# NIB V1.00

Loki/SatanicDreams

		COLLABORATORS	
	<i>TITLE</i> : NIB V1.00		
ACTION	NAME	DATE	SIGNATURE
WRITTEN BY	Loki/SatanicDreams	October 9, 2022	

REVISION HISTORY			
NUMBER	DATE	DESCRIPTION	NAME

# Contents

1	NIB	V1.00	1
	1.1	Welcome to the NIB Docs	1
	1.2	Description	3
	1.3	Disclaimer	3
	1.4	Requirements	3
	1.5	NOTES!	4
	1.6	Library Number	4
	1.7	Licence	5
	1.8	Author	5
	1.9	Where to copy stuff	6
	1.10	Your DefLibs	6
	1.11	Conflicting LibNums?	6
	1.12	Bad Tokens	7
	1.13	Include.	7
	1.14	NIB_ExampleNIB.BB2	7
	1.15	NIB_ExampleSTD.BB2	8
	1.16	NIB_ExampleTCHK.BB2	8
	1.17	Updates to NIB	8
	1.18	History	8
	1.19	Future	8
	1.20	NIBOpenIcon{}	9
	1.21	NIBCheckStruct{}	9
	1.22	STDCheckStruct{}	10
	1.23	STDFindWidth{}	11
	1.24	STDFindHeight{}	11
	1.25	STDToImages{}	11
	1.26	STDDrawImage{}	12
	1.27	NIBRemapChunkyData{}	13
	1.28	NIBDrawImage{}	13
	1.29	NIBFreeImages{}	14

1.30	NIBFreeIcon{}	14
1.31	NIBFindWidth{}	15
1.32	NIBFindHeight{}	15
1.33	NIBSaveIcon{}	16
1.34	NIBCheckLibs{}	16
1.35	Greets to	17
1.36	Thanks to	17

# **Chapter 1**

# **NIB V1.00**

## 1.1 Welcome to the NIB Docs...

NEW ICONS BLITZ - V1.00 - (C) ROBERT HUTCHINSON 27/04/1999 [Loki/SatanicDreamsSoftware 1999] NIB, the complete replacement for the RI icon.library commands. Very easy to use system which allows DIRECT newicon.library support within your applications. With commands for standard and newicon images.

1.00	Introduction
1.01	Description
1.02	WTF is this then?
1.02	Disclaimer
1.03	In the event of NIB-GBH
	Requirements
1.04	What y'al need!
	IMPORTANT NOTES
1.05	MAKE SURE YOU READ THIS!
	Library Number Blitz lib number
1.06	Bitt2 iib humber
	Licence How can I use NIB
1.07	
	Author That be meee!
2.0	Installation
	Where to copy stuff
2.02	Check this first dewd
	Your DefLibs What are those then?
2.03	are those then?
	Conflicting LibNums?

```
2.04
             Bad Tokens
             .....'Naughty! Naughty!, BAD Tokens!'
3.0 The NIB Include
3.01
             Notes about the Include
             .....Some notes about the include
4.0 The Examples
4.01
             NIB_ExampleNIB.BB2
             .....The First Example
4.02
             NIB_ExampleSTD.BB2
             .....The Next Example
4.03
             NIB_ExampleTCHK.BB2
             .....Another Example
5.0 NIBSingle Commands
5.01
             NIBOpenIcon{}
                5.02
             NIBCheckStruct{}
              5.03
             STDCheckStruct{}
                5.04
             STDFindWidth{}
              5.05
             STDFindHeight{}
                5.06
             STDToImages{}
              5.07
             STDDrawImage{}
                5.08
             NIBRemapChunkyData{}
              5.09
             NIBDrawImage{}
                5.10
             NIBFreeImages{}
              5.11
             NIBFreeIcon{}
                5.12
             NIBFindWidth{}
              5.13
             NIBFindHeight{}
                5.14
             NIBSaveIcon{}
              5.15
             NIBCheckLibs{}
             6.0 Misc
6.01
             Updates to NIB
             .....Where can I get them from?
6.02
```

	History
	What has happened?
6.03	
	Future
	What can you expect?
6.04	
	Greets to
	Who could that be then?
6.05	
	Thanks to
	Who helped etc

NIB (C) Rob Hutchinson 1999 - http://www.satanicdreams.freeserve.co.uk/ NewIcons (C) Team NewIcons - http://www.amiganet.org/NewIcons/

#### 1.2 Description

Description of NIB

NewIconsBlitz's purpose is to allow Blitz programmers the ability to directly access the newicon.library to display NewIcon and Standard Amiga icons in an easy and friendly way.

