



New firmware and IPS MR6 update package available

For the HP Latex R series printers.

August 2022

A new firmware (SKAAR_21_21_36.11) and IPS version (v20.51.11) are now available to install for HP Latex R series printers. HP strongly recommends installing this new firmware and IPS version on all units, as it includes new functions and significant improvements.

Firmware and IPS can be upgraded by executing the automatic system upgrade maintenance in IPS front panel. Also, by downloading the firmware and IPS package from the hp.com website and installing it using the upgrade buttons on IPS front panel.

Related links:

www.hp.com/go/latex/

Printers related to this article

[HP Latex R series printers](#)

Release notes summary

The MR6 firmware release includes the following new improvements and bug fixes with respect to the previous one.

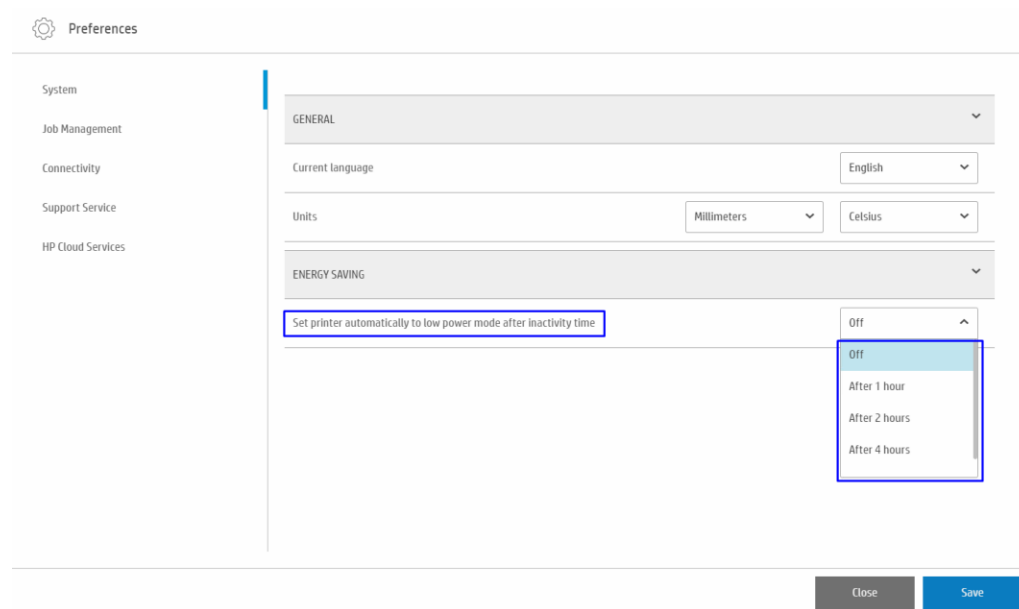
Improve substrate usage after end of roll detection

When printing flexible substrates, and the printer detects the substrate has been detached from the substrate input roll -for example, the substrate is finished- it will continue to print automatically up to 1.20 meters more unattended. Therefore, all the printed substrates will be cured.

This function allows you to take advantage of this extra printed part versus previous versions, where the printer stopped printing as soon as the end of roll was detected.

Automatic low power mode

The printer will automatically switch to low power mode when it is idle for more than the specified time and there is no interaction with the IPS app. The settings are in **Preferences > System**. By default, this functional is disabled.



Printing Adjustment on the Fly

While a job is being printed, this new feature will allow you to change the following printing properties:

- vacuum in input zone, print zone and curing zone
- curing height
- curing temperature

Changes are permanently and instantly applied. The changes will be saved on the respective substrate settings (so it will affect future jobs). Changes may be reverted to previous settings while the windows setting is still open by pressing **Restore values**; when the **Done** button is pressed, the only way to restore the previous values is by changing them manually.

Printing adjustments on the fly

Substrate: SAV David LP MR6
Print mode: Indoor Signage 6p-110-6c
① Changes will be permanently applied to current substrate profile and print mode

Curing temperature (°C)
If ink is not cured, increase temperature. If substrate is deformed, decrease temperature.

- 80 +

Not cured
Substrate deformation

Curing height (mm)
If ink is fully cured but dark-area gloss is not uniform, increase curing height. If ink is not fully cured and temperature cannot be increased, reduce curing height.

- 22 +

Curing not uniform
Not cured

Vacuum
If substrate suffers from smears or lifts from print zone, increase vacuum. If vertical banding or substrate not advancing, decrease vacuum.

Input vacuum (Pa)
- 250 +

Print-zone vacuum (Pa)
- 500 +

Restore values
Done

Printing adjustments on the fly

Curing temperature (°C)
If ink is not cured, increase temperature. If substrate is deformed, decrease temperature.

- 80 +

Not cured
Substrate deformation

Curing height (mm)
If ink is fully cured but dark-area gloss is not uniform, increase curing height. If ink is not fully cured and temperature cannot be increased, reduce curing height.

- 22 +

Curing not uniform
Not cured

Vacuum
If substrate suffers from smears or lifts from print zone, increase vacuum. If vertical banding or substrate not advancing, decrease vacuum.

