cfg from 3.7.8.3 or earlier.

3. On VDSL, if experiencing delays in web browsing then disable H/W Acceleration via [Hardware Acceleration] > [Setup]. This will not impact the throughput performance.

4. Fax Mechanism will fail to send multiple papers/files from Phone1 to Phone 2 (Vac model)

5. PPTP VPN Passthrough for NAT to some types of internal PPTP VPN server may prevent a VPN establishing successfully.

Firmware Version	3.8.4.1BT (Formal Release)
Release Type	**Regular** – Upgrade recommended when convenient
Build Date	26th October 2016
Release Date	18th November 2016
Applicable Models	Vigor2860, Vigor2860n, Vigor2860Vn, Vigor 2860n+, Vigor 2860Vn+ Vigor 2860ac, Vigor 2860Vac, Vigor 2860L, Vigor 2860Ln
Locale	UK & Ireland Only

New Features

(None)

Improvements

1. [VPN and Remote Access] > [Connection Management] now shows which WAN interface an SSL Tunnel has dialled through
2. [VPN and Remote Access] > [PPP General Setup] Dial-In PPP Authentication can now specify "MS-CHAPv2 Only"
3. Improved VPN performance for iOS clients
4. [Diagnostics] > [Ping Diagnosis] can specify WAN IP Alias IPs as Source IP to test from
5. Added Comment to [Wireless LAN] > [Access Control List] entries
6. AP Management can now be disabled from [System Maintenance] > [Management]
7. Added CLI commands to configure IPsec Phase 2 Proposal settings for LAN to LAN VPN tunnels
8. An MTU of 1500 would not save correctly in the WAN3/LTE interface settings through [WAN] > [Internet Access]
9. Resolved issues with the [Load Balance/Route Policy] > [Diagnose] feature that could show packets being dropped incorrectly
10. LTE models only - LTE Status was not displayed on the [Dashboard]
11. Resolved an issue with DNS that could occur when using the DNS Filter with Web Content Filtering

Known Issues

1. SNMP Manager Host IP(IPv4) setting does not take effect with a Subnet Mask of "255.255.255.255 / 32", use a Subnet Mask of "255.255.255.254 / 31" as a work-around.
2. Configuration settings in 3.8.4.1BT firmware are not backwards compatible with 3.7.8.3. It is not possible to downgrade from 3.8.x to 3.7.8.3 and retain settings. To downgrade, use the .rst file to clear settings.
   Before upgrade to 3.8.4.1BT we recommend taking a backup of the previous configuration. To downgrade to 3.7.8.3 onto a unit running 3.8.4.1BT, first .rst reflash 3.7.8.3 and then restore a previously saved .cfg from 3.7.8.3 or earlier.
3. On VDSL, if experiencing delays in web browsing then disable H/W Acceleration via [Hardware Acceleration] > [Setup]. This will not impact the throughput performance.
4. Fax Mechanism will fail to send multiple papers/files from Phone1 to Phone 2
5. PPTP VPN Passthrough for NAT to some types of internal PPTP VPN server may prevent a VPN establishing successfully

Firmware Version	3.8.4BT (Formal Release)
Release Type	**Regular** – Upgrade recommended when convenient
Build Date	26th September 2016
Release Date	20th October 2016
Applicable Models	Vigor2860, Vigor2860n, Vigor2860Vn, Vigor 2860n+, Vigor 2860Vn+ Vigor 2860ac, Vigor 2860Vac, Vigor 2860L, Vigor 2860Ln
Locale	UK & Ireland Only

New Features

1. Support for High Availability to use a secondary Vigor 2860 as a redundant router - [Applications] > [High Availability]
2. [WAN] > [Internet Access] > [IPv6] PPP WAN now supports IPv6 RIPng (RIP for IPv6)
3. Added [Central Switch Management] > [Switch Management] to manage compatible VigorSwitches
4. Support for [Wireless LAN] > [Airtime Fairness] added to 2.4GHz and 5GHz wireless
5. Band Steering added (requires same SSID & PSK on both 2.4GHz & 5GHz), to help 5GHz capable clients connect to the faster 5GHz band
6. Support for DNSSEC added in [Application] > [DNS Security]
7. Firewall configuration can be backed up / restored from [Firewall] > [General Setup]
8. WAN2 can now operate in 2.4GHz or 5GHz Wireless Station Mode, switchable with Ethernet mode in [WAN] > [General Setup] > [WAN2]
9. Router auto-generates unique Self-Signed Certificate for HTTPS [System Maintenance] > [Self-Signed Certificate]
10. Added [Diagnostics] > [VPN Graph] to view VPN connection history
11. WAN Failover in [WAN] > [General Setup] now supports Failover by Traffic Threshold
12. [Wireless LAN] SSIDs now support individual Schedules
13. Added configuration for Brute Force Protection for router's management interfaces to [System Maintenance] > [Management]
14. Router's SSH command line interface now supports RSA-based key exchange to improve client compatibility
15. [Load-Balance/Route Policy] Rules can now be applied to Hostnames / Domain names as Destination addresses
16. VoIP QoS Statistics / Log added to [Bandwidth Management] > [Quality of Service]
17. Ping Detect latency Graph is available in [Diagnostics] > [Traffic Graph] for WAN interfaces using Ping for WAN Connection Detection
18. Firewall Wizard Mode added to [Firewall] > [Filter Setup] > [Edit Filter Set]
19. IPsec VPN now supports SHA2_256 (SHA256) authentication algorithm
20. [Applications] > [Schedule] re-designed to simplify management of schedules
21. [Objects Setting] > [IP Objects] can now be uploaded to the router in CSV format
22. [NAT] > [Port Redirection] and [Open Ports] can specify an allowed Source IP Object (Single IP, Subnet or Range IP) to allow only specified IPs to access port forwards without making Firewall Filter Rules