The beauty behind accessing the newicon.library directly is that your application's user doesn't have to be running the 'NewIcons' program to see the NewIcons. And NIB handles icons in an object orientated way. To save hastle and confusion.

NIB (newicon.library) can be used for all manner of things, from simply displaying icons in a window, to using it as a simple but extremely effective way of loading auto screen-remapped Graphical User Interface elements. Because of the speed of chunk image data remapping, the newicon.library is perfect for such things.

## 1.3 Disclaimer

Disclaimer

This software is provided as-is, without warranty of any kind, either expressed or implied. In no event will the author(s) be liable for direct, indirect, incidental or consequential damages or data loss resulting from the use or application of this software. The entire risk as to the results and performance of this software is assumed by the user!

#### 1.4 Requirements

Requirements

NIB Requires:

BlitzBasic2.1+ (Well duh :)) newicon.library1 (Within BlitzLibs:AmigaLibs/ And remade DefLibs.)

Your Executables will require to run:

icon.library (Standard Commodore)
newicon.library (For newicons [Version 4+ perferably])

Not too much to ask? I'm not 100% sure from the NI documents if the newicon.library is distributable with your applications or not. But I still advise you to take it up with the author:

Eric Sauvageau: merlin@linux.tc3net.com

## 1.5 NOTES!

IMPORTANT NOTES

- o Images or icons should NOT be freed until you have finished with them! IE, if you have loaded a newicon, remapped it and drawn it to a window, DO NOT free the images UNTIL that window has either been closed or the image overwritten (you have finished with the image.) The reason for this is because the newicon.library allocates pens from your selected screen, and if you free the images when they are still `on-screen', the images could change colour. YUK!
- O LOGICAL ORDER OF NEWICON DISPLAY:
  - 1, Load icon
  - 2, Check structure for held images
  - 3, Remap chunky data to the screen
  - 4, Draw image(s) to window
  - 5, Free images
  - 6, Free icon
- o NIB uses Blitz Window objects, but wouldn't take 5 minutes to convert to NCS window or the like.. And you might see this in next version of NIB.
- o AmigaLibs.RES, AmigaLibsII.RES or AmigaLibsIII.RES (NCS) should be resident in the compiler menu for you program to function.

### 1.6 Library Number

#### LIBRARY NUMBER

Blitz uses library numbering for different librarys, and the

newicon.library1 has lib number 208 assigned to it. This has been allocated with the official blitz library number list. Although the chances are this lib number wont clash with any others (2 libraries using the same number). You are advised to use DefLibMan (on aminet) to check libraries for duplicate library numbers.

If you are having any problems with the library number, see the Conflicting LibNums?

section.

### 1.7 Licence

LICENCE

Of course there is no licence for using NIB in your programs, though I would like to have an email from you if you use NIB,

Me: loki@sdsoft.freeserve.co.uk

I have no idea what the distribution regulations are on the newicon.library itself, and whether you are allowed to distribute the newicon.library with your own applications:

Eric Sauvageau: merlin@linux.tc3net.com

The docs arnt to clear on the distribute of the library. Well I couldn't find anything :)

### 1.8 Author

AUTHOR

NIB is copyright Robert Hutchinson of SDSoftware 1999,

loki@sdsoft.freeserve.co.uk

Please send any bug reports, changes to the above address, also if you are having ANY problems with NIB I would be only too happy to help ;)

Any other questions regarding the newicon.library should be directed to the NewIcons Team,

Eric Sauvageau: merlin@linux.tc3net.com Phil Vedovatti: vedovatt@u.washington.edu Ariel Magnum: arielmag@actcom.co.il Nicola Salmoria: MC6489@mclink.it

