!!SwitchBoot!!
V 1.2

Purpose:

SwitchBoot is intended for Mac users who change their boot drive often due to different operating systems, system versions, or environments and wish to shortcut the time involved in waiting through the boot process of the current default drive, setting the new drive in the control panel Startup CDEV, and then rebooting. It cannot be used to switch between systems installed in different partitions.

Installation:

Although it can be located anywhere in your system folder, SwitchBoot should be the first INIT alphabetically since you will want to be able to interrupt the boot process as soon as possible. If you are operating under System 7, then follow the same guidelines below but place SwitchBoot in your Extensions folder. The SwitchBoot INIT is named " !!SwitchBoot!!" to help accomplish this. However, depending on the names of other INITS in your folder and/or a desire to have Switchboot controlled by an INIT manager, you may need to adjust the name for proper alphabetic placement.

If you decide to control SwitchBoot with an INIT manager, be aware that managers like the Now Startup Manager interpret SwitchBoot's restart as a "crash" and automatically deactivate SwitchBoot during the next boot cycle. This can be annoying after a while and suggests that you may want to have this type of INIT manager load after Switchboot.

If you have any drives which have their own INITS (most often those drives with removable media), those drive INITs should alphabetically precede SwitchBoot. This is necessary if you want your drive to be recognized by SwitchBoot if it has no disk in it when your machine starts up.

SwitchBoot must also be placed in the system folder of any hard disk that you intend to switch from or to, so the best bet is to just put it in the system folder of every hard disk. This will also insure that the "One Time" feature described below will function properly. If you do not invoke SwitchBoot's dialog (explained below), just having it in your system folder will add considerably less than a second to your boot time.

Operation:

After holding down the <s> or <caps lock> key during startup, you are presented with a dialog box containing a list of the currently available volumes with the current default volume highlighted. In certain cases, the default volume stored in parameter ram will no longer match the setup of your machine. In this case, the volume which just booted is highlighted as the default volume and, unless some other volume is chosen, it will automatically be made the default volume for subsequent boots. A description of the buttons follows.

Boot:

This button is only available if you have chosen a volume which is bootable. Non-bootable volumes are noted. If you choose a bootable volume from this list and press "Boot", your Mac will reboot with the chosen volume as the default volume. This volume will remain the default as if you had set it from the Startup CDEV.

One Time:

This button is the same as Boot except that the new drive does not remain the default drive - it simply allows you to accomplish a one time switch to another drive. After rebooting from the new drive, the default drive is reset to the original drive. To do this, Switchboot writes the original drive specification to a temporary file ("SwitchBoot.Temp") on the new drive. When the new drive boots up, before checking to see if you wish to invoke the SwitchBoot dialog, it automatically checks the new drive for the presence of the temp file and if it finds it, reads the drive specification, resets the default drive, and finally erases the file. Remember, you must have Switchboot on all of your disks for this to function properly. One Time is canceled if you interrupt the one time boot by invoke SwitchBoot's dialog.

Continue:

This button allows you to continue booting from the original drive. It is only available if the Remove or Insert buttons have not been used. This helps avoid potential damage to removable disks that have been switched while the system is still in an unsteady state. Rebooting from these disks should pose no problems, but continuing to boot from another drive after a removable was switched was considered too risky.

Remove:

This button is only available if the selected drive supports removable media and there is a disk in the drive. Once this button is pressed, the disk may be replaced with another disk. The list is updated to indicate that the disk has been removed.

Insert:

This button is only available if the selected drive supports removable media and there is no disk in the drive. After inserting the disk as you normally would, pressing this button makes the volume available to SwitchBoot. The list is updated to indicate the newly inserted disk.

Update:

This button rechecks the drive queue and updates the list. Use this button if for some reason you think that the list does not contain the correct

information or if you wish to reselect the drive from which you just booted.

Shutdown:

This button simply powers down your machine.

The buttons may also be selected by pressing the first letter of the button's name in combination with the <shift> key. The arrow keys control the scrolling of the list.

Caveats:

• SwitchBoot was originally intended for internal use. Reasonable attempts have been made to insure its reliability and, although it has not caused any verifiable problems, it has not been subjected to exhaustive testing. Although the nature and design of the INIT minimizes the possibility of problems, any program which directly accesses your drives, particularly in the midst of the booting process, could potentially cause problems.

• Due to the myriad of partitioning schemes, the resultant potential for causing problems, and the fact that parameter ram does not hold partition information for the default drive, SwitchBoot does not recognize partitions other than the main partition on the drive. In most cases, the main partition is the volume which appears on your desktop when you don't have your partition INIT in your system folder.

• If you have only one hard disk with several partitions, SwitchBoot will not be of any value to you. If you need to switch between operating systems in this case, it is suggested that you use System Switcher (shareware on most boards) which allows you to move between different systems on the same hard disk.

• SwitchBoot filters out any devices which are not classified as hard disks or any devices which are not directly connected to your machine. This means, for example, that it ignores CD-ROM drives and hard drives which are accessed through a network. It should be able to recognize non-SCSI hard drives connected to your machine (e.g. the HD-20), but it has not been tested for this compatibility.

• SwitchBoot also does not recognize hard disks connected to the Nubus or PDS slots. The only exception to this is if your machine just booted from a Nubus/PDS device and it is the designated default startup drive. In this case, the drive is indicated by its Slot and Device ID and may be selected to continue booting. (I was not able to test this feature. If it works, please let me know.) When more of these cards become available and if anyone requests it, I'll look at adding the capability of identifying and rebooting from additional SCSI Nubus/PDS drives.

- SwitchBoot only works on an SE or newer machine. It does not work on the earlier machines since Parameter Ram was not designed to hold boot device information beyond a preference for floppy drive 1 or 2.

- Some trackballs freeze the cursor when the SwitchBoot dialog comes up. To circumvent this, try using the keyboard equivalents to control SwitchBoot.

Legal:
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Change History:
- 1.1
  - Added "One Time" ,"Continue" buttons and Caps Lock invocation. (Feature and Implementation ideas by: Alex Chaffee, Reed College)
- 1.2
  - Fixed problem with partitions appearing in the list under certain partitioning schemes.
  - Enabled the use of keyboard commands to control SwitchBoot to circumvent interaction problems with some trackballs. Renamed certain buttons to facilitate this. (Suggested by Ryan Baker, Peat Marwick)
  - Cleaned up problem with old boot device information residing in parameter ram.
  - Cleaned up certain infrequent drive list inconsistencies.
  - Fixed bug which sometimes caused the "One Time" feature to operate improperly. (Identified by Murray N. Page- and many apologies for my long term skepticism regarding the problem!)
  - Improved the ability to distinguish bootable drives. Unlike Apple's Startup Disk CDEV, SwitchBoot attempts to identify those drives which are not bootable. The test is more reliable under System 7 and, when in doubt, the drive is designated as bootable.

Feedback:
All problems, questions, comments, criticisms, suggestions, etc. should be directed to:

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