

NewIcons

Philip A. Sauvageau

COLLABORATORS

	<i>TITLE :</i> NewIcons		
<i>ACTION</i>	<i>NAME</i>	<i>DATE</i>	<i>SIGNATURE</i>
WRITTEN BY	Philip A. Sauvageau	October 23, 2022	

REVISION HISTORY

NUMBER	DATE	DESCRIPTION	NAME

Contents

1	NewIcons	1
1.1	NewIcons	1
1.2	Introduction	2
1.3	NewIcon Features	3
1.4	Installation	5
1.5	NewIcons	7
1.6	DefIcons	8
1.7	NewIconsPrefs	10
1.8	CopyNewIcon	12
1.9	CreateDefaultIcon	13
1.10	InjectBrush	13
1.11	KillNewIcon	14
1.12	PatchOpenWB	14
1.13	Tips And Tricks	15
1.14	Authors	20
1.15	Acknowledgements	21
1.16	Distribution	21
1.17	History	22

Chapter 1

NewIcons

1.1 NewIcons

The NewIcons Package
Version 3.0
brought to you by
~The~NewIcons~Team~

↩

~Introduction~

~~~Features~~~

~Installation~

The Main Programs:

~NewIcons~

~DefIcons~

The Support Files:

~~~NewIconsPrefs~~~

~~~~CopyNewIcon~~~~

~~~~InjectBrush~~~~

~CreateDefaultIcon~

~~~~KillNewIcon~~~~

~~~~PatchOpenWb~~~~

~~Tips~and~Tricks~~

~~~~~Authors~~~~~  
~Acknowledgements~  
~~~Distribution~~~  
~Version~History~~~

1.2 Introduction

Greetings Amiga User!

The NewIcons Package is a revolutionary GUI enhancement system for the Amiga computer. It adds many new features to the Workbench that, we hope, will be standard in the next generation Amiga operating system. Specifically, it allows for a palette independent icon system whereby icons look color correct on any system, no matter what your Workbench palette is set to. It allows you to use icons in up to 256 colors, adds default icons for many, many file types, and works on any Amiga with OS2.04 and up.

If you have never used NewIcons before, please read the documentation carefully...it will save you from any trouble you should encounter. If you are a seasoned NewIcons user, also be sure to read the documentation carefully...there are a lot of new features in this latest version.

This archive is not "just another set of icons". This is a completely new concept, which we hope will revolutionize, and push in the right direction, the idea of GUI on the Amiga.

BACKGROUND INFORMATION

=====

Kickstart 3.0 was Commodore's first step towards ReTargetable Graphics. There isn't a device independent graphic engine yet, but there is a new pen arbitration system which allows applications to obtain a given color, or the one which is closest to it if there are not enough free pens.

It's simply ridiculous that, on a system capable of displaying a 256 color Workbench screen, and with a pen arbitration system like the one described above, icons are limited to 8 colors. Various solutions have been proposed, ranging from "use some colors and hope they are right" to "allocate some pens and reserve them for icon display", but they all miss the point, which is:

Why should I, the user, have to care about the icon palette?

Why should I set the system palette in a way decided by someone else (the icon designer) and not the way I like it?

When you display a picture on the Workbench screen using MultiView, you don't have to care about the palette: the system chooses it for you. So why should one care about the palette used by icons? The system should take care of it, not the user.

Unfortunately, icons don't carry palette information. Therefore, Nicola had to define a new standard for icon files, and write a system patch to make the system recognize them. Several goals had to be reached:

- The new standard should be backward compatible, that is users not running the patch program should see the standard 4-color icons.
- Manipulation of icons by users not running the patch program should not cause the new icon information to be lost.
- Remapping of the icons to the Workbench palette should be as fast as possible.
- Data should be compressed in order to reduce disk usage.
- The patch should work even on Kickstart 2.0 systems, with limited features.

All of the above goal have been reached. The new icon information is stored in the ToolTypes, so it is completely backwards compatible. A library, `newicon.library`, takes care of reading and writing the imagery in the ToolTypes; it also hides away the special ToolTypes so that when one asks for information about an icon only the standard ToolTypes are shown. A patch program, `NewIcons`, intercepts calls to `icon.library`, redirecting them to `newicon.library`, so that Workbench and all other applications transparently get the new icon imagery.

1.3 NewIcon Features

NewIcons

is a revolutionary system patch which enhances your Workbench and gives the user much more power and configurability over the appearance of the GUI (Graphical User Interface). The `NewIcons` system works transparently, and provides for a standard icon system that will look the same on any system, no matter what the palette is set to.

DefIcons

complements the `NewIcons` system. It works by recognizing a file's type, and instantly displaying the appropriate icon image for files without icons attached to them.

The system's features include:

- Allows up to 256 color icons on an AGA machine. (!)