Input vacuum (Pa)
- 250 +

Print-zone vacuum (Pa)
- 500 +

Curing vacuum (Pa)
- 750 +

Restore values
Done

Load and print substrate linked workflows

When you click the **Print** button to print a job queue or calibration plot (such as PH alignment, CLC, add new substrate) and there is no substrate loaded, the IPS will automatically prompt the substrate load workflow (see message below), and after the substrate is loaded, printing will start automatically.

Substrate not loaded

Alignment plot cannot be printed. Load substrate to continue.
Substrate width must be at least 635 mm.

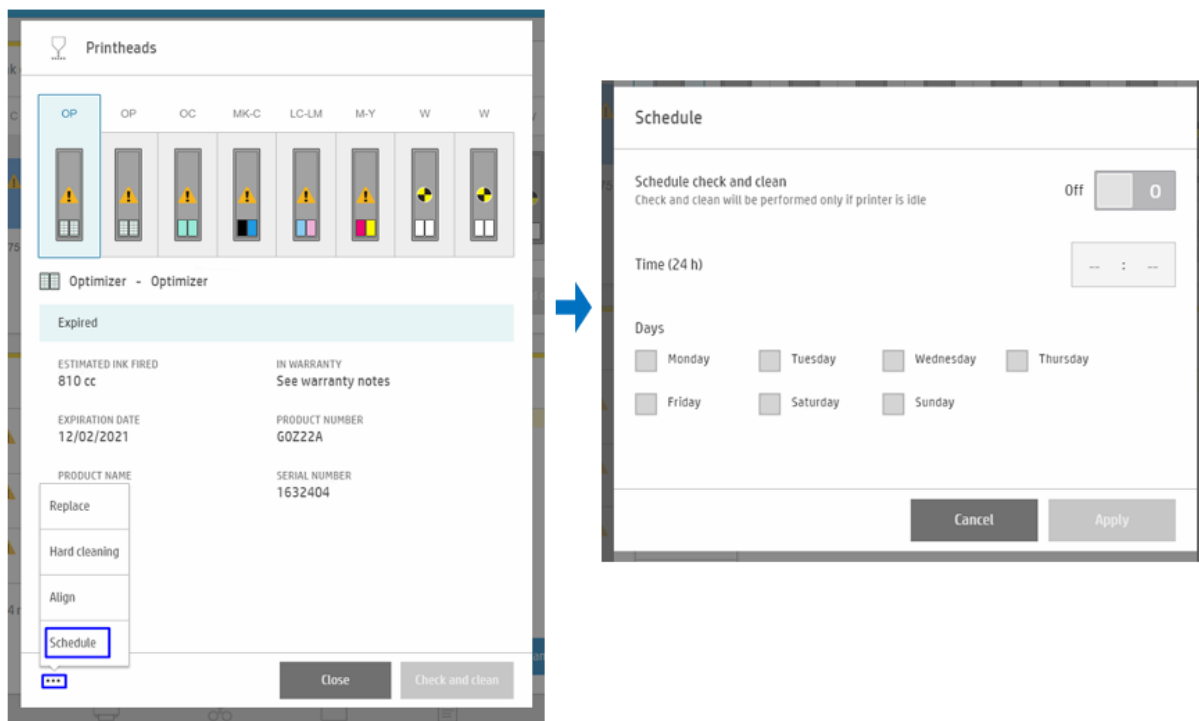
Cancel

Load

Schedule check and clean

It is now possible to schedule a printhead cleaning routine to speed up printer preparing process. Note that this process will not be executed if the printer is switched off, in low power mode, printing or error status.

On the Printhead widget, click on the three dots menu, press **Schedule** and program the cleaning routine.

