



# RELEASE NOTES

vWLAN 3.0.1-P6 Patch  
September 18, 2017

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## Introduction

The 3.0.1-P6 patch for vWLAN that addresses an issue that was uncovered in a previous code release.

This release is generally available code. Results obtained during internal testing have been evaluated and the code has been determined to be ready for general availability. Caveats discovered during testing but not addressed in this build are listed in [Errata on page 6](#).

## Supported Models

The following models are supported in vWLAN 3.0.1-P1. The patch can be applied to the following models if they are running vWLAN version 3.0.1. The vWLAN 3.0.1-P6 patch is only compatible with vWLAN version 3.0.1.

- vWLAN Rackmount Appliance (1700900F1/1700900F2)
- vWLAN Virtual Appliance for VMware ESX/ESXi 4.X and 5.X (1951900G1)
- vWLAN Desktop Appliance (1700918F1)

## Wireless Regulatory Compliance

Based on United States FCC and European DFS and ETSI regulations, ADTRAN validates the country in which the APs are being operated. This prevents the ADTRAN equipment from accidentally being used in an improper configuration.

When customers request AP licenses, they must specify the country where the AP will be deployed and operated. Note that a single vWLAN can control and manage APs in different countries and regulatory domains – and the channel and power settings are regulated by the country where the individual AP is deployed and operated.

Before the license is installed, the AP is in the platform and not associated to any domain, so the AP's radios are disabled by default. When the licenses are uploaded, the country code is then applied to licensed BSAPs. Allowed channels and power levels are determined by the country and the platform, and once the AP is placed into a domain, it will scan the channels to discover neighboring APs and choose a valid channel.

## Fixes

**This section highlights major bug fixes in vWLAN patch 3.0.1-P6.**

- UTF-8 characters used in client usernames caused vWLAN's UI indexing mechanism to crash and display inconsistent data for clients in the UI.
- On the last day of the month the Administrator's time zone could not be changed.
- Periodic reporting was failing due to a process crash in vWLAN.
- UI counts could become incorrect under a high user load.

## Errata

**The following is a list of errata that still exist in vWLAN Version 3.0.1 with the vWLAN 3.0.1-P6 patch applied.**

- Continuous re-indexing of the vWLAN UI is causing system instability in large scale deployments.

- The Max EIRP for Canada does not scale up to ISED allowed total limits.
- Utilizing SNMP on vWLAN can cause the server's memory to be heavily utilized.
- GRE tunneling requires L3 Mobility to be enabled.
- Creating Mesh links between APs of different types or series causes sluggish connection speeds. This type of linking is not recommended or supported.
- Editing an AP job several times eventually can cause the user to receive an internal server error.  
**Workaround:** Create a new job to replace the old one.
- When a role schedule is initiated to remove a role, currently authenticated clients in vWLAN may still show as authenticated in the vWLAN UI even though they will be denied access.
- DynamicRF will suggest Channel 0 if all channels available to a particular AP model are excluded in the AP template.
- Specifying a MAC address that is all uppercase while taking an AP Traffic capture causes the capture to fail to start.
- By default, outdoor APs are set to Indoor in the AP details page. **Workaround:** Navigate to **Status > APs** and select the particular AP to change this setting back to Outdoor.
- In a frequently changing RF environment, if new RF changes have been detected since the last status was displayed, DynamicRF suggestions shown on the **Status > APs** menu may not be the exact settings pushed to the AP upon an accept.
- In an extremely crowded RF environment (APs with over 100 adjacencies), the DynamicRF channel algorithm may not choose the channel with the least interference.
- The time zone entries for Moscow, St. Petersburg, and Volgograd are incorrect in the AP template.
- In rare cases, a DynamicRF change suggestion may fail to display a message on the **Status > APs** menu but it will be applied when accepting DynamicRF suggestions.
- The current channel being scanned by DynamicRF is not shown in the AP Status Page.
- After channel scanning, the AP adjacency produced by the channel scanning AP will show as all zeros.
- Adjacent APs running in 80 MHz mode are shown in vWLAN's Adjacent AP menu as 40 Mhz.
- The Signal and TX Rate fields for clients connected to BSAP 18XXs do not display correct information. These statistics are not supported on the BSAP 18XX Series.
- Unless the maximum and minimum transmit power are set to the same value inside a DynamicRF profile, those specific power settings will never be automatically chosen for radios.
- When moving an AP from any AP template back to the default template, a domain task will be incorrectly generated to create a scheduled background scan.
- Allowing client-to-client traffic cannot be applied using the **Apply** option but instead requires an AP reboot.
- The minimum transmit power is displayed as 0 dBm when the channel in the AP template is set to **Auto**.
- The **Select All** button only selects the first 100 table entries in the UI.
- Bulk Import only allows a 1000 line CSV file to be uploaded at a time.
- vWLAN logs report client data usage as kilobytes but the unit measure displayed is bytes.
- Scheduled dashboard reports do not include data for Current Client or AP count.
- Over time dashboard widgets cease to display the latest data point available.

