



New firmware and IPS update package available (MR4)

For HP Latex R Printer Series

May 2020

New versions of firmware and software for the HP Latex R Printer Series are available to download.

Related links:
www.hp.com/go/latex/

Printers related to this article
HP Latex R series

Important note

There is a new firmware and IPS update package for HP Latex R Series Printers, we strongly recommend that **all printers are upgraded** to get benefit of all the improvements of the update.

Before starting the FW upgrade, make sure to contact HP support.

Where to find the update package

Firmware: **SKAAR_19_19_36.15**
HP Internal Print Server (IPS): **19.101.7**

<http://hp.com/go/LatexR1000/firmware>
<http://hp.com/go/LatexR2000/firmware>

How to implement the upgrade

Both components—the firmware and the IPS—must be installed together. No other combination is supported. Firmware update is allowed in **Normal mode** only. Do not try it in Diagnostic mode, or in any other mode.

Mandatory installation order:



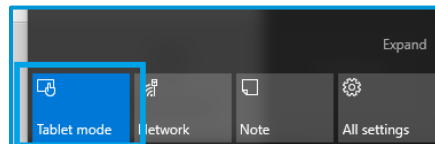
Steps to implement the upgrade:



1. Download and unzip the files
2. Update the firmware
3. Update the HP Internal Print Server (IPS)
4. RIP synchronization:
 - 4.1. Caldera RIP
 - 4.2. Onyx RIP
 - 4.3. RIP driver updates

Download and unzip the files through the links

1. Download the 2 files that contain the upgrade files using one of the previous links. The files are:
 - o If downloaded through WeTransfer:
 - FD19.15_MR4.zip
 - o If downloaded through hp.com:
 - FW19.15_MR4.zip
 - FW19.15_MR4.z01
2. Extract the contents using a file compressor utility (do not use the one built-in to Windows).
3. 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.



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



Download the files through the ASU

If the installation is done from a previous MR3 version to MR4 the users will see in their IPS a maintenance warning them of the new firmware that'll look similar to this.

New firmware and software release available - MR4 (19.13)

1/2

A new version of the firmware and software is available:

- Firmware: SKAAR_19_19_38.13
- IPS: 19.101.4

Including:

- Distance between boards in hotload reduction
- Optimization on different queues with different material thickness
- Fast sandwich modes and more profiles
- Faster printmodes for ACP
- Enable adding new jobs while queue is being printed
- Multiple queues improvements
- New functionalities in choke
- Automatic Software Upgrade
- Multi-selection in IPS
- Use alignment bar to improve media feed with Edge Holders
- Other small improvements and bug fixes

2/2

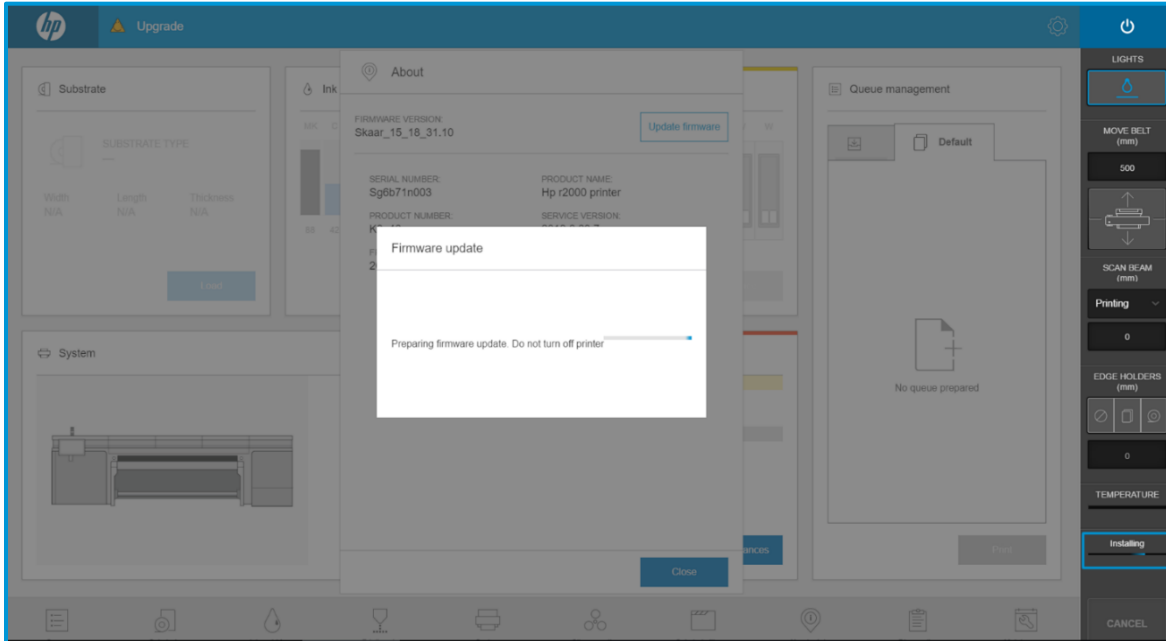
Please use the link below to access to the release files and documentation:

<C:\Users\platexi\Documents\HP\Resources\ASU19.13>

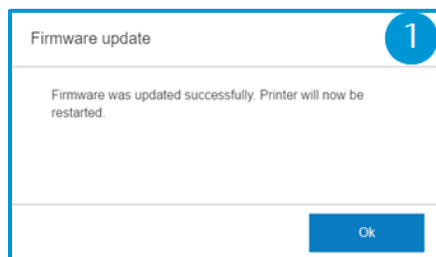
With this version of the Automatic Software Upgrade, users will have the files to perform the software upgrade in the folder specified in the maintenance already downloaded and prepared to do it via a service agent.

Update the firmware

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**.
3. The firmware will be uploaded and installed on the printer. The status of the update can be checked on the right 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 reboot without any interaction. 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.

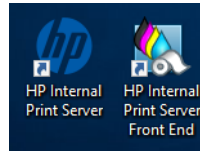
Update the HP Internal Print Server (IPS)

1. Make sure the printer has boot up completely.
2. Take note of the IPS preferences by taking some photos/screenshots of the IPS Preferences. Tap to access  to the preferences and check the values in the “System,” “Connectivity” and “Queue” sections, including (among others) the hot folder configuration.
3. Run the **HPIPs-Installer.exe**. This installer will close both the Front and Back End and Install the IPS software, this may take some time.

NOTE: the IPS updates all the jobs there are in the inbox and the history tab to make them compatible with MR4, so the more jobs there are, the longer this upgrade will take. Please, once you’ve launched the **HPIPs-Installer.exe** have some patience as this process will be processing in the background. Don’t launch it again.

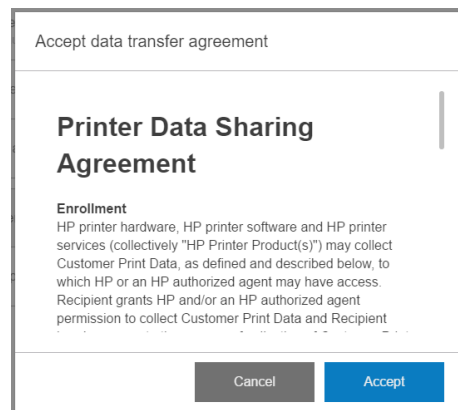


- Once the installation process is complete, the IPS installer will prompt you to reboot the IPS PC. Please accept.
- If the HP Internal Print Server software doesn't boot automatically, tap first on **HP Internal Print Server** and then on **HP Internal Print Server Front End**.



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

NOTE: Sometimes the PDSA won't appear on the first IPS boot up. It'll appear eventually by rebooting the IPS.