- Icon colors are color correct on an AGA system no matter what your palette is set to. They automatically appear in perfect color.
 - Default icons for dozens of file types automatically appear for files without icons (FAST!). Recognizes file types in a very efficient manner. If you click on a "fake" icon, your appropriate user-defined default tool will appear in the "Execute command" text field automatically!
 - Make a brush, convert it to an icon. It will appear on your workbench in the exact proper colors you created it in, no matter what your palette is set to. Imagine making gorgeous icons from your digitized pics, in more than 16 colors!
 - Icon images are compressed to maximize disk space. They are uncompressed faster than you can say "NewIcons"!
 - Also KS 2.04 compatible (16 color icon limitation).
 - Fix that ugly Cross-DOS icon to look like a standard NewIcon.
 - Unique icons for RAM-Disks and CD-ROM's that don't have icons.
 - A complete set of beautiful, standardized Workbench icons, drawn by artist Roger McVey.
 - Comprehensive set of utilities to allow you to manipulate your NewIcons.
 - FREEWARE! Why would anyone want to pay cash for icons?
 - Dithering of icon images is selectable for users with fewer available Workbench colors. This is turned off by default.
 - Icons can be given a single tooltype, which will tell NewIcons to display a NewIcon image from elsewhere on the system. This feature has some
caveats
, but introduces a huge number of neat possibilities for configuring your Workbench, and saves on disk space and chip RAM. Imagine having your Workbench icons appear randomly different on EACH reboot!
 - The source for deficons.prefs has been included, so any enterprising programmer can add their own file identification types to the system!
 - NEW! User configurable, GUI enhanced Preferences program to configure all attributes of the NewIcons system (dither, pen precision, etc.)
 - NEW! The NewIcons system is now a commodity, which can be enabled and disabled on the fly, using Commodities Exchange.
 - NEW! RTG (ReTargetable Graphics) mode, which allows graphics card users to store icon data in fast RAM instead of chip RAM. This has the advantage of saving your valuable chip RAM for other uses, and speeds up rendering of icons on the Workbench.
-

- NEW! Borderblank option! Remember the Kickstart 1.3 days when there were no gray border boxes around the icons? This new option removes those silly looking boxes once again, and is user configurable.
- NEW! Faster icon rendering routines should speed things up even more.
- NEW! Optimized newicon.library for '020+ machines. ZOOOM!
- NEW! New DefIcons brainfile which recognizes many more file types, including .lzx, .png, and much more.

1.4 Installation

To install the package, just double click on the "Install_NewIcons" icon. If you are currently running a previous version of NewIcons, double click on the "Update_NewIcons" instead -- the updater script will update only the binaries and won't install the icons.

Make sure you have some disk space on your SYS: partition. You should have at least 250K available if you install the entire package. If you don't have enough room on your partition and you still want to install the package, see the

tips~and~tricks
section

to learn how to make more room for the images. Alternatively, you can install

NewIcons
without the
DefIcons
files.

You will be prompted as to which parts of the distribution you want to install. For maximum performance, it is suggested that you install both NewIcons and DefIcons.

The installer script will install the icon images on your system. The existing tooltypes of your icons will not be touched by the installation script, and the original icon images will not be altered. You will not see the new icon images until the NewIcons program is run. The installer script will launch NewIcons immediately, so you can view the new images right away. Since your original icon images are not actually deleted, it is easily possible to restore the icons to their original appearance, so don't be intimidated by the installation process.

The NewIcons program will be copied to your c: directory, and newicon.library will be put in your Libs: directory. You'll be given the option of where you would like to put the other icon utilities. If you choose to install DefIcons (highly recommended), the program will be copied to your c: directory and the default icons and brainfile will be put in ENVARC:. Your old default icons will be backed up by the installer.

The program


```
PatchOpenWB
    will be copied to c:.
```

Two short commands will be added to your s:user-startup file to launch NewIcons and DefIcons whenever you boot your system.

Users of previous versions of NewIcons! IMPORTANT!:
The 3.0 version of NewIcons requires a change in how it is run in the user-startup script. For technical reasons, it must now be RUN'ned like this:

```
RUN <>NIL: c:NewIcons
```

If you installed NewIcons previously with the installer script, the installer will seek out the ;Begin Newicons line in the user-startup, and will make the change for you automatically. If you have altered your user-startup and removed the ";Begin Newicons" section, or added the NewIcons command elsewhere in your startup, you will have to remove the old NewIcons command from the user-startup script.

If your user-startup script launches NewIcons the old way (without "RUN <>NIL: c:NewIcons"), your Amiga will freeze during bootup.

Kickstart 3.x users! IMPORTANT:

You need to add a line to your s:startup-sequence to fix a bug in Kickstart 3.x. Add the following line to your startup-sequence, before IPrefs and after SetPatch:

```
C:PatchOpenWB
```

Users of 2.04 need not worry about this step.

Once the installation is complete, reboot your computer and you're ready to have the best looking GUI anywhere!

The installation program only installs images for the standard WB, so some files will likely not be "NewIconized" by the installer script. Don't worry; you can add images to these icons later using the

```
CopyNewIcon
    utility supplied in this archive.
```

NewIcons works by installing compressed images of the new icons into tooltype lines of the .info files. Once NewIcons is launched, you will not see these tooltypes, so they will not interfere with your work. If for some reason you are not happy with NewIcons, you can use the utility

```
KillNewIcon
    to remove these images from the .info
files, restoring them to their original appearance.
```

The big advantage of this system is that when the NewIcons program is run, you see the new icon images. When NewIcons has not been started, you will see the boring old icon you viewed before you

received this package. Therefore, icons that are transferred to users not running NewIcons will still be visible as a plain, old-style icon.

