

## **Release Notes for DrayTek Vigor 3900 (UK/Ireland)**

|                   |  |
|-------------------|--|
| Firmware Version  | 1.3.2 (Formal Release)                               |
| Release Type      | <b>Regular</b> – Upgrade recommended when convenient |
| Build Date        | 24 <sup>th</sup> November 2017                       |
| Release Date      | 12 <sup>th</sup> December 2017                       |
| Revision          | 7459   |
| Applicable Models | Vigor 3900   |
| Locale            | UK & Ireland Only                                    |

### **New Features**

1. Fast NAT functionality added to improve outbound NAT throughput by bypassing firewall processing for specified local subnet(s) going through selected WAN interfaces.  
Configured in [NAT] > [Fast NAT]

### **Improvements**

1. Updated DNSMasq to improve security, for more details please read this security advisory: <https://www.draytek.co.uk/information/our-technology/dnsmasq-vulnerability>
2. Configured and functioning URL/Web Category Profiles could display as a blank profile in the web interface
3. Syslog output would report the rate unit as Kbps when setting the Filtering Rate (Mbps) in [Firewall] > [DoS Defense] > [Switch Rate Limit] > [Storm Filter]
4. Access Barrier for HTTPS management could potentially block an authenticated HTTPS management session
5. Corrected a potential error which might result in flooding a WAN interface removed from the Load Balance Pool
6. The Counter value for URL/Web Category Filter rules could not increment when blocking HTTPS websites
7. LDAP with Bind Type set to “Regular Mode” – When clicking the Search button for Base DN, the router would attempt to bind with Root, which caused compatibility issues with Windows LDAP servers
8. HTTPS filtering behaviour was incorrect when filtering with a keyword of “.”
9. Improved reliability of filtering by File Extension with the Firewall
10. High Availability failover did not occur when all WANs failed on the primary router
11. Multiple subnets available through a VPN Trunk in Backup mode were unavailable when Primary Interface VPN tunnel dropped and the Backup Interface VPN tunnel became active
12. VPN tunnels were unable to route traffic if a PPPoE WAN was disconnected, remained offline for over 12 hours and was then reconnected
13. Dial Out IPsec VPN could not establish if VPN server hostname started with a number (0-9)
14. After upgrade from firmware 1.2.2, [VPN and Remote Access] > [Connection Management] could not display profile names for IPsec VPN tunnels, displaying a “Lack of Ptype” error
15. Web Portal could conflict with IP filter rules
16. Improved [Bandwidth Management] > [Bandwidth Limit] rate limiting algorithm
17. AP Management broadcast packets no longer send through VPN tunnels, this can be enabled in [AP Management] > [General Setup] by enabling “Pass-Through VPN”

18. Improved Web Portal login page load times
19. QoS profiles and Firewall Filter Rules can now specify up to 200 Service Type Objects
20. IPsec VPN stability improvements

### **Known Issue**

1. **High Availability** - Updating from a firmware version  $\leq 1.1.0.2$ : Due to significant changes to High Availability functionality, existing HA configuration will be cleared during the update process and it will be necessary to reconfigure High Availability after the update
2. **L2TP Tunnel** - Disable "Force IPsec with L2TP" option in [VPN and Remote Access] > [PPP General Setup] to allow a standard L2TP tunnel, otherwise the L2TP server will allow L2TP with IPsec only
3. **IP Filter** - F/W 1.2.0 onwards Changes the behaviour of the IP Filter. After upgrade some IP Filter rules may need to be reconfigured. Please read the "Filter Rule Actions" segment of this guide for more information on the changes:  
<http://www.draytek.co.uk/support/guides/kb-3900-ipfilter-basics>

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### **Important Note - Upgrading Firmware**

Do not upgrade directly from 1.0.5 (and earlier) to 1.3.2.

Due to differences in the Web UI and functionality the router **MUST** first be upgraded to at least 1.0.7.1 prior to upgrading to 1.3.2.

Upgrade your router to Version 1.0.7.1 or later first, and afterwards upgrade the router to Version 1.3.2.

### **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.



### **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.



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|-------------------|--|
| Firmware Version  | 1.3.1 (Formal Release)                               |
| Release Type      | <b>Regular</b> – Upgrade recommended when convenient |
| Build Date        | 11 <sup>th</sup> July 2017                           |
| Release Date      | 27 <sup>th</sup> July 2017                           |
| Revision          | 7156   |
| Applicable Models | Vigor 3900   |
| Locale            | UK & Ireland Only                                    |

### **New Features**

1. Fast Route functionality added to improve throughput by bypassing firewall processing for specified routed subnets (VPN tunnels etc.). Located in [Routing] > [Fast Route].

