Software Release Notes

Rev #: 1.00
SW Version: R5.0.2

Date: 20 August 2021

Revision History

Doc. Version	SW Release	Date	Details
V1.00	R5.0.2	20-Aug-21	Initial release

Contents

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1 Introduction

DuraFlex® software version R5.0.2 is a major release that includes new features, improvements, and corrections.

1.1 Typographic Conventions

Throughout this document, the following typographic conventions are used:

`Code Character`	`Courier` font is used to identify HTTP GET and POST commands with associated arguments, as well as references to source code, job states, registry settings, directory/file names, XCI commands, and XML settings.
Bold	Text that appears on-screen in the user interface is shown in **bold** font. This includes UI buttons, engine states, warning codes, and fault codes.
Yellow Highlighting	Yellow highlighting indicates sections that are new or updates in this version of the document, compared to the previous version.

1.2 Additional Documentation or Access

For additional product-related technical documents, go to your Memjet Partner Site.

If you need access, enter a case in Service Desk (*https://OEMsupport.memjet.com*), send an email to Memjet Customer Support (*customer.support@memjet.com*), or contact your Technical Account Manager.

2 New Features and Improvements

This section describes enhancements made to the software in this release.

2.1 Required Glenbeigh Images Provided During Installation

Unique Glenbeigh images are no longer required for each DuraFlex unit. The LiveUSB drive provides the required Glenbeigh images during installation.

2.2 PES Interface Reports Additional Product Information for Internal RIP Mode

When in Internal RIP Mode, the PES interface now reports the status of the internal RIP such as the list of ICC profiles, dithers, and other product information.

For example:

```
pes.pes_client._cmd_client.getProductInfo()
AllProductInfo(pdlBufferSizeBytes=0, usableWidthA4=222821.5, ripMode=1,
sharedMemSizeBytes=0, usableWidthA3=324421.5, versions={}, xTolerance=0.0,
printUnit={1: PrintUnitProductInfo(inkColors=[2, 4, 1, 3], engineStage=1,
bids=1, yOffset=0.0, mediaTimingGroup=1, xOffset=0.0)},
installed1dCalibrationTables=[], installedDithers=['18-8-3-7-bn-512x512-lin-
V1.3.1', 'default', 'default_1600', 'default_954'], rasterBufferSizeBytes=0,
installedIccProfiles=['DF_ID1007_PreRev2_1600dpi_MKCY_120-v3',
'DF_ID1007_PreRev2_954dpi_MKCY_180-v3', 'DF_ID1010_PreRev2_1600dpi_MKCY_120-v3',
'DF_ID1010_PreRev2_954dpi_MKCY_180-v3', 'DF_ID1076_PreRev2_1600dpi_MKCY_130-v3',
'DF_ID1076_PreRev2_954dpi_MKCY_180-v3', 'DF_ID860_PreRev2_1600dpi_MKCY_120-v3',
'DF_ID860_PreRev2_954dpi_MKCY_180-v3',
'ID0860_0954_Thunderbolt_MKCY_180_HigherGamut',
'ID0860_1600_Thunderbolt_MKCY_120_HigherGamut',
```

```
'ID1007_0954_Thunderbolt_MKCY_120_HigherGamut',
'ID1007_1600_Thunderbolt_MKCY_120_HigherGamut',
'ID1033_1600_Thunderbolt_MKCY_120', 'ID1033_954_Thunderbolt_MKCY_180',
'ID1035_0954_Thunderbolt_MKCY_180_HigherGamut',
'ID1035_1600_Thunderbolt_MKCY_140_HigherGamut',
'ID1046_0954_Thunderbolt_MKCY_160_HigherGamut',
'ID1046_1600_Thunderbolt_MKCY_120_HigherGamut', 'default', 'default_1600',
'default_954', 'glossy_1600', 'glossy_954', 'matte_1600', 'matte_954',
'plain_1600', 'plain_954', 'treated_1600', 'treated_954'], yTolerance=0.0)
```

2.3 PES Interface Reports OEM Job Data

The PES interface now reports OEM job data.

