# Release Notes for DrayTek VigorAP 910C (UK/Ireland)

Firmware Version	1.2.9
Release Type	Regular – Upgrade recommended when convenient
Release Date	29 <sup>th</sup> July 2019
Build Date	18 <sup>th</sup> July 2019
Revision	10633
Applicable Models	VigorAP 910C
Locale	UK Only

# Important Note

If upgrading from firmware version 1.2.0, reboot (power cycle or software reboot) the VigorAP 910C before commencing the firmware upgrade process

# New Features

(None)

### **Improvements**

1. Updates to TLS mechanism for compatibility with VigorACS 2.5.0

#### Known Issues

1. The VigorAP will prompt to restart if the available memory is too low to perform the firmware upgrade. If firmware upgrade via web interface fails, restart the VigorAP and retry the update. Otherwise update the VigorAP through TFTP using the Firmware Upgrade Utility

### **Firmware File Types**

The ZIP file contains the firmware with a file extension of .ALL. If you install the ALL file, your access point will retain all existing settings. Changing the file extension to .RST and uploading that firmware file will reset the VigorAP to its Factory Default configuration.

### Important Note - DO NOT POWER OFF WHEN UPDATING FIRMWARE

When updating from 1.1.3.2 firmware, this firmware updates the bootloader of the access point in addition to the firmware, this means that the access point will reboot twice. It is essential that the access point is not powered off during this time as it may put the access point into an unrecoverable state. This can take up to 3 minutes when updating locally.

### **Upgrade Instructions**

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

To upgrade firmware, select 'firmware upgrade' from the AP's system maintenance menu and select the correct file. The access point will perform the upgrade and automatically reboot once this completes.



#### Manual Upgrade

If you cannot access the AP's menu, you can put the AP into 'TFTP' mode by holding the FACTORY RESET button 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	1.2.8
Release Type	Regular – Upgrade recommended when convenient
Release Date	17 <sup>th</sup> May 2019
Build Date	26 <sup>th</sup> March 2019
Revision	10090
Applicable Models	VigorAP 910C
Locale	UK Only

If upgrading from firmware version 1.2.0, reboot (power cycle or software reboot) the VigorAP 910C before commencing the firmware upgrade process

#### New Features

(None)

### **Improvements**

- 1. Details configured in [RADIUS] > [RADIUS Server] could be displayed incorrectly with entries over 20 characters in length, after clicking the OK button
- 2. Wireless clients now remain connected when making changes to the Access Control list in [Wireless LAN] > [Access Control]

#### Known Issues

The VigorAP will prompt to restart if the available memory is too low to perform the firmware upgrade. If firmware upgrade via web interface fails, restart the VigorAP and retry the update. Otherwise update the VigorAP through TFTP using the Firmware Upgrade Utility

Firmware Version	1.2.7
Release Type	Regular – Upgrade recommended when convenient
Release Date	31 <sup>st</sup> October 2018
Build Date	16 <sup>th</sup> October 2018
Revision	9351
Applicable Models	VigorAP 910C
Locale	UK Only

If upgrading from firmware version 1.2.0, reboot (power cycle or software reboot) the VigorAP 910C before commencing the firmware upgrade process

#### New Features

(None)

### Improvements

- 1. Improved memory usage
- 2. Access Control for 5GHz WiFi only showed 64 entries when transferring WLAN Profile from APM ([Central Management] > [AP] > [WLAN Profile] on the router) with over 64 entries

#### Known Issues

The VigorAP will prompt to restart if the available memory is too low to perform the firmware upgrade. If firmware upgrade via web interface fails, restart the VigorAP and retry the update. Otherwise update the VigorAP through TFTP using the Firmware Upgrade Utility

Firmware Version	1.2.6
Release Type	Regular – Upgrade recommended when convenient
Release Date	23 <sup>rd</sup> October 2018
Build Date	20 <sup>th</sup> September 2018
Revision	9231
Applicable Models	VigorAP 910C
Locale	UK Only

