

PatchCX

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Chapter 1

PatchCX

1.1 PatchCX.guide

PatchCX 1.1 Amigaguide Manual

PatchCX is a support commodity for the patch.library by Stefan Fuchs <snfuchs@sokrates.franken.de>. In the current state it is not much more than an information tool about the installed patches with a resizable, fontsensitive and iconifiable gadtools gui.

It displays information about the patches which are currently installed in your system through the patch.library (which function is patched in which library by whom). If you have the FD files for the patched libraries, PatchCX is able to display the names for the patched functions and not just their library offsets.

Legal Issues

Requirements

Installation

Menus

GUI

Tooltypes

FD files

Author & More

History

1.2 PatchCX.guide/Legal Issues

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1.3 PatchCX.guide/Requirements

PatchSetFunc

You will find it on Aminet:util/misc/PatchSetFunc.#?

PatchSetFunc patches exec.libraries SetFunction function to use the patch.library. PatchCX is quite useless without PatchSetFunc at the moment, since nearly all patches don't directly use the patch.library.

You will need at least this archive.

NOTE

Although it is very easy to install PatchSetFunc, you may get an unstable system at first. This is in most cases not the fault of PatchSetFunc but of one or more of the patches you have running.

I had a few problems with random crashes after I had installed PatchSetFunc. With some testing I found out that those crashes were caused by ReqChange's asl.library patches.

I have solved these problems by using RTPatch (reqtools.library) to patch the asl.library (only Asl) and by disabeling the Asl-patches and enabeling the ReqTools patches in the ReqChange Prefs program.

My system works now as stable as without PatchSetFunc.

patch.library

You will find it on Aminet:util/libs/patchlib#?

This archive is only of interest to those who want to use the patch.library in their own programs.

AmigaOS 3.0+

The `gadtools.library` is IMHO unuseable without `GT_GetGadgetAttrs`. This function appeared first time in V39, so PatchCX needs AmigaOS 3.0+.

fd files

You don't really need them, but PatchCX can't display any function names without them.

If you don't have any fd file, you will find the fd files for the system libraries on the Amiga Developer CD v1.1 in `NDK_3.1/Includes&Libs/fd/#?`

For third party libraries the fd files should be part of their developer material, if there is any.

Patches ;-)

I guess, most of you have already more than enough of them.

1.4 PatchCX.guide/Installation

Put it anywhere you like it.... you may use the provided installer script.

1.5 PatchCX.guide/Menus

Project

Hide

Quit

About

I don't have to describe these, do I?

Misc

Save current list

saves the currently displayed information in the listview to the file selected in the `asl` file requester which will pop up.

Settings

en-disable columns

with the items in this submenu you can disable or enable the columns

displayed in the listview.

snapshot window

stores the current window size and position in the appropriate tooltypes.

sort panel

makes the 'Sort Panel' visible or invisible.

1.6 PatchCX.guide/Gui

main window.

The main window contains only a listview and an 'update' button. To get the latest information about the installed patches select the update button.

The windows close gadget has 'esc' as a keyboard shortcut.

'patched functions' Listview-Gadget.

It has a fillPen frame (should be the same as the window color) around it, indicating that cursor up/down movements will go to this gadget.

If the 'sort panel' is visible, 'tab' or 'backtab' (shift tab) moves the fillPen frame to the next or previous gadget in the cycle chain.

Sort Panel.

The sort panel allows to change the initial settings from the 'sortlevels' tooltype. The cycle gadgets correspond the sequence of the 'sortlevels' tooltype, i.e the leftmost cycle gadget is the primary sort criterion and so on. If you change the state of any cycle gadget, the list gets re-sorted. If a cycle gadget is active, i.e. the fillPen frame is around it, cursor up or down keys will change its state as well.

Iconify-Gadget.

To the left of the zoom gadget is another zoom gadget, which is used as an iconify gadget. The keyboard shortcut for iconification is the third key left from the 'del' key (' ').

NOTES:

'updating' the list: If you use the fd-file system, it will need a 'few' seconds to parse the fd files. On my system (A4040) it needs about three seconds.