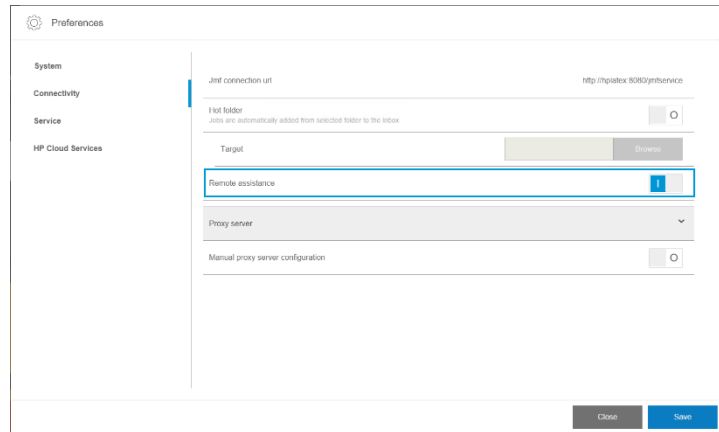


HP strongly suggests accepting in order to take advantage of the Information retriever functionalities, and for a faster and better remote support experience.

- As an additional step, 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. Notice that this option



will be enabled by default if the PDSA has been accepted when installing the new Internal Print Server.



8. Re-apply all the specific IPS preferences captured in step 1.

NOTE: If the JMF connection is lost, please, reboot the IPS PC.

9. As a recommended action, perform the first substrate synchronization with Configuration Center: **Substrate Library > Back up substrates.**

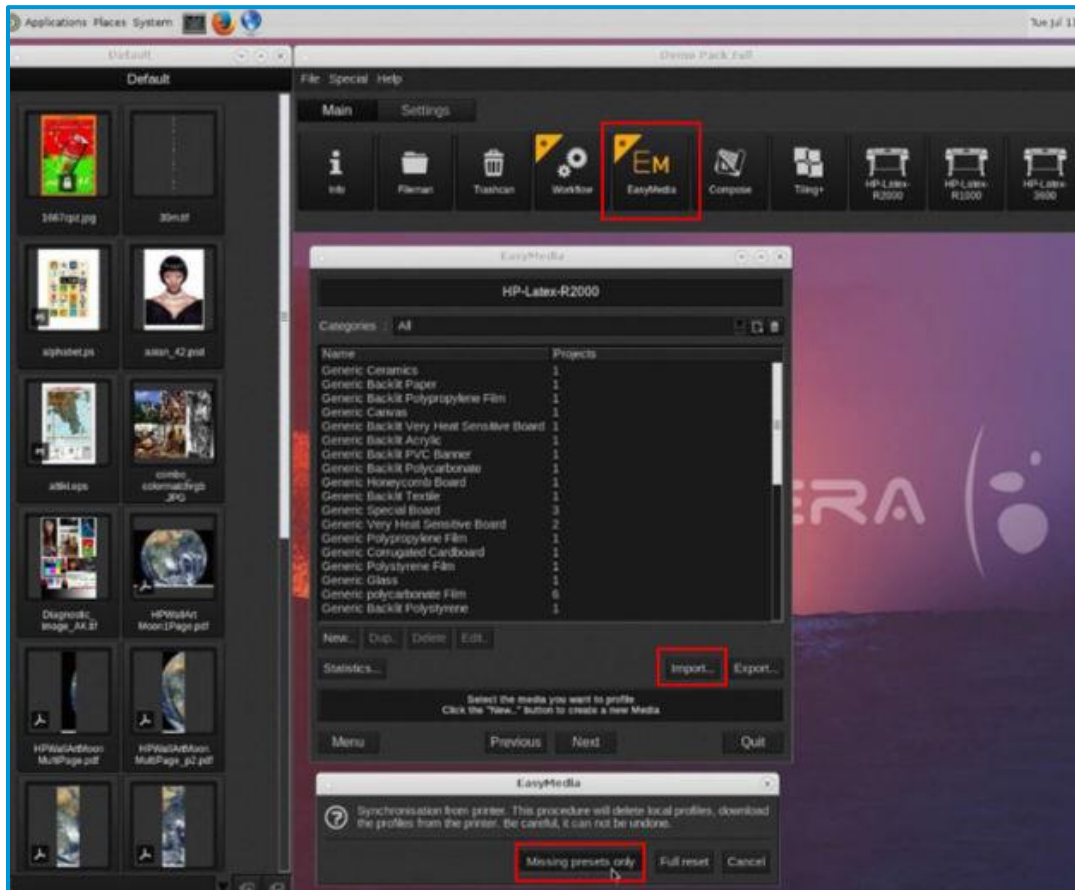
NOTE: In case of problems when starting the Internal Print Server software, please refer to Appendix 2 to troubleshoot these issues.

