

The DoppleMaker©

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The DoppleMaker is named after a rather distasteful mythological creature. This creature, called a doppleganger, has the ability to change its appearance and it would use this ability to its own evil ends. Now, there is nothing evil about my DoppleMaker unless you are a software pirate. The DoppleMaker makes DoppleGangers which are applications with the same names as the original applications but are not the original applications. A DoppleGanger is a front, a decoy for the safely hidden original. Pirates on your network can copy the DoppleGangers all they want for apart from the network they are useless.

Included with the DoppleMaker is a HyperCard stack that teach you how to use the DoppleMaker. In this text file, I want to detail how your lab might be set up to make the best use of your applications and the DoppleGangers.

For the DoppleGanger to be able to find the original applications, the general user must have "see files" and "see folders" privileges to the folder where the original application exists. There are two relevant aspects of network management to look at: 1) How to make files single/multi user, and 2) How to hide your applications.

1) How to make files single/multi-user.

There are two ways to make an application multi-user. One way is to set a certain bit that is related to the application. The other way is to put the application into a folder that the user does not have "make changes" privileges. With the first way, the Finder will ignore any application busy warnings, whereas, with the second way, the Finder never receives any application busy warnings to deal with. Thus, if you place a copy of an application that should be single-user only into a folder that the user can not make changes to, the application will actually run multi-user. Also, some applications (eg. MicroSoft Works) will give nasty messages to the user if it cannot update some special file. Such applications should be placed into a folder that the user can make changes to. However, such a folder should be made invisible so that users can not make changes such as dumping files into it, renaming files, deleting files, etc.

Because the folder with the DoppleGangers is available to the general user, it would be advisable to remove their "make changes" privileges from that folder.

Applications are single-user by default.

2) How to hide your applications

The DoppleMaker is effective because it is able to hide original applications from users and still maintain a standard Macintosh™ user-interface. Generally, what a user can not see, he can not copy. However, as the network manager, you should be aware that there are tools available that can copy hidden files and even hidden files in hidden folders. Such tools can be very dangerous in malicious or ignorant hands.

A tool that you may find very useful (and dangerous) is ResEdit. With ResEdit, you can make invisible the folders that your original applications are in. If the general user does not have “make changes” privileges for the volume (or root directory), he can not make visible a folder that you have made invisible. Because the user can not open an invisible folder, he can not copy the files in it. Therefore, the files in an invisible folder can be visible and the user can have “make changes” to the contents of the folder. It is easy to maintain a folder if you are easily able to make its contents visible. Hence, if you have ResEdit, I would suggest making the folder where the applications are kept invisible.

The Application Usage File

The following conditions must exist before a DoppleGanger can keep track of how many times it has been launched.

- 1) A folder called “Resources” must exist in the root directory.
- 2) The folder must have “make changes” privileges to all users.

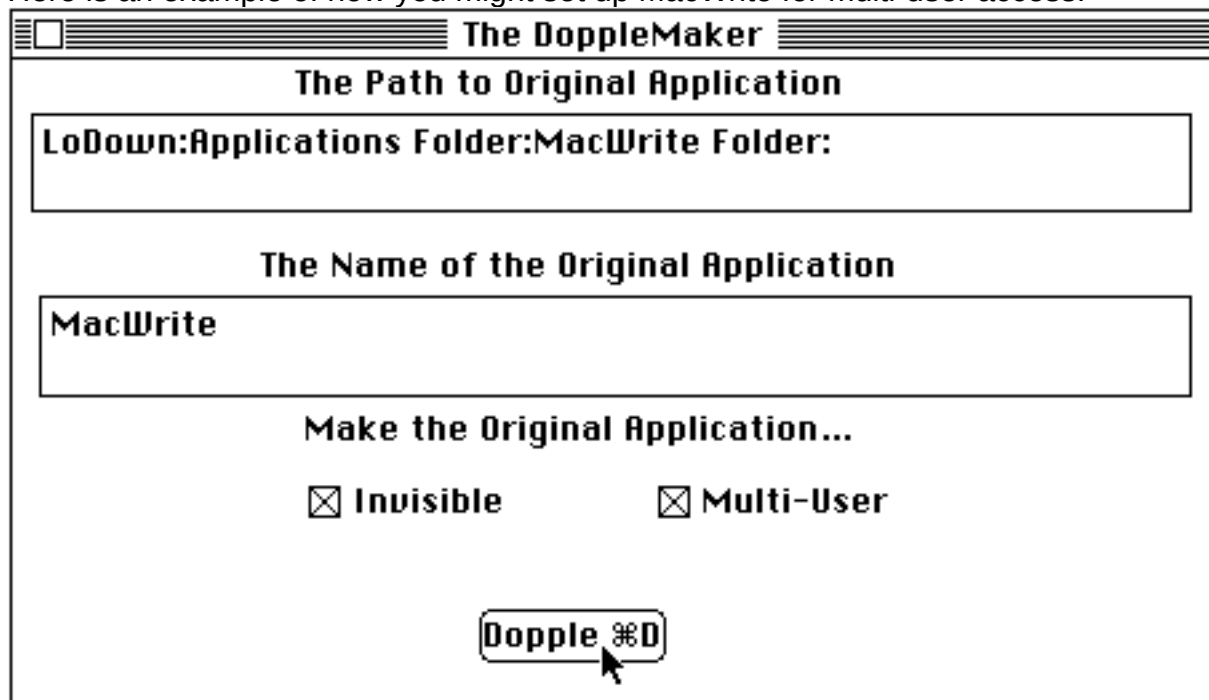
This is optional. Each DoppleGanger will try to open the file. If it can not open the file, it will try to create a new one. If it can not create a new one, it will give up on updating the stats. Thus, if you do not want to keep track of how many times a DoppleGanger has been launched then do not create a folder called “Resources” with “make changes” privileges to everyone.

Upcoming Updates

- 1) Scroll bars for the Application Usage Report.
- 2) A better dialog box for making DoppleGangers.
- 3) The ability to print and save Application Usage Reports
- 4) The ability for the DoppleGangers to check if the application is busy and single-user.

And anything else that you would like to see.

Here is an example of how you might set up MacWrite for multi-user access.



The screenshot shows a window titled "The DoppleMaker". Inside, there are two text input fields. The first field is labeled "The Path to Original Application" and contains the text "LoDown:Applications Folder:MacWrite Folder:". The second field is labeled "The Name of the Original Application" and contains the text "MacWrite". Below these fields, there is a section titled "Make the Original Application..." which contains two checked checkboxes: "Invisible" and "Multi-User". At the bottom of the window is a button labeled "Dopple ⌘D" with a mouse cursor pointing at it.