#### 1.9 Where to copy stuff

#### INSTALLATION

Step 1, Copy the 'NewIconsBlitz/NIBBlitzLibs/AmigaLibs/newicon.library1' file to 'BlitzLibs:AmigaLibs/' Step 2, Open DefLibMan (AmiNet(Dev/Basic)), and check to see if the newicon.library1's library number (208) is highlighted in white. If this is the case, see the Conflicting LibNums? section. Else Select 'All' and 'Make DefLibs'. Step 3, Open Blitz and then open the file: NewIconsBlitz:NIBIncludes/NIB\_Include.BB2 If this file has ?????'s (bad tokens) in it, or wont compile straight through until termination, see the Bad Tokens section. (BTW - Make sure AmigaLibs.RES is resident in  $\, \leftrightarrow \,$ the compiler menu!)

And should be ready for use :)

#### 1.10 Your DefLibs

YOUR DEFLIBS

Your deflibs are kept in your Blitz2: directory. This file contains all your library token offsets, and library settings.

Your deflibs can be remade with the DefLibMan program on aminet (Dev/Basic), everytime you install/uninstall a new library you should remake your deflibs.

You should also check for duplicate library numbers in DefLibMan before selecting 'All' and 'Make DefLibs'.

#### 1.11 Conflicting LibNums?

CONFLICTING LIBNUMS

If you have confilicting library numbers, there are 2 ways to solve this problem:

1, Get a copy of the NewIconV4 package of either aminet, http://www.amiganet.org/NewIcons/ or AFCD/CUCD. Then convert the FD file in Developers/Include/FD . (Preferably with NewFDConvert from aminet Dev/Basic) Giving it a free lib number.

- 2, Fire up a copy of DiskModTools, AZap or similar HexEditor. Load in the newicon.libraryl file and search for the hex value of 208 (\$D0) changing it to another (free) lib number (in hex of course, hex values can be converted easily with the calculator in blitz!).
  - NOTE: This method isn't always 100% effective, and can cause bad tokens (incorrect offsets) so if you STILL have problems after changing this lib num and re-creating your deflibs, delete the newicon.library1 file and use option number 1 :)

### 1.12 Bad Tokens

BAD TOKENS

If you are getting bad/incorrect tokens within Blitz's editor. And the lib number is DEFINATLY \*NOT\* conflicting, then have a look at the ASCII versions of the includes and examples in the ASCII/ directories. Then load them into blitz and save them out as BB2 files.

#### 1.13 Include.

NOTES ABOUT THE INCLUDE

Your program should have the followind include at the top:

INCLUDE "<Path>/NewIconsBlitz/NIBMulti/NIB\_Include.BB2"

- ; Where <Path> is the directory the NIB package is located.
- ; Could be Blitz2: ?

Then your program will have access to the NIB commands.

#### 1.14 NIB\_ExampleNIB.BB2

NIB\_EXAMPLENIB.BB2

This example is held within NewIconsBlitz/NIBExamples/ and shows you exactly how to load specific NI data and display it in a window with the NIB commands. If no NI data is found in the icon, the program terminates.

NOTE: You may have to change the location of the icon to load and the include file path!

#### 1.15 NIB\_ExampleSTD.BB2

NIB\_EXAMPLESTD.BB2

This example is held within NewIconsBlitz/NIBExamples/ and shows you exactly how to load specific STD data and display it in a window with the NIB commands. If no STD data is found in the icon, the program terminates.

BTW: STD is just standard, IE 4Col/MWB icons.

NOTE: You may have to change the location of the icon to load and the include file path!

#### 1.16 NIB\_ExampleTCHK.BB2

NIB\_EXAMPLETCHK.BB2

This example is held within NewIconsBlitz/NIBExamples/ and shows you exactly how to check for different types of icon data held within a .info file. Then displays the NI data if found, and the STD data otherwise in a window with the NIB commands. You can override the NI display of the icon in this example by setting #NIB\_OVERRIDE to 1.

NOTE: You may have to change the location of the icon to load and the include file path!

