Adobe Developers Association

Would you like to learn more about Adobe technology? Receive technical documentation? Be informed of new development tools? Then take a look at the Adobe Developers Association.

Adobe Systems, the leader in PostScript® language technology, would like to introduce you to our Developers Association. This association is intended for third-party software developers who are interested in using Adobe technology in conjunction with their products. The information and services provided by the association are designed to support developers and keep them up-to-date as they work with Adobe technology.

We publish technical information about all of our products and technologies, including the PostScript language, Adobe® Acrobat®, Adobe Type Manager®, Adobe Printer Drivers for Macintosh® and Windows®, the Adobe Type Library, Adobe Illustrator®, Adobe Photoshop®, Adobe Premiere®, PageMaker®, and After Effects™ plug-in API's. We encourage you to take advantage of our services and let us help you in the development process.

At this time, the Adobe Developers Association does not offer support for the Display PostScript™ System. The Display PostScript extension to X is shipped and supported by various workstation manufacturers. Adobe has collaborated with Visual Edge Software to make Display PostScript NX software and developer products for Sun and HP systems available through two distributors. The European distributor, Protek, may be contacted by phone at +44-01628-75959, or by e-mail at info@protek.co.uk. The U.S. distributor, Bluestone, may be contacted by phone at +1-609-727-4600, or by e-mail at blustone!info@uunet.uu.net.

It's important to receive essential documentation quickly when developing software. Support for Adobe Acrobat, PostScript Level 2 features such as forms and device independent colour, EPSF and Type 1 fonts, are features that add value to your product. Knowing about new tools and features can affect your business, and the classes and programmes that we offer can help you write better software.

If you need to have accurate, precise information, let us introduce you to our available resources. Come to the source for technical information!

How to Join

It's simple! The Adobe Developers Association offers four separate programmes for you to choose from: Basic Membership, the Adobe PostScript Technologies Programme, the Adobe Graphics and Publishing Developers Programme, and the Adobe Acrobat Plug-Ins Developers Programme. Please review the following descriptions to see which programme is best suited to your area of development. To join any of the programmes, just complete the enclosed application form.

▶ Basic Membership

The annual fee for this programme is $145.

Membership is for one individual to receive the following benefits. Only this contact may call to order software products at a discount.

Technologies Supported

None. This programme is for receiving general information only. To receive support on a specific technology, you must join that programme. **Please note that Basic Membership benefits are included in all of the other programmes**.

Monthly Newsletter Mailing

The Developers Association publishes a newsletter, the *ADA News,* that keeps members informed of new technologies, questions and answers, class schedules and conference locations where you can meet members of the developer support team. You will also receive order forms for technical literature, notification of newly created technical documents, new product announcements, and other timely information.

Discounts

Members receive discounts on Adobe application programs *(some restrictions apply).* You will be responsible for registering the products you receive and for purchasing application upgrades through our

Customer Support group.

Members are also entitled to a 25% discount on Adobe's PostScript and Acrobat developer training courses. For more information about these courses, please contact Iris Braam at: ibraam@adobe.com or tel: +31-20-65 11 252.

▸ Adobe PostScript Technologies Programme

The annual fee for this programme is $395.

This programme is for one individual to receive the following benefits. Only this contact may call for technical support or to order software products at a discount.

Technologies Supported

PostScript language, Adobe Printer Drivers for Macintosh and Windows, Adobe Type Manager, Type 1 and Far Eastern font technology, PostScript Printer Description (PPD) and Adobe Font Metric (AFM) files.

Basic Membership

This includes the monthly newsletter mailing and discounts.

Technical Support

A member in this programme is entitled to 5 developer technical support cases per year at no additional charge. Additional cases may be purchased for $125 per case. Support packages of 5 cases for $500 and 10 cases for $1,000 may also be purchased. Developer technical support may be provided via phone, e-mail or fax.

PostScript Software Development Kit

The PostScript Software Development Kit (SDK) on CD-ROM for Macintosh and Windows provides the help you need to take advantage of the wide variety of benefits that the PostScript language has to offer. It contains reference manuals, specifications and protocols, technical notes on programming techniques and supplemental documentation, sample code and files, development tools and software applications.

Regular Updates & Upgrades

Members will automatically receive updates to technical notes, development tools or development software, including any upgrades to the PostScript SDK.

For a complete overview of this programme, see page 5 of this pamphlet.

▸ Adobe Graphics and Publishing Developers Programme

The annual fee for this programme is $195.

This programme is for one individual to receive the following benefits. Only this contact may call for technical support or to order software products at a discount.

Technologies Supported

Plug-in API's and file formats for Adobe Illustrator, Adobe Photoshop, and Adobe Premiere, PageMaker, and After Effects.

Basic Membership

This includes the monthly newsletter mailing and discounts.

Technical Support

A member in this programme is entitled to 3 developer technical support cases per year at no additional charge. In addition, 3 cases may be purchased for $195. Developer technical support may be provided via phone, e-mail or fax.

Graphics and Publishing Developers Kits

Software developers kits for Adobe Photoshop, Adobe Illustrator, Adobe Premiere, PageMaker and After Effects include documentation and sample code that provide the plug-in developer with everything needed to take advantage of the full set of functionality within the plug-in interfaces.

Regular Updates & Upgrades

Members will automatically receive updates for all of the software developers kits.

For a complete overview of this programme, see page 7 of this pamphlet.

▶ Adobe Acrobat Developers Programme

There are two options in this programme and the fee varies depending on the option you choose.

Option #1. Acrobat Software Development Kit

The annual fee for this plan is $495.

This programme is for one individual to receive the following benefits. Only this contact may call for technical support or to order software products at a discount.

Technologies Supported

Acrobat Viewer Plug-ins, Interapplication Communication (IAC) (Apple events, OLE, DDE) Portable Document Format (PDF) file format, and pdfmark operator.

Basic Membership

This includes the monthly newsletter mailing and discounts.

Technical Support

A member in this programme is entitled to 5 developer technical support cases per year at no additional charge. Additional cases may be purchased for $125 per case or a 5 Pack for $500 or 10 Pack for $1,000. Developer technical support is available via phone, e-mail or fax.

Acrobat Plug-Ins SDK

This SDK provides the information needed to to develop Acrobat viewer plug-ins, and to control the Acrobat viewers, the PDF Writer print driver and the Acrobat search plug-in using Interapplication Communication (IAC) interfaces such as Apple events, OLE, OLE Automation, and DDE. This SDK contains a complete set of documentation, header files, and sample code.

Regular Updates & Upgrades

Members will automatically receive updates for the Acrobat Plug-Ins SDK.

Option #6. Reader Plug-in Programme

Allows development and distribution of plug-ins for Acrobat Reader. There is a $100, one-time fee per developer. After paying this fee, you can write any number of Reader plug-ins, and distribute them in any way you want (CD-ROM, floppy, network,...). Developers who want to participate in this programme have to be members of the Acrobat Software Development Kit programme described under *Option #1.* Please note that Reader plug-ins cannot modify PDF files, only Exchange plug-ins do this.

For a complete overview of this programme,

Application Form — Adobe Developer Programmes

Customer Information Please print, or attach business card.

Contact Name: _____ Title: _____

Company: _____

Address: _____

_____ Country: _____

Tel: _____ Fax: _____ E-mail: _____

Background Information

Please list your product(s) or area of development. Attach literature or supply information about your company's background and how your product(s) will utilise Adobe technology.

