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# Super Boomerang™ DirectOpen Menu Technical Note

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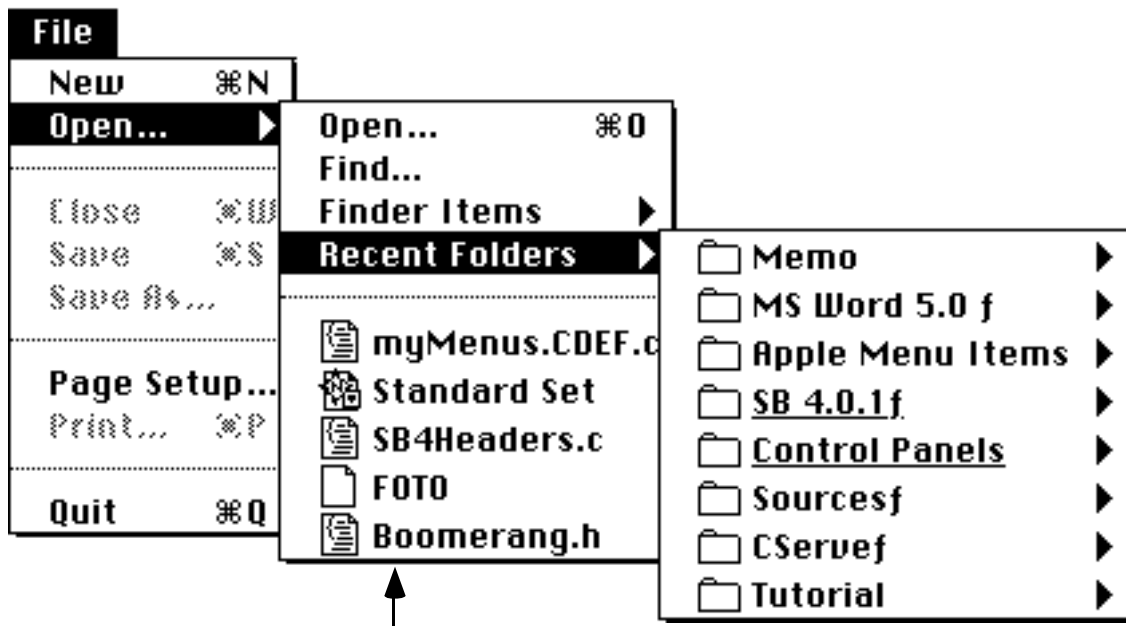
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## §1. Introduction

This note provides technical information on how to attach Super Boomerang™'s DirectOpen menu to any menu command which brings up the Open dialog box in an application. This can be done by adding a simple resource. This note is aimed at those who know the Macintosh operating system, how to use ResEdit or Resorcerer and MacsBug, and how Super Boomerang's DirectOpen menu works in general.

Super Boomerang attaches the DirectOpen menu (Fig.1) to various menu commands in many programs, which bring up the Open dialog to let the user select files. When the user select a file from the DirectOpen menu, the file is opened immediately without showing the Open dialog.



Recent files which can be opened by TeachText

**Fig.1 DirectOpen menu in TeachText**



Some of the commands like "Open..." in the File menu or "Subscribe to..." in the Edit menu are general enough that Super Boomerang can locate and decide what kinds of files should be displayed in the DirectOpen menu. In addition to these standard commands, many programs have other menu commands which bring up the Open dialog. One example is "Verify..." in the File menu of ResEdit. Super Boomerang uses a built-in look-up table to handle these special menus.

The purpose of this note is to overcome the following problems:

1. When a new program comes out, Super Boomerang cannot handle any special menu items in the program until Super Boomerang is upgraded to address it.
2. I cannot check all commercial programs, in-house programs and customized menus like those in MPW, and Super Boomerang cannot support those menus.
3. Sometimes Super Boomerang uses general rules, and sometimes look-up tables to decide what kind of files should be displayed in the DirectOpen menu. These methods are not perfect, so sometimes the user finds that the DirectOpen menu does not show the proper files.

## §2. How to add DirectOpen menu - 'bMRM' resource

To overcome these problems, Super Boomerang 4.0 and later (4.0.1 and later recommended) uses a special resource to get more information about these special menu commands. When the user clicks the menu bar, Super Boomerang looks for '**bMRM**' resources in the current application (identified by CurApRefNum). If there are any in the application, Super Boomerang adds the DirectOpen menu following the information in these resources, then adds more DirectOpen menus to other menus using its own knowledge.