RIP synchronization

The actions below must be carried out after the firmware upgrade in order to synchronize the media list and to import and export the ICC profiles.

Caldera RIP

1. Export your custom ICCs and save them in a folder on your PC.
2. Go to Easy Media.
3. Select the printer and follow the steps to synchronize the media. Click **Import > Autosync > Missing presets only.**



4. Check that all media have been synchronized.
5. If there are any missing or mismatched media, repeat the previous procedure to synchronize them.
6. This time, instead of selecting the 'Add Missing Presets Only' option, select Full Reset.

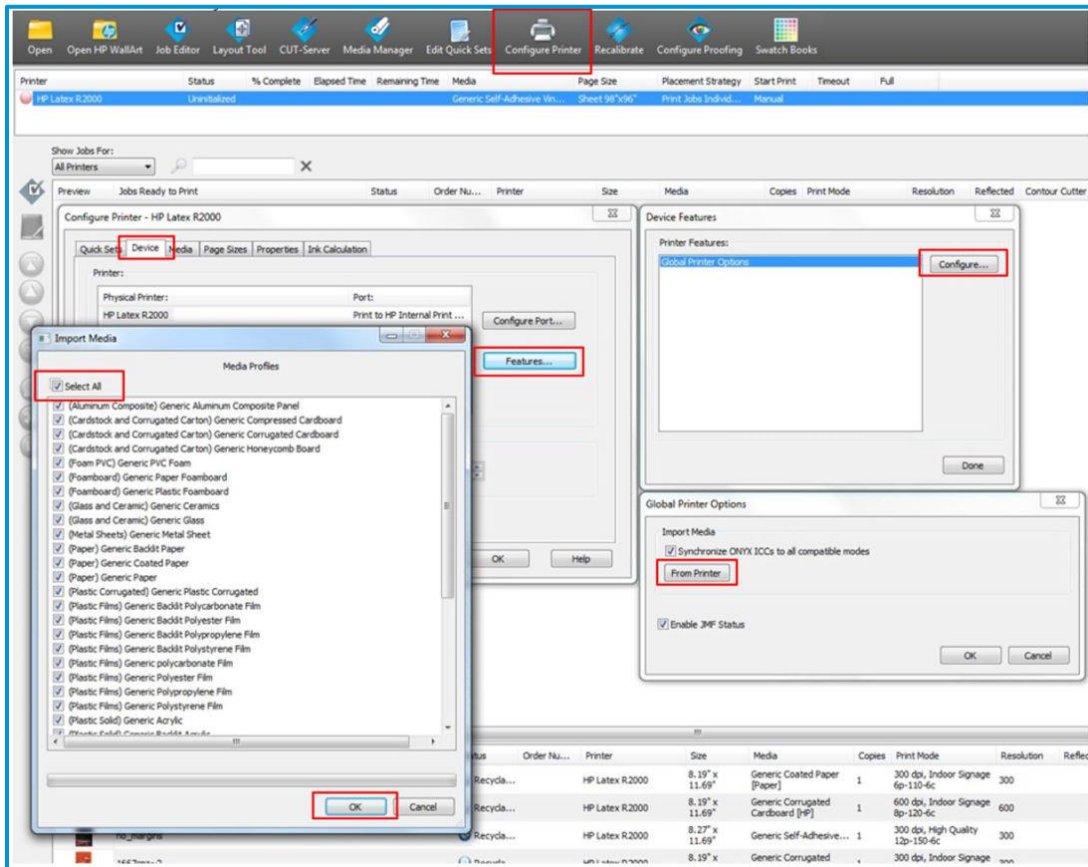
IMPORTANT: This option deletes all existing media in Caldera and imports all media located in the IPS. If some media is stored in the RIP but not in the IPS, this media will be deleted. Make sure you have a backup of the media missing from your IPS.

