

# **MultiCX**

Martin Berndt

**COLLABORATORS**

	<i>TITLE :</i> MultiCX		
<i>ACTION</i>	<i>NAME</i>	<i>DATE</i>	<i>SIGNATURE</i>
WRITTEN BY	Martin Berndt	June 24, 2022	

**REVISION HISTORY**

NUMBER	DATE	DESCRIPTION	NAME

# Contents

<b>1</b>	<b>MultiCX</b>	<b>1</b>
1.1	MultiCX-Guide Main	1
1.2	Installation	2
1.3	Features	2
1.4	Notification	4
1.5	Locale	4
1.6	Screen Blanker	5
1.7	Moire Blanker	5
1.8	DPMS	6
1.9	Mouse Accelerator	7
1.10	Mouse Blanker	7
1.11	Lefty Mouse	8
1.12	Screen Cycling	8
1.13	Mouse Shift	8
1.14	Window Cycling	9
1.15	SUN-alike Window Activation	9
1.16	Title Activator	10
1.17	HoldX and HoldY	10
1.18	Enter ASCII	10
1.19	Map Umlauts	11
1.20	CapShift	11
1.21	NoCapsLock	12
1.22	CloseZoom	12
1.23	Window Movement	12
1.24	Window Remember	13
1.25	CenterScreen	13
1.26	HotFlush	13
1.27	ForceAmiga	14
1.28	PopCLI	14
1.29	PrtSc Hotkeys	14

---

---

1.30	FrontPubScreen . . . . .	15
1.31	System Flags . . . . .	15
1.32	Trackdisk Parameters . . . . .	15
1.33	Public Screen Flags . . . . .	16
1.34	Internal and External Preferences . . . . .	16
1.35	Advanced EditHook . . . . .	17
1.36	Advanced ResetHandler . . . . .	18
1.37	SetFunction Patches . . . . .	18
1.38	AssignWedge . . . . .	19
1.39	NewLookMenus . . . . .	19
1.40	NewLookProps . . . . .	19
1.41	WBExtender . . . . .	20
1.42	TagScreens . . . . .	21
1.43	LockPens . . . . .	22
1.44	FixOpenWB . . . . .	22
1.45	NoCloseWB . . . . .	22
1.46	NoDisplayBeep . . . . .	23
1.47	Drive Protection . . . . .	23
1.48	ToolAlias . . . . .	24
1.49	LockPatch . . . . .	24
1.50	ShapeShifter Support . . . . .	24
1.51	Opaque Windows . . . . .	25
1.52	Alert Timeout . . . . .	26
1.53	WBGauge . . . . .	26
1.54	ScreenMenu . . . . .	27
1.55	PubScreenAlias . . . . .	27
1.56	Notes and Hints . . . . .	27
1.57	Author . . . . .	29
1.58	History . . . . .	30
1.59	To do . . . . .	39
1.60	PatchList . . . . .	40
1.61	Legal . . . . .	40
1.62	Credits . . . . .	42
1.63	HandleCX . . . . .	42

---

# Chapter 1

## MultiCX

### 1.1 MultiCX-Guide Main

---

MultiCX 2.77 (27.8.97)

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

DPMS

Mouse~Accelerator

Mouse~Blanker

Lefty Mouse

Screen~Cycling

Mouse~Shift

Window~Cycling

SUN~alike~Window~Activation

Title Activator

HoldX~and~HoldY

---

---

Enter~ASCII  
Map~Umlauts  
CapShift  
NoCapsLock  
Window~Close & Zoom  
Window Movement  
Window~Remember  
CenterScreen  
HotFlush  
ForceAmiga  
PopCLI  
PrtSc Hotkeys  
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  
ToolAlias  
LockPatch  
Opaque Windows  
Alert Timeout  
OS 3.x only!  
WBGauge  
ScreenMenu  
PubScreenAlias  
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/SCRMODEID are set, the ScreenMode is only used if the Workbench is not available for some reason. But this should never happen...

See also:

Moire Blanker  
 and  
 DPMS  
 -----

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
SCRMODEID=ModeID	selects a display ModeID (decimal)

## 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  
and  
DPMS

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
BLANKPRI=n	sets blanker's task priority, default is -120

## 1.8 DPMS

DPMS Registered Users only !

DPMS stands for Display Power Management Signaling and needs at least three things to work properly:

1. a DPMS compatible monitor
2. CyberGraphX system v40+
3. a CyberGraphX Workbench screen

WARNING:

Do NOT try to use DPMS if your monitor doesn't support Power Management!

CyberGraphX knows different DPMS levels, but not all graphics cards or monitors support them all, i.e. Picasso-II users may only use level 3. The levels are:

Level 0	DPMS_ON	Full operation
Level 1	DPMS_STANDBY	Optional state of minimal power reduction
Level 2	DPMS_SUSPEND	Significant reduction of power consumption
Level 3	DPMS_OFF	Lowest level of power consumption

In order to prevent other screen blankers from doing unnecessary work while DPMS is active, MultiCX may regularly emulate the pressing of the left shift key, but MultiCX' own blankers do not need this.

