Adtran

SDG PlumeOS

2.1.1.0 Release Notes

Release Notes

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1. Introduction

The PlumeOS 2.1.1.0 firmware release for Adtran's Service Delivery Gateway (SDG) products is a major system release that introduces new features and addresses customer issues uncovered in previous code releases.

The 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*.

Configuration guides, white papers, data sheets, and other documentation can be found on Adtran's Support Community, https://supportcommunity.adtran.com. The contents of these release notes will focus on the platforms listed in *Supported Platforms on page 4*.

2. Supported Platforms

Table 1 lists the platforms that are supported in Adtran's SDG 2.1.1.0 PlumeOS release.

Table 1. Supported Platforms

Platform
841-t6
834-5
834-v6
854-6
854-v6

> **ℹ️ NOTE**
>
> *Mosaic Device Manager (MDM) customers must ensure that ACS instances are updated with the latest drivers.*

3. System Notes

The following are important notes about the PlumeOS 2.1.1.0 release:

- PPPoE is not supported in this PlumeOS 2.1.1.0 release. If currently running PPPoE, updating to this version of software will clear your PPPoE settings.

- The 834-5, 834-v6, 854-6, and 854-v6 PlumeOS requires an ACS to manage firmware.

- For 841-t6 devices being managed on the PlumeOS Auto Update Server, they will be updated to PlumeOS 2.1.1.0 in the upcoming weeks (refer to the *PlumeOS Auto Update Feature for 841-t6* article for more information). For upgrade notifications, subscribe to the *PlumeOS 841-t6 Auto-Update Software Notifications* board in the Adtran Support Community.

- The 841-t6 does not support SSH connections unless it is currently connected to the Plume Cloud.

- Downgrading from PlumeOS 2.x to PlumeOS 1.x is not supported. If a device is downgraded, it will not work properly until returned to factory default settings.

- If a device running PlumeOS is unable to connect to the cloud for more than 10 consecutive minutes, it will reboot due to an OpenSync Health Check (as do other OpenSync devices).

4. Features and Enhancements

Features and Enhancements in 2.1.1.0

This section highlights features and enhancements included in the PlumeOS 2.1.1.0 release.

- Added regional support with DFS in this release. Some regions are determined based off of the part number of the device, as they were manufactured for that specific region. When loading firmware on these devices, the device firmware will evaluate the device part number and apply the correct power settings for your regional regulations. New Zealand and Canada require a separate cusdef build since they do not have separate part numbers. The information below outlines the version you must run for each region.

    - United States: **plos-sdg-mkt-arm-2.1.1.0.run**

    - United Kingdom (GB): **plos-sdg-mtk-arm-2.1.1.0.run**

    - EU: **plos-sdg-mkt-arm-2.1.1.0.run**

    - Australia: **plos-sdg-mtk-arm-2.1.1.0.run**

    - Canada: **plos-sdg-mtk-arm-2.1.1.0-regdom-ca.run**

    - New Zealand: **plos-sdg-mtk-arm-2.1.1.0-regdom-nz.run**

- Updated and improved WAN light and WPS light functionality so that they more accurately indicate WAN and WPS status.

5. Fixes

General Bug Fixes in 2.1.1.0

This section highlights major bug fixes in the PlumeOS 2.1.1.0 release.

- PLOS-321   Fixed an issue in which more than 5 log entries per second were being reported, causing constant log rolling.

- PLOS-839   Fixed an issue in which, in some cases, an upgrade could complete in such a way that the unit rebooted, but the new code was not applied and the device remained on the original firmware.

- PLOS-855   Fixed an issue in which device upgrades via HTTPS from the admin CLI would fail.

- PLOS-853   Fixed an issue in which, on initial contact, a device could send two BOOTSTRAP events within approximately 20 seconds which could stall initial contact scripts.

- PLOS-891   Fixed an issue in which the 841-t6 could offer DHCPv6 addresses out the WAN port if it was configured as a wired extender.

- PLOS-921   Fixed an issue where, when the WAN connection to the cloud is down, an Admin CLI user could be logged out of the system approximately every 1 minute.

- PLOS-926   Fixed an issue in which the WAN LED would not illuminate when the WAN connection is up.

- PLOS-934   Fixed an issue in which Sig Fault errors could appear in the Frontline Reboot Timeline if using an 841-t6 as a wired extender, or when connecting an 841-t6 to a switch via Ethernet.

- PLOS-950   Fixed an issue in which the WPS LED would not illuminate when attempting to connect via WPS.

- PLOS-958   Fixed an issue in which 841-t6 HUB switching to DFS channels failed to bring connected stations back up after CAC with no radar present.

- PLOS-965   Fixed an issue in which STAs could not connect to 834-v6 DFS channels.

- **PLOS-966**   Fixed an issue in which DHCP could restart multiple times in the device boot process due to configuration changes, which could cause a large amount of DHCP messages to be generated.

- **PLOS-1010**   Fixed an issue in which the 841-t6, when configured as an extender, would drop its backhaul connection if radar was detected on the fronthaul.

- **PLOS-1020**   Fixed an issue in which, on an 841-t6, CAC and NOP events were not filtered correctly for triband devices.

