



**The Harlequin RIP** continues to deliver key capabilities: performance, reliability, flexibility, excellent color quality, dependability and a rich feature-set for a variety of environments. The latest iteration - the Harlequin PLUS Server RIP (v8.3) - encompasses Global Graphics' next generation kernel technology, providing native PDF, PostScript® and XPS interpretation, and many 'workflow in a box'

prepress capabilities that are not always expected in a RIP including trapping, screening, proofing, color management, simple in-RIP imposition and font emulation. After nearly two decades, the descendents of the first Harlequin RIP continue to outpace the industry by offering an exemplary level of RIP performance.

### All native, all of the time

The Harlequin PLUS Server RIP (v8.3) handles XPS, PDF & PostScript natively, without first converting to another format, resulting in faster, more accurate throughput. The RIP supports the following Page Description Languages (PDLs):

- PDF 1.7, including PDF/X-1a, PDF/X-3 and PDF/X-4
- PostScript Language Level 3
- XPS v1.0.

### Color management & proofing

Available with the Harlequin RIP is Harlequin ColorPro™ which provides excellent color management, giving accurate, consistent and predictable color reproduction for a wide range of workflows including ICC profiles. Harlequin SetGold Pro™ is a utility for making high quality input and output profiles that are tightly integrated with the Harlequin RIP and optimizes the quality of the color output of the printing or proofing device. ProofReady™ plugins provide OEMs with the tools they need to deliver 'out of the box' color proofing. A Color Management Module (CMM) API also allows OEMs to easily add their own or third party color management.

# NO NEED TO FLATTEN TRANSPARENCY

The Harlequin RIP has processed PostScript files natively since 1988 and PDF files natively since 1997, including rendering of live PDF transparency since 2002. It also processes XPS, the print and document format from Microsoft natively.



### Screening

Global Graphics is at the forefront of leading edge screening techniques, holding extensive patents in screening technology. The Harlequin Screening Library™ (HSL™) is a collection of advanced screening techniques designed to resolve the quality issues faced by the pre-press and printing industry and includes our patented solution for high quality stochastic screening -Harlequin Dispersed Screening (HDS), as well as special screen sets developed specifically to support N-color applications and photo inks. Global Graphics' Harlequin Cross-modulated Screening (HXM) is a hybrid screen that builds on the best aspects of conventional and stochastic screening. A screening API also allows OEMs to easily plug in their own screening algorithms or a complete screening solution of their choice. Third party screening solutions such as Auraia from Hamillroad Software can also be used with the Harlequin PLUS Server RIP.

# In-RIP trapping

Our best-in-class, powerful trapping solution, Harlequin TrapPro™, is the result of extensive internal development. This in-RIP trapping technology handles trapping automatically, as the page is processed in the prepress workflow.

### **Font Emulation**

The Harlequin PLUS Server RIP (v8.3) has one of the most advanced font emulation capabilities on the market. Where there is a missing font, this feature can be switched on to make a typographically acceptable match with no text

# **NEW IN 8.3**

Support for Windows 7 and Mac OS X 10.6 (Snow Leopard)

Expanded support for hybrid and digitally modulated screens

Support for PDF Retained Raster on more classes of device

overflow and, where character spacing, weight and width matches that of the missing source.

### Simple Imposition

Simple Imposition is an optional in-RIP imposition capability which can be used for a bound work, N-up, cut & stack and step & repeat. Imposition management is accessed and edited easily through simple, graphical GUI controls accessed directly from the Page Setup dialog within the RIP.

## **JDF-**enabled

Harlequin RIPs are JDF-enabled; they are able to process jobs passed to them from a JDF source. Harlequin PLUS Server RIP (v8.3) and is designed for compliance with level 2 of CIP4's base Interoperability Conformance specification (ICS). The Harlequin RIP Genesis Release (v.7.1) was the first product to be officially CIP4 certified following testing by the Printing Industries of America./Graphic Arts Technical Foundation, against the Layout Creator to Imposition (LayCrImp) ICS and Base ICS.

# Harlequin PLUS Server RIP

FEATURES		
	Lladaguia CalayDya TM with aphanad	CLII
Color management	Harlequin ColorPro™ with enhanced GUI	
	Support for RGB, CMYK, N-Color and gray ICC version 2 and 4 profiles  Press/Proof Simulation	
	Color management module (CMM) API	
Output devices	Epson ProofReady™ plugin support (SWOP® certified on Mac OS 10.2.1 when used with Epson Stylus Pro 4000, SetGoldPro and Harlequin RIP Eclipse Release™ SP4)	
	Harlequin I bit and 2bit error diffusion screening (HEDS)	
	SetGold™ on Windows for gray balance and ink limiting	
	Optional proofing Plugins available for the following:	
	Epson	
	3800, 4800, 4880, 7800, 7880, 9800, 9880, 11880	
	Hewlett-Packard	
		00 Decignist TTT00 Decignist 130
	Designjet Z2100, Designjet Z6100, Designjet T1100, Designjet 130 An output plugin API enables Global Graphics' OEM partners to write plugins for many output devices	
Trapping	Harlequin TrapPro™ (optional) Trap Zone support with PDF files in Trap <del>Ppe</del> ™ 6	
Input File Types	PDF 1.0, 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7	TIFF/IT-P1 (optional)
	PDF/X-1a:2003 & PDF/X-3:2003	HDPhoto
	PDF/X-1a:2001 & PDF/X-3:2002	IPEG, GIF
	PDF/X-4	
	PostScript levels 1, 2 and 3	JPEG2000 (with PDF 1.5 or greater) DCS and DCS 2
	EPS	JDF 1.1a, 1.2 and 1.3
	XPS 1.0	ושן 1.11, 1.2 מוט 1.3
Output formats	<ul> <li>TIFF, supporting separated and composite colour, screened and contone output</li> <li>CIP3 for ink-key pre-setting (optional)</li> <li>PDF wrapped raster for soft-proofing of the actual results from the RIP</li> <li>TIFF/IT-P1 (optional).</li> </ul>	
Network Protocols	TCP/IP	
	AppleTalk® (Mac to OS X 10.5, PC to Windows Vista. Vista support requires 3rd party add-on)	
	Windows® named pipe, Unix®-style sockets	
	Serial	
Supplied Fonts	Base 35 core Linotype Fonts (optional)	
Font Support	PostScript Type 0, Type 1, Type 2 (CFF), Type 3, Type 4, Type32, Type 42 (TrueType) CID fonts, including TrueType based 'New CID' OpenType and TrueType collections (.ttc) Morisawa Fonts CID/OCF (optional, requires license with Morisawa) Demand Loadable Fonts (DLD1)	
Other font controls	User defined font substitution Font emulation Font rendering API	
Calibration	Calibration, dot gain, tone curve controls  Genlin™ Utility: auto-import of calibration values from the following devices:  • X-Rite 408, DTP41 series, DTP 32, DTP 12, 938, DTP34  • GretagMacbeth Eye-One	