### **Improvements**

1. Resolved an issue that could stop the router from resolving DNS hostnames, this would affect any services that resolve hostnames to IP addresses, such as Content Filtering, NTP, Mail Alert, DNS Server etc.
2. Improvements to Samba service to ensure immunity to CVE-2017-7494
3. Updated SSH server
4. Updated App Enforcement signatures to improve handling / blocking of:
  - a. Hotspot
  - b. UltraSurf
  - c. PPstream
  - d. Google Hangouts
5. [NAT] > [Server Load Balance] can now balance based on "Source IP"
6. Central AP Management can select all managed VigorAPs to apply WLAN Profiles / AP Maintenance tasks
7. Resolved an issue with [User Management] > [Web Portal] and SMS authentication
8. [User Management] > [User Profile] > Apply All tab could not alter PPTP settings
9. IPsec VPN tunnels could not re-establish VPN connection over specified "Failover to" WAN
10. Resolved an issue with IPv6 when using an IPv6 WAN configured for DHCPv6 PD (IAID)
11. iPad / iPhone devices with iOS 10.3.1 and later could not establish IKEv2 VPN tunnel
12. XAuth VPN tunnel could not authenticate if the password contained "#" or "." characters
13. The router could not perform DDNS update for "Strato" Dynamic DNS
14. Improved PPPoE server efficiency
15. IPv6 Ping Diagnostics would not display the ping result
16. Resolved a display issue with Switch Management's Switch Hierarchy view

### **Known Issue**

1. High Availability - Updating from a firmware version <=1.1.0.2: Due to significant changes to High Availability functionality, existing HA configuration will be cleared during the update process. Reconfigure High Availability after updating the firmware.
2. Disable "Force IPsec with L2TP" option in [VPN and Remote Access] > [PPP General Setup] to allow a standard L2TP tunnel, otherwise the L2TP server will allow L2TP with IPsec only
3. F/W 1.2.0 onwards Changes the behaviour of the IP Filter. After upgrade some IP Filter rules may need to be reconfigured. Please read the "Filter Rule Actions" segment of this guide for more information on the changes:  
<http://www.draytek.co.uk/support/guides/kb-3900-ipfilter-basics>

|                   |  |
|-------------------|--|
| Firmware Version  | 1.3.0 (Formal Release)                               |
| Release Type      | <b>Regular</b> – Upgrade recommended when convenient |
| Build Date        | 26 <sup>th</sup> April 2017                          |
| Release Date      | 17 <sup>th</sup> May 2017                            |
| Revision          | 7020   |
| Applicable Models | Vigor 3900   |
| Locale            | UK & Ireland Only                                    |

### **New Features**

1. Support for GRE Tunnel under [VPN and Remote Access] > [VPN Profiles] > [GRE] for compatibility with Cisco routers
2. Support for IKEv2 IPsec VPN tunnels
3. XAuth authentication support for IPsec Remote Dial-In Teleworker VPN tunnels
4. Central AP Management support – manage up to 50 VigorAP access points
5. Central Switch Management support – manage up to 10 VigorSwitch switches
6. New interface with improved design for mobile devices available through:  
<https://<router IP>/mobile>
7. Support for DNSSEC added in [Applications] > [DNS Security]
8. [NAT] > [Server Load Balance] added

### **Improvements**

1. The router will notify when another DHCP server is detected
2. DHCP options can now specify DHCP Gateway IP Address
3. Support dynamic prefix for IPv6 LAN
4. WAN Interfaces will default to DHCP when enabled
5. High Availability Hot Standby mode can now be switched manually
6. Firewall now has a Guest group in [Filter Setup] to apply rules to Guest Profile users
7. If Firewall – Default Policy is set to Block, option added to “Block All Incoming Traffic”
8. Bandwidth Limit now supports “Auto Adjust to make best use of available bandwidth” option
9. Bandwidth Limit & Session Limit can now be applied to User Objects, Groups & LDAP
10. Added VPN Disconnect Alert Delay to [Notification Object] > [Advanced Setting]
11. StartTLS Connection Security supported in [Mail Service Object] & Mail Alert
12. Added an option to disable User Login Mail Alert
13. Mail Alerts for WAN Status changes now include the WAN IP
14. HTTPS Management can now be enforced using Enforce HTTPS Management option, forwards HTTP access attempts to the HTTPS interface
15. SSH interface now supports SHA2 authentication
16. Timezone configured in Time and Date settings now defaults to UK
17. Traffic Graph now displays CPU and Coprocessor usage history graphs
18. Added Apply Settings to VigorAP section to TR-069 configuration
19. Support for scheduled reboot on weekdays only
20. Improvements to the Fail to Ban & Access Barrier functions
21. LAN DNS now supports wildcards
22. LAN DNS profiles can now perform conditional DNS forwarding when the Type of the LAN DNS profile is set to FORWARD
23. Dynamic DNS now supports HTTPS