2.4 PES Interface Allows X-Axis Adjustment

Print position adjustment along the X-axis is now available through the PES interface.

For example:

```
>>>ss = pes.getSettings()
>>>ss.xAdjust  = 50000.0
>>>pes.storeSettings(ss)
```

2.5 Set mediaReadyOffset in PES Interface

Using the PES Interface, you can now set the `mediaReadyOffset` value (previously known as `mediaPresentDelay`) to override the default value in the `hwparamstore.json` file. This allows the flexibility of changing the value in real-time. The json file still provides a default value that is used when the printer controller does not override it.

2.6 Deprime Without Bulk Ink Supplies

The system can now be deprimed without bulk ink supplies being connected. Previously, the commands would fail if the bulk ink supplies were not connected.

2.7 First Page Declog Larger than Interpage Gap

First page declog can now be set larger than the secondary page interpage gap.

2.8 Improved Narrow Media Support

The X-offset limit was removed to support printing on narrower media.

2.9 Bulk Ink Supply Ink Level Tracking Accuracy Improved

The PES interface now reports a more accurate remaining ink level for the bulk ink supplies. This value is still an estimate and is not intended to be used to determine when bulk ink supplies are empty. Use the INK_LOW and INK_OUT events instead.

3 Bug Fixes

The section includes corrections implemented in this release.

3.1 Internal RIP Mode – Multiple Issues Fixed Related to Canceling Jobs

Canceling jobs in internal RIP mode has been fixed such that when using the `ClearJobQueue` command or canceling jobs when there are multiple chained jobs in the queue no longer results in errors.

3.2 LiveUSB Drive Created on a Mac Does Not Fail

Installation with a LiveUSB drive created with a Mac computer no longer fails due to the hidden file that is created on a Mac.

3.3 Resolved Possible Fault During Pre-Job State

The print unit no longer faults when command `pes.prepareToPrint()` is called and then command `pes.finishPrinting()` was called while still in the PRE_JOB state.

3.4 Pausing Short Jobs No Longer Causes a Fault

Attempting to pause a job that is too short used to cause a fault. Now, the job will not fault and will instead print. The pause will not occur as there are not enough buffered pages to pause.

3.5 Interpage Spit Bar Fixes

Interpage spit bars are now correctly scaled and offset to match the settings in the `hwparamstore.json` file. Previously, the scaling was twice as large as defined and color offsets were not considered.

3.6 Resolved Job Chaining Fault

Previously, attempting to chain jobs that had different vertical resolutions would cause a fault. Now, there will not be a fault and instead the chain will be broken and printed accordingly.

4 Known Issues

There are no known issues in this release.

5 Software Installation and Upgrade

5.1 Prerequisites

CAUTION: The software upgrade will delete any existing data.

Follow the instructions in this section to install or upgrade the DuraFlex system software.

Perform the following tasks before a new software installation or upgrade:

- Create a DPCA LiveUSB drive according to the instructions in the *DuraFlex Installation and Commissioning Guide*.
- Record the Datapath PCA serial number from the label on the electrical enclosure.
- Save any configuration file or logs, e.g. `hwparamstore.json`, etc.
- Save any custom ICC profiles or dither profiles.

5.2 Installation/Upgrade Procedure

To install or upgrade software:

1. Set up the system network.
2. Power off DuraFlex.
3. Insert the DPCA LiveUSB drive into the USB port on the printing system.

Figure 1 – Connect LiveUSB Drive via USB Port

4. Power on the DuraFlex system.
5. Log in to DuraFlex using PuTTY with username `duraflex` from the Client PC.

Note: Alternatively, you can also use Windows 10 SSH if that is available.

No password is required. When the login is successful, the PuTTY terminal should respond with a shell prompt: `[duraflex@servername ~]$`

6. In the PuTTY terminal, enter the command below to install the new software on DuraFlex:

```
dtpDpcaSwInstaller
```

7. Wait for the PuTTY terminal to display the following response indicating the upgrade is complete:

```
Installation Complete
Press Return to quit
```

8. While the DPCA LiveUSB drive is still inserted, press **Enter**.
9. Wait until the print unit boots from the DPCA LiveUSB drive again and obtains an IP address.