○ Electronic Publishing   ○ Desktop Publishing   ○ Image Editing   ○ Printer Drivers   ○ Graphics   ○ Pre-press

○ Document Management   ○ CD Publishing   ○ On-line Systems   ○ Display PostScript   ○ Fonts

Which operating environments do your products currently support?   ○ MS-DOS®   ○ MS Windows®   ○ Macintosh®   ○ UNIX®

What is your objective in working with the Adobe Developers Association? _____

_____

_____

Order Information

Please make your selection from the following Adobe Developer Programmes.

Basic Membership Programme	$ 145*	_____
PostScript Technologies Programme	$ 395*	_____
Acrobat Plug-in Software Development Kit	$ 495*	_____
Graphics and Publishing Developer Programme	$ 195*	_____

> ***Please note that the Basic Membership Programme benefits are included in all other programmes!***

Subtotal _____

VAT _____   VAT Number: _____

More information about VAT requirements in your country

TOTAL _____

*For prices in other currencies, please see Support Programme Pricing.

Payment Information

○ Cheque (Payable to Adobe Systems Direct Ltd)   ○ Mastercard/Access/Eurocard   ○ VISA

Credit Card Number: _____   Issue date: _____

Cardholder Name: _____   Expiry date: _____

Signature: _____

Signature and Agreement

I certify that the information provided in this application is, to the best of my knowledge, true and correct. The Adobe Developers Association is intended for development teams who are using Adobe technologies (the PostScript page description language, Display PostScript™ System, Adobe Acrobat, Adobe Type Manager, or Plug-ins for Adobe Illustrator, Photoshop, or Premiere) to be compatible and in conjunction with their products. Adobe reserves the right to modify the terms and conditions of the Adobe Developers Association programme and, at any time at its discretion, may reject or revoke your participation in this programme.

Name: _____   Title: _____

Signature: _____   Date: _____

Return to: **Adobe Developers Association, P.O. Box 12356, Edinburgh EH11 4GJ, Great Britain Tel: +44-131-4586800, Fax: +44-131-4586801**

Support Programme Pricing

	USD	GBP	DEM	BEF	DFL	FFR	CHF	ATS	SEK	PTS	ITL
I. Basic Membership Programme	145	90	220	4,520	250	755	185	1,550	1,075	18,330	225,300
II. Adobe PostScript Technologies Programme	395	245	600	12,315	675	2,055	500	4,220	2,925	49,930	613,750
III. Adobe Acrobat Plug-in Developer Programme	495	310	750	15,435	845	2,575	635	5,295	3,670	62,575	769,130
IV. Adobe Graphics and Publishing Developer Programme	195	120	295	6,080	335	1,015	250	2,085	1,445	24,650	302,990
Reader Plug-in Programme*	100	60	150	3,115	170	520	125	1,070	740	12,640	155,380

* The Reader Plug-in Programme is only available for people who are members of the Acrobat Plug-in Programme

Adobe Developers Association Programme Benefits

	Technologies Supported	Annual Fee (US$)	Newsletter Mailing	Discounts on Most Adobe Retail Products	Developer Technical Support*	Software Development Kits (SDKs) or Other Resources	Regular Updates and Upgrades
I. Basic Membership Programme	None	$145	Yes	Yes	N/A	No	No
II. Adobe PostScript Technologies Programme	Adobe PostScript, ATM™, Printer Drivers, Type 1 and Far Eastern font technologies, PPD and AFM files	$395	Yes	Yes	5 cases per year	Adobe PostScript SDK	Yes
III. Adobe Acrobat Plug-in Developer Programme	IAC, PDF, Acrobat Plug-in API	$ 495	Yes	Yes	5 cases per year	Adobe Acrobat Plug-ins SDK	Yes
IV. Adobe Graphics and Publishing Developer Programme	Plug-ins APIs for Adobe Photoshop Adobe Premiere Adobe Illustrator Adobe PageMaker Adobe After Effects	$195	Yes	Yes	3 cases per year	Adobe Photoshop Adobe Premiere Adobe Illustrator Adobe PageMaker Adobe After Effects Plug-in Developer Kits	Yes

Developer Marketing Opportunities. Adobe offers marketing assistance to plug-in developers worldwide. In Europe, we have the Adobe Shop catalogue, which is mailed to our registered end-user database. Developers can advertise their plug-ins or accessories for Adobe products free of charge in this catalogue. Call Yvonne French for more information at +44-131-458-2155 or e-mail her at *yfrench@adobe.com.* If developers want to market their plug-ins outside Europe, they can contact Cynthia Johnston at +1-408-536-6284 or e-mail her at *johnston@adobe.com*

Adobe Developers Association

VAT Information

Please read this information carefully before filling in the ADA Membership Application Form

If you are a resident of the following EC countries, in which Adobe Systems Direct Ltd is locally registered for VAT, please add VAT to your order subtotal at the prevailing rate as follows:

UK   17.5%
Ireland   21%
France   20.6%
Sweden   25%
Germany   15%

For residents of the **Netherlands**, if you can provide a Dutch VAT Number, then no VAT should be added. Otherwise, as local VAT registration is held, Dutch VAT at 17.5% must be added.

For residents of **Belgium**, local VAT at 20.5% must be added in all cases as local VAT registration is held. However, if you have a Belgian VAT Number, please quote this on your order form as we are required by Belgian legislation to show your VAT Number on our invoices.

For residents of **EC Countries other than those shown above**, if you can provide your local VAT Number then no VAT should be added. Otherwise, UK VAT at the current rate of 17.5% must be added.

For residents of **all other (non EC) countries**, net prices only will apply. (However you will be responsible for any local import duties and tarrifs).

All VAT rates quoted above are as required by the local VAT legislation in force at the time of printing. Please note that any changes in local rates will be applied as necessary and may result in orders being held pending further payment. In addition any changes in EC membership or legislation, or the local VAT status of Adobe Systems Direct Ltd will also result in VAT changes being applied without prior notification.
Where no VAT is added due to the provision of a local VAT number, please note that it is then the responsibility of the purchaser to account for any local acquisition VAT.

PostScript® Software Development Kit

Version 2.0, Release 2

This SDK contains everything you need for supporting PostScript language technology from Adobe Systems. The CD-ROM collects, in one package, an extensive set of tools and reference materials to help applications generate PostScript language files. Also included are Adobe drivers, font programs and other software to enable developers to test application compatibility.

If you have a Windows® or Macintosh® application, the SDK offers:

• Tips and software for testing with Adobe Printer Drivers

• Techniques for incorporating advanced type handling using the Adobe Type Manager® (ATM®) Application Programmer's Interface (API)

• Add device-independent colour support

• Use PostScript Printer Description (PPD) files to utilise printer capabilities

• Adobe software products for compatibility testing

• Take advantage of PostScript Level 2 operators and features

The following is a list of the Reference Manuals, Technical Documents, Specifications, Sample Code and Files, and Adobe Software products offered:

Specifications/Protocols

• PostScript Printer Description File Format (v. 4.2)

• Adobe Font Metrics File Format (v. 4.0)

• Glyph Bitmap Distribution File Format (BDF)

• JPEG Technical Specification

• Adobe Serial and Parallel Communications Protocols

• Adobe Binary Screen Font File Format (ABF)