24. Dynamic DNS now supports User Defined mode for custom API configuration
25. Google Domains added to Dynamic DNS
26. OpenDNS added to Dynamic DNS
27. Ping & Trace Route diagnostics can now select which WAN IP Alias to send through
28. Added View button to Certificate Management to view loaded certificate details
29. Search functionality added to:
  - a. IP Objects & Groups
  - b. Service Type Objects & Groups
  - c. Keyword / DNS Objects
  - d. User Profiles
  - e. VPN Profiles
  - f. NAT Port Redirection rules
30. Web Portal can now redirect to specified LAN DNS address instead of IP
31. [User Management] > [Web Portal] – Login History added
32. Clean Deadline button added to Guest Profile to renew usage time of selected account(s)
33. Guest Profile accounts can specify max simultaneous logins
34. Added Search Button in LDAP to allow users to view and select the Base DN/Group DN
35. LDAP now supports SSL connection to LDAP Server
36. Improvements to the RADIUS configuration page
37. [NAT] > [Port Redirection] can specify allowed Source IP Objects to allow only specified IPs to access port forwards without making Firewall Filter Rules
38. Policy Route rules can select Service Type Objects instead of manually specifying ports
39. Policy Route rules can now specify Time Objects to apply rules during specified times only
40. Added a priority graph to Policy Route rules, click “(?)” to view
41. Support for SPF/TXT DNS Records for WAN Inbound Load Balance
42. VPN Profiles can now be renamed
43. VPN Profiles now display Status icon to indicate connection state
44. SSL VPN port can be configured separately from HTTPS management interface
45. SSL VPN can be disabled on individual WAN interfaces in [Access Control] to allow NAT Port Redirections to be configured with that port, to the WAN interface with SSL VPN disabled
46. Allowed WAN interfaces for PPTP VPN server can be selected in [VPN and Remote Access] > [PPP General Setup]
47. IPsec VPN can be set as Default Route/Gateway with Apply NAT Policy enabled for that VPN
48. User Profiles can specify allowed VPN Dial-In times by selecting Time Objects
49. IPsec proposal DH Group now defaults to G5 (1536-bit)
50. Multiple SAs (Security Associations) added to IPsec VPN profiles to specify additional Local & Remote subnets
51. Central VPN Management is now able to configure SSL VPN tunnels

### **Known Issue**

1. High Availability - Updating from a firmware version <=1.1.0.2: Due to significant changes to High Availability functionality, existing HA configuration will be cleared during the update process. Reconfigure High Availability after the update
2. Disable "Force IPsec with L2TP" option in [VPN and Remote Access] > [PPP General Setup] to allow a standard L2TP tunnel, otherwise the L2TP server will allow L2TP with IPsec only
3. F/W 1.2.0 onwards Changes the behaviour of the IP Filter. After upgrade some IP Filter rules may need to be reconfigured. Please read the "Filter Rule Actions" segment of this

guide for more information on the changes:

<https://www.draytek.co.uk/support/guides/kb-3900-ipfilter-basics>

|                   |                        |
|-------------------|------------------------|
| Firmware Version  | 1.2.2 (Formal Release) |
| Release Date      | 22nd November 2016     |
| Build Date        | 13th October 2016      |
| Revision          | r6591                  |
| Applicable Models | Vigor 3900             |
| Locale            | UK ONLY                |

### **New Features**

(None)

### **Improvement**

1. FTP connections in Active mode were not passed correctly through NAT
2. When using [Diagnostics] > [Data Flow Monitor] > Packet Monitor, results could not be filtered by Host
3. Resolved an issue that could cause higher than normal memory usage with some router configurations
4. When configuring a User Management profile for VPN with MOTP enabled, it could not be saved without entering a password
5. TTL values were reported incorrectly in the [Diagnostics] > [Session Table]
6. Improved connectivity for Mac OS X SmartVPN clients

### **Known Issues**

1. High Availability - Updating from a firmware version <=1.1.0.2: Due to significant changes to High Availability functionality, existing HA configuration will be cleared during the update process and it will be necessary to reconfigure High Availability after the update
2. Disable "Force IPsec with L2TP" option in [VPN and Remote Access] > [PPP General Setup] to allow a standard L2TP tunnel, otherwise the L2TP server will allow L2TP with IPsec only
3. F/W 1.2.0 onwards Changes the behaviour of the IP Filter. After upgrade some IP Filter rules may need to be reconfigured. Please read the "Filter Rule Actions" segment of this guide for more information on the changes:  
<http://www.draytek.co.uk/support/guides/kb-3900-ipfilter-basics>

|                   |                        |
|-------------------|------------------------|
| Firmware Version  | 1.2.1 (Formal Release) |
| Release Date      | 7th September 2016     |
| Build Date        | 24th August 2016       |
| Revision          | r6454                  |
| Applicable Models | Vigor 3900             |
| Locale            | UK ONLY                |

### **New Features**

1. The router's Online Status can display "Remote DSL" information from a Vigor 130 or Vigor 120v2 modem connected to the router's WAN ports
2. Support WAN Load Balance by Session, configured in [Routing] > [Default Route], the default is IP-based Load Balancing
3. Packet Monitor facility added to [Diagnostics] > [Data Flow Monitor] to capture WAN/LAN packets and download as a .pcap file
4. Web Content Filter Query Server can now be specified in [Objects Setting] > [Web Category Object] > [Query Server] tab

### **Improvement**

1. NAT efficiency improvements
2. SSL VPN supports Idle Timeout and Reconnect
3. APP-Enforcement Signature updated to improve handling of:
  - i. IM-Google Hangouts
  - ii. Protocol-DNS
  - iii. HTTP
  - iv. SSL/TLS
  - v. Tunnel-Ultrasurf
  - vi. VoIP-RC
  - vii. WebHD-HTTP\_Upload
4. Web interface response time improved when displaying large numbers of Profiles (User Profile, IP Objects, etc)
5. Improved TCP SYN+FIN filtering mechanism
6. Auto DDoS defense added to reduce CPU load if DDoS occurs

### **Known Issues**

1. High Availability - Updating from a firmware version <=1.1.0.2: Due to significant changes to High Availability functionality, existing HA configuration will be cleared during the update process and it will be necessary to reconfigure High Availability after the update
2. Disable "Force IPsec with L2TP" option in [VPN and Remote Access] > [PPP General Setup] to allow a standard L2TP tunnel, otherwise the L2TP server will allow L2TP with IPsec only
3. F/W 1.2.1 Changes the behaviour of the IP Filter. After upgrade some IP Filter rules may need to be reconfigured. Please read the "Filter Rule Actions" segment of this guide for



more information on the changes: <http://www.draytek.co.uk/support/guides/kb-3900-ipfilter-basics>