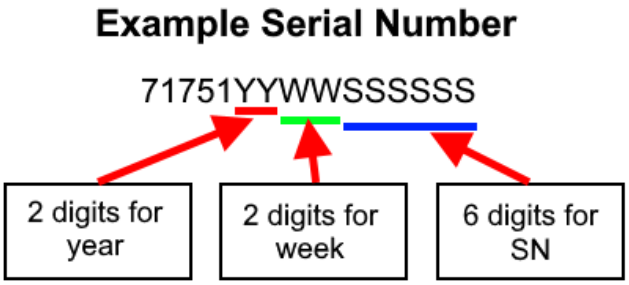
10. Ping the IP address of the print unit. Verify that the print unit successfully responds.
11. Power off the print unit.
12. Remove the DPCA LiveUSB drive.
13. Power on the print unit and wait until the print unit boots up.
14. From the Client PC, log in to DuraFlex using PuTTY with credentials (`duraflex` for both username and password).
15. In the PuTTY terminal, enter the command below to set the hostname:

    ```
    sudo hostnamectl set-hostname rsYYSSSSSS.local
    ```

    The hostname is based on the Datapath PCA serial number labelled on the electrical enclosure.

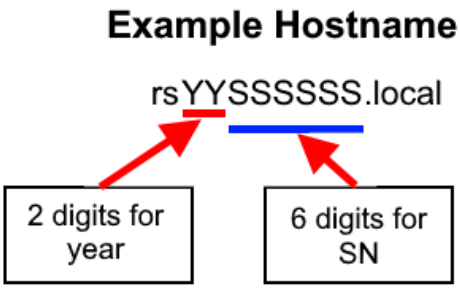
    The serial number includes 2 digits for year, 2 digits for week, and 6 digits for the serial number (SN).

Figure 2 – Fields in Serial Number



The hostname consists of the following fields, including 2 digits for year and 6 digits for SN, with `.local` added to the end.

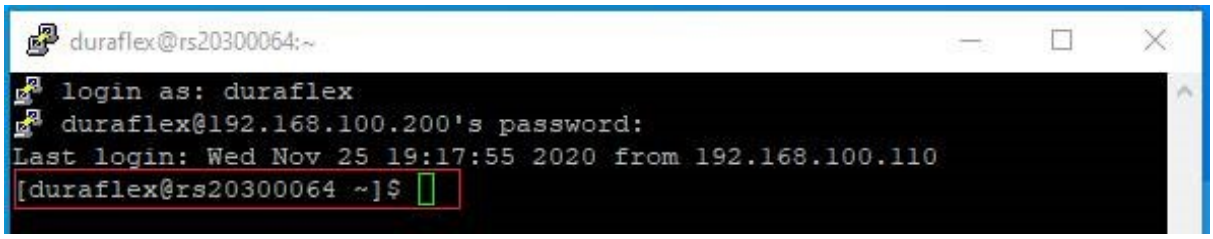
Figure 3 – Fields in Hostname



For example, if the serial number is `717512020300062`, the hostname will be `rs20300062.local`.

16. Exit the PuTTY terminal. Log in again using the same credentials. Verify that the hostname is shown on the login prompt. *Figure 4* shows an example.

Figure 4 – Hostname on Login Prompt



17. Edit the `hwparamstore.json` file to configure the DuraFlex print unit:

    a. From the Client PC, use PuTTY to log in to DuraFlex.
    b. In the PuTTY terminal, use the text editor to open the file:

    ```
    sudo vi /opt/memjet/kareela/data/hwparamstore.json
    ```

    c. Refer to the *DuraFlex Installation and Commissioning Guide*, specifically Section 6.1 Configure the Printing System, to make necessary changes.
    d. Save and close the file.

