

MkLinux Installation Notes

Please remember that this is a work in progress. Updates and news are available at our web site: www.mklinux.apple.com. You are strongly encouraged to check the web site for notes, bug fixes, updates, etc BEFORE you begin the installation process.

To install MkLinux on a Power Macintosh 6100, 7100, 8100, PowerComputing 100, or 120 (other Nubus based PowerPC systems may work but we haven't tested on any other systems yet ... check the web site for updates) you must have at least 16 meg of RAM in your computer and 400 MB of disk available. MkLinux uses its own filesystem format and your disk must be partitioned properly in order to install and use MkLinux. Unfortunately, for this developer release, this is a manual process that must be performed before you begin the actual installation.

The process you will use to create the disk partitions varies among the drive utilities. We are using the same basic partitioning structure that was used for Apple's A/UX product so most utilities should support setting up the partitions. The 2 most important partitions are the swap partition and the root partition—you cannot run MkLinux without these. The swap partition (usually at least 32MB, but no larger than 64MB) will be used for virtual memory backing store. The 'root' partition holds the core of the MkLinux system utilities, drivers, etc.—it must be at least 100MB (the minimum is 300MB if you choose not to have a separate 'usr' partition). It is also common to have a 'usr' partition (200MB minimum recommendation) to separate the most dynamic portion of the filesystem from the core of the OS.

Creating the partitions in preparation for installing MkLinux will require your becoming intimately familiar with your favorite drive setup utility. You may want to use HD SC Setup which came with your Macintosh (and which we've included on the CD). No matter which utility you use, you will to go into the partition setup portion of the utility—and, more importantly, you will probably need to use the more advanced or custom modes of partitioning available. We hope to simplify this process in a future release of MkLinux.

Existing Macintosh drives usually come pre-configured such that the entire drive is taken up with 1 or more Macintosh filesystems (HFS). You will need to save off any data you may have on the drive you plan to install onto before changing the partitioning of the drive. The first step is making sure there is sufficient free space available on the drive. This does not mean free space as listed in the finder window but, rather, space that is not assigned for use by any filesystem such as HFS. You may have to shrink or delete the existing Macintosh filesystem(s) before you proceed. Remember you need about 400MB of otherwise unassigned drive space. Once the space is available it will need to be allocated in approximately this structure:

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+-----+  
| Partition Map |  
+-----+
```

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|  Driver  |
+-----+
| Root (slice 0) | <==  Root partition (100 - 300MB)
+-----+
| Usr (slice 2) | <==  Optional usr partition (200+ MB)
+-----+
| MacOS Disk  | <==  Optional
+-----+
| Swap (slice 1) | <==  Swap partition (32 - 64MB)
+-----+

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Other partitions can/may exist but we're not going to cover that here (however, MkLinux currently supports only 8). If you have trouble setting up your partitions to look something like what is shown above you should definitely check with our web site and, possibly even more useful, you should check out the various mailing lists you can join regarding a handful of MkLinux topics.

Once the drive is partitioned, it gets much easier from there. Just click on the "Install MkLinux" application and answer the various questions presented. The installer will put all of the necessary MkLinux OS files on your system as well as installing a handful of files in your system folder (specifically a Control Panel to control booting / not booting MkLinux), an extension which is used to switch boot the Macintosh into MkLinux, and the Mach Kernel file which takes over the booting process for bringing up MkLinux. There will be at least one large pause during the installation process which is related to how the files are packaged for splitting across a root partition and a usr partition. Please be patient.

Once the installation process is completed you will need to run the MkLinux control panel to select which operating system you wish to boot into the next time you restart. You can, by the way, select to restart now directly from the control panel.

Remember, be sure to check our web site (www.mklinux.apple.com) for more information, tips, updates, mail lists, newsgroups, etc.