Technical white paper

FutureSmart Level Switching with FutureSmart 3

This document discusses the new FutureSmart Level switching capabilities provided with the Fall 2013 Future 2 and 3 firmware roll and Fall 2013 Enterprise Product releases

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HP FutureSmart Level Switching

What is it?

Today most FutureSmart Products ship from the factory with FutureSmart 2 firmware. With the introduction of HP's new 2013 fall product release some models will ship with FutureSmart 3 which is the next major firmware release from HP offering new features and functions for the fleet.

In addition to the new products shipping with FutureSmart 3 HP will also provide a fall 2013 release of firmware that will allow customers to enhance the capabilities of their older devices by providing firmware for the existing fleet which will provide both FutureSmart 2 and FutureSmart 3 in one bundle of firmware. When the bundle is installed, the administrator can then switch to level 3 to enhance the capabilities of the product.

Level switching allows HP to provide new features that deliver new functionality and a possible new look and feel to HP products without forcing the customer to accept them right away. HP understands that many customers will want their product or fleet to have the latest features and functions but also realizes that many customers and administrators prefer to qualify new features before using them or sharing them with employees. By providing major release level switching HP is able to provide this capability by allowing the administrators to choose when and if they switch to the major release.

Listed below are items that would normally be provided in a Major release:

- New device features and capabilities that are highly visible to end users
- Significant changes to the UI
- Changes to existing feature location, naming or operation
- Changes to solution interaction or operation

To see a list of products that support Level 2/3 switching or only Level 3 see the **Product Level Support Matrix** below.

The rest of this document will be used to explain how an administrator or product owner can switch between levels. It will also provide a list of FAQ's to help answer the numerous questions this technology change may raise.

How does it work

Design Update

FutureSmart has migrated to a new firmware bundle design

FutureSmart 2 Release
FutureSmart 3 Release

FutureSmart 2   FutureSmart 3   FutureSmart 4

We have moved from individual major release branches...

To a single FutureSmart release branch that uses an **NVRAM variable to turn features on or off**. This now creates a single bundle for each device that will contain all the service pack and supported major releases.

Methods to switch levels

There are three methods that can be used to perform level switching. They consist of:

- *The products Embedded Web Server (EWS)*

- *The device control panel*
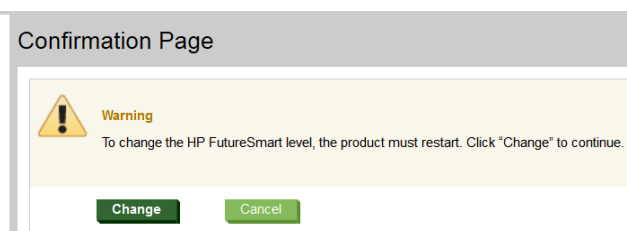
- *The fleet management tool Web JetAdmin (WJA)*

Before switching levels, the device will have to be updated with a version of firmware that supports the new functionality. (FutureSmart Bundle Version 3.2 or greater)

The firmware that provides this capability can be found on the firmware download page for any product that supports this capability. The **Product Level Support Matrix** listed below in the document detail the products which support level switching.

