AutoPEG

COLLABORATORS					
	<i>TITLE</i> : AutoPEG				
ACTION	NAME	DATE	SIGNATURE		
WRITTEN BY		February 8, 2022			

REVISION HISTORY					
NUMBER	DATE	DESCRIPTION	NAME		

## Contents

#### 1 AutoPEG 1.1 AutoPEG ..... 1.2 1.3 Legal Stuff Welcome to AutoPEG..... 1.4 1.5 1.6 Making AuotPEG.exe pure 1.7 1.8 . . 1.9 1.15 JPEGDIR ..... 1.17 Selecting tasks...

1

1

1

2

3

3

3

4

5

5

6

6

6

7

7

7

8

9

10

11

## **Chapter 1**

# **AutoPEG**

## 1.1 AutoPEG

AutoPEG - Background JPEG Decompression by John Corigliano Registering AutoPEG Copyright and Other Fun Stuff Introduction Installation Usage The New Preferences Program Problems that might occur

## 1.2 Registration

Since I am releasing AutoPEG as FreeWare (that means it costs you nothing, but I still have the copyright) there is no "registration" per se. However, if you like AutoPEG, send me some e-mail or something cool! History - Version 1.0 First public release - Version 1.55 Added support for READ-ONLY disks (like CD-ROMS) Number of open JPEGs only limited by user ram - Version 2.0 AutoPEG only operates with user specified tasks Requires 68020+ Includes a new preferences program to select tasks and set options (This requires MUI). Added NO\_DELETE option to force AutoPEG not to delete decompressed 24-bit files. Added ADD\_EXT option to get AutoPEG to add an extension of ".AP" to decompressed files. Previously this was the default behavior, but now it is not. Added REUSE option to get AutoPEG to reuse already decompressed files. AutoPEG.exe is now pure (can be made resident). Thanks to: TheMadDoctor - For notifying me of the 68000 bug :-( Simon Edwards - For first suggesting making AutoPEG only work with specific tasks. Joel Newkirk - For his many suggestions (especially REUSE) and for the new AutoPEG icon. Eric Totel - For MUIBuilder. Without it I probably would have been too lazy to write APPrefs ;-) The Independent JPEG Group - For making the JPEG algorithms available to the public. Miles Davis - Just for being Miles Davis... Email - jcorig@strauss.udel.edu Smail - John Corigliano 1327 Gilpin Ave. Wilmington, DE 19806 IRC - mopp

## 1.3 Legal Stuff

- AutoPEG and AutoPEG.exe, and are Copyrighted © 1995 by John Corigliano

- This product is FREELY REDISTRIBUTABLE.

- This software is based in part on the work of the Independent JPEG Group:

¶ Permission for use of this software is granted only if the user

accepts full responsibility for any undesirable consequences; the

authors accept NO LIABILITY for damages of any kind.

- Installer and Installer project icon

(c) Copyright 1991-93 Commodore-Amiga, Inc. All Rights Reserved.

Reproduced and distributed under license from Commodore.

- INSTALLER SOFTWARE IS PROVIDED "AS-IS" AND SUBJECT TO CHANGE;

NO WARRANTIES ARE MADE. ALL USE IS AT YOUR OWN RISK. NO LIABILITY OR RESPONSIBILITY IS ASSUMED.

- Well, you get the idea: you're on your own if the world happens to end while you're using my software ;)

## 1.4 Welcome to AutoPEG

AutoPEG was developed to help those poor little graphics programs that don't support JPEG compression. It allows them to read JPEG files as 24-bit IFF files. It does not, however, allow them to write JPEG compressed files. Maybe later .... Here's how it works: it checks every file that is opened by any user-specified program to see if it is a JPEG file. If it is not, AutoPEG will ignore it. If it is, AutoPEG will decompress it and save it as a 24-bit file. The program that tried to open the JPEG, will actually open the 24-bit file - pretty sneaky, eh? The decompressed files will go to a user-determined drawer. If you've got plenty of memory, you should use the RAM: disk 'cause it'll be much faster. If not, make sure you're disk has enough free storage. After the program is done with the file, the 24-bit file is deleted (unless the NO\_DELETE argument is given) - which is another reason why you should use the RAM: disk. Most programs will open the file, quickly read the contents, then close it right away.