7. Go to **Easy Media** and import your previously saved custom ICCs.



Onyx RIP

1. Export your custom ICCs and save them in a folder on your PC.
2. Go to **Configure Printer > Device > Features > Configure** and select **From Printer**. Select **All** the media and click **OK** to synchronize.



3. Go to **Media Manager** and import your previously saved custom ICCs.

RIP driver updates

You are also advised to update your RIP driver to ensure you have the latest improvements and bug fixes.

- For Onyx RIP, drivers can be downloaded from:
<http://www.onyxgfx.com/printer-and-profile-download-manager/>
- For Caldera RIP, separate drivers can be downloaded for the different R Series printers:
 - HP Latex R1000 printers:
https://workspace.caldera.com/index.php?model=download&action=execute&scope=update_files&file_id=83314&file_md5=67a8c36793ab6f6f016d1d9cd01977f4
 - HP Latex R2000 printers:
https://workspace.caldera.com/index.php?model=download&action=execute&scope=update_files&file_id=81941&file_md5=76c702f95aab1d54df5bb4326db7ae7b



Summary of changes

The MR4 firmware release includes the following new improvements with respect to the previous one.

1. Reduced load time between boards with rigid substrates, more copies per hour.
2. Fast sandwich modes and more profiles.
3. New 8-pass printmode for ACP.
4. Allow adding new jobs to a queue while it is being printed.
5. Multiple queues; prepare the next queue with a different substrate while printing the current one.
6. Improved choke algorithms to fix artifacts.
7. Enhanced Automatic System Upgrade.
8. Multiple job selection for drag-and-drop to queue, delete, and reprint.
9. Improved substrate feed with Edge Holders.
10. Optimized keyboard to enter numeric keyboard.
11. New high density thermoforming print modes.
12. Diagnosticability changes and improvements.
13. Other small improvements and bug fixes.



Release notes

Reduced load time between boards with rigid substrates, more copies per hour

Changes

Tailgating is a fully automated print mode for rigid substrates. It optimizes printing workflow to minimize switching time between jobs and increases sustained throughput with rigid substrates, especially when printing small boards.

Details

- Tailgating mode is used in combination with Hot Load mode where the printer will ask the operator to load the next board as soon as the first board exits the Media Input area. Once the operator presses the “Substrate ready” button, the printer will feed the next board as soon as possible, this reduces the gap between boards to the minimum required and the printheads will not perform a dedicated service routine between boards; they will service while printing.
- For certain printmodes for the Generic Plastic Solid and Generic Backlit Plastic Solid substrate family, this reduction won't be applied to make sure the substrate is not deformed in the printing zone and produces crashes.
- Furthermore, some substrates that were not deforming in the printing zone, due to this new feature may start to curl causing crashes. If that's the case, please, check the Heat-sensitive drying and Heat-sensitive Curing in the substrate

Fast sandwich modes and more profiles

Changes

A new fast sandwich print mode has been added for the 3-layer sandwich mode: 29 passes and 60% white opacity. This allows a faster 3-layer sandwich mode with a lower white layer opacity.

This new print mode has been added to the following profiles: Self-Adhesive Vinyl, Plastic Solid, PET, and PVC banner.



New 8-pass printmode for ACP

Changes

We have created a new print mode for the ACP to solve the banding that appeared in some colors with the 6-pass mode, while maintaining a good throughput: the 8-pass print mode.

