

**bgui**

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|               | <i>TITLE :</i><br>bgui |                   |                  |
| <i>ACTION</i> | <i>NAME</i>            | <i>DATE</i>       | <i>SIGNATURE</i> |
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**REVISION HISTORY**

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# Chapter 1

## bgui

### 1.1 bgui.guide

BGUI release 1.1c

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General information:

|              |                    |
|--------------|--------------------|
| Preface      | READ THIS!         |
| Introduction | What is BGUI?      |
| Features     | BGUI features.     |
| Requirements | What do you need.  |
| Installation | Where to put what. |

Programmers information:

|         |                         |
|---------|-------------------------|
| Read Me | Things you should know. |
|---------|-------------------------|

Users information:

|                  |  |
|------------------|--|
| Keyboard & Mouse | Keyboard controlled object activation. |
|------------------|--|

Required reading :)

|            |  |
|------------|--|
| Disclaimer | You want Warranty? Buy a toaster... ;) ) |
| License    | License agreement.                       |

Program information:

|           |                      |
|-----------|----------------------|
| History   | Program history.     |
| Future    | TODO.                |
| Thanks To | Thank you very much. |

Like it say's... Index:

|       |               |
|-------|---------------|
| Index | What's where. |
|-------|---------------|

## 1.2 bgui.guide/Preface

Preface

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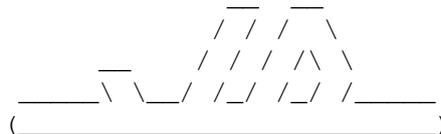
BGUI release 1.1c  
 (C) Copyright 1993-1994 Jaba Development  
 (C) Copyright 1993-1994 Jan van den Baard  
 Written using DICE v3.0 by

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EMail is preferred.  
 If you must use snail mail then please make it clear  
 when you absolutely need an answer and (don't forget  
 this) include enough return postage.

User Manual  
 (C) Copyright 1993-1994 Jaba Development



BGUI, (C) Copyright 1993-1994 Jaba Development. All rights reserved. This program is GiftWare. This means that if you want to use the programs you are morally obligated to reward the author with a gift that, you think, matches his efforts. If you cannot think of a gift (come on! be creative ;), a small financial donation will always be gladly accepted.

I have thought about how to release this package for quite some time. My initial thought went out to shareware but I soon forgot about this. Since most of the libraries of this kind seem to be shareware I do not think that many people like this simply because it's annoying to have to pay for a library if you had to pay for the application as well.

To avoid these problems I have decided to release this package as giftware for people writing freely distributable software. With "freely distributable software" I mean non-crippled, free of charge software. Authors who wish to use BGUI in shareware and/or commercial programs must pay for the usage of BGUI before actually using it.

ShareWare and/or commercial usage is not allowed without:

- 1) Prior written permission from the author.
- 2) A small financial donation of US\$ 20,-, DM 30,- or HFL 30,-.
- 3) A free and registered copy of the product including free updates that still make use of the library.

The idea behind this distribution policy is simple. You make money with the aid of BGUI? I want to get my (very humble) share.

This software is not crippled so when you register it you will not receive a key-file or an updated version. Registering simply buys you the right to use this software in shareware and/or commercial applications.

Resonable, eh?

## 1.3 bgui.guide/Introduction

Introduction

\*\*\*\*\*

BGUI is a BOOPSI based shared library containing a number of BOOPSI classes. It allows for easy creation and managing of font sensitive and size adjustable GUI's on the Amiga. Hmm, where have I read something like this before..., I hear you say.

YES! This is yet another GUI library. I know there has been a lot of discussions about the usability and necessity of GUI libraries on the nets lately. Still, being the ignorant bugger that I am, at some point I felt it was necessary to write yet another one.

Believe me when I say that BGUI was not intended to become a releasable project. I started coding BGUI simply because I was amazed what MUI did using BOOPSI. Therefore I started coding some BOOPSI classes as a learning experience.

Hmmm... This is beginning to sound like an excuse... As if I did something terrible ;)

The point is that, while working on BGUI, I saw many GUI libraries being released and not one of them really seemed to take off. This made me think that all this talk about "For every app I run I need to install a different GUI library" really is bull. Please correct me if I'm wrong but I have yet to see a program requiring a GUI library (with the exception of MUI ofcourse).

Sure there are a lot available but MUI is the only one which actually seems to be used by the programmers.

This is the reason for BGUI. I have tried to create a library which does it's thing similar to MUI eliminating the biggest problems that programmers seem to have with MUI. Meaning no fancy background-pen-frame-text-image-whatever settings editor, not a zillion extra images, no external class libraries etc.

BGUI is a single library which can be removed as easily as it can be installed. It provides an easy way to create and control GUI's without becoming excessive in what it does.

I guess time will tell if BGUI is going to be accepted or not...