4. FTP connections do not work in "active" mode, "passive" mode works normally. This will be fixed in the next firmware release.

|                   |                        |
|-------------------|------------------------|
| Firmware Version  | 1.2.0 (Formal Release) |
| Release Date      | 29th December 2015     |
| Build Date        | 3rd December 2015      |
| Revision          | r5723                  |
| Applicable Models | Vigor 3900             |
| Locale            | UK ONLY                |

## **New Features**

1. CPU, Memory, Traffic Tx/Rx usage added to [Notification Object], configured under Advanced Setting tab
2. [Configuration Backup] > [Analysis] displays details of router configuration on one page
3. Auto Firmware Upgrade and Auto Firmware Patch now available to simplify update process
4. [User Management] > [Web Portal] new features:
  - a. Can use SMS as an authentication method (requires internet SMS provider configured)
  - b. Option to block mobile devices if required
  - c. Customise login & background images in Portal Page Setup
5. MAC/Vendor Object now supported for use with IP Filter
6. SMB Server now available under [USB Application] menu for file sharing of connected USB storage
7. Now supports SHA2\_256 for IPsec VPN tunnel authentication
8. SSL VPN port can now be configured as a separate port from HTTPS Management under [System Maintenance] > [Access Control]

## **Improvement**

1. Improvements to the design and functionality of [Applications] > [High Availability]
2. Corrected an issue with Port Redirection which could occur after upgrading to 1.1.x firmware
3. [Firewall] > [Filter Counter] indicates how many sessions have matched each rule
4. General improvements to [Firewall] menus and syslog output
5. Improvements to HTTPS filtering when using Web Content Filtering
6. Specify Remote IP / Host Name to limit Remote Dial-In VPN connections to that WAN IP / Hostname only
7. Bandwidth Limit can now apply to PPTP Remote Dial-In VPN clients
8. [Diagnostics] > [ARP Cache Table] now has an option to quickly create an IP Object for listed IP address
9. Supports Suffix Type in IPv6 Object configuration
10. Time Schedule in Filter Rules can now force sessions to clear when the schedule takes effect
11. Spotify can now be blocked with the Application Filter
12. Can specify which WAN interfaces can be used for remote management
13. Improvements to Traffic Graph and Data Flow Monitor
14. QoS Class was not displayed in the Session Table

15. Support for "esendex" SMS Provider
16. Custom SMS Provider option to define API settings manually for SMS providers not listed
17. Improved the SOA Serial Format for Inbound Load Balance DNS response
18. External Devices can now list up to 200 items

#### **Known Issues**

1. Due to significant changes to High Availability functionality, existing HA configuration will be cleared during the update process and it will be necessary to reconfigure High Availability after updating to 1.2.0
2. Disable "Force IPsec with L2TP" option in [VPN and Remote Access] > [PPP General Setup] to allow a standard L2TP tunnel, otherwise the L2TP server will allow L2TP with IPsec only
3. F/W 1.2.0 Changes the behaviour of the IP Filter. After upgrade some IP Filter rules may need to be reconfigured. Please read the "Filter Rule Actions" segment of this guide for more information on the changes: <http://www.draytek.co.uk/support/guides/kb-3900-ipfilter-basics>

|                   |                          |
|-------------------|--------------------------|
| Firmware Version  | 1.1.0.1 (Formal Release) |
| Release Date      | 9th September 2015       |
| Build Date        | 27th August 2015         |
| Revision          | r5461                    |
| Applicable Models | Vigor 3900               |
| Locale            | UK ONLY                  |

### **New Features**

(None)

### **Improvement**

1. Corrected an issue that could cause Port Redirection to not work after upgrading the firmware from 1.0.9 or earlier
2. Syslog to USB was not writing to USB after restarting the router
3. It was not possible to modify the max failed Telnet Login attempts before the router bans the IP
4. Netbios names were not displaying in the ARP cache table correctly
5. Improvements to certificate handling for the router's HTTPS interface
6. DNS Suffix (DHCP Option 15) support added for remote dial-in VPN clients
7. Upgraded OpenSSL to 0.9.8zg for security updates
8. Resolves an WAN connectivity issue that could occur after an extended duration

### **Known Issues**

1. You need to disable "Force IPsec with L2TP" options for pure L2TP tunnel in [VPN and Remote Access] > [PPP General Setup].
2. The upgrade may affect Port Redirection entries if the router's configuration has been upgraded from 1.0.7.1 or previous firmware. To resolve this issue, please use 1.2.0 firmware. If the router has been factory reset or was installed with 1.0.8 or later firmware, port redirection will work normally.