## 1.5 Installing AutoPEG

I advise you use the prepared install script that should've been in the archive. To use it you need the Installer program, which is freely available on Aminet. You probably have it already since tons of companies bundle it with their software. If you want to do this yourself, here's what needs to be done: 1. Copy "AutoPEG" wherever you like. 2. Copy "AutoPEG" wherever you like. 3. Copy "APPrefs" to sys:Preferences (or anywhere you like). 4. Before running AutoPEG, you should run APPrefs to select tasks for AutoPEG to use.

NOTE: AutoPEG requires AmigaDOS 2.0+

## 1.6 Making AuotPEG.exe pure

AutoPEG.exe is a stand-alone program that AutoPEG calls when it needs to decompress a file. AutoPEG.exe is a 'pure' program, meaning that it can be added to the list of resident programs. Making a program resident is like copying it to the Ram Disk, and running it from there. To make AutoPEG.exe resident use this command line (it can be used from a CLI or a script): resident C:AutoPEG.exe PURE This will speed up operations if you use AutoPEG alot. It is probably not worthwhile to make AutoPEG.exe resident if you don't use AutoPEG very often. NOTE: AutoPEG.exe MUST be located in C:. The reason is that C: is always part of the system path, thus AutoPEG will always be able to find AutoPEG.exe if it is in C: (AutoPEG does not have to be in C:).

## 1.7 Using AutoPEG

AutoPEG ON/S,OFF/S,USEMEM/S,QUIET\_ON/S,QUIET\_OFF/S,ADD\_EXT/S,

NO\_DELETE/S,TASK/K,JPEGDIR/K

NOTE: Arguments given OVERRIDE settings in the prefs file.

NOTE: There is no need to RUN AutoPEG. It will detatch itself.

Arguments:

#### ON/S

This switch either loads AutoPEG or makes AutoPEG stay loaded if it already is.

#### OFF/S

This switch either unloads AutoPEG or makes the program terminate immediately.

#### USEMEM/S

This switch forces AutoPEG to decompress files to RAM: then copy the uncompressed 24-bit file to JPEGDIR using 4K blocks.

#### QUIET\_ON/S

This switch forces AutoPEG not to display a requester when it is initially loaded.

#### QUIET\_OFF/S

This switch forces AutoPEG not to display a requester when it exits.

#### ADD\_EXT/S

This switch forces AutoPEG to add the extention '.AP' to decompressed files.

#### **REUSE/S**

This switch (when used in conjunction with NO\_DELETE) forces

AutoPEG to reuse decompressed files.

#### NO\_DELETE/S

This switch forces AutoPEG to not delete the 24-bit decompressed file.

#### TASK/K

TASK is a the name of a task that you want AutoPEG to

be active for.

#### JPEGDIR/K

The directory where all files are to be decompressed to.

## 1.8 ON/OFF

Arguments: ON/S,OFF/S

These args can be useful in scripts. They force AutoPEG into a certain state. If AutoPEG is already running, running it again will shut it down. However, if it is already running, running it again with the ON switch will basically do nothing - it will stay loaded in memory. The same is true for OFF. It is contradictory to use these arguments together! Only use one or the other. EXAMPLES:

1.> AutoPEG ON

2.> AutoPEF OFF

## 1.9 USEMEM

#### Argument: USEMEM/S

If your JPEGDIR is a directory on a hardrive, you may find operation a little bit faster using this switch. With this switch, AutoPEG will first decompress the file to RAM:, then it will quickly copy the file, using 4K blocks, to JPEGDIR. It makes little sense to use this option if JPEGDIR is on the Ram Disk. Use this option only if you have enough memory! EXAMPLES: 1.> AutoPEG USEMEM

## 1.10 QUIET\_ON, QUIET\_OFF

Arguments: QUIET\_ON/S,QUIET\_OFF/S By default, AutoPEG puts up a requester when it is loaded and when it is unloaded. These options terminate that behavior. EXAMPLES: 1.> AutoPEG QUIET\_ON 1.> AutoPEG QUIET\_ON QUIET\_OFF