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## 1.4 bgui.guide/Features

### Features

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- \* Requires at least OS 2.04 (Yes, that is a feature :)
- \* Extends on the existing system gadgetclass and rootclass.
- \* Creates completely font sensitive GUI's.
- \* Supports sizable windows.
- \* AppWindow support.
- \* Titled group-frames and seperators.
- \* Supports OS 3.0 when available.
- \* Style Guide compliant.
- \* Keyboard control of most gadget classes.
- \* Several types of notification to create "self driven" GUI's.
- \* Easy intergration of third-party classes.
- \* Easy to make your class work directly with BGUI.
- \* Object oriented.
- \* Resonable speed, even with a 68000 processor.
- \* Relatively small library.
- \* Classes for easy filerequester and commodity creation.
- \* Seperate ARexx class including source code.

## 1.5 bgui.guide/Requirements

### Requirements

\*\*\*\*\*

BGUI requires at least version 2.04 of the operating system. It does not run on 1.3 systems. Are there still people running 1.3?

BGUI also requires the following disk-based libraries to operate:

- \* gadtools.library                    (V37)    (menus)
- \* asl.library                        (V37)    (filereq class)

\* commodities.library (V37) (commodities class)

The following libraries are not required but they will impose on the functionality of the library when not available:

\* locale.library (V38) (localized library strings)

\* amigaguide.library (V37) (On-line help)

\* workbench.library (V37) (App-window support)

It should not be a problem to use BGUI on a system with 512KByte but a minimum of 1 Megabyte is suggested as a minimum.

## 1.6 bgui.guide/Installation

Installation

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The installation of BGUI is very simple. You can either use the Installer utility by C= which will install the library for you or you can copy the bgui.library to your LIBS: directory or into a directory you might have setup for non-system libraries.

Where you put the headers/modules for the language you use is up to you. Since the different compilers and users use different directory structures I did not supply a script for you to install these. You'll have to do this by hand.

## 1.7 bgui.guide/Read Me

Read Me

\*\*\*\*\*

\* The bgui.library is a special library in the sence that it is a single task library. This means that every task using the library must open the library for itself. The library base pointer may not be shared between different tasks.

The reason for this is that the library tracks information like window bounds etc. This tracking is done for each individual task.

So if your code spawns a sub-task which needs the library, the sub-task code must open the library for itself. It may not share it with the main task.

\* The object ID's (gadgets and menus) are restricted to the range 1..65535. ID's smaller or larger than this are not allowed. This should not be a problem :)

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- \* When designing custom classes to work with BGUI please try to keep your tag values and method ID's well out of the range of the BGUI tag values and method ID's. Using values that conflict with the BGUI values may have unexpected results.
- \* Do not be alarmed when you notice disk-activity when a BGUI requester pops up. This is due to the fact that the bgui.library catalog file is re-loaded each time BGUI needs it. This makes sure that the language is correct if it changed.
- \* When scrolling a large listview the mouse pointer may move in steps rather than smoothly. This is not abnormal behaviour with BOOPSI objects because all rendering occurs on the input device it's task. Just scroll a MultiView window with the scroller and you'll see the same effect.

## 1.8 bgui.guide/Keyboard & Mouse

### Keyboard & Mouse

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Most of the BGUI gadget objects can be controlled by the keyboard. Usually the key that is used to control an object is shown by an underlined character in the object it's label. The objects can be controlled as follows:

- \* Button - Pressing the key will make the object appear pressed. If you release the key the object appears normal again and the application is signalled that the object was selected. When you accidentally activated the button you can press SHIFT or ESC before releasing the key to cancel the selection.
  - \* Toggle Button - Pressing the key will toggle the selected state of the toggle button.
  - \* CheckBox - Pressing the key will toggle the selected state of the checkbox object.
  - \* Prop (Scroller) - Pressing the key will advance the knob position by one page. When you press the key together with SHIFT the knob will backup one page. You can reset the knob position when you are dragging the knob with the mouse by clicking on the right mouse button.
  - \* Listview - Pressing the key will select the next entry in the list scrolling the entries when necessary. Pressing the key together with SHIFT will select the previous entry. Read only listview objects will simply scroll the list forward and backward.
  - \* Cycle - Pressing the key will cycle one choice forward. Pressing the key together with SHIFT will cycle one choice backward. Selecting the gadget with the mouse while holding down the SHIFT key will also make the gadget cycle backward. When the cycle gadget was setup to be a popup gadget by the application programmer you can click inside the label area to pop-up a menu from which you can select the desired item. You can recognize a popup gadget by the imagery left of the label area. Normal cycle gadgets have a circular arrow here and popup gadgets have a small
-

menu here.