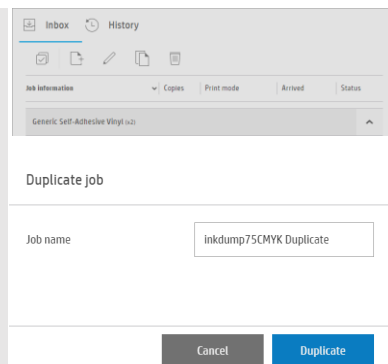
Allow adding new jobs to a queue while it is being printed

Changes

There is a new functionality that enables a job to be duplicated at any moment.

Details

By selecting a job and pressing this button, a pop-up window will prompt you to name the duplicate job, this duplicate will maintain all the same properties as the original job, and then by naming this job differently than the original one, you can add this one in the queue while the original is still being printed.



Multiple queues, prepare the next queue with a different substrate while printing the current one

Changes

- You can now have up to eight queues, and the transition when thickness differs between queues has been improved.
- A new button has also been added to the IPS so you can create a new queue without having to drag different substrate types into the queue.
- The print queues now remain open for longer, allowing more time to add jobs.



Improved choke algorithms to fix artifacts

Changes

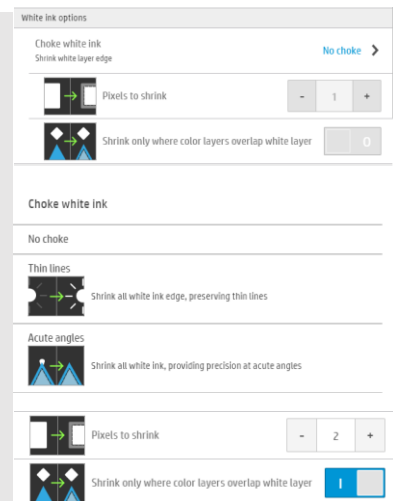
The choke feature has been redesigned to add a new option that eliminates the defect that appeared in the acute angles when the choke was applied. We will now have two options for choke behavior,

Details

- If the Thin lines option is chosen, the choke will behave the same as in the previous versions: preserving the thin white lines but showing the tearing in the acute angles.

- If the Acute angles option is chosen, the tearing will disappear, but so will the thin lines.

Once we have chosen which choke behavior we want, we can also choose to “Shrink only where color layers overlap white layer”, which causes the white layer only to shrink where it overlaps with a color layer, the same as in the previous “Smart Choke”.



Enhanced Automatic System Upgrade

Changes

- The new IPS installers automatically remove the previous IPS software before installing the new one, for easier installation.

- From now on, the firmware versions will be pre-downloaded to a folder in the printer's IPS PC.

To upgrade from MR3 to MR4, the maintenance linked to the firmware upgrade will show the folder the firmware has been downloaded to and, from MR4 onwards, the maintenance will show two buttons to automatically upgrade the firmware and the IPS software.

Multiple job selection for drag-and-drop to queue, delete, and reprint

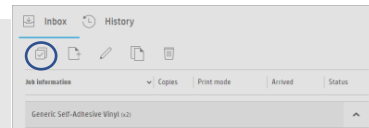
Changes

There's a new feature in the MR4 IPS enabling the multi selection of different elements.



Details

- This feature lets the user drag multiple jobs into the queue at once, creating new queues when needed.
- This feature can also be used to check multiple jobs from the history to send them back to the inbox or to delete multiple jobs at once.



Improved substrate feed with Edge Holders

Changes

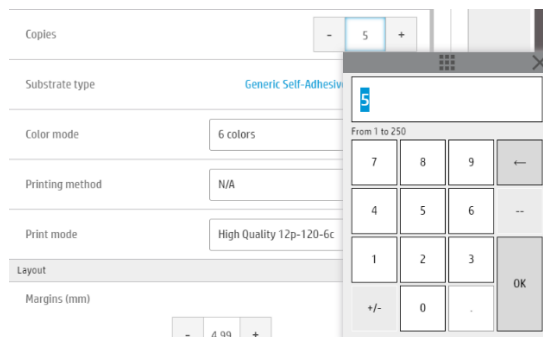
Until MR3, the alignment bar lifted to the uppermost position to allow the user to load the substrate without intervening in the loading workflow.

