



DSAM Firmware Release v3.4 is now Available

DSAM firmware release v3.4 is now released. New DSAM units shipped after July 1st will have version 3.4 preloaded. The release has been posted on the JDSU website. Firmware version 3.4 includes all features, functions, and fixes that occurred in previous firmware releases.

Notice: The DSAM with firmware version 3.3.3 or later now supports Cable Labs® BPI+ certificates. New certificates should be added to the meter to support this functionality. This document contains the release notes for version 3.3.3 which detail how to receive and deploy the new certificates to the DSAM

What's New in Release v3.4

DSAM 3.4 Firmware helps operators transition to DOCSIS® 3.0

New Features and Functions

NEW - Support for testing the transition to DOCSIS 3.0

Operators are aggressively rolling out new CMTS' and edge QAM modulators to support the transition to DOCSIS 3.0. This rollout has created the need for testing of multiple downstream DOCSIS carriers and multiple upstream carriers. Version 3.4 has added support for handling the CMTS downstream channel change (DCC) requests as well as providing the ability to select and test multiple upstream carriers.

Support for multiple downstream carriers.

- Home Certification and Autotests will accept a DCC (Downstream Channel Change) request and bypass any registration level testing
- Synchronization – The DSAM will allow changes to a new channel during a synchronization request even if the requested channel was not configured as the synchronization channel
- The Home Certification test properly supports DOCSIS channels that were configured for range-only and skips any registration attempt

Support for multiple upstream carriers.

Version 3.4 provides the user with the ability to choose a different upstream channel. This provides a powerful tool to identify varying performance issues on different upstream carriers.

NEW – SmartScan™ - Help segment problems between the TAP and the CPE

NEW – Smart Scan™ (beta trial version)

The DSAMs SmartScan mode helps find RF level issues that are out of spec at the tap, ground block or CPE. SmartScan automatically tilt compensates and normalizes analog and digital measurements to identify peak to valley issues that otherwise might be missed by the technician. SmartScan automatically calculates the tilt level that is experienced so a technician can quickly identify if the service is operating properly at the tap. The SmartScan beta version is included on all DSAM 6000s, DSAM 3600s, and DSAM 3500s. A 90 day free trial is available on any other DSAM model.



NEW - User Defined custom shortcuts increase speed of user navigation

DSAM version 3.4 provides the ability for each user to customize the four (4) shortcut softkeys that are accessed when the blue “SHIFT” key is selected. The user can configure each shortcut to access any mode or feature in the DSAM and replace the default shortcuts.

NEW - Improved Spectrum Analyzer user interaction

The downstream spectrum mode has been modified to provide additional flexibility and user control. Additional settings of 1 and 2dB per division have been added. The user now has the ability to choose either 1, 2, 5, or 10 dB per division. To increase efficiency, a soft “reset” key has been added so the user can quickly reset the peak hold trace. The user also has the ability to view spectrum files that were saved while in the zoomed setting.

NEW - Updated Synchronization process with pending firmware upgrade

When synchronizing the DSAM through Ethernet, the DSAM now provides the user with the ability to defer any pending firmware upgrades. This feature allows the user to decide if it is an acceptable time to take a firmware upgrade.

Minor Enhancement and fixes

Sweep zoom settings - The zoom settings should now be retained even if brief losses of telemetry occur.

LCD Orientation Setting –The user can correct the orientation of the display on non-DSAM^{XT} meters.

Sweep marker position during autoreference -Fixes an issue with sweep display's right marker movement during autoreference.

Test Point Compensation settings – Settings can be viewed and changed from all Autotest Modes.

Info Screen text alignment - Text is properly aligned on the meter info screen (shift + 6).

Hum limit – The hum limit in the limit set editor always follows the user preference setting of either dB or %.

Prevention of unacceptable characters in file names – Fixed an issue where files were not being saved if user entered certain non-alpha-numeric characters.

DOCSIS security type reporting in saved files - DOCSIS security type (none, BPI, or BPI+) are now being saved in docsis measurement files.

Power on from standby properly runs Reverse Sweep and Reverse Alignment – Previous version may not have properly entered reverse sweep and reverse alignment modes.

Sweep reference file timestamp corrected – saved sweep files properly timestamp the reference file to match behavior expected.

Viewing zoomed sweep files – Users can now un-zoom sweep files that were saved in a zoomed mode.

Home Cert results – Home Certification results screen adds DOCSIS version and upstream channel modulation.

Eliminated limit set defaulting after upgrade – some users were experiencing limit sets on meters not matching TPP due to an overwrite of limit default file.

Improved DOCSIS throughput test results – Eliminated an occasional false failure on DOCSIS throughput testing.

Improved RF sync process – Sync process behaves properly when transferring a large number of files.

Sweepless sweep invalid reference - Fixes an issue with not showing the Invalid Reference error.

The following section highlights the changes that occurred in version 3.3.3. Please follow these instructions on how to receive and deploy BPI+ certificates if this has not been done.

What was new in version 3.3.3?