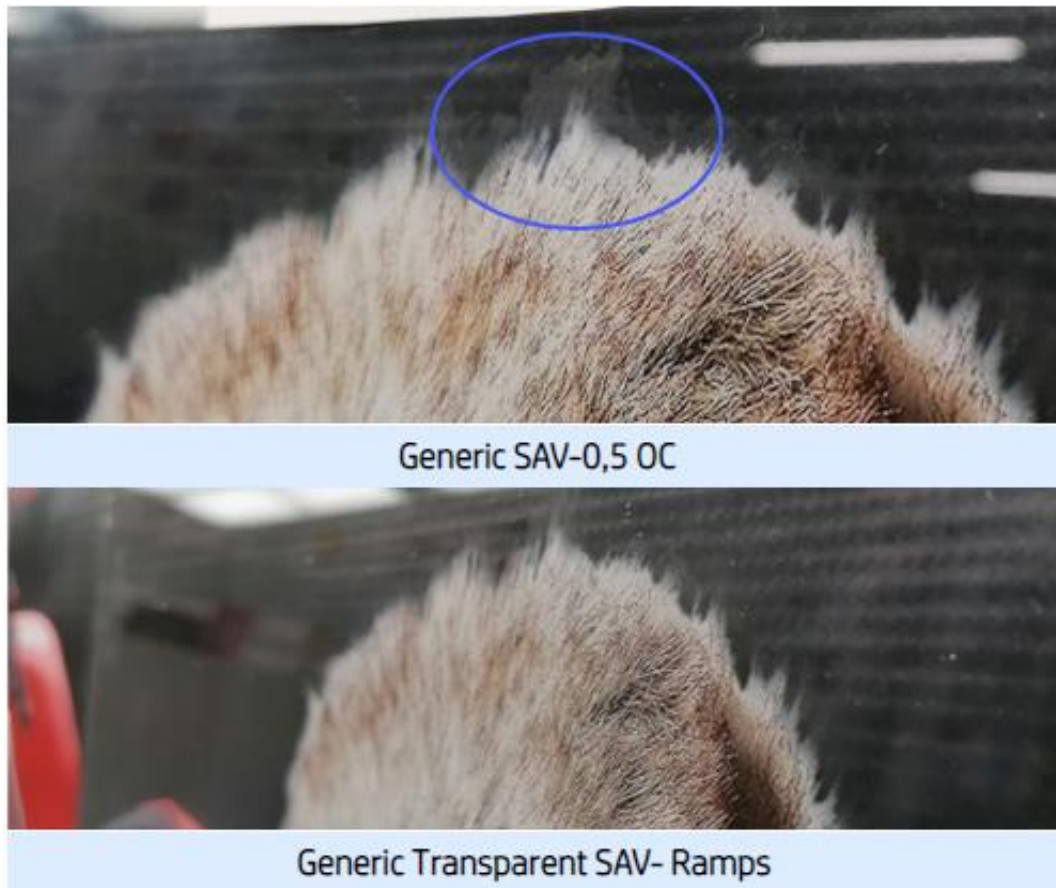


New substrate presets to reduce halo effect (on transparent and ACP substrates)

A new functional has been developed to remove the “halo effect” on the color edges. This consists of printing a ramp of overcoat (from 0 to 0.5 dpp) for low color densities (up to around 10% contone). This improvement is only applied on a new set of generic substrate presets.

This new feature is implemented through 5 new additional generics:


- Generic Transparent Self-Adhesive Vinyl
- Generic Transparent Plastic Solid
- Generic Transparent Polyester Film
- Generic Colored Aluminum Composite Panel
- Generic Colored PVC Foam



Color calibration workflow improvements

- Option to delete CLC even if the substrate is not loaded.

User can now delete color calibration settings even if the substrate is not loaded.

 Substrate details

Type: Roll

Name clone generic

Calibrated. Last calibration: May 27, 2022

Calibration is recommended to ensure color consistency
To calibrate the substrate, load clone generic and tap "Calibrate"

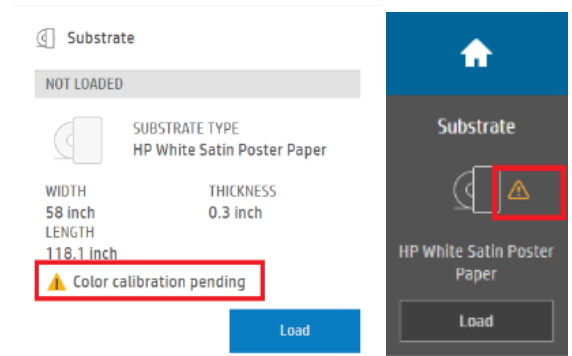
Delete color reference

...