1.5 NewIcons

NEWICONS

=====

This program is the heart of the package, and is launched from your user-startup. It must be RUN'ned from the user-startup like this:

```
RUN <>NIL: c:newicons
```

It accepts three parameters, and its template is as follows:

CX_PRIORITY/N/K,CX_POPKEY/K,PE=PREFSEEDITOR/K

CX_PRIORITY/N/K - This is the standard commodity hotkey priority. This parameter prevents conflicts with hotkeys between different programs. Consult your Workbench manual if you don't understand this parameter. The default setting for this parameter is 0, and most likely you won't need to change it.

CX_POPKEY/K - NewIcons is now a commodity, and pressing the specified hotkey will open a window displaying information about NewIcons, the current settings for NewIcons, and displays a gadget to launch the prefs program. The default hotkey is Lalt Shift N.

PE=PREFSEEDITOR/K - This defines where NewIcons should look for its preferences program. By default, it looks for Sys:Prefs/NewIconsPrefs. If you have placed the prefs editor in another location, use this parameter so NewIcons can find it.

Examples:

```
RUN <>NIL: C:NewIcons (most people will use this)
RUN <>NIL: C:NewIcons CX_POPKEY "lalt shift P"
RUN <>NIL: C:NewIcons PE Work:Prefs/NewIconsPrefs
```

The idea behind NewIcons is that we shouldn't need a fixed color scheme for icons anymore. NewIcons will automatically remap icon images using the colors available on the Workbench screen. A specific palette is therefore not required (icons look reasonable even on a 2-color

Workbench) but it is suggested to obtain best results. If you use a Workbench with ≥ 64 colors, you can ignore the palette completely. The file "palette.preset" is the palette I use on my Workbench. Note I have changed the pens used by bright and dark edges to have smoother button gadgets, and that color 3 is the same as color 0 so that the shell cursor is of the correct color. This palette uses 7 out of the standard 14 colors used by the NewIcons. The remaining 7 are dynamically allocated at run time.

Workbench 2.0 users:

If you are running Kickstart 2.0, you will have to set up a suitable palette. The colors used by the supplied icons are:

| | Dec | | |
|-------------|-----|-----|-----|
| | R | G | B |
| | --- | --- | --- |
| Black | 0 | 0 | 0 |
| Gray1 | 2 | 2 | 2 |
| Gray2 | 5 | 5 | 5 |
| Gray3 | 8 | 8 | 8 |
| Gray4 | 10 | 10 | 10 |
| Gray5 | 12 | 12 | 12 |
| White | 15 | 15 | 15 |
| Green | 2 | 8 | 2 |
| Yellow | 13 | 11 | 3 |
| Red | 13 | 2 | 2 |
| Purple | 9 | 4 | 10 |
| Light Brown | 12 | 9 | 6 |
| Dark Blue | 0 | 5 | 9 |
| Light Blue | 5 | 8 | 11 |

Of course you can sort them anyway you like, since NewIcons will pick the correct colors from the above palette for you.

A palette for 2.0 is supplied in the Extras drawer of this distribution.

In this version, there is a new tootype feature. Any icon that does not have NewIcon image data in it can be given a single tootype to cause NewIcons to "borrow" an image from another NewIcon icon. To use this feature, you simply add the following tootype to the icon:

```
DEFAULTIMAGE=<location of image to "borrow">
```

For example, you could direct all your drawer icons to a single image on your harddisk or RAM: disk. Once this is done, you can change the image of all your drawers by changing the single "loaner" icon. You can read more about using this feature

here

.

1.6 DefIcons

DEFICONS

=====

Deficons is run as a single command in the user-startup. It takes no parameters, and does not need to be RUN'ned, since it automatically detaches from the CLI.

The DefIcons patch will magically transform Workbench's silly fake icons (displayed when you pick the menu item Window/Show/All Files) into more meaningful ones. The program not only recognizes files such as projects and tools, but identifies various other file types:

- IFF, JPEG, ANIM. GIF and PNG files
- 8SVX, SMUS, DCMS, Med, and PT/ST mods
- Handlers, Kickfiles, and Filesystems
- ASCII, TeX, AmigaGuide and Postscript files
- Source codes of various languages
- Keymaps, Datatypes, Libraries, and Printer Drivers
- Various crunched filetypes
- Bitmap and Outline Fonts

...and several more.

Just like any "fake" icon, you can't double click on fake icons to start the associated tool immediately, but if you have designated a default tool for the deficon (located in ENVARC:sys), the "Execute Command" text field will automatically have the default tool entered for you. This feature is very handy for things like text files and picture files that don't have icons attached to them.

Additionally, you can transform a fake icon into a real icon using the

```
CreateDefaultIcon
utility.
```

DefIcons has a brainfile called deficons.prefs, which is copied to ENVARC: by the install_NewIcons script. Unfortunately, it is currently not possible to easily edit the brainfile, so you can't add your filetypes, but the source code for deficons.prefs is included. Will a little programming knowledge, you can create your own deficons classes. When you install NewIcons, the Installer script copies the default def_xxx icon images to ENVARC:. These icons are used by DefIcons.