Now the alignment bar rises above the substrate thickness and then lowers until there is a clearance of 1 mm, this gently pushes the substrate and helps facilitate its advance if it is slightly bowed.

Optimized keyboard to enter numeric keyboard

Changes

When using any field in the IPS that only allows numeric values, a new, numeric-only keypad has been added, showing the maximum and minimum value, and improving the usability of the IPS.



New high density thermoforming print modes

Changes

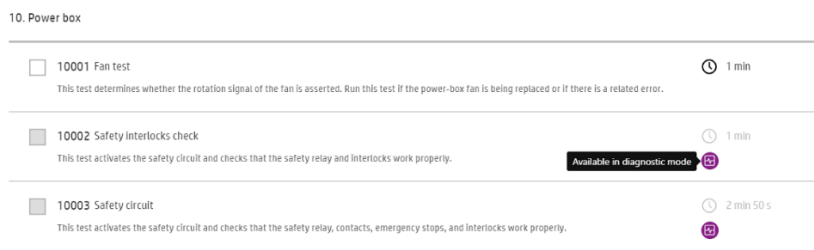
- Heat Sensitive High Density 20p 260
- Heat Sensitive High Density 24p 390
- Heat Sensitive High Density White OF W160 30p 260
- Heat Sensitive High Density White OF W160 33p 390
- Heat Sensitive High Density White UF W160 38p 260
- Heat Sensitive High Density White UF W160 42p 390



Diagnosticability

Changes

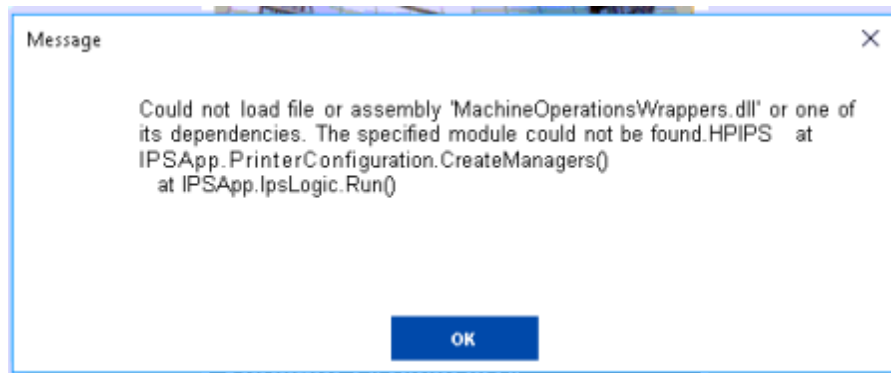
Diagnostics permitted in a different boot mode will appear in the menu but shaded. E.g. If you are in normal mode, you'll see the checker shaded for these diagnostics you can run in diagnostic mode also there is a new search bar in the diagnostics menu.



Appendix 1 – IPS doesn't boot

In case the Internal Print Server software doesn't boot properly after the upgrade, please perform the following action:

1. When the application has started, the following message appears. This error message regards an issue with Visual C++ redistributables.



“Could not load file or assembly ‘MachineOperationsWrappers.dll’ or one of its dependencies- The specified module could not be found. HPIPS at IPApp.PrinterConfiguration.CreateManagers() at IPApp.IpsLogic.Run()”