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|-------------------|------------------------|
| Firmware Version  | 1.1.0 (Formal Release) |
| Release Date      | 6th August 2015        |
| Build Date        | 24th July 2015         |
| Revision          | r5322                  |
| Applicable Models | Vigor 3900             |
| Locale            | UK ONLY                |

## **New Features**

1. SSL VPN LAN to LAN tunnel (Supported from DrayTek Vigor 2960 / 3900 1.1.0 firmware and Vigor 2860 / 2925 3.8.x firmware).
2. Internal RADIUS server under [User Management] > [RADIUS].
3. APP Enforcement supported app list added under [Objects Settings] > [APP Support List].
4. Added auto/manual APP Signature Upgrade setting page in [System Maintenance] > [APP Signature Upgrade].
5. [System Maintenance] > [Access Control] Improvements:
  - a. Validation Code in Access Control tab to improve web admin security;
  - b. Fail to Ban setting page to automatically block IP addresses after failed login attempts;
  - c. Access Barrier setting page to protect router services (WUI, FTP etc) from brute force attack.
6. Added Switch Rate Limit setting page in [Firewall] > [Dos Defense].
7. Added [NAT] > [Connection Timeout] to allow altering the session timeout of different traffic types i.e. TCP, UDP etc
8. Wake on LAN can now operate on a schedule by configuring profiles in [Applications] > [Wake on LAN] > [Schedule Wake on LAN]
9. [Diagnostics] > [MAC Address Table] added.
10. [Diagnostics] > [User Status] added, to show PPPoE / Web Portal / VPN / SSL Proxy users in one location.
11. [LAN] > [LAN DNS] now supports wild-card strings and CNAME records for individual LANs using the Specified LAN option.
12. [Routing] > [Policy Route] Improvements:
  - d. Priority options (Normal, High, Top) for more flexible routing.
  - e. Country Objects as destination addresses.
  - f. Failover options for target IP ping failure.
13. Support for Multicast via VPN.
14. Router's web interface can now notify of new firmware upgrades available.

## **Improvement**

1. Improved DDoS protection.
2. SSL VPN settings now available under [VPN and Remote Access] > [PPP General Setup].
3. PPTP Dial-In VPN Profile (LAN to LAN) now supports multiple remote subnets.
4. LDAP/RADIUS support for the router's SSL Proxy facility.
5. [User Management] > [Web Portal] > [Portal Page Setup] now supports uploading an HTML file as the bulletin message.

6. Packet Inspection settings added under [Firewall] > [Filter Setup] > [Default Policy]
7. [User Management] > [User Profile] > [Apply All] improved to allow multiple choice.
8. Port Statistics now shown under [Diagnostics] > [Traffic Statistics].
9. Session Information added to [Diagnostics] > [Traffic Graph].
10. Vendor Information added to [Diagnostics] > [ARP Cache Table].
11. Daily / Period timeout settings added to Web Portal under [User Management] > [Web Portal] > [General Setup].
12. Bind IP to MAC can now be applied to specific subnets.
13. Supported added for VPN routing through GRE over IPSec tunnel (VPN Trunk).
14. Keep VPN Setting option added to [Central VPN Management] > [CPE Management].
15. Alert interval of temperature sensor now configurable under [USB Application] > [Temperature Sensor] > [General Setup].
16. The router could not use a DNS server located on the LAN for DNS queries under some circumstances.
17. Traffic was unable to pass between LAN and PPPoE server clients.
18. Web Content Filter category selection page improvements.
19. IP Filter now shows a counter display for matched packets.
20. Policy Route increased to 120 entries, Static Route increased to 200 entries.

#### **Known Issues**

1. You need to disable "Force IPsec with L2TP" options for pure L2TP tunnel in [VPN and Remote Access] > [PPP General Setup].

|                   |                          |
|-------------------|--------------------------|
| Firmware Version  | 1.0.9.1 (Formal Release) |
| Release Date      | 16th February 2015       |
| Build Date        | 2nd February 2015        |
| Revision          | r4765                    |
| Applicable Models | Vigor 3900               |
| Locale            | UK ONLY                  |

### **New Features**

(None)

### **Improvement**

1. The IGMP Proxy feature's compatibility with some ISPs that use PPPoE has been improved.
2. Support for the Bandluxe C330 USB 3G modem.
3. SSL VPN now changes tunnel MTU in relation to the WAN MTU.
4. PPTP Dial-In User VPN connections could not access the internet under some circumstances.
5. Policy Route was not working with return path traffic.
6. The IPsec option "Auto Dial Out if WAN1 Down" was still taking effect after being disabled in the WUI.
7. The router's memory usage was higher than normal when using the Data Flow Monitor.
8. The Access Control List was not working correctly under some circumstances.
9. Improvements to ensure immunity to Ghost/CVE-2015-0235

### **Known Issues**

1. You need to disable "Force IPsec with L2TP" options for pure L2TP tunnel in VPN and Remote Access >> PPP General Setup.
2. VPN Trunk tunnel should not be used with a profile name over 15 characters.

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|-------------------|------------------------|
| Firmware Version  | 1.0.9 (Formal Release) |
| Release Date      | 24th December 2014     |
| Build Date        | 1st December 2014      |
| Revision          | r4542                  |
| Applicable Models | Vigor 3900             |
| Locale            | UK ONLY                |

### **New Features**

1. Supports USB 4G/LTE. Check [USB]-[Modem support list] in the router's web interface for details.
2. Supports USB disk /FTP server.
3. Supports saving Syslog to USB disk.
4. Supports Policy Route (replacing Load Balance Rule and Address Mapping menus).
5. IPSec VPN tunnel can now be configured to pass or block NetBios packets.