## 1.11 ADD\_EXT

Argument: ADD\_EXT/S If JPEGDIR is the same as the directory where the JPEGs exist, use this argument to prevent AutoPEG from overwriting the original JPEG. The name of the decompressed file will be the original JPEG's name plus ".AP". EXAMPLES: 1.> AutoPEG ADD\_EXT

## 1.12 REUSE

Argument: REUSE/S If this switch is used, when a task requests a JPEG file, AutoPEG will first check JPEGDIR to see if the file exists there - meaning it has already been decompressed to 24-bit format. If the file exists, then AutoPEG simply returns that file instead of having to re-decompress the JPEG. This argument only makes sense if used with the NO\_DELETE argument. This will not work if the ADD\_EXT argument is given. EXAMPLE:

1.> AutoPEG NO\_DELETE REUSE

## 1.13 NO\_DELETE

Argument: NO\_DELETE/S

Normally, AutoPEG deletes the decompressed file after it has been closed by the program that opened it. If you use the NO\_DELETE switch, the decompressed file will not be deleted by AutoPEG. If this option is used, then it is up to the user to delete the files in JPEGDIR when they are no longer used. EXAMPLES: 1.> AutoPEG NO\_DELETE

## 1.14 TASK

Argument: TASK/K

If you do not have a prefs file (s:autopeg.prefs) you must supply a task name for AutoPEG to work with. AutoPEG only decompresses files for programs that you tell it to. if there is no prefs file and you don't supply a task name, AutoPEG will terminate immediately. This argument is not required if you have used the APPrefs program to create the s:autopeg.prefs file. If this argument is supplied, AutoPEG will ONLY work with the given task - any tasks listed in s:autopeg.prefs (if it exists) will be ignored. EXAMPLES: 1.> AutoPEG TASK TrueBrilliance 1.> AutoPEG TASK Imagine

## 1.15 JPEGDIR

Argument: JPEGDIR/K This is the directory in which decompressed files will (temporarily) exist. If given, it will override the value in s:autopeg.prefs (if it exists). The default value is T: EXAMPLES:

1.> AutoPEG JPEGDIR RAM:

1.> AutoPEG JPEGDIR Work:Gfx/JPEGS

## 1.16 Using APPrefs

In order to facilitate setting AutoPEG options quickly and easily, I have created the APPrefs program. This program requires MUI. When you run the program, it opens a window where you can set the options. The "Running Tasks" listview gadget This is a list of all the tasks currently running on your system (except APPrefs). Use this list to select the programs that AutoPEG will work with (PLEASE use this list!! Do not guess what a task's name might be!!). See Selecting Tasks To operate properly, the program you want to choose must be running, or else its name won't show up in the list. So, if you would like to use AutoPEG with ProgramX, start the ProgramX program, then - leaving ProgramX running - return to APPrefs and click the "Update" gadget. This will reload the task names, and now ProgramX's task name should be in the list. Click once on the name to hilite it. The "Select" gadget After hiliting a name click the ">" arrow gadget to copy the task name to the "AutoPEG Tasks" listview. The "AutoPEG Tasks" listview gadget This listview displays all the tasks that you have selected AutoPEG to work with. To remove a task from the list, click the "Remove" gadget. See TASK The "Decompress JPEGs to:" string gadget Enter the directory where you want files to be decompressed to. Eq. to **JPEGDIR**. The "Do not delete 24 bit IFFs" check box Select this if you do NOT want AutoPEG to delete decompressed 24 bit files after a task has closed it. Eq. to NO\_DELETE. The "Reuse IFFs" check box Select this if you want AutoPEG to reuse already decompressed files. Eq. to **REUSE**.

The "Add '.AP' Extension" check box Select this if you want AutoPEG to add the ".AP" extension to decompressed files. Eq. to ADD\_EXT. The "RAM: -> 4K Copy" Check box. Select this if you want AutoPEG to decompress files to RAM: first, then copy to JPEGDIR. Eq. to USEMEM. The "Quiet Startup" check box. Force AutoPEG not to display a requester when it loads. Eq. to **QUIET\_ON**. The "Quiet Shutdown" check box. Force AutoPEG not to display a requester when it unloads. Eq. to QUIET\_OFF. The "Save" button Saves to s:autopeg.prefs and quits. The "Cancel" button Quits the program WITHOUT saving. NOTE: If you make changes, these changes will not be noticed by AutoPEG until the next time it is run.

