The *Login* Administrator's Guide

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1 Preface

The software described in this manual is designed as an aid to those who monitor and maintain networks of Macintosh computers and assumes a basic knowledge of the Macintosh, such as the ability to open drives and folders, create and name folders, how to open applications and perform mouse operations like clicking and dragging. Please consult the appropriate Macintosh user manual if these tasks are unfamiliar to you.

2 Introduction

Login is a system of programs to track the people who use a network of Macintosh computers. It is *not* a security system! In fact, it is rather easy for even a moderately knowledgable Macintosh user to subvert the system. **Login** relies on the system administrator to enforce security rules.

Login requires a user to enter his or her name in order to use the Macintosh. It is the responsibility of the system administrator to get users to run Login to logout and shutdown the computer when finished. Once a name is entered it is checked against a master user list on the file server, if there is a match the program records the name, computer ID, date, and time and then terminates. If there is no match the program continues asking for a valid name.

2.1 Who Should Use this Program?

Login was designed to be used in a small Macintosh lab with a central file server or with a single computer. Specifically, **Login** was designed for use in elementary through high school computer labs and has been successfully used in labs with more than 800 users. If high security is not required but you want to know who was using which computer and when, then **Login** is likely to be of use to you.

2.2 Who Should NOT Use this Program?

This program is not for people who (a) do not have a central file server but use a LocalTalk network for printer sharing, (b) require high levels of security (though **Login** has been used successfully with Apple Computer's *At Ease* program), or (c) have a lab that is for the most part run without an administrator to generate reports and enforce security.

3 System Requirements

Login requires the following in order to operate:

1. A network of Macintosh computers with a central file server, or a single Macintosh.
2. Each Macintosh connected to the network must have a local hard drive.
3. Macintosh system software 7.0, or greater.

In addition, the individual installing **Login** must have administrator access to the file server in order to create the *Login* folder that is required for **Login** to run. **Login** was tested with AppleShare 3.0 but should work with earlier versions of AppleShare.

4 Set Up

4.1 Before You Begin

Before you begin installing **Login** make a backup of the **Login** distribution diskette and work from that. If you are using a single Macintosh that is not connected to a network skip ahead to the section titled *Single Macintosh Set Up.*

4.2 Networked Macintosh Set Up

You need to think of a unique name for each computer on which you will install **Login**. This is the computer ID that will be used to identify each computer used and can be any string of characters that does not contain spaces or colons. Deciding ahead of time on a consistent and expandable system for naming the computers in the network will save time and effort in the long run. Examples might be simply assigning a number to each computer, or grouping the computers by location, identified by a letter and number, e.g. A3 or D8. The ideal naming scheme will be determined by the existing network. There is no practical limit to the number of computers that can be using **Login** at one time.

Please follow the directions below in the order given. The file server *must* be configured prior to installing **Login** on the workstation computers.

4.3 File Server Set Up

The following needs to be performed on the file server. If you have more than one file server on your network, choose one which can be accessed by all the computers on which you wish to run **Login**.

First, on the file server, open the file server's hard drive and create a folder named *Login* by choosing **New Folder** from the Finder's *File* menu. This folder must be at the root level of the hard drive, not within another folder. A future version of **Login** might ease this requirement.

Run the *AppleShare Admin* program found in the *System Folder* of the file server. Enter the appropriate administrator key when asked. The following instructions apply to those using version 3.0.1 of AppleShare Admin. Other versions will be similar.

1. Select **Access Information...** from the **Privileges** menu.

2. Using the scroll bar if necessary, select the file server you wish to use from the list on the left and click the **Open** button.

3. Again, using the scroll bar if necessary, select the **Login** folder.

4. At the bottom of the window find the check boxes next to the word **Everyone**. These control the access information for the folder **Login**. All three of the check boxes must be clicked to give all file server users access to `see folders`, `see files`, and `make changes`.

5. Save the changes and choose **Quit** from the **File** menu to exit the AppleShare Admin program.

Now that the file server is prepared you can install the administration programs located on the **Login** diskette. Create a new folder on the file server named *Login Admin* (or whatever) and drag the following files from the **Login** diskette to the newly created folder:

1. *Admin* – the *Login* administration program.

2. *Initialize* – initializes the datafiles.

3. *Convert* and *Filter* – used to change text file formats, see the section *Notes, Tips and Hints*.

4. *Encrypt* – for encoding and decoding login data files.

Now, drag the files below from the **Login** diskette to the *Login* folder:

1. `Names.DAT` and `Computers.DAT` – initially empty, these files hold the user names and computer names respectively.

2. `Preferences.DAT` – holds the information that determines when **Login** will run.

This completes the file server set up.

4.4 Workstation Set Up

What follows must be repeated for every computer on which you wish to run **Login**. The process can be broken down into several steps:

1. Copying the **Login** and **MakeLogin** applications from the Login diskette.

2. Configuring the Chooser and locking the AppleShare Prep file.

3. Running the **MakeLogin** application to create the Login.DAT file that contains the computer ID and file server name.