### **Improvement**

1. Disabled HTTPS SSL 3.0 for CVE-2014-3566, this can be configured from the [System Maintenance] > [Management] page.
2. Connection request notifications from Vigor ACS were not authenticated
3. Could not establish IPv6 static connection.
4. Allow downloading/uploading private key (for Host to LAN VPN by X.509).
5. Shows the VPN Type/Form fields on VPN History web page.
6. Improved handling for Duplicated Routes (with Static Route Metric). When the static route metric is <=10, the priority of that static route will be greater than a VPN route.
7. Support QoS for VoIP traffic from LAN.
8. Support "Ping to Keep Alive" feature for detecting whether an IPsec tunnel is able to pass traffic
9. Support WAN Port and IP Alias options for PPTP Dial Out connections.
10. Support for RFC 4638 (accommodating an MTU/MRU larger than 1492 for PPPoE protocol WAN connections).
11. Added STUN server option to TR-069 settings.
12. Added Jumbo Frame setting under [LAN]-[Switch]-[Jumbo Frame] to edit Maximum Frame size.
13. Added a "Clear" button for the DDNS settings page.
14. Bind IP to MAC can now export or import a list of IP / MAC addresses.
15. [System Maintenance] > [Access Control] can now be configured to accept pings from the WAN on specified WAN interfaces.
16. Added "OVH" as service provider for DDNS setting.
17. Supports Range-to-many Port Redirection.
18. Improve login page customization for Web Portal setup.
19. Changed mechanism of deleting objects.



### **Known Issues**

1. You need to disable "Force IPsec with L2TP" options for pure L2TP tunnel in VPN and Remote Access >> PPP General Setup.
2. VPN Trunk tunnel should not be used with a profile name over 15 characters.

|                   |                          |
|-------------------|--------------------------|
| Firmware Version  | 1.0.8.2 (Formal Release) |
| Release Date      | 15th August 2014         |
| Build Date        | 13th June 2014           |
| Revision          | r3968                    |
| Applicable Models | Vigor 3900               |
| Locale            | UK ONLY                  |

## **New Features**

(None)

## **Improvement**

1. PPTP connection stability improved
2. Web Portal stability improved
3. Improved: Remove management port setting which may occupy port redirection.
4. Improve the stability of High Availability function.
5. Add telnet timeout if login not completed in 60 seconds
6. CPU usage is too high when data flow monitor is enabled.
7. Improved interoperability with SSL VPN client
8. A problem of WCF license occurred when HA is enabled.
9. CVM can't perform configuration backup.
10. NAT Loopback to LAN More Subnet doesn't work.
11. DNS for PPTP Remote dial-in is not assigned according to the LAN Profile.
12. Reboot with Customized Configurations bug.
13. When firewall default policy (block) is used, HTTP is still available for access.
14. Web portal still supports URL redirect when login mode is disabled.
15. Packet count error when PPTP acceleration is enabled.
16. mOTP User profile cannot be saved without Password.
17. WAN Priority Bits doesn't work.
18. Time object error corrected
19. [WAN]>[Switch mode]>[double tag] error corrected
20. Upgrade OpenSSL to 0.9.8za for security updates.
21. Update WCF (Web Content Filter) to account for Commtouch name change to Cyren.
22. High Availability improvements
23. DDNS failover 3G WAN improvements

## **Known Issues**

1. VPN Trunk tunnel doesn't work well when the profile name is more than 15 characters.
2. You need to disable "Force IPsec with L2TP" options for pure L2TP tunnel in VPN and [Remote Access]>[PPP General Setup]

|                   |                        |
|-------------------|------------------------|
| Firmware Version  | 1.0.8 (Formal Release) |
| Release Date      | 11th March 2014        |
| Applicable Models | Vigor 3900             |
| Locale            | UK ONLY                |

### **New Features**

1. Same WAN VLAN ID can be used in different WAN interfaces. (WAN >> General Setup Mode: Advance, Switch Mode: Double Tag)
2. QoS for multiple WANs.
3. SNMP v3.
4. Country block for Firewall.
5. WCF white list.
6. LAN DNS server.
7. BGP routing protocol.
8. SSL VPN in tunnel mode
9. Support Web Portal and Hotspot (Guest profile) in User Management.
10. Support PPTP acceleration for PPTP WAN/Remote Dial-in/LAN to LAN
11. QoS retag option added
12. VPN dial-out failover if WAN disconnected.
13. Support VPN LAN to LAN for overlap/duplicate subnets.
14. Display the last UP/DOWN log of VPN profile.
15. Add default policy for Firewall and default block policy can be applied.
16. Add IPv6 firewall settings.
17. Add DNS object.
18. Add a remote capture telnet command (rc), for traffic monitor and wireshark remote capture.
19. Add front panel and VPN status on the dashboard.

### **Improvements**

#### Web User Interface changes

1. Menu [User Management]>[General Setup] renamed [User Management]>[Web Portal]
2. Move [IP Routing] from to [Routing]>[Status Route] and rename as [LAN/WAN Proxy ARP]
3. Move [Inter-LAN Route] to [LAN]>[General Setup] from [LAN]>[Static Route]
4. Move status page to the first tab of each function menu.

