Appendix C – Standard Torque GUI Controls

Purpose

This appendix has been created to facilitate scripted creation and use of the standard Torque GUI controls. It is not a complete reference and does not address all methods and members accessible via C++.

Credits

TBD

Common GUI Members (Fields)

Member (Field)	Usage
profile	• This allows you to select a predefined profile for your control. • Profiles are used to provide default field values for controls. • Values you supply in the inspector will over-ride profile defined values. • A value of <NULL> means, "use no profile". • Most profiles are defined int the file: *example\common\ui\defaultProfiles.cs*. • To fine all defined profiles, search for '*new GuiControlProfile*' in all .CS files.
horizSizing	• In short, this field affects re-sizing and re-positioning of controls in relation to resolution. • For a more in-depth examination, see the 'Tech School' chapter on 'Standard Torque GUIs', sub-chapter 'Control Placement'.
vertSizing	• In short, this field affects re-sizing and re-positioning of controls in relation to resolution. • For a more in-depth examination, see the 'Tech School' chapter on 'Standard Torque GUIs', sub-chapter 'Control Placement'.
position	• This value specifies the coordinate of the control's upper-left corner.
extent	• These two values specify the pixel "WIDTH HEIGHT" of the control.
minExtent	• These two values specify the minimum size "WIDTH HEIGHT" of the control. • Some controls provide an alternate/supplemental field that does something similar.
variable	• This field is used to specify the name of a (global) console variable which will be updated with the value of the control. • This field is used in a control-specific way. • I will specify the specific values this variable can take for each control I give details for below.
command	• This field specifies a command(s) to be executed on a specific control action. • This field is used in a control-specific way. • I will specify the specific values this variable can take for each control I give details for below.
altcommand	• This field specifies a command(s) to be executed on a specific control action. • This field is used in a control-specific way. • I will specify the specific values this variable can take for each control I give details for below.

accelerator	• This field specifies the hot-key for this command. See key mappings index.
helpTag	• This is supposed to be the help text that pops up for any control when you hover your mouse over it. • **Help bubbles are not currently implemented.**

Common GUI Methods

First of all, most of the methods below were aquired by using the '*%obj.dump();*' command. You can do this for any kind of object, not just GUI controls. In the list below, I'll give a short description and in some cases, sample usages.

Method	Usage
add()	set.add(obj1,...) Currently only implemented by GuiFrameSetCtrl, and GuiScrollCtrl.
bringToFront()	set.bringToFront(object)
clear()	set.clear()
delete()	obj.delete()
dump()	obj.dump()
getClassName()	obj.getClassName()
getCount()	set.getCount()
getExtent()	ctrl.getExtent()
getGroup()	obj.getGroup()
getHelpPage()	TBD
getId()	obj.getId()
getMinExtent()	ctrl.getMinExtent()
getName()	obj.getName()
getObject()	set.getObject(objIndex)
getPosition()	ctrl.getPosition()
getText()	returns the text of the button.
getType()	obj.getType()
getValue()	ctrl.getValue()
isActive()	ctrl.isActive()
isAwake()	ctrl.isAwake()
isMember()	set.isMember(object)
isVisible()	ctrl.isVisible()
listObjects()	set.listObjects()
makeFirstResponder()	ctrl.makeFirstResponder(value)
performClick()	simulates a button click from script.
pushToBack()	set.pushToBack(object)
remove()	set.remove(obj1,...)
resize()	ctrl.resize(x,y,w,h)
save()	obj.save(fileName, <selectedOnly>)
schedule()	object.schedule(time, command, <arg1...argN>)
setActive()	ctrl.setActive(value)
setName()	obj.setName(newName)
setProfile()	ctrl.setProfile(profileI)
setText()	(string text) - sets the text of the button to the string.
setValue()	ctrl.setValue(value)
setVisible()	ctrl.setVisible(value) xyzabc.

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The Knowns

To date, I have not been able to intuit the purpose of all GUI controls as supplied in the HEAD version of Torque. The following is an organized list of the ones I have figured out. I'll give a screenshot, a short description, a list of Members (Fields) and methods specific to the current control, as well as any interesting notes I might have. For more complete usage and examples, see the Techschool chapter on 'Standard Torque GUI Controls'.