If upgrading from firmware version 1.2.0, reboot (power cycle or software reboot) the VigorAP 910C before commencing the firmware upgrade process

#### New Features

(None)

### Improvements

- IGMP Snooping can now be enabled for the 5GHz WLAN interface from [Wireless LAN (5GHz)] > [Advanced Setting]
- 2. Time and Date configuration on the VigorAP now uses NTP Client as the factory default
- 3. WDS security key could not be saved for 2.4GHz WDS wireless configuration
- 4. Resolved an issue with the router intermittently losing APM connectivity with the VigorAP
- 5. Corrected an issue with the NTP client functionality of the VigorAP

# Known Issues

The VigorAP will prompt to restart if the available memory is too low to perform the firmware upgrade. If firmware upgrade via web interface fails, restart the VigorAP and retry the update. Otherwise update the VigorAP through TFTP using the Firmware Upgrade Utility

Firmware Version	1.2.5
Release Type	Regular – Upgrade recommended when convenient
Release Date	3 <sup>rd</sup> September 2018
Build Date	16 <sup>th</sup> August 2018
Revision	9032
Applicable Models	VigorAP 910C
Locale	UK Only

If upgrading from firmware version 1.2.0, reboot (power cycle or software reboot) the VigorAP 910C before commencing the firmware upgrade process

#### New Features

1. Support for transfer of Access Control List between VigorAPs using VigorACS

### **Improvements**

1. In some scenarios incorrect STUN / UDP connection data could be sent to the VigorACS server during registration

# Known Issues

Firmware Version	1.2.4
Release Type	Critical – Upgrade recommended immediately
Release Date	30 <sup>th</sup> May 2018
Build Date	7 <sup>th</sup> May 2018
Revision	8404
Applicable Models	VigorAP 910C
Locale	UK Only

- 1. 5GHz Wireless LAN now supports AP Bridge-WDS mode
- 2. Captive Web Portal facility added to [LAN] > [Web Portal]
- 3. Wireless Pre-Shared Key can now be viewed when logged into the VigorAP's web interface. Click on the "\*\*\*\*" text to reveal the password currently in use
- 4. Auto Channel Reselect now available in [Wireless LAN] > [Advanced Setting] enabling this will have the VigorAP scan for and select a new channel to use; if the currently auto selected channel's detected utilisation / interference goes over 70% (refer to [Diagnostics] > [Interference Monitor] for an example)

# Improvements

- 1. This firmware includes improvements to harden the web interface against attacks
- 2. Increased the number of MAC address filter profiles in [Wireless LAN (5GHz)]>[Access Control] to 256 entries
- 3. The VigorAP can now be reflashed back to factory default settings by renaming a VigorAP ".all" firmware to ".rst" extension and sending that to the VigorAP
- 4. When configuring RADIUS 802.1X authentication in EAP TLS mode, the VigorAP will now require creation of a root CA in [RADIUS Setting] > [Certificate Management] before proceeding
- Recommended wireless channel was not displayed when scanning channel usage [Diagnostics] > [Interference Monitor]
- 6. The VigorAP would not allow configuration of a WLAN Trusted DHCP Server IP address ending in "xxx.xxx.0"
- 7. VigorACS 2 was unable to configure AP Assisted Client Roaming
- 8. VigorAP did not send Root CA certificate if PEAP was selected as RADIUS EAP Type
- If Channels 36-48 were specified as filtered out channels for Auto channel usage, the Active Channel could under some circumstances display channel 36 being used in [Wireless LAN 5GHz] > [General Setup]
- 10. Vendor information for some Apple devices was not displayed correctly in [Mobile Device Management] > [Detection]
- 11. Product registration page could not work if accessing web user interface through HTTPS
- 12. VigorACS 2 Dashboard was unable to display the full 5GHz wireless client list in some situations