#### Others

5. Support RADIUS, LDAP, Local authentication in User Management.
6. Support NAT option for IPsec LAN to LAN.
7. Support LDAP profile in Firewall.
8. Support ratio configuration for VPN Load Balancing.
9. Port number setting for Access Control in WAN IP alias can be passed to LAN by default.
10. Notification object can be recorded on Syslog through the configuration on [Applications]>[SMS/Mail Alert Service]

11. Support Local/RADIUS/LDAP authentication for PPTP/L2TP/PPPoE
12. Inter-LAN route priority changed so that IP filter can control
13. Support connection failover for TR-069.
14. Display router name in web page title.
15. IPsec VPN dial-in connection with all WANs is supported in default.
16. Support RFC3021.
17. Combine IM/P2P/Protocol object to App Object for blocking more Apps.
18. Management Access Control List increased up to 16 entries
19. Support peer identity for IPsec RSA authentication.
20. Support password encode option for configuration backup.
21. Support more special characters in username for user profile.
22. Number of SSL web proxy/VNC/RDP profiles increased to 30
23. Support customized DDNS.
24. Support acceleration of fragmented UDP packets (maximum 1628 bytes).
25. Support DHCP option 95 (LDAP server), 161(FTP server), and 162 (File path)
26. Support more subnet DHCP servers in Bind IP to MAC.
27. Support DHCP relay over LAN/Non-Direct-Connected LAN.
28. Support DHCP relay settings for PPTP/L2TP/PPPoE.
29. Support open port to the host in remote VPN network.
30. Default route cannot work well when two WAN IPs are in the same IP network.

|                   |                          |
|-------------------|--------------------------|
| Firmware Version  | 1.0.7.1 (Formal Release) |
| Release Date      | 13th November 2013       |
| Build Date        | 12th November 2013       |
| Revision          | r3067                    |
| Applicable Models | Vigor 3900               |
| Locale            | UK ONLY                  |

## **New Features**

(None)

## **Improvement**

1. Support USB-WAN for WAN Profile under the Setting tab in Application>> Dynamic DNS.
2. Support WCF (web content filter) in High Availability (HA) application.
3. Modify the mechanism for IP filter, "if no further match" action.
4. Add a subnet mask setting, 255.255.255.254, for WAN IP configuration.
5. Added option disable negotiation for Fiber WAN under the Interface tab in WAN>>Switch.
6. 'space' special character can be used in the username for LDAP
7. QoS IP rule can apply the packets passing through both Local IP and Remote IP.
8. Improved PPTP service mechanism for multiple simultaneous LAN to LAN dial-ins
9. Corrected: Can not block / unblock some IPs on Diagnostics>>Data Flow Monitor.
10. Corrected issue with ICMP packets larger than 8138 bytes over IPsec LAN to LAN tunnel.
11. Corrected: The user can not access Internet when QoS queue weight is set as "0".
12. Corrected: Lower the priority of Inter-LAN routing function.
13. Corrected: LAN DHCP packets do not respond while LAN DHCP Server is OFF.
14. Corrected: Can't accept L2TP VPN from (None) default route WAN.
15. Corrected: RADIUS client (Vigor router) sends wrong NAS IP address (127.0.0.1).
16. Corrected traffic status of DHCP over IPsec in VPN Connection Management.
17. ARP detection may fail when WAN TX traffic is full.
18. Corrected: SMS can't be sent out when L2TP over IPsec is up and down.

## **Known Issues**

1. VPN Trunk tunnel doesn't work well when the profile name is more than 15 characters.
2. You need to disable "Force IPsec with L2TP" options for pure L2TP tunnel in [VPN and Remote Access]>[PPP General Setup]

|                   |                        |
|-------------------|------------------------|
| Firmware Version  | 1.0.7 (Formal Release) |
| Revision          | 2733                   |
| Release Date      | 2nd Sept 2013          |
| Build Date        | 27th Aug 2013          |
| Applicable Models | Vigor 3900             |
| Locale            | UK ONLY                |

### **New Features**

1. Support Central VPN Management (CVM). Up to 16 devices can be managed.
2. Support 3G backup/load balance.
3. Support inbound load balance.
4. Support VPN Trunk failover mode.
5. Support PPPoE quota setting and MAC address filter.
6. Support USB temperature sensor. <http://www.draytek.co.uk/products/usb-thermometer.html>
7. Support SMS, Email Alert and Notification object profiles for WAN/VPN connection and USB temperature sensor.

### **Improvement**

1. Improved: Support SmartMonitor users up to 500.
2. Improved: VPN Trunk throughput and stability.
3. Improved: By default disable insecure SSL Encryption Key Algorithms
4. Improved: Support DHCP relay on VPN.
5. Improved: Add Active Standby mode for High Availability (HA).
6. Improved: QoS redesigned
7. Improved: Username reported to Syslog
8. Improved: Add option 60(Vendor ID), 61(Client ID) for WAN DHCP mode.
9. Improved: Add default maximum session number for Session limit.
10. Improved: Add flow control settings for Switch.
11. Improved: Add user defined options for DHCP server.
12. Improved: Improve DMZ function.
13. Improved: Add log and force update function for DDNS.
14. Improved: Add Force L2TP with IPsec policy option enabled in default.
15. Improved: Corrected causes for high CPU usage being displayed in Web UI
16. Improved: Stability in TR-069.
17. Improved: Firmware upgrade speed.
18. Fixed: Time object cannot work correctly when daylight saving is enabled.