Improvements

1. Additional information added to [USB Application] > [USB Modem Support List]
2. Central AP Management - [AP Map] interface improvements
3. Central AP Management - [WLAN Profile] can be applied to router's Wireless LAN interfaces with "Apply to Local" option
4. Central AP Management now supports managing APs across a LAN-to-LAN VPN tunnel
5. Added options in [System Maintenance] > [Management] to disable HTTPS management via TLS 1.0, TLS 1.1 or TLS 1.2
6. Vigor 2860L & 2860Ln LTE Models only - Send SMS alerts using LTE modem SMS interface
7. VoIP Models only - SIP account registration failover options added
8. VoIP Models only - WAN IP Alias can be selected for SIP account registration
9. LAN-to-LAN VPN Dial-Out IP address can be specified via WAN IP Alias addresses
10. [LAN] > [General Setup] - Advanced DHCP options can now specify "{}" characters
11. Changed TCP Initial sequence number mechanism
12. Added X-Frame-Options to HTTP headers
13. Management Validation Code (Captcha) compatibility improved with Apple devices
14. QoS Statistics was not displaying VPN traffic classifications correctly
15. [Open Ports] configured for WAN1 were affected when changing WAN2 IP Alias settings
16. Invalid Routes were not cleared from [Diagnostics] > [Routing Table] correctly in some scenarios with 3G/4G USB modems
17. Queries to the Router's DNS server were blocked when Firewall - Filter Rules were configured to block DNS queries to Internet DNS servers
18. With UPnP enabled, UDP 1900 and TCP 2869 could be detected when port scanning the UPnP WAN interface
19. LDAP Server Profile - Additional Filter setting did not work with Base DN
20. IP TV could not work with WAN1
21. [LAN] > [General Setup] - Advanced DHCP options gave incorrect values for DHCP Option 132 & 133
22. VDSL on WAN1 could not perform PPPoE Pass-Through

Known Issues

1. SNMP Manager Host IP(IPv4) setting does not take effect with a Subnet Mask of "255.255.255.255 / 32", use a Subnet Mask of "255.255.255.254 / 31" as a work-around.
2. Configuration settings in 3.8.4.1BT firmware are not backwards compatible with 3.7.8.3. It is not possible to downgrade from 3.8.x to 3.7.8.3 and retain settings. To downgrade, use the .rst file to clear settings.
   Before upgrade to 3.8.4.1BT we recommend taking a backup of the previous configuration. To downgrade to 3.7.8.3 onto a unit running 3.8.4.1BT, first .rst reflash 3.7.8.3 and then restore a previously saved .cfg from 3.7.8.3 or earlier.
3. On VDSL, if experiencing delays in web browsing then disable H/W Acceleration via [Hardware Acceleration] > [Setup]. This will not impact the throughput performance.
4. Fax Mechanism will fail to send multiple papers/files from Phone1 to Phone 2

5.   If DNSSEC is enabled, it can in some circumstances prevent VPN dial-in users from browsing the internet
6.   PPTP VPN Passthrough for NAT to some types of internal PPTP VPN server may prevent a VPN establishing successfully

Firmware Version	3.8.2.3BT (Formal Release)
Release Type	**Regular** – Upgrade recommended when convenient
Build Date	22nd April 2016
Release Date	5th May 2016
Applicable Models	Vigor2860, Vigor2860n, Vigor2860Vn, Vigor 2860n+, Vigor 2860Vn+ Vigor 2860ac, Vigor 2860Vac, Vigor 2860L, Vigor 2860Ln
Locale	UK & Ireland Only

New Features

1. Support WAN load balance by Session, configured in [WAN] > [General Setup]
2. Modem code 576D17 supports G.INP (G.998.4 TX and RX retransmission) and Vectoring (G.993.5)

