



Apple will continue broad distribution of OpenDoc viewers for new technologies. And, in the future, you will see viewers that support other industry component Internet architectures.

The Safest Choice

OpenDoc lets you program for many different operating systems—Mac OS, Windows, OS/2, and AIX. It's an outstanding way to expand your opportunities and create additional revenue streams. Increasingly, software developers are adopting the component software model. Hundreds of developers have announced their intent to deliver OpenDoc products this year.

Created and supported by a non profit association of industry leaders—including Apple, IBM, Oracle, and Object Management Group (OMG)—the OpenDoc architecture is accessible in every sense of the word. This association, CI Labs, makes all OpenDoc source code available to develop-

ers. There are no hidden extensions. And the OpenDoc API is consistent across multiple platforms. What's more, CI Labs provides developers with test suites and a conformance validation process, to ensure that OpenDoc-enabled software interoperates properly.

With the OLE interoperability layer, OpenDoc eliminates the need to choose among different object technologies. In fact, programming to the elegant OpenDoc APIs is the optimal way to support OLE objects.

A Complete Set of Tools and Support

Apple also provides a wide range of tools and services in support of OpenDoc application development. Object-oriented tools are available from Apple and IBM, as well as from third-party vendors, to help you develop a wide range of OpenDoc applications on Mac OS, Windows, OS/2, and AIX platforms.

A variety of workshops and on-line support services are available from members of CI Labs—including courses from Apple's Developer University. And, a software development kit (SDK) assembled just for OpenDoc developers provides sample code,

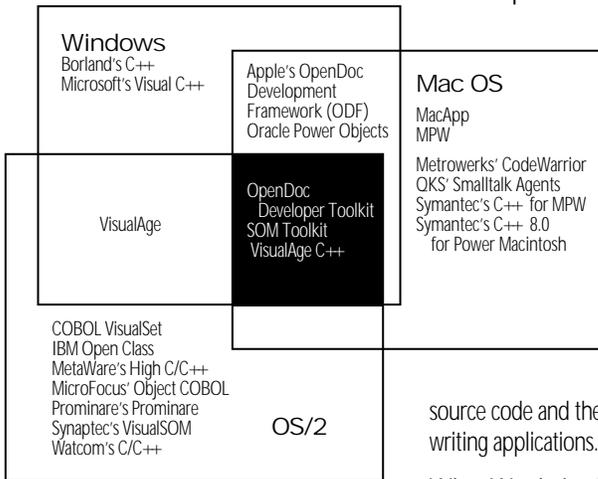
source code and the documentation and tools you need to quickly start writing applications.

Why Work in the Past When OpenDoc Is Here?

Now is the time to adopt the OpenDoc multiplatform standard for component software. So e-mail us today at: opendoc@apple.com. We'll send you the information you need to get started writing an OpenDoc application for the Mac OS. Or, visit our Internet home page: <http://opendoc.apple.com>

OpenDoc Architecture		
Compound Document Services	Automation Services (OSA)	Interoperability Services (ComponentGlue Technology)
Component Services		
Object Management Services (SOM)		

OpenDoc component software architecture is made up of proven technologies from leading vendors. Because OpenDoc is modular, developers can replace most of the supporting technologies with an API-compliant alternative technology.



You can always select the tools you need—the tools you're familiar with—to quickly deliver OpenDoc-enabled solutions.

Opportunities with Cyberdog

Created entirely with OpenDoc, Cyberdog is an innovative technology that harnesses the power of the Internet and component software. Cyberdog integrates network services into the Mac OS, bringing live links and views of the Internet to any document. It makes the Internet as easy to use as a Macintosh.

Apple designed Cyberdog to create a ready market for you. You can ship it with your products. And you can replace or enhance every one of Cyberdog's components.

You can develop replacement web or Gopher browsers, Notebooks, Logs, or other Cyberdog components. Or you can choose to offer Cyberdog users totally new functionality. Perhaps a videoconferencing component, or real-time "chat" capabilities. Other opportunities include developing tools to analyze and manipulate raw data from the Internet.

All application developers can realize benefits from Cyberdog. For example, by simply adding OpenDoc support to your existing applications, you obtain Internet connectivity through Cyberdog.



The power to be your best.

Apple Computer, Inc. 1 Infinite Loop, Cupertino, CA 95014 U.S.A. (408) 996-1010

© 1996 Apple Computer, Inc. All rights reserved. Apple, the Apple logo, Cyberdog, MacApp, Macintosh, MPW, OpenDoc, Power Macintosh, and "the power to be your best" are trademarks of Apple Computer, Inc., registered in the U.S.A. and other countries. Mac and the Mac OS logo are trademarks of Apple Computer, Inc. AIX and OS/2 are registered trademarks of International Business Machines Corporation. All other products mentioned herein are property of their respective owners. Printed in U.S.A. 4/96 26M VHC/FB L01437B





Building opportunities with component software. OpenDoc.

"We believe that the future of computer software lies in components that can interact with the Internet. No other technologies facilitate this more than OpenDoc and Cyberdog."

—Neal Williams, president, Corda Technologies, Inc.

"OpenDoc and Cyberdog are the nexus of both the component software and the Internet paradigm shifts. Together they will change our computing experience... how we create, distribute, and collaborate on documents."

—Steven T. Roussey, president and CEO, Kantara Development

As applications become more advanced, your development cycles lengthen. Until the amount of time needed to create, revise, and maintain code becomes an obstacle to your success. Just look, for instance, at the development cycle of a typical application. As more and more features are added, each upgrade takes longer to release than the last.

But with OpenDoc, you have a multiplatform software architecture that resolves such problems. An architecture that lets you leverage your programming strengths, without building applications from the ground up. It reduces your programming time. And brings you opportunities to develop for multiple platforms—including Mac OS, Windows, OS/2, and AIX.

OpenDoc is based on the concept of component software: self-contained, reusable software modules. Because all components use a single, open standard—the OpenDoc standard—users can add or remove a component just by dropping it in a document or workspace.

Focus on Your Area of Expertise
Software prices are falling. Development times are increasing. So the time is right to adopt OpenDoc, a more efficient, more cost-effective technology. For example, when you architect your application as an OpenDoc container, there's no need to revise your current software every time Apple updates an API. And, by simply adding OpenDoc support to your existing applications, you gain Internet connectivity through Cyberdog, an innovative technology which combines the power of the Internet and component software.

OpenDoc's "plug-and-play" functionality lets you develop components within your area of expertise. You can combine them with OpenDoc components from other developers. You can sell your components to other developers. Create vertical market-specific solutions by packaging component "bundles." And offer users the ability to combine the features they want and use most.

Which means that OpenDoc software components are easy to maintain, debug, and document. They use a standardized interface and interact in a consistent manner. And they are smaller and less complex than the blocks of code used to build monolithic applications.

Your Customers Win, Too

OpenDoc frees users from the dilemma of choosing between software applications that are either overburdened with features, or lack the features they require. Now they can select the set of features they want and use, adding more features only when they are needed. With modular software components, your customers can focus on using their tools, rather than on manipulating feature-heavy applications.

Moreover, Apple is using OpenDoc to bring new technologies directly to your customers. For example, customers will find OpenDoc installed on Macintosh systems. Each of those systems will ship with key OpenDoc components—specifically viewers for Apple technologies. That means that your customers can keep up with new Apple technologies for free.