#### 1.17 Updates to NIB

UPDATES

You can find the latest version of NIB on AmiNet (dev/basic) or our site: http://www.satanicdreams.freeserve.co.uk/

#### 1.18 History

HISTORY

1.00 - First release (This version)

#### 1.19 Future

FUTURE

The future of NIB is unknown, as to whether or not I will update it depends on if I update it personally. I will be using it in

- o IconToBrush, saving of an Icon image to a brush. Simple?
- o Transparent drawing.

# 1.20 NIBOpenIcon{}

```
NAME:
  NIBOpenIcon{}
SYNOPSIS:
   succ.b=NIBOpenIcon{Icon#, IconPath$}
   This command is a function!
FUNCTION:
   NIBOpenIcon{} loads an icons data into memory, from disk.
   The icon can be loaded from disk with or without the
  the '.info' suffix. If you do add the .info suffix it will
   get stripped by the command. It is probably faster to leave
   the `.info' suffix off if you can.
INPUTS:
             = A number from 0 to #NIB_MAXIMUM. To load the icon
   Icon#
               data into. Note #NIB_MAXIMUM can be changed at the
               top of the include. If you use more than the
               set maximum, the chances are you will get
               'Array subscript out of range' errors from the
```

debugger. IconPath\$ = A .info file on disk to load.

#### RETURNS:

True for success or False for fail. If the command fails it almost certainly means the icon doesn't exist or there wasn't enough memory to load it.

# 1.21 NIBCheckStruct{}

NAME: NIBCheckStruct { } SYNOPSIS: imgs.b=NIBCheckStruct{Icon#} This command is a function! FUNCTION: NIBCheckStruct should always follow the NIBOpenIcon{} command! It is used to check the structure of the icon Icon#. This to find out if there is NewIcon image data in the icon. If the function returns 0. You should then proceed to use STDCheckStruct to see how many standard images are held within the structure. INPUTS: Icon# = A number from 0 to #NIB\_MAXIMUM. RETURNS: 0 = No NI data.1 = Normal image only.

2 = Selected image and normal image.

## 1.22 STDCheckStruct{}

```
NAME:
   STDCheckStruct{}
SYNOPSIS:
   simgs.b=STDCheckStruct{Icon#}
   This command is a function!
FUNCTION:
   STDCheckStruct{} works in the same way as
              NIBCheckStruct{}
               except
   it checks the structure of the STD data in the icon Icon#
INPUTS:
   Icon#
            = A number from 0 to #NIB_MAXIMUM.
RETURNS:
   0 = No STD data.
   1 = Normal image only.
   2 = Selected image and normal image.
```

## 1.23 STDFindWidth{}

```
NAME:

STDFindWidth{}

SYNOPSIS:

iconwid.w=STDFindWidth{Icon#}

This command is a function!

FUNCTION:

STDFindWidth{} will return to you in a WORD type variable the

width of the icon Icon#'s STD data. Loaded with

NIBOpenIcon{}

.

INPUTS:

Icon# = A number from 0 to #NIB_MAXIMUM.

RETURNS:

A WORD containing the width of the loaded STD data.

SEE ALSO:
```

STDFindHeight{}

# 1.24 STDFindHeight{}

```
NAME:

STDFindHeight{}

SYNOPSIS:

iconhei.w=STDFindHeight{Icon#}

This command is a function!

FUNCTION:

STDFindHeight{} will return to you in a WORD type variable the

height of the icon Icon#'s STD data. Loaded with

NIBOpenIcon{}

INPUTS:

Icon# = A number from 0 to #NIB_MAXIMUM.

RETURNS:

A WORD containing the height of the loaded STD data.

SEE ALSO:
```

STDFindWidth{}

# 1.25 STDToImages{}

```
NAME:
   STDToImages{}
SYNOPSIS:
   STDToImages{Icon#}
   This command is a statement!
FUNCTION:
   STDToImages{} is used to initialize the Standard image data.
   This should always be called before
              STDDrawImage{}
              , and
   only needs to be called once per loaded icon!
   NB: Remember no remapping of STD icons is done!
INPUTS:
   Icon#
             = A number from 0 to #NIB_MAXIMUM.
SEE ALSO:
```