- \* Slider - Pressing the key will advance the knob position by one. Pressing the key together with shift will decrease the knob position by one. You can reset the knob position when you are dragging the knob with the mouse by clicking to on the right mouse button.
- \* String,Integer - Pressing the key will simply activate the gadget.
- \* Mx - Pressing the key will select the next button skipping any disabled buttons. Pressing the key together with shift will select the previous button skipping any disabled buttons. If the Mx object is in tabs mode the choices will not stop at the last or first selection but instead it will cycle back to the start or the end.

As you can see this behaviour is mostly style guide compliant with some additional possibilities.

## 1.9 bgui.guide/Disclaimer

Disclaimer

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## 1.10 bgui.guide/License

License

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  - \* If you wish to incorporate parts of the programs into other programs, write to the author to ask for permission. If you want to release your programs as being Public Domain, FreeWare or GiftWare you are allowed to include a copy of the "bgui.library" without the accompanying documentation and files. ShareWare and Commercial distribution of the programs is not allowed without prior written permission. Please refer to the see Preface section for more information on registering.
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  - \* You may charge a fee to recover distribution costs. The fee for diskette distribution may not be more than the cost to obtain a public domain diskette from Fred Fish.
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## 1.11 bgui.guide/History

History

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V38.4  
V38.5  
V38.6  
V38.7

## 1.12 bgui.guide/V37.11

V37.11

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- \* Started written history...
  - \* Added the PROGRESS\_Divisor tag for those extremely large values.
  - \* BUG FIX: The progress class object could fill the gauge 1 pixel to far in some cases. Added some extra code to prevent this from happening.
  - \* Added the external class. This class makes it easy to include third party classes like the colorwheel.gadget in a BGUI user interface. Still have major problems handling notification though...
  - \* Added the WM\_ADDUPDATE method to the window class. This method makes it possible to connect an external class object to another object to perform simple icclass style notification.
-

## 1.13 bgui.guide/V37.12

V37.12

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- \* BUG FIX: The layout engine sometimes layouted an object one or two pixels to small. Added some extra code to prevent this from happening.
- \* Added the LGO\_Align attribute to enhance the layout procedure.
- \* BUG FIX: The stringclass screwed up in computing it's minimum size when it did not have a frame attached to it.
- \* BUG FIX: The layout engine sometimes GURU'd. Ooops. Should be fixed now.
- \* BUG FIX: The LISTV\_RenderHook did not setup the entry correctly in the lvRender structure.
- \* Added the LVM\_REMENTRY method which can be used to remove single entries from a listview.
- \* Added the LVM\_REFRESH method to refresh the listview object after adding/removing some entries.
- \* BUG FIX: The infoclass computed the maximum width of the formatted text one pixel to small.

## 1.14 bgui.guide/V37.13

V37.13

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- \* BUG FIX: The window class did not succeed in opening a screen size window when the screen was smaller than it's default size.
- \* BUG FIX: The listview class did not refresh the list correctly when a single entry was added.
- \* BUG FIX: Fixed the AddEntryVisible macro in bgui\_macros.h.
- \* BUG FIX: Fixed a couple of bugs in the string class. Bugs found by Paul weterings.
- \* BUG FIX: The Toggle() and KeyToggle() macros from bgui\_macros.h did not make it possible to set a toggle button selected by default. Note that these macros require an additional parameter now. Bug found by Paul Weterings.

## 1.15 bgui.guide/V37.14

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V37.14

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- \* BUG FIX: The online-help system of the gadget objects did not work at all.
- \* BUG FIX: The drop-box frame used incorrect spacing when the FRF\_THIN\_FRAME flag was set. The radio-button frame totally ignored the FRF\_THIN\_FRAME flag. Bugs found by Paul Weterings.
- \* Added the LISTV\_TitleHook attribute to the listview class. This hook makes it possible to render a title entry in the listview object. Can come in handy with multi-column listviews.
- \* Re-arranged and adjusted the source for DICE V3.0 commercial. Boy oh boy it really is picky about correct prototyping now...
- \* The list class now uses the memory pool routines from the 3.1 amiga.lib. This means working memory pools even on 2.04.
- \* BUG FIX: The group class did not always yield the correct results when requesting the minimum size of another group. This resulted in a wrong-sized mx object when it had a label attached to it.

## 1.16 bgui.guide/V37.15

V37.15

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- \* Added task-relative information tracking. This means that from now on the library is a SINGLE-TASK-LIBRARY. If your code spawns a sub-task that requires the use of BGUI then this sub-task must open the library itself. It may not share the base pointer with the main-task.
- \* Added the WINDOW\_UniqueID attribute to give a window a unique ID of your choice. This ID is used by the task-relative information tracking to store the window size/position even when you dispose of the object and re-generate it.
- \* Added the LVM\_SORT method for re-sorting the entries in a listview object. Also added the SortList() macro in bgui\_macros.h for this purpose.
- \* Made the flag bits of the frameclass and labelclass also available as boolean tags. This allows for easier switching of single flags.
- \* BUG FIX: The lvma\_Entry field of the lvmAddSingle structure was defined as (APTR \*) while it should be (APTR).