Firmware Version	1.2.3.2
Release Type	Regular – Upgrade recommended when convenient
Release Date	5 <sup>th</sup> January 2018
Build Date	1 <sup>st</sup> December 2017
Revision	7833
Applicable Models	VigorAP 910C
Locale	UK Only

If upgrading from firmware version 1.2.0, reboot (power cycle or software reboot) the VigorAP 910C before commencing the firmware upgrade process

#### New Features

 EAPOL Key Retry Enable/Disable setting added to [Wireless LAN (2.4GHz/5GHz)] > [Security] Disabling this setting can prevent WPA2 Key Reinstallation Attack (KRACK) attack vectors, for more details please read this security advisory: <u>https://www.draytek.co.uk/information/our-technology/wpa2-krack-vulnerability</u> (EAPOL Key Retry is set to Enabled by default and in previous firmware)

#### **Improvements**

(None)

### Known Issues

Firmware Version	1.2.3.1
Release Type	Regular – Upgrade recommended when convenient
Release Date	20 <sup>th</sup> October 2017
Build Date	20 <sup>th</sup> October 2017
Revision	7660
Applicable Models	VigorAP 910C
Locale	UK Only

If upgrading from firmware version 1.2.0, reboot (power cycle or software reboot) the VigorAP 910C before commencing the firmware upgrade process

### New Features

- Isolation between SSIDs and Bands (2.4GHz <-> 5Ghz) can now be enabled or disabled from [Wireless LAN] > [Advanced Setting]
- 2. Setting for 'Isolate Member with IP' added to [Wireless LAN] > [Advanced Setting] to control the behaviour of [Wireless LAN] > [General] > Isolate Member Enabled Block ARP packets from WLAN clients if isolate member set for SSID Disabled –Allow ARP packets from WLAN clients if isolate member set for SSID The advantage of 'enabled' behaviour is that clients will be blocked from using the LAN gateway as a proxy via which to communicate with other LAN clients
- 3. Support for extra TR-069 parameters
- 4. TLS 1.2 support added to TR-069 client

#### **Improvements**

- 1. Improvements to Universal Repeater mode WPA2 security to protect against WPA2 Key Reinstallation Attack (KRACK), for more details please read this security advisory: <u>https://www.draytek.co.uk/information/our-technology/wpa2-krack-vulnerability</u>
- 2. Central AP Management via Vigor 2952 and Vigor 3220 could not retrieve station list data
- 3. Support for compression of Central AP Management (via router) data to improve management across remote links
- 4. Corrected an issue with AP-assisted Client Mobility when using Minimum RSSI mode
- 5. SSID names now allow spaces and these special characters (@ # % \* \_ .)
- 6. Central AP Management did not configure optimal settings for 11ac wireless clients when provisioning the VigorAP with the "Default" profile

# Known Issues

Firmware Version	1.2.3
Release Type	Regular – Upgrade recommended when convenient
Release Date	5 <sup>th</sup> September 2017
Build Date	5 <sup>th</sup> September 2017
Revision	7562
Applicable Models	VigorAP 910C
Locale	UK Only

If upgrading from firmware version 1.2.0, reboot (power cycle or software reboot) the VigorAP 910C before commencing the firmware upgrade process

#### New Features

1. Support for extra TR-069 parameters

#### **Improvements**

- 1. Support for configuration of Channel Width and other parameters through Central AP Management
- 2. Improvements to [TR-069] configuration page with URL Wizard, TR-069 status information and "Test With Inform" button to test TR-069 connectivity when pressed
- 3. Improvements to memory handling
- 4. Minor improvements to the AP Discovery and Data Flow Monitor pages
- 5. Communication between wireless clients on 2.4GHz and 5GHz SSIDs is now allowed where the SSID is the same for both wireless bands

#### Known Issues

- 1. If firmware upgrade via web interface fails, restart the VigorAP and retry the update. Otherwise update the VigorAP through TFTP using the Firmware Upgrade Utility
- 2. Interoperability issue with some VigorACS servers when connecting via HTTPS. This is fixed in 1.2.3.1 firmware