This resource contains the following information:

1. Which menu command should have the DirectOpen menu attached
2. What kind of files are to be displayed in the DirectOpen menu

This note comes with a 'TMPL' resource to be used with ResEdit or Resorcerer to simplify the process of creating the resource. The details of the resource format will be provided later.

The procedure for adding this resource is as follows:

1. Find the menu ID or menu title and the item number or item name where you want the DirectOpen menu attached. (SB uses GetMHandle to find the menu.) If you don't have this information, run the program, invoke MacsBug or any other debugger, and check the menu information. One of the good tool is "mlist" dcmd which is included in "Debugging Macintosh Software with MacsBug" published by Addison Wesley. Another simple way is to check the MENU resource using ResEdit, but this may not work 100 % of the case, because the menu id in the memory could, in principle, be different from the menu id in the MENU resource.



2. Determine the file types to be displayed in the DirectOpen menu.
3. Using ResEdit, open the application.
4. Add a new 'bMRM' resource to the application, not to Super Boomerang. The resource ID does not matter, and you may add more than one resource.
5. Enter information in the new resource according to the instructions below.
6. Close the application.

Not all menu commands which bring up the Open dialog can be handled by DirectOpen, and you have to be careful when you try the newly added DirectOpen menu for the first time. Never try to add DirectOpen menu to items like "Delete...". It is not easy to identify a priori which kind of menu command can be handled by DirectOpen. A rule of thumb is that if the command brings up the Open dialog and hitting Return is enough to select a file, then DirectOpen can most likely take over.

### §3. 'bMRM' resource format

The following is one of the example 'bMRM' resources included in this package. (Fig.2) This resource directs Super Boomerang to attach the DirectOpen menu to "Transfer..." in the File menu, and show applications. (Fig.3)

Enter bMRM	<b>bMRM</b>	
Enter \$A9FF	\$A9FF	
Version	\$0001	
Menu ID	0	
Menu Title	File	
Menu Item No	0	
Menu Item String	Transfer...	

Any files	<input checked="" type="radio"/> 0	<input type="radio"/> 1	Number of File Types 1 1) ***** File Type <b>APPL</b>
Any files created by this APPL	<input checked="" type="radio"/> 0	<input type="radio"/> 1	
Following files	<input type="radio"/> 0	<input checked="" type="radio"/> 1	
Following files created by this APPL	<input checked="" type="radio"/> 0	<input type="radio"/> 1	
Following files and files created by this APPL	<input checked="" type="radio"/> 0	<input type="radio"/> 1	

**Fig. 2 Transfer 'bMRM' resource**



**Fig. 3 DirectOpen menu attached by 'bMRM' in Fig.2.**

## Signature

In the **first three fields**, you must enter the information exactly as is shown above. The first two fields are there to ensure that this is the resource for Super Boomerang's DirectOpen menu. The third field is the version number of this format.

## Menu specification

**Menu ID** and **Menu Title** specify the menu and **Menu Item No** and **Menu Item String** specify the item in the menu. For both cases, if the string is not an empty string, that string is used to specify the menu / menu item. If it is an empty string, the ID number is used to identify the menu / menu item. In this example, the menu is completely specified by the string, i.e., the menu title is "File" and the item string is "Transfer..". The strings are not case-sensitive, and "..." at the end of the item string can be either 3 dots or ellipsis (option + semicolon), i.e., Super Boomerang treats them as the same "character".

## File specification

The on / off buttons are to specify the files to be displayed in the DirectOpen menu. One and only one option should be on.

1. **Any File** - If this option is on, all files are displayed. This is good for menu commands like "Open..." in ResEdit.
2. **Any File created by this APPL** - If this option is on, all files created by the application are displayed.
3. **Following Files** - This is the most useful option. If this option is on, only those files which match those file types at the end of this resource are displayed. In this example, there is one file type, 'APPL', so only applications are shown in the DirectOpen menu.





4. **Following files created by this APPL** - If this option is on, only those files created by the current application which match with those at the end of this resource are displayed. This is useful when an application opens files with special data in it. For example, Navigator opens 'TEXT' file only if the file contains special information for Navigator.
5. **Following files and files created by this APPL** - If this option is on, all files created by this application and those which match the types at the end of this resource are displayed. This is useful for those applications which can open files created by similar kind of applications, e.g., word processors and graphics programs.

