

MultiCX

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	<i>TITLE :</i> MultiCX		
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REVISION HISTORY

NUMBER	DATE	DESCRIPTION	NAME

Contents

1	MultiCX	1
1.1	MultiCX-Guide Main	1
1.2	Installation	2
1.3	Features	2
1.4	Notification	3
1.5	Locale	3
1.6	Screen Blanker	3
1.7	Moire Blanker	4
1.8	Mouse Accelerator	5
1.9	Mouse Blanker	5
1.10	Screen Cycling	5
1.11	Mouse Shift	6
1.12	Window Cycling	6
1.13	SUN-alike Window Activation	7
1.14	HoldX and HoldY	7
1.15	Enter ASCII	7
1.16	Map Umlauts	8
1.17	CapShift	8
1.18	NoCapsLock	8
1.19	CloseZoom	9
1.20	Window Remember	9
1.21	CenterScreen	9
1.22	HotFlush	10
1.23	PopCLI	10
1.24	FrontPubScreen	11
1.25	System Flags	11
1.26	Trackdisk Parameters	11
1.27	Public Screen Flags	12
1.28	Internal and External Preferences	12
1.29	Advanced EditHook	12

1.30	Advanced ResetHandler	13
1.31	SetFunction Patches	14
1.32	AssignWedge	14
1.33	NewLookMenus	15
1.34	NewLookProps	15
1.35	WBExtender	15
1.36	TagScreens	17
1.37	LockPens	17
1.38	FixOpenWB	18
1.39	NoCloseWB	18
1.40	NoDisplayBeep	18
1.41	Drive Protection	18
1.42	LockPatch	19
1.43	ShapeShifter Support	19
1.44	Opaque Windows	20
1.45	Alert Timeout	21
1.46	WBGauge	21
1.47	Notes and Hints	22
1.48	Author	23
1.49	History	24
1.50	To do	33
1.51	PatchList	33
1.52	Legal	34
1.53	Credits	35
1.54	HandleCX	35

Chapter 1

MultiCX

1.1 MultiCX-Guide Main

MultiCX 2.55 (24.6.96)

The ultimate Multi-Function-Commodity

MultiCX is the smallest Multi-Function-Commodity for the Amiga, thought as a replacement for many larger and sometimes badly programmed programs. It is a 100% pure commodity, which means that it does not use interrupts and no special input handlers. Some Patches (SetFunction) are installed in a very clean way, so that they do not interfere with other programs which use the same vectors.

As a result MultiCX can safely be disabled or removed at any time.

If you need a clean Commodity without bad hacks there's no alternative !

Legal Stuff
Who did it?

Installation

Features
Notes~and~Hints
List of Patches
History
To~do

Credits

!!! MultiCX is SHAREWARE !!!

1.2 Installation

MultiCX Installation

Here you can install MultiCX automatically. It will be detected which OS you are using and whether you are installing MultiCX new or whether you are just updating. In the second case you have to add the new tooltypes or these functions will be disabled. For more information about new tooltypes have a look at the history.

[Click here to install.](#)

1.3 Features

MultiCX Features

Notification	
Localisation	
Screen~Blanker	
Moire~Screen Blanker	
Mouse~Accelerator	
Mouse~Blanker	
Screen~Cycling	
Mouse~Shift	
Window~Cycling	
SUN~alike~Window~Activation	
HoldX~and~HoldY	
Enter~ASCII	
Map~Umlauts	
CapShift	
NoCapsLock	
Window~Close & Zoom	
Window~Remember	
CenterScreen	
HotFlush	
PopCLI	
FrontPubScreen	
System~Flags	
Trackdisk~Parameters	
Public~Screen~Flags	
Internal~and~External~Preferences	
Advanced~EditHook	
Advanced ResetHandler	
SetFunction~Patches	
AssignWedge	
NewLookMenus	OS 3.x only!
NewLookProps	

WBExtender	
TagScreens	
LockPens	OS 3.x only!
FixOpenWB	OS 3.x only!
NoCloseWB	
NoDisplayBeep	
Drive Protection	
LockPatch	
Opaque Windows	
Alert Timeout	OS 3.x only!
WBGauge	
ShapeShifter Support	
HandleCX	

1.4 Notification

Notification

MultiCX recognizes any changes of the ToolTypes while running, so there's no real need for a GUI.

1.5 Locale

Localisation

The standard language of MultiCX is english, but if the current locale language is german, then all MultiCX text outputs are in german, too.

ToolTypes:

FORCE_GERMAN	force usage of german language, may be helpful for WB 2.0 users
--------------	--

1.6 Screen Blanker

Screen Blanker

MultiCX includes a simple but compatible screen blanker. It always uses the display mode which fits best to the actual front screen, while taking the lowest resolution with only one plane.

AVOIDTASK and AVOIDSCREEN fully support AmigaDOS pattern matching and work case insensitive.

If LIKEWB and SCRMODE are set, SCRMODE is only used if WB is not available for some reason. But this should never happen...

See also: Moire Blanker

ToolTypes:

SCRBLANK=n	sets number of seconds until screen blanks, 0 means OFF
HOTBLANK=Qual&Key	sets hotkey for immediate blanking
CDNOBLANK	do not blank screen if Carrier is detected (currently only supports internal serial port)
CDUNBLANK	unblank screen if Carrier is detected (currently only supports internal serial port)
IGNOREKEY	ignore unblanking keypress
IGNOREMOUSE	do not unblank on mouse movement
IGNOREDISK	do not unblank on disk insertation
AVOIDTASK=Pattern	do not blank screen if OwnerTask of active screen matches pattern
AVOIDSCREEN=Pattern	do not blank screen if title of active screen matches pattern
AVOIDWINDOW=Pattern	do not blank screen if title of active window matches pattern
LIKEWB	forces cloning the WB's display mode
SCRMODE=ModeName	selects a display mode by name

1.7 Moire Blanker

Moire Blanker

MultiCX has a really nice Screen Blanker, too! It steals no processor time from other tasks, and if it couldn't draw a line for longer than 10 seconds it falls back to a simple black screen. There are some parameters to play with...

See also: Screen Blanker

ToolTypes:

MOIRE	selects Moire blanker
LINES=n	number of lines, default is 2
TRAIL=n	length of trail, default is 64
XSPEED=n	x offset for next line, default is 4
YSPEED=n	y offset for next line, default is 6
CSPEED=n	color cycling delay, default is 16
COLOR=n	drawing color, range is 1-4095

0 means Random, -1 means Color Cycling

1.8 Mouse Accelerator

Mouse Accelerator

MultiCX lets you set Acceleration and Theshold (minimum movement to activate Acceleration) for smooth mouse handling.

