HARLEQUIN® multiRIP™

Release Notes

Version 10.0r1

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GLOBAL GRAPHICS®
software

Contents

Harlequin® MultiRIP™ v10.0r1 Release notes

Global Graphics Software (GGSL) is pleased to announce the release of the Harlequin® MultiRIP™ v10.0r1 (HMR).

The Harlequin MultiRIP v10.0r1 is the same as v10.0r0 with the exception of the changes and issues detailed below. For information about the changes and issues with v10.0r0 please consult the Release note provided with that release.

This release note contains the following information:

- "New features and improvements" on page 3
- "Notes about this release" on page 4
- "Change details" on page 7

1 New features and improvements

Please note the following new features:

- Allow HXM/HDS spot color angles to be selected. For more information see "Spot color screen angle selection for HXM and HDS—368116" on page 6.

- Improve the memory requirements for Harlequin VariData (HVD).

- Add Japanese resources for pdfraster in HMR v10.0r1.

- Update the plugin installer to include the new release of the Oki c9650 plugin (v1.7r0).

- Add the ability to see license details using the LDK tool. For more information see "LDK tool "Display Keys" option" on page 5.

- The Plugin API now uses the actual RIP platform code instead of the licence platform so that 32-bit plugins work when a 32-bit RIP is run using a 64-bit licence for HMR 10 with a 32-bit upgrade.

- Provide a method to report the actual value of max active threads to allow confirmation that passwords and configurations have been correctly applied. For more information see "Reporting the actual value of MaxThreads" on page 4.

- HVD now works with parallel pages and a pdfexecid "chunked" workflow.

- Make the LDK activation tool localizable and provide a Japanese translation.

- Allow multiple LDK licences to be used on a single computer.

- Global Graphics can now provide a single LDK Product Key that can be used with a 32- or 64-bit RIP build, rather than requiring different keys for the two builds.

- Provide an example of how to deal with halftone rasters on a 64-bit OS. See "Plugin Kit example—opeg3" on page 7.

2 Notes about this release

This sections contains notes about and changes made to the release of HMR v10.0r1.

2.1 Migrate and HXM/HDS screening

Because of the recent changes made to HXM and HDS screening, the Migrate utility must be used when upgrading from v10.0 to v10.0r1. For more information see "Spot color screen angle selection for HXM and HDS—368116" on page 6.

Please note the following points before attempting to migrate:

- You must use the Migrate utility provided with v10.0r1. That is, the Migrate utility from v10.0 will not work correctly.

- The HXM/HDS screens must be installed into the v10.0r1 RIP before an attempt is made to migrate.

- The imported (migrated) page setups will continue to use default screen angles for any spot colors explicitly listed; they may now be edited to assign screen angles to those spot colors if required.

2.2 Procsets changed

The only procset changed between HMR v10.0r0 and HMR v10.0r1 is:

HqnPageSetupConf.

2.3 Naming and version numbering

The installer announces itself as "Harlequin MultiRIP". In the logfile, the RIP announces itself as "RIP Version 40.0 Revision 1 XX-bit Edition".

Note: XX is either 32 or 64, and v40.0 Revision 1 represents v4.0r1 of the core RIP library.

2.4 Operating System information

You should note the following:

- WoW64 subsystem on Windows Server 2012.

  The WoW64 subsystem of the Windows operating system is a RIP requirement and must be present. In particular, you should check that it is present on Windows Server 2012.

- Windows XP must have SP3 installed.

- Windows 7 and Windows Server 2008 R2 must have SP1 installed.

- Windows 8.1 and Server 2012 R2 are not yet supported.

2.5 Reporting the actual value of MaxThreads

The values returned for `/MaxThreads` in `currentsystemparams` show the settings that were actually made after taking the limits set by `SwStart` and the current password/license for multithreading limits into account. Note that this doesn't tell you how many threads are actually running at any one time.

2.6 LDK tool "Display Keys" option

A **Display Keys** option is added to the LDK tool which allows you to display further information about the various LDK licenses you have. By selecting a key in the displayed list, information about that key is displayed in the lower area of the dialog.

For example you can view; the Customer number, Security number, Resolution limit, RIP version, and maximum number of threads allowed.

In addition, you can save information about all your keys to a text file by selecting **Save**.

For more information see below and the Sentinel LDK Security document.

2.7 Sentinel LDK notes

When you install a new RIP using the LDK and you activate your product key, the RIP will run.