### Specification by file name extension

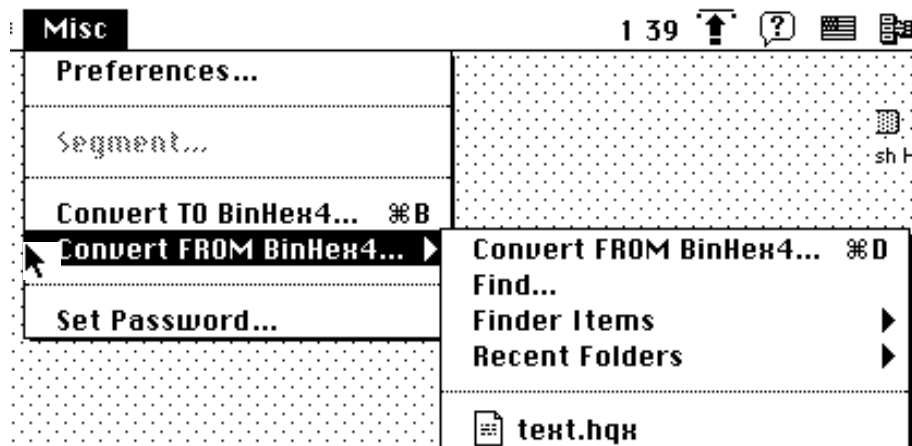
Following these flags, you enter the **file types**, if necessary. There is one special case here: If you enter '...ABC' (option + semicolon, followed by up to 3 capital letters) following a file type, this is interpreted as an extension of file names. For example, if you specify the file type as

TEXT
...C
...H

all text files whose names end with ".c", ".C", ".h" or ".H" are displayed in the DirectOpen menu. The letters for the extensions entered in the resource should be capital letters, but it matches both lower and upper-case letters in the file name.

Another example 'bMRM' resource included in this package adds the DirectOpen menu to the "Convert from BinHex4..." command in Compact Pro as shown below. The type specification for this case is

TEXT
...HQX



**Fig.4 DirectOpen showing files with extension "hqx"**

By using a special file type '`*.....`' (asterisk + 3 option-semicolons), you can specify files only by the extension. For example, if you want to show files whose name ends

with ".DVI", which could be imported from various computers and the file type of which cannot be specified, specify the file type to be

* .....
...DVI

## §4. How DirectOpen works

When the user selects a file in the DirectOpen menu, Super Boomerang fools the application into thinking that the menu item of the application's menu is selected. The application then tries to call the Open dialog. Super Boomerang patches Open dialog calls and, before the Open dialog is displayed, asks the application if the selected file is really acceptable by the application using the fileFilter passed to the Open dialog call. If the application says "Yes, I can open it", then Super Boomerang fills the proper data in the reply record, sets the "good" flag on and passes back the file information to the application without showing the Open dialog. If the application says, "No, I cannot open this file", then Super Boomerang shows the Open dialog to let the user select a file.

If your application has any trouble using DirectOpen menu and you need more details how Super Boomerang communicates with the application, please contact the author via the E-mails shown below.

Because Super Boomerang confirms if the file being selected can be opened by the application, instead of simply passing back the selected file to the application, the specification of the file type by the 'bMRM' resource need not be exactly accurate. The rule of thumb is that the file specification covers the most often-used file types.

Because Super Boomerang does not release 'bMRM' resource after reading the data from the resource, the application can specify different files for the same menu under different conditions. For example, you can request to show Movie files and PICT files if QuickTime is installed, and to show only PICT files if QuickTime is not installed.

The first method is to prepare several 'bMRM' resources for the same menu item, and set the first field to 'bMRM' only in the resource which is appropriate under the current condition. The second method is to change the unnecessary file type to another file type in the resource, e.g.,

MOOV
PICT

to

PICT
PICT

If you don't want to attach DirectOpen menu under certain condition, change the first field to something different from 'bMRM'. To change the file types in the DirectOpen menu, make sure the resource is set to be non-purgeable.



## §5. Disclaimer

This technical information is provided directly by the developer of Super Boomerang, Hiro Yamamoto of zeta soft. Now Software, Inc., the publisher of Super Boomerang, assumes no responsibility for answering technical questions about the DirectOpen menu.

This documentation can be distributed freely, but any contents of this documentation should not be altered, and accompanying resources should be distributed with this documentation.

If you have any technical questions about the DirectOpen menu, please send electronic mail to the author on one of the computer networks listed below.

AppleLink	D5611
CompuServe	76407,3251
America Online	Hiro Y

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