# Harlequin PLUS Server RIP

## **FEATURES** (continued)

## **Screening**

Support for AM/FM screening tuned for a variety of devices:

- Renowned Harlequin Precision Screening™ (HPS)
- Harlequin Dispersed Screening™ (HDS). Patented FM/Stochastic screening (Optional)
- Harlequin Error Diffusion Screening™ (EDS) (Optional)
- Harlequin Cross-Modulated screening (HXM) (Optional)
- Screening API
- Third-party screening such as Auraia from Hamillroad Software

# **SYSTEM REQUIREMENTS**

Windows XP, Vista, 7, Server 2003 and Server 2008

Processor: Pentium-based processor

Compatible with 32- and 64-bit operating systems (can access more RAM under 64-bit Windows)

Mac<sup>®</sup> OS X (10.4-10.6), Mac OS X Server (10.4-10.6)

Processor: PowerMac G3, G4, G5; IntelMac

**All systems** Memory: 512MB

• Use of PDF Retained Raster requires additional RAM

• Processing speed will normally be greater with more RAM.

**Hard drive:** 4 GB free space (minimum) **Port:** USB port for the Sentinel security dongle.

CD-ROM: CD-ROM drive for installing the Harlequin RIP





- Native processing of PDF 1.7 (in addition to previously available native support for PDF 1.6 through to PDF 1.0 and native processing of PostScript)
- Native PDF/X-4 support
- Native processing of XPS 1.0 files
- HD Photo support
- JDF compatible
- Significant performance increases:
  - Multi-threaded rendering that helps remove RIP bottlenecks in handling raster data and takes full advantage of the new Duo and Quad core technologies
  - PDF retained raster that speeds up variable data processing
  - Trapping up to eight times faster
  - Complex transparency performance enhanced
  - Spot colors fine-tuned
- Raster PDF output to facilitate soft proofing
- Compatible with Windows<sup>®</sup> Vista<sup>™</sup> and Windows 7 (both 32- and 64-bit versions. Can access more RAM under 64-bit Windows)
- Compatible with MAC OS X 10.5 (Leopard) and 10.6 (Snow Leopard)
- Support for PANTONE® Goe™
- Extended support for hybrid and digitally modulated screens.

# IN ADDITION TO PREVIOUSLY AVAILABLE FEATURES INCLUDING:

- PostScript LL3 compatible ( as well as LL1 and LL2)
- TIFF, JPEG, GIF
- Award winning in-RIP Font Emulation
- Two and four up and step & repeat in-RIP Simple Imposition
- In-RIP color management
- In-RIP trapping
- Cross platform.

For a full specification visit: http://www.globalgraphics.com/products/harlequin\_rip/specs.html





The Harlequin RIP Genesis Release (v.7.1) was the first product to be JDF certified by CIP4.



## **ONE** OPEN ARCHITECTURE **MANY** PDL APPLICATIONS **INFINITE** OPPORTUNITIES

September 2010



www.globalgraphics.com

Global Graphics Software Inc.

31 Nagog Park, Suite 315, Acton MA 01720, USA Tel: +1-978-849-0011 Fax: +1-978-849-0012

### **Global Graphics Software Ltd**

2nd Floor, Building 2030 Cambourne Business Park Cambourne, Cambridge CB23 6DW UK Tel: +44 (0)1954 283100 Fax: +44 (0)1954 283101

### **Global Graphics KK**

704 AIOS Toranomon Bldg. I-6-I2 Nishishimbashi, Minato-ku, Tokyo 105-0003 Japan Tel: +8I-3-6273-3740 Fax: +8I-3-6273-3741

the smarter alternative, Harlequin, the Harlequin logo, SetGold, SetGoldPro, TrapPro, ProofReady, Harlequin Precision Screening, HPS, Harlequin ColorPro are trademarks of Global Graphics Software Limited which may be registered in certain jurisdiction. Global Graphics is a trademark of Global Graphics S.A. which may be registered in certain jurisdictions. TIFF and PostScript are trademarks of Adobe Systems Incorporated which may be registered in certain jurisdictions. SWOP is a registered trademark of SWOP, Inc. All other brand and product names are trademarks or registered trademarks of their respective owners. Global Graphics makes no warranty and accepts no liability for any loss or damage arising from the use of information or particulars in this document. Copyright © 2010 Global Graphics Software Limited. All rights reserved.