SWITCH OFF ALL ALIEN MOUSE ACCELERATORS BEFORE USING THESE OPTIONS!
(Input Prefs "Acceleration" etc.)

ToolTypes:

ACCELERATION=n	sets Acceleration factor, 0 means OFF
THRESHOLD=n	sets Threshold value, 0 means no Threshold

1.9 Mouse Blanker

Mouse Blanker

MultiCX blanks the mouse pointer on keypress and/or after approx. 30 seconds when no mouse movement has occured.

ToolTypes:

KEYBLANK	activates MouseBlanking on keypress
TIMEBLANK	activates MouseBlanking after timeout

1.10 Screen Cycling

Screen Cycling

MultiCX allows you to cycle screens using either MiddleMouseButton or BothMouseButtons, this is equivalent to LCOMMAND M. Additionally a hotkey for backward cycling may be defined.

If MOUSESHIFT and SCRCYCLE are both set to MMB, then ScreenCycling will occur on a Double-MMB-Click.

ToolTypes:

SCRCYCLE=MMB|BMB sets Screen Cycling to MMB or BMB
BACKCYCLE=Qual&Key sets Qualifier and Key for BackCycle,
 none means OFF

1.11 Mouse Shift

Mouse Shift

MultiCX lets you use the RightMouseButton or MiddleMouseButton as a Shift-Key for extended selection.

And this is how it works with RightMouseButton:

1. Press LeftButton to select first icon and hold it.
2. Press RightButton and hold it.
3. Release LeftButton and keep RightButton pressed.
4. Now select some more icons with LeftButton.
5. To deselect an icon, click on it with LeftButton and keep it pressed, then release RightButton and press it again.

Sounds much more complicated than it is...

ToolTypes:

MOUSESHIFT=RMB|MMB sets MouseShift to RMB or MMB

1.12 Window Cycling

Window Cycling

MultiCX lets you put a window to front/back by a configurable number of LeftButton clicks. Qualifiers can be defined for both functions. Additionally there are two hotkeys available for TopWindowToBack and BottomWindowToTop. But only windows with a Depth Gadget are affected by Window Cycling.

ToolTypes:

WINCYCLE=n sets number of mouse clicks for WindowCycle,
 0 means OFF

WINFRONTQUAL=Qual	sets Qualifier for WindowToFront
WINBACKQUAL=Qual	sets Qualifier for WindowToBack
FRONT2BACK=Qual&Key	sets hotkey for TopWindowToBack
BACK2FRONT=Qual&Key	sets hotkey for BottomWindowToTop

1.13 SUN-like Window Activation

SUN-like Window Activation

MultiCX has three different options to activate windows automatically. All of them activate the window under the mouse pointer, SunKey does it on every keypress, SunMouse does it after mouse movement, and SunRMB does it after pressing the right mouse button. So SunKey and SunMouse together seem to be rather useless. Windows with active Gadgets (like FileRequesters etc) will never be deactivated by one of these functions. Additionally specific windows may be excluded from deactivation using the AVOIDSUN ToolType.

ToolTypes:

SUNKEY	activates SunKey
SUNMOUSE	activates SunMouse
SUNRMB	activates SunRMB
AVOIDSUN=Pattern	do not deactivate active window if title matches this pattern

1.14 HoldX and HoldY

HoldX and HoldY

MultiCX allows you to lock a specific mouse dimension while holding a defined Qualifier. If both Qualifiers are set to the same it locks all mouse movements. So you are responsible for useful settings...

ToolTypes:

HOLDXQUAL=Qual	sets Qualifier for HoldX, none means OFF
HOLDYQUAL=Qual	sets Qualifier for HoldY, none means OFF

1.15 Enter ASCII

Enter ASCII

MultiCX allows you to enter ASCII codes directly by pressing an ALT key and the numbers in the numeric block, for example: <ALT> 65 = A. Maximum 3 digits, value must not be greater than 255.

ToolTypes:

ENTERASCII=LALT|RALT activates EnterASCII using LALT or RALT

1.16 Map Umlauts

Map Umlauts

This option might be of use for german users or other people writing german texts. It will convert the german umlauts into the normal character pendants.

ToolTypes:

MAPUMLAUTS activates MapUmlauts

1.17 CapShift

CapShift

This option changes the way CapsLock works. Just try activating CapsLock, and then press some shifted letters to get an idea of it. Hotkeys etc. are no longer affected by CapsLock. CapShift is ignored if NoCapsLock is active.

ToolTypes:

CAPSHIFT activates CapShift

1.18 NoCapsLock

NoCapsLock

... simply switches off CAPSLOCK completely.

ToolTypes:

NOCAPSLOCK activates NoCapsLock

1.19 CloseZoom

Window Close & Zoom

MultiCX allows you to close/zoom windows using pre-defined Qualifiers and Keys.

ToolTypes:

WINCLOSE=Qual&Key sets Qualifier and Key for CloseWindow,
 none means OFF
WINZOOM=Qual&Key sets Qualifier and Key for ZoomWindow,
 none means OFF

1.20 Window Remember

Window Remember

MultiCX remembers the last active window on every screen, and the next time you go to that screen, this window will be re-activated automatically.

ToolTypes:

WINREMEMBER activates WindowRemember

1.21 CenterScreen

CenterScreen

The active screen is centered when this hotkey is pressed. Optionally the frontmost Screen is centered automatically as soon as it becomes active.

ToolTypes:

CENTERSCR=Qual&Key	sets Qualifier and Key for CenterScreen, none means OFF
AUTOCENTER	activates AutoCenterScreen

1.22 HotFlush

HotFlush

MultiCX frees all unneeded memory when pressing this hotkey, just like "Avail flush" does.

ToolTypes:

HOTFLUSH=Qual&Key	sets Qualifier and Key for HotFlush, none means OFF
-------------------	--

1.23 PopCLI

PopCLI

MultiCX spawns a UserShell using the given command string when pressing the PopCLI key.

ToolTypes:

POPCLI=Qual&Key	sets Qualifier & Key for PopCLI, none means OFF
POPCLICMD=Command	sets command string for PopCLI, none means OFF
POPCLISTACK=n	sets stacksize for PopCLI (Default: 4096)

1.24 FrontPubScreen

FrontPubScreen

If this option is activated the FrontScreen automatically will become the actual DefaultPubScreen, as long as it is public and not private.