• PostScript Language File Transmission Specification

• Adobe SCSI Input Protocol Specification

• Adobe Standard Cyrillic Font Specification

• Adobe CMap and CID Font Files Specification

Reference Manuals

• *PostScript Language Reference Manual, Second Edition*

• *PostScript Language Program Design*

• *PostScript Language Tutorial and Cookbook*

• *Adobe Type 1 Font Format*

Programming Techniques

• Supporting PostScript Level 2 Functionality

• Supporting Data Compression in PostScript Level 2 and filer Operator

• Emulation of the setstrokead just Operator

• Emulation of the rectclip, rectfill, and rectstroke Operators

• Supporting the DCT Filters in PostScript Level 2 software

• Timing Techniques

• Emulation of the makepattern and setpattern Operators

• Optimization Case Study

• PostScript Language Code Optimization:Rectangles

• Emulation of the execform Operator

• Supporting Fonts in the PostScript Environment

• Advanced Path Construction Using Level 2 Features

• Overview of the Generic Text Interface

• Binary Token and User Paths

• Simple Text-Setting Calculations

• PostScript Level 2 Software Compatibility: the setscreen and currentscreen Operators

• Supporting Downloadable PostScript Fonts

• Font Switching Optimizations

• Device Independent Color in PostScript Level 2 software

• Roman Re-encoding Issues

- Matching RGB Color From Monitor to Printer
- Supporting Device Features
- Color Images using Color Lookup Tables
- Fast Text Rendering
- PPD File Parser: Application Programmer's Interface
- Supporting PostScript Fax
- PostScript Level 2 and Fax Modem Printing
- Using save outside the Server Loop

Supplemental Documentation

- Updates to the PostScript Language Reference Manual, Second Edition
- Adobe Type 1 Font Format Supplement
- Selecting Binary Communications Protocol and Host Switching between the PostScript Interpreter and Emulators
- Technical Tips for Macintosh Applications using Adobe Type Manager
- Adobe Type Library Addendum IBM™ PC Version
- Multiple Master Font Programs for the Macintosh
- Adobe Type Manager Software API: Macintosh
- Macintosh FOND Resources
- Adobe Type Manager Software API: Windows
- Adobe Type Manager Software API for Multiple Master Fonts: Macintosh
- Tutorial on Composite Fonts
- Gaiji in PostScript Printers
- PostScript language Reference Manual Supplement for Versions 2015 and earlier
- Sonata® Font Design Specification
- Character Height Variations as a Function of Resolution
- JPEG Source Vendor List

6

- The StemSnap Hint Operator for Type 1 Font Programs for Macintosh
- Bar Code Vendor List
- Windows Application Tips for PostScript language Printer Drivers

Sample Code and Files (Available for both Macintosh and PC Compatible, unless noted)

Sample code is generic C or PostScript language source code which has been tested on at least one platform. Some code may need to be modified to work with your application or to compile on your specific platform. The following is a list of included files.

Color API Code	L2 Paths
ATM API	Development Tools
AFM Parser	Patterns
–GetFace Sample Code	–ehandler.ps
AFM Files	Rectangles
SDK Prolog	–PSTool:
Japanese AFM Files	Re-encoding
TiffToPS	–PCSend
PPD Parser	Stroke Adjust
Timing	–PSDown
PPD Files	Generic Text
Blue Book files	Color
Forms	Green Book Files
CLUT	Filters
Black Book Files	Fax
SCSI	

Software Applications included (Macintosh and Windows):

Type On Call® software (Bundle version) – a CD-ROM version of the Adobe Type Library, (available for unlocking individual fonts) and a distribution method for new application programs.

Font programs – a variety selected to test software's ability to handle the extremes of font parameters (e.g. kern pairs and character sets).

Acrobat® Exchange LE 2.0 Macintosh, Windows – View, navigate and print Portable Document Format (PDF) files. Search plug-in provided.

Adobe Type Manager – Several versions will be included for compatibility checking. Mac versions: 3.5.1 to 3.8. Windows versions 1.0 to present, Win-J version 2.5.

Macintosh Printer Driver -Versions 8.0, 8.01, 8.1, 8.1.1, 8.2.1

Windows Printer Driver – Versions 2.1, 2.1.1, 2.1.2, 3.0.1

Lasertalk™ for Macintosh and Windows – Provides a complete set of features to help you debug PostScript programs.

Graphics and Publishing Software Development Kit

Adobe provides software developers kits for it's vector and raster application programs on both Macintosh and Windows platforms. These development kits represent the current shipping product's plug-in interface which gives the developer the most current tool for their development needs. You will find a complete set of reference materials, documentation, code samples, and other materials to support Adobe graphics and publishing applications.

Adobe Illustrator 6.0

The Adobe Illustrator 6.0 Plug-in Development Kit for Macintosh contains documentation, header files, and sample source code to be used in creating plug-in filters for Adobe Illustrator. The development kit is distributed on a CD-ROM and contains all documentation in Acrobat's Portable Document Format. The sample source code is in C and will work with the Metrowerks CodeWarrior™ environment. Documentation and sample code on how to create Adobe Illustrator plug-ins native for PowerPC™ are also included in the development kit. Only the Macintosh version of the Adobe Illustrator application supports the API.

The Adobe Illustrator 6.0 program is a high-end graphic design application. One of its most powerful features is an Application Programming Interface (API) that enables developers to extend its basic functionality. Many of the program's "built-in" features are actually implemented as plug-ins, including modal and modeless interface items. Among other plug-in types, the Adobe Illustrator API supports plug-in menus, tools, windows, and file formats. Examples of what can be accomplished through the API include: creating new and transforming existing path objects; creating or modifying raster and text objects; placing EPS files; and translating non-native file formats, including page information and colour styles.

A plug-in will be passed a series of messages to which your code will respond; for instance a tool would receive a mouse down message. Interactions with the Adobe Illustrator program are done with callback functions packaged into modular "suites". As an example, a line would be modified using the SetPathSegment( ) function of the path suite. Function suites are provided to access almost all Adobe Illustrator data types. The API also provides a number of auxiliary suites to make plug-in development easier, such as a math library and a number of interface calls. A plug-in can even extend the API by adding new suites, allowing the API to easily grow with the application.

Adobe Premiere

The Adobe Premiere program is a non-linear video editing application. The Adobe Premiere API allows a variety of plug-in types to be created. These include plug-ins that work on video and audio data such as video transitions, video filters, and audio filters. These plug-ins work over a series of data frames and manipulate the information to produce some effect. Other plug-in types include two kinds of export modules and two types of hardware control modules, one for video zooming and one for device control.

The Adobe Premiere program uses a message passing scheme to communicate with its plug-ins. A common message received by plug-ins is *Execute*. In addition to a command message, the plug-in is passed appropriate data. This data differs by plug-in type. For instance, a video transition would receive two graphic frames to blend together, while a video filter would only receive one. In the case of transitions and filters, the plug-in processes the data and returns a final audio or video frame. Export filters would normally create a file of some sort with the data passed to them. Hardware control modules directly interact with their related hardware based on the message passed, for instance, by moving to a location on a video tape.

The development kits are unfortunately not identical across platforms. While the basic plug-in types are supported by both the Macintosh and Windows applications, the Macintosh API has some extended functionality and large library of useful, though not critical, routines. Both APIs include the callbacks necessary for the filter to interact with Premiere, for instance the functions needed to obtain information for exporting a Premiere project.

Adobe Photoshop

The Adobe Photoshop 3.0 application is a high-end photo retouching, image editing, and colour painting application. Its Application Programming Interface (API) enables developers to vastly extend its base functionality. Adobe Photoshop plug-ins allow third party vendors to read and write non-native file formats, acquire images directly from scanners or video devices, export images directly to hardware devices or save them in proprietary formats and filter or modify selected portions of images. Photoshop Plug-ins are installed by placing them in the user's designated Plug-in folder.

The current versions of all the Graphic and Publishing developers kits are supplied with example code and

makefiles for Metrowerks CodeWarrior on Macintosh and Visual C++™ on the Windows platform.