4. Making an alias of the **Login** application and copying it to the *Startup Folder* in the *System Folder*

4.4.1 Copying the applications from the Login diskette

On the hard drive of the workstation create a folder named *Login*. Copy the applications **Login** and **MakeLogin** from the distribution diskette to the new *Login* folder by dragging them into the *Login* folder on the hard drive.

4.4.2 Configuring the Chooser and locking the AppleShare Prep file

From the **Apple** menu select the **Chooser**. Click on the AppleShare icon and select the file server on which you just installed the administration software. Click the OK button. Select *Guest* login and click OK. Click the check box next to the name of the file server which has the administration software to set the Macintosh to login on startup. Click OK and exit the Chooser.

Open the **Preferences** folder located in the **System Folder** of the computer's hard drive. Find the file named **AppleShare Prep** and click once on it. Select **Get Info** from the Finder's **File** menu and click the check box labeled *locked*. This locks the guest login setup ensuring that the Macintosh will login to the file server on startup.

4.4.3 Running the MakeLogin application

The **MakeLogin** application is used to create the *Login.DAT* file that contains the ID for the computer as well as the name of the file server to use. Run the application by double-clicking the icon. When asked, enter the name chosen for the computer (short names work best) and enter the name of the file server as it appears under the icon on the desktop. Once the file *Login.DAT* has been created the **MakeLogin** application may be deleted to conserve hard disk space. Should the name you selected for this computer be in use already the **MakeLogin** program will alert you and ask you to run it again and use a different name if you wish. There are times, especially after a crash, when you will run **MakeLogin** again on a computer that is already registered with the **Login** system, in which case you will likely want to use the same name as before.

4.4.4 Making an alias of the Login application

To run **Login** on startup you must put an alias of the actual application in the **Startup Folder**. Select the **Login** application and choose **Make Alias** from the Finder's **File** menu. Move this alias file into the **Startup Folder** in the **System Folder** and remove the 'alias' extension to the name. This will make **Login** run on startup. It is the job of the system administrator to get users to restart their computers when they are finished.

4.5 Creating Login's data files

Each time it was run the **MakeLogin** application added the name of the workstation computer to the empty `Computers.DAT` file that was copied into the administration folder on the file server. This list will be used by the **Initialize** application to create the particular data files where **Login** will store the information about who is using the computers and when. Open the administration folder on the file server and double-click the **Initialize** application to run the program.

4.6 Using the *Initialize* Application

The **Initialize** application will allow you to select from three options: (1) initialize the datafiles, (2) clear the `Names.DAT` file, or (3) clear the `Computers.DAT` file. If this is the first time setting up the **Login** system the program will prompt you to locate the *Login* folder on the file server to create the Path.DAT file that is used by the *Admin* program. Then select the *Initialize Data Files* option to create a data file for each computer. Use this program to clear the data files when they become too large or to clear the computer and user names. Use option 4 to reset the `Path.DAT` file should you need to move the *Login* folder after it is up and running.

5 Single Macintosh Set Up

This section is for single Macintosh users, networked users may skip this section. To run **Login** on a single Macintosh follow the directions below:

1. Create a folder named *Login* on the hard drive and copy the following files to it: **Login**, **MakeLogin**, **Admin**, **Initialize**, `Names.DAT`, `Computer.DAT` and `Preferences.DAT`.

2. Double-click on the *MakeLogin* application. Enter any name for the computer and enter the name of the computer's hard drive as the name of the file server.

3. Make an alias of the *Login* application and place it in the *Startup Folder* located in the *System Folder*. This will run **Login** on startup.

4. Double-click on the *Initialize* application and select option 1 to create the data file after following the directions for creating the Path.DAT file. The data file stores all the information gathered by the *Login* program.

Login is now set to run on a single Macintosh.

6 The Admin Program

The *Admin* program is used to monitor the users of the network and to generate reports showing who has been using the network. Each of the menus and menu items are described below. The **File** and **Edit** menus are self-explanatory. Note, all *Login* data files, including the *Names.DAT* file are encoded to prevent users from easily altering the data. Use the *Encrypt* application to encode and decode these files. This is particularly useful if you are using a method other than the *Admin* program to create the *Names.DAT* file.

6.1 The Reports Menu

6.1.1 Lookup Name

To search for a particular user use this option. *Lookup Name* searches all the data files for the string entered. This is a substring search so entering 'smith' will show all users with 'smith' in their name. This option only prints to the screen.

6.1.2 Lookup by Computer

Lookup by Computer asks for a computer ID and displays all users of that computer. This option only prints to the screen.

6.1.3 Report by Date

To create a report by date use this option. Use the TAB key to move from field to field and enter the month, day, and year (the current year is listed by default) for the starting and ending dates. Use numbers to represent the months, i.e. October is 10, etc. By default the output is sent to the screen, click the 'disk file' box to send it to a disk file as well. If no boxes are clicked the output will be sent to the screen. This is an inclusive search and shows all matches for all computers. Clicking the mouse in the window will pause the display of names. Click it again to resume.