## 1.17 bgui.guide/V37.16

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V37.16

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- \* You can now reset the knob of a sliderclass or propclass object to it's initial setting by pressing the right mouse button before releasing the left-button.
- \* Added the WINDOW\_Window attribute to enable you to obtain a pointer to the window structure of a windowclass object.
- \* Started keeping up with the source code revisions using the Revision Control System (RCS) supplied with DICE 3.0.

## 1.18 bgui.guide/V37.17

V37.17

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- \* **BUG FIX:** The buttonclass now takes the design size of a vectorclass image into consideration when computing it's minimum size. Bug found by Wouter van Oortmersen.
- \* **BUG FIX:** Fixed the rendering bug of objects on invisible pages. Bug found by Paul Weterings.
- \* **BUG\_FIX:** Fixed the enforcer hits of Infoclass objects in a Pageclass object. Bug found by Paul Weterings.
- \* Added a XEN style button frame to the frame class. Also added some new macros to the bgui\_macros header specially for this purpose.
- \* Added XEN macros in the bgui\_macros.h file for the checkbox and cycle objects.
- \* Added the GROUP\_BackFill attribute to supply a group backfill possibility without a group frame.
- \* Added the BREQF\_XEN\_BUTTONS flag to supply the requester buttons with a XEN style frame.

## 1.19 bgui.guide/V37.18

V37.18

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- \* **BUG FIX:** The infoclass sometimes screwed up with text-styles. I'm not sure if this was a bug in the infoclass itself but I have coded a work-around to the problem.
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- \* Optimized setting pens and drawmode in a rastport. Now the code checks the pens and drawmode to see if it needs to change. Should speed up the rendering somewhat.
- \* BUG FIX: When flushing the library from memory while one or more of the classes failed to free could result in a GURU. This should not happen anymore.
- \* Added the seperator class which adds the possibility to seperate groups with a single 3D line with or without a title. Also added a couple of macros to bgui\_macros.h for this purpose.

## 1.20 bgui.guide/V37.19

V37.19

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- \* BUG FIX: The stringclass by default used the wrong pens to render it's contents. Now the correct pens are used by default keeping track of user set pens.
  - \* Added some simple macros for NewMenu definitions in the bgui\_macros.h header.
  - \* BUG FIX: Drag-selecting menus would result in replying a non-existent IntuiMsg (enforcer hits... GURUs... ouch!)
  - \* BUG FIX: Fixed a bug that caused rendering object labels in the wrong color when the object was selected and the label was located outside the object hit area.
  - \* BUG FIX: The HorizSlider() macro was broken.
  - \* BUG\_FIX: Some classes screwed up computing their minimum size when the label was located above or below the object. This should not happen anymore.
  - \* Extended the Listview class rendering hook result code. When the hook returns non-NULL the class will see this as a string and render it. A result code of NULL is ignored. Please read the LISTV\_DisplayHook section of the listviewclass.doc file for more information on this subject.
  - \* Added hook-notification to the baseclass. Please refer to the baseclass.doc file for more information on this subject.
  - \* BUG FIX: Fixed a small bug in the tab-cycling code of the string class. The bug caused non-tabcycling gadgets to notify the event-handler when it was de-activated.
  - \* BUG FIX: The AddEntrySelect() macro was broken.
  - \* Added the LVM\_LOCKLIST and LVM\_UNLOCKLIST methods to the listview class. These methods should have been in there from the beginning to prevent strange results when somebody is fiddling with the listview while you are
-

changing one of it's entries.

- \* **BUG FIX:** While converting a text-editor I'm writing to BGUI I came accross a buch of small bugs bugs in BGUI. These (I shall not list them) should be fixed now.
- \* **BUG FIX:** When using a shared window port for the BGUI windows it would happen that the event handler did not get the initial IDCMP\_ACTIVEWINDOW message because the port is added to the window after it is opened. Now the code will manually activate the window when the WA\_Active tag is TRUE after the port has been added.