5.3 Set RIP Mode

Starting from software release R4.2.x, the print unit will initially boot in Technictl mode. Therefore, it is required to set the RIP mode to internal or external.

1. Log in to DuraFlex using PuTTY with the credentials (`duraflex` for both username and password).

   When the login is successful, the PuTTY terminal should respond with a shell prompt:
   `[duraflex@servername ~]$`

Note:	Alternatively, use Windows 10 SSH if that is available. For example, `ssh duraflex@192.168.100.200`

2. Change directory to the `hwparamstore.json` file location:

   ```
   cd /opt/memjet/kareela/data
   ```

3. Open and edit the `hwparamstore.json` file:

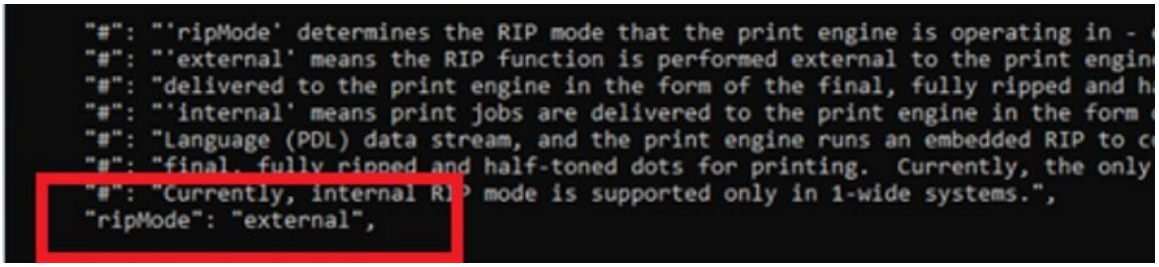
   a. Run the command to open the text editor:

   ```
   sudo vi hwparamstore.json
   ```

   b. Change the value of the `ripMode` variable to match the desired RIP mode.

   For example, if changing the RIP mode to the external RIP mode, set the `ripMode` variable to "`external`"; as shown in *Figure 5*.

Figure 5 – Set RIP Mode in the JSON File



Similarly, if the internal RIP mode is intended, set the `ripMode` variable to "`internal`".

c. Save the `hwparamstore.json` and exit from the `vi` text editor.

4. Choose one of the options to enable the same RIP mode that you have set in `hwparamstore.json`.

Option 1 – Use the PuTTY terminal:

a. Disable the current RIP mode:

```
dtpStop
```

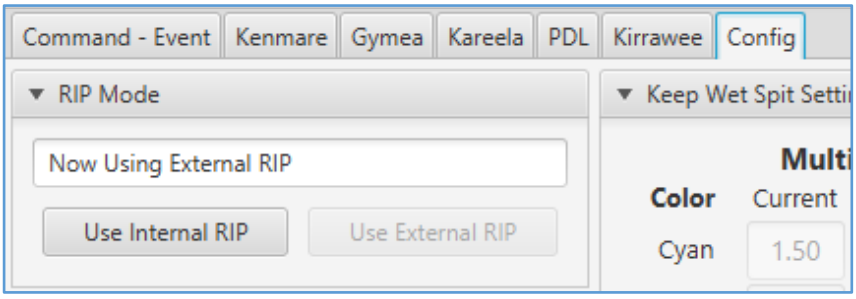
b. Power cycle DuraFlex.
c. Enable the internal or external RIP mode:

```
dtpUseInternalRip or dtpUseExternalRip
```

Option 2 – Alternatively, use the Demo GUI:

a. In the Demo GUI connected to the print engine, select the **Config** tab.

Figure 6 – Use RIP Mode



b. In the RIP Mode section, enable the desired mode:

- To enable the Embedded RIP mode, click **Use Internal RIP**.
- To enable the External RIP mode, click **Use External RIP**.

To change the print mode, the print unit must be in the **OFF** state. Otherwise, a shutdown confirmation (*Figure 7*) will pop up. Click **Yes** to shut down the print engine.

Figure 7 – Shutdown Confirmation Window