1.7 PatchCX.guide/Tooltypes

left, top, width, height

initial position and dimensions for the application window(s).

CX_PRIORITY, CX_POPKEY, CX_POPUP

the standard commodity tooltypes. CX_PRIORITY and CX_POPKEY will be reread when PatchCX gets started a second time.

fdpath

the path to the directory where you keep the your fd files. It may contain subdirectories with more fd files. It will be reread when PatchCX gets started a second time.

listformat

with this you can change the format, in which sequence and which of the possible information gets displayed in the listview gadget about the patches. It is a string which contains a single character for every possible information. PatchCX is sensitive to their sequence and their case. It will be reread when PatchCX gets started a second time.

L or l

is the identifier for the 'L'ibrary name. If it is part of the listformat, PatchCX will show you in which libraries the patched functions are. If it is the lower case 'l', the library column is initially not visible. You can enable it by using the 'Settings/en-disable columns' menu.

O or o

is the identifier for the function 'O'ffset. If it is in the listformat, PatchCX will show you the offsets for the patched functions. If it is the lower case 'o', the column is initially not visible. To enable it, do it the same way as above with 'l'.

I think you got the system, so I will only describe the meanings for the rest of the possible identifiers.

F or f

is the identifier for the 'F'unctions name.

N or n

is the identifier for the 'N'ame of the patch. Usually, at least with PatchSetFunc, the name of the program which installed the patch.

T or t

is the identifier for the 'T'ype of a patch. The type is either 'user' if the program used the patch.library directly to install the patch or 'system' if the patch was installed with PatchSetFunc.

P or p

is the identifier for the 'P'riority of a patch. Positive priorities indicate that the patch is called before the original routine. Negative priorities indicate that it is called after the patch and a priority of zero says it is called instead of the original.

If you don't use the listformat tooltype, PatchCX will use the following list format: LOFNTP

sortlevels

The sortlevel tooltype defines the multi-stage sort sequence, which is used to sort the information displayed in the listview. The leftmost character is the primary sort criterion. The second character is the secondary sort criterion and so on. It uses the same characters as the 'listformat' tooltype, although only the upper case ones. A sort criterion is disabled by a 'd' character. The tooltype will be reread when PatchCX gets started a second time.

WINDOW

This is only necessary for debug versions of PatchCX.

1.8 PatchCX.guide/FDfiles

'The naming and register conventions for function entries in library-like operating-system modules are described in the so called "FD files" (FD = function descriptor)'.

'The Amiga Guru Book', Ralph Babel

Library functions are called, and patched too, by 'offsets'. Therefore the patch.library has no idea about the name to such an offset or is even interested in. It is PatchCX work to 'know' the function name to a given library name and a given offset. The fd files are quite useful here, because they are named after their corresponding libraries and one can find the name to a given function offset in them.

1.9 PatchCX.guide/Author

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1.10 PatchCX.guide/History

0.0β3

- first public release.

0.0β4

- first Aminet release.
- a lot of changes to the gui engine.

1.0

- the patch list gets initialized on startup.
- improved commodity handling. Now PatchCX opens the gui when it gets started a second time.
- fixed a bug in the gui engine. The window class didn't check the actual window size against the minimum size necessary for the gadgets when a window was opened.

1.1

- fd files are only parsed if 'F' is set in the listsformat.
 - overall improvements to the listsviews column handling (column
-

seperators, column titles, columns are only as wide as necessary for their widest entry).

- width/height tooltips are now used for the real window size instead of the inner window size.

- fixed two bugs in the fd-file parsing code which showed up only when mungwall was running. Both froze the machine.

FGets was called although it already had returned eof and a Lock that was passed to OpenFromLock was unlocked.

- added 'Settings' menu.

snapshot window, en-disable listview columns, sort panel.

- PatchCX will reread part of the tooltips when it gets started a second time. See the tooltips section, which tooltips will be reread.

1.11 PatchCX.guide/Index

ups, nothing in here so far.....