As with Illustrator's API set, the Photoshop APIs only supports a modal interface. Standard system calls are available for any user interaction. Documentation and sample code on how to create native Power PC Photoshop Plug-ins is also included in the developers kit.

Adobe After Effects

Adobe After Effects is a digital post-production tool for composing, motion graphics, and special effects. Its extensive plug-in architecture lets you write input/output modules and powerful add-on effects.

The program supports the Adobe Photoshop file format specification (8BIF) and extends it to time-based and non-file-based formats. After Effects also supports Adobe Photoshop plug-in filters, which can be applied to still images or to video over time. You can even customise the user interface for special effects plug-ins. Like the application, the After Effects API is available exclusively for Macintosh.

Adobe PageMaker

The Adobe PageMaker Plug-in technology enables third-party developers and users to extend the capabilities of Adobe PageMaker. Based on a simple command and query language, this technology provides an interface to PageMaker's menu commands, tools, and publication data. Developing PageMaker plug-ins let you create a personalised publishing environment that extends PageMaker functionality.

Adobe PageMaker plug-ins can take many forms, from simple scripts written in PageMaker, to dynamically loaded modules that appear on the PageMaker plug-ins submenu, to any application-to-application communications (System 7.0 Apple events on the Macintosh or DDE in Windows applications).

The SDK contains the following key features for PageMaker extensibility:

• Private data - you can now attach variable length private data to PageMaker documents and page level objects such as text and graphics. This allows you to save data that relates to an object or objects on a page. One example of this is caption information for a placed graphic.

• Multiple Master Pages - PageMaker can now have up to 256 master pages defined and accessible through the plug-ins API.

• User definable grids - PageMaker 6.0 allows user definable grids that let you customise column guides, trim marks and other guidelines for frequently used page templates.

• New Filters - PageMaker has added several new filters to its already large list of import filters. These include PhotoCD™, EMF, ClarisWorks™, CorelDRAW™ 5.0, and TAGS filter.

The SDK includes documentation in Adobe Acrobat® format detailing the PageMaker Plug-ins mechanism, command and query language and information on building a plug-in. Also included: sample code, header files, Adobe Acrobat Reader 2.1 for Macintosh and Windows, the Filter Developers Toolkit and more.

Adobe® Acrobat® Plug-ins SDK

This CD-ROM contains everything you need to develop Acrobat solutions using the Acrobat viewer plug-in API and Interapplication Communication (OLE, DDE, and Apple® events). It includes documentation and code for integrating your products with Acrobat Exchange, PDFWriter, the Acrobat Distiller® application, Acrobat Capture™, Acrobat Search, and Acrobat Catalog®—and for creating Acrobat viewer plug-ins using the Acrobat Viewer Plug-in API. You'll also find documentation for automatic generation of advanced Acrobat features through the Acrobat Distiller application. Contents include the following:

Specifications and Documentation

- Acrobat Viewer Plug-in API Overview
- Acrobat Viewer Plug-in API On-line Reference
- Acrobat Viewer Plug-in Development
- Acrobat Viewer Plug-in API Tutorial
- Acrobat Search Plug-in HFT Specification
- Acrobat Weblink Plug-in HFT Specification
- Acrobat Viewer Interapplication Communication Support Overview
- Acrobat Viewer Interapplication Communication On-line Reference
- Acrobat Search Plug-in IAC Specification
- Acrobat Catalog® Control Interface Specification
- Acrobat Capture DDE Support
- Acrobat Distiller Control Interface Specification
- Acrobat Distiller Parameters
- pdfmark Reference Manual
- Supporting DCT Filters in PostScript® Level 2
- Portable Document Format Reference Manual
- PDFWriter Control Interface Specification
- Acrobat Overview and Compatibility
- Compatibility Testing Guidelines
- Acrobat Marketing Support

Software and Utilities

- Acrobat Toolkit for SunOS, Solaris , IRIX, AIX®, HP-UX, Windows NT, and Windows 95
- Sample Code & Plug-ins
- Header Files

With this SDK you can:

- Verify that your application, in conjunction with the Acrobat PDFWriter or the Acrobat Distiller application, produces high-quality PDF files as described in *Portable Document Format Reference Manual*.
- Test your OLE container applications by embedding PDF files using OLE.
- Learn how to generate Portable Document Format (PDF) files containing cross-document hypertext links, bookmarks, annotations, and articles using the pdfmark operator.
- Integrate your application with the Acrobat software via DDE/OLE/Apple events.
- Create Acrobat Viewer plug-ins, which can add rich functionality by enhancing Acrobat Exchange.

On-Line Availability

A subset of the Acrobat Plug-Ins SDK is available on-line for you to download and use. This includes all documentation (in PDF format) and sample code for the IAC Support (OLE, DDE, Apple Events), but does not include any Acrobat software, or information and sample code for the Plug-In API.

This information is unsupported; to receive Developer Technical Support and technical updates, you must purchase the complete Acrobat Plug-Ins SDK, purchase individual support cases, or buy a support contract. Information specifically pertaining to Acrobat plug-ins is contained only in the Acrobat Plug-Ins SDK.

The Acrobat Plug-Ins SDK subset is available from:

world wide web:

```
http://www.adobe.com/Acrobat/AcroSDK/
```

anonymous ftp:

```
ftp.adobe.com/pub/adobe/Acrobat/SDK/
```

Acrobat Licensing

Certain portions of the Acrobat software may be licensed for commercial redistribution. Please contact the Adobe Developers Association for further information on how to license these products.

Acrobat Reader (free)

The basic Acrobat Viewer enables Macintosh®, Windows®, and UNIX® users to view, navigate and print a PDF file, but does not support any of the features that modify the PDF file (i.e. does not have "save" functionality). Reader supports the subset of the plug-in API that does not modify PDF files. Acrobat Reader is freely distributable.

Acrobat Exchange (fee based)

The advanced Acrobat viewer. Enables Macintosh, Windows and UNIX users to not only view, navigate and print, but also annotate, create navigation features, add security controls, and modify PDF files in various ways. Acrobat Exchange supports all of the Plug-In API and IAC calls. Includes the Search Plug-ins other plug-Ins.

Plug-Ins

Adobe provides plug-ins which may be used with Exchange (in all cases) and with Reader (in some cases).

Weblink Plug-In

Provides the ability to set (with Acrobat Exchange) a link to a URL on the World Wide Web. This link may then be followed when using the Weblink Plug-in with either Acrobat Exchange or Acrobat Reader. This capability requires the use of the Netscape Navigator (or compatible) browser. The Weblink plug-in is included in some configurations of the Acrobat Reader, and may be freely distributed.

Movie Plug-In

Provides the ability to include (with Acrobat Exchange) a Quicktime or AVI movie in a PDF file. This movie may then be viewed when using the Movie Plug-in with either Acrobat Exchange or Acrobat Reader 2.1. The Movie Plug-in is included in most configurations of the Acrobat Reader, and may be freely distributed.

Search Plug-In

This plug-in provides the user interface to the Acrobat full text index-based search system and is included with Acrobat Exchange. In general, it may not be distributed with Acrobat Reader, but there is a retail product (Acrobat Reader with Search for CD-ROM Publishers) that permits redistribution on CD-ROM with Reader.

Acrobat Toolkit (fee based)

Allows the extraction of text from PDF files on the HP/UX, SunOS, Solaris, AIX®, IRIX®, and WindowsNT platforms.