After the products firmware has been updated, (*Instructions for updating can also be found in the product readme which can be downloaded from the firmware download page*) use one of the 3 procedures listed below to switch levels.
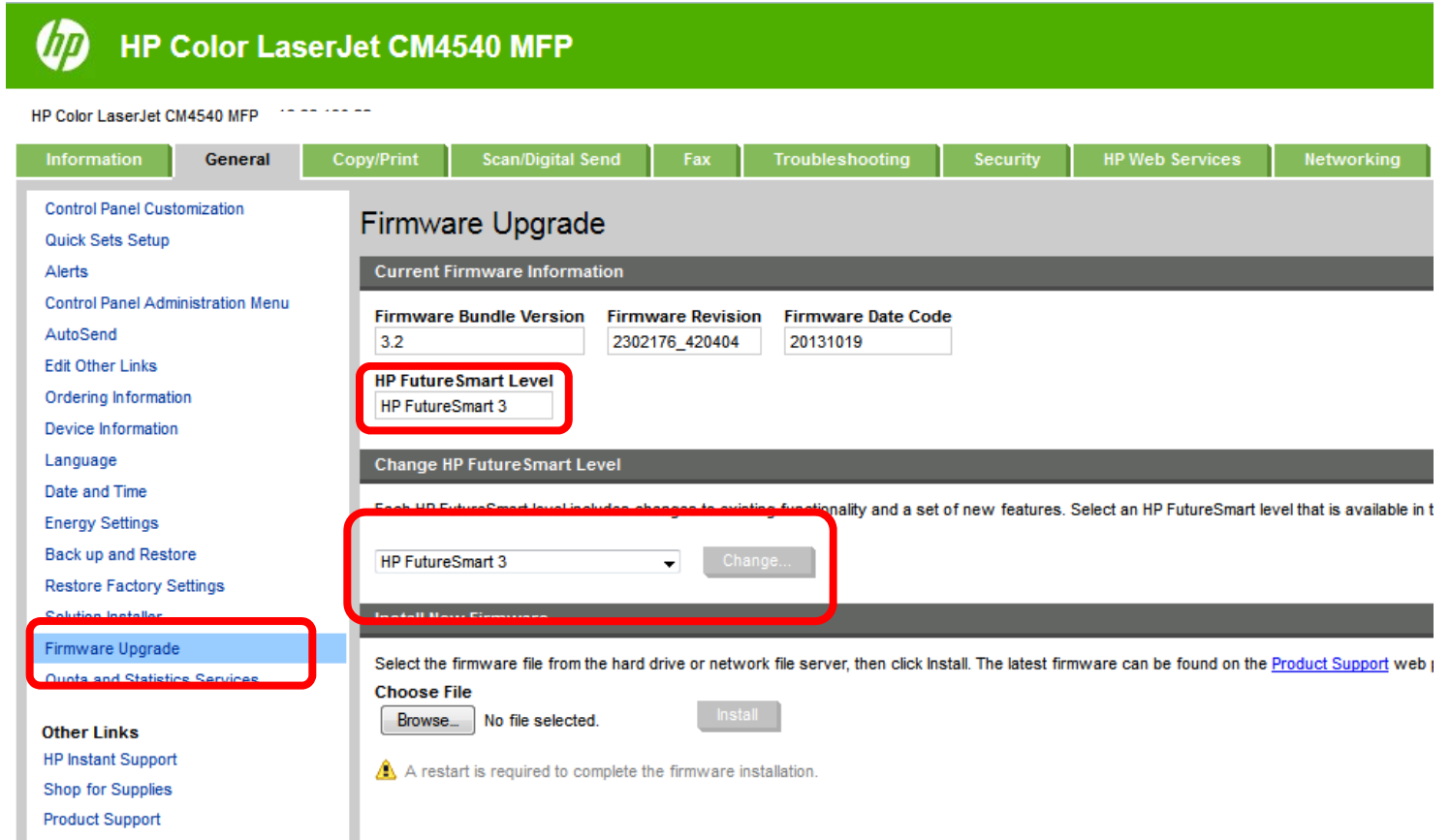
Embedded Web Server (EWS)

1. Open an Internet Browser Window.

2. Enter the IP address of the device in the URL line.

3. Sign into the Embedded Web Server.

4. Select the *Firmware Upgrade* link from the left screen options on the Embedded Web Servers *General* tab. (See Figure 1)

5. Make sure that under the Current Firmware Information section you see a section labeled *HP FutureSmart Level*. If this is not seen you will need to update the firmware to a version of firmware that supports level switching

6. Now go to the section of the screen called *Change HP FutureSmart Level*. Choose the level of firmware you want the device to be on and then click on the "*Change*" button.

7. You should get a message that the device must restart. Click change and the printer or MFP will reboot. Once is comes back on line the device will now be on the level chosen.