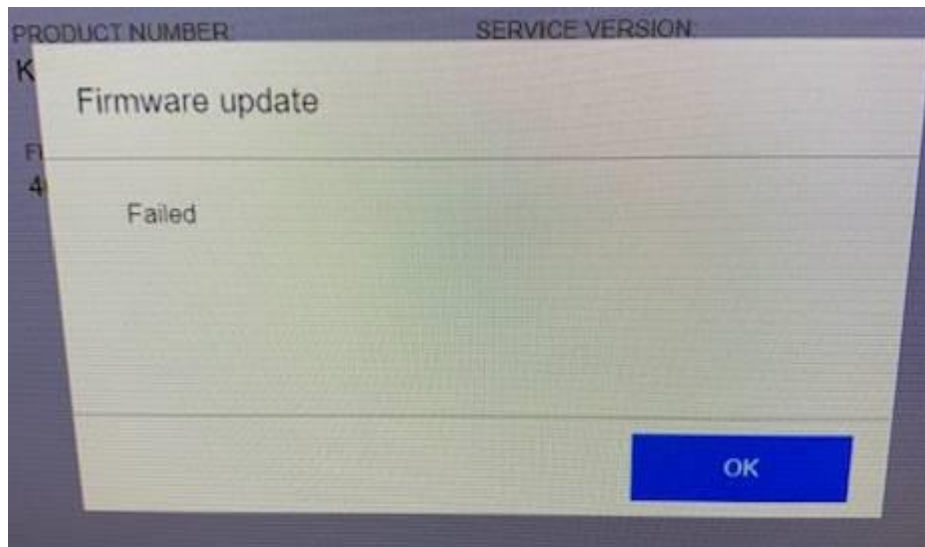
- a. Swipe in from the right side of your screen to open the Action Center and select All settings. Go to System > Apps & features and search for Visual C++ redistributables.



- b. Uninstall all aps matching the name "Microsoft Visual C++ * Redistributable *".
- c. Run the IPS installer again. The required Visual C++ libraries will be installed during the process.

Appendix 2 – Firmware upgrade error

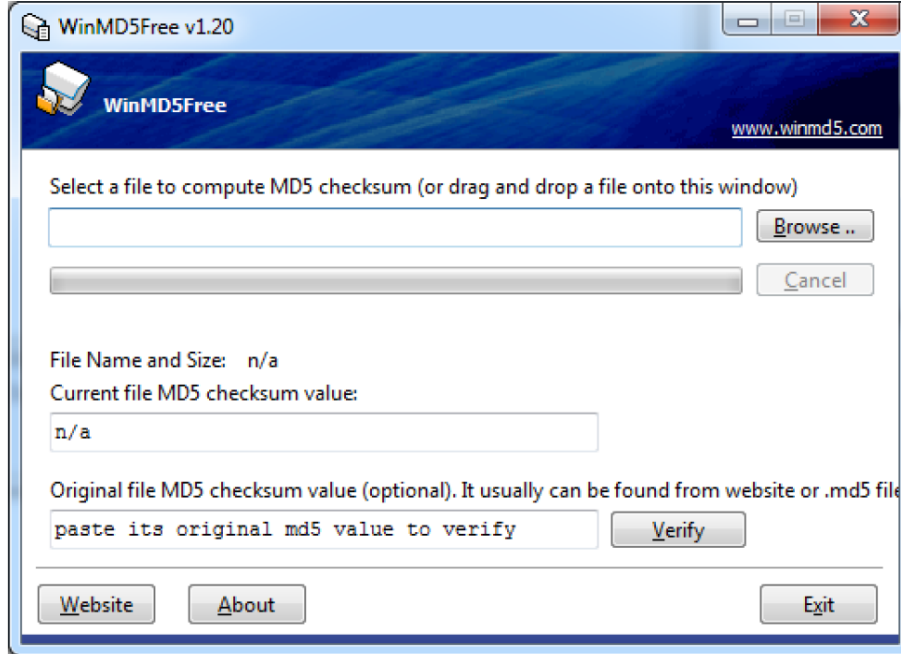
In some cases the new firmware cannot be installed upon trying to update it:



If so, please perform the following action to troubleshoot the issue:

Check if the firmware file that you are trying to install is corrupted by computing the MD5 checksum value:

1. Go to <http://www.winmd5.com/> and download the windmd5 software.
2. Run the WindMD5.exe file. The following window will pop up:



3. Click Browse and select the SKAAR_19_19_36.15.rfu.fmw file.

4. Paste the value “949e4ecc7a82b8893317d7ea2da3e8ed” in the “Original md5 value” field and click Verify.

If the two values do not match, the downloaded file is corrupted. In that case, download the firmware file again from the HP support web site.