If you uninstall the RIP and remove the LDK runtime and then re-install the RIP and LDK runtime using the "skip this step..." option when prompted to enter the key, the RIP should run because the SL key should still be present.

If, however, the RIP does not run, claiming that no licenses are available, you should re-start the Sentinel Local License Manager service. To do this, right-click **Computer** and select **Manage**. Select **Services and Applications** in the left windows followed by double-clicking **Services** in the right window. This displays all the available services. Scroll down and select **Sentinel Local License Manager** followed by **Restart.**

Generally, if you have a problem with the RIP not starting and you have already activated your product key, restart the Sentinel Local License Manager service.

2.8 pdfexecid

From HMR v10.0r1 `pdfexecid` can safely be used with HVD. For more information see below.

2.9 Using HVD with page ranges

A large job can be split into "chunks" of data with the use of `/PageRange`. Here, for example, the job is split into chunks of 10 pages:

```
/PDFContext
(%E%//TestJobs/largejob.pdf) (r) file << >> pdfopen  def
PDFContext << /PageRange [ [1 10] ] >> pdfexecid
PDFContext << /PageRange [ [11 20] ] >> pdfexecid
PDFContext << /PageRange [ [21 30] ] >> pdfexecid
PDFContext << /PageRange [ [31 40] ] >> pdfexecid
PDFContext << /PageRange [ [41 50] ] >> pdfexecid
PDFContext pdfclose
```

While running this PostScript language fragment in an HVD setup, if, for example, during the first page range (1 to 10) some variable data is retained for re-use but the scan is aborted during a subsequent range, the scan for variable data is aborted for the rest of the job. Thus, if you are using small chunks of data and are seeing jobs aborting the HVD scan when you think there should be re-use of data, you should increase the `/OptimizedPDFScanLimitPercent` value, possibly up to the maximum of `100%`, in which case, the HVD scan will continue for the whole job.

Note: If you are writing a PostScript language control stream that needs to execute chunks from different PDF files you should call `pdfclose` on the first PDF file before calling `pdfexecid` on a chunk from the second to ensure that HVD scanning is triggered for the second file.".

2.10 Spot color screen angle selection for HXM and HDS—368116

From HMR v10.0r1, if you are editing a halftone (screened) style and using Harlequin Cross-Modulated (HXM) screening or Harlequin Dispersed Screening (HDS) along with additional spot colors, the selection of an equivalent angle for each named spot color is provided. For example, you can specify that "Pantone Reflex Blue" should use the "Cyan" angle, and "My Red" should use the "Magenta" angle. You cannot enter a specific angle for each spot color but you can select one of Cyan/Magenta/Yellow/Black from a drop-down menu. If (Other colors in job) is set to Yes or Not Blank, spot colors that are not specified by you in the dialog are printed using the Default screen.

This change only applies to Threshold and HDS screens. That is, it does not apply to Core Module screens. If a modular screen is selected for a spot color, the RIP ignores the selection.

2.11 Using HDS and HXM screens with non-square resolutions—369220

When using HDS or HXM screens with non-square resolutions the Rotate screens according to page rotation option must not be selected as part of the page setup. If this is attempted with a v9.0rx RIP, the RIP generates an ioerror/Offending Command: setscreen. With HMR 10.0.x the error generated is:

```
%%[ Error: configurationerror; OffendingCommand: pagedevice; Info: Can't rotate
threshold screen anisotropically ]%%.
```

To work around this; open the Separations Manager for your page setup with the HDS/HXM screen selected. The selected HDS/HXM screen is displayed. Change the selection to another non-HDS/HXM dot shape, for example, "Round". In the lower part of the dialog Rotate screens according to page rotation is displayed. De-select that option then re-select the required HDS/HXM screen and save the separation style. The RIP is now able to output the selected HDS/HXM screen with a non-square resolution.

2.12 HEDS with older plugins

You should note that an older plugin that uses variable-sized dots by installing HEDS into the RIP will not work with HMR 10.0rx. However, an older plugin that creates the variable-sized dots internally within the plugin itself should continue to work if the RIP just treats it as contone.

2.13 CIP3 plugin

A new version (v1.5r0) of the CIP3 plugin was made available for use with HMR v10.0.0 because previous versions are not compatible with this RIP version. Because of this incompatibility migrating CIP3 settings from earlier versions to HMR v10.0rx can cause problems. To successfully migrate CIP3 to HMR v10.0rx from an earlier RIP, such as v9.0rx, use one of the following procedures.