Acrobat Marketing Programs

Adobe Systems provides the following marketing programs to assist Acrobat developers in marketing their products:
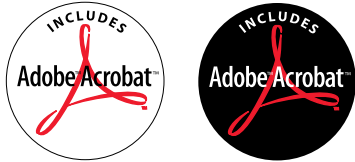
Acrobat Logos

Adobe provides three different Acrobat logos for developers to use. These logos can be printed on product boxes, literature, even directly on CD-ROMs. There is no license fee for these logos, however developers must complete a license agreement to receive these logos. The logo license agreement may be obtained directly from the Adobe Developers Association.
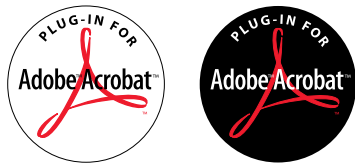
Supports Adobe Acrobat

This logo is for products that are integrated with or support Adobe Acrobat.

Includes Adobe Acrobat

This logo is for products that are bundled with Acrobat Reader or Acrobat Exchange.

Plug-in for Adobe Acrobat

This logo is for products that include a custom plug-in for Adobe Acrobat.

Please note that these are the only Acrobat logos that you may use on your product. In addition, there are restrictions as to how you can use the words "Adobe Acrobat" in your packaging.

Third Party Catalogue

Adobe publishes *Adobe Acrobat Software: A Guide to Related Products and Services*, a catalogue of information for Acrobat users and developers. Any product that supports or includes Acrobat can be included in this catalogue. In addition, space in this catalogue is available to companies or developers who provide services around Acrobat.

Adobe Acrobat Software: A Guide to Related Products and Services is distributed in a number of ways including an electronic version that is shipped with the Acrobat products and on our world wide web site (http://www.adobe.com). By including your product or service in this catalog you have direct access to Acrobat customers and developers.

To be part of *Adobe Acrobat Software: A Guide to Related Products or Services*, complete the participation form which can be obtained directly from the Adobe Developers Association.

Additional Acrobat Marketing Opportunities

Adobe provides developers with opportunities to co-market their products. Developers will be contacted by Adobe when specific co-marketing opportunities arise.

Co-marketing activities include:

• Developers can take advantage of Adobe's Acrobat registered user database for direct mail purposes. The list is made available on a "blind" basis via an external mailing house, and all costs for the direct mail piece are paid by the developer.

• Adobe can provide visibility to developers on Adobe's WWW site with links to their own home page as appropriate.

• Adobe provides the opportunity to do joint Press Releases with developers at the launch of their product.

• At the discretion of Adobe, there may be an opportunity to do an Acrobat Customer Spotlight which focuses on a key customer of a developer, highlighting their success with Acrobat in conjunction with the developer's product.

Acrobat™ Integration Opportunities

Adobe Acrobat is more than just a document communication platform, it is also a development platform. The depth and richness of the Acrobat development environment allows for innovative and diverse projects including:

• Enhancing existing applications by incorporating Acrobat document viewing.

• Building effective electronic document communication systems around the Acrobat products.

• Customising or extending the functionality of the Acrobat viewers through the creation of plug-ins.

• Automating the creation of Acrobat navigation and readability features (bookmarks, links, notes and

articles).

To better understand the variety of development opportunities with the Acrobat products, this document provides a detailed look at the Acrobat.

General Compatibility Testing

The first step to integrating existing applications with Adobe Acrobat software is to perform compatibility testing between the existing application and the Acrobat products.

If your application can generate printed output of any kind, it should be tested with both the Acrobat PDFWriter and the Acrobat Distiller™. Test by "printing" through the PDFWriter or by printing to a PostScript™ language file and sending this file through the Acrobat Distiller, and then compare the resulting PDF file to printed output.

Acrobat Exchange viewer for the Windows™ environment is an OLE 2.0 server application. Applications that are OLE containers should test for compatibility by embedding PDF files using OLE. Further compatibility testing depends on the features of your specific application.

Integrating with Adobe Acrobat

The Acrobat products provide a broad range of integration opportunities that allow developers to do far more than just invoke Acrobat to view a file. There are Application Programming Interface (API) calls and/or Interapplication Communication (IAC) calls for every part of the Acrobat environment. These allow integration with:

• the Acrobat viewers (Reader and Exchange)

• the PDF creation tools (PDFWriter and Distiller)

• the Acrobat Search system (Acrobat Search plug-in

  and Acrobat Catalog™)

The following sections detail the development opportunities available with each part of the Acrobat environment.

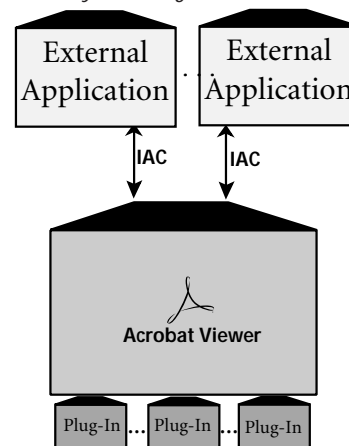## Integrating with the Acrobat Viewers

The Acrobat development environment provides multiple ways for developers to enhance and control the Acrobat viewers. These include using IAC and writing plug-ins to the Acrobat viewers using the API provided *(see figure 1)*.

Plug-ins have access, through the extremely rich API, to the majority of PDF objects and Acrobat viewer features. Plug-ins can be written to provide standalone functionality to the Acrobat viewers, or they can be used to integrate with an external application.

Object Oriented Interapplication Communication (OLE automation on Windows and Apple® events on the Macintosh® platform) gives the developer access to a substantial portion of what is provided in the API directly from an external application. In many cases, integration can be done solely through IAC without writing a plug-in. However, it is appropriate, and will sometimes be necessary, to combine the use of plug-ins with IAC. Additionally, IAC methods (including DDE) can be used for remote control of the Acrobat viewers.

The Acrobat Exchange viewers for Windows are OLE 2.0 servers, providing a certain level of access for OLE containers.

Figure 1: *Two ways to integrate with the Acrobat Viewers*

Acrobat ViewerPlug-In API

The Acrobat viewer plug-in API allows the developer to enhance and control the Acrobat viewers in order to add functionality and integrate with existing environments.

Acrobat Exchange supports the entire API, while Acrobat Reader Supports those calls that do not modify files.

To use the API, you must write an Acrobat plug-in. Plug-ins are C or C++ programs implemented as DLLs on Windows, code resources or code fragments on the Macintosh and shared libraries on UNIX. The Acrobat Viewer looks in a special folder/directory for plug-ins when it launches. All plug-ins found will be loaded.
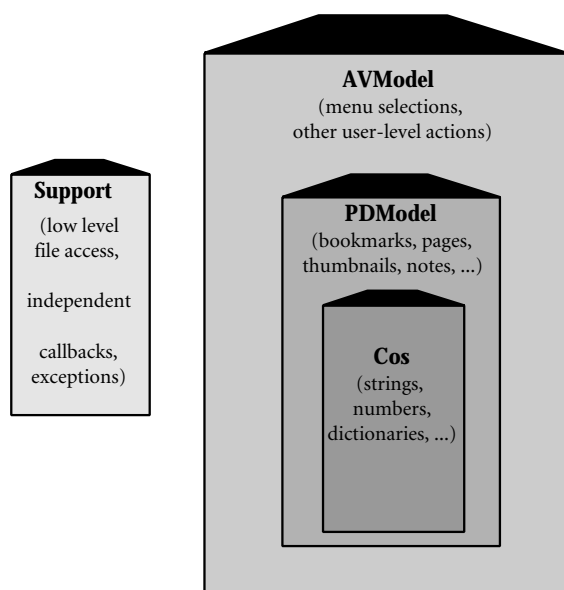
Plug-ins themselves can enrich Acrobat Exchange in a variety of ways. Examples of plug-in functionality range from adding tools (e.g. highlighter pen or redlining pen) to modifying the Acrobat file access procedures. Plug-ins can add private data (data which is not inherently part of the PDF structure) to a PDF file. Private data can be used to store a variety of information from new annotation types (e.g. highlight ink or red lines) to an entire application file (e.g. the source document from which the PDF file was created). These are just a few examples of what Acrobat plug-ins can do. Plug-ins can also provide their own API which can be called from other plug-ins.