Improvements

1. Changed TCP Initial sequence number mechanism
2. Added X-Frame-Options to HTTP headers
3. Session validation method improved in Web UI
4. SSL VPN username now shown in VPN Status when authenticated via RADIUS server
5. DoS Flood table mechanism improved
6. Incoming SIP calls could ring both ports when configured as Phone1 only
7. Wireless 5G LED was always on when 5G was disabled by schedule
8. TCP port 2869 and UDP port 1900 responding on WAN when UPnP enabled

Known Issues

1. Configuration settings in 3.8.2.3BT firmware are not backwards compatible with 3.7.8.3. It is not possible to downgrade from 3.8.x to 3.7.8.3. and retain settings. To downgrade, use the .rst file to clear settings.
   Before upgrade to 3.8.2.3BT we recommend taking a backup of the previous configuration. To downgrade to 3.7.8.3 onto a unit running 3.8.2.3BT, first .rst reflash 3.7.8.3 and then restore a previously saved .cfg from 3.7.8.3 or earlier.
2. On VDSL, if experiencing delays in web browsing then disable H/W Acceleration via [Hardware Acceleration] > [Setup]. This will not impact the throughput performance.
3. Fax Mechanism will fail to send multiple papers/files from Phone1 to Phone 2

Firmware Version	3.8.2.2 (Formal Release)
Release Type	**Regular** – Upgrade recommended when convenient
Build Date	19th February 2016
Release Date	4th March 2016
Applicable Models	Vigor2860, Vigor2860n, Vigor2860Vn, Vigor 2860n+, Vigor 2860Vn+ Vigor 2860ac, Vigor 2860Vac, Vigor 2860L, Vigor 2860Ln
Locale	UK & Ireland Only

New Features

1. Support for X.509 Certificates over 2048 bytes in size e.g. StartCom
2. [SSL VPN] > [General Setup] can select which WAN interfaces listen for SSL VPN connections
3. Web Portal Message page can now require the user to click a button to proceed to internet access
4. RTS Threshold and Fragment Length can be configured from [Wireless LAN] > [Advanced Setting]
5. App QoS now available under [Bandwidth Management]
6. [System Maintenance] > [Firmware Upgrade] can now check for latest available firmware
7. SSH now supports 2048-bit DH

Improvements

1. Dynamic DNS configuration for DynDNS now supports up to 64 characters
2. 2.4GHz wireless interference mitigation improvements
3. VigorACS SI can now disable the wireless button on the router
4. Support for ZTE MF730M & Huawei K3520 USB modems
5. [Wireless LAN 5GHz] now indicates to the user how the router will operate when selecting DFS channels (52-64, 100-140)
6. IPv6 IP addresses could not be obtained after the WAN connection dropped
7. Resolved display issues with the Web Portal page
8. Resolved an SSL VPN connectivity issue with SmartVPN client 4.3.3 that could cause the VPN to drop
9. Corrected an issue that stopped the Wireless Wizard from setting wireless configuration
10. Resolved no internet connectivity if both DSCP and VLAN tag were specified for a WAN interface
11. Usernames in [User Management] can now contain an "@" symbol
12. Disabling a [NAT] > [Port Redirection] entry would clear the Protocol setting of that entry
13. Dynamic DNS would not update if the DDNS password contained @, #, $, % characters
14. Resolved an issue with Customised DDNS authentication via HTTPS
15. [Diagnostics] > [Ping Diagnosis] was not able to ping LAN IP addresses correctly under some circumstances
16. TCP/IP SYN+FIN packet filtering improved
17. SSL VPN web login could not use LDAP authentication
18. VigorACS SI could not enable [Wireless LAN 5GHz] interface

19.   If the Firewall - Data Filter was disabled, QoS outbound status did not display correctly
20.   It was not possible to configure a Dial-In VPN user account with a LAN IP ending in .200
21.   On networks with LAN - VLAN enabled, the router was sending more ARP packets than required

Known Issue

1. Configuration settings in 3.8.1 firmware are not backwards compatible with 3.7.8.3. It is not possible to downgrade from 3.8.x to 3.7.8.3. and retain settings. To downgrade, use the .rst file to clear settings.
Before upgrade to 3.8.1 we recommend taking a backup of the previous configuration. To downgrade 3.7.8.3 onto a unit running 3.8.1 first .rst reflash 3.7.8.3 and then restore a previously saved .cfg from 3.7.8.3 or earlier.
2. On VDSL, if experiencing delays in web browsing then disable H/W Acceleration via [Hardware Acceleration] > [Setup]. This will not impact the throughput performance.
3. Fax Mechanism will fail to send multiple papers/files from Phone1 to Phone 2

