

# **FinalWriter**

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# Chapter 1

## FinalWriter

### 1.1 MathScript & FinalWriter

How to use MathScript together with FinalWriter®.

[Introduction](#)

[Installation](#)

['Peculiarity' of FinalWriter](#)

[Use of the ARexx scripts](#)

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### 1.2 Introduction

In order to use EPS files of MathScript in word processors and DTP programs, they must be able to load this file format. Most of them should be able to. For showing and printing them they have to be "interpreted". Usually this happens inside of a PostScript laser printer. If you integrate a preview into an EPS file (Binary EPS), you are able to see it on your monitor or print it on non-postscript printers. MathScript is able to do this since version 2.0. However if you want high quality print-outs, you have to use very high resolutions for you preview, which will eat much of your RAM and disk space. Because FinalWriter has its own PostScript interpreter, you are able to see your formulas quickly in low resolutions on your monitor and print them in high quality by using the PostScript code.

If you do own a PostScript printer, change the settings of MathScript so that the math font will be included into the PostScript description, because the PostScript interpreter of the printer cannot load the font from the harddisk. But a little error will occur with this setting (see ['Peculiarity' of FinalWriter](#) ).

If you do not own such a printer, do not include the font into your PostScript code so that this error will not occur and the size of your files will be kept at a minimum.

### 1.3 Installation

For easier use of MathScript with FinalWriter do the following:

- Define in FinalWriter two new gadgets which start ARexx scripts. The first gadget is assigned to MathScript:Rexx/OpenMathScript.ms, the other to MathScript:Rexx/CloseMathScript.ms .
  - Put the file InsertFormula.ms on any function key in MathScript.
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- Edit the file .../FinalWriter/FWFiles/init.ps . The following paragraph has to be there:

```
systemdict /findfont { % Comment out the next 3 lines if you don't have a PSFonts: directory % If you have a directory containing
Type-1 fonts to use for EPS clip % art, substitute the path name of the directory for "PSFonts:" below. -->% dup FontDirectory
exch known not % Not in FontDirectory? -->% { dup (PSFonts:) () loadfont % Try to load from PSFonts: -->% } if
```

Do what is written in the comment: remove the percent signs at the beginning of the last three lines.

## 1.4 'Peculiarity' of FinalWriter

It seems that FinalWriter has a little bug with its EPS support. If you save a document with an EPS file in which a PostScript font is included this file cannot be seen after loading the document again (when using the full display option)

Because including fonts in your files is only recommended if you use a PostScript printer it is not so bad because the PostScript print is still correct, and a preview (Binary EPS) can be used for displaying them on your monitor.

Without a PostScript printer there is no use of integrating the font into your files so this error won't occur.

## 1.5 Use of the ARexx scripts

In order to make the connection between MathScript and FinalWriter easier three scripts are used: OpenMathScript.ms CloseMathScript.ms InsertFormula.ms The first is started from FinalWriter (from the menu or from user-defined gadgets, see [Installation](#)).

Their functions are:

OpenMathScript.ms: This script will put MathScript's screen to the front or start the program if it is not running yet. If a formula was selected in FinalWriter before, its formula description will be loaded, so you are able to modify previously created files.

InsertFormula.ms: This macro saves the formula as a Binary EPS file and imports it into FinalWriter. If a formula was selected in FW before, it will be replaced by the new one, otherwise it will be inserted into the current page. Moreover it uses the current font size and color of FinalWriter. If you do not want this, take a look at the script to learn how to modify it.

CloseMathScript.ms: This script may only be executed when your document has been saved and closed. It deletes all temporary files which have been created by InsertFormula.ms.

For creating documents with mathematical formulas just do the following:

1. Start FinalWriter
2. As soon as you need a new formula or you want to edit one already created, start OpenMathScript.ms
3. Enter your formula into MathScript
4. Start the script InsertFormula.ms from MathScript

Repeat the steps 2-4 until all formulas are complete

6. After you have saved your document and closed it, start CloseMathScript.ms

## 1.6 Frequently Asked Questions

When using the full display option in FW or printing on normal printers, the formula cannot be seen. Check out the following points: In the file init.ps (in the directory FWFiles of FW) there has to be the following section:

```
systemdict /findfont { % Comment out the next 3 lines if you don't have a PSFonts: directory % If you have a directory containing
Type-1 fonts to use for EPS clip % art, substitute the path name of the directory for "PSFonts:" below. dup FontDirectory exch
known not % Not in FontDirectory? { dup (PSfonts:) () loadfont % Try to load from PSFonts: } if
```

[...]

Write "assign PSFonts: exists" into your shell. The path of MathScript should appear in the output. This assign should be made by the installer script.

In the directory of MathScript there has to be the file PSFont.

During the execution of InsertFormula.ms the error occurs that your Ram Disk is full. Do the following: Edit the files InsertFormula.ms and CloseMathScript.ms. Replace all "T:" with any legal path so that the formulas will be saved there (and deleted afterwards) instead of your RAM.

Although I set different colors the formula remains black in FW By default the ARexx script "InsertFormula.ms" uses the current font color. If you do not want this, edit the script according to the instructions inside!