

GX Toolbar Customisation

GX V3.3c supports a customisable toolbar where the default button icons and text can be modified at initialisation time via a group of INI file settings and at run-time via two subroutine calls. This note describes the various settings in the [toolbar] section of GX.INI and how icons need to be created for use on the toolbar. Note that some of these features were available prior to GX V3.3c.

The standard toolbar consists of 13 buttons and their actions are (from left to right):

Button Number	Default Text	Action	Notes
1	Function 1	Return UF1 response	
2	Function 2	Return UF2 response	
3	Function 3	Return UF3 response	
4	Next	Return NXT response	
5	Home	Return HME response	
6	Clear	Return CLR response	
7	Enquire	Return ENQ response	
8	Delete	Return DEL response	
9	Insert	Return INS response	
10	Abort	Return ABO response	
13	Filter	Return Filter response	Added for V3.3c
11	Help	Initiate external help or return HLP response	
12	Launch	Start program specified in [programs] section	

In addition to the 13 standard buttons up to 20 extra buttons can be added. The actions performed by these buttons are defined by the Run Menu maintenance program which allows a menu item to be linked with one of the extra toolbar buttons.

[toolbar] settings in the GX.INI file

The following settings are recognised in the [toolbar] section of the GX.INI file:

ButtonWidth

This setting specifies the width (in pixels) to be used for ALL buttons on the toolbar and needs to take account of the longest text description for the buttons. The default value of 60 is sufficient for the default text descriptions.

xxText settings

The following group of settings specify the text description for the buttons:

GX.INI setting	Default	Button number
F1Text	Function 1	1
F2Text	Function 2	2
F3Text	Function 3	3
NextText	Next	4
HomeText	Home	5
ClearText	Clear	6

EnquireText	Enquire	7
DeleteText	Delete	8
InsertText	Insert	9
AbortText	Abort	10
HelpText	Help	11
LaunchText	Launch	12
FilterText	Filter	13
Extra1Text	Extra1	65
Extra2Text	Extra2	66
Extra3Text	Extra3	67
Extra4Text	Extra4	68
Extra5Text	Extra5	69
Extra6Text	Extra6	70
Extra7Text	Extra7	71
Extra8Text	Extra8	72
Extra9Text	Extra9	73
Extra10Text	Extra10	74
Extra11Text	Extra11	75
Extra12Text	Extra12	76
Extra13Text	Extra13	77
Extra14Text	Extra14	78
Extra15Text	Extra15	79
Extra16Text	Extra16	80
Extra17Text	Extra17	81
Extra18Text	Extra18	82
Extra19Text	Extra19	83
Extra20Text	Extra20	84

xxlcon settings

The following group of settings specify the filenames of the icons for the buttons. Each setting specifies two bitmap names as follows:

xxlcon=Standard icon,Hot icon

The standard icon is used for normal toolbar displays and the hot icon is used when the mouse cursor passes over that particular button. This usually requires the hot icon to be more colourful than the standard icon to make the "selected" button stand out. Note that when the toolbar buttons are disabled another greyed out image is displayed but a third icon is not required to be specified since the toolbar control derives the greyed out version from the standard icon. A ".BMP" extension is appended to the bitmap filename if no extension is included in the setting.

There are no defaults for any of these settings but the following table describes the supplied bitmaps which correspond to the internally stored toolbar bitmap.

GX.INI setting	Supplied Bitmap	Button number
F1Icon	F1.BMP, HF1.BMP	1
F2Icon	F2.BMP, HF2.BMP	2
F3Icon	F3.BMP, HF3.BMP	3
NextIcon	NEXT.BMP, HNEXT.BMP	4