Calibrate

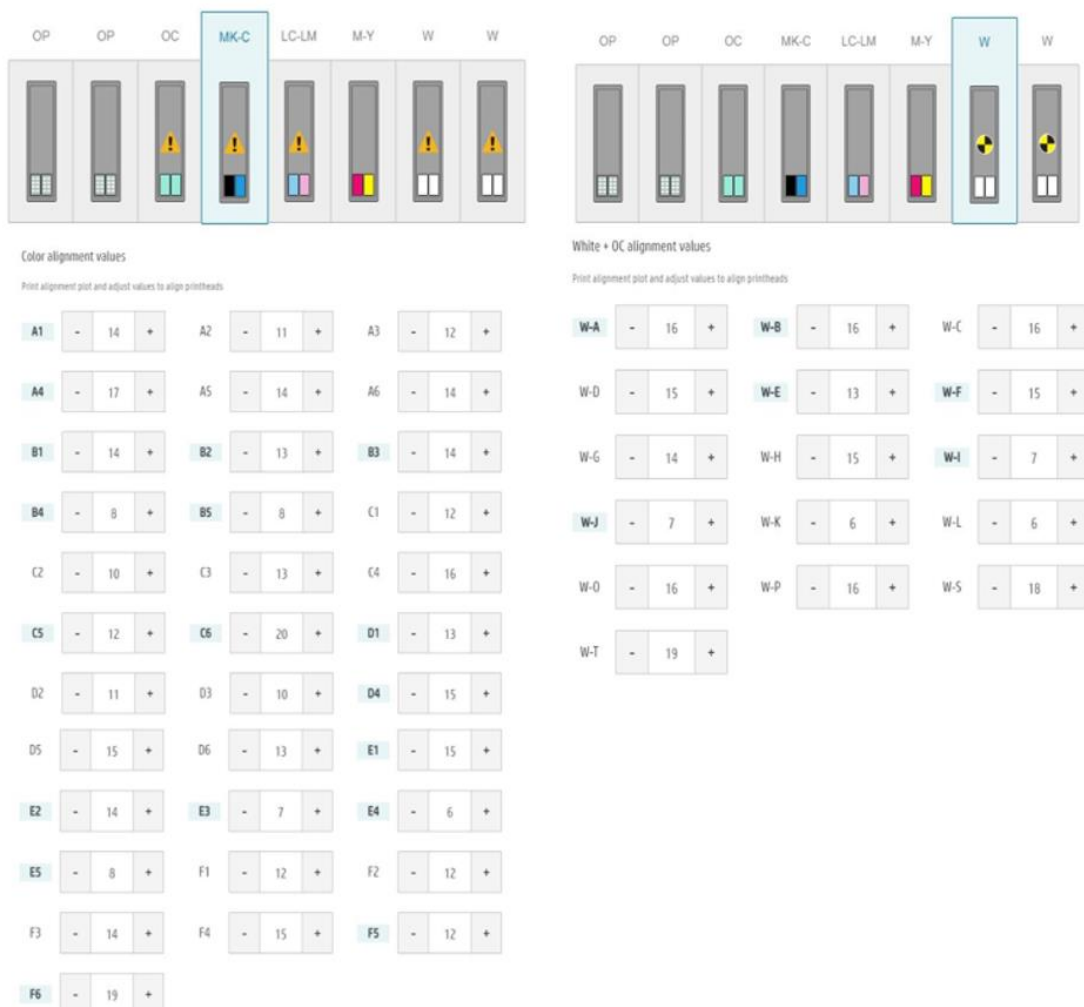
b. Obsolete CLC reporting

When the CLC is obsolete, it will now appear as a CLC pending message in substrate and load substrate windows. (This only affects customized substrates



Manual Printhead Alignment highlights

In the manual PH alignment widget, the specific alignment settings for each PH are now highlighted. As seen on the images, it is necessary to select one of the heads, to see the alignment values involved for the marked color. It makes it easier for the user to identify which settings are to be checked.

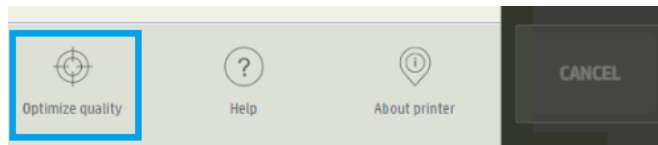


HP Control Plot included in the IPS

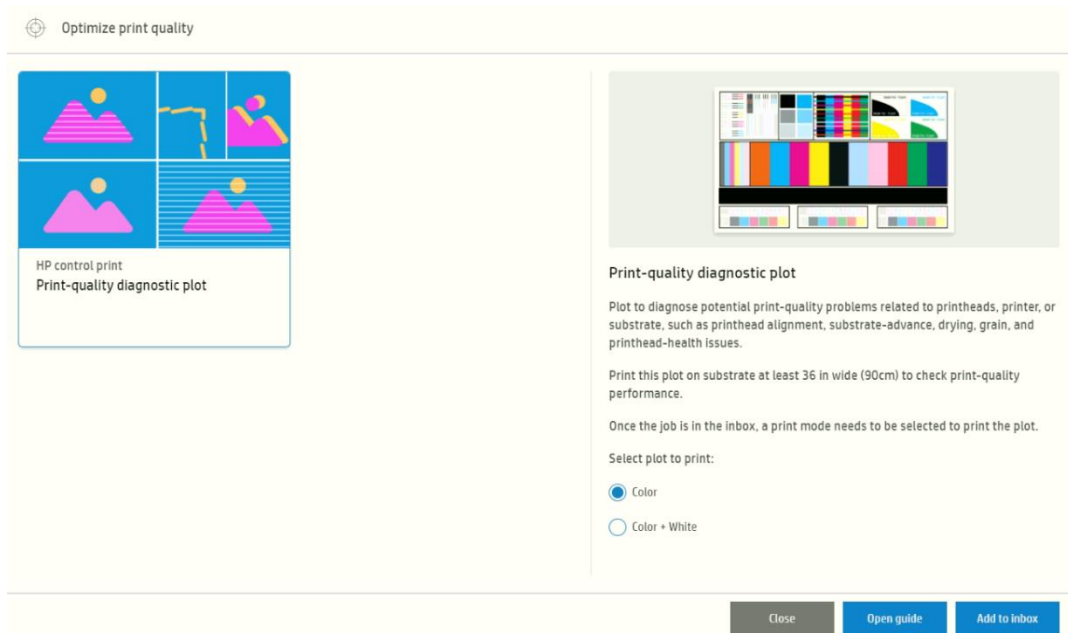
To make it easier for users to troubleshoot image equality issues, HP recommends you print the HP Control Plot. This HP Control Plot can be found on the main front panel screen.

To select this:

1. Press **Optimize quality**.



2. Chose the mode, **Color** or **Color + White**. Then press **Add to inbox**.



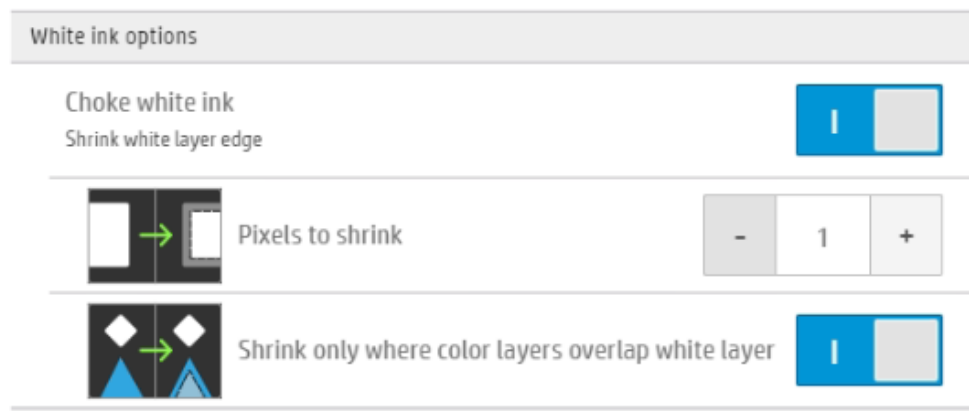
3. When you go to the **Inbox** and open the job, select the print mode, save the changes and drag the job to the queue (if the plot selected is “color+white”, select the “color mode” and the “printing method” before you select the print mode”).

NOTE: If you require further information regarding this function, on step 2, instead of “Add to Inbox” press the **Open Guide** for more information and search for **HP Control Print** (the guide will be available soon).

Choke white ink modifications

When you print with white, you sometimes need to shrink the white layer in case there is a misalignment between the color layer and the white layer in the printed output. This function was added for the first time on MR1, and was improved for MR4, by adding the option to choose between the thin lines (choke preserves thin lines but showing tearing in the acute angles) and the acute angles (tearing was disappearing, but so will the thin lines).


With the new MR6 firmware release, the printer will internally make the choice. The printer will identify which is the best way to shrink, and the user will only choose the number of pixels and if the shrink should be done when color layers overlap white layer. The choke white ink is disabled by default, so it should be enabled if is desired to work with this function.




White ink options

Choke white ink ☒

Shrink white layer edge

 Pixels to shrink

 Shrink only where color layers overlap white layer ☒

Configuration Center benefits

If a device is not connected to PrintOS (it does not matter if it is due to a disconnection or to a not registered user) a message will appear on the "Substrate library > Substrate packages", which is:

"Device not registered in PrintOS"

Register printer on PrintOS and access Configuration Center application, to create and manage substrate packages and deploy them to your printers. Any substrate packages added to the printer will be automatically uploaded to Configuration Center. www.printos.com.

Job file management changes

New features have been included related to how the job files are managed. The improvements are:

Job History deletion options

In order to avoid the IPS hard disk becoming full, two different actions have been enabled to increase the free space:

- Delete files from hard drive: By pressing the Delete All button, all the TIFF files that are related to the History, will be deleted immediately.
- Automatically delete files older than a period of time: This function has been improved by allowing the user to set the number of days. The procedure is launched when the free space is less than 150 GB and applies to jobs not used in the period defined.

Preferences

System

Job Management

Connectivity

Support Service

HP Cloud Services

QUEUE

Chained printing
Once a queue is printed, the next printable one will automatically start printing

Automatically move completed jobs to History

HISTORY

STORAGE

Delete files from hard drive
Logs will remain.

Delete all

Automatically delete files older than a period of time (days)

- 90 +

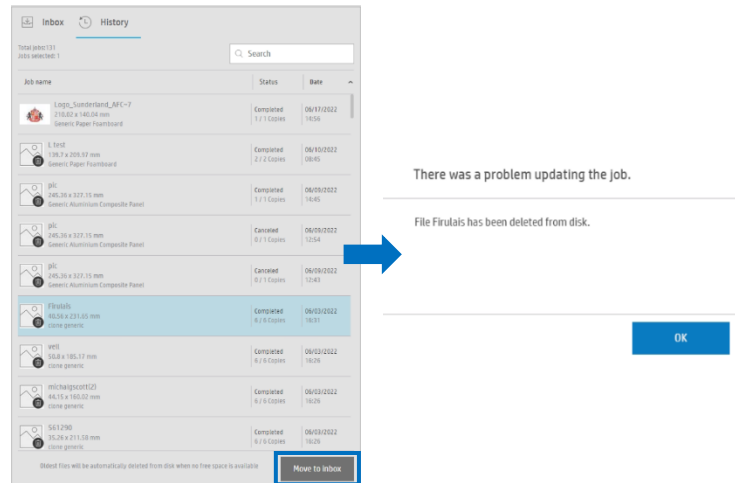
Close Save

NOTE: Non-applicable files in the Job History database will not be deleted. Job entries in the Inbox will not be deleted.

This clean-up feature deletes the printed job .tiff files, but the printed job record will still appear on the history tab, with the name, size, the number of copies, and the print date, but without previsualization.