- When configuring custom language login forms, vWLAN displays invalid characters for certain languages. Instead of the valid character, the browser displays ?.
- If invalid entries are made when configuring the LDAP server, the Administrator may not receive a valid error message.
- The Timeout Weight setting should be a required field in the LDAP Server configuration and will automatically default to **1** if left blank on initial set up.
- The administrator feature of **Downloading Widgets** as **JPEG** does not function.
- Uploading the same AP firmware file twice results in the inability to choose a different firmware file.  
**Workaround:** Navigate away from the page and back again.
- In some cases, vWLAN's self-signed certificate is regenerated when the system reboots and the certificate must be re-saved. **Workaround:** Upload a custom certificate verified by a CA.
- The client count display on the UI is inaccurate and out of sync in a large system with multiple clients roaming. The client count at the top of the UI page on the Domain status page and the client count at the bottom of the UI page do not match - even after multiple refresh cycles.
- Packet captures taken from the vWLAN UI often miss packets. In a lab environment during captive portal authentication with RadiusWebServer, a test sent 50 packets but the PCAP observed only 48.  
**Workaround:** Administrators are advised to take multiple Packet captures when attempting to diagnose an issue.
- When attempting to execute a traffic capture from the vWLAN UI on an AP that is in a down state, the capture will not begin, but the UI will not return an error.
- After upgrading, some pages may not load correctly due to browsers' cached sorting options.  
**Workaround:** Clear the browser cookies and cache.
- When using the Drop User function, Apple MacBooks running OS X will retain a previously held IP address unless the timeout threshold is reached. This can cause web redirection to the captive portal to fail if the client attempts to connect to a different SSID. **Workaround:** Disable the wireless interface on the MacBook prior to dropping the user.
- Some customized login forms do not allow full customization of the page. The page renders the same without regard to the **Enable Complete Customization** selection.
- When using a Google Chromebook on a captive portal, the user will never be automatically redirected to their final destination. Manually refreshing the page or going to another page will function as expected.
- The intended behavior of HSTS is fundamentally incompatible with vWLAN's HTTPS redirection of clients to the login form. For example, Google, Facebook, and Yahoo all use HSTS and will not redirect to the login form in browsers that support HSTS. If an attempt is made to redirect to an HTTPS site that does not use HSTS (<https://www.adtran.com> works for this), a certificate warning is returned that cannot be ignored or bypassed. See <http://caniuse.com/#feat=stricttransportsecurity> to determine which browsers support HSTS.
- Wireless IDS alerts are not generated for the following conditions: AP Down, AP SSID Change, and AP Channel Change.
- The platform NTP server setting does not return errors when invalid values were entered for
  - its host name.
  - High Availability is not replicating HotSpot Login Forms correctly.
- In case of 1X Authentication Failed, vWLAN GUI will display Unregistered Role even though Different Role was configured.