8. This can be validated by accessing the *Firmware Upgrade* link from the left screen options on the Embedded Web Servers *General* tab. (**See Figure 1**)
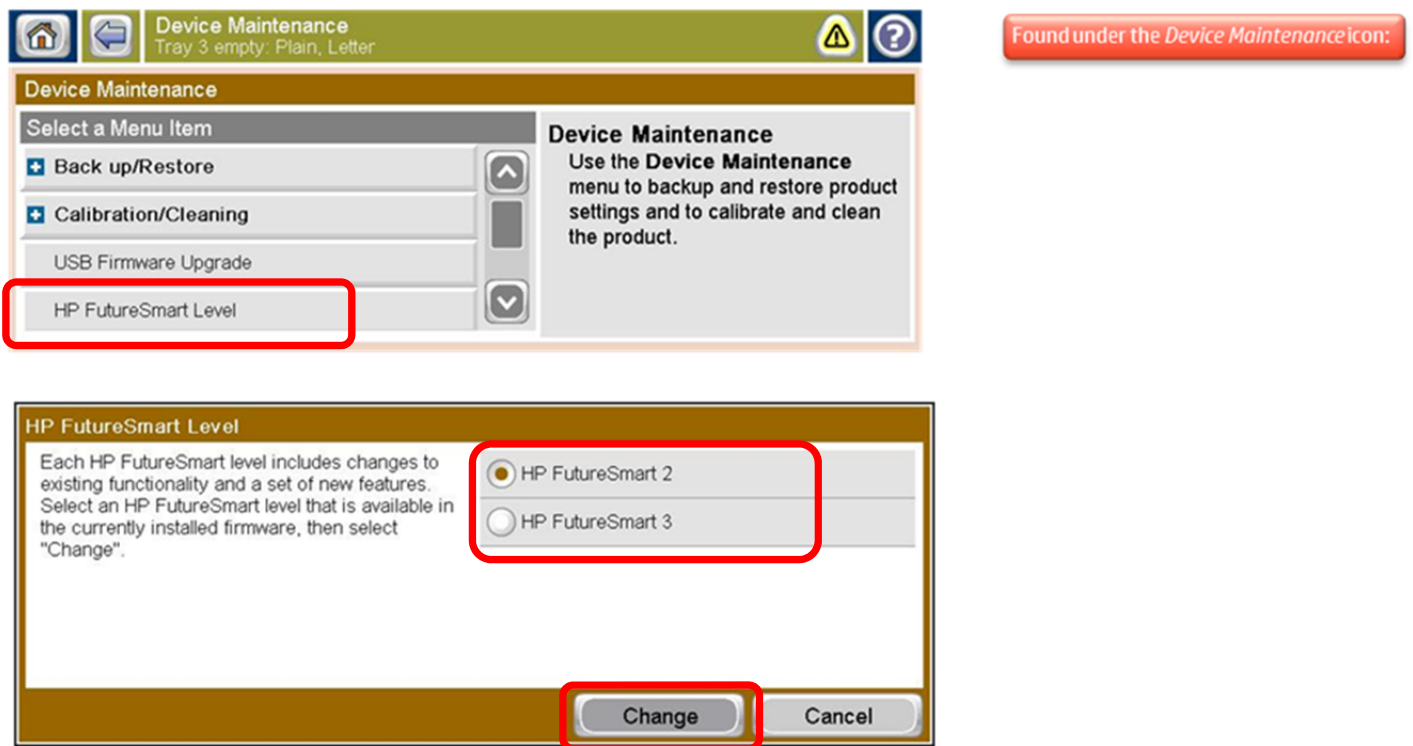
Figure 1- Embedded Web Server screen options

Device Control Panel

1) The device control panel icons may be hidden or password protected by the administrator. If they are, access will need to be provided by the administrator.

2) Once access is obtained, press the *Device Maintenance* Icon on the control panel. If the device is a single function device (non-multifunction), you will need to press the *Home* button and scroll down and select the *Device Maintenance* menu.

3) Once inside the Device Maintenance menu scroll to and select the *HP FutureSmart Level* selection. (**See Figure 2**)

4) Now select the level of FutureSmart needed and press or select the change button/selection

5) You should get a message that the device must restart. Select *change* and the printer or MFP will reboot. Once the device comes back to a READY state it will be on the level chosen.

6) This can be validated by accessing the HP FutureSmart Level control panel screen (**See Figure 2 bottom picuture**)

