



Harlequin[®] RIP, Eclipse Release[™]

Background

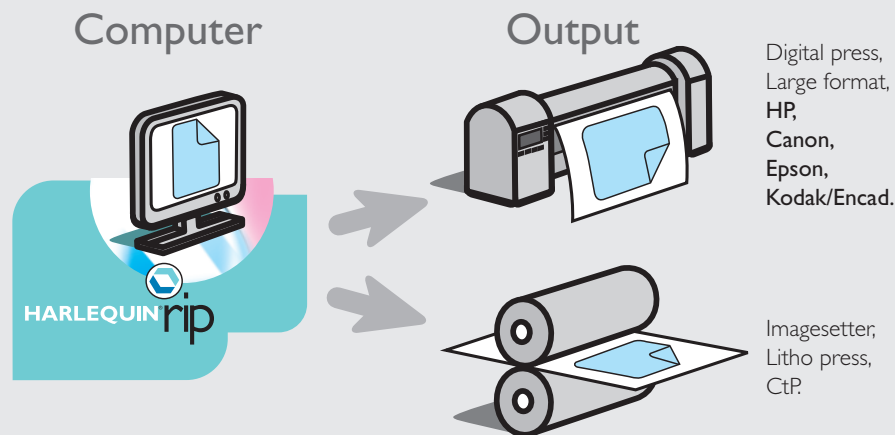
The Harlequin RIP continues to deliver:

- **High performance**
- **Reliability**
- **Flexibility**
- **Excellent color quality**
- **Dependability**
- **A rich feature-set for the graphic arts and printing industry.**
- **Easy integration into other products such as workflow solutions**

This white paper is a detailed description of Global Graphics Software's Harlequin RIP Eclipse Release.

The RIP is offered in two variations, the Classic Edition, and the Enterprise Edition. The Enterprise Edition (EE) delivers the full suite of Harlequin RIP features, with complete input and output mechanisms, but without a Graphical User Interface (GUI). The Classic Edition offers similar functionality but includes a comprehensive GUI.

The Eclipse Release puts everything else in the shade!



Target Markets For The Eclipse Release

- Commercial Printing
- Digital Prepress (Computer-To-Plate (CTP) for Newspaper and Publishing industry)
- Digital Press
- Digital Proofing
- Digital Printing
- Digital Workflow Solutions
- In-plant Print Shops
- PDF workflow based solutions

Features

Native Portable Document Format(PDF) Support

The Harlequin RIP is fully compatible with applications that generate PDF 1.4 files without having to convert them to PostScript®, by supporting the following:

- Transparency
- Referenced PDF
- JBIG2

The Harlequin RIP supports the following PDF/X standards:

- PDF/X-1a:2001
- PDF/X-3:2002

These PDF/X standards are subsets of PDF focused specifically for the graphic arts market. By supporting these standards the Harlequin RIP greatly increases the likelihood that a file will run through a prepress workflow without error; and that a pre-transmission proof will closely match the final printed piece.

End users will be able to retain the advantages of the PDF file format throughout their complete workflow.

TrapPro™ (Optional)

In the color printing process each color is laid down separately, one on top of the other. As each color is printed, the possibility of misregistration occurs as the colors fail to line up correctly due to paper shift, paper stretching, an incorrectly aligned press, or other mechanical inaccuracies. To compensate for misregistration, traps must be added to the areas where gaps or overlays are most likely.

Global Graphics Software's in-RIP trapping technology handles trapping automatically, as the page is processed in the digital prepress workflow. This highly sophisticated trapping technology is incorporated into two affordable products:

TrapProLite™

- Special ink handling - metallic (opaque) and varnish (transparent)
- Shaded fill (radial & axial) support



- Full N-color support for CMYK and spot colors.
- Patented New Trap Brush technique intelligently compares object and trap requirements and adjusts the traps to be proportional to the original object.
- Prevention of artifacts such as “mushroom” trap ends
- Automatic Auto-chokes superblacks by default, ensuring that superblack objects maintain a sharp, crisp edge.
- Protection of small text and graphic elements.
- Trap color density reduction to produce less visible traps between abutting colors.
- Improved performance efficiency over earlier Global Graphic Software solutions.
- Recognizes trap zones generated by PostScript Level 3
- Preview all applied traps using the Harlequin RIP ROAM™, which allows the user to refine the traps before committing the file to film or plates.