- Some pages in the UI do not fully function under IE9. **Workaround:** Use a different browser, upgrade to a newer version of IE, or use the API.
- After executing any restart from the vWLAN GUI, the page must be refreshed manually.
- If an administrator attempts to delete an Email Configuration that was used to schedule a Dashboard job by a different user/administrator, the deletion will fail. It will give the name of the Dashboard that has the job scheduled, but the administrator might not have access to that dashboard to clear the job. The creator of the Scheduled Job must remove the job before the Email Configuration is deleted.
- If an AP is manually edited and a non-native location is selected for the Location, the AP may not discover locations correctly.
- Using the captive portal in the Catalan, German, Swedish, and Portuguese languages may display special characters instead of certain letters.
- APs configured for Mesh mode do not allow an AP traffic capture.
- The API may become unresponsive if used from multiple sources simultaneously. It will become responsive again after a few minutes.
- When upgrading a large database (with many historical records and/or domains), the system can take up to an hour to come up after the upgrade. **Workaround:** Implement HA or a high Control Channel timeout.
- The ability to preview a login form does not function properly when using the Opera browser.
- For fast-roaming, adjacent APs must detect each other and add each other as neighbors. If APs are brought in at different times, it is possible for neighbor detection to fail and roaming to take longer.
- Changing the channel width when a windows client is connected will result in a one time AP reboot.
- When the number of firewall rules configured in a role reaches 1024, an AP will continuously reboot. Note that each service/hostname/IP constitutes one rule. Items designated as **both ways** count as two rules for each line.
- In some cases while running in AP/Sensor mode on the 2.4 Ghz radio, smaller packet sizes ( $\leq 512$  Bytes) will cause greater performance degradation than normally running AP/Sensor mode (~10%).
- In rare cases when using 4+ SSIDs on a BSAP 1900 Series AP, the channel shown in the vWLAN UI may not be the actual channel on which the AP is operating.
- The **Noise Floor** is not shown in AP details for the BSAP 2000 Series AP's 5Ghz radio.
- When creating or editing a Role, if the administrator sets the **CoS Priority Out Override** field to **DSCP from 802.11** or **802.1p from 802.11**, the IP packet put onto the wire will not have the DSCP value correctly set.
- The 2.4 GHz radio may only have 124 client associations, whereas the 5.0 GHz radio operates normally.
- Only 52 clients can associate to a BSAP 1800, despite vWLAN indicating a 64 client limit.
- BSAP 1800s may run low on memory causing sporadic client and AP activity or even a lose connection with vWLAN requiring a manual hard reset before operation can resume.
- Wireless packet captures may not function properly on the 5 GHz radio of a BSAP 1800 Series.
- The UI will allow configuration of greater than 1024 schedules. Configuring greater than 1024 schedules can result in AP reboots.
- BSAPs support up to 1024 Schedule Rules. If the APs reboot after adding schedules, you need to reduce the number of schedules.

- When starting a wireless packet capture, take care to allow the capture to begin before taking an action on it. If the capture must be stopped, wait at least 30 seconds to let the capture fully start. If a domain task pop-up is seen after a capture, it means the AP never fully recovered after the capture. Apply configuration to or reboot the AP to recover it.
- If greater than 86 users are associated to an AP and a failover occurs, they will not appear immediately in the UI of the secondary vWLAN.
- The Sony Xperia Tablet Z running Android version 4.2.2 may fail to authenticate using 802.1x due to an issue with the device itself.
- On a heavily loaded system, the Captive Portal may fail to load when **Redirect HTTPS traffic for Unregistered Clients** is enabled.

## Release Specific Upgrade Instructions

To apply the patch, you must first be running vWLAN version 3.0.1. Please see [vWLAN 3.0.1 Release Notes](#) and then upgrade using the vWLAN upgrade guide located at <https://supportforums.adtran.com/docs/DOC-7691>.

Once upgraded, see the section of the document called "Applying a Patch to vWLAN" to properly apply the patch.