DSAM version 3.3.3 added the following features to the DSAM:

BPI+ support through Cable Labs® DOCSIS® chained root certificates

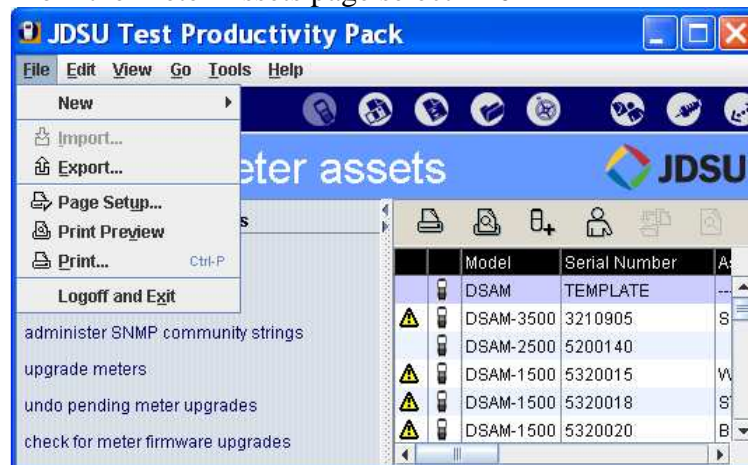
The DSAM with version 3.3.3 firmware can be provisioned to operate in BPI+ mode on any CMTS without requiring any additional actions on the CMTS. DSAMs shipped from the factory have the new v3.3.3 firmware and the new Cable Labs certificates pre-installed. DSAMs with firmware v3.3.3 and new certificates can be identified in the Info/Options screen. DSAMs with the new cert will show the following option **Cable Labs Cert V3**.

To operate in BPI+ with existing DSAMs, the firmware should be upgraded to version v3.3.3 and have new certificates uploaded to the DSAM.

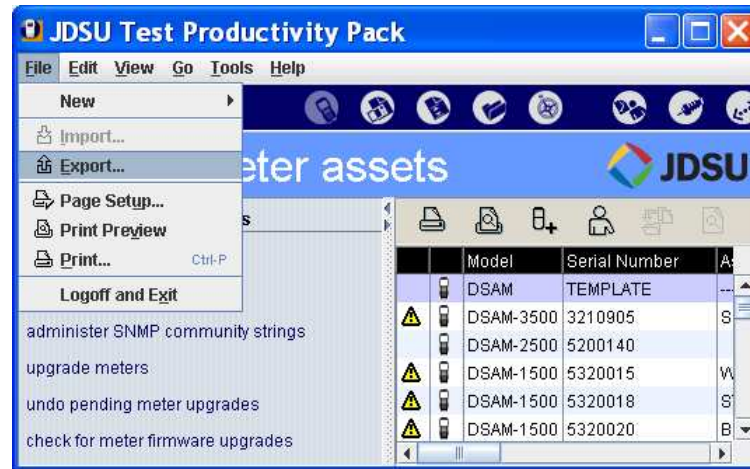
To receive new certificates for your DSAM, a list of serial numbers is required. These can be exported from TPP or FDM to ease the process. Below is the process for exporting and receiving your certificates.

Exporting serial number list from the TPP or FDM Thick Client

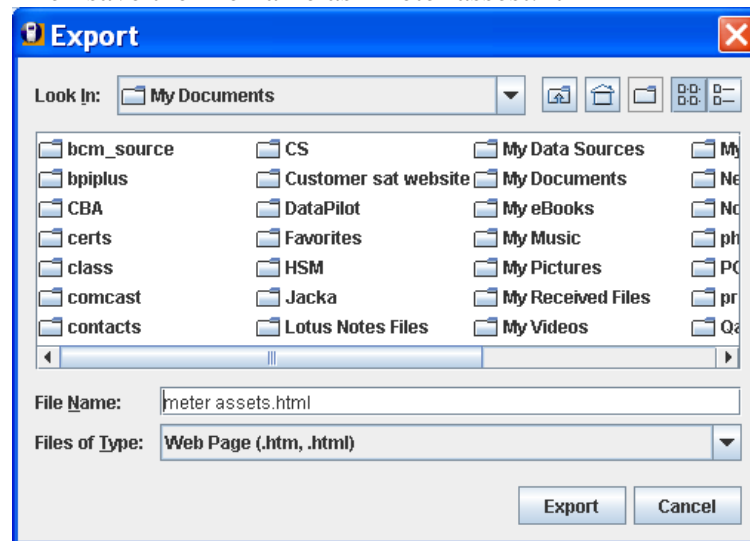
From the Meter Assets page select **File**



Then select **EXPORT**



Then save the file name as “meter assest.html”



Send the file “meter assets.html” to our technical assistance group at catvsupport@jdsu.com with the subject: **DSAM Certificate Generation**. The technical assistance group will send you a file with your new certificates along with instruction on how to install them.



Additional measurement configure capability for systems with dB Delta™ conditions

In the Configure/Measurements/**Other Settings** there is a new setting called **dB Delta™**

This setting works similar to the dB Delta setting that has been in the SDA where it adds additional internal attenuation prior to the measurement to help suppress intermodulation products caused by high power analog carriers that are more than 6-10 dB above the digital carrier in absolute power.

The options are **Normal, Medium and High**

Normal is the default and preferred state. If you are experiencing dB Delta limit violations in the full scan or Autotest or have experienced degraded measurement results due to excessive differences between the analog and digital carriers, the user may try adjusting the dB Delta setting to medium or high to achieve maximum MER performance in adverse conditions.

Fixed issue found in v3.3.2 if sweep telemetry was set to a frequency above 300MHz

The issue has been fixed. Now any sweep telemetry frequency up to 1GHz behaves as expected.

Updated the default throughput server address to the new address

DSAM Version 3.4 firmware can be found on the JDSU website at the following Link:

<http://www.jdsu.com/products/communications-test-measurement/products/downloads/to-upgrade-your-dsam-meter.html>



Caution: Any version of TPP or FDM prior to v4.1 will not work with DSAM firmware version v3.3.3 or version 3.4

The following error message will occur if upgrade to v3.4 is attempted with TPP version v4.0 or earlier.



Please upgrade to TPP or FDM version 4.1 to support the DSAM firmware v3.4