STDDrawImage{}

## 1.26 STDDrawImage{}

```
NAME:
  STDDrawImage{}
SYNOPSIS:
   succ.b=STDDrawImage{Icon#, Type, Window, X, Y}
   This command is a function!
FUNCTION:
   This command will draw the initialized STD data to a specified
   window. Both the Normal and Selected images have to be drawn
   individually. (IE, call the command twice.)
INPUTS:
   Icon# = A number from 0 to #NIB_MAXIMUM.
   Type
          = The type of image to draw:
               #NIB_NORMAL
                            - Draws the normal image data.
               #NIB_SELECTED - Draws the selected image data.
   Window = The window number to draw the image to.
         = The X position in the window to draw the data at.
   Х
   Y
          = The Y position in the window to draw the data at.
RETURNS:
   True or False. This command will only return false if
   STDToImages{} hasn't been run before-hand, you have no
   icon loaded or there was a constant other than the above
   passed to the function.
NOTES:
```

Dont rely on the failsafe!

## 1.27 NIBRemapChunkyData{}

```
NAME:
   NIBRemapChunkyData{}
SYNOPSIS:
   NIBRemapChunkyData{Icon#, Type, Screen}
   This command is a statement!
FUNCTION:
   This command will remap the loaded chunky image data ready for
   you to draw to a window with
              NIBDrawImage{}
INPUTS:
   Icon# = A number from 0 to #NIB_MAXIMUM.
         = The type to remap:
   Type
               #NIB_NORMAL - Remap only the normal image data.
               #NIB_SELECTED - Remap only the selected image data.
                           - Remap both types (as above).
               #NIB BOTH
   Screen = The number of the screen you with to remap the data
            to. (Found with commands such as Screen, FindScreen
                 and WBToScreen).
SEE ALSO:
```

NIBDrawImage{}

## 1.28 NIBDrawImage{}

```
NAME:
  NIBDrawImage{}
SYNOPSIS:
   succ.b=NIBDrawImage{Icon#, Type, Window, X, Y}
   Command is a function!
FUNCTION:
   This command will draw the initialized NI data to a specified
   window. Both the Normal and Selected images have to be drawn
   individually. (IE, call the command twice.)
INPUTS:
   Icon# = A number from 0 to #NIB_MAXIMUM.
   Type
          = The type of image to draw:
               #NIB_NORMAL
                            - Draws the normal image data.
               #NIB_SELECTED - Draws the selected image data.
   Window = The window number to draw the image to.
```

X = The X position in the window to draw the data at.Y = The Y position in the window to draw the data at.

RETURNS:

True or False. This command will only return false if NIBRemapChunkyData{} hasn't been run before-hand, you have no icon loaded or there was a constant other than the above passed to the function.

#### NOTES:

Dont rely on the failsafe!

### 1.29 NIBFreeImages{}

NAME: NIBFreeImages{} SYNOPSIS: NIBFreeImages{Icon#, Type, Screen} This command is a statement! FUNCTION: This command frees the remapped chunky images from memory, and should only be used after you have finished with your icon, as it frees the pens on the screen. Screen should also be the same as specified in NIBRemapChunkyData{} If you free the imagedata and you still have the image on the window, the image may change colour! If your screen has since been closed, use: FreeRemappedImage\_ \*NIBImage(<Icon#>\*2),0 ;for normal image freeing and FreeRemappedImage\_ \*NIBImage((<Icon#>\*2)+1),0 ;for selected image freeing INPUTS: Icon# = A number from 0 to #NIB\_MAXIMUM. = The type of image to free: Type #NIB\_NORMAL - Frees only the normal image. #NIB\_SELECTED - Frees only the selected image. #NIB\_BOTH - Frees both images.