Windows and Containers

GuiWindowCtrl

Description:

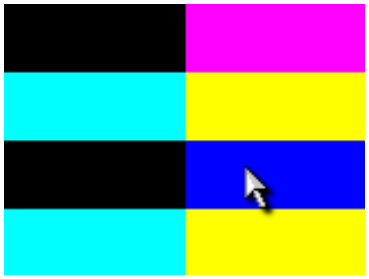
Members (Fields):

- text – Text to print in window handle (at top).
- maxLength – TBD.
- resizeWidth – Enable width resizing.
- resizeHeight – Enable height resizing.
- canMove – Allow window to be moved.
- canClose – Allow window to be closed.
- canMinimize – Allow window to be minimized.
- canMaximize – Allow window to be maximized.
- MinSize – Minimum <x,y> dimensions window can assume.
- closeCommand – Command(s) to issue on close.

Methods:

Notes:

GuiArrayCtrl



Description:

Members (Fields):

- STANDARD ONLY

Methods:

Notes:

GuiControl

NO IMAGE YET

Description:

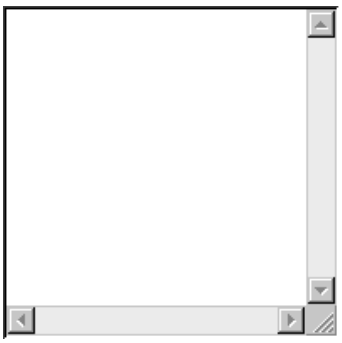
Members (Fields):

Methods:

Notes:

Scrolling Controls and Frames

GuiScrollCtrl



Description:

Members (Fields):

- willFirstRespond – TBD.
- hScrollBar/vScrollBar – Specifies how/when scroll bars are enabled.
  - alwaysOn – Bar is always on.
  - alwaysOff – Bar is always off.
  - Dynamic – Bar is on as necessary.
- constantThumbHeight – TBD.
- childMargin – TBD.

Methods:

Notes:

GuiFrameSetCtrl

NO IMAGE YET

Description:

Members (Fields):

Methods:

Notes:

Buttons

GuiButtonCtrl

Description:

Members (Fields):

- text – Text to display in button.
- groupNum – Whole number used to group sets of buttons.
- buttonType
  - PushButton (default) – Standard single shot button operation.
  - ToggleButton – On/Off value.
  - RadioButton – On/Off value. Only one member of groupNum allowed to be on. (requires use of groupNum field).

Methods:

Notes:

GuiCheckBoxCtrl

Description:

Members (Fields):

- text – Text to display next to checkbox.
- groupNum – Whole number used to group sets of buttons.
- buttonType
  - PushButton (default) – On/Off value. (Standard checkbox behavior.)
  - ToggleButton – On/Off value.
  - RadioButton – On/Off value. Only one member of groupNum allowed to be on. (requires use of groupNum field).

Methods:

Notes:
Q: In PushButton mode, does this button behave like a pushbutton still?

GuiRadioCtrl

Description:

Members (Fields):

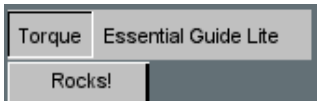
- text – Text to display next to radio circle.
- groupNum (required) – Whole number used to group sets of buttons.
- buttonType
    - PushButton – On/Off value. (Standard checkbox behavior.)
    - ToggleButton – On/Off value.
    - RadioButton (default) – On/Off value. Only one member of groupNum allowed to be on. (requires use of groupNum field).

Methods:

Notes:

Menus

GuiMenuBar



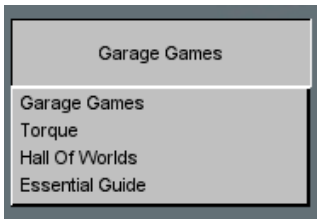
Description:

Members (Fields):
- STANDARD ONLY

Methods:

Notes:

GuiPopupMenuCtrl



Description:

Members (Fields):
- text – Text to display in menu before first selection.
- MaxLength – TBD.
- maxPopupHeight – TBD.

Methods:

Notes:
1. If pop-up list is too close to bottom of parent to display entire list, popup is above button.
2. If pop-up list is too long to display fully in parent, it automatically displays a vertical scrollbar.

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Text

GuiTextCtrl

Description:

Members (Fields):
- text – Text to display.
- MaxLength – TBD.

Methods:

Notes:

GuiTextEditCtrl

Description:

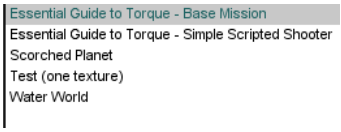
Members (Fields):
- text – Initial value to display.
- maxLength – Max entry length. Limits input to N characters.
- validate – TBD.
- escapeCommand – TBD.
- historySize – TBD.
- password – Display asterisks instead of value.
- tabComplete – TBD.
- deniedSound – TBD.
- sinkAllKeyEvents – TBD.