- **PLOS-1118**   Fixed an issue in which high-throughput packet loss could occur during speedtests when the SDG WAN port was set to negotiate at 2.5G.

6. Errata

The following is a list of errata that still exist in the PlumeOS 2.1.1.0 release.

- **PLOS-1146**   Download throughput on the 834-5 5 GHz radio, when operating with 80 MHz channels, may show low throughput. LAN to Wireless throughput will be expected.

- **PLOS-1144**   SNR is being reported to the Plume Cloud incorrectly, causing the Plume health checks to report parallel WiFi networks.

- **PLOS-1125**   If a wired link between an 841-t6 acting as an extender and another Opensync device is bouncing, a network look can be created when the device switches over to wireless backhaul.

- **PLOS-1116**   Adding a second 841-t6 extender to a topology can cause a Nordic Track smart bike to be unable to connect.

- **PLOS-961**   In rare cases, clients are unable to connect to a radio that has switched to a DFS channel.

- **PLOS-960**   In some situations, devices will send Pause Frames in cases of bursty traffic, even when Pause Frames have not been negotiated on the Ethernet port. Repeated speed tests (20 or more in a row) can lead to a state where speed test performance from the unit, or through the unit, is significantly degraded.

- **PLOS-948**   Networks with multiple daisy-chained extenders or a PlumeOS router being simultaneously upgraded may cause downstream 841-t6 upgrades to timeout. Auto-upgrade will attempt to upgrade these 841-t6 devices again in the future. **Workaround:** Upgrade routers and extenders serving as a mesh gateway first, then downstream extenders.

- **PLOS-922**   A unit acting as a router will not pass the upstream IPv6 IA_PD preferred timers down via DHCPv6.

- **PLOS-920**   A router may hand down IPv6 IA_NA lifetimes of infinity.

- **PLOS-919**   A router may hand down IPv6 IA_NA lifetimes that do not match upstream lifetimes.

- **PLOS-916**   Canceling a forced steer does not function correctly. The unit will continue to be steered to the 2.4GHz band.

- **PLOS-838**   Manually power cycling a unit reports a Cold Boot to the Plume cloud instead of a Power Cycle.

- **PLOS-765**   Disabling all three Wi-Fi radios in an 841-t6 will cause it to reboot every 10 minutes due to failed Health Checks.

- **PLOS-709**   IPv6 throughput is limited to 80% of the IPv4 throughput maximums in the unit.

- **PLOS-690**   Some 854-6 devices may be identified as 854-v6 devices in TR-069. **Workaround:** Check the label of the unit for the correct part number, or reference the serial number in Frontline. A **V** in the serial number indicates an 854-v6.

- PLOS-672   Wired links between PlumeOS mesh units will not show up in Frontline. They will instead appear as a separate gateway.

- PLOS-664   Multiple DNS queries to the same address will be seen due to the DNS cache not being properly enabled in an 841-t6 operating as an extender.

- PLOS-401   The Bluetooth beacon MAC address may not match the unit's base MAC address. This will not affect HomePass or Frontline; they will display the correct MAC address.

- PLOS-381   Multiple LAN clients cannot fully saturate the 2.5G link with traffic. Two LAN clients running speed tests out the WAN port will see a maximum of approximately 1800 Mbps down, and approximately 1940 Mbps up. **NOTE:** Performance was improved in this release, but this issue is not fully resolved.

- PLOS-339   Some devices may not be band-steered properly on an 841-t6.

7. Upgrade Instructions

Upgrading Adtran's SDG products to the latest version of software is outlined in the following sections.

Step 1: Upgrading Firmware

PlumeOS software for the 834-5, 834-v6, and 854-(v)6 must be managed via TR-69 upgrades. For information on performing the upgrade via Mosaic Device Manager (MDM), refer to the *Updating Firmware* article included in the MDM online help for specific instructions.

The 841-t6 running PlumeOS can be upgraded via ACS, but is also included by default in the PlumeOS Auto Update Service and will be periodically updated. Refer to the *PlumeOS Auto Update Feature for 841-t6* article in the Adtran Support Community for more information. To receive upgrade notifications, subscribe to the *PlumeOS 841-t6 Auto-Update Software Notifications* board, also in the Adtran Support Community.

Step 2: Verifying the Version

SDG software versions can be verified either via the ACS or by using the Plume Frontline tool. Instructions for both methods are provided in this section.
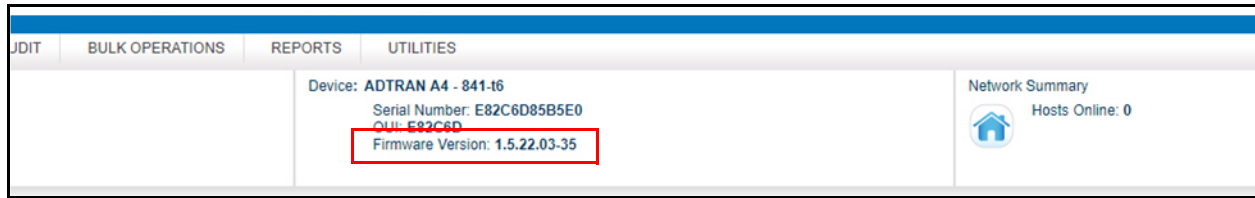
Verifying Software Version Using the ACS

To verify the SDG software version using the ACS, follow these steps:

1. Log into the ACS URL (**https://***<customer instance name>***.smartrg.com**), using your specific customer instance name and your login credentials.

