

Mac OS 8 Developer Roadmap

This paper outlines the development opportunities for Mac OS 8. The intent is that developers can examine this "roadmap" for the products that they ship today, and see what Apple recommends for the same types of products rehosted on Mac OS 8.

1.0 System 7.x Development Opportunities Overview

This section outlines the most common types of System 7.x development (and products) and describes the transition of these applications to Mac OS 8.

System 7.x Development Opportunities:

- User Interface Applications
- OpenDoc Part Editors
- Faceless Background Applications
- Control Panels & Desk Accessories
- Extensions (INITs)
- Drivers (DRVRs)
- Input Methods

1.0.1 User Interface Application

Description A User Interface Application interacts with a user through the traditional Macintosh GUI. This type of application is what most people think of today when you say "a Macintosh application". Most productivity applications (word processing, drawing, works, etc.) fall into this category.

Transition Options

1. A Mac OS 8 Only Application
2. An OpenDoc Part Editor (see below)
3. A Mac OS 8 Transitional Application
4. A Mac OS 8 Compatible Application

1.0.2 OpenDoc Part Editor

Description An OpenDoc part editor is a SOM object (packaged as a shared library) that provides content editing or viewing services in an OpenDoc document. OpenDoc part editors continue to exist as first-class citizens on Mac OS 8. Note that an OpenDoc container application is simply a User Interface Application that can embed OpenDoc parts.

Transition Options

1. A Mac OS 8 Only Part Editor
2. A Mac OS 8 Transitional Part Editor
3. A Mac OS 8 Compatible Part Editor

1.0.3 Faceless Background Applications

Description A Faceless Background Application is any type of application that is not a UI Application. This category includes applications that provide services but do not directly interact with a user.

Transition Options

1. A Server Program
2. A Mac OS 8 Only Application
3. A Mac OS 8 Transitional Application
4. A Mac OS 8 Compatible Application

1.0.4 Control Panels & Desk Accessories

Description In System 7.x, this type of application was typically a small, well-contained application which usually used one window and some simple user interface widgets. Control panels typically appeared to be integrated with the Finder.

Note: Control panels and Desk Accessories are not supported in Mac OS 8. This type of product must be rewritten as one of the following:

Transition Options

1. A Mac OS 8 Only Application
2. A Mac OS 8 Transitional Application

3. A Mac OS 8 Compatible Application
4. An OpenDoc Part Editor

1.0.5 Extensions (INITs)

Description This type of application typically extended or modified the system by patching early in the system start-up sequence. Code of this type is ignored in Mac OS 8.

Note: INITs are not supported in Mac OS 8. This type of product must be rewritten as one (or more) of the following:

- Transition Options**
1. A Server Program
 2. A Mac OS 8 Only Application
 3. A Mac OS 8 Transitional Application
 4. A Mac OS 8 Compatible Application
 5. An OpenDoc Part Editor

1.0.6 Drivers

Description A Driver is a low-level program generally used for communicating with peripheral devices. This type of program falls into two categories: code that touches hardware, and code that doesn't.

DRVRs DRVRs are written according to Inside Macintosh rules. DRVRs are installed in the Device Manager Unit table. DRVRs are called drivers, but in fact are drivers, DAs, protocol modules, etc. DRVRs are grouped for this definition into two categories those DRVRs that touch hardware and those that do not. All DRVRs that touch hardware must be rewritten as one of:

1. A specific Mac OS 8 family plug-in - An ethernet driver such as .ENET must be rewritten to be an Open Transport networking plug-in.
2. A Device Manager (family) plug-in - This type of driver is known as an "NDRV" driver and is documented in "Designing PCI Cards & Drivers for the Power Macintosh Computer."

For DRVRs that do not touch hardware the requirement is less stringent. The options available for these types of "drivers" are:

1. To be rewritten as a family plug-in - for example, an Appletalk protocol module such as .ADSP, should be rewritten as an Open Transport network plug-in. The rewrite will allow the example protocol module to be used by both cooperative and re-entrant clients. A protocol module whose implementation remains DRVR will run, but be available only to cooperative clients, and operate with a performance penalty.
2. To be rewritten as a Device Manager family plug-in - This option applies for DRVRs that do not become Mac OS 8 family plug-in.
3. To remain as a DRVR - Using only backward compatible APIs. This option is not available to DRVRs that are part of the page fault path. Any driver code in the page fault path must be rewritten to be a Mac OS 8 I/O plug-in.

Native Driver (NDRVs)

Native drivers are Device Manager supported drivers that are compiled into native PPC code and are written to follow the programming guidelines provided in "Designing PCI Cards & Drivers for the Power Macintosh Computer." The term NDRV is used both as a file type, and as a serviceCategory specification; The Device Manager installs drivers of serviceCategory 'ndrv' into the unit table; the file type NDRV is used for all plug-ins in the Hardware Support folder in the Mac OS Folder.

Drivers supported by the Device Manager that follow all of the programming guidelines in DPC&D will continue to work under Mac OS 8. Video drivers have additional new selectors to support.

Transition Options

1. A Mac OS 8 I/O Plug-In
2. A Server Program

1.0.7 Input Methods

Description

This type of application has been replaced by a new type of application. System 7.x input methods are not supported in Mac OS 8.

Transition Options

1. A Mac OS 8 Input Method

1.1 Document Cross Reference

TABLE 4. WWDC 1996 Application Documents

Application Kind	Document Name
1. Mac OS 8 Only Application	1. Mac OS 8 Only Application
2. Mac OS 8 Transitional Application	2. Mac OS 8 Transitional App
3. Mac OS 8 Compatible Application	3. Mac OS 8 Compatible Application
4. Mac OS 8 OpenDoc Only Part Editor	4. Mac OS 8 OpenDoc Components
5. Mac OS 8 OpenDoc Transitional Part Editor	5. Mac OS 8 OpenDoc Components
6. Mac OS 8 Only Part Editor	6. Mac OS 8 OpenDoc Components
7. Server Program	7. Mac OS 8 Only Application