Methods:

Notes:

Lists and Trees

GuiTextListCtrl



Description:

Members (Fields):

- enumerate – TBD.
- resizeCell – TBD.
- columns – TBD.
- fitParentWidth – Automatically resize horizontally to fit parents width.
- clipColumnText – TBD.

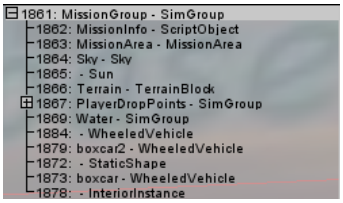
Dynamic Fields

- noDuplicates – TBD.

Methods:

Notes:

GuiTreeViewCtrl



Description:

Members (Fields):

- allowMultipleSelections – Allow user to select multiple entries from tree.
- recurseSets – TBD.

Methods:

Notes:

Sliders and Spinboxes

GuiSliderCtrl

Description:

Members (Fields):

- range – “MIN MAX” Floating point numbers which together define a range for the slider.
- ticks – Number of ticks to display between beginning and ending tick.
- value – Starting value.

Methods:

Notes:

1. Holding **SHIFT** will dragging slider selects closest tick.

GuiTextEditSliderCtrl

Description:

Members (Fields):

- text – Initial floating point value. Defaults to MIN if not specified.
- maxLength – TBD.
- validate – TBD.
- escapeCommand – TBD.
- historySize – TBD.
- password – TBD.
- tabComplete – Display asterisks instead of value.
- deniedSound – TBD.
- sinkAllKeyEvents – TBD.
- format – Numeric format: **TBD**
  %[*Width*] **.** [*Precision*][*Type*]
  - Width – Minimum characters used to represent value.
  - Precision – Maximum characters to use to represent fractional part.
  - Type
- range – “MIN MAX” Floating point numbers which together define a range for control.
-
- increment

Methods:

Notes:

Special

GuiAviBitmapCtrl

NO IMAGE YET

Description:

Members (Fields):

Methods:

Notes:

GuiBitmapBorderCtrl

Description:

Members (Fields):

Methods:

Notes:

GuiBitmapCtrl

Description:

Members (Fields):

- bitmap
- wrap

Methods:

Notes:

GuiChunkedBitmapCtrl

Description:

Members (Fields):
- bitmap
- useVariable
- wrap

Methods:

Notes:

GuiClockHud

Description:

Members (Fields):
- showFill
- showFrame
- fillColor – <R G B A>
- frameColor – <R G B A>
- textColor – <R G B A>

Methods:

Notes:

GuiCrossHairHud

Description:

Members (Fields):
- bitmap
- wrap
- damageFillColor – <R G B A>
- damageFrameColor – <R G B A>
- damageRect – x,y
- damageOffset – x, y

Methods:

Notes:

GuiHealthBarHud

Description:

Members (Fields):
- fillColor – <R G B A>
- frameColor – <R G B A>
- textColor – <R G B A>
- pulseRate – n
- pulseThreshold – n.m
- showFill
- showFrame
- displayEnergy

Dynamic Fields
- value – 0.0 .. 1.0

Methods:

Notes:

GuiFilterCtrl

NO IMAGE YET

Description:

Members (Fields):

Methods:

Notes:

GuiProgressBarCtrl

Description:

Members (Fields):

- STANDARD ONLY

Methods:

Notes:

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The Unknowns

As I mentioned previously, I haven't figured out all the GUI controls. For completeness, the following is a list of the remaining controls (that I've discovered). They are here till I learn enough to use them and give examples on their use.

CreatorTree	
DbgFileView	
DebugView	
EditManager	
EditTSCtrl	Looks like container?
GameTSCtrl	Used for main game window. Can have more than one?
GuiBackgroundCtrl	
GuiBubbleTextCtrl	Seems simple, but doesn't work as expected.
GuiButtonBaseCtrl	Not a far stretch to assume base class for any button, inlcuding user created.
GuiCanvas	Not allowed to create for some reason.
GuiConsole	
GuiConsoleEditCtrl	
GuiConsoleTextCtrl	
GuiControlListPopup	
GuiInputCtrl	Need to understand this
GuiInspector	
GuiMessageVectorCtrl	
GuiMLTextCtrl	Hypertext? Multiline?
GuiMLTextEditCtrl	"
GuiMouseEventCtrl	Need to understand
GuiNoMouseCtrl	Need to understand
GuiPlayerView	Hmmm
GuiShapeNameHud	Huh
GuiTerrPreviewCtrl	
GuiTSCtrl	Looks like a container
MissionAreaEditor	Odd that this is in the list
ShowTSCtrl	For Show tool, but can we use it for other?
TerrainEditor	Doh!
WorldEditor	Double Doh!