

# Lincoln & Co. Solutions Guide

## About Lincoln & Co

Lincoln & Co. was founded in 1978 to develop advanced technology for processing text and graphics, and to apply this technology to computer peripherals. The company was an early leader in developing software and hardware for laser printer imaging and control. Companies such as DEC, Toshiba, Minolta, Ricoh, and others integrated Lincoln-designed controllers in their original printers.

More recently, Lincoln & Co. file conversion and image viewing software has been used by leading OEMs and end users in the fax systems, document management, and printer markets worldwide. Since its founding, Lincoln & Co. has attained a reputation of providing high quality products with excellent support and customization capabilities. In December 1997, Lincoln & Co. became a division of Biscom, Inc., a leader in enterprise fax and messaging solutions.

## Our Customers

With over 25 years in the image conversion industry, Lincoln & Co. has built an extensive list of customers from diverse industries. Lincoln's customers generally fall into one of three categories OEM, VAR, and End-User.

### OEM

The majority of Lincoln's customers use file conversion and image viewing applications as a component of their own solution. To the customers of our OEM clients, the use of Lincoln & Co. software is not apparent. For example, a document management company uses Lincoln's file conversion applications to convert retrieved documents into a viewable file format.

### VAR

Lincoln resellers provide a value-added solution to their customers by integrating Lincoln's file conversion and image viewing applications into business applications. Lincoln VARs often serve as systems integrators, employing Lincoln technologies to satisfy specific customer requirements. For example, an accounting department prints invoices to be mailed, but also needs to archive these invoices electronically in a format that can be easily viewed. Lincoln's conversion software is employed to convert the print output to a standard image format.

### END-USER

Lincoln's viewers are popular with end-users that have a need to view PCL or PostScript files. Lincoln's file conversion applications are used by end-users that work with many different file types, and need to convert these to image or to other standard file formats.

Here are some more examples of how Lincoln customers use our solutions:

- 75% of fax server manufacturers use Lincoln's PCL/PostScript Converter as an integral part of their product offerings, providing on-the-fly document conversion for their customers
- A large insurance company uses LincPDF to convert PCL files generated from a Legacy System to PDF files for employee use through a document management system
- Using Lincoln's Image Viewer, an output management company systems provider detects and Trouble shoots printing errors by viewing PCL and PostScript files at the desktop

# Converting PCL & PostScript to Image

The PCL and PostScript Converters convert PCL and Postscript files to image formats such as a TIFF and JPEG. These converters are available via an easily integrated COM object, allowing developers to access the converter via any programming or scripting language that supports COM objects, such as Visual Basic or C/C++. Using the COM object, file conversions can be done consecutively or simultaneously.

## **PCL5 Converter**

Input: PCL5e, PCL5c, HP-GL/2  
Output: TIFF G3, Tiff G4, Color Tiff, JPEG, Split PCL,PCX/DCX  
Runs On: Windows, Solaris, Linux  
Interface: COM API, GUI (.exe), command line (.exe)

## **PCL6 Converter**

Input: PCL XL, PCL5e, PCL5c, HP-GL/2  
Output: TIFF G3, TIFF G4, Color TIFF, JPEG, PCX/DCX  
Runs On: Windows, Solaris, Linux  
Interface: COM API, GUI (.exe), command line (.exe)

## **PostScript Converter**

Input: PostScript Level 2,  
Output: TIFF G3, TIFF G4, Color TIFF, JPEG, PCX/DCX  
Runs On: Windows, Linux  
Interface: COM API, GUI (.exe), command line (.exe)

## Converting PCL to PDF

LincPDF converts files from HP-PCL to Adobe PDF. LincPDF was developed to meet demand from document management solution developers and users to convert documents from an industry-standard print output format to a form commonly viewable by Web browsers and email viewers.

LincPDF supports the conversion of PCL print files and HP-GL/2 vector graphics. The output PDF files are fully searchable in Acrobat and can be indexed in Acrobat Catalog.

LincPDF is available in the form of an easily integrated COM object, allowing developers to access the converter via any programming or scripting language that supports COM objects, such as Visual Basic or C/C++. Using the COM object, file conversions can be done consecutively or simultaneously.

LincPDF includes an accessory utility which can convert LincPDF output to a Secure PDF. User access to the Secure PDF is specified as outlined in the Adobe PDF 1.5 specification.

### LincPDF (PCL5)

Input: PCL5e, PCL5c, HP-GL/2  
Output: Adobe PDF

Runs On: Windows  
Interface: COM API, GUI (.exe), command line (.exe)

### LincPDF (PCL6)

Input: PCL XL, PCL5e, PCL5c, HP-GL/2  
Output: Adobe PDF

Runs On: Windows  
Interface: COM API, GUI (.exe), command line (.exe)

## Viewing PCL and PostScript

Lincoln offers two applications for viewing PCL and PostScript images, LDV and Page View. These viewers are Windows-based applications that display PCL and PostScript documents quickly, accurately, and economically.

- Runs as a standalone application or can be integrated with other applications
- Full text search of PCL and PostScript
- Sharp, full fidelity representation of text and graphics
- Includes standard printer fonts for PCL and PostScript
- Supports Asian fonts
- PCL5e support includes HP-GL/2 and is compatible with HP LaserJet 4Si
- Mix page and envelope sizes within a document
- Display multiple multi-page PostScript and PCL files simultaneously
- Prints displayed pages to any Windows printer
- Optional thumbnail and table-of-contents views for multi-page documents
- Supports Color PCL and CMYK modes

## Common applications include:

- A service bureau prints monthly statements for mortgage and loan companies. Spool files are sent to printers, and sample statements are prepared in PCL format. The sample PCL statements are sent to customers for approval; the customers view and approve each statement.
- A hospital provides fast, remote access to patients' electrocardiograms by transmitting them as PCL files and viewing these images on remote PCs.
- A major clothing manufacturer views Baan-created invoices as PCL print spool files.
- An output management company detects and troubleshoots printing errors by viewing PCL and PostScript files at the desktop.

## LDV (Long Document Viewer)

Lincoln's LDV (Long Document Viewer) application views PCL5 and PCL6 files, and includes an ActiveX/COM programmatic interface. While LDV can be used to view documents large and small, it is designed to optimally and efficiently view documents of thousands of pages or more in length. It is also provided as an Internet Explorer embedded version (PCLReader).

**View:** PCL XL, PCL5e, PCL5c, HP-GL/2

**Document**

**Length:** Optimized for long documents (> 100 pages)

**Runs On:** Windows

**Color:** Auto-Detected

**Interface:** ActiveX, COM, .exe

## Page View

Lincoln's Page View application views PCL5 and PostScript files, and includes an OLE programmatic interface.

**View:** PCL XL, PCL5e, PCL5c, HP-GL/2, PostScript Level 2

**Document**

**Length:** Ideal for shorter documents (<100 pages)

**Runs On:** Windows

**Color:** Configurable

**Interface:** OLE, .exe

*This guide is a quick reference document about Lincoln & Co.'s product offerings. For more information, and to evaluate the products, please visit [www.lincolnco.com](http://www.lincolnco.com), or contact us via phone (USA-978-244-0250) or email [info@lincolnco.com](mailto:info@lincolnco.com)*