#### 1.30 NIBFreelcon{}

```
NAME:
NIBFreeIcon{}
```

SYNOPSIS:
 succ.b=NIBFreeIcon{Icon#}

Screen = The screen you remaped the images to.

```
This command is a statement!
FUNCTION:
This will free a loaded icon, and should be called after
you have finished with your icon. Regardless of whether you
have use STD or NI images.
The images should be freed with the relevent commands
before calling this command.
INPUTS:
Icon# = A number from 0 to #NIB_MAXIMUM.
```

## 1.31 NIBFindWidth{}

```
NAME:
   NIBFindWidth{}
SYNOPSIS:
   nibwid.w=NIBFindWidth{Icon#}
   This command is a function!
```

FUNCTION:

```
This command returns to you the width of the NI image in the icon Icon#'s data. It can be called before or after the remap commands.
```

RETURNS:

A WORD value containing the width of the NI image.

INPUTS:

```
Icon# = A number from 0 to #NIB_MAXIMUM.
```

## 1.32 NIBFindHeight{}

```
NAME:
   NIBFindHeight{}
SYNOPSIS:
   nibwid.w=NIBFindHeight{}
   This command is a function!
FUNCTION:
   This command returns to you the height of the NI image in
   the icon Icon# data. It can be called before or after the
   remap commands.
RETURNS:
   A WORD value containing the height of the NI image.
INPUTS:
   Icon# = A number from 0 to #NIB_MAXIMUM.
```

## 1.33 NIBSavelcon{}

```
NAME:
  NIBSaveIcon{}
SYNOPSIS:
   succ.b=NIBSaveIcon{Icon#,FilePath$}
   This command is a Function!
FUNCTION:
   This command will save back to disk an icon file. Encoding the
   chunky image data into the tooltypes of the icon if it
   is availible. This rountine will save back any availible data.
   Simply if the data has been freed and the pointers reset
   the command will save only the STD data (and visa-versa)
INPUTS:
            = A number from 0 to #NIB_MAXIMUM.
   Icon#
   FilePath$ = Path of the .info file to save to on disk.
RETURNS:
   True or False. If it fails the chances are it's because
   the device/path doesn't exist.
NOTES:
   I havent 100% tested this command, but is should work fine!
```

## 1.34 NIBCheckLibs{}

#### NAME:

```
NIBCheckLibs{}
```

#### SYNOPSIS:

```
succ.b=NIBCheckLibs{}
This command is a Function!
```

#### FUNCTION:

This command despite being at the bottom of the guide is the most important one you have available! It checks for the newicon.library and icon.library, both required by your executable!!

#### RETURNS:

True or False. If it fails, this means the user doesn't have either V40+ of the newicon.library or V39+ of the icon.library and your program should promptly terminate!

#### NOTES:

I haven't checked the lowest possible version of the icon.library the user must have in order for you to use STD icons.. So if you have a version lower than V39 and it still works change the version it checks for in the include.

## 1.35 Greets to

GREETS GO OUT TO: All the members of SDS: HawkEye, HotCakes, GazChap, EcheXiO, Scider, Pagman, aMIGA\_dUDE, mULDERfBI, Budda, BootBlock, Fanta, Ribs, Labbe, Kev, Wrecker and last but not least Phil Price. Members of the BlitzList: David McMinn, Rui Carvalho, Rick Hodger, Donnovan Reeve, Liz Tucker, Simon Hitchen, James.L.Boyd, S.BeardWood, Curt Esser, Amorel, Paul West, Anders Hasselqvist, Simon Archer, Paul Burkey, Anton Reinauer, Chris "PrinceD" Deeney, Tony Rolfe, Julian Kinraid, Jamie Solomons, Peter Price, Dave "COOlie", Stefan Lebed, Peter Thor, Chris Jarvis, John Mason and Scott. (I GOTTA have missed someone there?) Other Peeps, Materia\_Keeper, Fairs, Ben Vost, People keeping the Amiga BBS scene alive: Leon (D-Tracker BBS) [Humm, kinda says summat dont it? ahahah] Sorry if I forgot ppl ;)

## 1.36 Thanks to

been in anyway possible :)

THANKS GO OUT TO: Whoever emails me telling me they are using NIB (But doubt anyone will, will they?? Go on, you know you want too! ;)) David McMinn, for some additional help with rountines I haven't yet incorporated. And for getting me into all this OS stuff. Big thanks. TA. Acid and RWE for Blitz2. My lovely Miggy :) And OF COURSE, Team NewIcons, whom without this wouldn't have