## 1.21 bgui.guide/V37.20

V37.20

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- \* Changed the behaviour of the WINDOW\_UniqueID tag when the WINDOW\_PosRelBox tag is also used. Please refer to the WINDOW\_UniqueID section of the windowclass.doc file for more information.
  - \* Added some extra code to ensure that the window sizing-gadget size is computed correctly. This will ensure the correct operation with patches like SysIHack. One note about SysIHack... When using the PGA\_NewLook feature SysIHack renderes the proportional gadget left&and up from the intended location and to big and it ignores the PGA\_Borderless tag. I would report this to the author of SysIHack if only I knew who Mr. BOOPSI was :)
  - \* **BUG FIX:** The progress class now checks frame thickness before filling the indicator.
  - \* **BUG FIX:** Fixed the PACKPENS() macro in bgui\_macros.h. Docs clearly state "packed as two WORDs into a longword" but as it seems it should be two bytes in a word? Am I wrong???
  - \* **BUG FIX:** After testing BGUI on another public screen with a BACKGROUNDPEN different from 0 it came to my attention that BGUI had some problems with this. Now all rendering should occure OK with a different BACKGROUNDPEN than 0. I have fixed the labelclass and vectorclass and added a backfill-hook (WA\_BackFill) to the windowclass to fix these problems.
  - \* Added a pop-up menu option to the cycle class. Also added a couple of new macros to bgui\_macros.h to support this new option. Suggested by Jim Cooper.
  - \* The infoclass does not clip the text anymore when it won't fit. Now it simply renders as much text as will fit in the area.
  - \* Removed the text class completely. It was not a necessary class since the infoclass can do the most important things that the text class could do. The info class even does a better job at it. This also means that I finally got rid of all rastport-clipping.
-

- \* The complete GUI is rendered in a buffer bitmap so that it can be made visible in a single blit. This looks much smoother than rendering visible on-screen. If a buffer cannot be allocated the rendering occurs on-screen.
- \* BUG FIX: It was possible to size an empty group to 0x0 which lead to potentially dangerous situations. I have made all RectFill() that are performed safe which means that the rectangle specified is checked for wierd values.

## 1.22 bgui.guide/V37.21

V37.21

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- \* Changed the imagery of the cycle gadget when it is in Popup mode. It is not the best of imagery but it works. If anybody has a better idea let me know.
  - \* BUG FIX: A window with an ID and positioned relative to a rectangle would be placed wrong if the window was to big for the used font. This does not happen anymore but windows which grow to big for the used font and have to use the fall-back font will not remember it's size.
  - \* BUG FIX: Fixed a big-fat-stupid-lame-bug in the external class. I failed to aply rule number one when writing a BOOPSI dispatcher by not using the \_\_geta4 (\_\_saveds) qualifier. Bug found by Paul Weterings.
  - \* BUG FIX: Using a frame and/or a label on the master-group caused the rendering of this frame and/or label to be overwritten. Bug found by Paul Weterings.
  - \* Changed Xen frame rendering so that you get "rounded" corners. Looks much better.
  - \* Made the LISTV\_Top attribute gettable as it should have been al along.
  - \* BUG FIX: Some IDCMP bits where not accessable with an IDCMP hook. Should be fixed now.
  - \* Added the EXT\_NoRebuild attribute to handle external gadgetclasses which are smart enough to handle a resize themselves. Suggested by Paul Weterings.
  - \* BUG FIX: The stringclass rendered through the active page when it's contents was changed. This also happened when the gadget was not located on the active page. Bug found by Paul Weterings.
  - \* Added a method to the groupclass to insert members at any place into an already existing group. Suggested by Paul Weterings.
  - \* The cycleclass notification (in popup mode) is now delayed until the menu window is closed. Suggested by Paul Weterings.
-

- \* The pageclass now also renders the current page in a buffer before it is shown. Note that this is only true when the page to show is a group. Suggested by Paul Weterings.

## 1.23 bgui.guide/V37.22

V37.22

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- \* BUG FIX: LISTV\_MakeVisible and LISTV\_Select did not make the item visible. Bug found by Paul Weterings.
- \* Added a couple of macros to create non-fixed size checkbox objects. Suggested by Paul Weterings.
- \* Made the WINDOW\_Screen and WINDOW\_PubScreenName settable when the window is closed. Suggested by Paul Weterings.
- \* BUG FIX: The Popup menu of a Popup-Cycle object would not open on the correct screen when the window in which it resided was not located on the default public screen. Bug found by Paul Weterings.
- \* BUG FIX: Erasing the title area of a seperatorclass object did not yield the desired result when the area-pattern of the rastport was not cleared.
- \* BUG FIX: After running tests with memoration it came to my attention that the re-size operations where not working properly if the buffer rastport could not be allocated.

## 1.24 bgui.guide/V37.23

V37.23

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- \* Enhanced listview class scrolling a bit. The old routines had a lot of overhead because they simple re-rendered the complete list even if the top only changed one or two places.
  - \* Switching pages in a pageclass object looks smoother now.
  - \* Most small allocations are now made in memory pools instead of allocating them directly from the system memory pool.
  - \* Changed the operation of the WINDOW\_SigMask, WINDOW\_AppMask and COMM\_SigMask attributes. Instead of OR'ing the mask value to the storage field the mask value is set now.
  - \* Added the WINDOW\_Bounds attribute which can be used to open a window at the place and width the size that you want. Suggested by Paul Weterings.
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- \* Initial Public Beta Release... (30.09.94)

