MacPhoneHome™
Tracks & Locates Missing Computers

HARDENING YOUR COMPUTER

MacPhoneHome version 4.0

10.6 to 10.13 compatible

Brigadoon Software™

APPENDIX: "HARDENING" YOUR HARDWARE

Introduction

Out-of-the-box, Mac OS X is reasonably secure. Apple installs a fairly secure default configuration, and provides regular Security Updates. However, **to protect your proprietary data and to provide you with the highest probability of recovery of your computer should it be lost or stolen, we recommend that you take the following steps:**

1. Set up different user accounts on your Mac:

    a. For personal use: two accounts: **Administrator** and **Guest (Managed)**;

    b. For organizations: three accounts: **Administrator**, **Standard** and **Guest (Managed)**;

2. Password protect access to your Administrator and Standard accounts, but not your Guest account;

3. Have your computer boot directly into your Guest Account.

4. Utilize **Apple's Open Firmware Password** application to allow you to enable security features in Open Firmware;

5. Use Apple's **File Vault** to protect your important data.

I. Accounts and users

By default, the account created when installing OS X is an **Administrator** account that has the equivalent of "root" access. **It's not secure or necessary to use that account for routine work.**

Recommendations:

Have several accounts for special purposes on your Mac OS X system. Be in control of all access to your system by other users. Here's how:

A. **Create (i) a Standard account for daily work; and (ii) a Guest (Managed) account.**
    While logged in as the administrator, use the "**Accounts**" System Preference tool to create two non-administrator user accounts.**Error! No index entries found.**
    a. Create a Standard Account (with a password) for daily tasks (especially in a multi-user or organizational situation); and

    b. Create a Guest (Managed) Account (without a password)
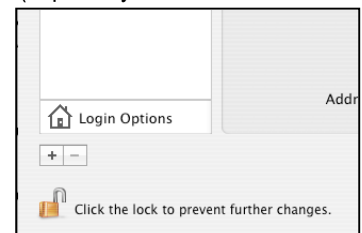
i. go to "**System Preferences**";

ii. click on "**Accounts**", and click on the "**+**" sign

iii. type in "Guest" in the **Name** field

iv. DO NOT PUT IN A PASSWORD

v. Click "OK" when prompted that there is no password

vi. Click on **Limitations** and click only on "This user can only use these applications" and select a minimum of applications (see below).
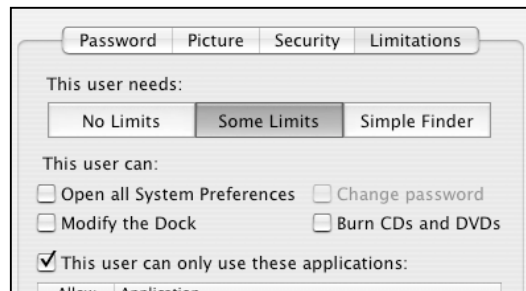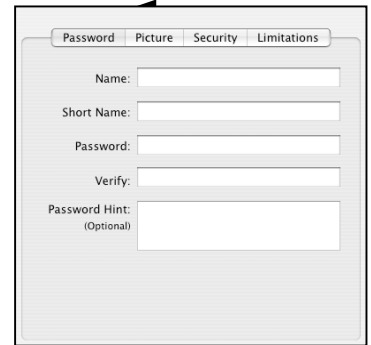
B. Change Log in to a show Users as startup.

By default, OS X logs in automatically after a restart, using the first account created during installation and this account's saved password. As previously noted, this is an administrator account, so anyone can start it up and make changes to it. To fix this,

a. go to "**System Preferences**";

b. click on "**Accounts**", and click on "**Login Options**"

c. be sure "**List of users**" is selected instead of "Name and password."

[NOTE: Do not enable Personal File Sharing unless you need to, because it doesn't allow you to require an account and password. It's a bad idea to allow guest or anonymous access to any service, folder, or file unless you understand what you're doing.]