The API itself is organized into objects, although it is implemented using a plain C interface. There are approximately 50 object types organized into the following four groups *(see figure 2)*:

- *AVModel* — access to user level actions.
- *PDModel* — access to document level actions.
- *Cos* — access to low level data.
- *Support* — utilities and file access.

Object types represent items in the Acrobat viewer (e.g. menus and toolbar buttons), items in PDF files (e.g. fonts and notes), and file system objects (e.g. files). Each object type has methods that allow the creation, destruction, examination, and modification of objects of that type. The API contains more than 500 methods.

Figure 2: Acrobat viewer API Organization

AVModel

The AVModel group contains objects that represent parts of the Acrobat viewer, including menus, menu items, document windows, toolbar buttons, and the application itself. Some of the methods in this group allow you to open a window containing a PDF document, add or remove menus, menu items and toolbar buttons, and modify settings in the application's preferences file.

PDModel

The PDModel group contains objects that represent components in a PDF file, including pages, fonts, bookmarks, notes, and actions. The structure of a PDF file is described in *The Portable Document Format Reference Manual* available in the Acrobat Plug-ins SDK and from the Adobe Web Site. PDModel methods are used to extract text from a PDF file (see also the Acrobat Toolkit section later in this document), to add notes or actions, determine the fonts a document uses, etc.

Cos

The low-level data in a PDF file is represented by objects in the Cos group. Cos contains the seven data types of a PDF file: booleans, numbers, strings, names, arrays, dictionaries, and streams. Cos methods are used to add private data to a PDF file, or to read or modify parts of a PDF file for which PDModel methods are not provided.

Support

The Support method group provides a collection of utility and file access methods. Included are utilities (fixed point math, memory allocation), file methods, and methods that allow a plug-in to export its own callable functions to other plug-ins. Methods in this group are used to convert pathname specifications between platform-independent and native formats, or allow files to be read over the Internet or from a database by replacing the file system.

OLE Automation

OLE automation on Windows provides a way for the developer to remotely control the actions of Acrobat Exchange. OLE automation is supported only by Acrobat Exchange, not by the Acrobat Reader.

A detailed overview of the OLE automation support in

Acrobat Exchange can be found in Technical Note #5155, "Acrobat Viewer Interapplication Communication Support Overview," of the Acrobat Plug-Ins SDK and can be obtained from the ADA area of the Adobe Web Site.

The remote control actions are structured in the following four sections:

Application Configuration — allows control of the Acrobat viewer application's appearance and the invocation of menu and toolbar items.

Document Manipulation — allows control of actions on specific PDF files.

Document Printing — allows control of printing from an Acrobat viewer.

View Manipulation — allows control of the view of a specific PDF file.

Application configuration

These calls allow the developer to control functions such as:

- Exiting the Acrobat viewer.
- Iconifying / Showing the Acrobat viewer
- Hiding / Showing the toolbar.
- Displaying Full / Short menus.
- Closing all open PDF files.
- Invoking a menu item.

Document Manipulation

These calls allow the developer to control functions such as:

- Opening / Closing a PDF file.
- Saving a PDF file.
- Inserting / Replacing / Deleting pages in a PDF file.

Document Printing

These class allow a developer to invoke the printing of a PDF file specifying the page range to print and suppressing dialogs if desired.

View Manipulation

These calls allow the developer to control functions such as:

- Going to a specific page of aPDF file.

- Changing the Zoom factor for a PDF file.
- Scrolling the view of a PDF file.
- Performing the functions of the up, down, right and left arrow keys on the PDF file.

Apple Events

The Acrobat viewers on the Macintosh support Apple events based on the Object Model, where the application is represented as a collection of objects on which Apple events act. The objects in AVModel and PDModel that can be controlled through Apple events have been reorganized slightly to fit the Object Model. In addition to controlling Acrobat objects, Apple events support also provides the Macintosh developer with remote control of the Acrobat viewers. This remote control is the same provided with OLE automation on Windows. See the OLE automation section earlier in this document for a description of the remote control functionality available.

Apple events can be used either from programming languages such as C or from AppleScript™. Because AppleScript is much more straightforward, it is the recommended way for developers to use Apple events with the Acrobat viewers.

The Acrobat viewers support a wide variety of Apple events, grouped into three broad categories:

- *Required events* — Events that the Finder sends to all applications.

- *Core events* — Events that are not universal to all applications, but are common to a wide variety of applications.

- *Acrobat-specific events* — Events that are specific to the Acrobat viewers.

Apple events support is not standard across all the Acrobat viewers. Acrobat Exchange provides the broadest range of support, and Acrobat Reader provides only the Required events support.

Detailed overview of the Apple events support in the Acrobat Viewer can be found in Technical Note #5155, "Acrobat Viewer Interapplication Communication Support Overview," previously described.

Required events

The required suite consists of four events the Finder sends to an Acrobat viewer. These allow the

developer to:

- Launch an Acrobat viewer.
- Open a PDF file.
- Print one or more PDF files.
- Exit the Acrobat viewer.

Core events

The Acrobat viewers support a subset of the Core Apple events. The eleven core Apple events supported are:

- Close a PDF file.
- Open a PDF file without displaying it.
- Count objects in a PDF file.
- Make a new object in a PDF file.
- Delete an object from a PDF file.
- Determine if an object exists in a PDF file.
- Get data/properties of an object in a PDF file.
- Move an object in a PDF file.
- Set data/properties of an object in a PDF file.
- Hide the Acrobat viewer.
- Perform tasks and then quit the Acrobat viewer.

Acrobat-specific events

Following are some examples of what the Acrobat-specific Apple events provide.

- Create / Delete thumbnails in a PDF file.
- Insert a page from one PDF file into another PDF file.
- Delete a page from a PDF file.
- Find text in a PDF file.
- Change the view magnification.
- Remove toolbar buttons.
- Invoke a menu item.

DDE (Dynamic Data Exchange)

The Acrobat viewers on the Windows platform support Dynamic Data Exchange (DDE). Through DDE, Windows developers have remote control of the Acrobat viewers and limited access to Acrobat objects. The remote control is a subset of that provided with OLE automation on Windows. See the OLE automation section earlier in this document for a description of the remote control functionality available.

DDE support is not standard across all Acrobat viewers. Acrobat Exchange provides the broadest range of support and and Acrobat Reader provides support only for a small subset of DDE calls.

An overview of the DDE support in Acrobat 2.0 (including specifically which DDE calls are supported) can be found in Technical Note #5155, "Acrobat Viewer Interapplication Communication Support Overview," previously described.

Acrobat Toolkit

The Acrobat Toolkit is an object code library that can be linked into a developer's application. It provides the ability to extract text from a PDF file. The Acrobat Toolkit is currently availabe on the following platforms: SunOS™ and Solaris®, IRIX®, AIX®, HP-UX, Windows® NT, and Windows® 95. The Toolkit is available in the Acrobat Plug-Ins Software Development Kit but must be licensed if you wish to redistribute..

Macintosh and 16-bit Windows versions of the Acrobat Toolkit are not available. Developers on these platforms must extract text using the Acrobat viewer's Plug-In API.