Apart from fake icons, DefIcons has another wonderful feature: if a volume doesn't have a disk.info icon, it will replace the standard def_disk.info icon used by Workbench with a user-defined one. For example, it will use def_CD0disk.info for a CD in CD0:, and def_RAMdisk.info for the Ram Disk. If you did the old 'copy ramdisk.info to ram:disk.info' trick, you can remove that command from your startup-sequence.

DefIcons works well with multiple files systems and MFS. When a disk without disk.info is inserted in DF0:, it first searches for an icon named def_DF0disk.info; if it can't find it, it looks for an icon named after the file system (def_DOS0disk.info, def_MSD0disk.info, def_PFS0disk.info...) so you can have different icons for different

file systems. Latest versions of CrossDos use an icon of their own for MS-DOS disks. Since the icon is really ugly, you may want to use your `def_MSDDisk.info`. To do that, load `L:crossdosfilesystem` into a hex editor, search for the string `"disk.info"` and replace it with something else, for example `"dusk.info"`.

The disk trick will also work for non-DOS disks. In this case, the basename is the one displayed by Workbench under the icon. For example if Workbench shows `"DF0:NDOS"`, the icon named `def_NDOSdisk.info` will be used. `DF0:????` is a special case: `def_BADdisk.info` will be used.

DefIcons uses a tree structure when identifying files. For a JPEG picture, for example, DefIcons will search in order first for `def_jpeg.info`, `def_picture.info` and `def_project.info`. IFF files are special, and DefIcons will search for `def_XXXX.info`, where `XXXX` is the FORM type of the file. If it can't be found, `def_iff.info` is used.

For archived files there are three families: `def_archive` (`lha`, `zip`, ...), `def_filearchive` (for `uuencode`, `compress`, `gzip`, ...) and `def_diskarchive` (DMS). These families can have sons (i.e, `def_lha`, `def_dms`, etc) if you create and add them to your `ENVARC:sys` directory.

1.7 NewIconsPrefs

NewIconsPrefs
=====

This is a new feature in NewIcons v3. All configuration of NewIcons options done with the preferences program. There are three ways of launching the preferences program for your convenience:

- 1) Start the Commodities Exchange program and select NewIcons. Click on the "Show Interface" gadget, or:
- 2) Double-click on the NewIconsPrefs icon from the Workbench, or:
- 3) Just hit the NewIcons hotkey (default is Left-Alt+shift+N) NewIcons will open a status window showing how many NewIcons are currently open, and all the current options. From here you can click on "OK" to close the window, or click on "Prefs" to launch the preferences program.

Using NewIcons Prefs

There are five configurable options from the Preferences program:

- DITHERING - (default: OFF) - Normally NewIcons does not dither the icon images. This generally results in better looking icons for AGA systems, since the icons appear exactly as they were created. For users

with a limited number of available colors on the Workbench (such as those with <32 colors or a 2.04 system), you can try the DITHER option to improve the appearance of the icons.

NO BORDERS - (default: OFF) - Using this option removes the bounding icon boxes around your icons. This can dramatically change the appearance of your WB. This option is recommended primarily for die-hard NewIcons users who have done away with all those non-NewIcon images on their system. It can make non-NewIcon icons look strange at times, but can transform your Workbench into a visually stunning interface. Color zero is made completely transparent, so the backdrop will fill where the box was.

RTG MODE - (default: OFF) - This new feature has been added for the benefit of graphics card users only, and if you have a graphics card, you should set this mode to ON. RTG mode allows NewIcons to render the icon images in Fast RAM instead of Chip RAM. It has several advantages, including saving your precious chip RAM for other uses, and speeds up icon rendering, since access to fast RAM is, well, faster! :) If you don't have a graphics card, keep this mode OFF or you will meet the Guru, most likely.

Note: RTG mode is only available with the '020+ version of the library.

DEPTH PROMOTE-(default: NONE) - This option is really only useful when using the NO BORDERS option. If you have non-NewIcon images that look particularly strange, you can try this option. Turning on this option causes all non-NewIcon images to be promoted to 8 bitplanes, and can sometimes fix those wierd looking non-NewIcon images. The drawback of using this mode is that it eats more memory. There are 3 modes available with this cyclegadget: NONE, which will not promote icons (default), ONLY WORKBENCH, which will promote only Workbench icons, and ALL, which will promote appicons and other images like dock icons that use icon images. Depth promote may look better or worse, depending on your OS/configuration. Play with the settings and find the best effect for you.

IMPORTANT! If you are doing some editing on non-NewIcons with an icon editor, be sure to turn the DEPTH PROMOTE option to NONE or ONLY WB. If you don't you'll be playing with an icon copy, and your editor won't save it properly. You have been warned.

PEN PRECISION-(default:16) - This option allows you to set

how exact NewIcons will select the colors for displaying the icons. The default value is 16, which is reasonable if you have a limited number of pen colors available on your WB. It won't steal all the colors from your other programs, but may not display everything with exact precision. The lower the PRECISION parameter, the greater the precision when picking colors to map the icons. Zero is very high precision, -1 is the highest, and is recommended for graphics card users or those with lots of available WB pens.