### **Known Issues**

1. VPN Trunk tunnel doesn't work well when the profile name is more than 15 characters.
2. You need to disable "Force IPsec with L2TP" options for pure L2TP tunnel in [VPN and Remote Access]>[PPP General Setup]

|                   |                          |
|-------------------|--------------------------|
| Firmware Version  | 1.0.6.1 (Formal Release) |
| Release Date      | 10th April 2013          |
| Build Date        | 25th March 2013          |
| Applicable Models | Vigor 3900               |
| Locale            | UK ONLY                  |

## **New Features**

(None)

## **Improvement**

1. NAT Port Redirection Rule for FTP server didn't work with two WAN connection
2. Customized web content message would disappear after rebooting the router
3. Improvements to VPN Trunk tunnel where profile name are long
4. PPTP connection display error in VPN Graph for syslog utility
5. PPTP WAN could not dial-up if the server was set with a domain name
6. Fixed issue with ping to VPN remote network working after clicking WAN DHCP Renew Button via web user interface
7. Fixed Session limit rule not applying the correct limit due to subnet mask calculation error
8. Fixed that WAN status displays "up" when the WAN cable is unplugged and WAN detect mode is set with "(None)"
9. Corrected an issue with SNMP set/get Community setting
10. Resolved that VPN traffic wouldn't flow while one of the VPN GRE tunnels is disconnected
11. Corrected issue preventing some VLAN users from accessing Internet via Browser
12. Improved DHCP renewal interoperability
13. Fixed LAN VLAN configuration issues after restoring the web configuration
14. Corrected WAN1 MAC address used
15. Improved SIP ALG feature
16. Fixed that IPSec tunnel uptime would not reset after VPN reconnection
17. Corrected PPTP sessions problem that would prevent new network connections being setup
18. Corrected that a PC from remote subnet could't access Internet via PPTP LAN to LAN tunnel
19. Improvements to IPv6 traffic handling via AICCU
20. Improved load balance where multiple PPPoE connections have the same gateway
21. Corrected issue where multiple WAN disconnections could prevent VPN Trunk from reconnecting
22. Added information for remote network connected with GRE over IPsec to Routing Table
23. Corrected issue where enabling Perfect Forward Secrecy in VPN client could prevent connection
24. Display issue with transmitted/received (TX/ RX) packets in Connection Management fixed for VPN clients behind NAT
25. Improved parameters stability for TR-069
26. Improved throughput between different VLANs
27. Added sending ARP for WAN Alias IP to WAN Gateway when connected
28. Added support for VPN on Alias WAN IP and IP Routing IP
29. Add mail alert when VPN is up

30. High availability improvements

**Known Issues**

1. VPN Trunk tunnel profile names should be kept to less than 15 characters.



|                   |                        |
|-------------------|------------------------|
| Firmware Version  | 1.0.6 (Formal Release) |
| Release Date      | 2nd Jan 2013           |
| Build Date        | 6th Nov 2012           |
| Applicable Models | Vigor 3900             |
| Locale            | UK ONLY                |

### **New Features**

1. VPN(IPSEC) Routing Acceleration
2. Supports PPPoE server for LAN PC connection
3. Support VPN Alarm via E-mail & Syslog
4. Support VPN Graph for syslog utility
5. Support PPP mode for IPv6
6. Support domain name for IPsec/PPTP dial-out

### **Improvements**

1. URL filter can block HTTPS connection by host keyword
2. WCF support https block by web category
3. Add QQ account filter for Firewall
4. WAN4 is regarded as physical DMZ port
5. Add time schedule for session limit and bandwidth limit
6. Web content filter (WCF) stability improvements
7. Data flow monitor resource allocation improvements
8. DHCP server cannot work when Multi-LANs is configured
9. Hosts under routing LAN can not access into the router
10. Configuration backup may fail
11. UPnP improved
12. Changing web port could prevent User management from working
13. WebUI server security improvements
14. IPsec RX/TX packets count may have error after entering phase2 rekey
15. L2TP connection status error after disconnection.
1. 16 Cannot create IPsec VPN in aggressive mode when selecting AES as IKE phase 1 encryption.
16. PPTP dial-in may fail while using static IP mode.
17. VPN load balance may not work after connection reconnects
18. SSL Application doesn't work when HTTPS port is not set with 443.
19. Support PPTP dial on demand and idle timeout.
20. Support URL filter rules move up/down.
21. Support VLAN priority in LAN/WAN interface.
22. Support QoS packet by DiffServ (DSCP/TOS) for outgoing packet.
23. Let the user profile password support more special characters in standard ASCII table.
24. Show the IP binding with MAC in DHCP table.
25. Mail Alert Send test e-mail button added
26. Add 36 regions time zone options for NTP.
27. Improve user management login process.

28. Add Common Name Identifier field in LDAP configuration.
29. Add an option for DDNS to select Internet IP or WAN IP.

#### **Known Issues**

1. VPN Trunk tunnel profile names must be less than 15 characters.

|                   |                        |
|-------------------|------------------------|
| Firmware Version  | 1.0.5 (Formal Release) |
| Release Date      | 4th Sept 2012          |
| Applicable Models | Vigor 3900             |
| Locale            | UK ONLY                |

### **First Firmware Release**

#### Known Issues

- Devices on non-NAT subnets are unable to access the routers management interface

**[END OF FILE]**