HomeIcon	HOME.BMP,HHOME.BMP	5
ClearIcon	CLEAR.BMP,HCLEAR.BMP	6
EnquireIcon	ENQUIRE.BMP,HENQUIRE.BMP	7
DeleteIcon	DELETE.BMP,HDELETE.BMP	8
InsertIcon	INSERT.BMP,HINSERT.BMP	9
AbortIcon	ABORT.BMP,HABORT.BMP	10
HelpIcon	HELP.BMP,HHELP.BMP	11
LaunchIcon	KICKOFF.BMP,HKICKOFF.BMP	12
FilterIcon	FILTER.BMP,HFILTER.BMP	13
Extra1Icon	No default icon available	65
Extra2Icon	No default icon available	66
Extra3Icon	No default icon available	67
Extra4Icon	No default icon available	68
Extra5Icon	No default icon available	69
Extra6Icon	No default icon available	70
Extra7Icon	No default icon available	71
Extra8Icon	No default icon available	72
Extra9Icon	No default icon available	73
Extra10Icon	No default icon available	74
Extra11Icon	No default icon available	75
Extra12Icon	No default icon available	76
Extra13Icon	No default icon available	77
Extra14Icon	No default icon available	78
Extra15Icon	No default icon available	79
Extra16Icon	No default icon available	80
Extra17Icon	No default icon available	81
Extra18Icon	No default icon available	82
Extra19Icon	No default icon available	83
Extra20Icon	No default icon available	84

Note there are no default icons supplied for the extra toolbar buttons.

If an icon is not configured then that button will be removed from the toolbar. Note that once a button is removed, it cannot be restored at run time and any calls which update its text or icon will be ignored. If none of the icons are specified then the internal toolbar bitmap will be used and all 13 buttons will appear. Also, if GX is unable to load **any** of the toolbar icons specified then the internal bitmap will be used.

The internal bitmap only defines icons for the 13 standard buttons. If any extra buttons are required then they **must** be added using the `ExtraNIcon` setting described above.

Iconn settings

This range of settings allow other icons to be specified which can then be selected at run-time via a subroutine call. These settings are configured in the same way as the `xxIcon` settings above:

Iconn=Standard icon,Hot icon

Folder

The `xlcon` and `lconn` settings all rely on specifying filenames for the appropriate bitmaps. The filename can specify a full path name or one relative to the current GX directory. If the `folder` option is used then any non-absolute filename setting will be taken relative to this folder, which allows all toolbar icons to be grouped in a single directory.

Icon bitmaps

All toolbar button bitmaps can be created using a suitable bitmap editor and must conform to a particular standard. They must be standard 16 colour (or 4-bit) bitmaps, 20 pixels wide by 15 pixels deep (the resulting file will therefore be 298 bytes in size). The background must be a mid-grey colour (RGB value 192,192,192) for it to be correctly merged onto the prevailing background colour, i.e. all mid-grey pixels in the bitmap will be effectively transparent. Two bitmaps are required for each button, a normal image and a hot image. Usually they are both use the same basic design but the hot image is more colourful to make the button stand out when it is displayed.

Updating the toolbar at run-time

The toolbar can be modified using two subroutines `GXTBT$` and `GXTBI$`. `GXTBT$` allows the text and button width to be altered and reset, `GXTBI$` allows the icon to be altered and reset. Both subroutines address a standard button via its button number indicated above. To access the extra buttons an index value in the range 1 to 20 must be combined with the #40 bit. For example, an index value of 65 accesses the `EXtra1button`.

Note that `GXTBI$` can only be used if the initial toolbar icons have been customised in the INI file: At least one of the `xlcon` settings must have been set up successfully.

Using the Extra Toolbar Buttons

The 20 extra toolbar buttons can only be used in conjunction with the Run Menu (`$$MENRUN`) established using the `$RUNMAIN` utility. The GSM SP-14 version of `$RUNMAIN` allows a "Toolbar Icon Index" to be associated with a line in the Run Menu. When the extra toolbar button is selected the appropriate program specified in the Run Menu will be launched. The program specified by an extra toolbar button can be either a Global or Windows program.