Note: If you are running Kickstart 2.0, this parameter does nothing.

The four other gadgets in the Preferences window are fairly self explanatory:

- SAVE - Saves the currently set configuration permanently.
- USE - Keeps the currently set configuration until the next reboot.
- CANCEL - Cancels any changed parameters.
- NewIcons Logo - Click here for version and author information.

NewIconsPrefs uses the ClassAct GUI system, and requires a few ClassAct gadgets to be installed in Sys:classes. The installer will take care of installing these.

1.8 CopyNewIcon

CopyNewIcon will likely be the most used of the support utilities.

This command is used to copy the NewIcon image from one icon to another. You can use it to add NewIcon images to your other programs/files. ONLY the NewIcon image is copied. The standard image and the other properties of the destination icons are not affected.

You'll need this command to use the icons contained in the Icons/Misc drawer. DO NOT USE THE USUAL 'COPY' COMMAND TO COPY THOSE ICONS. You should consider the Icons drawer as a sort of "catalog" of images, which you can pick IMAGES, and not true icons, from.

From CLI:

```
Copynewicon srcicon desticon1 [desticon2...]
```

From Workbench:

```
click on CopyNewIcon
shift-click the icon you want to copy from
shift-click the icons you want to copy to
```

shift-double click the last icon

You can also add this command to the Tools menu using ToolManager or ToolsPrefs.

1.9 CreateDefaultIcon

```
                This will convert a fake icon to a real icon. Of course it is ←  
                much more  
useful if  
                DefIcons  
                is running.
```

It also replaces real icons with standard icons, that is with the ones which would be used as fake icons if there wasn't a real icon. I hope I've been convoluted enough to confuse you ;-)

Anyway, the interesting part is that if you use this command on a real icon, the original properties will not be lost (position, drawer dimensions, tooltypes, default tool - unless the def_icon has a default tool by itself). This command is VERY handy to quickly replace all the drawer icons in your hard disk.

```
Usage is the same as  
                KillNewIcon  
                :
```

Click on CreateDefaultIcon, then shift-click on the icons you want to make into a real icon. Double-click on the last icon selected. If you have a standard default tool for certain files (like Multiview for your AmigaGuide® files), you can add that tooltype to your default icon (Envarc:sys/def_guide.info) and any AmigaGuide® files you use CreateDefaultIcon on will have the correct default tool associated with it. This technique is useful for picture and sound files, and ASCII text files as well.

1.10 InjectBrush

This command is used to create a NewIcon. It can be used only from CLI. It takes the name of the icon to NewIcon-ize and the names of two ILBM brushes. The brushes should be 36x40 in size, and use the standard palette. In the Extras/BUILDING_BLOCKS directory you find some standard elements to use in creating NewIcon images.

Template:

```
ICON/A,NORMALIMAGE/A,SELECTEDIMAGE,FORCE/S
```

```
Example: injectbrush myicon.info brush1.iff brush2.iff
```

You can leave off the ".info" extension if you like. Injectbrush is smart enough to know you mean the icon file, not the file itself.

Note that the original image is not removed from the icon. It stays there so that users not running NewIcons can see an old-style icon.

Color 0 of the brush used to create a NewIcon is always considered the transparent color. That is, it will always be remapped to color 0 of the screen.

The `newicon.library` does not optimize the color data. Thus, if you use an 8 bitplane brush to create an icon, and it uses only 16 colors of the 256 available, the icon created will be larger than if you used a 4 bitplane brush. The best thing to do is to always work on a 16 color screen, using the `building_blocks/platform` provided to start from.

`Injectbrush` expects the brushes to be of the standard size and color palette. You will be prompted if the brushes are not 36x40, or if the palette colors are non-standard. This is NOT implemented to force you to use a particular icon size or palette. Rather it is included as a feature for those who want to keep their icons the same palette and size, consistent with the included icon set.

This feature can be overridden by using the `Force` option.

1.11 KillNewIcon

This is the complementary of `InjectBrush`. It removes the `NewIcon` and restores the icon to its original image.

From CLI:

```
Killnewicon icon1 [icon2...]
```

From Workbench:

```
click on KillNewIcon
shift-click the icons you want to remove the NewIcon from
shift-double click the last icon
```

You can also add this command to the Tools menu using `ToolManager` or `ToolsPrefs`.

1.12 PatchOpenWB

Kickstart 3.x has a serious bug concerning Workbench screen opening. If the Workbench screen is closed and a program causes it to be opened, either by calling `OpenWorkBench()`, or `OpenWindow()`, or `LockPubScreen()`, the system may hang. Specifically:

- If the program has priority less than 0, it will always hang.
 - If the priority is greater than 0, it will never hang.
 - If the priority is 0, it may or may not hang; it depends on when task switching happens.
-

This program is a workaround for the bug. It will intercept `OpenWorkBench()`, `OpenWindow()` and `LockPubScreen()` calls and temporarily raise the priority to 1, thus avoiding the deadlock. This patch is necessary when running NewIcons, otherwise the system will always hang when the Workbench screen is closed and reopened.

Users of Workbench 2.0 do not need to use this command.