Integrating with the Acrobat Creation Tools

Adobe provides two ways to create PDF files: The PDFWriter and the Acrobat Distiller. Developers can control various features of these tools.

In addition, applications that produce printed output can automatically generate advanced Acrobat features (such as bookmarks, links, notes, articles, and more).

PDFWriter

The PDFWriter is a printer driver, not a standalone application, and therefore cannot be controlled directly via IAC. However, when the PDFWriter runs it gathers specifications from an initialization file. By editing this file, developers can control the following actions of the PDFWriter:

- Suppress the PDFWriter dialog from appearing on screen.
- Specify the pathname of the output file (the resulting PDF file).

On the Macintosh, the application puts this information into a PREC resource in the PDFWriter. On Windows,

this information is put in the Acrobat PDFWriter section of the WIN.INI file.

The Windows platform provides a way to broadcast messages. The Acrobat PDFWriter on Windows sends a broadcast message when it starts creating a PDF file and when it is finished creating a PDF file. There is no corresponding functionality on the Macintosh.

Acrobat Distiller

The Acrobat Distiller supports a set of IAC calls implemented through Apple events on the Macintosh and DDE on Windows. The set of calls supported allows the developer to:

- Run the Acrobat Distiller.
- Open a PostScript language file and distill it.
- Open a PostScript language file, specify the output pathname, and distill it.
- Quit the Acrobat Distiller.

Using IAC, developers can make the creation of the PostScript language file and the distilling into a PDF file appear as a single step to the user. This is especially valuable to the user if the application is automatically generating advanced Acrobat features (see section later in this document).

In addition to directly controlling the Acrobat Distiller functions, developers can indirectly control the Distiller settings. Because the Acrobat Distiller is a PostScript level 2 interpreter, the Distiller-specific PostScript operator, **setdistillerparams** can be used to change the settings of the Distiller. An application can generate **setdistillerparams** as part of a PostScript language file. When this file is distilled by the Acrobat Distiller, the **setdistillerparams** operators are interpreted and the Distiller settings are changed.

The **setdistillerparams** operator can be used to control the following Acrobat Distiller settings:

- Generation of thumbnail images.
- Compression of text and graphics with LZW compression.
- Downsample resolution and bits per sample.
- Encoding of images and specify the compression filter (JPEG, LZW, or CCITT).
- Type 1 font embedding. Note that there is no TrueType™ font embedding in the Distiller since it

is a PostScript language interpreter, and, as such, will only receive PostScript language files as input. Any TrueType font that existed in the original file will have been converted to a Type 1 or Type 3 font before it reaches the Distiller.

When the Distiller software settings are changed by generating the **setdistillerparams** operator in a PostScript language file, the changed settings are in effect only for the duration of the single job (usually the creation of a single PDF file) and then the settings are restored to those present before the job began.

Detailed information about controlling the Acrobat Distiller settings through the **setdistillerparams** operator can be found in Technical Note #5151, "Acrobat Distiller Parameters." This technical note is included the Acrobat Plug-Ins SDK and can be obtained directly from the Adobe Web Site.

The Acrobat Distiller on Windows sends a broadcast message when it starts creating a PDF file and when it is finished creating a PDF file. There is no corresponding functionality on the Macintosh or UNIX.

Automatic Generation of Advanced Acrobat Features

Automatic generation of advanced Acrobat features is done through **pdfmark**, a Distiller specific PostScript level 2 operator. The use of **pdfmark** makes it possible for an application that already supports the PostScript language to support the added value of the Portable Document Format without having to write a PDF file directly.

Detailed information about **pdfmark** can be found in Technical Note #5150, "**pdfmark** Reference Manual." This technical note is included in both of the Acrobat Plug-Ins SDK and can be obtained directly from the Adobe Web Site.

pdfmark is supported by the Acrobat Distiller. Applications that generate **pdfmark** must do so in a PostScript language file which is then sent through the Distiller. While **pdfmark** is a PostScript operator, when implemented correctly, it will be ignored by PostScript printers and only interpreted by the Acrobat Distiller. Because of this, developers can choose to generate **pdfmark** operators whenever the application generates a PostScript language file.

At the time of printing, an application needs to identify the structure in its document that corresponds to the Acrobat structures and generate the appropriate **pdfmark** operators in the PostScript language file. These **pdfmark** operators are then interpreted by the Acrobat Distiller and expressed as the appropriate Acrobat features. Some examples of how applications can use **pdfmark** are:

- A word processing application that has a table of contents feature can identify its table of contents structure at the time of printing and generate a **pdfmark** for both a bookmark and a link for each table of contents entry.
- A presentation product can generate a **pdfmark** for a bookmark for each slide title.

The **pdfmark** operator can generate the following items in PDF files:

- *Bookmarks* — a bookmark is a string that appears in a hierarchical list separate from the PDF document. When activated, a bookmark changes the view of the PDF document, opens another PDF document to a specific view, or launches another application. When specifying a bookmark using **pdfmark**, the application provides the name of the bookmark and the details of the destination for that bookmark.
- *Links* — a link is a rectangular area on the page of a PDF document that, when activated, changes the view of the PDF document, opens another PDF document to a specific view, or launches another application. Links can be visible or invisible. If visible, they can have thin, thick or dashed lines of any color. When specifying a link using **pdfmark**, the application provides the page and location of the link, the viewable characteristics of the link and the details of the destination for that link.
- *Notes* — Notes are text fields that appear as separate windows on top of the PDF document. Notes have a color, creator name, and date and time created associated with them. When specifying a note using **pdfmark**, the application provides the text and location of the note. The application may also provide the color and creation characteristics. If none are provided, defaults will be used.
- *Articles* — Article threads define how the text of a story flows through the PDF document. They are particularly useful for documents that are formatted with columns (such as magazines or newspapers).

Article threads have titles and consist of a set of rectangular regions called beads. A separate **pdfmark** is generated for each bead of an article thread. When specifying a bead using **pdfmark**, the application provides the name of the article thread and the location and boundary of the bead rectangle.
- *Info dictionary information* — The info dictionary keeps the specific information about the PDF document that is displayed in the Document Info dialog in an Acrobat viewer. When specifying info dictionary information using **pdfmark**, the application provides strings for any of the following information: author, creation date, creator, producer, title, subject, and keywords.
- *Catalog dictionary information* — Catalog dictionary information is more varied than info dictionary information and can be used to store data such as the initial view setting of the document, and pointers to private data. When specifying catalog dictionary information using **pdfmark**, the application provides information in the specific format required.
- *Page cropping* — Page cropping is used to reduce the visible area of the page, for example, to cut out information that is not necessary for viewing the page on screen (e.g. crop marks). Page cropping can act upon either the entire PDF document or on a single page. When specifying a page cropping **pdfmark**, the application provides the boundary of the visible rectangle.
- *Pass thru PostScript code* — Pass thru PostScript code allows the application to include PostScript code for custom halftoning, spot functions and device specific information in the PDF file. This PostScript code will not effect the view of the file in the Acrobat viewer, but will execute when the PDF file is sent to a PostScript printer. When specifying pass thru PostScript code using **pdfmark**, the application provides the PostScript code to be included in the PDF file.

Integrating with The Acrobat Search System

There is a full text, index based search system for Acrobat available from Adobe. The indexing part of this system is the Acrobat Catalog product, and the searching part of this system is a plug-in to the Acrobat viewers called the Acrobat Search plug-in. This search system is based

on the Verity search engine.

Various aspects of both portions of this system can be controlled by developers.

Acrobat Search Plug In

The search plug-in provides the user interface for search queries and performs searches on indexes that have been created with Acrobat Catalog, when used with Acrobat Exchange (but not with Reader). Developers can communicate with the Search plug-in via its API, or via IAC (DDE or Apple events).