Example GX.INI file

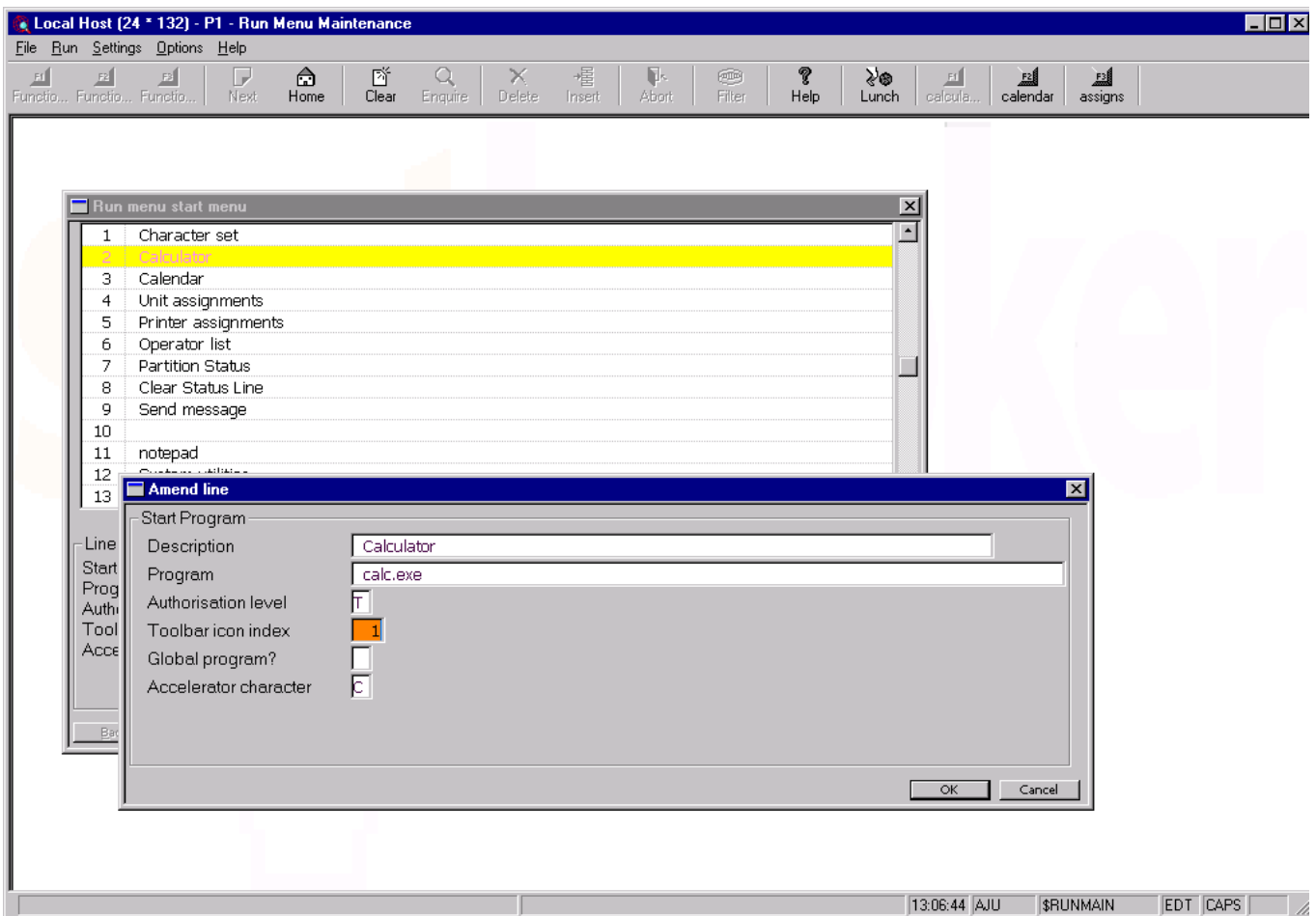
```
[toolbar]
Folder=.\toolbar
ButtonWidth=50
F1Text=Function 1
F2Text=Function 2
F3Text=Function 3
NextText=Next
HomeText=Home
ClearText=Clear
EnquireText=Enquire
DeleteText=Delete
InsertText=Insert
AbortText=Abort
HelpText=Help
LaunchText=Launch
Extra1Text=calculator
Extra2Text=calendar
Extra3Text=assigns
F1Icon=f1,hf1
F2Icon=f2,hf2
F3Icon=f3,hf3