To install the patch, just execute the program `PatchOpenWb` in your startup-sequence, preferably before `IPrefs`, and after `SetPatch`.

1.13 Tips And Tricks

Here are some tips to help you make the most of the NewIcons ← system:

Q: I just installed NewIcons version 3. Now my computer seems to freeze up during the boot process. What the hell?!

A: Hopefully we have placed this information in enough places in the archive that users won't have this problem. If you have updated from a previous release of NewIcons, and didn't originally install everything with the installer, you may have to make a change in the user-startup. NewIcons now requires a change in the command line that launches it. NewIcons MUST be launched with "RUN <>NIL: c:NewIcons" now. If your old command line in user-startup still says "c:NewIcons", you must change it. If you installed NewIcons previously with the Amiga Installer program, the version 3 installation should take care of this automatically.

Q: When I ran the installer script, it didn't convert every single icon on my hard drive. Why not?

A: Since everyone's system can be configured differently, the installer can't possibly configure for all setups. The installer is designed to install the typical Workbench System file icons. To convert the rest of your icons, use the

`CopyNewIcon`
utility to copy images to

other icons.

Q: I used `CreateDefaultIcon` to convert my icons into NewIcons. Now my tooltypes and default tool settings are missing from the icons. Help!

A: Go back and read the documentation. If the default icon in `Env:sys` associated with the icon you created has a default tool setting in it, it will be used, as well as the tooltype settings. For general use in converting existing icons to NewIcons, use

`CopyNewIcon`
instead.

`CreateDefaultIcon`

is for adding icons to files that don't have .info files!

Q: With 2 images in each icon, my icon sizes are a bit bigger than standard icons. Is there anything I can do about this?

A: If you decide that you really like the NewIcons system, and make it a permanent part of your Workbench, you can make the standard icon images very small, i.e. a few pixels large. This is done quite easily with the included utility "Killoldicon", by Michael Barsoom. This changes the old icon images permanently, so don't do this procedure unless you are sure you won't need them back. To use, simply shift-click on killoldicon, then shift-click on the icons you wish to convert. While holding shift, double-click on the last icon to convert. Since NewIcon images are compressed, the resulting final icon can be considerably smaller than a standard icon with the equivalent number of colors. Also these icons load considerably faster with the old image removed. One drawback of this method, however is that if you share these icons with people not running NewIcons, they will only see the tiny pixel icon.

Q: Can I run Deficons without running NewIcons?

A: Absolutely, if you only want to use the default icon feature. In this case you will only have the standard icon images to view, however.

NewIcons
can be run without
Deficons
also, although you won't get
default icon images for "fake" icons.

Q: Sometimes when I change screenmodes, the colors of my NewIcon appicons don't look right. What's going on?

A: Intuition doesn't reset the colors properly for appicons, unfortunately. You'll have to switch back to the screenmode you were using, or restart the program that created the appicon. Sorry, this is a fault of the OS. For Toolmanager Docks, this shouldn't be a problem with NewIcons version 3. A fix for Toolmanager docks only has been implemented. This might break with future versions of Toolmanager.

Q: My icon colors don't look the right colors.

A: The NewIcons system dynamically allocates colors as needed when an icon appears on the Workbench. Most likely if you are having a problem with the icon colors, you don't have enough free colors available on your Workbench screen. Unless you are using a back-drop with a large number of colors, 32 or 64 colors is usually plenty with the supplied icons. Increasing the number of bitplanes in the screenmode settings should fix this problem. Alternatively, you can set the DITHER mode in
NewIconsPrefs

to ON.

Q: I want to make my own icons that are different sizes and colors from the supplied icons. How can I get injectbrush to work with the brushes I use to make the images?

A: All the supplied icons use the same 15 color palette to preserve the number of available colors on the Workbench. If you choose, you are certainly not limited to these colors and you can make icons as complex as your heart desires. Icons also do not have to be the 36 x 40 pixel size either. Using the "FORCE" option in
injectbrush
will allow you to
use nonstandard palettes and sizes (up to 93 x 93 pixels). Make sure your brushes are the same size and palette, or injectbrush won't allow you to make them into icons.

Note: Although you can create up to 256 color icons, this is not really recommended, since you will very likely lock all the available colors for the workbench, and programs like Multiview will not be able to dynamically allocate the correct colors for viewing pictures and so forth. In addition, icons with large palettes take up a larger amount of disk space.

Q: IconEdit doesn't work with my NewIcon images. What gives?

A: Do NOT use standard icon editing tools to manipulate NewIcon images. Some programs could cause serious damage to the icon data, saving the NewIcon image as an old-style image, therefore losing palette information. The best way to create NewIcon images is to use a paint program; create a brush, and then use injectbrush; there are NewIcon editors out there as well, such as Iconian.

Q: I prefer the magic workbench style of icons. Can I get the benefits of using NewIcons with mwb?

A: Absolutely. Just convert the images to brushes and change them into NewIcons with
injectbrush.
From now on you'll never have to worry
about what your palette is set to. There is also a utility to convert mwb icons to NewIcons available on Aminet, called MWB2NI.

Q: If I want to make my own default disk icons, do I have to make them a disk type icon?

A: No.