TrapPro

In addition to all the features in TrapProLite, this advanced version offers the following:

- Mitred ends and joins
- Small Object Protection
- Raster to Vector and Raster to Raster trap support
- Narrowed/proportional traps
- Image mask support
- Feathered traps
- Complex image and shfill support
- Sliding trap
- Anamorphic Traps

SetGoldPro™ 2.0

Global Graphics SetGold Professional is a utility designed for ease-of-use and intended for making high quality input and output profiles that are tightly integrated with the Harlequin RIP. It optimizes the efficiency of the color output of the printing or proofing device thereby establishing its “Golden State”.

Harlequin ColorPro™

New with Global Graphics Software's Harlequin RIP Eclipse release is Harlequin ColorPro™. Building on the industry leading software options:

- Harlequin ICC Profile Processor™ (HIPPTM)
- Harlequin Full Color System™ (HFCS™)

ColorPro™ provides excellent color process control, giving accurate, consistent and predictable color reproduction for a wide range of workflows. ColorPro provides full support for industry standard ICC profiles (including device link profiles) avoiding dependence on the generic, system level color management of the computer's operating system.

ProofReady™ Plugin

The availability of low-cost, high-quality inkjet proofing devices, allows users “upstream” from the prepress or printing production facility to utilize desktop color proofing solutions.

Print production professionals are also looking for cost-effective proofing solutions that will ensure that they can match the proof to the press. To address this need, Global Graphics Software has developed the ProofReady™ Plugins for Harlequin RIPs to drive inkjet printers from Epson, ENCAD and Hewlett-Packard. The plugin-based output support provides OEMs with the tools they need to deliver “out of the box” color proofing quality to their customers. Integrated with the ProofReady Plugins are the high quality Global Graphics developed Error Diffusion Screening (HEDSI and HEDSII) and the patented stochastic Harlequin Dispersed Screening™ (HDS™).

Additional Features

- Recombine of pre-separated files
- Extra gray levels
- Support for compressed fonts
- Selectable separations
- In-RIP OPI
- Support for Custom Media
- Support for RGB to CMYK workflow
- Output preview
- Support for new O/S platforms – Linux, Mac® O/S X, Windows® XP
- Optimized memory handling and cleanup during and after print jobs (including UNIX RIPs).

Customers and Partners

Below is a list of some of our customers and partners.

- AB Dick
- ArtQuest
- Autologic Inc.
- Compose Systems Ltd.
- Creo Products Inc.
- Dainippon Screening of America, Inc.
- ECRM
- Esko-Graphics
- Heidelberg
- Hewlett Packard
- HighWater Designs Ltd.
- Kodak
- Konica Corporation – Japan
- Litho Development & Research
- Mitsubishi Paper Mills Ltd
- Presstek
- Rampage Systems Inc.
- Real Time Inc.
- Ryobi Ltd.
- Scitex Digital
- Song and Co.
- Xitron



How To Purchase

Global Graphics Software Incorporated sells its Harlequin RIP software primarily to its Original Equipment Manufacturer (OEM) partners. These OEM partners sell their output devices, workflow solutions and products integrated with the Harlequin RIP software.

Specifications

Recommended Computer Requirements

- Pentium, 450 MHz
- 256 RAM
- 4 GB HD
- Parallel/USB port
- CD-ROM

Printers Supported

- Epson
- 3000, 5000, 7000, 7500, 9000, 9500
 - 7600, 9600, 10600, 5500
- Encad
- NovaJet 700 (42" and 60" wide models)
 - NovaJet 850 (42" and 60" wide models)
- HP
- HP DesignJet 1050C/1055CM
 - HP DesignJet 2000CP/2500CP
 - HP DesignJet 3000CP/3500CP
 - HP DesignJet 5000 (42" and 60" wide models)

Connectivity

- TCP/IP
- AppleTalk (Mac, PC)
- NT Pipe and NT Socket
- Serial
- Hot Folders

Supported Operating Systems

- Windows 98/ME/NT/XP/2K
- Mac OS 8.5 or later
- Mac OS 10.2.1 (Jaguar)
- Linux Red Hat 7.3 and other popular distributions
- Unix and Irix

File Types Supported

- PS
- PDF and PDF/X
- EPS
- TIFF
- PCL
- JPEG, GIF

Includes

- Documentation
- Hardware Security Key
- Software



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