II. Have your computer boot directly into your Guest (Managed) Account.

We recommend that you have your Mac automatically log in to the Guest (Managed) account you created. From there you can log out and then log in to either your Administrative or Standard account, as needed. Here's how:
A. Open **System Preferences** and click **Accounts**.
B. If some settings are dimmed, click the lock icon and type an administrator name and password.
C. Click **Login Options**.
D. Select the way you want users to log in (a list of users).
E. Select "**Automatically log in as**" if you want the computer to log one user in automatically each time it starts up. Then choose the Guest (Managed) user from the pop-up menu when prompted.

III. Utilize Apple's Open Firmware Password

Anyone can change your Administrator password if they start your Mac up with an OS X Installation CD. If your Mac is

VERSION 4.0 – APRIL 2018

started up from an OS 9 (Classic) System Folder, there is no protection or security at all for the OS X files in the same disk partition We recommend you prevent the possibility of someone booting it from an external hard drive, DVD, or CD, and then changing your administrator password, erasing your disk, or accessing your private documents.

Recommendations: To prevent booting from external drives, use the Open Firmware Password utility to set a firmware password. See http://docs.info.apple.com/article.html?artnum=120095 for complete instructions and a copy of the utility.

Open Firmware Password Application

Version 1.0.2

The Open Firmware Password application allows you to enable security features in Open Firmware. You can use it to prevent others from starting your computer using a CD or other disk with an operating system on it. You can use Firmware password protection to enhance access security to your computer.

When you set a Firmware password, it prevents others from starting up the computer from a volume other than the one you have chosen as the startup disk (chosen in the Startup Disk preference panel within the System Preferences.) Once security is enabled, you cannot startup from other devices such as an external FireWire disk, a CD-ROM drive, or another partition or disk inside the computer.

Requirements

This application requires Firmware update 4.1.7 or a later version and Mac OS X 10.1 or later.

Installing the Firmware Password Application

1. Drag the application icon from the disk image (.dmg file) to your hard disk (Macintosh HD). (see example, right)
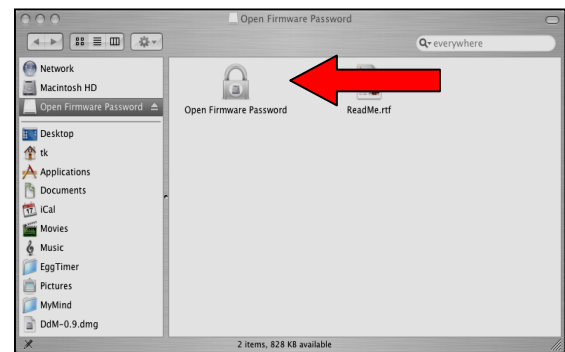
Using the Application

1. Make sure that you have selected the Mac OS X System folder for your startup device that your plan to protect. If your startup device is correctly selected, you should be able to
    a. Click on "**System Preferences**"
    b. Click on "**Startup Disk**" preference pane
    c. Show "**Mac OS X, 10.x on Macintosh HD**" (see example, right)

    d. Be sure to lock your settings to prevent further changes (see example, right)

2. Double click the "**Open Firmware Password**" icon to open it. (/Macintosh HD)

3. Click the "**Change**" button to modify the security settings. (see right)

4. If you are enabling the security features, enter a password into the Password and Verify boxes. (see right)

5. Click **OK**. (see right)

6. Follow the prompts to enter your Administrator account information. You should then see a successfully saved window. (see right)

IV. Use Apple's File Vault to protect your important data.

About FileVault

Mac OS X includes FileVault, which allows you to encrypt the information in your home folder. Encryption scrambles the data in your home folder so that your information is secure if your computer is lost or stolen. FileVault uses the latest government-approved encryption standard, the Advanced Encryption Standard with 128-bit keys (AES-128).

When you turn on FileVault, you also set up a master password for the computer that you or an administrator can use if you forget your regular login password.

WARNING: If you turn on FileVault and then forget both your login password and your master password, you will not be able to log in to your account and your data will be lost forever.

Because of the amount of disk space required, we recommend that you use File Vault with the account in which it essential to protect your important data only.