Deficons
can use drawer type icons for disks or drawers in most cases. It will also use any type of icon for the "kick" type icons. Therefore, if you make new default icons for your ENVARC:sys drawer, you don't usually have to convert them to a disk or kick type icon. This applies to the custom icons only, such as def_RAMdisk, etc.

The standard def_disk.info and def_kick.info icons still must be of the proper type.

Q: When I double click on an iconless file, sometimes the "Execute Command" gadget doesn't get filled in with the default tool like it's supposed to.

A: This is due to Intuition, not Deficons. If you open a drawer and click on an iconless Amigaguide file for example, Multiview should be selected in the "Execute Command" field. However, if you open a second drawer or click on other icons in a different drawer than the first, then try to open that same AmigaGuide file, the default tool will not appear. Sorry, there is no easy solution to this problem; it's a fault of the OS.

Q: I really don't want a great looking Workbench...how can I deinstall it?

A: There is a script in the archive that will deinstall the package for you. To remove NewIcon images from icons by hand, just run

```
KillNewIcon  
on
```

them.

Q: How do I use the DEFAULTIMAGE tooltype?

A: Use it with icons that have NO NewIcon image data in them. For example, to make all your drawers use the image of an icon called Work:MyDrawer.info, add this tooltype to your non-NewIconized drawers:

```
DEFAULTIMAGE=Work:MyDrawer.info
```

Now, you can change the look of ALL your system drawers just by changing the MyDrawer icon's image. Pretty cool! You could even set up your user-startup to randomly copy a different image at each bootup to Env:sys, and make your Workbench look different every time you start your computer!

Using this feature slows down loading time slightly, because two icons have to be loaded (the main one and the one whose image is to be borrowed), but has several advantages, especially with icons which are used frequently, like drawer icons:

- 1) It saves disk space, because the image is stored only once.
- 2) Saves memory when the icons are on screen, because the Tooltypes containing the compressed image are loaded, decompressed, and freed, whereas in the normal method they stay in memory until the icon is freed.
- 3) If you get bored of an image, just replace the default one, and all the others will change automatically!

Remember that the image stored in the icon has precedence. Therefore, you have to run

```
KillNewIcon  
on a NewIcon to have the DEFAULTIMAGE
```

ToolType work.

WARNING!!!: This trick is recursive, that is, if DEFAULTIMAGE points to an icon which has a DEFAULTIMAGE itself, a third icon will be loaded, and so on. Pay attention not to create loops which refer back to another icon. If you do, you will likely meet the big GURU. You have been warned.

Q: I'm using the borderblank option and some of my old non-NewIcon images look very strange. What's wrong?

A: Workbench 2.04 and up was not designed to have the borders removed around the icons. With the borderblank option turned on, color zero is now transparent. Any area of the icon with color zero will now show the backdrop through the icon. This can cause some icons to appear strange. The options for fixing it are 1) change your backdrop to a somewhat neutral gray color 2) don't use the borderblank option, or 3) get rid of those old icons altogether, and use NewIcon images instead.

Another note about the borderblank option: some non-newicon icons will really look bizarre, especially the secondary image if the alternate image is just a complemented color. You can try toggling the DEPTH PROMOTE option in

NewIconsPrefs
on or off. Depending on whether
you use a graphics card, this option might help either way.

One further note about the borderblank option: If you use colorfonts for your icon font, these can look weird also with non-NewIcon icons. It appears to be a quirk in the OS. The solution is the same as above: 1) don't use borderblank, or 2) use only NewIcon images on the Workbench.

Q: Can I use RTG mode if I don't have a graphics card?

A: NO! Don't even try it. You will surely end up looking at a flashing red and black system error screen (i.e. GURU).

Q: If I have a graphics card, must I use the RTG mode?

A: You don't have to, but there's certainly no reason not to, unless you like eating up all your chip RAM.

Q: How can I make my NewIcon icons into brushes for editing?

A: There's a utility on Aminet (gfx/conv/newicontobrush) which will do this for you.

Q: Where can I get more icons in the isometric/McVey style?

A: There are loads of them on Aminet (well over 1000 images) in the pix/icon directory. Some of the best ones are
McVey's
NewIconsXTRA and NI-V2
packages, and the AESicons series by

Phil~Vedovatti
(IMHO! ;-).

Q: Are there any backdrop sets for NewIcons?

A: Yes! Look in the pix/icon directory on Aminet. Roger McVey has uploaded literally hundreds of NewIcons compatible backdrops. They look great!

1.14 Authors

The NewIcons Team

=====

The NewIcons project is the result of many months of idea-exchanging, late-night IRC sessions, numerous reboots and collaboration among people who have never once met each other in person. The NewIcons package was created purely for the enjoyment of its users.

Please send any bug reports to Eric or Phil.