Figure 2—FutureSmart Level configuration options (Control Panel)
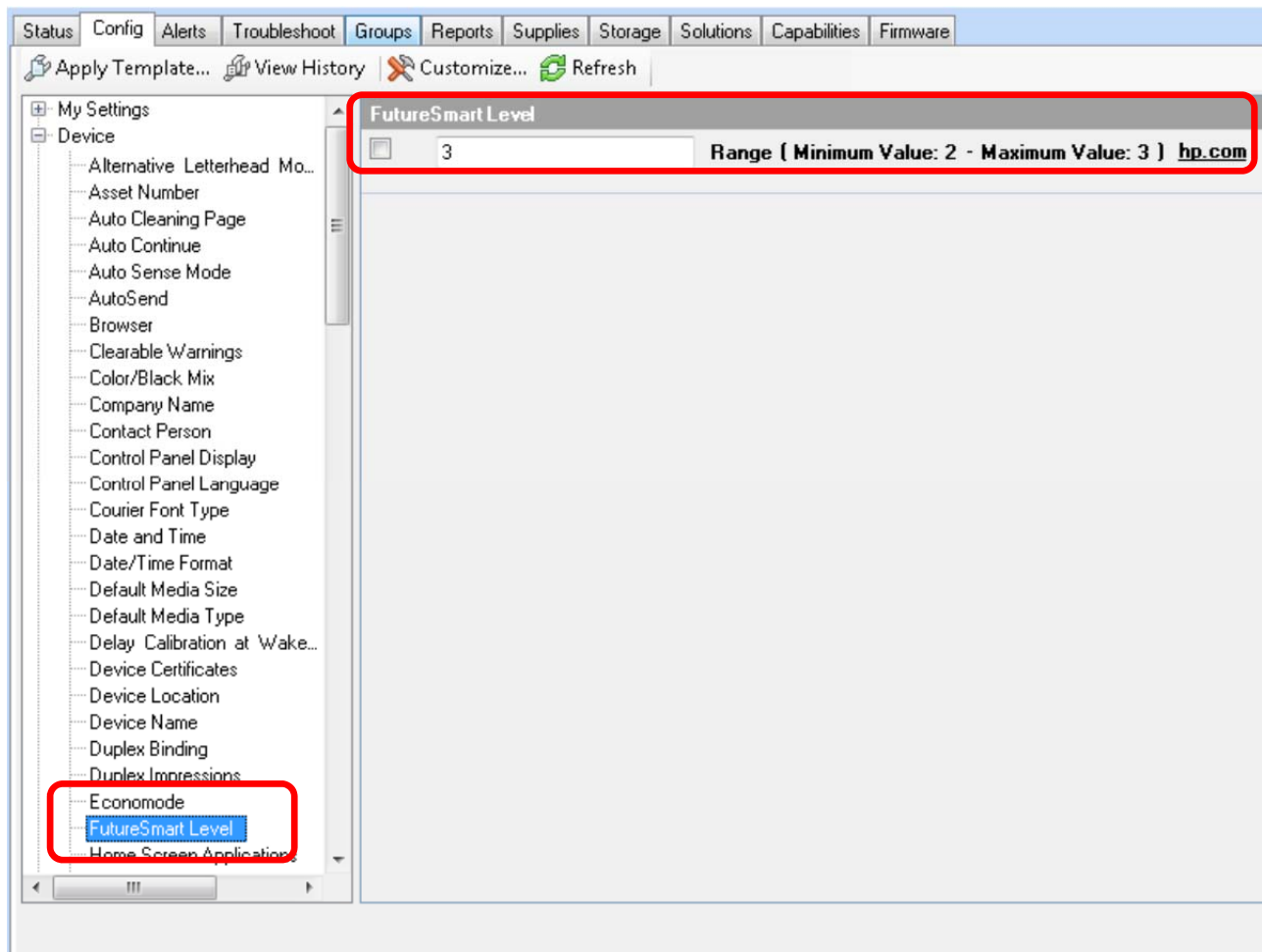

Web Jet Admin

1. With HP Web Jetadmin 10.3 SR4, you can view the current HP FutureSmart level (**Figure 3**) and change the HP FutureSmart level if the device has HP FutureSmart 3 or later installed.

2. Non-HP FutureSmart devices always display Not Supported for the HP FutureSmart level.

3. HP FutureSmart devices display a value instead of Not Supported if they have at least HP FutureSmart 3 installed and if a selection for the HP FutureSmart level can be made. For example, when the HP LaserJet M806 device was introduced, HP FutureSmart Level 3 was

available and was the initial firmware for the device. The device cannot be set to a lower version. Therefore, HP Web Jetadmin shows Not Supported for the HP FutureSmart level of this device until a newer version is installed on the device.

4. The FutureSmart Level configuration option is available from the Device category on the Config tab (**Figure 3**).

5. Use the FutureSmart Level configuration option to specify a number for the HP FutureSmart level that is available in the firmware that is currently installed on the device.