Firmware Version	1.2.1
Release Type	Regular – Upgrade recommended when convenient
	Note: The previous firmware (1.2.0) was a <b>critical release</b> . This f/
	w includes all changes/improvements that were in 1.2.0.
Release Date	27 <sup>th</sup> July 2017
Build Date	30 <sup>th</sup> June 2017
Revision	7322
Applicable Models	VigorAP 910C
Locale	UK Only

If upgrading from firmware version 1.2.0, reboot (power cycle or software reboot) the VigorAP 910C before commencing the firmware upgrade process

### New Features

- 1. Support for extra TR-069 parameters
- 2. Added mechanism to check connectivity to specified IP Address / Hostname and disable Wi-Fi if it is unavailable, in [Applications] > [Wi-Fi Auto On/Off]
- 3. Added 5GHz SSID Isolation support

### **Improvements**

- 1. Improvements to interface and functionality of web firmware upgrade process
- 2. Added TR-069 parameters for wireless traffic statistics
- 3. Improvements to functionality and layout of [System Maintenance] > [Configuration Backup]
- 4. 5GHz WLAN Transmit Power setting can now be configured through Central AP Management
- 5. Configuring Universal Repeater for 5GHz through Quick Start Wizard did not update SSID & Channel parameters when selecting from AP Discovery search results
- 6. Resolved a [Data Flow Monitor] display issue
- 7. Corrected a problem that could occur with Central AP Management when using WPA2/802.1x Security Mode on the VigorAP 910C
- 8. Updated Wireless Driver
- 9. Schedule system can now apply schedules overnight in a single schedule entry

#### Known Issues

Firmware Version	1.2.0.1
Release Type	Regular – Upgrade recommended when convenient
	Note: The previous firmware (1.2.0) was a <b>critical release</b> . This f/
	w includes all changes/improvements that were in 1.2.0.
Release Date	12 <sup>th</sup> April 2017
Build Date	3 <sup>rd</sup> March 2017
Revision	6852
Applicable Models	VigorAP 910C
Locale	UK Only

Please reboot (power cycle or software reboot) the VigorAP 910C before commencing the firmware upgrade process

### New Features

- 1. The VigorAP's configured name is now displayed in the page / tab title of the browser
- 2. [Diagnostics] > [Data Flow Monitor] now displays total throughput values

#### **Improvements**

- 1. Resolved an issue with Internet access for SSIDs with VLAN tag and Isolate Member enabled
- 2. [Central AP Management] > [APM Log] would not clear correctly when using <u>Clear</u> option
- 3. AP Discovery on 2.4GHz band did not display results correctly after clicking Scan
- 4. Improved interoperability of "Isolate Member" function with some wireless clients
- 5. Configuring Universal Repeater for 5GHz through Quick Start Wizard did not update SSID & Channel parameters when selecting from AP Discovery search results
- 6. Device Name was limited to 15 characters only, now allows up to 31 characters
- 7. Performing a Speed Test could stop the web interface from responding
- 8. Resolved an issue with changing Channel Width setting for 5GHz band in Advanced Settings
- 9. Some Wireless specific settings moved from [WLAN] > [General Setup] to [WLAN] > [Advanced Setting]

#### Known Issues

Firmware Version	1.2.0
Release Type	Critical – Upgrade recommended immediately
Release Date	19 <sup>th</sup> January 2017
Build Date	12 <sup>th</sup> December 2016
Revision	6649
Applicable Models	VigorAP 910C
Locale	UK Only

- 1. The number of clients allowed to connect can be limited per SSID
- 2. The AP can be configured to disable its wireless interface while its Internet connection is unavailable, determined with ping detection, in [Applications] > [Auto Switch On/Off Wi-Fi]
- 3. SNMP support added via SNMPv3
- 4. The AP's Telnet interface can be disabled from [System Maintenance] > [Management]
- If the AP's DHCP server is disabled, the AP can now be configured to allow only a Trusted DHCP server IP to provide DHCP to wireless clients under [LAN] > [General Setup]