Brainstorming, programming, documentation and artwork for Newicons 3+:

Eric Sauvageau
5338 10th Avenue
Montreal, Quebec
CANADA
H1Y-2G6

IRC: RMerlin
E-mail: dream@step.polymtl.ca

Phil Vedovatti
2424 41st Ave E. #370F
Seattle, Washington 98112
USA

IRC: Aesculape
E-mail: vedovatt@u.washington.edu

The new deficons.prefs file:

Ariel Magnum
IRC: Ariel
E-mail: arielmag@actcom.co.il

The icon artwork was done by

Roger McVey

E-Mail: r.mcvey@genie.geis.com

Original concept, and programming for versions 1.0 - 2.0:

Nicola Salmoria
Via Piemonte 11
53100 Siena ITALY

E-Mail: MC6489@mclink.it

1.15 Acknowledgements

Acknowledgements

=====

Many thanks go out to our beta testers, who risked crashing their systems for the sake of NewIcons:

Steve Bara (IRC: Frotz)
Jonathan Larson (IRC: Multitask)
Giacomo Magnini (IRC: Swatch)
Ariel Magnum (IRC: Ariel)
Peter J. Mills (IRC: DrPhuQt)
Andrew G. Robson (IRC: Greebo)
Chris Townsend (IRC: Vidar)
Joshua B. Wingell (IRC: Shape)

Thanks to Chris Green, whose chunky to planar routine was based upon. (Chris based his routine on one by Richard Addison).

Thanks to Federico Giannici who pushed Nicola to make the color remapping faster, and faster, and faster...

Thanks also to Michael Barsoom, who kindly allowed the inclusion of his program, "killoldicon" in the package.

A special thanks to our friends who transcribed the installer scripts:

Eric Sauvageau for the French version, Giacomo Magnini for the Italian version, Volker Schleifstein for the German version.

Børge Nøst for optimizing the ASM DecodeLine routine.

Christopher Aldi, Tim Aston and Osma Ahvenlampi for Class Act.

All the folks on EFNET IRC channel #amiga who begged us to finish this release.

And thanks to all the NewIcons fans out there!

1.16 Distribution

This software is FreeWare. It is freely distributable as long as the archive remains intact, and only a nominal fee is charged for its distribution.

This software is provided "AS IS" without warranty of any kind, either expressed or implied. By using it, you agree to accept the entire risk as to the quality and performance of the program.

1.17 History

Version History:

V1.0:

Original public release.

V2.0:

In the previous version of the docs I forgot to mention that the chunky to planar routine was based on a routine by Chris Green (who based his routine on one by Richard Addison).

fixed bug in DefIcons, was causing "plase insert volume dir c" after doing execute command - dir c:

fixed bug in DefIcons, would hang if it couldn't find deficons.prefs

fixed bug in DefIcons, was causing a disk icon to appear for files called "disk".

fixed bug in DefIcons, would show a drawer as disk icon for disks containing a directory called "disk" (which is a bad idea anyway).

The GetDiskObjectNew() patch now returns NULL if the given name doesn't exist (like the standard function)

now does dithering (optional)

some file types added to deficons.prefs.

bug fix: createdefaulticon now preserves the tooltypes of tool icons and of project icons whose default icon have no default tool.

bug fix: newicons would check the argarray after FreeArgs(). Thanks to Nicola Soggia for discovering it and not reporting it. Thanks to Moreno Magnani who did report it.

bugfix, arj files were not recognized

bug fix: DefIcons now uses Stricmp() to avoid problems with international sorting

DEFAULTIMAGE special ToolType added

Fixed installer: no longer copies over the original def_#? icons in

Envarc:sys. It now just copies them to a safe place.

Localized installer and documentation files added

Replaced "ReplaceImage" utility with "KillOldIcon", since ReplaceImage required NewIcons not to be running to use.

Changed a few of the icons from the original distribution archive

CHANGES since last version from Nicola (Release 2, V38.3)

3.0

===

- Development is now done by
 Phil~Vedovatti
 and
 Eric~Sauvageau
 .

- A much requested feature: you can now have borderless icons on your Workbench, just like under Kickstart 1.x :) Note that it is really a hack, so it might break under future versions of Workbench, and it has some minor drawbacks. Make sure you read the
 NewIconsPrefs
 section
about it before enabling it.

- New RTG Mode which uses Fast RAM instead of Chip on systems with graphics cards.

- Library (V39.1) now comes in two versions:
 - o 68020 and up, OS 3.x (Required for RTG Mode)
 - o 68000, OS 2.x

The library base has also changed, so application programmers should check the updated libraries/newicon.h include file. Note that things are still fully backward compatible).

Various speed optimisations have been done, and the tootype decoding routine has been rewritten by Børge Nøst. We're hoping to also have the C2P routine rewritten in a future version :)

- NewIcons has been rewritten in E, and is now a commodity which can be enabled/disabled. The hotkey will let you see some information about the current settings, and allow you to directly launch the external
 preferences
 editor.

-
- NewIcons will no longer auto-detach from the CLI so it must be Run <>NIL:. It also has a totally new template:

```
'CX_PRIORITY/N/K,CX_POPKEY/K,PE=PREFSEEDITOR/K'
```

Hopefully NewIcons will auto-detach again in a future version.

- The former Newicons settings have been moved to a separate prefs editor. Makes it easier for the user to install/configure, and gives you more freedom to experiment with the various settings without needing to reboot.

This editor uses the ClassAct BOOPSI package for its GUI (all the required classes are included in this archive.)

- Added a "kludge" so that icons used by ToolManager docks get properly remapped on screenmode changes.
-