ToolTypes:

FRONTPUBSCR activates FrontPubScreen

1.25 System Flags

System Flags

MultiCX lets you set/change some of the internal AmigaOS flags. These may be set, unset or left unchanged, where a parameter of 0 means deactivate, 1 or any value >0 means activate, and putting the ToolType in brackets (the same as removing it) means no change. Old values are NOT restored when quitting/disabling MultiCX, but Notification may be used at any time.

ToolTypes:

BLACKBORDER=n	changes BlackBorder flag, ECS Denise needed
NOCLICK=n	changes NoClick flag for all drives, may not work with very old drives
WILDSTAR=n	changes flag for extended WildCarding, if ON "*" may be used instead of "#?"
SNDFILTER=n	switch Sound filter ON/OFF

1.26 Trackdisk Parameters

Trackdisk Parameters

This option is used to set some parameters of trackdisk.device. If used with care these settings could make your drives faster and less noisy. Old values are NOT restored when quitting/disabling MultiCX, but default values are set when disabling these Tooltypes.

ONLY USE THEM IF YOU KNOW EXACTLY WHAT YOU ARE DOING!

ToolTypes:

TDRETRY=n	change TDU_RETRYCNT (Default is 10)
TDSTEP=n	change TDU_STEPDELAY (Default is 3000)
TDSETTLE=n	change TDU_SETTLEDELAY (Default is 15000)
TDCALIBRATE=n	change TDU_CALIBRATEDELAY (Default is 4000)

1.27 Public Screen Flags

Public Screen Flags

MultiCX also lets you set/change the global Public Screen flags. These may be locked, so that other tasks cannot change them. The values are the same as for the System Flags.

ToolTypes:

POPPUBSCR=n	changes PopPubScreen flag
SHANGHAI=n	changes Shanghai flag
LOCKPUBFLAGS	locks Public Screen flags set by MultiCX

1.28 Internal and External Preferences

Internal and External Preferences

Normally MultiCX opens a WBInfo Requester on CX_POPUP (OS 3.x only!), but this may be replaced by an external program like MUI-MCXPrefs by Jürgen Kempkes.

Thanks for the great work, Jürgen!

ToolTypes:

CX_POPUP=Qual&Key	sets Qualifier and Key for WBInfo or ext. Prefs
IGNORE_CLASS	lets all other Qual&Key definitions ignore their ix_Class, normally only RAWKEY is accepted
EXTPREFS=Command	sets Command to execute for external Preferences

1.29 Advanced EditHook

Advanced EditHook

MultiCX contains a comfortable extension for all system StringGadgets. It is completely inactive as long as the CONTROL qualifier is pressed.

The following keys can be used:

RCOMMAND Q	undo	(*)
RCOMMAND X	clear	(*)
RCOMMAND C	copy to Clipboard	
RCOMMAND V	paste from Clipboard (Insert)	
RCOMMAND SHIFT V	paste from Clipboard (Clear)	
RCOMMAND G	convert contents to upper case	
RCOMMAND H	convert contents to lower case	
RCOMMAND key	leave Gadget and execute Menu option	(\$^1\$)
LCOMMAND (SHIFT) key	execute original RCommand shortcut	
SHIFT CURSOR LEFT	jump to start of line	(*)
SHIFT CURSOR RIGHT	jump to end of line	(*)
SHIFT BACKSPACE	delete to start of line	(*)
SHIFT DEL	delete to end of line	(*)
ALT CURSOR UP	previous Gadget (SHIFT TAB)	
ALT CURSOR DOWN	next Gadget (TAB)	
ALT CURSOR LEFT	jump word left	
ALT CURSOR RIGHT	jump word right	
ALT BACKSPACE	delete word left	
ALT DEL	delete word right	
ESC	leave Gadget	(\$^2\$)

(*) function provided by OS

ToolTypes:

EDITHOOK	activates advanced EditHook
CLIPUNIT=Unit	select Clipboard unit for Copy/Paste (0-255), Default: 0
NOCMDKEY	switch off "execute Menu" option (\$^1\$)
NOESCKEY	switch off "leave Gadget" option (\$^2\$)

1.30 Advanced ResetHandler

Advanced ResetHandler

If this option is enabled NOTHING will survive a Reset (Software Reset or Keyboard Reset via LCOMMAND-RCOMMAND-CONTROL) in your computer's memory. This will kill all kinds of virusses and things like the RAD: device, which can be very useful if you just use it to decrunch disks.

Please note that the Keyboard Reset is not affected by PATCH_DISABLE and

that KBD_RESETHANDLERS will not work on very old machines (A1000 and early A500).

ToolTypes:

RESETHANDLER activates advanced ResetHandler

1.31 SetFunction Patches

SetFunction Patches

Using this ToolType it is possible to select whether all patches are disabled when disabling the Commodity. Patches are always disabled when MultiCX is removed.

The following MultiCX functions are affected by this ToolType:

LOCKPUBFLAGS	ASSIGNWEDGE	NEWLOOKMENUS
NEWLOOKPROPS	WBABOUT	WBTITLE
SA_PENS	SA_AUTOSCROLL	SA_FONT
LOCKPENS	FIXOPENWB	NOCLOSEWB
NODISPLAYBEEP	NOFORMAT	NOBOOTWRITE
LOCKPATCH	SHAPEFREEZER	ALERTTIME
WBGAUGE	EDITHOOK	
BLACKBORDER	(OS 2.x only)	
RESETHANDLER	(SoftReset only)	

ToolTypes:

PATCH_DISABLE if set, all Patches will be disabled together
with MultiCX

1.32 AssignWedge

AssignWedge

This ToolType helps you handling "Please insert volume <xyz> in any drive" requesters. If the system tries to open such a requester, it will be replaced by a new one with three more gadgets:

Assign... opens a DirectoryRequester asking for a path
to assign the requested volume to

Mount	tries to mount the volume
Deny	denies the request and remembers the Process which tried to access that volume, so that it will not ask you again as long as AssignWedge is active

ToolTypes:

ASSIGNWEDGE	activates AssignWedge
AUTOMOUNT=Pattern	defines a pattern for volumes which will be mounted automatically when accessed for the first time

1.33 NewLookMenus

NewLookMenus	OS 3.x only!
--------------	--------------

This patch forces NewLook Menus on all PublicScreens.

ToolTypes:

NEWLOOKMENUS	activates NewLookMenus
--------------	------------------------

1.34 NewLookProps

NewLookProps

This patch gives all PropGadgets (Sliders etc.) the OS 2.0+ look.
(This will work with GadTools Gadgets only!)