Firmware Version	3.7.4BT (Formal Release)
Release Type	**Regular** – Upgrade recommended when convenient
Build Date	19th February 2016
Release Date	19th February 2016
Applicable Models	Vigor2860, Vigor2860n, Vigor2860Vn, Vigor 2860n+, Vigor 2860Vn+ Vigor 2860ac, Vigor 2860Vac, Vigor 2860L, Vigor 2860Ln
Locale	UK & Ireland Only

New Features

1. Vectoring Support
2. Support user switch between BT Sin498 normal mode and MTU1534 mode dynamically
1. Using command: MTU1534 [on | off]
2. VDSL WAN1 support C-VLAN(default 101) encapsulation on original Multi-PVC architecture.
3. User can enable/disable this feature by command: wan phyvlan wan [if_idx] [enable | disable]
4. User can config VLAN ID by: wan phyvlan wan [if_idx] tag [tag_val]
5. Support for Ethernet OAM ITU-T Y.1731 and IEEE 802.3ah
6. >ethoam dot3ah status

Improvements

1. VDSL can support double tagging, outer is C-VLAN (default 101), inner is Multi-PVC VLAN (dosen't effect original virtual WAN Multi-PVC)
2. Fix the issue that web page cannot be display for wireless PCs when hardware acceleration is ON.
3. Additional "vdsl" commands added
4. Support new dms/dmms settings for modem code "571a17" or later
1. / US ReTx Enable + DS ReTx Enable + ReTx Amnd-2 Enable
2. dms 5048 0 1 102
3. / SRA-DS&US on, Bitswaps-DS&US on
4. dmms f45 0 1 36 36

Known Issues

1. Configurations from earlier firmware are not compatible. Upgrade using .RST file so that settings are reset. This only applies to 3.7.4BT and not to subsequent firmware versions
2. Reboot is necessary after executing follow command:
   wan phyvlan wan [if_idx] tag [tag_val]
3. IGMP / IPTV function only operational when hardware acceleration is OFF

Firmware Version	3.8.2 (Formal Release)
Release Type	**Regular** – Upgrade recommended when convenient
Build Date	29th October 2015
Release Date	19th November 2015
Applicable Models	Vigor2860, Vigor2860n, Vigor2860Vn, Vigor 2860n+, Vigor 2860Vn+ Vigor 2860ac, Vigor 2860Vac, Vigor 2860L, Vigor 2860Ln
Locale	UK & Ireland Only

New Features

1. Support for Vigor 2860L and Vigor 2860Ln routers
2. VigorACS can now display the status of LAN ports on the router

Improvements

1. Resolved an issue could stop [Central AP Management] > [Rogue AP Detection] from working
2. When SSL VPN service port was disabled, TCP 443 could be detected on WAN side (but no access permitted)
3. DNS Filter blocked remote access from WAN incorrectly
4. Apple iOS 9.0.2 devices were unable to access the router's HTTPS web interface
5. Multi-VLAN bridge was unable to work correctly when using VDSL on WAN1 with untagged traffic
6. Internal RADIUS server did not work when User Management was disabled
7. DMZ port was incorrectly being assigned an IPv6 address from LAN1
8. Local PCs could not ping the router's WAN IP address
9. Ping Diagnostics did not work for VLANs LAN2 to LAN6
10. [LAN] > [Web Portal]: URL Redirection was truncating URLs
11. [Diagnostics] > [Data Flow Monitor] did not show correct throughput values for client IP addresses
12. Web Portal Redirect page was displaying multiple continue buttons
13. A router reboot could occur when setting TR-069 parameters relating to USB WAN under some conditions
14. The router was unable to print the TR-069 parameter list via telnet correctly
15. [Wireless LAN] > [Station List] was not displaying the IP addresses of all clients
16. Corrected the note of [System Maintenance] > [Configuration Backup] regarding Vigor 2850 configuration import compatibility
17. WUI now requires an IP to be configured when Ping to Keep Alive is enabled in a [VPN and Remote Access] > [LAN to LAN] profile
18. Resolved a display issue with the User Management status window
19. Next Server IP address could not be specified as a DHCP option if other DHCP options had been configured

Known Issue

1. Configuration settings in 3.8.1 firmware are not backwards compatible with 3.7.8.3. It is not possible to downgrade from 3.8.x to 3.7.8.3. and retain settings. To downgrade, use the .rst file to clear settings.
   Before upgrade to 3.8.1 we recommend taking a backup of the previous configuration. To downgrade 3.7.8.3 onto a unit running 3.8.1 first .rst reflash 3.7.8.3 and then restore a previously saved .cfg from 3.7.8.3 or earlier.
2. On VDSL, if experiencing delays in web browsing then disable H/W Acceleration via [Hardware Acceleration] > [Setup]. This will not impact the throughput performance.
3. Fax Mechanism will fail to send multiple papers/files from Phone1 to Phone 2
4. 2048 bit X.509 certificates with a file size over 2048 bits are not currently supported
5. SSL VPN tunnel may drop after a period of time