## 1.25 bgui.guide/V37.24

V37.24

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- \* Added the BT\_HelpText and WINDOW\_HelpText attributes to pop a requester with a help text instead of having to use AmigaGuide® for small help. This also results in a new BGUI catalog (version 2).
- \* BUG FIX: BGUI did not recognize language changes. Now each time BGUI needs to access localized strings the catalog is refreshed before actually accessing the strings. This results in the strings always being in the preferred language.
- \* Added the GROUP\_EqualWidth and GROUP\_EqualHeight attributes to make the members of a group all have the same minimum width and or height.
- \* Made the WINDOW\_Bounds attribute settable with OM\_SET. You can set it when the window is closed or opened. Suggested by Paul Weterings.
- \* Initial Public Release (09.10.94)

## 1.26 bgui.guide/V37.25

V37.25

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- \* BUG FIX: Most of the macros in the Amiga E support that called upon BGUI\_DoGadgetMethodA() were broken. Major screwup from my side. Sorry...
  - \* Made the GA\_Disabled tag settable with OM\_SET/OM\_UPDATE on groupclass objects. When set on a groupclass object all members in the group will be disabled/enabled. Suggested by Paul Weterings.
  - \* BUG FIX: The mxclass can now be controlled by the keyboard. Keyboard control of this class is style guide compliant.
  - \* BUG FIX: Sometimes the key message handler of the windowclass could leave a message pending which could result in repeated keys not functioning anymore. Should be fixed now.
  - \* BUG FIX: Manually setting LISTV\_Top with OM\_SET or OM\_UPDATE did not move the scroller along with the list.
  - \* Increased the minimum height of a listview class object.
  - \* The initial public release lacked the presence of the clib/bgui\_protos.h file. Sorry about that.
-

- \* BUG FIX: The MsgInfo in bgui\_macros.[p]ma of the Amiga E support was broken.
- \* BUG FIX: For some strange reason the OS 2.04 propgclass seems to fiddle with the font in the RastPort. This caused the adding of entries in a listview object to give strange results when the system font and screen font differed. Should be fixed now. Bug found by Michael Barsoom.
- \* Added the PAGE\_NoBufferRP and WINDOW\_NoBufferRP attributes. This will allow you to have rendering happen on-screen.
- \* Release 1.0a. Public bug-fix update #1.

## 1.27 bgui.guide/V38.1

V38.1

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- \* Enhanced adding a single entry visibly to a listview object. This used to cause a complete list refresh with every added item. Now only the added entry and the prop are refreshed.
  - \* Separators are rendered slightly different now. Suggested by Magnus Holmgren.
  - \* Added the LISTV\_LastClickedNum attribute which can be used to query the ordinal number of the last selected entry of a listview object.
  - \* Added the WM\_REPORT\_ID method to the windowclass. This method can be used to set return codes from a IDCMP-hook or Verify-hook. The ID's are stacked internally and the next time the windowclass IDCMP handler is called returned to the application one by one.
  - \* Made the VIT\_VectorArray and VIT\_BuiltIn attributes settable on a buttonclass object. Suggested by Paul Weterings.
  - \* BUG FIX: Setting both the GA\_Disabled and CYC\_Active tag on a cycle class object would not change the label visibly.
  - \* Added the LGO\_NoAlign layout attribute to the groupclass which forces the layout engine not to align the object it's hitbox with the others. Suggested by Florian Vorberger.
  - \* Now NULL may be passed with the STRINGA\_TextVal attribute to the stringclass. Normally the system stringclass does not allow this.
  - \* Added the some magic numbers to the LISTV\_Select attribute. Suggested by Michael Barsoom.
  - \* The alignment of the hitboxes in a vertical group sometimes made the total width of the group to large. Should not happen anymore. Bug found by Florian Vorberger.
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- \* Added the LVM\_MOVE method and LISTV\_NewPosition attribute for moving entries in a listview object.
- \* Added the LISTV\_NumEntries attribute for getting the number of entries in a listview object.
- \* Added the LISTV\_Select\_Page\_Up and LISTV\_Select\_Page\_Down magic numbers.
- \* Enhanced the indicatorclass minimum size calculations. The old routine was 100% precise but took ages to complete with a large difference between min & max. It now "guesses" the correct minimum size but is much faster. Reported by several people.
- \* Added keyboard shortcuts for BGUI\_RequestA().
- \* Added the BUTTON\_Image and BUTTON\_Selected image tags to the buttonclass which may be used to add Intuition or BOOPSI imagery to a button object.
- \* Optimized some stuff internally which saved a couple of bytes of the library. Still under the 100000 bytes ;)
- \* Added the WINDOW\_AutoAspect attribute and BREQF\_AUTO\_ASPECT flag to let the windowclass decide whether the objects use thick or thin framing. Suggested by Paul Weterings. Passed the 100000 bytes :(
- \* From now on infoclass command sequences are valid for listviewclass text entries. Also returned strings from a LISTV\_DisplayHook may contain infoclass command sequences.
- \* The format string specified with the INFO\_TextFormat and INDIC\_FormatString attributes may now contain locale.library FormatString() formatting (%) codes. Please note that locale specific formatting codes will only work when the locale.library is available.
- \* Added a screen field to the bguiRequest structure.
- \* Added a Tabber mode for the mxclass. This mode will give you a Tabs-like object which can be used to select pages from a pageclass object.
- \* Release 1.1. Second Public Release.