ToolTypes:

NEWLOOKPROPS	activates NewLookProps
--------------	------------------------

1.35 WBExtender

WBExtender

This is how the Titlebar will look:

Attention!
The~WB~only~refreshes~display~when~amount~of~free~memory~has~changed!
And~here's~your~new~Workbench/About...

```
~~~~~OK~~~~~:~just~leave~Requester~as~before
~~~~~Flush~~~:~flush~all~inactive~libs,~fonts~etc.
~~~~~Reboot~~~:~reboots~system,~opens~confirmation~Requester~first
```

```

~~~~~+-----+
~~~~~|~~~~~---~System~Reboot~---~~~~~|
~~~~~|~~~~~|
~~~~~|~~~~~|
~~~~~|~Wait~for~disk~activity~to~finish.~|
~~~~~+-----+
~~~~~|~~~OK~                               Cancel~|
~~~~~+-----+

```

Please read more about Patches under "Notes and Hints"!

ToolTypes:

```
WBABOUT~~~~~  ~~~~~enables new WB About
WBTITLE~~~~~  ~~~~~enables new WB Titlebar
CLOCK          adds a digital clock to the TitleBar, which will
                be updated regularly
12HRS          12hrs clock display
DATE           adds a date display to the TitleBar
COMPACT        enables a more compact TitleBar (for people with
                very big fonts or a very narrow WB screen)
```

1.36 TagScreens

TagScreens

Do you remember this old goodie? ;-)

These functions only affect screens which do not set these parameters themselves, so this should work perfectly together with other TagItem promoters like MagicCX's TagScreens. Additionally all screens with supplied TagLists are not changed unless HARDPATCH is set.

ToolTypes:

```
HARDPATCH      if set, NewScreens with TagLists are also
                affected by the patch
SA_PENS        set DRIPens for ugly looking old programs
SA_AUTOSCROLL  enable AutoScrolling
SA_FONT        use Topaz-8 as default font for old programs
```

1.37 LockPens

LockPensOS 3.x only!

This option is very useful if you use Workbench with many colors. It locks pens 4-7 and sets the colors according to the actual Palette Preferences.

ToolTypes:

```
LOCKPENS      enable LockPens
```

1.38 FixOpenWB

FixOpenWB OS 3.x only!

AmigaOS 3.x has a severe bug when re-opening the Workbench screen, depending on the task priority of the current task the system will hang forever. This option is a workaround for the bug.

ToolTypes:

FIXOPENWB enable FixOpenWB

1.39 NoCloseWB

NoCloseWB

If this option is set, only the IPrefs task is allowed to close your Workbench screen. The tasks name MUST be "« IPrefs »", which should be the case since Workbench 2.1. Otherwise the Workbench could not be closed by any task.

ToolTypes:

NOCLOSEWB enable NoCloseWB

1.40 NoDisplayBeep

NoDisplayBeep

This option simply disables Intuition's DisplayBeep() function, thus no application will flash the display anymore.

ToolTypes:

NODISPLAYBEEP enable NoDisplayBeep

1.41 Drive Protection

Drive Protection

Using the NOFORMAT option you may Format-protect a specific device, but remember that writing of tracks is still possible (Format ... QUICK).

NOBOOTWRITE inhibits writing the first 2 blocks of a specific device, so viruses or any other programs cannot write a BootBlock any longer, which would otherwise destroy the RDB (Rigid Disk Block) of a harddisk.

If IOALERT is enabled any violation of the above options will cause an Alert giving you the chance to ignore (LBUTTON) or cancel (RBUTTON) the operation. If this option is disabled all offending operations are cancelled.

DeviceName is CASE-DEPENDENT and the driver must already be loaded when starting MultiCX!

ToolTypes:

NOFORMAT=DeviceName	enable NoFormat for DeviceName
NOBOOTWRITE=DeviceName	enable NoBootWrite for DeviceName
IOALERT	enable IOAlert

1.42 LockPatch

LockPatch

This fixes a small OS-bug in dos.library's Lock function. Without this patch some programs will not work properly with muFS etc.

ToolTypes:

LOCKPATCH	enable LockPatch
-----------	------------------

1.43 ShapeShifter Support

ShapeShifter Support

If SHAPEFREEZER is enabled, MultiCX will freeze ShapeShifter when it's screen is not in front. This will prevent GfxBoard displays from being trashed by the Mac display.

SHAPECLICKER allows you to use RMB to create a DoubleClick on the Mac.

SHAPESTICK will emulate a Joystick on the Mac side by translating your Joystick movements to keypresses. Default is SPACE for Fire and CURSOR keys for the four directions. Diagonal movements are represented by the corresponding two keypresses. As an example RETURN for Fire and NUMPAD 4,5,6,8 would be correct for F/A-18 and A10-Attack. All Qualifiers except NUMPAD are ignored. Please note that this option will only affect ShapeShifter, so it is compatible to all other programs running on the Amiga side.

Just in case you don't know what the hell I'm talking about...

ShapeShifter is the incredible Macintosh emulator by Christian Bauer.

IMPORTANT NOTES:

- The name of ShapeShifter's main task must be "ShapeShifter", so do not rename the program! Newer versions of ShapeShifter (since 3.2) take care of this automatically.
- Do NOT use SHAPESTICK if you have anything other connected to your Joystick port (Gameport 1) than a digital Joystick!
- SHAPESTICK currently only supports ShapeShifter running on it's own screen, it is simply ignored if you run ShapeShifter in a window.

ToolTypes:

SHAPEFREEZER	enable ShapeFreezer
SHAPECLICKER	enable ShapeClicker
SHAPESTICK	enable ShapeStick
S_FIRE=Key	set Key representing the Joystick's fire button
S_RIGHT=Key	set Keys representing Joystick directions
S_LEFT=Key	
S_UP=Key	
S_DOWN=Key	

1.44 Opaque Windows

Opaque Window Movement and Sizing

These options enable you to move/size windows in full, and not only an ugly frame. But this should not be used on slow machines! If OPAQQUAL is not set and any Qualifier is pressed while moving/sizing a window MultiCX will use the old OS routines.

ToolTypes:

OPAQMOVE	enables Opaque Movement
OPAQSIZE	enables Opaque Sizing
NOSMART	use OS routines for SmartRefresh windows
NOSIMPLE	use OS routines for SimpleRefresh windows
WBONLY	use Opaque functions on WB screen only
OPAQLIMIT=Pixels	limits WindowSize for Opaque functions 0 means "No Limit"
OPAQQUAL=Qual	set Qualifier for Opaque functions

1.45 Alert Timeout

Alert Timeout OS 3.x only!

This option allows you to set a timeout (in 1/50 seconds) for all system alerts. If the specified period of time has expired the alert will be cancelled, just like you would have pressed RBUTTON.

ToolTypes:

ALERTTIME=ticks	enable and set Alert Timeout in 1/50 seconds, 0 means "No Timeout"
GURUTIME=ticks	set Timeout for Guru messages (Default: 540)

1.46 WBGauge

WBGauge

Perhaps you know these gauges from good old OS 1.x times...

If activated these gauges show you how much the device is filled up, just like the percent figure in the windows titlebar.

There are 4 different looks available:

- Type 1: OS 2.x Proportional Gadget
- Type 2: OS 3.x Proportional Gadget
- Type 3: Plain Raised
- Type 4: 3D Raised

Just try them all to find out what you like most.

ToolTypes:

WBGauge=type	enable WBGauge and select gauge type (1-4),
--------------	---

0 means OFF

1.47 Notes and Hints

Notes and Hints

- MultiCX must be started from WB, CLI/Shell is not supported.
 - MultiCX is 100% compatible to Commodore's specifications, so don't complain if some bad-behaving software does not work with it.
For example: Some bad filesystems do not support Notification, some bad gfx-board drivers do not support MouseBlanking etc...
 - Not all patch programs are as clean as MultiCX (in reality most are really bad hacks!), so you should pay attention to the following simple rules:
 1. All lowlevel patches (like CopyMemQuicker, RTPatch etc.) should be started between SetPatch and LoadWB! Do not use the User-Startup for such programs. This method is preferable for most patches.
 2. Application patches (like ARQ) should have a high start priority if started in WBStartup. Simply set a ToolType "STARTPRI=nnn" and use a relative high value like 100 to make sure that these tools are started before MultiCX. Valid values range is -127 to 127.
 3. Do not try to remove bad patches, not even if they have a option to do that! It's simply not possible to do that in a clean way without MultiCX's advanced interfacing routines. You have been warned...
 - Some bad programs pass invalid parameters to OS functions, for example some set WFLG_NW_EXTENDED in the NewWindow structure and do not supply a valid TagList in enw_Extension. MultiCX tries to check parameters in order to avoid problems when possible, but this will not always work. Remember: Things like this are not MultiCX's fault!
 - MultiCX's Screen Blanker uses BestModeID to find the best display mode. Because this is impossible under AmigaOS 2.x, MultiCX uses a special masking algrorythm to find the display mode. But this relies on the fact, that a DisplayID with all ModeKeys set to 0 exists. Anyway you should use AmigaOS 3.x for best results.
 - BlackBorder is not fully supported by AmigaOS 2.x, but should work.
 - Some very old drives do not like NoClick, so switch it off at once if your drive makes funny noises...
 - If you like to toggle some of MultiCX's features using hotkeys, you should try ToolManager 2.1 (by Stefan Becker) together with DoIcon (by Lars Eilebrecht).
 - MultiCX may be enabled, disabled or removed from within scripts by using HandleCX (included in this archive). Should always be done when
-

starting nasty games...

- External Preferences programs must not use more than 4096 byte stack, and should use ReadArgs to get needed arguments. The program is responsible for things like protecting itself against being started twice, popping it's screen to front etc.

In order to get the path and name of MultiCX's active icon file a Public Semaphore has been implemented. Programs can use FindSemaphore to get the base of the following structure:

```
struct MCXSemaphore
{
    struct    SignalSemaphore mcx_Sem;
    BPTR      mcx_Lock;          /* Copy of my wa_Lock */
    CHAR      *mcx_Name;         /* Ptr to Icon Filename */
    WORD      mcx_Version;       /* MultiCX Version */
    WORD      mcx_Revision;      /* MultiCX Revision */
}
```

The name of the Semaphore is "MultiCX Path".
Don't forget to protect all accesses by a Forbid/Permit pair, because the Semaphore will be removed if MultiCX ends.

- NEVER try to remove/disable ARQ or other programs that patch the EasyRequestArgs function. Most often these bad programs will trash the vector, resulting in "Please insert volume NIL: in any drive" requesters.
- Do NOT use ReqChange, because every version has serious bugs and trashes several OS functions! Simply use RTPatch instead.
- Do NOT use bad hacks like SysIHack, ToolsDaemon, ExecPatch etc.
- Some programs (DOpus5 etc.) call Intuition functions while having the IntuiBase locked. So if you encounter any deadlock problems it's definitely not MultiCX's fault!
- Some bad KBD_RESETHANDLERS do not preserve registers and do not return NULL when finished. This is the case with RebootOff from the Enforcer package, so do not complain if it doesn't work correctly!
- Things like Enforcer are only thought for debugging purposes and should not be used on every startup!
- Some bad so-called viruskillers do not know the difference between a virus and an application, and so report that the DoIO vector has been corrupted and must be fixed. If possible you should CANCEL this operation!
- Everybody should use SwazInfo by David Swazbrook... ;-)

1.48 Author

Author

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1. Support BBS: WANDERER +49-211-9215563
+49-211-9215517

Login: MBS

Use 'download <number>' to get the archive you want

2. Support BBS: KSB +49-2151-974740
+49-2151-974758
+49-2151-974923
+49-2151-974961

Login: GAST

Online-Menu: Support-Area

MultiCX was developed using DevPac v3.14 ©1994 by HiSoft

1.49 History

History

1.00 - 1.76 Ancient History

2.0ß (25.6.95) INTERNAL BETA

- renamed public semaphore to "MultiCX Path"
- overall code improvements
- implemented SetFunction interfacing code
- implemented EDITHOOK

2.0ß (27.6.95) INTERNAL BETA

- completed SetFunction interfacing code
- implemented PATCH_DISABLE ToolType
- improved AUTOCENTER
- BLACKBORDER uses a Patch now with OS 2.x
- EDITHOOK's Clipboard Paste now inserts new text instead of replacing the old text
- implemented TagScreens function with some ToolTypes: HARDPATCH, SA_PENS, SA_AUTOSCROLL and SA_FONT

2.0ß (28.6.95) INTERNAL BETA

- fixed some bugs
- LOCKPUBFLAGS is a Patch now and only locks the Flags which are changed by MultiCX
- implemented FORCENEWLOOK

2.0ß (30.6.95) INTERNAL BETA

- improved FORCENEWLOOK
- fixed some bugs (only Mario Cattaneo found them...)

2.0ß (2.7.95) INTERNAL BETA

- fixed some more small bugs
- re-improved FORCENEWLOOK because of side effects
- improved Intuition access protocol handling
- implemented ASSIGNWEDGE

2.0ß (3.7.95) INTERNAL BETA

- fixed bug in ASSIGNWEDGE
- implemented warning message to show up if some resident data structures are incompatible

2.0ß (4.7.95) INTERNAL BETA

- improved ASSIGNWEDGE
- improved FORCENEWLOOK

2.0ß (5.7.95) INTERNAL BETA

- implemented WBABOUT and WBTITLE as a replacement for WBExtender

2.0ß (6.7.95) INTERNAL BETA

- WBABOUT now works correctly with 68040 and 68060
- improved WBTITLE

2.0ß (7.7.95) INTERNAL BETA

- extended "MultiCX Path" Semaphore
- improved some routines

2.0ß (8.7.95) INTERNAL BETA

- SetFunction interfacing code completely rewritten
-

- fixed Enforcer hit in WBTITLE

2.0β (10.7.95) PUBLIC BETA

- fixed bug in ASSIGNWEDGE

2.0β (16.7.95) INTERNAL BETA

- improved Screen~Blanker, it will no longer re-open Workbench when blanking
- implemented LOCKPENS and FIXOPENWB (OS 3.x only!)

2.0β (18.7.95) INTERNAL BETA

- fixed serious bug in SetFunction interfacing code, which caused difficult to trace lockups
- improved LOCKPENS and FIXOPENWB

2.0β (27.7.95) INTERNAL BETA

- improved EDITHOOK

2.0β (30.7.95) PUBLIC BETA

- built in some more sanity checks for OpenWindow and OpenScreen patches
- improved Moire~Blanker

2.0β (7.8.95) INTERNAL BETA

- fixed bug in EDITHOOK, Clipboard Paste now always works correctly (ReqTools FileRequester etc.)

2.0β (11.8.95) INTERNAL BETA

- improved some routines

2.0β (12.8.95) INTERNAL BETA

- fixed small bugs in SA_PENS and SA_FONT
- extended SetFunction interfacing code

2.0β (14.8.95) INTERNAL BETA

- fixed a little bug in Notification routine

2.0β (15.8.95) INTERNAL BETA

- renamed FORCENEWLOOK to NEWLOOKMENUS
- implemented NEWLOOKPROPS
- improved SetFunction interfacing code
- made some routines more "hack-friendly"... ;-)

2.0β (19.8.95) INTERNAL BETA

- implemented SHAPEFREEZER (ShapeShifter Support)
-

-
- 2.0ß (20.8.95) INTERNAL BETA
- implemented NOFORMAT and LOCKPATCH
 - improved documentation (PATCH_DISABLE)
- 2.0ß (21.8.95) INTERNAL BETA
- improved SHAPEFREEZER
 - optimised some routines
 - fixed nasty bug in SetFunction interfacing code (occured with OS 2.x only)
- 2.0ß (22.8.95) INTERNAL BETA
- improved Moire Blanker (no more funny pixels with CyberGraphX)
 - MultiCX needs at least 4096 Bytes Stack now!