# **Improvements**

- 1. Security improvements including one or more considered critical.
- 2. Improvements to the Quick Start Wizard
- 3. The Isolate Member function did not work for wireless LAN clients in some scenarios
- Advanced wireless settings such as MAC Clone, TX Power % moved to [Wireless LAN] > [Advanced Settings]
- 5. Auto channel selection now has **Auto Channel Filtered Out List** to specify which channels should not be used by the AP when auto detecting which wireless channel to operate on
- 6. [Wireless LAN] > [Station List] now displays Vendor name derived from MAC address OUI
- 7. Improvements to Fast Handoff using WPA2/802.1x security

# Known Issues

Firmware Version	1.1.7.2
Release Date	7th October 2016
Applicable Models	VigorAP 910C
Locale	UK ONLY

(None)

### **Improvement**

- 1. ACS required two attempts to successfully write settings to AP immediately after AP reboot
- 2. Resolved an issue that stopped Windows 10 computers from reconnecting to a VigorAP when using WPA2/802.1x security and the EAP-TLS RADIUS functionality on the AP
- 3. Universal Repeater 5GHz mode could not connect to the remote wireless network if the pass-phrase contained ";" (semicolon) character
- 4. Improved HTTPS response times for VigorAP web interface
- 5. Added VigorACS TR-069 parameters for Airtime Fairness and Wireless LAN Client Limit

### Known Issues

Firmware Version	1.1.7
Release Date	23rd June 2016
Applicable Models	VigorAP 910C
Locale	UK ONLY

- 1. Mobile Device Management added to control connections to the AP from mobile devices, PCs / Laptops and unknown devices
- 2. [Wireless LAN] > [Roaming] has new AP-assisted Client Roaming options to disassociate clients based on RSSI (recommended) or data rate
- RTS Threshold and Fragment Length and Wireless Region can be configured from [Wireless LAN] > [Advanced Setting]
- 4. Support additional TR-069 related parameters for central AP management
- 5. [Wireless LAN] > [Station List] > [Neighbour] now shows Vendor names
- 6. The configuration backup can now be password protected & encrypted
- Mail Alert can now send via TLS, configured under [System Maintenance] > [Syslog / Mail Alert Setup]

# Improvement

- 1. Session validation method improved in Web UI
- 2. Universal Repeater mode can now pass Airplay / mDNS packets across the wireless link
- 3. Resolved an issue that could stop an AP using RADIUS / 802.1X authentication from passing traffic after changing 5GHz security settings
- 4. Resolved LAN port issue that could occur when using Schedules
- 5. Enabling Management VLAN could stop NTP from updating
- 6. Resolved display/functionality issues in [Wireless LAN 5GHz] > [Bandwidth Management]
- Add legend ("Seconds") for "Session Timeout" field in RADIUS Server settings under [Wireless LAN] > [Security]
- 8. Improvements to Band Steering mechanism
- 9. The web interface now displays a notification to change the default password of the AP
- 10. Performance improvements to 5GHz Airtime Fairness
- 11. [Central AP Management] > [Status of Settings] updated with RSSI Threshold
- 12. Improved connection speed with 5GHz WPA2/PSK and 2.4GHz WPA2/802.1x connections

#### Known Issues

Firmware Version	1.1.6
Release Date	22nd February 2016
Applicable Models	VigorAP 910C
Locale	UK ONLY