## 1.28 bgui.guide/V38.2

V38.2

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- \* Shifted numerical gadget keys did not work. Should be fixed now. Bug found by Florian Vorberger.
  - \* Added the LISTV\_MinEntriesShown attribute which can be used to determine the number of entries that should be visible at all times. Suggested by Stan Burton.
  - \* BUG FIX: Setting the CYC\_Active attribute on a cycleclass object when it
-

was not in a window would erase the old label but not set the new one. Bug found by Florian Vorberger.

- \* BUG FIX: AmigaGuide help did not open on the correct screen if the window was not located on the default public screen. Bug found by Zachary A. Forsyth.
- \* BUG FIX: Controlling a Mx object in tabs mode would not cycle through when it reached the end or the beginning like it was supposed to. Also key-activation of an mx object did not generate an event. Bugs found by Johan Eliasson.
- \* BUG FIX: Fixed a rendering bug in the stringclass and one in the cycle class.
- \* BUG FIX: Sometimes a string object could be resized to small. Bug found by Stan Burton.
- \* BUG FIX: Changing the text or arguments of a frameless infoclass object would result in overwriting the old text instead of replacing it. Bug found by several people.
- \* BUG FIX: Again some macros from the E support where broken. Jeezz, maybe I should have tested them all.
- \* Released as bug-fix patch on the mailinglist.

## 1.29 bgui.guide/V38.3

V38.3

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- \* Changed the Amiga E support to require at least version 3.1a of the Amiga E compiler.
  - \* BUG FIX: Tab-cycling should work through pages now. Simply add all string objects with WM\_TABCYCLE\_ORDER and you're done. Reported by Patrick (poseidon@newswire.gun.d).
  - \* BUG FIX: The groupclass could compute the minimum size incorrect. Should be fixed now. Reported by Florian Vorberger.
  - \* BUG FIX: The internal memory allocator screwed up by releasing 4 bytes short of the original allocator. Also the initializing the localization gave mungwall hits. Bugs found by Magne Oestlyngen.
  - \* BUG FIX: The listview class became as slow as a C= 64 diskdrive when scrolling it at the end of a large amount of entries. This should not happen anymore. Bug found by Johan Eliasson.
  - \* Enhanced adding single entries to a listview. Adding with LVAP\_TAIL or LVAP\_HEAD should be considerably faster now.
  - \* BUG FIX: The last enhancement could cause problems when adding the first
-

item. Fixed.

- \* BUG FIX: The layout engine did not read all tags when there where tags specified after adding the members.
- \* Added the PAGE\_Inverted and GROUP\_Inverted tags. These tags are implemented to serve the assembly macro package.
- \* Totally re-written the assembly header bgui\_macros.i. Now it works. Added a small demonstration in the Demo drawer which shows the usage of the bgui.library in assembler. Paul Hamer put me up to this.
- \* BUG FIX: Disabling and enabling a checkbox object ar any object with a EdgesOnly frame should not be a problem anymore. Bug found by several people.
- \* BUG FIX: Again AmigaGuide help did not pop up on the right screen. I fixed for the help attached to the gadget objects but help attached to a window still had this problem. Bug found by Zachary A. Forsyth.
- \* BUG FIX: Opening the library twice in the same task and closing it once would result in a crash when using BGUI after the single close. Bug found by Janna Jalkanen.
- \* BUG FIX: A PROGRESS\_Max equal to PROGRESS\_Min would result in a crash. Bug found by Florian Vorberger.
- \* BUG FIX: Newlines in the arguments of a BGUI\_RequestA() requester resulted in an incorrectly sized requester. Bug found by Janne Jalkanen.
- \* Public bug-fix update #2.

### 1.30 bgui.guide/V38.4

V38.4

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- \* BUG FIX: The way the localization was handler could dereference invalid memory pointers.
- \* BUG FIX: Renamed the "Label" macro from the assembly support to "xLabel" to avoid clashes with the exec/types.i "LABEL" macro. Also the "WindowOpen" macro has been renamed to "xWindowOpen".
- \* Released as 1.1b.