 - improved OpenWindow and OpenScreen patches
- 2.0ß (23.8.95) INTERNAL BETA
- implemented RESETHANDLER
- 2.0ß (26.8.95) INTERNAL BETA
- SHAPEFREEZER completely rewritten
 - implemented SHAPECLICKER (ShapeShifter Support)
 - improved EDITHOOK, Clipboard Paste works with MUI now
 - improved Moire Blanker
 - fixed some small bugs
- 2.0ß (27.8.95) INTERNAL BETA
- improved ASSIGNWEDGE, does more sanity checks now
 - fixed bug in RESETHANDLER
- 2.0ß (28.8.95) INTERNAL BETA
- improved SHAPEFREEZER, should work always now, even while the Mac is booting up!
- 2.0ß (29.8.95) INTERNAL BETA
- some minor code improvements
- 2.0ß (30.8.95) INTERNAL BETA
- reduced stack usage of some routines to avoid problems with other patches
- 2.0ß (31.8.95) INTERNAL BETA
- added another sanity check
 - some minor code improvements
- 2.0ß (6.9.95) INTERNAL BETA
-

- fixed small bug in EDITHOOK
 - implemented OPAQMOVE, OPAQSIZE, OPAQSMART, OPAQLIMIT
- 2.0B (7.9.95) INTERNAL BETA
- removed OPAQSMART, added NOSMART and NOSIMPLE
 - improved OPAQMOVE and OPAQSIZE
- 2.0 (9.9.95) FIRST RELEASE VERSION
- improved SHAPEFREEZER
 - fixed bug in EDITHOOK
 - finished AmigaGuide documentation
- 2.01 (10.9.95) PUBLIC RELEASE
- fixed serious bugs in Moire Blanker and Mouse Blanker
 - implemented AVOIDWINDOW
- 2.02 (12.9.95) PUBLIC RELEASE
- improved Screen Blanker
 - improved OPAQMOVE and OPAQSIZE
 - fixed serious bugs in SHAPEFREEZER and FIXOPENWB
 - enhanced and improved EDITHOOK
- 2.03 (14.9.95) PUBLIC RELEASE
- fixed documentation bug (NEWLOOKMENUS)
 - enhanced EDITHOOK
 - OPAQMOVE and OPAQSIZE completely rewritten, works with OS 2.x and OS 3.x now!
- 2.04 (15.9.95) PUBLIC RELEASE
- OPAQMOVE no longer ignores alien BorderGadgets (MUI's Iconify Gadget etc.)
- 2.05 (15.9.95) PUBLIC RELEASE
- improved DragBar recognition in OPAQMOVE
 - fixed small bug in OPAQSIZE
- 2.06 (16.9.95) PUBLIC RELEASE
- improved LOCKPATCH
- 2.07 (18.9.95) PUBLIC RELEASE
- improved LOCKPENS
 - added List of Patches to documentation
- 2.08 (19.9.95) PUBLIC RELEASE
- fixed serious bug in error cleanup code
- 2.09 (24.9.95) PUBLIC RELEASE
-

- POPCLI and External Preferences should work with faked WBStartupMsgs (with empty MP_SIGTASK field) now, but the Path will not be cloned then!

2.10 (25.9.95) PUBLIC RELEASE

- implemented Deadlock Protection System for some very nasty programs

2.11 (26.9.95) PUBLIC RELEASE

- implemented NOBOOTWRITE and IOALERT
- implemented NODISPLAYBEEP

2.12 (28.9.95) PUBLIC RELEASE

- implemented ALERTTIME
- modified behaviour of IOALERT

2.13 (29.9.95) PUBLIC RELEASE

- enhanced and optimised NOFORMAT and NOBOOTWRITE, now ETD commands are detected as well

2.14 (2.10.95) PUBLIC RELEASE

- hopefully solved deadlock problems with some very nasty programs (DOpus5 etc.)

2.15 (4.10.95) PUBLIC RELEASE

- made NEWLOOKMENUS more waterproof, some bad programs tried to define NULL-MenuStrips

2.16 (8.10.95) PUBLIC RELEASE

- fixed bug in ASSIGNWEDGE, so IDCMP_DISKINSERTED will be handled correctly now
- added some Notes and Hints

2.17 (9.10.95) PUBLIC RELEASE

- improved StringGadget recognition routine

2.18 (10.10.95) PUBLIC RELEASE

- fixed bug in SHAPEFREEZER

2.19 (24.10.95) PUBLIC RELEASE

- added some sanity checks for ASSIGNWEDGE

2.20 (25.10.95) PUBLIC RELEASE

- improved LOCKPENS
-

-
- 2.21 (27.10.95) PUBLIC RELEASE
- implemented Joystick emulation for ShapeShifter
 - improved some routines
- 2.22 (7.11.95) PUBLIC RELEASE
- fixed small bug in SHAPEFREEZER
 - some internal improvements
- 2.23 (10.11.95) PUBLIC RELEASE
- implemented OPAQQUAL
 - included fixed version of RebootOff (Enforcer)
- 2.24 (11.11.95) PUBLIC RELEASE
- improved ASSIGNWEDGE and implemented workaround for some nasty programs like TheAnswer3
- 2.25 (17.11.95) PUBLIC RELEASE
- implemented WBONLY
 - implemented SMARTWB
 - updated Support BBS number
- 2.26 (1.12.95) PUBLIC RELEASE
- implemented WBGAUGE
- 2.27 (3.12.95) PUBLIC RELEASE
- fixed stupid bug in WBGAUGE
- 2.28 (4.12.95) PUBLIC RELEASE
- fixed and improved FRONT PUBSCR
- 2.29 (4.12.95) INTERNAL TEST VERSION
- 2.30 (5.12.95) PUBLIC RELEASE
- improved and enhanced EDITHOOK:
 - is now controlled by PATCH_DISABLE
 - implemented CLIPUNIT ToolType
 - RCOMMAND SHIFT V clears gadget before inserting string
 - works with applications that do their own Copy/Paste now
 - is 100% compatible to MUI now
 - overall code cleanup
- 2.31 (11.12.95) PUBLIC RELEASE
- improved OPAQMOVE and OPAQSIZE
 - fixed (harmless) Enforcer hit in NEWLOOKMENUS
- 2.32 (15.12.95) PUBLIC RELEASE
-

- hopefully fixed some problems with v39 Workbench
- minimised stack usage of some routines

2.33 (16.12.95) PUBLIC RELEASE

- improved and extended WBABOUT and WBTITLE
- fixed nasty bug in SHAPEFREEZER

2.34 (16.12.95) PUBLIC RELEASE

- Arrggghhhh! v2.33 introduced a MEGA-BUG!

2.35 (19.12.95) PUBLIC RELEASE

- WBGAUGE should work with all languages now

2.36 (20.12.95) PUBLIC RELEASE

- optimised some routines
- WBGAUGE really works with all languages now,
including German... ;-)

2.37 (26.12.95) PUBLIC RELEASE

- implemented CLOCK
- added 12HRS and COMPACT ToolTypes

2.38 (31.12.95) PUBLIC RELEASE

- implemented IGNORE_CLASS
- implemented NOCMDKEY and NOESCKEY

2.39 (1.1.96) PUBLIC RELEASE

- implemented GURUTIME
