Adobe® Reader® LE SDK

Extending Adobe PDF technology to the mobile environment

The Adobe Reader LE software development kit (SDK) is a developer support tool that contains a set of C++ application programming interfaces (APIs) as well as a testing and verification framework. Developers can use this SDK to build PDF viewing applications optimized for mobile devices. By extending the Adobe PDF functionality to the mobile environment, the SDK enables mobile users to view rich, reliable, and more secure PDF content on their devices. This enables wireless carriers, device manufacturers, and content providers to deliver compelling PDF content across multiple devices and operating systems.

BENEFITS TO WIRELESS DEVICE MANUFACTURERS
- Help ensure users can accurately display PDF documents
- Eliminate out-of-cycle patches or revisions

BENEFITS TO WIRELESS CARRIERS
- Generate additional revenue through add-on services
- Improve Average Revenue Per User (ARPU) with no additional investment

BENEFITS TO CONTENT PROVIDERS
- Deliver a consistent user experience
- Mobilize existing PDF content quickly and easily

Fully asynchronous execution model
Despite the fact that embedded environments provide little or no support for multi-threading, they require applications to respond quickly to events. The Adobe Reader LE SDK solves this dilemma by providing a set of completely asynchronous APIs. Developers can use these APIs to build responsive mobile-optimized Adobe Reader applications that do not overload system resources, even when mobile users are viewing complex documents over an intermittently available network.

Ideal for resource-constrained environments
The Adobe Reader LE SDK has been developed with embedded environments in mind. It enables the developers to quickly and easily create mobile Reader applications that have a small footprint, consume low memory, and render swiftly. In addition, the modular architecture of the Adobe Reader LE SDK allows developers to extend functionalities that meet the requirements of mobile users.

Support for small screens
The Adobe Reader LE SDK supports a reflowable view of PDF files specifically designed for small screens. In addition to displaying the traditional "final form" layout, applications developed with the Adobe Reader LE SDK can take the contents of a document targeted for large screens and reformat it for easy reading on a narrow screen.

Full support for the latest PDF rendering model
The Adobe Reader LE SDK is fully compliant with the rendering model for PDF 1.6 specification. Support for the latest PDF specification (PDF 1.6) ensures that Adobe PDF files that have been created with any version of Adobe Acrobat® software, including Acrobat 7.0, can be displayed accurately. It provides advanced features such as transparency, smooth shades, dash patterns, stroked text, and legacy type 1 fonts.

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Portable across multiple platforms

The Adobe Reader LE SDK overcomes the constraints that are unique to the mobile environment, such as no C++ exception handling, limited stack space, no multi-threading, and no support for global variables. The sample application and the testing and verification framework in the SDK support Microsoft® Windows® and Symbian™ platforms or operating systems. Developers can use the Adobe Reader LE SDK to develop mobile Adobe Reader applications and deploy them across various platforms, including Symbian OS™, Microsoft Windows Mobile®, Linux®, and Palm OS®.

Because the PDF rendering engine in the Adobe Reader LE SDK can run in the background on any standard mobile platform with minimal effort, device manufacturers can leverage multiple operating systems in their portfolio and utilize a single source for developing applications for various targets with different functionality without significant effort.

Support for web-optimized PDF files

The Adobe Reader LE SDK provides APIs that allow downloading only the necessary portion of a PDF file on a page-by-page basis instead of the whole document as long as the server supports byte-range requests. This feature optimizes overall user experience in terms of both download costs and waiting time in constrained or low-bandwidth networks.

Feature summary

The following table summarizes the features of the Adobe Reader LE SDK:

FEATURE	DESCRIPTION	NOTES
Basic view and navigation	Provides accurate rendering of PDF content	Compliant with the rendering model for PDF 1.6 specification
Zoom	Supports zooming in or out to increase the legibility of PDF content on small screens	
Scroll	Provides navigation capabilities with up-down-left-right scrolling in PDF documents	
Page rotation	Supports rotation of the PDF content (display only) in 90-degree increments, allowing users to maximize the viewing area on a small screen (for example, going from landscape to portrait maximizes the viewing area for some content)	
Reflow view	Allows an alternate view of the PDF document where text is reflowed on the screen to provide a better viewing experience; a reflowed view eliminates left-right scrolling for text-heavy documents	Supports tagged PDF only
Smooth shading, transparencies	Supports transparencies and smooth shading (used for smoother tonal gradation) contained in PDF documents	
Text search	Supports basic text search in PDF documents	
Link	Supports intradocument links and bookmarks contained in PDF documents	Does not support interdocument links
Bookmarks	Supports bookmarks contained in PDF documents	Does not allow inserting or adding bookmarks
Annotations	Supports the display of comments contained in PDF documents	Does not allow inserting or adding comments
Encryption	Supports decryption of files encrypted with up to 128-bit encryption	Does not support encrypting of PDF documents
Web-optimized PDF support	Allows for page-at-a-time downloading (byte-serving) of Adobe PDF documents from web servers	Contingent on byte-range-request support by the server

Note: The following features are currently not supported: multimedia, interactive forms (supports the display of forms but not interaction, such as data input), digital signatures, JavaScript in PDF documents, and PDF file creation.

Support and maintenance

Adobe supports the development partners (licensees) with implementation and rollout processes for the Adobe Reader LE SDK. End-user support is provided via the user forums.

Availability

If you are interested in licensing the Adobe Reader LE SDK, send an e-mail to Reader-le@adobe.com.

Better by Adobe.™