6.1.4 Report by Time

Use this option to create reports based on a specified number of hours and minutes before the present time. You can enter any value for the hours or minutes fields, i.e. 0 hours and 90 minutes is the same as 1 hour and 30 minutes. The 'Send to' boxes work as above. This report is useful for showing all the users for specific span of time, like a single classroom period. Use the mouse as above to start and stop the listing.

6.1.5 Preferences

There are two possible formats that *Admin* can use to write reports to disk. The default format is a plain text file that includes header information. Use this option to select a spreadsheet format that has no header information and uses tab characters between fields. This makes it easy to paste the report into a spreadsheet.

6.2 The Utilities Menu

6.2.1 List Users

Lists all the users in the `Names.DAT` file. Use the mouse to pause.

6.2.2 Add Users

Allows for the addition of individual users to the `Names.DAT` file. For large groups of users see the section *Notes, Tips and Hints* on other ways to set up the `Names.DAT` file.

6.2.3 Remove Users

Use this to remove a specific user from the `Names.DAT` file, if found.

6.2.4 Login Settings

Login Settings determine when the *Login* program will run. When a workstation computer is started the *Login* program reads the settings file and decides, based on the information read, whether to run or not.

The settings dialog asks for several things: whether to run on Saturdays and Sundays, whether to stop after a certain time each day, and whether there is a range of dates on which *Login* will not run. These are provided as way to make *Login* more flexible so it can fit into as many different lab situations as possible. The defaults are 'YES' to running on Saturdays and Sundays and zero to all other options. Use a zero to indicate that a particular option should not be used. Enter months as numbers and either 'YES' or 'NO', or 'AM' or 'PM' where appropriate. For example, the high school lab where *Login* was initially tested was used by outside groups on the weekends, in the evenings, and during vacations. By telling *Login* not to run after the end of the school day, on the weekends, and during vacations it was not necessary to force the outside lab users to deal with the system.

7 Notes, Tips and Hints

7.1 Alternate Methods for creating `Names.DAT`

If there are a large number of users it can be quite troublesome to enter all the names individually via the **Admin** program. Here are possible alternatives to using **Admin** to create the `Names.DAT` file.

`Names.DAT` is a simple text file and can be edited with TeachText. Use TeachText to enter the names, **one name per line (press return at the end of the line) and in UPPERCASE only**. *Login* maps all input to uppercase so the names file must contain uppercase as well. This file must be encoded by the *Encrypt* program and named `Names.DAT`.

Alternatively, you can get the file `Names.DAT` from another computer system and use it. Many school districts have a central computer system which should be capable of creating a file of user names in uppercase with one per line. Getting a file from one of these systems and putting in on the Macintosh can save a great deal of time. Often, the system that generates the file uses a text file format that is different from the one used on the Macintosh. If the text file is from one of those systems it will need to be converted with the **Convert** application included. Simply select the conversion to be performed and open the file. As the user must enter at least what is in the `Names.DAT` file to login it is important that multiple spaces be removed. If there are multiple spaces between say the first and last name use the **Filter** application to make multiple spaces into a single space. It also strips leading and trailing spaces. This method of creating `Names.DAT` has it's advantages but it requires a higher level of familiarity with the Macintosh than is needed to use the rest of the system. Again, the file must be encoded by the *Encrypt* application.

7.2 Tips on Selecting User Names

When someone signs into the *Login* program the system scans the file `Names.DAT` for string that is contained in the string the user entered. This means that the string `SMITH` contained in the file `Names.DAT` will cause a match if the user entered `JANE SMITH`. It will also match `JOHN SMITH` and `MICHAEL NESMITH`. If this sort of flexibility is acceptable use `SMITH` in `Names.DAT`. If less flexibility is desired use the first and last name of each user. This also avoids ambiguity. Alternatively, it is entirely possible to use a student number or social security number in place of a name.

7.3 What Does the '*' After a Name Mean?

The *Login* application screens the input searching for a select set of English swear words and informs the user that they should wash their mouth out with soap if any are found. If the user then signs in after entering a swear word the name if flagged with an asterisk. This was added primarily to let teachers know which of their students are goofing off.

7.4 Why Do This and What Might Come?

Login was written because I got tired of having students sign in on a sheet of paper. It made it difficult to track who was using what as they often failed to fill in the form properly. This is why I created *Login*. Future versions of *Login* will, depending on people using and paying for this system, allow the possibility of adding passwords as well as a user name.

8 Shareware Notice

This program is being distributed as shareware. Fees in U.S. funds are as follows:

1. $10.00 for each computer up to $50.00 maximum. If you plan on using *Login* on more than five computers the fee is $50.00 for a single lab.
2. $75.00 for a single building site license with no limit on the number of labs or computers.
3. If you wish to use *Login* district wide or in more than one building contact me and we can come to an agreement as to what will constitute an appropriate fee.

Please pay the fee for this program. This program is geared towards institutions and in general institutions can afford to pay the small fee required to use this program. Anyone who registers will be entitled to free updates, please give mail or e-mail (Internet or provide the gateway information) addresses.

9 Disclaimer and Address

The software carries no warranty, either expressed or implied, about it's suitability to any purpose and the author assumes no responsibility for any loss or damage, of any kind, incurred through the correct or incorrect use of this software.

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