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Internet Archive URLs for Mac OS X Technology Overview

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Internet Archive URL to Mac Technology Overview (page captures below)

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Introduction to Mac OS X Technology Overview

Mac OS X is a modern operating system that combines a stable core with advanced technologies to help you deliver world-class products. The technologies in Mac OS X help you do everything from manage your data to display high-resolution graphics and multimedia content, all while delivering the consistency and ease of use that are hallmarks of the Macintosh experience. Knowing how to use these technologies can help streamline your own development process, while providing you access to key Mac OS X features.

Who Should Read This Document

Mac OS X Technology Overview is an essential guide for anyone looking to develop software for Mac OS X. It provides an overview of the technologies and tools that have an impact on the development process and provides links to relevant documents and other sources of information. You should use this document to do the following:

- Orient yourself to the Mac OS X platform.
- Learn about Mac OS X software technologies, why you might want to use them, and when.
- Learn about the development opportunities for the platform.
- Get tips and guidelines on how to move to Mac OS X from other platforms.
- Find key documents relating to the technologies you are interested in.

This document does not provide information about user-level system features or about features that have no impact on the software development process.

New developers should find this document useful for getting familiar with Mac OS X. Experienced developers can use it as a road map for exploring specific technologies and development techniques.

Organization of This Document

This document has the following chapters and appendices:

- "Mac OS X System Overview" provides background information for understanding the terminology and basic development environment of Mac OS X. It also provides a high-level overview of the Mac OS X system architecture.
- "Darwin and Core Technologies" describes the technologies that comprise the Darwin environment along with other key technologies that are used throughout the system.
- "Graphics and Multimedia Technologies" describes the graphics foundations of the system, including the technologies you use for drawing to the screen and for creating audio and video content.
- "Application Technologies" describes the development environments (like Carbon and Cocoa) and individual technologies (like Address Book) that you use to create your applications.
- "User Experience" describes the technologies that your application should use to provide the best user experience for the platform. This chapter also describes some of the system technologies with which your software interacts to create that experience.
- "Software Development Overview" describes the types of software you can create for Mac OS X and when you might use each type.
- "Choosing Technologies to Match Your Design Goals" provides tips and guidance to help you choose the technologies that best support the design goals of your application.
- "Porting Tips" provides starter advice for developers who are porting applications from Mac OS 9, Windows, and UNIX platforms.
- "Command Line Primer" provides an introduction to the command-line interface for developers who have never used it before.
- "Mac OS X Frameworks" describes the frameworks you can use to develop your software. Use this list to find specific technologies or to find when a given framework was introduced to Mac OS X.
- "Mac OS X Developer Tools" provides an overview of the available applications and command-line tools you can use to create software for Mac OS X.

Getting the Xcode Tools

Apple provides a comprehensive suite of developer tools for creating Mac OS X software. The Xcode Tools include applications to help you design, create, debug, and optimize your software. This tools suite also includes header files, sample code, and documentation for Apple technologies. You can download the Xcode Tools from the members area of the Apple Developer Connection (ADC) website (<http://connect.apple.com/>). Registration is required but free.

For additional information about the tools available for working with Mac OS X and its technologies, see "Mac OS X Developer Tools."

Reporting Bugs

If you encounter bugs in Apple software or documentation, you are encouraged to report them to Apple. You can also file enhancement requests to indicate features you would like to see in future revisions of a product or document. To file bugs or enhancement requests, go to the Bug Reporting page of the ADC website, which is at the following URL:

<http://developer.apple.com/bugreporter/>

You must have a valid ADC login name and password to file bugs. You can obtain a login name for free by following the instructions found on the Bug Reporting page.

See Also

This document does not provide in-depth information on any one technology. However, it does point to relevant documents in the ADC Reference Library. References of the form "`<title>`" in "`<category>`" Documentation" refer to documents in specific sections of the reference library.

For information about new features introduced in different versions of Mac OS X, see *What's New in Mac OS X*.

The following sections list additional sources of information about Mac OS X and its technologies.

Developer Documentation

When you install Xcode, the installer places the tools you need for development as well as sample code and developer documentation on your local hard drive. The default installation directory for Xcode is `/Developer` but in Mac OS X v10.5 and later you can specify a custom installation directory if desired. (This document uses the term "`<Xcode>`" to represent the root directory of your Xcode installation.) The installer application puts developer documentation into the following locations:

- **General documentation.** Most documentation and sample code is installed in the `<Xcode>/Documentation/DocSets` directory. All documents are available in HTML format, which you can view from any web browser. To view the documentation, open the Xcode IDE and choose **Help > Show Documentation Window**.
- **Additional sample code.** Some additional sample programs are installed in `<Xcode>/Examples`. These samples demonstrate different tasks involving Mac OS X technologies.

You can also get the latest documentation, release notes, Tech Notes, technical Q&As, and sample code from the ADC Reference Library (<http://developer.apple.com/reference/library>). All documents are available in HTML and most are also available in PDF format.

Information on BSD

Mac OS X Reference Library Developer

Mac OS X Technology Overview PDF

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Internet Archive URLs for Bundle Programming Guide

Introduction (page capture below)

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About Bundles

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Bundle Structures

<https://web.archive.org/web/20100515101347/http://developer.apple.com/mac/library/documentation/corefoundation/conceptual/CFBundles/BundleTypes/BundleTypes.html>

Accessing a Bundle's Contents

<https://web.archive.org/web/20100516163746/http://developer.apple.com:80/mac/library/documentation/corefoundation/conceptual/CFBundles/AccessingaBundlesContents/AccessingaBundlesContents.html>

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