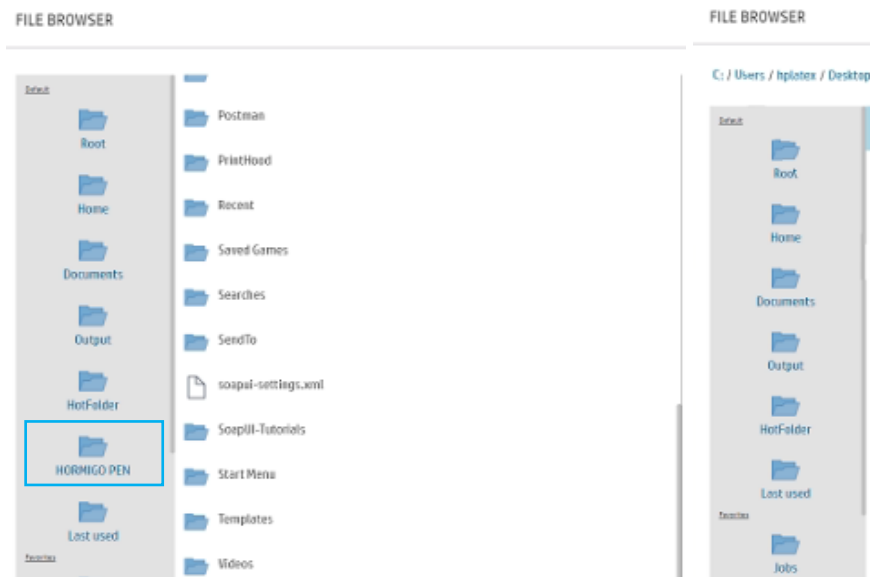
Erased jobs are deleted permanently.

When you delete a job from the inbox, or any deletion in the History is done as explained in the previous point, the job is deleted from the HDD and is not recoverable and will not be in the “Recycle bin”. Therefore, when you go to the Job History, if the user tries to “Move to inbox” the selected job (which has been deleted), the following message will appear on the IPS screen.



Printing a file saved on a USB

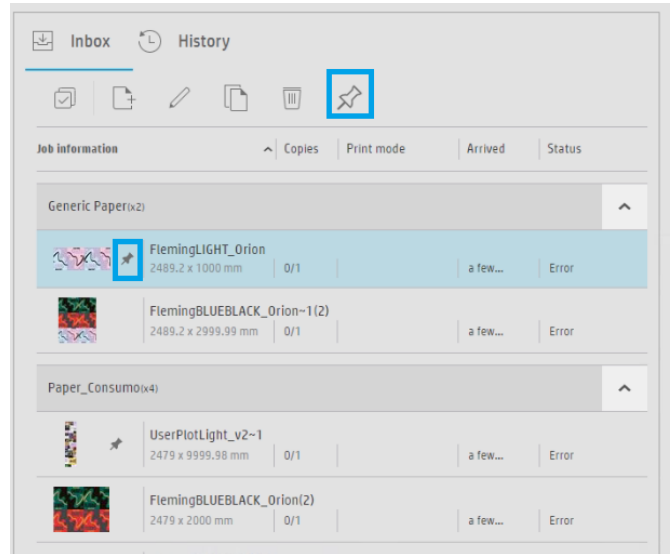
With the new MR6 it is possible to add a job to the inbox directly from a USB stick. When you open the file browser with the USB inserted, the external device will appear on the left margin, and the jobs inside will be visible as if it were an internal folder on the computer. When you remove the USB, the file will not be visible anymore.



Pinned jobs

Pin jobs to the inbox. With this function, it is possible to:

- 1) Avoid moving a specific job from the “inbox” to the “History” when a job is printed.
- 2) Put the pinned job on the top of all the jobs from the same substrate.

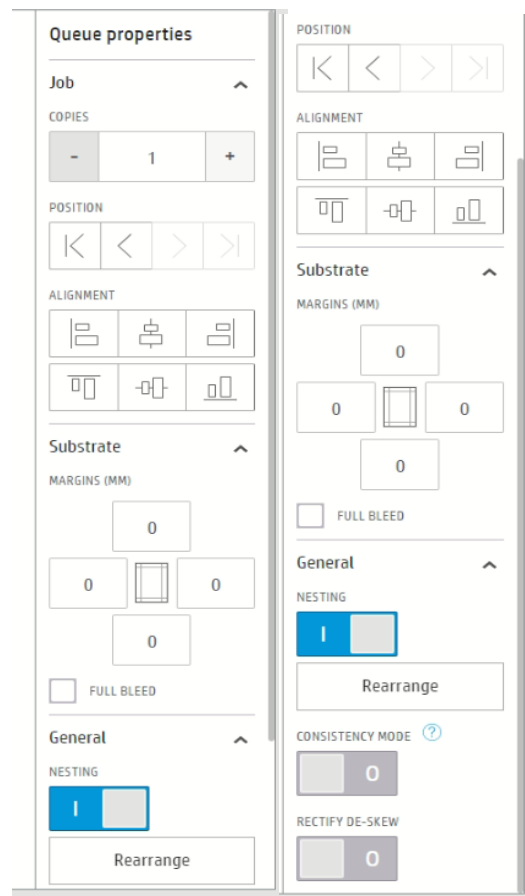


Job queue alignment

It is now possible to set the alignment for all the queued jobs, instead of doing it manually job by job, or by using multi-selection. It means that pressing a button on this section, will affect the alignment of all the jobs queued (it could be all centered, all to the left, or all to the right).

It is also possible, after you align all the jobs in general, to edit one specific queued job (this function remains the same), even though a new change on the general queue properties will overwrite these specific changes.

NOTE: When using “Sheet” loading mode, it is necessary to scroll down to see all the functions of the “Queue properties” to see the “Consistency mode” and the “Rectify de-skew” buttons, which are hidden.



