

Sorcerer™ 3

Printer Driver Development Kit for Photo Inkjet, Raster-laser & Wide-format Printers

The Sorcerer 3 Driver Development Toolkit (DDK) is a powerful and flexible tool that makes it simple, fast and cost-effective for developers to create host-based raster printer drivers for a wide range of operating systems including Vista (Legacy and XPSDrv) and Mac OS X.



Sorcerer™ 3

Raster Driver Development Tool for Windows, Mac & Linux Operating Systems

Reduce your development overhead and deliver high-quality drivers to market quickly using the Sorcerer DDK's "design once, build many" approach to multi-Operating Systems driver development.

Features & Benefits

Single Source Development for Multiple Operating systems:

- Build class-leading drivers from a single driver description
- Greatly reduce development costs and time-to-market

Broad Operating systems Coverage:

- Support for legacy and new OS's, including Microsoft Windows Vista
- Streamline your multiple OS development

Full XPSDrv and Windows Vista Support:

- Quickly build premium-signable, class leading XPSDrv drivers
- Take full advantage of Vista's expanded color gamut and greater color accuracy

Advanced Job Finishing Capabilities:

- Create sophisticated, customized features to differentiate your drivers

High-speed Rendering for High-speed Printing:

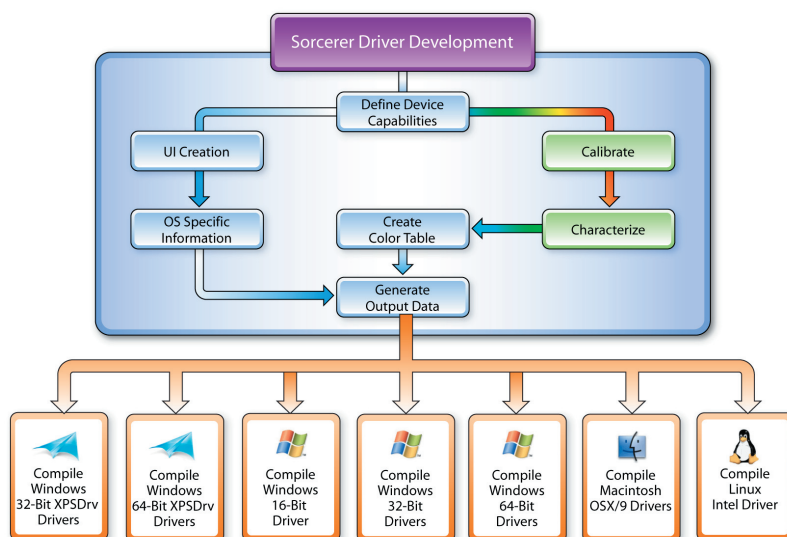
- Optimized for printer drivers
- High performance with no negative impact on the user experience

High Quality, Flexible Color Capabilities:

- Fast device characterization tools to quickly integrate high quality color
- Optionally use your own Color Matching Method (CMM) engine

Over 80 Million Drivers Shipped Worldwide:

- Proven reliability - the lowest rate of field support calls in the industry
- Enjoy low maintenance costs and high end-user satisfaction
- Implemented in design wins with all major manufacturers



Raster Driver Development - Simplified

Excellent raster printer drivers, be they for inkjet, dye-sublimation, laser, or wide-format, are inherently challenging to create. They must meet the quality and performance expectations of today's market and printer manufacturers. They must offer differentiating driver features and take full advantage of the latest advancements in color science. They must also support a wider variety of major Operating Systems, both new and legacy, than ever before.

That's why Software Imaging, experts in host-based printer driver technology, created the Sorcerer Driver Development Toolkit (DDK), a powerful and flexible driver development platform. Sorcerer gives printer manufacturers the ability to create best in class, high quality, high performance customized raster drivers quickly, easily, and cost-effectively for all required platforms.