Using either of these methods, developers can control the Acrobat search plug-in in the following ways:

- *Control the list of indexes being searched* — the search interface allows for searches to be performed on any of the available indexes. Developers can control the list of active indexes.

- *Initiate a search with options* — Developers can pass the search variables and the search settings (e.g. whole words only, word stemming, case sensitive, etc.) to the Acrobat search plug-in and initiate the search. Search results will be presented to the user.

A developer could, for example, create a plug-in that has a UI for pre-defined search queries.

Acrobat Catalog

Through IAC (DDE), external applications can control Acrobat Catalog in the following ways:

- Run Acrobat Catalog.
- Build an index (specifying directories to be indexed and name of index file).
- Quit Acrobat Catalog.

On the Windows platform, Acrobat Catalog sends a broadcast message when it starts indexing and when it is finished.

Develop with Adobe Acrobat Today!

This document has provided a basic understanding of the Acrobat development environment. Now you can determine how Acrobat can add value to your applications.

Documents and Tools

The following is a list of documents and tools mentioned in this document. All documents mentioned are part of the Acrobat Plug-Ins Software Developer Kits. Everything listed can be obtained from the Adobe Web Site.

- Adobe Technical Note #5155, "Acrobat Viewer Interapplication Communication Support Overview."
- Adobe Technical Note #5151, "Acrobat Distiller Parameters."
- Adobe Technical Note #5150, "**pdfmark** Reference Manual."
- *The Portable Document Format Reference Manual*
- Acrobat Plug-Ins Software Developer Kit

Technical Training

Adobe Systems Europe offers the following programme of training courses aimed at those who wish to learn about Adobe's technologies.

PostScript Courses

Practical Issues in PostScript Systems (1 day—$400)

This course is suitable for anyone who needs to understand how the PostScript™ language is used within a desktop publishing system. Students are given an overview of the PostScript language, along with an explanation of system issues such as fonts, Encapsulated PostScript, printer drivers, etc.

No prior knowledge of PostScript is required.

The PostScript Language—Level 1 ($3\frac{1}{2}$ days—$1,600)

This is a programming course that teaches the basic details of the PostScript language. Subjects covered include the PostScript imaging model, stacks, dictionaries, line art, images and text.

No prior knowledge of PostScript is required, but a familiarity with another programming language would be an advantage.

The PostScript Language—Level 2 ($1\frac{1}{2}$ days—$800)

This programming course teaches the advanced features that were introduced in Level 2 of the PostScript language. The topics include forms, patterns, device-independent colour, data compression, the page device and the resource mechanism.

It is assumed that students already have a knowledge of PostScript equivalent to that provided by the PostScript Level 1 course.

Adobe Acrobat™ Developer Courses

An Introduction to Developing with Adobe Acrobat (1 day—$400)

Provides an introduction to the mechanisms whereby developers can integrate Adobe Acrobat into their systems. The topics include an overview of the Acrobat family of products, pdfmark, Distiller Params, OLE, DDE and Apple® Events.

No prior knowledge of Acrobat is assumed, but this is a technical course that requires students to be experienced with the concepts of application development on either Macintosh® or Windows™ platform.

Developing Adobe Acrobat Plug-ins (2 days—$800)

The plug-in API that is a feature of Acrobat 2.0 is described in detail, and students are taken through the process of designing and writing sample plug-ins. Also included is an introduction to PDF file structure.
Those attending should be competent programmers in C or C++ on either the Macintosh or Windows platform and must be members of the Acrobat Plug-ins SDK developers programme, which is available from the Adobe Developers Association.

All courses include hands-on practical exercises and are taught in English. The course fee includes lunch and refreshments, student notes and, where appropriate, technical documentation.

Technical Training

Training Course Schedule 1996

March
1st	Practical Issues in PostScript Systems
4th-7th	The PostScript Language—Level 1 (ends on 7th at 12.30)
7th-8th	The PostScript Language—Level 2 (starts on 7th at 13.30)

May/June
31st May	Practical Issues in PostScript Systems
3rd-6th June	The PostScript Language—Level 1 (ends on 6th at 12.30)
6th-7th June	The PostScript Language—Level 2 (starts on 6th at 13.30)

August/September
30th August	Practical Issues in PostScript Systems
2nd–5th September	The PostScript Language—Level 1 (ends on 5th at 12.30)
5th-6th September	The PostScript Language—Level 2 (starts on 5th at 13.30)

November/December
29th November	Practical Issues in PostScript Systems
2nd-5th December	The PostScript Language—Level 1 (ends on 5th at 12.30)
5th-6th December	The PostScript Language—Level 2 (starts on 5th at 13.30)

All courses are held in Amsterdam, the Netherlands, except for the PostScript courses in August/September 1996, which will be held in London, United Kingdom. For dates of the Adobe Acrobat developer courses, please contact Iris Braam at the following telephone and fax numbers:

Tel: +31-20-65 11 252
Fax: +31-20-65 11 313

Please also telephone or fax these numbers for bookings of the PostScript training courses.

Members of the Adobe Developers Association and Adobe's OEM partners qualify for a discount on the course fees. Please enquire for details.

Adobe

Adobe™ Developers Association

Training Course Registration Form

Customer Information
Please print or attach business card.

Contact Name: _____ Title: _____

Company: _____

Street Address: _____

City: _____ Postal Code: _____ Country: _____

Tel: _____ Fax: _____ E-mail: _____

YES, I would like to register for the following course(s) at Adobe Systems:

PostScript™ Courses

☐ **Practical Issues in PostScript Systems**

☐ **The PostScript Language—Level 1**

☐ **The PostScript Language—Level 2***

* It is assumed that students already have a knowledge of PostScript equivalent to that taught in the PostScript Level 1 course.

Adobe Acrobat™ Developer Courses**

☐ **An Introduction to Developing with Adobe Acrobat**

☐ **Developing Adobe Acrobat Plug-ins***

I would like to work on   ☐ **Macintosh®**   ☐ **Windows™**

** These courses are held at regular times, please call +31-20-65 11 252 for more information about the dates

*** Students attending this course must be members of the Acrobat Plug-ins SDK developers programme, which is available from the Adobe Developers Association.

I would like to attend the course on the following date(s): _____

☐ **Yes, we are an Adobe OEM**

☐ **Yes, we are a member of the ADA; our number is:** _____

Return to: **Adobe Developers Association**
Europlaza
Hoogoorddreef 54a
1101 BE Amsterdam Z.O.
The Netherlands
Fax: +31-20-65 11 313

I understand that I will be subject to a cancellation fee of 25% of the course fee if I cancel less than one week before the course starts.

ADA030-7/95

The Adobe Developers Association:

In Europe contact:
Adobe Developers Association
Europlaza
Hoogoorddreef 54a
1101 BE Amsterdam Z-O
The Netherlands

Membership questions:
Tel: +44.131.458.6800
Fax: +44.131.458.6801
Email: euroADA@adobe.com

Developer technical support questions:
Tel: +31.20.65 11 355
Fax: +31.20.65 11 313
Email: eurodevsup@adobe.com

In the USA, Canada and outside of Europe contact:

Adobe Developers Association
Adobe Systems Incorporated
345 Park Avenue
San Jose, CA 95110-2704
U.S.A.

ADA Hotline: +1.408.536.9000
Fax: +1.408.536.6883
FaxYI: +1.206.628.5737
Technical questions, email:

devsup-person@adobe.com

Membership questions, email: ada@adobe.com
Order information, email: devorder@adobe.com