

HARLEQUIN® multiRIP™

Release Notes

v11.0—October 2015



GLOBAL GRAPHICS®
software

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Harlequin® MultiRIP™ v11.0r0

Release notes

Global Graphics Software (GGS) is pleased to announce the release of the Harlequin® MultiRIP™ v11.0r0 (HMR).

This Harlequin MultiRIP release is delivered under embargo and may not be delivered to customers or announced publicly until after the Global Graphics launch on 2nd March 2016. Beta sites under NDA are allowed.

Additional functionality will be delivered in v11.0r1 made available in Feb 2016. More details can be found in the New Feature document supplied with the HMR OEM bulletin in August 2015.

This release note contains the following information:

- [“New features and improvements” on page 3](#)
- [“Notes about this release” on page 5](#)
- [“Supported operating systems” on page 7](#)
- [“Plugins and utilities” on page 7](#)
- [“SOAR support” on page 8](#)
- [“Known issues” on page 8](#)
- [“Documentation change details” on page 8.](#)

I New features and improvements

Please note the following changes made to HMR v11.0r0:

- [“Quality” on page 3](#)
- [“Speed” on page 4](#)
- [“Memory” on page 4](#)
- [“Harlequin Variable Data” on page 4](#)
- [“User interface” on page 5](#)
- [“Maintenance and various fixes” on page 5.](#)

I.1 Quality

In v11.0r0 the following improvements are made to the correctness of rendering, color and screening:

1.1.1 Image snapping

Automated images snapping is added which recognizes incorrectly placed image tiles and automatically adjusts them so that they are aligned correctly. This prevents device pixel-wide white lines from appearing on the image.

1.1.2 PDF screening for flexographic printing

The PDF specification is unambiguous about which screen should be used for areas of a page that involve live PDF transparency. However, these rules are not appropriate for cases where it's important to apply the screen associated with each object in the PDF with that object. To overcome this a switch on the PDF options dialog is added which allows the screen specified in the object to be used rather than following the PDF specification.

This option chooses the screen selection to use for transparent regions.

Default	Use the page default screen for non-fully opaque objects.
Use topmost	Use the screen from the top-most object for all objects. In all cases, fully transparent objects are ignored.

The behavior when `Default` is selected is in-line with the PDF specification.

The `Use topmost` setting is of particular value in workflows where it is important to use the halftones specified in the supplied PDF file, such as in flexographic printing.

For more information see section “8.12.8.6 Screening selection” in the OEM manual.

1.2 Speed

HMR v11.0r0 shows the most significant speed improvements in the following areas:

- Image-heavy work such as photobooks and catalogs.
- Jobs with heavy use of live PDF transparency.
- PDF files containing a large number of pages where a large number of small ranges of pages are printed in a single request, such as when all odd or all even pages of a long job are output at one time.

1.3 Memory

Considerable work has been carried out to reduce the memory required for many RIP operations, and to improve the response when the RIP cannot access as much RAM as it would like to process the job at full speed. This means that you are much less likely to see VMerror messages.

1.4 Harlequin Variable Data

The following improvements and additions have been made to HVD.

1.4.1 Position-independence

The external mode of Harlequin VariData has now been extended to allow the same graphic to be rendered only once even if it's used in multiple different positions on pages throughout the document.

Position-independence is especially valuable:

- When a page layout “flexes” with the specific data included in each instance, e.g. a direct mail piece where graphics and images are moved down the page if one recipient's address is longer than others.

- When many instances of a direct mail piece or label are imposed together into a single PDF “page” representing an imposed sheet, and where significant graphics on each imposed instance are selected based on the recipient’s metadata and therefore appear pseudo-randomly laid out when the sheets as a whole are viewed.

You should note the following:

- There is currently no limit to the size of elements cached when using position independent eHVD, and in some rare cases these elements can be much larger than the page. If this does occur you can workaround by turning off the position independent parameter.
- iHVD performance is a balance between memory use and speed and for v11.0r0 is not yet optimized. While many jobs are processed much faster some jobs have been observed to process slower than previous versions. Work on improving performance is ongoing.