One Driver Description, Multiple Operating Systems

Developing drivers for multiple operating systems traditionally requires developers with experience in each operating system that you intend to support. Then, you need to design your drivers in such a way as to ensure cross-platform consistency - your customers expect it, and a lack of consistency inevitably leads to costly field support inquiries. Consistency of user interface. Consistency of features. Consistency of output quality and color.

Sorcerer's Single Source Development Environment (SSDE) was designed to simplify this. The Sorcerer DDK uses a series of 'driver emitters' to output drivers for different families of operating system based on a single cross-platform 'driver description'. For example, if your first Sorcerer project is a XPSDrv driver for 64-bit Windows Vista, your developers can use Sorcerer and that same XPSDrv description to quickly produce drivers for Windows XP, 2000, NT 4, Windows 98, Mac OS X, and even Linux.

Cross-platform output quality and color fidelity are assured because Sorcerer uses a single set of calibration data, regardless of the target operating system. In addition each emitter preserves cross-platform consistency of the user interface and job finishing features.

Windows Vista and XPSDrv

Software Imaging has worked with Microsoft on Windows Vista since 2003. It created the first demonstrable XPS filters (demonstrated by Microsoft at WinHEC 2006), and was tasked by Microsoft to create the XPSDrv sample drivers now distributed with their Windows Driver Kit (WDK). It was also asked to share expertise by providing the first whitepaper on XPSDrv development, which is available from Microsoft via its website.

Our background in quickly supporting new operating systems, combined with our specific technical expertise in Windows Vista and XPS printing puts Software Imaging in the unique position of offering the most complete and highest quality host-based XPSDrv solutions on the market.

Powerful Job Finishing Capabilities

Job finishing is an important part of any printer driver. Features, like page scaling, and multiple copies are universal. Others can be highly sophisticated and customized in order to help printer manufacturers differentiate their end-user experiences. The Sorcerer DDK comes with a standard set of job finishing features pre-defined, meaning your team won't have to "reinvent the wheel" in order to offer features like N-up, collation, or reverse ordering.

Sorcerer also offers a powerful and flexible 'recipe' system that allows developers to easily create their own unique job finishing features by allowing specific functions to be attached to different pages within a print job. This allows, for example, the drawing of borders, overlays, or watermarks. Sorcerer even supports the addition of dialogs, for situations where end-user instructions may be needed (such as manual duplex).

High-speed Rendering and Printing

Print speed combined with quality is key. The Sorcerer DDK gives developers the flexibility and power to drive their devices as quickly as their hardware can allow, even on the most complex print jobs. Sorcerer has been used to create drivers for raster-based printers that operate at speeds greater than 120 pages-per-minute.

Color Calibration & Characterization

Today's raster devices must work with a variety of different types of media and consumables, and each combination can require careful characterization and calibration to ensure that the output quality is high and that colors are consistent. A key feature of Sorcerer is its AutoEZ-Cal (AEC) calibration system, a wizard-driven International Color Consortium (ICC) compatible utility that generates color tables which are used for quality color driver output. AEC allows calibration and characterizations to be performed extremely quickly.

Sorcerer also allows the use of Color Matching Method (CMM) engines from 3rd parties (such as Agfa, GretagMacbeth, Heidelberg and Monaco). This ensures that Sorcerer users have the flexibility to use either the AutoEZ-Cal system or their own preferred CMM.



Additional Features

Sorcerer also contains support for many driver extras such as:

Multi Language support

- Easy internationalization

Bi-di communications

- Easy custom communication with your printer

DeskSets & Print Direct

- Easy direct printing and user-settings management

Support of Metadata such as EXIF/PIM

- Allows custom handling within the driver

Proven Reliability

All of the World's leading printer manufacturers have deployed solutions using Software Imaging's raster-based technology. The response from the field has been clear - Sorcerer drivers have the lowest field support call rate in the industry. This means that Sorcerer drivers are not only cost-effective to build, they are (perhaps most importantly) cost-effective to support and maintain.