- 1. Support for 5GHz PMK Caching under [Wireless LAN (5GHz)] > [Roaming]
- 2. Band Steering added (requires same SSID & PSK on both 2.4GHz & 5GHz), to help 5GHz capable clients connect to the faster 5GHz band
- 3. Support for Air-time Fairness, enabled under [Wireless LAN]>[Airtime Fairness] http:// www.draytek.co.uk/support/guides/kb-airtimefairness
- 4. [Wireless LAN]>[Station Control] to automatically disconnect clients after a specified time period
- 5. Schedule to enable or disable wireless now supports controlling 2.4GHz or 5GHz (Radio), SSID 2, SSID 3 and SSID 4 in a schedule entry
- 6. Certificate Management added to [RADIUS Setting] menu, to generate a custom selfsigned certificate for RADIUS server or WUI usage
- [System Maintenance] > [Management] LED Setup can now set the ACT LED to Blue, Orange or Purple. The LED can also be configured to remain "Always On" instead of "Flashing"
- 8. Added MAC address blacklist / whitelist to [Central AP Management] > [Overload Management]
- 9. [Diagnostics] > [WLAN (2.4GHz / 5GHz) Statistics] added to show detailed wireless statistics for the AP and per SSID
- 10. [Diagnostics] > [Station Statistics] added to display number of wireless clients nearby and connected to the AP on an hourly, daily or weekly basis
- 11. [Diagnostics] > [Data Flow Monitor] added to show bandwidth usage per wireless client
- 12. [Central AP Management] > [Status of Settings] added to indicate settings configured by the managing router

# **Improvement**

- 1. Unique self-signed certificate automatically generated on initial boot
- 2. RTS Threshold and Fragment Length can be configured from [Wireless LAN] > [Advanced Setting]

# Known Issues

Firmware Version	1.1.5.2
Release Date	27th October 2015
Applicable Models	VigorAP 910C
Locale	UK ONLY

1. The LED can be disabled permanently on the AP by setting the LED Status to Disable under [System Maintenance] > [Management] - LED Setup

# **Improvement**

- 1. Improvements to the bootloader to resolve an issue that would stop the ACT LED from working when updating to 1.1.5.1 firmware
- 2. LED Enable/Disable via schedule can be configured in the schedule options

#### Known Issues

Firmware Version	1.1.5.1
Release Date	15th September 2015
Applicable Models	VigorAP 910C
Locale	UK ONLY

1. Support for Dynamic Frequency Selection on 5GHz wireless interface, allows use of channels 52-64 and 100-140

### Improvement

- 1. The Device Name configured for the AP now shows on the [System Maintenance] > [System Status] page
- 2. The AP will show a warning if the HTTP / HTTPS ports are changed on the AP
- 3. CPE Username and Password settings were not available when modifying settings via TR-069 / VigorACS
- 4. When the AP is in Universal Repeater mode, the Channel Autoselect option is no longer available, so that Universal Repeater mode can operate correctly
- 5. Resolved a display issue with [AP Discovery] which could occur after configuring the AP via the Quick Start Wizard
- 6. TR-069 parameters added to allow VigorACS to perform Central AP Management
- 7. Resolved a display issue with the Traffic Graph that would display inconsistent information for the Daily and Weekly views
- Added a notification for AP Bridge Point to Multi-Point mode under [Wireless LAN] >
  [General Setup] to indicate that Index 1 must be entered before Index 2
- 9. Resolved a display issue in [Wireless LAN (2.4GHz/5GHz)] > [Station List] that would display an incorrect Rx Rate value

# Known Issues

1. The option to disable LED via schedule is unavailable. Disable/Enable LED schedule entries configured in 1.1.5 will continue to work with 1.1.5.1 firmware

Firmware Version	1.1.5
Release Date	11th September 2015
Applicable Models	VigorAP 910C
Locale	UK ONLY

- 1. 5GHz Universal Repeater Mode
- 2. 5GHz Bandwidth Management
- 3. Support for Central AP Management
- 4. "Where Am I?" Buzzer feature, can be triggered manually or via schedule

### **Improvement**

Firmware Version	1.1.3.2 (first release)
Applicable Models	VigorAP 910C
Locale	UK ONLY

First Firmware Release for this model

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