Firmware Version	3.8.1 (Formal Release)
Build Date	25th September 2015
Release Date	8th October 2015
Applicable Models	Vigor2860, Vigor2860n, Vigor2860Vn, Vigor 2860n+, Vigor 2860Vn+, Vigor 2860ac
Locale	UK & Ireland Only

New Features

1.	Support for RFC4638 for MTU of 1500 on PPPoE WAN interface
2.	Port forwarding (Port Redirection, Open Ports) to remote clients connected via an IPsec LAN to LAN VPN now supported
3.	WAN2 can now operate in 2.4GHz Wireless Station Mode, switchable with Ethernet mode ([WAN] > [General Setup] > [WAN2])
4.	Path MTU detection added to simplify correct MTU detection
5.	WAN1 PPPoE/PPPoA now supports Fallback account, used if the primary details are unable to establish a working connection
6.	WAN Connection Detection - Ping Detect now supports Primary/Secondary Ping IP, Interval & Retry parameters
7.	Static or Dynamic IP now supports Bridge mode with firewall applied
8.	Multi-WAN & Multi-LAN IPv6 now supported
9.	Notification Objects now have WAN Budget and Central VPN Management options
10.	URL Content Filter Profiles now have Exception List option
11.	LAN DNS entries now support CNAME (Domain Alias)
12.	Internal RADIUS / 802.1X server ([Applications] > [RADIUS], accounts configured in [User Management])
13.	[Web Portal] feature improvements, now supports HTTPS redirection
14.	[Load Balance / Route Policy] > [Diagnose] added
15.	LAN to LAN VPN now supports SSL Tunnel
16.	Switch Management added, accessible via network icon on [Dashboard]
17.	[Central AP Management]:
    a.	[Event Log] added
    b.	[Dashboard] added
    c.	[Station Number] added to show history of connected clients per AP
    d.	[Total Traffic] added to show bandwidth usage per AP
    e.	[AP Maintenance] can now send firmware to multiple APs simultaneously
18.	DrayTek SMB protocol stack
19.	[System Maintenance] > [Management] now support Captcha validation for Internet / LAN access to router Login page
20.	[Diagnostics] > [Authentication Information] shows details on users authenticated by internal RADIUS server
21.	TACACS+ support for VPN authentication ([VPN and Remote Access] > [PPP General Setup]
22.	Added support for TLS 1.2

Improvements

1. IP Filter telnet command could not configure Service Type Protocol to UDP or TCP
2. WAN connectivity issue with IPv6 when using DHCPv6 or 6rd
3. QoS Statistics would not display corrected when Firewall > Data Filter was disabled
4. URL Filter blocked some HTTPS sites incorrectly
5. LAN to LAN VPNs configured using VPN Wizard could not be re-established after disconnecting via VigorACS SI
6. Not all DHCP clients were displayed in the router's DHCP Table

Known Issue

1. On VDSL, if experiencing delays in web browsing then disable H/W Acceleration via [Hardware Acceleration] > [Setup]. This will not impact the throughput performance.
2. Fax Mechanism will fail to send multiple papers/files from Phone1 to Phone 2

Firmware Version	3.7.8.3 (Formal Release)
Build Date	12th June 2015
Release Date	6th July 2015
Applicable Models	Vigor2860, Vigor2860n, Vigor2860Vn, Vigor 2860n+, Vigor 2860Vn+, Vigor 2860ac
Locale	UK & Ireland Only

New Features

None.

Improvements

1. Improvements to 5GHz Wireless LAN performance.
2. Improved support for RFC3021 (31-bit prefix for WAN subnet mask)
3. Web interface improved to protect against Cross-Site-Request-Forgery attacks.
4. RFC-1483 Routed IP LLC mode did not work correctly.

Firmware Version	3.7.8.2 (Formal Release)
Build Date	15th May 2015
Release Date	10th June 2015
Applicable Models	Vigor2860, Vigor2860n, Vigor2860Vn, Vigor 2860n+, Vigor 2860Vn+, Vigor 2860ac
Locale	UK & Ireland Only

New Features

1. Vigor2860ac support DFS channels (52 - 140)
2. Support WAN budget.
3. Vectoring (use modem code "vector 2" / 574307)

Improvements

1. Improved security of web cookie ID generation.
2. WLAN button switch to support 4 states of two-way WLAN bands (off-off,
1. off-on, on-off, on-on) instead of the existing 2 state (off-on, on-off).
2. Added additional TCP SYN protection from WAN
3. Renamed "Samba" keyboard to "SMB" in Web GUI

Firmware Version	3.7.8.1 (Formal Release)
Build Date	11th March 2015
Release Date	31st March 2015
Applicable Models	Vigor2860, Vigor2860n, Vigor2860Vn, Vigor 2860n+, Vigor 2860Vn+
Locale	UK & Ireland Only

New Features

None.