2. Enter the device serial number (or subscriber associated with the device) into the **Find Subscriber or Device** search bar and select the magnifying glass to execute the search.
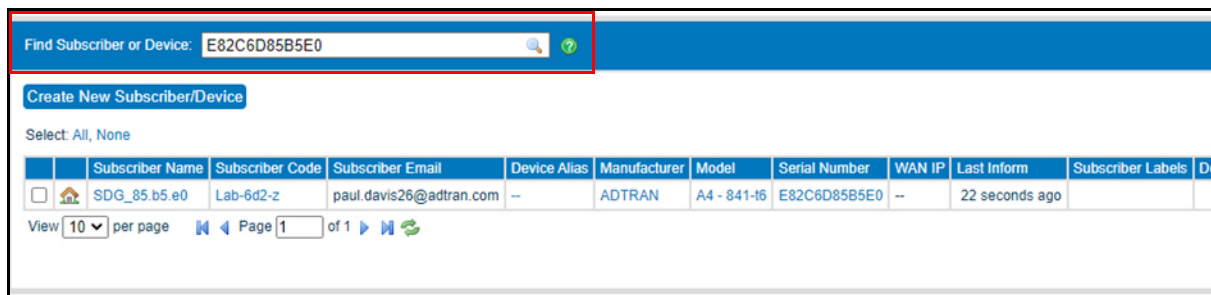
3. Once the device is located, select the device link to open the **Device** page. The **Firmware Version** is displayed in the middle of the menu.

Verifying Software Version Using Plume Frontline

To verify the SDG software version using Plume Frontline, follow these steps:

1. Access the Frontline tool by entering the following address in your browser https://portal.plume.com/home, and then log in using your login credentials.

2. Navigate to the **Applications** menu, and select **Frontline Tier 1**. In the resulting search bar, enter your Plume account or node ID (for example, **device@customer.com**).

3. Once the account page is displayed, select **Pods and Nodes** from the menu on the left.

4. In the **Pods and Nodes** menu, locate your specific pod and you can view your **Firmware Vers** directly under the **Device Type** (as shown in the image below).
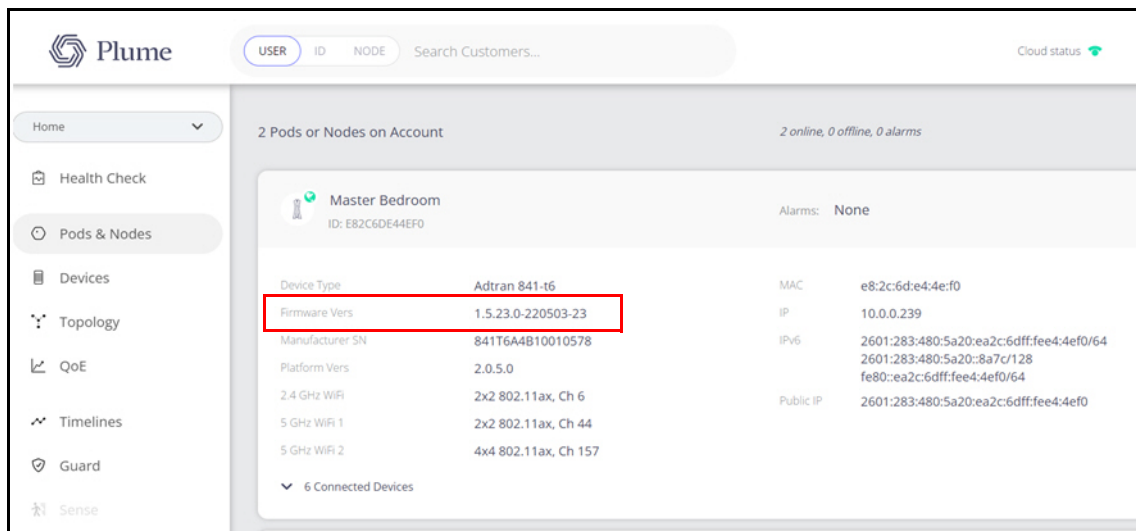
8. Restoring the Factory Defaults

To restore the factory default settings to your device, press and hold the **Reset** button on the device for **30 seconds**. Do not hold the button for longer than **55 seconds**, as that will cause the device to roll back to the last bootable firmware version.

A factory reset can also be performed from the Admin CLI with the command **factory-reset**, or it can be sent from the ACS via TR-069.

9. Warranty and Contact Information

Warranty information can be found online by visiting www.adtran.com/warranty-terms.

To contact Adtran, choose one of the following methods:

Department	Contact Information	
Customer Care	From within the U.S.: From outside the U.S.:	(888) 4ADTRAN ((888)-423-8726) +1 (256) 963-8716
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