The Printer Driver Experts

Software Imaging is widely recognized as the leader in host-based printer driver technology for inkjet, raster-laser, wide format and PDL-based laser printers. It has been developing printer drivers for more than twenty years and has shipped more than 80 million drivers worldwide. In addition to our work with Microsoft on Windows Vista and XPS, for several years we have been providing Microsoft with development services for Unidrv (Windows XP). Software Imaging has licensed driver technology to every major printer manufacturer in the world and continues to demonstrate a sustained commitment to delivering printing technology optimized for host-based printing environments.

Sorcerer Setup

Also included within the Sorcerer DDK is a Printer Driver Installation Utility (Setup). An OEM may require the installation of drivers to be transparent, or may wish to create a Microsoft WHQL driver that has been digitally signed. Custom setup programs are also supported. Setup is designed to provide total flexibility and is tested to current Microsoft WHQL-signing requirements.

Multi-Platform

The single source development environment (SSDE) of Sorcerer allows printer drivers to be produced for the following operating systems:

Windows 64-bit

- Microsoft Windows Vista 64-bit (XPS)
- Microsoft Windows XP 64-bit (XPS and Vista legacy drivers)

Windows 32-bit

- Microsoft Windows XP (XPS and Vista legacy drivers)
- Microsoft Windows 2000
- Microsoft Windows NT4

Windows 16-bit

- Microsoft Windows Me
- Microsoft Windows 98
- Microsoft Windows 95

Macintosh

- Mac OS X Intel
- Mac OS X Power PC
- Mac OS 9 (Sorcerer 2.7)

Linux

- Intel-based distributions

Sorcerer System Capabilities

Color Modes:

- Monochrome
- CMY
- CMYK
- Photo-ink
- Multiple color devices
- Pantone Hexachrome support
- Multiple intensity
- Dye sublimation
- Wax thermal transfer

Image Data Input Formats:

- All XPS HDPhoto formats for XPSDrv
- Monochrome (8-bit packed-pixel)
- RGB (32-bit packed-pixel)
- RGBW (32-bit packed-pixel)
- Multiple-channel
- EXIF / PIM tagged

Output Data Formats:

- 8 Color Channels/intent
- 256 intensities per channel
- 16k intensities per channel (Vista)
- 24-bit RGB
- 48-bit RGB (Vista)
- 8 channels continuous tone
- 8 channels halftone
- 1 to 8-bits per pixel
- Up to 16-bit halftoning

Device Resolution:

- Limited only by the target OS
- No limits on Windows Vista

Driver Installation:

- Plug and Play
- Point and Print
- WHQL
- Microsoft HCL
- InstallShield-based installs
- Silent "Stealth mode" installs

Supported Devices:

- Any mono or color raster device

System Requirements

To Run the Sorcerer Toolkit:

- 1.5GHz Pentium based PC
- 512Mb RAM
- 4Gb hard drive space
- Microsoft Windows XP

To Build Drivers for Windows:

- 1.5GHz Pentium based PC
- 512Mb RAM
- 4Gb hard drive space for driver builds
- Microsoft Windows XP SP2
- Microsoft Platform SDK (6000)
- Microsoft WDK (6000)
- Microsoft Visual Studio
- .NET 2005 SP1
- Microsoft Visual C1.52c (for Windows 9x drivers only)

To Build Drivers for Macintosh:

- Macintosh Intel Processor (or Macintosh PowerPC G4 or greater)
- 1GB RAM
- 4Gb hard drive space for driver builds
- Mac OS X 10.4.x.
- Xcode tools 2.4.1

To Build Drivers for Linux:

- 1.5GHz Pentium based PC
- 512Mb RAM
- 4Gb hard drive space for driver builds

Contact Us

Contact us today to discuss how Sorcerer, our single source development environment, can help you bring your imaging device to market on-time and under budget. For more information:

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