Improvement

1. Wireless default profile parameteres modified for compliance with EN300328 certification.
2. App Enforcement now supports POP3 STARTTLS under the Protocol section.
3. The router's TCP SYN attack protection has been improved.
4. DHCP Discovery packets now sent only when the WAN interface is physically up.
5. Telnet commands 'adsl snr' and 'vdsl snr' are now available in the VDSL firmware version only.
6. Vigor ACS SI was unable to switch between White / Black list under [Wireless LAN] > [Access Control].
7. 2860n+ / 2860Vn+ only: When 5GHz WMM was disabled, 5GHz wireless would be limited to 54mbps.
8. WAN1 MAC checking mechanism improved.

Known Issue

1. Fax Mechanism will fail to send multiple papers/files from Phone1 to Phone 2

Firmware Version	3.7.8 (Formal Release)
Build Date	23rd December 2014
Release Date	12th January 2015
Applicable Models	Vigor2860, Vigor2860n, Vigor2860Vn, Vigor 2860n+, Vigor 2860Vn+
VDSL Firmware Version	VDSL 567517_A, ADSL 562301_A
Locale	UK & Ireland Only

New Features

1. AP Map feature, located in [Central AP Management] > [AP Map]
2. App-Enforcement signature updates downloadable via MyVigor
   http://www.draytek.co.uk/support/guides/kb-appe-sigupgrade
3. Supports TACACS+ remote authentication, set from [User Management] > [User Profile]
4. Supports Virtual IP Mapping for LAN to LAN VPN tunnels, to map / NAT local IPs to a required subnet.
5. Added the DNS filter object in [Firewall]-[General Setup] which allows the DNS filter to be applied using filter rules. DNS filter can now use either URL or WCF filter profiles.
6. Configuration backup [Maintenance]-[Configuration Backup] can be password protected
7. Added [Wireless LAN]-[Station Control].
8. Support for customized login page image for User Management login
9. Improvements to the SSL VPN tunnel implementation - requires Smart VPN Client 4.3.2
10. New multi-level WAN backup mechanism.
11. The router's Online Status can display DSL information from a Vigor 130 modem connected to WAN2.
12. Support for DNS Forwarding under [Applications] > [LAN DNS/DNS Forwarding].

Improvement

1. SSL3 now disabled in favour of TLS by default for SSL tunnels and web management.
2. Improvements to the layout of the [System Maintenance] > [SNMP] page.
3. Improvements to the Web Portal feature.
4. [System Maintenance] > [Management] now has a help page, click the "i" icon in the upper right to access this.
5. The Dashboard now shows the hardware Annex type (A or B).
6. Online Status can now show the USB temperature status.
7. Improvements to the display of [Wireless LAN] > [AP Discovery] and [Wireless LAN] > [Station List]
8. Improvements to the display of [USB Application] > [Temperature Sensor].
9. The router can now import a SHA-2 signed certificate for use with its HTTPS/SSL interface
10. Changed the classification of WAN backup logs in syslog.
11. The router would clear all sessions when a PPPoE WAN interface dropped.
12. Could not create NAT pseudo port when the outgoing packet was fragmented.
13. IP-Object profiles set using TR-069 were limited to 128 entries rather than 192.
14. Stability of WCF mechanism improved.
15. Route Policy did not apply to LAN to LAN VPN connections correctly.

16.   Resolved an issue that would cause virtual WAN interfaces to drop.
17.   The router name can now be up to 39 characters long, configured from [System Maintenance] > [Management].
18.   Improvements to [System Maintenance] > [Syslog/Mail Alert] when setting the SMTP port of a mail server.
19.   Resolved configuration backup issue via FTP.
20.   The DNS filter was blocking access to the web user interface when accessing via hostname.
21.   LAN2 Routing Mode did not reply to WAN ARP packets for LAN clients in the same way as the IP Routed subnet did.

Known Issue

1. Fax Mechanism will fail to send multiple papers/files from Phone1 to Phone 2

Firmware Version	3.7.4.5 (Formal Release)
Build Date	18th December 2014
Release Date	7th January 2015
Applicable Models	Vigor2860, Vigor2860n, Vigor2860Vn, Vigor 2860n+, Vigor 2860Vn+
VDSL Firmware Version	VDSL 567517_A, ADSL 562301_A
Locale	UK & Ireland Only

Note: Modem Codes

The recommended VDSL mode code for UK is 567517_A

The standard VDSL modem code is 548006_A

New Features

1. Wireless LAN 5GHz - Support for DFS (Dynamic Frequency Selection). Please note that when selecting a DFS channel (52-140) the router's 5GHz wireless will stop broadcasting for 60 seconds to determine whether the channel is allowed to be used, as per the DFS specification.