- Before using Migrate, ensure you create a CIP3 page setup in the target RIP using the newer v1.5r0 CIP3 plugin. This ensures that, even after migration, the color setup styles for CIP3 called CMYK Composite (Pixel) and CMYK Composite (Frame) will be correct and will work.

  However, after migration you will also see two color setup styles called CMYK Composite (Pixel)_M00 and CMYK Composite (Frame)_M00. These have been migrated from the earlier RIP, and will be used by any page setups that were also migrated, but will not work in HMR 10.0rx.

  Change the relevant "From" page setups to use the color setup styles without the _M00 suffix, so that they work again. Once this is done for all the old page setups you can delete the broken _M00 color setup styles using the Separations Manager.

- Before using Migrate, apply the following procedure to the "From" RIP. That is, the HSR v9.0rx RIP when migrating from v9.0rx to v10.0rx, or the v10.0r0 RIP when migrating from v10.0r0 to v10.0r1:

Carefully edit the file: **SW\Config\Devices\DevCSS\CIP3.X00** replacing each occurrence of `/Screened true` with `/Screened false`.

Proceed with the migration, and afterwards the CIP3 plugin should have normal, working color setup styles in both the "From" and "To" RIPs.

The same procedures can be used when migrating from v10.0r0 to v10.0r1 if your v10.0r0 RIP contains an older CIP3 plugin (earlier than v1.5r0) for whatever reason, or if it contains CIP3 setups that were migrated from an earlier RIP without following one of the above procedures.

2.14 Plugin Kit example—opeg3

The "opeg3" example can accept halftone rasters, but in a 64-bit build it treated them as though they were 32-bit packed. For HMR v10.0r1 this has been corrected. For more information see the Plugin Kit Manual section 5.6.6 "Halftone Raster Packing -1-bpp" (issue 411 or later).

2.15 Plugin Kit example—opeg5

A plugin example "opeg5" is available as part of the plugin kit v20.0 or later. This example shows how to use a thread to process data. Each time the "output thread" gets passed a new raster it "sleeps" for a while (to represent the time spent "processing" the data), and then the raster data itself is discarded. The plugin also shows how to report progress from the output thread using timelines. The APIs for handling threads and timelines are obtained using a PFI function to access the RDR API interface for API discovery. For more information see sections 17 and 18 of the Plugin Kit documentation.

3 Change details

Below is a list of the changes made between HMR v10.0r0 to HMR v10.0r1. The table is uncategorized, in numerical order:

Reference	Description
300101	Provide a method to report the actual value of max active threads to allow confirmation that passwords and configurations have been correctly applied. For more information see the "Reporting the actual value of MaxThreads" on page 4.
	Changes made in the RIP binaries
301067	Implement an alternative approach to HVD scan hashing (GUID generation) to prevent collisions and increase speed.
	Changes made in the RIP binaries.
303632	Implement a change so that a customer-supplied file does not cause a RIP failure when using modular screens and TrapPro (SW Call #121339, SW Call #121502).
	Changes made in the RIP binaries.
347978	Add a new section to the API Reference manual (4.13.1) with an example showing how to use timelines with an interrupt event to perform cancel job functionality (SW Call #119918, SW Call #122631, SW Call #123131).
	Changes made to the API Reference manual.

Table 1 Changes made for Harlequin MultiRIP v10.0r1

Reference	Description
358894	Added two new sets of screens for Flexo printing, normalized to the 0-90 quadrant.
	The (7.5, 37.5, 82.5, 67.5) set in HPS should be used with this set of angles in the CSS: (97.5, 37.5, 82.5, 67.5) and the (22.5, 52.5, 7.5, 82.5) set should be used with this set of angles in the CSS: (112.5, 52.5, 97.5, 82.5).
	Changes made in the build system.
367774	Implement a fix to the PDF string decryption of empty strings so that a customer-supplied encrypted PDF 1.4 file doesn't error with Error: rangecheck; Offending-Command: getinterval (SW Call #122775).
	Changes made in the RIP binaries.
367964	Make a change so that HVD works with parallel pages and a pdfexecid chunked workflow.
	Changes made in the RIP binaries.
368116	Allow HXM/HDS spot color angles to be selected. For more information see "Spot color screen angle selection for HXM and HDS—368116" on page 6.
368198	Implement a change so that interrupting ICC profile installation does not cause the RIP to crash (SW Call #122868).
	Changes made in the RIP binaries.
368228	Refine Omit separation behavior when setting contone mask to 1 (SW Call #122793).
	Changes made in the RIP binaries.
368351	Implement a fix for a customer-supplied TIFF file which output corrupted (SW Call #122941).
	Changes made in the RIP binaries.
368353	The SOAR ROAM Server works with screened output from a 64-bit RIP. A change was made to link the ROAM server with a new RIP compound.
	Changes made in the RIP binaries.
368400	Implement a fix to prevent artifacts caused by incorrect stroke widths on faux bold text (SW Call #122963).
	Changes made in the RIP binaries.
368500	Implement a change so that a customer-reported issue with contone masks is fixed (SW Call #122977).
	Changes made in the RIP binaries.
368639	Make the LDK activation tool localizable and translate to Japanese.
	Changes made in the RIP binaries.
368715	Add Japanese resources for pdfraster in HMR v10.0r1.
	Changes made in the RIP binaries.
368728	Implement a change so that the base map size is increased when necessary. This fixes an issue with a customer-supplied PDF file which output very slowly or caused a configuration error using previous RIP versions (SW Call #123023).
	Changes made in the RIP binaries.