## 1.17 Selecting tasks...

When selecting a task to use, it is imperative that you start the task in the manner you normally would. i.e. if you normally run ProgramX from icon, then run it from icon when using APPrefs. Or, if you normally run ProgramX from a program-launcher (like Tool Manager) then run it from that program launcher when using APPrefs.

The reason is that the name can change, depending on what context the program is started under. For example, when I run ViewTek from icon, it shows up in APPrefs as "VT", but when I run it from Tool Manager it shows up as "Work:Gfx/VT".

Also, when you start a program with the "RUN" command, the name of the task will most likely end up as "Background CLI" or "Background Process". This is not desired, since, at any given time, you will probably have many "Background" programs going and AutoPEG won't know which is which - i.e. it will work for all of them.

## 1.18 Why MUI?

If you read the USENET news groups you will find that people either think that MUI is the greatet thing since sliced bread or it is the devil incarnate. I am impartial, but I really like the program "MUIBuilder" by Eric Totel. With this program I was able to have the APPrefs program written in one night! In deference to those people who don't use MUI, I have formatted the s:autopeg.prefs file so that it can be edited by hand. Though I don't reccommend this, the option is there. You MUST follow this format!!!!! Line #1 USE\_MEM opt Line #2 NO\_DELETE opt Line #3 QUIET\_ON opt Line #4 QUIET\_OFF opt Line #5 ADD\_EXT opt Line #6 REUSE opt Line #7 JPEGDIR opt Line #8 Task #1 ... Line #n Task #(n - 7) The value entered on the first 6 lines MUST be "0" or "1" - a "0" means 'don't use this option' and a "1" means 'use this option'. LINES 1-6 ARE REQUIRED. Line #7, if given, supplies the name of the JPEGDIR. i.e. "T:", or "Work:Gfx/JPEG". Lines #8 through n should have the names of the tasks you want AutoPEG to work with. LINE 7 CANNOT BE SKIPPED if line(s) 8 (or more) is/are supplied. See Selecting Tasks. Here is an example s:autopeg.prefs: 0 1 1 1 0 1 T: TrueBrilliance

#### Imagine

A minimal s:autopeg.prefs would be: 0 0

P.S. If you really don't like MUI but have some free time, feel free to write a non-MUI version of APPrefs - I won't mind ;) Good luck.

## 1.19 Problems :(

Since we are not living in a perfect world, some problems might arise:

1. REMOVED ;)

2. The AutoPEG.exe file must be located in C:

3. Some programs open files twice when they read them (ViewTek opens them 3 times!). This won't affect the final result, but it gets kinda boring waiting for the file to be decompressed so many times.

A work-around is to use the NO\_DELETE and REUSE options (without the ADD\_EXT option). For example. If I have these options set and tell VT to load "Work:Gfx/somefile.jpg", AutoPEG will kick-in and decompress the file the first time, but the next two times VT loads the file, AutoPEG will not decompress the JPEG, but rather will give VT the already decompressed file (in JPEGDIR).

4. If you run a program twice (at the same time), AutoPEG will only work with one instance of the program. The reason is that AutoPEG uses the exec.library function "FindTask" to determine if a program is an AutoPEG task or not and "FindTask" will always return the program loaded first (or the one with higher priority). Currently, there is no work-around.
5. Some programs just won't work with AutoPEG - there could be

many reasons why. Fortunately, I believe there are many more programs that do work with AutoPEG than there are that don't. Don't be discouraged! AutoPEG has successfully been tested with: DCTV Paint Real 3d (the older version) ViewTek (doesn't need it) Brilliance ImageEngineer (doesn't need it) Imagine ToasterCG, LightWave, but not ToasterPaint (hmmm....) If you find others that work or don't work, send 'em to me to add to the list.