Improvement

1. Improved: SSL3 now disabled in favour of TLS by default for SSL tunnels and web management.
2. A problem could occur with the router's DHCP server when updating to 3.7.4.3 Vector firmware with some configurations.

Known Issue

1. Fax Mechanism will fail to send multiple papers/files from Phone1 to Phone 2
2. W800 USB Modem Performance issue :
   PC : Download 33~43 Mbits, Upload: 3~5 Mbits
   Vigor2860 : Download: 6~10 Mbit/s, Upload: 2~5.5 Mbit/s

Firmware Version	3.7.4.3 (Formal Release)
Build Date	15th September 2014
Release Date	30th September 2014
Applicable Models	Vigor2860, Vigor2860n, Vigor2860Vn, Vigor 2860n+, Vigor 2860Vn+
VDSL Firmware Version	VDSL 548006_A, ADSL 544401_A
Locale	UK Only

New Features

None

Improvements

1. LAN users were prevented from accessing router's Web UI using HTTPS via WAN IP.
2. Connection mode for WAN2 wasn't shown correctly in VigorACS SI.
3. LAN2 Routing Mode didn't reply WAN ARP for LAN Clients like IP Routed Subnet did.
4. DMZ Port isolation from other ports corrected
5. Stability of WCF mechanism improved
6. Memory usage of PPPoE improved for disconnection events
7. Mail Alert did not work with 1and1 SMTP server
8. 'sys mem' command improved
9. New TR069 parameters added to cater for VigorACS SI 1.1.5
10. Could not show "_" at comment of Bind IP to MAC.
11. IPv6 gateway was not displayed correctly in static IPv6 mode.
12. After setting RADIUS server setting, wrong message containing TACACS+ displayed
13. In Budget limit when Quota limit set to 0 the wrong adjustable range was displayed
14. [User Management]>[User Profile] factory default button would also reset [User Management]>[User Profile]
15. Issue with some CLI VoIP commands corrected
16. Strangth of automatically generated APM AES key increased

Known Issue

1. Fax Mechanism will fail to send multiple papers/files from Phone1 to Phone 2
2. W800 USB Modem Performance issue :
   PC : Download 33~43 Mbits, Upload: 3~5 Mbits
   Vigor2860 : Download: 6~10 Mbit/s, Upload: 2~5.5 Mbit/s

Firmware Version	3.7.4.2 (Formal Release)
Build Date	30th July 2014
Release Date	14th August 2014
Applicable Models	Vigor2860, Vigor2860n, Vigor2860Vn, Vigor 2860n+, Vigor 2860Vn+
VDSL Firmware Version	VDSL 548006_A, ADSL 544401_A
Locale	UK Only

New Features

1. Support configuration of Vigor2820/Vigor2830/Vigor2850 transferred to Vigor2860.
2. Menu [Diagnostics]>[DNS Cache Table] added

Improvements

1. Update OpenSSL for CVE-2014-0224
2. TR-069 parameters for LAN and VLAN added
3. Updated 3G/4G modem(s) support: Including Huawei E3272, K3772 and E303, Vodafone K4201, Alcatel L800 4G LTE, Alcatel One Touch L100V, Alcatel One Touch W800, 4G Systems W100.
4. Improved: New web user interface designed of CVM.
5. Syslog telnet CLI commands
6. Add wireless 5G scheduling function.
7. Channel 3 and 4 are hidden in Multi-PVC setting page.
8. The username of RADIUS server will be displayed in Syslog.
9. Modify the Status page for Central AP Management.
10. A warning message will be sent to the user when 3G gateway IP conflict is detected by Vigor router.
11. Menu title "4G USB Modem (DHCP mode)" changed to "3G/4G USB Modem (DHCP mode)"
12. Separate the tag settings for ADSL and VDSL in wizards.

Known Issue

1. Load-Balance / Route Policy only applies to traffic received on one of the LAN interfaces.
2. Fax Mechanism will fail to send multiple papers/files from Phone1 to Phone 2
3. W800 USB Modem Performance issue :
   PC : Download 33~43 Mbits, Upload: 3~5 Mbits
   Vigor2860 : Download: 6~10 Mbit/s, Upload: 2~5.5 Mbit/s

Firmware Version	3.7.4.1 (Formal Release)
Build Date	25th Feb 2014
Release Date	15th April 2014
Applicable Models	Vigor2860, Vigor2860n, Vigor2860Vn, Vigor 2860n+, Vigor 2860Vn+
VDSL Firmware Version	VDSL 548006_A, ADSL 544401_A
Locale	UK Only

New Features

1. Support VoIP.
2. Support DMZ port setting in LAN1.
3. Support dual 3G/4G LTE function (WAN3/WAN4).
4. Support Bonjour and SSH (Secure Shell) for IPv6.
5. Support Central AP Management, including
    a. AP Load Balance
    b. Rogue AP Detection
    c. AP Maintenance (Configuration Backup/Restoration, and Firmware Upgrade)
    d. AP Traffic Graph
    e. Station List
    f. Support Station Control function for wireless connection.