Table 1 Changes made for Harlequin MultiRIP v10.0r1

Reference	Description
368748	Add a handler with highest priority SW_EVENT_OVERRIDE to correct the timeline progress when using single-if output with anti-aliasing (SW Call #123044). Changes made in the RIP binaries.
368795	Implement a change to allow a localization to specify the LDK feature which protects it. The LDK feature ID for a localization can be specified using the KeyFeature tag in the messages file header. Feature IDs are allocated by GGSL. Changes made in the RIP binaries.
368850	Update the plugin installer to include the new release of the Oki c9650 plugin (v1.7r0). This version works correctly with 64-bit. Changes made to the build system.
368875	Change the maximum queue length so that it is effectively unlimited and raise the level at which the messages are written to the log. This will prevent multiple Disabling/Re-enabling queue messages from appearing in the RIP monitor when the RIP is used with SOAR (SW Call #123074). Changes made in the RIP binaries.
368936	Allow multiple LDK licences to be used on a single computer. Changes made to the RIP security.
368937	Add the ability to see license details using the LDK tool. For more information see "LDK tool "Display Keys" option" on page 5. Changes made in the RIP binaries and security.
368982	Update Global Graphics logo on HMR "About" dialog. Changes made in the build system.
369107	Make a change so that the Plugin API uses the actual RIP platform code instead of the licence platform so that 32-bit plugins work when a 32-bit RIP is run using a 64-bit licence for HMR 10 with a 32-bit upgrade. Changes made in the RIP binaries.
369121	Make a change so that HMR 10.0r1 RIPs use the LDK tool v1.1. Change made in the installer and build system.
369149	Implement a fix for an issue where the **No color management** and **Override black generation in job** options, when enabled, resulted in incorrect output. (SW Call #123196). Changes made to the HqnPageSetupConf procset.
369152	Implement a change to provide an example of how to deal with halftone rasters on a 64-bit OS to prevent corrupt output from the Plugin Kit OPEG3 example with 64-bit RIP. Changes made to the plugin.
369165	Implement a change to improve RIP performance when using Single output modes. (SW Call #123206). Changes made to the RIP binaries.

Table 1 Changes made for Harlequin MultiRIP v10.0r1

Reference	Description
369201	Implement a change to improve the output speed when using the None device (SW Call #123206). Even though the output speed of the None device is improved it is recommended that this device is not used for performance comparison between v9.0rx and v10.0rx RIPs.
	Changes made to the RIP binaries.
369220	Using HDS/HXM screens with a non-square resolution (SW Call #123226). See "Using HDS and HXM screens with non-square resolutions—369220" on page 6.
	Changes made to the documentation.
369249	Make a change to substitute an empty string for a NULL to prevent a RIP failure when the /JobName user parameter is set to an empty string (SW Call #123231).
	Changes made in the RIP binaries.

Table 1 Changes made for Harlequin MultiRIP v10.0r1

4 Documentation change details

This section contains details of the various documents which have been created or updated for HMR v10.0r1:

Document	Status	Format
API Reference Manual	Updated	PDF
Extensions Manual	Updated	PDF
Installation Guide (Windows)	Updated	PDF/MIF
OEM Manual	Updated	PDF/MIF
Plugin Kit Manual	Updated	PDF
Sentinel LDK Manual	Updated	PDF
Technote Hqn077—HXM Screening Module	Updated	PDF/MIF

Table 2 Documentation changes

Documentation is available on the support FTP site at: http://support.globalgraphics.com/login.html. Go to: **/HQN_Common/HMR_Doc/**.

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