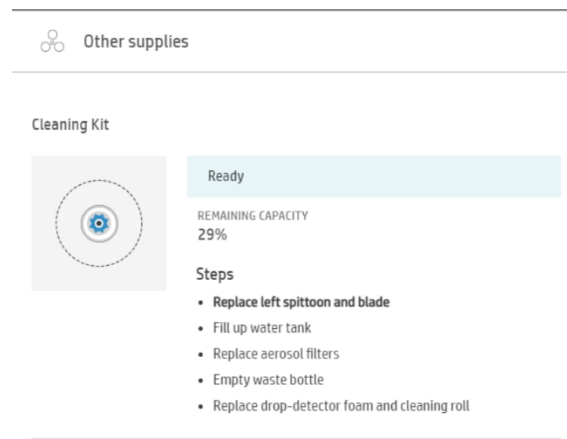
Improvements and bug fixes

Bug fixes and improvements in this firmware release include:

- Several fixes to decrease the occurrence of SE 0086-0005-0082, for both SKUs (64" and 98").
- Several fixes to decrease the curing/drying communication disconnections (the system errors were 001X-0001-XX04).
- Several fixes for errors 8015-427E-0000, 8405-4807-0000 and 81A6-7ACE-0000.
- Fixes and improvements to minimize or avoid PrintOS disconnections.

User interface improvements.

- When you replace the wipers, the process steps have been included to better understand the overall situation and the remaining steps.



How to install the firmware

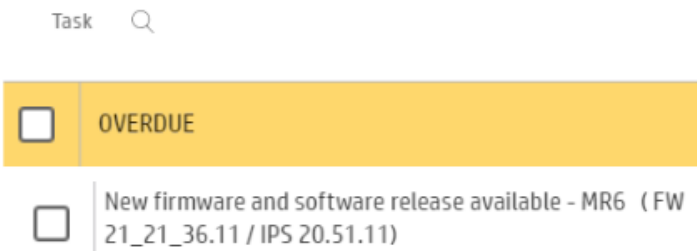
The firmware and the IPS must be installed together. No other combination is supported. The firmware update is allowed in **normal mode** only. Do not try it in diagnostic mode, or in any other mode, unless it is required by GBU.

Mandatory installation order:

2. Firmware
3. HP Internal Print Server (IPS)

Installation through the maintenance upgrade

If the installation is done from MR3, MR4, MR5 or MR6, a maintenance alert will appear in the IPS warning of the new firmware. The maintenance is localized to the languages that the printer



supports.

By entering the maintenance, a list of improvements will be displayed with two buttons, **Install Firmware** and **Install IPS**. Upgrade the firmware first and then the IPS.

The maintenance menu allows users to upgrade the unit by themselves, by following the recommendations lists and using these buttons.

New firmware and software release available - (FW 21_21_36.11 / IPS 20.51.11)

1/3	<p>A new version of the firmware and software is available:</p> <ul style="list-style-type: none">• Firmware: SKAAR_21_21_36.11• IPS: 20.51.11 <p>Main new functionalities include:</p>
2/3	<div><p>IMPORTANT:</p><ul style="list-style-type: none">• Do not proceed with the upgrade if a severe error is present.• Do not close the maintenance during the firmware upgrade process and prior to reaching the final maintenance step.</div> <div><p>Install Firmware</p></div> <ul style="list-style-type: none">• Rearm the unit when requested.
3/3	<div><p>IMPORTANT:</p><ul style="list-style-type: none">• Wait for the "Idle" status and the "Firmware incompatibility message" before you press the "Install IPS" button.• Do not close the maintenance, it will be done automatically after you press the "Install IPS" button.• During the update process, the system will not provide progress feedback for some time. Just leave the procedure to finish by itself.• The first application boot-up can take several minutes, with only the splash screen visible.• Reboot the computer after the IPS upgrade.• In case of any issues during the upgrade, IPS and firmware files can be found in the following directory: C:\ProgramData\HP\IPS\maintenances\ASU\resource</div> <div><p>Install IPS</p></div>

Note these points:

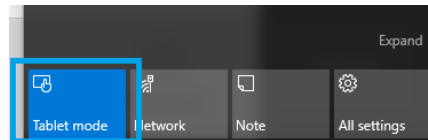
- "Do not proceed with the upgrade if a severe error is present." -> Printer HDD may become corrupted.
- "Do not close the maintenance during the firmware upgrade process and prior to reaching the final maintenance step." -> It might not be possible to enter the maintenance again, therefore only the firmware will be upgraded.
- If there are any failures during the process, installer files can be obtained from "C:\ProgramData\HP\IPS\maintenances\ASU\resource".

Manual Installation

Download and unzip the files

1. This new release is available from:
 - <http://hp.com/go/LatexR2000/firmware> - 2 split files
2. Download the two files that contain the upgrade files:
 - [FW21.29_MR6.zip](#)
 - [FW21.29_MR6.z01](#)

3. Extract the content using a file compressor utility (do not use the one built-in to Windows).
4. Turn off Tablet mode: Swipe in from the right side of your screen to open the action center. Turn off Tablet mode by touching the Tablet mode icon.