1.4.2 Specific use of PDF/VT hints

The Harlequin RIP has historically processed most PDF/VT files very quickly. HMR v11.0r0 can now explicitly take advantage of the “hints” that can be included in a PDF/VT file, as specified in ISO 16612-2:2010.

1.5 User interface

In HMR 11.0.r0 the output monitor window is now slightly larger, reflecting the use of significantly larger and/or higher resolution monitors over the last few years.

In addition Select All, Select Page and Select Job buttons are added below both the Active and Held queues. These new options allow you to select one entry in the queue and then one button to select one of:

- All separations for that page/sheet.
- All page buffers for that job.
- All page buffers in the whole queue.

For more information see section “4.3.1.1 The Active queue and Held queue” in the OEM manual.

1.6 Maintenance and various fixes

- Added improvements for the handling of badly formed PDF files or embedded fonts that do not correctly follow their respective specifications.
- HMR is now fully compatible with GMG PDF files.
- Vignette detection is now deprecated. Note that this might change the output of some very old PostScript language and PDF files.

2 Notes about this release

This section contains notes about the changes made to v11.0r0:

2.1 Security

HMR v11.0r0 does not support HLS security, and won’t run with your existing SuperPro dongles; you must use LDK security.

Because v11.0r0 is a major upgrade it requires enabling in your RIP licenses.

All demo LDK licenses created from now on automatically include support for v11.0r0. Alternatively, you can upgrade your existing demo licenses.

2.1.1 Timed software licenses (demo RIPs)

A demonstration RIP can be supplied with a timed software license.

Alternatively, a RIP can be supplied with a watermarked license, which is timed and has a watermark and drop-dead date. A RIP of this type is for evaluation purposes only.

The date at which a watermarked RIP will cease to work is 2nd March 2017.

2.2 Naming and version numbering

The installer announces itself as “Harlequin MultiRIP”. In the logfile, the RIP announces itself as “RIP Version 50.0 Revision 0 64-bit Edition”.

Note: v50.0 Revision 0 represents v5.0r0 of the core RIP library.

2.3 LDK runtime version

The LDK runtime version for this release is v7.32.

2.4 Procset changes

The following procsets have been changed between HMR v10.1r2 and v11.0r0:

HqnCalibrate, HqnColorBar, HqnColorDatabase, HqnControl, HqnErrorHandler, HqnExternalFile, HqnFontConverter, HqnImpose2, HqnInputTypes, HqnLayout, HqnLocal, HqnMedia, HqnMissingFonts, HqnNamedColor, HqnPageSetupConf, HqnParseComments, HqnPDFPages, HqnPushCalibration, HqnUNC.

The following procset is removed from v11.0r0:

HqnFilterPipeline.

2.5 Plugin kit

To build plugins for use with HMR 11.0r0 you must use MSVC 2013.

Note: Run Length Encoding (RLE) is not supported in v20.2r1 of the plugin kit.

2.6 AllowColorManagement key

The values used in NamedColor databases defined in DeviceCMYK has always been interpreted as matching the CMYK input characterisation identified in ColorPro and has therefore been color managed as such. In v11.0r0 a new optional key, /AllowColorManagement is added to the named color database dictionary. This key controls whether color management may be applied to spot colors converted to their alternate space by a named color interception. The key is optional and if not present defaults to true.

Note that defining a NamedColor database using a DeviceN color space containing four channels matching CMYK could be used in HMR v10 and earlier to avoid color management of the database results. From HMR v11.0r0 those DeviceN values would be color managed in the same way as DeviceCMYK.

If your named color database uses HqnColorDatabase, you should add a new optional key, /AllowColorManagement false. Similarly, if your named color database is defined directly as a PostScript language resource, the same optional key should be added to the resource dictionary.