### 1.31 bgui.guide/V38.5

V38.5

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- \* Quirk Fix: Uppercase GadgetKeys() now are converted to lowercase for them to work correctly. Found by Michael Barsoom.
- \* BUG FIX: Fixed a mean bug in the library task code which could cause serious problems when the same task opens the library twice. Bug found by Janne Jalkanen.
- \* Work arround: BGUI should not have any problems with hacks like MagicMenu and CycleToMenu anymore. Included some additional code from Osma Ahvenlampi's "NewObtainGIRPort" patch to the library.
- \* BUG FIX: Replace a couple of NULLs by NIL in the E macros.
- \* BUG FIX: Fixed some font related problems with the cycle gadget. Sometimes the font height was computed wrong.
- \* BUG FIX: In some rare occasions the keyboard handling of objects could get caught in a loop. Should not happen anymore.
- \* BUG FIX: The windowclass did not fall back to topaz 8 or the specified font anymore! Fixing this bug also shed light on another bug in the layout engine. Both bugs fixed. Bug found by Nick Christie.
- \* Quirk fix. It was not possible to add tab-cycle string objects to a window object in stages. Now it is. Found by Paul Weterings.
- \* BUG FIX: Adding the first item to a listview did not show on the screen. Bug found by Emmanuel Doguet.
- \* The rastport pointer passed to the Listview custom rendering hook is cached now.
- \* BUG FIX: Removed a rendering bug in the MX class which screwed up visuals a bit when the object was switched from disabled to enabled state. This was true for the normal MX objects and mx objects in tabs mode. Bug found by Janne Jalkanen.
- \* Added some defines to fix a spelling error in the BGUI headers in which "Separator" was misspelled as "Seperator". Reported by Nick Christie.
- \* BUG FIX: The minimum height of string object with a label was bigger than string objects without a label. Bug found by Emmanuel Doguet.
- \* Released as bug-fix patch on the mailing list.

## 1.32 bgui.guide/V38.6

V38.6

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- \* The window class now makes a private copy of the NewMenu array passed via the WINDOW\_MenuStrip attribute. Suggested by Janne Jalkanen.
-

- \* BUG FIX: String class objects, when located in a tab-cycle order, sent two or even three messages to the windowclass event handler. Bug found by several people.
- \* BUG FIX: Yet another dangerous bug found in the library task-tracking code. Sometimes the semaphore did not get released. Bug found by Zachary A. Forsyth.

### 1.33 bgui.guide/V38.7

V38.7

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- \* BUG FIX: Setting an attribute to a cycleclass object on an invisible page would screw up the display. Should be fixed now. Bug found by Stan Burton.
- \* BUG FIX?: Fixed a bug in the keyboard handling which might be the cause of the fact that sometimes qualifier keys randomly selected objects in a window. Reported by several people.
- \* The stringclass now supplies all buffers for you.

### 1.34 bgui.guide/Future

Future

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This is a list of known bugs and quirks. Please read this before you start sending me bug reports and suggestions.

- BUG = A bug that is still present.
  - SUG = A suggestion which might be implemented in the future.
  - REV = Revision and/or fine-tuning that still needs to be done.
  - MAY = Maybe...
  - \* BUG - The layout engine locks up when, due to a bug or hacking, you re-size a window smaller than it's minimum as decided by BGUI. Reported by Florian Vorberger.
  - \* BUG - The infoclass screws up computing it's minimum dimensions when the last thing in the text is a command sequence. Should not be a real problem since it is bullshit to end a string with a command sequence.
  - \* BUG - With some font italics can screw up the display because the system renders the text a couple of pixels left of the point where it should. Can't seem to find out why this is.
  - \* SUG - A Palette selector class. External? Suggested by Paul Weterings.
  - \* REV - BGUI gadgets on intuition requesters is NOT supported yet.
-

- \* REV - The commodity class could use some cleaning up. I'm not really satisfied with it as it is.
- \* REV - The format of the library and class documentation files suck. I should convert them to "real" autodoc format or amigaguide files.
- \* REV - Error reporting. It's OK that a window failed to open or an object failed to create but it would be nice to know why. Both numeric and textual error descriptions should be made available.
- \* REV - Adding method, conditional and hook notification to the window class to. This will allow notification to happen on the application task instead of the input.device task.
- \* REV - Work on the menus. For now it is not possible to dynamically add items, add notification or help files to the menus. This really sucks.
- \* REV - Try to cut down on the code size. Although, all things considering, BGUI is not excessive in size I'de like to see it smaller.
- \* MAY - Letting the window backfill hook optionally make use of the preferred workbench window backfill pattern or picture.
- \* MAY - Fonts and images in the info class.
- \* MAY - Add a possibility to "snapshot" window sizes to disk. Should this be up to the application programmer? Suggested by Paul Weterings.
- \* MAY - Take the layout engine of BGUI and make a seperate shared/link library out of it. This would result in a +/- 10 KByte shared/link library with the same functionality as the BGUI layout engine. Maybe this will satisfy those people who are always bitching and complaining about GUI engine libraries.

## 1.35 bgui.guide/Thanks To

Thanks To

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## 1.36 bgui.guide/Index

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