5. Copy the files onto the IPS PC's hard disk (it is recommended to use a dedicated folder, not the desktop).

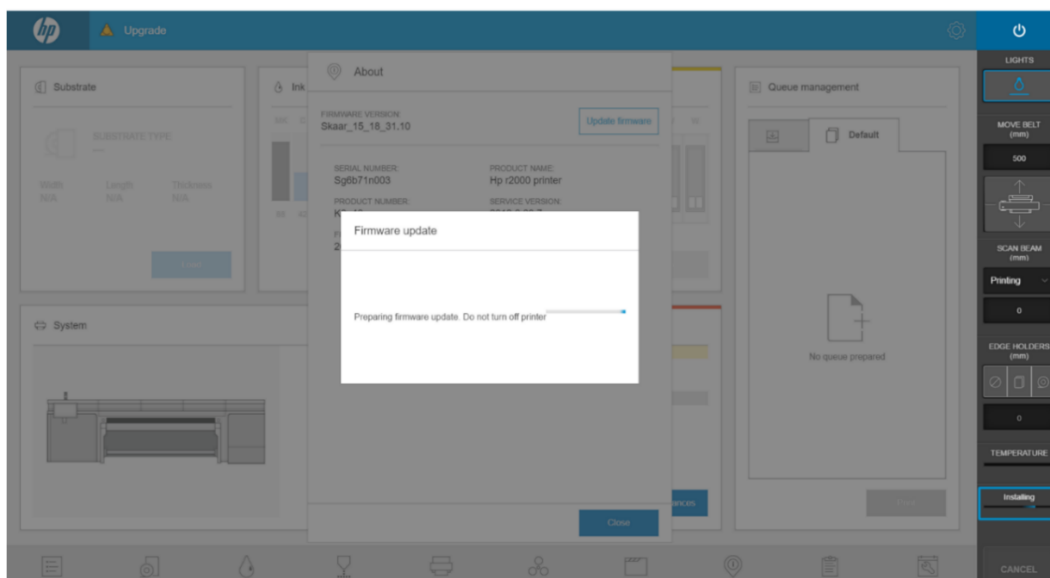
Update firmware

NOTE: The firmware update should never be done if the printer is in a **severe error** state.

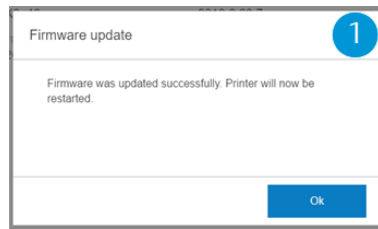
1. Tap the **Home** icon, then tap the **About** icon at the bottom right of the Internal Printer Server's main window. A window showing the details of the current firmware version installed in the printer will appear.
2. Tap **Update firmware** and browse to select the .fmw file; select it by tapping **Select**.

NOTE: If the update firmware option is not available, log in as a service user.

3. The firmware will be uploaded and installed on the printer. The status of the update can be checked on the right-hand side of the IPS main window. There are two possible statuses: **Receiving** and **Installing**.



4. Upon completion, the IPS will show the following message. Tap **Ok** to continue. At this point, the printer will automatically reboot. If it does not, reboot the printer manually.




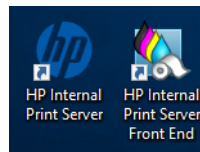
IMPORTANT: The first boot after the firmware upgrade takes more time than usual.

5. Wait until the printer boots completely.

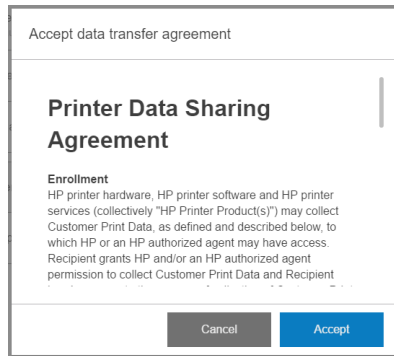
NOTE: In some cases, the new firmware may not install. If so, please refer to Appendix 2 to troubleshoot the issue.

Update the HP Internal Print Server (IPS)

1. Make sure the printer has booted up completely.
2. Take note of the customer IPS preferences by taking some photos/screenshots of the IPS preferences. Tap  to access the preferences and check the values in the **System**, **Connectivity**, and **Queue** sections, including (among others) the hot folder configuration.
3. Run the **HPIPS-20.51.11-Installer.exe**. Follow the on-screen instructions until the new software is installed. The installer will close and remove the previous IPS software. It may take some time. Tap **Close** to complete the installation.
4. When the installation process is complete, reboot the IPS PC.
5. If the HP Internal Print Server software does not boot automatically, first tap **HP Internal Print Server** and then **HP Internal Print Server Front End**.



- On the first boot, the Printer Data Sharing Agreement (PDSA) window will appear. Please click **Accept** to continue.



HP strongly suggests accepting to take advantage of the Information retriever functionalities, and for a faster and better remote support experience.

- Re-apply all the specific customer IPS preferences captured in step 2.

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- NOTE:** If not updated yet, a .NET installation can be performed prior to the IPS upgrade. In case, the .NET installation will take about five minutes. After the reboot the IPS will launch automatically.
 - NOTE:** If there are any problems when you start the IPS software, refer to Appendix 4 to troubleshoot these issues.
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Post-firmware update actions

Finally, you need to ensure that the **Remote assistance** option is enabled in the IPS Preferences window so that the system can send printer information to the HP servers. Note that this option will be enabled by default if the PDSA has been accepted when installing the new Internal Print Server.