3 Supported operating systems

The Harlequin MultiRIP v11.0r0 is formally supported on the following operating systems:

Harlequin MultiRIP v11.0r0 Windows

64-bit	Windows 7 SP1 (excludes Starter edition)
	Windows 8.1 SP1 (excludes Windows RT)
	Windows Server 2008 R2
	Windows Server 2012 R2

Table. I Supported operating systems

Note: HMR v11.0r0 is 64-bit only; it is not supplied as 32-bit.

Note: Global Graphics is not yet ready to sign off HMR as being formally supported under Windows 10 workstation. This will be completed for v11.0r1 available in Q1 2016. Also note that the Server version of Windows 10 is not yet released by Microsoft; a schedule for formally supporting HMR on that operating system will be provided when more details are available from Microsoft.

Note: On Windows Server 2012 R2, if HMR is not installed in the default directory, but for example, on a second disk, you have to right-click the executable and select **Run as Administrator** in order for it to run.

Note: If you try to activate the LDK on Windows 7 without SP1 the error failed to setup extended errors is generated. It is recommended that you update the operating system by applying SP1. Alternatively, see <http://support.microsoft.com/kb/975858/en-us>. You could, if you wish, use a different machine for the activation. The same error is possible on Windows Server 2008 R2.

4 Plugins and utilities

Any plugins distributed with this release are supplied solely for use with the Harlequin MultiRIP v11.0r0.

The TIFF/IT output plugin is removed from the Additional plugins installer and is not supported in v11.0r0.

Note: The Harlequin MultiRIP will support OEM and third-party plugins using input and output, color management and screening APIs.

The following table lists the standard and optional plugins and the various utilities available with the Harlequin MultiRIP v11.0r0:

Availability	Plugin/Utility	Version
Standard	Migrate	8.0r0
Standard	Genlin	3.1r0
Standard	SetGold	5.2r0
Standard	LDK utilities	1.5r0
Standard	Socket	3.2r2
Standard	Spool folder	3.6r2
Standard	PDF Raster	1.4r2
Standard	Testdev (none)	3.2r3

Table I Standard and optional plugins

Availability	Plugin/Utility	Version
Standard	TIFF	4.3r2
Standard	CRD Generator plugin	50.0r0
Standard	XPS PrintTicket Device	11.0r0
Optional	CIP3	1.6r0
Optional	OKI C9650 laser printer	1.7r1
Optional	NT Pipe	1.1r2
Optional	Plugin Kit	20.2r1

Table 1 Standard and optional plugins

5 SOAR support

HMR v11.0r0 supports the SOAR host, job-logger and ROAM server.

6 Known issues

This section details known issues.

6.1 Channel_id with HTM screens causes error—373363

An issue has been found in the halftone modular screening interface (HTM) that happens when separations are omitted; the channel IDs might be incorrect. This can cause problems for customers using Auraia screening who are omitting separations. The work around is to set `Print?` to Yes for all colorants (or at least K) and so produce blank plates. Alternatively, you could check in the output monitor and delete the unwanted plates.

6.2 Separation omission fails on images if erase is not white—373385

When using separation omission the images are checked, but if the erase color is not white it fails. That is, the RIP will not omit separations containing images.

6.3 Incorrect output—373416

Internal QA testing has revealed that a test job is output incorrectly when multithreading, parallel pages and OverprintPreview SpotsOnly are activated. This issue also affects PDF/X-4 files.

7 Documentation change details

This section contains details of the various documents which have been created or updated for HMR v11.0r0:

Document	Status	Format
OEM Manual	Updated	PDF/MIF
Extensions Manual	Updated	PDF
API Reference Manual	Updated	PDF

Table 2 Documentation changes

Document	Status	Format
Localization Release Notes	Updated	PDF
Installation Guide	Updated	PDF
Hqn 077—HXM Screening Module	Updated	PDF/MIF
Hqn089—Securing Multiple RIPs using the LDK	Updated	PDF
List of Technical Notes	Updated	PDF
Harlequin LDK Ordering	Updated	PDF

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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