6. HP Web Jetadmin displays the range of HP FutureSmart levels that the device supports. If you enter a number outside of the range that the device supports, HP Web Jetadmin automatically changes the version number to the nearest minimum or maximum level that the device supports.

7. After changing the HP FutureSmart level, the device restarts automatically.

Product Level Support Matrix

Product supports FutureSmart Level 2 or 3	Product supports FutureSmart 3 only
✓ **Ship from the factory with FutureSmart Level 2** ✓ **Support level switching between FutureSmart Level 2 and 3.**	✓ **Ship from the factory with FutureSmart Level 3 (Cannot be switched to HP FutureSmart Level 2) Note: all features in Level 2 exist in Level 3** ✓ **Will not support level switching between FutureSmart Level 2 and 3.**
Single Function Devices (SF)	**Single Function Devices (SF)**
HP Color Enterprise LaserJet CP5525	HP LaserJet Enterprise M806
HP Color Enterprise LaserJet M551	HP LaserJet Enterprise M855
HP LaserJet Enterprise M600 series	HP LaserJet Enterprise M750
HP LaserJet Enterprise M712	
Multifunction Devices (MFP)	**Multifunction Devices (MFP)**
HP LaserJet Enterprise M4555 MFP	HP LaserJet Enterprise M830 MFP
HP LaserJet Enterprise M525 MFP	HP LaserJet Enterprise M880 MFP
HP LaserJet Enterprise M525c MFP	
HP LaserJet Enterprise M725 MFP	
HP 8500 Enterprise DS	
HP Color LaserJet Enterprise CM4540 MFP	
HP Color LaserJet Enterprise M575 MFP	
HP Color LaserJet Enterprise M575c MFP	
HP Color LaserJet Enterprise M775 MFP	

FAQ's

- What level will my device be on if I downgrade to a version of firmware that doesn't support level switching and then upgrade to a release that does?
  - ✓ If the device is on FutureSmart Level 3, it will be on level 3 after the upgrade. If on FutureSmart Level 2 then it will be on Level 2.

- If I perform a Partial Clean, what Level will my device be on when the device reloads firmware and boots back to READY?
  - ✓ The device will remain at the Level it was set to before the Partial Clean was performed.

- If I perform a Format Disk, what Level will my device be on when the device reloads firmware and boots back to READY?
  - ✓ The device will remain at the Level it was set to before the Format Disk was performed.

- What happens if the device is on FutureSmart Level 3 and I perform a Back-up and then switch the device to FutureSmart Level 2 and the do a Restore with the FutureSmart Level 3 back- up?
  - ✓ The device will be on FutureSmart Level 2 as the variable is not part of the Back-up and Restore feature set.

- What happens if the device is on FutureSmart Level 2 or 3 and I perform a Back-up and then replace or Format the Disk, reload firmware and then do a Restore with the FutureSmart Level 2 or 3 back- up?
  - ✓ It will remain on whatever FutureSmart Level the device was on before the Format Disk or HDD replacement.

- What if I have a solution that is certified with a particular version of firmware that supports level switching and I switch between levels? Will it still be certified if I switch levels?
  - ✓ Yes, HP tests the Revision of firmware which will be the same for the Bundle Version regardless s of whether the device is configured with FutureSmart Level 2 or 3 of the Bundle.

- If I switch between FutureSmart levels with a device that I have configured for use in my office will I lose the settings I configured?
  - ✓ Switching between levels will not cause a loss of settings unless a level does not support a capability provided with the other level

- Can I downgrade my device to a version of FutureSmart that does no support level switching?
  - ✓ Yes, downgrading is supported but the device will lose all of its configuration settings.

- If I perform a Cold Reset , what Level will my device be on when the device boots back to READY?
  - ✓ The device will remain at the Level it was set to before the Cold Reset was performed.

- Are all of the features and configuration settings in FutureSmart Level 2 in FutureSmart Level 3?
  - ✓ Yes

- If I upgrade from a non-level switching version to the new level switching firmware which level will it default to?
  - ✓ Whatever levels the product ships from the factory with. In the matrix above all devices will default to FutureSmart Level 2.

- Am I able to upgrade to the new level switching version and set my level all in the same step so I do not have to reboot the printer or MFP for a second time?

  ✓ Today the answer is "No" do to the complexities of determining whether a firmware file supports level switching during certain upgrade processes.

For more information

Please contact your HP representative or go to: **hp.com/support**