See also:

Screen Blanker  
and  
Moire Blanker

---

ToolTypes:

DPMS_TIME=n	sets number of seconds until DPMS blanking, 0 means OFF (no DPMS)
DPMS_LEVEL=n	sets DPMS operation mode (0-3), 0 means OFF
DPMS_SHIFT=n	sets number of seconds for Shift emitting, 0 means OFF
DPMS_KILLKEY	ignore unblanking keypress
DPMS_NOMOUSE	do not unblank on mouse movement
DPMS_NODISK	do not unblank on disk insertation
DPMS_HOTKEY=Qual&Key	sets hotkey for immediate DPMS blanking

## 1.9 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

## 1.10 Mouse Blanker

---

Mouse Blanker

---

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

---

ToolTypes:

---

KEYBLANK                    activates MouseBlanking on keypress  
 TIMEBLANK                  activates MouseBlanking after timeout

## 1.11 Lefty Mouse

-----  
 Lefty Mouse  
 -----

If activated this feature will swap the left and right mouse button, ie. if you hit the left button it will act like the right and vice versa.

-----  
 ToolTypes:

LEFTYMOUSE                  activates Lefty Mouse

## 1.12 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

## 1.13 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

## 1.14 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

SUPERLAYERS                  enables SuperLayers support for CyberGraphX v3

## 1.15 SUN-alike Window Activation

-----

SUN-alike 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. When SUNPOPUP is used windows will be brought to front when being activated.

-----  
ToolTypes:

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

## 1.16 Title Activator

-----  
Title Activator  
-----

This option simply allows activation of a screen by clicking on its title bar, which is quite useful when using dragged screens.

-----  
ToolTypes:

TITLEACTIVATE	activates Title Activator
---------------	---------------------------

## 1.17 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

## 1.18 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

## 1.19 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. If the MAPCAPSLOCK switch is set the conversion only takes place while CAPSLOCK is active, which is very useful if you only need this feature with some applications. Please note that this option is not affected by  
    NOCAPSLOCK  
    , so these switches should be used  
together.

---

ToolTypes:

MAPUMLAUTS                      activates MapUmlauts  
MAPCAPSLOCK                     activates MapCapsLock

## 1.20 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

## 1.21 NoCapsLock

-----  
NoCapsLock  
-----

... simply switches off CAPSLOCK completely.

-----  
ToolTypes:

NOCAPSLOCK                      activates NoCapsLock

## 1.22 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

## 1.23 Window Movement

-----  
Window Movement  
-----

This group of hotkeys enables you to center the active window, to move it to the top left corner of the screen or to align it with it's parent window.

-----  
ToolTypes:

---

---

WINCENTER=Qual&Key	sets Qualifier and Key to center window
WINPARENT=Qual&Key	sets Qualifier and Key to align a window with it's parent window
WINTOPLLEFT=Qual&Key	sets Qualifier and Key to move window to the top left corner of the screen

## 1.24 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

## 1.25 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

## 1.26 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

## 1.27 ForceAmiga

-----  
ForceAmiga  
-----

This Hotkey lets you force switching to native Amiga modes when using CyberGraphX and is especially useful for some nasty games.

-----  
ToolTypes:

FORCEAMIGA=Qual&Key        sets Qualifier and Key for ForceAmiga,  
                                 none means OFF

## 1.28 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)

## 1.29 PrtSc Hotkeys

-----  
PrtSc Hotkeys  
-----

MultiCX executes the given command strings when pressing the left or right ALT key and PrtSc (NUMERICPAD \*), which might be useful to print or snapshot a screen.

-----

---

ToolTypes:

```

PRTSC_LEFT=Command      sets command string for LALT NUMPAD *
PRTSC_RIGHT=Command     sets command string for RALT NUMPAD *

```

### 1.30 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

```

### 1.31 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

```

### 1.32 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)

### 1.33 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

### 1.34 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.

---





## 1.38 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

## 1.39 NewLookMenus

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

This patch forces NewLook Menus on all PublicScreens.

-----  
ToolTypes:

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

## 1.40 NewLookProps

-----  
NewLookProps  
-----

This patch gives all PropGadgets (Sliders etc.) the OS 2.0+ look, if they are at least 4x4 pixels wide.

---





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

### 1.43 LockPens

-----  
 LockPens OS 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
----------	-----------------

### 1.44 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
-----------	------------------

### 1.45 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

## 1.46 NoDisplayBeep

---

NoDisplayBeep

---

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

---

ToolTypes:

NODISPLAYBEEP                enable NoDisplayBeep

## 1.47 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!

---



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
```

## 1.51 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

## 1.52 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)

## 1.53 WBGauge

-----  
WBGauge Registered Users only !  
-----

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

## 1.54 ScreenMenu

-----  
ScreenMenu  
-----

Using this option the depth gadget of a PublicScreen gets a new meaning. If you click it with the right mouse button MultiCX presents a menu from which you may select a screen, which will be brought to front when the mouse button is released. Public screens are marked by "<PUB>" in front of their public name, all others by "<SCR>" followed by the screen's title (if present).

Please note that this function is limited to public screens because a visitor window on a custom screen would never be safe enough.

-----  
ToolTypes:

SCREENMENU                    enables ScreenMenu

## 1.55 PubScreenAlias

-----  
PubScreenAlias  
-----

Many programs can only access a PubScreen using its name but not the frontmost or default PubScreen. MultiCX offers two alias names to access these screens: `_FRONT_` for the frontmost and `_DEFAULT_` for the default PubScreen.

Example: `MultiView MyPicture pubscreen _FRONT_`

Sometimes you may have to edit a programs prefs file using a Hex-Editor.

-----  
ToolTypes:

PUBSCREENALIAS                enables PubScreenAlias

## 1.56 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 algorithm 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 3.0 (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 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... ;-)

## 1.57 Author

-----  
 Author  
 -----

Martin Berndt

---

Fr.-Alfred-Str. 115  
47226 Duisburg  
Germany

Phone: +49-2065-73904

E-Mail: m\_berndt@wanderer.gun.de

Support BBS: WANDERER +49-211-226223

Login: MBS

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

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

---

Have you tried AmicDFS already ?

---

## 1.58 History

---

### History

---

1.00 - 1.76 Ancient History

2.0 (9.9.95) FIRST RELEASE VERSION

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  
OPAQUAL  
- 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  
FRONTPUBSCR  
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
- 2.56 (24.7.96) PUBLIC RELEASE
- improved NEWLOOKPROPS
  - fixed bug in WBGauge (Type 1)
  - fixed bug in AVOIDSUN which affected Window Cycling
  - implemented FORCEAMIGA
- 2.57 (10.9.96) PUBLIC RELEASE
- improved and extended WBABOUT and WBTITLE
  - improved German documentation
- 2.58 - 2.59 INTERNAL TEST VERSIONS
- 2.60 (10.1.97) PUBLIC RELEASE
- implemented SCREENMENU
  - 
  - SUNxxx functions no longer disable MUI Stringgadgets
  - fixed some small bugs
  - changed account number for money transfer
- 2.61 (15.1.97) PUBLIC RELEASE
- fixed stupid bug in SCREENMENU
-

2.62 (16.1.97) PUBLIC RELEASE

- fixed another stupid bug in DATE
- ToolType handling
- improved SCREENMENU routine

2.63 (5.2.97) PUBLIC RELEASE

- added Window Movement options
- added AM/PM display to clock's 12HRS mode
- 
- WBTITLE now detects Picasso96

2.64 - 2.69 INTERNAL TEST VERSIONS

2.70 (14.4.97) PUBLIC RELEASE

- implemented TITLEACTIVATE
- SUNPOPOP - implemented
- WBMENU - implemented
- LEFTYMOUSE - implemented
- MAPCAPSLOCK - implemented
- SCRMODEID - implemented
- PRTSC\_LEFT and PRTSC\_RIGHT - implemented simple
- ToolAlias option
- extended WBABOUT to show CyberGraphX version
- added SUPERLAYERS support for CyberGraphX v3
- fixed bug in Qualifier handling code
- improved some routines
- included HandleCX source
- changed registration details
- sorry, german documentation not finished yet

---

- 2.71 (24.4.97) PUBLIC RELEASE
- fixed some very small bugs
- 2.72 (12.5.97) PUBLIC RELEASE
- added  
WIDE  
option for extended TitleBar
  - improved  
SCREENMENU  
to be PowerWindows compatible
- 2.73 (20.5.97) PUBLIC RELEASE
- added  
DPMS  
for CyberGraphX
- 2.74 (4.6.97) PUBLIC RELEASE
- WBABOUT  
now works with SetPatch 43.6
- 2.75 (15.8.97) PUBLIC RELEASE
- added  
PUBSCREENALIAS  
- added Reboot option to  
WBMENU  
- MultiCX now automatically handles Executive, so ↔  
it  
should be removed from Executive's Tasklist.
- 2.76 (22.8.97) PUBLIC RELEASE
- added  
BLANKPRI  
in order to avoid problems with  
some badly programmed software
- 2.77 (27.8.97) PUBLIC RELEASE
- hopefully fixed deadlock problem in  
SCREENMENU

## 1.59 To do

---

Planned features for later versions:

---

- some more small patches...

---

Please send me your suggestions!

## 1.60 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) PUBSCREENALIAS 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) PUBSCREENALIAS
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
LoadSeg, NewLoadSeg	dos	OLDTOOL NEWTOL

## 1.61 Legal

---

---

Legal Stuff

---

MultiCX 2.x is SHAREWARE !!!

If you use it permanently please send me a donation of US\$ 20 (DM 30).  
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:

Martin Berndt    Konto 4185180009    BLZ 35060386    Vereinsbank Duisburg

Registered users should contact me  
to get rid of some strange new features...

THANK YOU FOR YOUR SUPPORT !

---

Copyright

---

MultiCX is written and copyright © 1994-1997 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!

---

## 1.62 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
- Mike Oldfield                             for the best music on this little planet
- the TNG crew                              for the greatest adventures in universe
- my girlfriend Heike                      for everything and for just being there
- my son Daryl                               for moral support
- my coffee machine                         for coffee support     ;-)

## 1.63 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
-