

Title: RDR Filesystem Note

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The Rhapsody Developer Release (RDR) has a fundamental incompatibility with OPENSTEP/Mach (and NeXTStep) that you should be aware of when planning how to install and evaluate this software. Specifically, RDR/Intel uses a different file system format than either RDR/PPC or OPENSTEP/NeXTStep. You will not be able to set up systems to dual-boot RDR/Intel and previous Mach/Intel operating systems. You will also not be able to exchange external hard disks and/or removable media between RDR/Intel and other versions of Mach. Rhapsody/PPC will be able to read (mount read-only) media created on previous versions of Mach. Read/write access to older media is not supported.

The specific technical issues are as follows:

OpenStep/Mach (all versions) used the original m68k UFS file format, for all architectures. Where necessary (Intel, etc) it was programmed to do byte-swapping on the file system structures as it read them off the disk.

The DR1 release of Rhapsody (for both PPC and Intel) does not have this byte-swapping code in it, so the two

systems are currently using incompatible file system formats. It happens that the PPC version has the same byte sequence that the original m68k system used, so that Rhapsody/PPC can read OpenStep/Mach disks created on any architecture. Rhapsody/Intel can't read anyone else's disks.

In addition, the RDR native file system is based on the BSD4.4 file system. Previous Mach versions used the BSD4.3 file system format. The new file system supports huge (64 bit offset) files, and has some other changes. RDR only supports read access to the older file system.