
RSCV_Compiler

A Tool To Update The *RSC_Viewer* Application.

Version 2.1 (10/07/1990)

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Written in *THINK's LightspeedC*[™]
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INTRODUCTION

As the Macintosh family increases regularly, new systems and new ROMs are regularly provided by Apple with the new machines. Consequently new trap-calls and new low memory global variables are created.

The purpose of the *RSCV_compiler* application is to provide an elegant mean to update the *RSC_Viewer* application. Indeed, it is easier to update a plain text file than a "resource-form" of that file.

To sum up, *RSCV_Compiler* allows the user to update the ‘**GVAR**’ (global variables description) and ‘**TRAP**’ (trap description) resources of the *RSC_Viewer* application without using a Resource Editor.

THE FILES

So to update *RSC_Viewer* two files are provided. They contain a clear-editable description of the traps and global variables that are currently recognized. Their names are : **GlobalVariables**, and **ListOfTraps**. To modify them, see the corresponding chapters.

USER GUIDE

Launch the *RSCV_Compiler* application, select one of the two files, and when the application presents the second dialog box, search for *RSC_Viewer* . When the application asks you if you want to replace *RSC_Viewer* answer **yes**. Do this operation twice, if you have updated the two files. That's all.

Note that you can put the ‘**GVAR**’ and ‘**TRAP**’ resources in other applications than *RSC_Viewer*. But remember the Copyright.

GLOBALVARIABLES FILE.

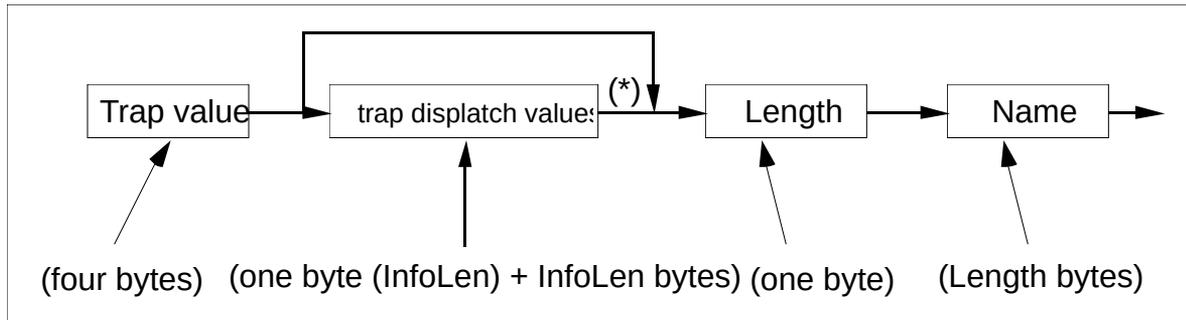
This file contains the description of the low memory global variables used by the Macintosh Systems.

To add or update a global variable, simply edit this file, find the place where to store it, and write it. You can change everything in that file (names, location of the addresses, etc) but two things :

- The word '**GVAR**' **at the beginning of the first line**.
- And the format **\$xxx:<length>** where length (an hexadecimal value) is the size of the variable (otherwise *RSC_Viewer* won't be able to show you their content) .

LISTOFTRAPS FILE

The format for that file is totally fixed. There must be the word '**TRAP**' at the beginning of the first line, and the syntax of the other lines (trap description) is the followings :



(*) These are the values that are pushed onto the stack and allow the system to choose the right element of a dispatch trap (example : HFSDispatch, etc).

As some traps can have some bits set (typically bit 9 and 10) and as those bits have different meanings (it depends on the trap actions, see IM books), it has been decided to use different trap values to differentiate? them.

Further more, some traps act as dispatch traps. So, in order to distinguish them from the standard ones, new values have been introduced.

To sum up, as a Macintosh trap is a word value which range is [A000...ABFF], *RSC_Viewer* uses The high order byte of this trap value (i.e. the A digit) to handle the diffe-rent cases.

So, if you want to add a new trap, you must respect the following syntax :

standart traps and those which can have the ASYNC/IMMED bits set

- 8xxx standart trap (ex : **800006PBOpen**)[A000]
- 1xxx dispatch trap (ex : **19EA15Standard File Package**)[A9EA]
- 0xxx element of a dispatch trap (ex : **09EA\x(0101)09SFPutFile**)
(or : **0B1D\x(0400040016)0BPixMap32Bit**)
[trap dispatch values]

traps which can have the SYS/CLEAR bits set

- Axxx standart trap (ex : **A04008ResrvMem**)[A040]
- 3xxx dispatch trap (ex : none)
- 2xxx element of a dispatch trap (ex : none)

traps which can have the MARK/CASE bits set

- Cxxx standart trap (ex : **C03C0BEqualString**)[A03C]
- 5xxx dispatch trap (ex : none)
- 4xxx element of a dispatch trap (ex : none)

traps which can have the ASYNC/HFS bits set

- Exxx standart trap (ex : **E20007PBHOpen**)[A200]
- 7xxx dispatch trap (ex : **72600BHFSDispatch**)[A260]
- 6xxxelement of a dispatch trap(ex : **6260\x(0101)08PBOpenWD**)

Notes :

- **GetTrapAddress** and **SetTrapAddress** are treated internally, so they are considered as standard traps.

- The maximum length for the Trap dispatch value is **16 bytes**, it seems to be widely sufficient...