Improvements

1. Support more TR-069 parameters including CPU, memory and up time.
2. Support customized DDNS.
3. Separate PPPoE display name and service name.
4. Support configuration backup/restore for IP bind MAC.
5. Multi-PVCs page improvement.
6. Support up to 31 characters configured for Server IP /Host name for VPN.
7. Modification for wireless setting for 2.4GHz and 5GHz.
8. Lease time setting is supported by LAN2 to LAN6.
9. Add the function of "Retrieve IPs from inactive clients periodically" on the page of LAN>>General Setup.
10. VLAN header is supported in LAN for Multi-VLAN bridge connection.
11. Support more LTE modems, such as Huawei E398, Huawei E3276, novatel
1. 551l, uml290vw.c, samsung B3730, LG vl600, ZTE MF820D and ZTE MF880D.
12. Status can now display two USB modems.
13. Add WAN DHCP option configuration in the page of WAN>>Internet Access.
14. Port Redirection and Open ports numbers increased
    a. IP Alias Number: 32 (original: 8)
    b. Port Redirection Number: 40 (original: 20)
    c. Open Port Number: 40 (original: 20)
15. Improved: Move license wizard for WCF to portal.

16. WCF licence mechanism improved
17. Modify the items under LAN Access Control on System Maintenance>>Management.
18. Modification for management port setup for TR-069.
19. The IP pool count changed from 10 to 32 for IP Routed subnet.
20. Disable warning message for GW IP in IP assignment range when DHCP server is disabled.
21. The router doesn't need to reboot to make the IP range setting take effect after finished PPTP general setup.
22. WLAN client cannot access into Internet when IGMP Proxy is enabled and HD video is running.
23. Filter rule in Firewall page cannot be displayed properly.
24. The warning message is shown when USB disk if full in SysLog / Mail Alert page.
25. Wireless PPPoE pass improved
26. Improved handling of DNS filter when WAN cable is disconnected
27. WCF mechanism stability improved
28. IPv6 PPP WAN cannot connect with VLAN tag on WAN interface.

Known Issue

1. Load-Balance / Route Policy only applies to traffic received on one of the LAN interfaces.
2. Multiple papers/files from Phone1 to Phone 2 will fail to send with the with FAX mechanism.

Firmware Version	3.7.3 (Formal Release)
Build Date	20th August 2013
Release Date	29th August 2013
Applicable Models	Vigor2860, Vigor2860n, Vigor2860Vn, Vigor 2860n+, Vigor 2860Vn+
VDSL Firmware Version	05.04.08.00.00.06
Locale	UK Only

New Features

1. Wireless Wizard.
2. Bonjour protocol service [Applications > Bonjour]
3. APPE Support List added to Web UI
4. USB Device Status for modem and disk.
5. DNS Filter
6. Support Multi-VLAN for WAN2.
7. Support 6in4 Static Tunnel & 6rd for IPv6.

Improvements

1. Add SNMP v3.
2. UP to 16 SSL VPN Tunnels can be configured.
3. Add Time Quota & Data Quota for User Management.
4. Support Load-Balance/Route Policy.
5. Support Operation Mode and 5G settings for AP management.
6. New web page design for Login Customization.
7. Support web content filter (WCF) based on fragFINN.
8. Support Hub and Spoke IPsec VPN between Cyberoam router and Vigor router.
9. Support wireless VLAN.
10. Support web portal setup.
11. Resolved Web UI compatibility issue with IE10.

Known Issue

1. Load-Balance / Route Policy (see point Improvement #4) only applies to traffic received on one of the LAN interfaces.

Firmware Version	3.7.1 (First Release)
Build Date	19th March 2013
Release Date	10th July 2013
Applicable Models	Vigor2860, Vigor2860n, Vigor2860Vn
VDSL Firmware Version	05.04.08.00.00.06
Locale	UK Only

New Features

1. AP management : Support AP management for 5 AP800 (with 1.0.5 release firmware)
2. Support SSL VPN tunnel (5 tunnels)
3. Support LDAP Profile
4. Support USB Temper Sensor
5. Support IPv6 AICCU always on and dial link
6. New SMS / Mail Alert mechanism
7. Support ZTE MF821D LTE dongle

Improvements

1. Changed WAN2 QoS bandwidth max value as 200Mbps
2. Support VLAN tag with PPPoE on VDSL

First Firmware Release

[END OF FILE]