- implemented some more Magic in WBABOUT

A Happy New Year to all of you!

2.40 (7.1.96) PUBLIC RELEASE

- fixed a global WB deadlock problem

2.41 (8.1.96) PUBLIC RELEASE

- fixed small bug in WBTITLE
- ENTERASCII now works with LALT or RALT

2.42 (23.1.96) PUBLIC RELEASE

- implemented AUTOMOUNT
- improved EDITHOOK

2.43 (23.1.96) PUBLIC RELEASE

- improved ASSIGNWEDGE
-

- 2.44 (26.1.96) PUBLIC RELEASE
- improved ASSIGNWEDGE (AUTOMOUNT) behaviour
- 2.45 (12.2.96) PUBLIC RELEASE
- removed SMARTWB, because it would never work properly
 - removed a sanity check from ASSIGNWEDGE
- 2.46 (18.3.96) PUBLIC RELEASE
- implemented NOCLOSEWB
 - implemented IGNOREKEY
 - improved IOALERT,
Multitasking is inhibited now while displaying the
alert to give the chance for a emergency reset
 - WBTITLE now detects CyberGraphX
 - easier access to Support BBS
- 2.47 (24.3.96) PUBLIC RELEASE
- fixed ASSIGNWEDGE's Mount to work properly with
some 3rd party command shells (WShell etc.)
- 2.48 (11.4.96) PUBLIC RELEASE
- implemented ASSIGNWEDGE workaround for WBStartup+
(bug in launcher.library)
 - fixed small bug in NOCAPSLOCK
 - improved SetFunction interfacing code
 - optimised some routines
 - included german documentation
- 2.49 (13.4.96) PUBLIC RELEASE
- fixed a nasty bug in new SetFunction interfacing code
- 2.50 (29.4.96) PUBLIC RELEASE
- fixed bug in SCRMODE, ToolType was simply ignored
- 2.51 (8.6.96) INTERNAL TEST VERSION
- 2.52 (10.6.96) PUBLIC RELEASE
- improved Drive Protection routines
 - implemented IGNOREMOUSE and IGNOREDISK
 - implemented AVOIDSUN
 - implemented DATE display for extended TitleBar
- 2.53 (11.6.96) PUBLIC RELEASE
- fixed small bug in DATE routine
- 2.54 (18.6.96) PUBLIC RELEASE
- fixed bug in AVOIDSUN
-

- improved InputEvent killing routine

2.55 (24.6.96) PUBLIC RELEASE

- implemented German Localisation
- improved some routines

1.50 To do

Planned features for later versions:

- some more small patches...

1.51 PatchList

List of Patches

Name	Library	needed for
OpenScreen, OpenScreenTagList	intuition	SA_PENS SA_AUTOSCROLL SA_FONT LOCKPENS (OS 3.x) BLACKBORDER (OS 2.x) SHAPEFREEZER
OpenWindow, OpenWindowTagList	intuition	NEWLOOKMENUS (OS 3.x) WBTITLE FIXOPENWB (OS 3.x) SHAPEFREEZER
CloseWindow	intuition	WBGauge
SetPubScreenModes	intuition	LOCKPUBFLAGS
SetMenuStrip	intuition	NEWLOOKMENUS (OS 3.x)
EasyRequestArgs	intuition	ASSIGNWEDGE WBABOUT
SetWindowTitles	intuition	WBTITLE WBGauge
LockPubScreen	intuition	FIXOPENWB (OS 3.x)
OpenWorkBench	intuition	FIXOPENWB (OS 3.x)
CloseWorkBench	intuition	NOCLOSEWB
CreateGadgetA	gadtools	NEWLOOKPROPS
WBenchToFront	intuition	SHAPEFREEZER
ScreenToFront, ScreenToBack	intuition	SHAPEFREEZER
ScreenDepth	intuition	SHAPEFREEZER (OS 3.x)
DoIO, SendIO	exec	NOFORMAT NOBOOTWRITE
Format	dos	NOFORMAT
Lock	dos	LOCKPATCH
ColdReboot	exec	RESETHANDLER

DisplayBeep	intuition	NODISPLAYBEEP	
DisplayAlert	intuition	ALERTTIME	(OS 3.x)
ModifyIDCMP	intuition	WBGAUGE	

1.52 Legal

Legal Stuff

MultiCX 2.x is SHAREWARE !!!

If you use it permanently please send me a donation of US\$ 15 (DM 20).
Please add \$5 when you send me a cheque to cover clearing charges.

All users who have sent a gift for MultiCX 1.x may use this and all
further coming updates without paying anything.

Bank Account for money transfer (German users only):

R.Berndt Konto 393439-438 BLZ 36010043 Postbank Essen

THANK YOU FOR YOUR SUPPORT !

Copyright

MultiCX is written and copyright © 1994-1996 by Martin Berndt. No parts
of this program may be altered by any means (this includes editing,
reprogramming, crunching, resourceing etc.), except archiving.

Disclaimer

The author is in no way liable for any changes made to any part of the
program, or consequences thereof as he is in no way liable for damages
or loss of data directly or indirectly caused by this software.

Distribution

Neither fees may be charged nor profits may be made by distributing this
piece of software. Only a nominal fee for costs of magnetic media may
be accepted, the amount of US \$5 shouldn't be exceeded for a disk
containing MultiCX. CD Manufactures are specifically granted the right
to include this program on CD collections, as long as they are for the
Public Domain. But the user still has to pay the Shareware fee!

1.53 Credits

Credits

The following persons deserve special thanks from me as they made a significant contribution to the development of MultiCX:

- Olaf "Olsen" Barthel for his good advice in many cases
- Jürgen Kempkes for MUI-MCXPrefs
- Christian Bauer for ShapeShifter, the best Mac-Emulator
- Frank Mariak for making CyberGraphX
- Kai Iske for WBGauge artwork
- Niels Görs for the german documentation
- all my Beta-Testers for reports and constructive criticism
- the MCP authors for the worst programming example ever
- Mike Oldfield for the best music on this little planet
- the TNG crew for the greatest adventures in universe
- my son Daryl for moral support
- my coffee machine for coffee support ;-)

1.54 HandleCX

HandleCX 1.3 (19-Mar-95)

HandleCX is a CLI-replacement for Exchange to help you handling your commodities. In many cases it is useful to have full control over all running commodities in scripts, e.g. to start a game which does not like screenblankers.

Usage

The syntax of the HandleCX command is:

```
HandleCX CX_NAME/M,L=LIST/S,V=VERBOSE/S,P=POPUP/S,H=HIDE/S,E=ENABLE/S,
        D=DISABLE/S,R=REMOVE/S,T=TOGGLE/S
```

The parameters are:

CX_NAME		name of a commodity, case-independent, must be quoted if it contains spaces, multiple names and wildcarding are allowed
LIST	or L	lists all or selected commodities, may be combined with other commands
VERBOSE	or V	like LIST, but with more infos
POPUP	or P	like "Show Interface" in Exchange
HIDE	or H	like "Hide Interface" in Exchange
ENABLE	or E	like "Active" in Exchange
DISABLE	or D	like "Inactive" in Exchange
REMOVE	or R	like "Remove" in Exchange
TOGGLE	or T	toggles Active/Inactive status

Only ONE command is allowed at a time!

That means only the first command found will be executed.

List format:

\$07146028:	MultiCX	ACTIVE	GUI
\$071460B0:	Arq 1.79	ACTIVE	NOGUI
\$07146138:	Magic Menu	ACTIVE	GUI
\$071461C0:	CycleToMenu	ACTIVE	GUI
\$07146248:	Exchange	ACTIVE	GUI
\$071462D0:	DynamiCache	ACTIVE	GUI
\$07146730:	MFS	ACTIVE	GUI
\$071467B8:	CrossDOS	ACTIVE	GUI
\$07146840:	AlertPatch	ACTIVE	GUI
\$071468C8:	CrossMac	ACTIVE	GUI
\$07146950:	PowerSnap	ACTIVE	GUI
\$071469D8:	ClipHistory 0	ACTIVE	GUI
\$07146A60:	Clipbook	ACTIVE	GUI
\$07146AE8:	SwazInfo	ACTIVE	GUI
\$07146B70:	ToolManager	ACTIVE	NOGUI
\$07146BF8:	PrinterManager	ACTIVE	GUI
\$07146D08:	DragIt	ACTIVE	GUI
^	^	^	^
	CX_Name		
_____	Address of Structure		
	Commodity is ACTIVE _____		

Commodity has a GUI or not _____|

Verbose list format:

```
$07157418: MultiCX                ACTIVE   GUI
: MultiCX 2.0 - ©1995 by Martin Berndt (Adds many nice features)
```

History

- 1.0 - initial release
 - 1.1 - implemented wildcarding
 Some AmigaShell replacements need quotes around wildcards!
 - 1.2 - changed command template,
 verbose list implemented
 - 1.3 - implemented TOGGLE option
-