NextIcon=next,hnext
HomeIcon=home,hhome
```

```

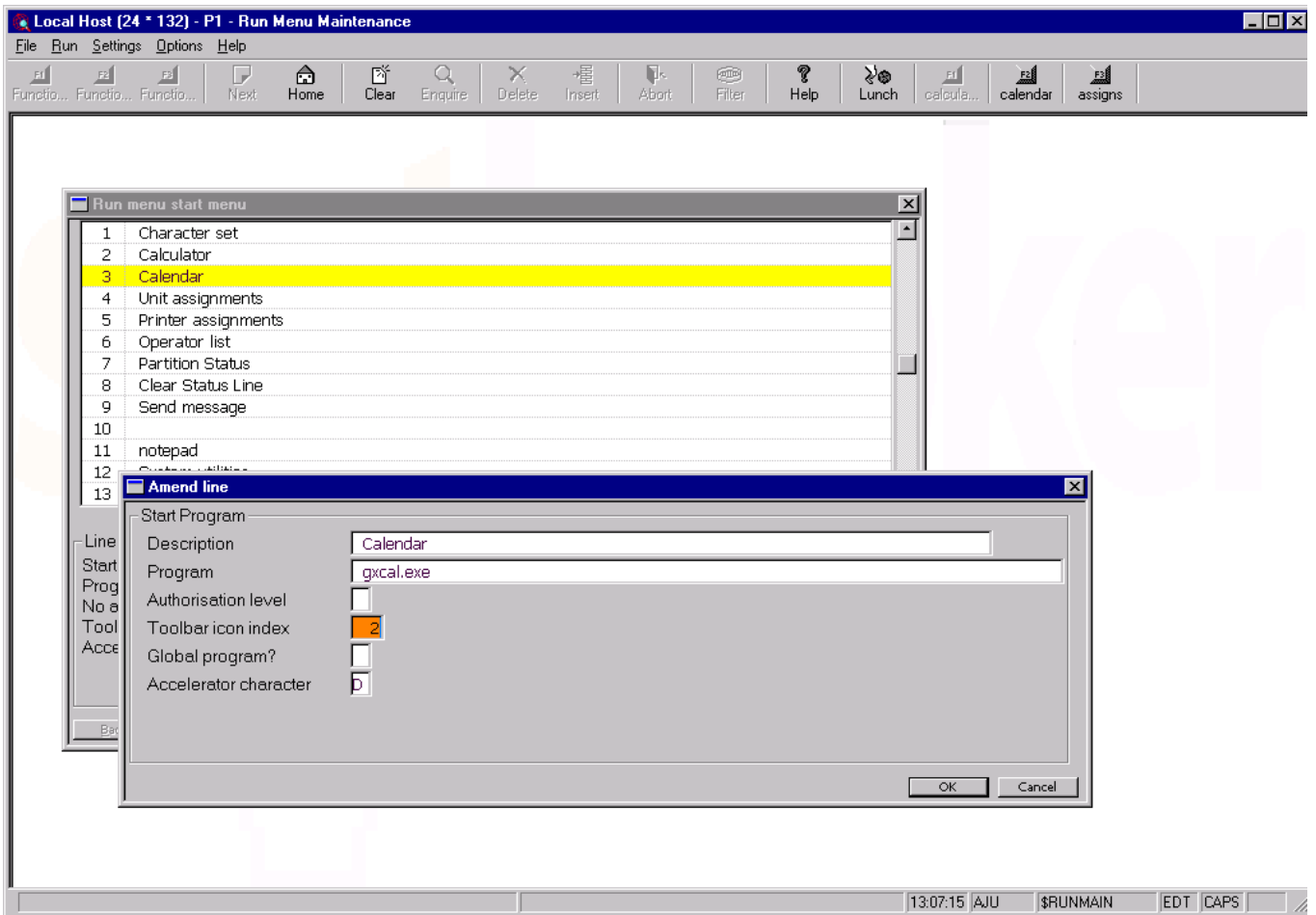
ClearIcon=clear,hclear
EnquireIcon=enquire,henquire
DeleteIcon=delete,hdelete
InsertIcon=insert,hinsert
AbortIcon=abort,habort
HelpIcon=help,hhelp
LaunchIcon=kickoff,hkickoff
FilterIcon=filter,hfilter
;
; Extra user-defined icons
;
Extra1Icon=calc,hcalc
Extra2Icon=calendar,hcalendar
Extra3Icon=assigns,hassigns

```

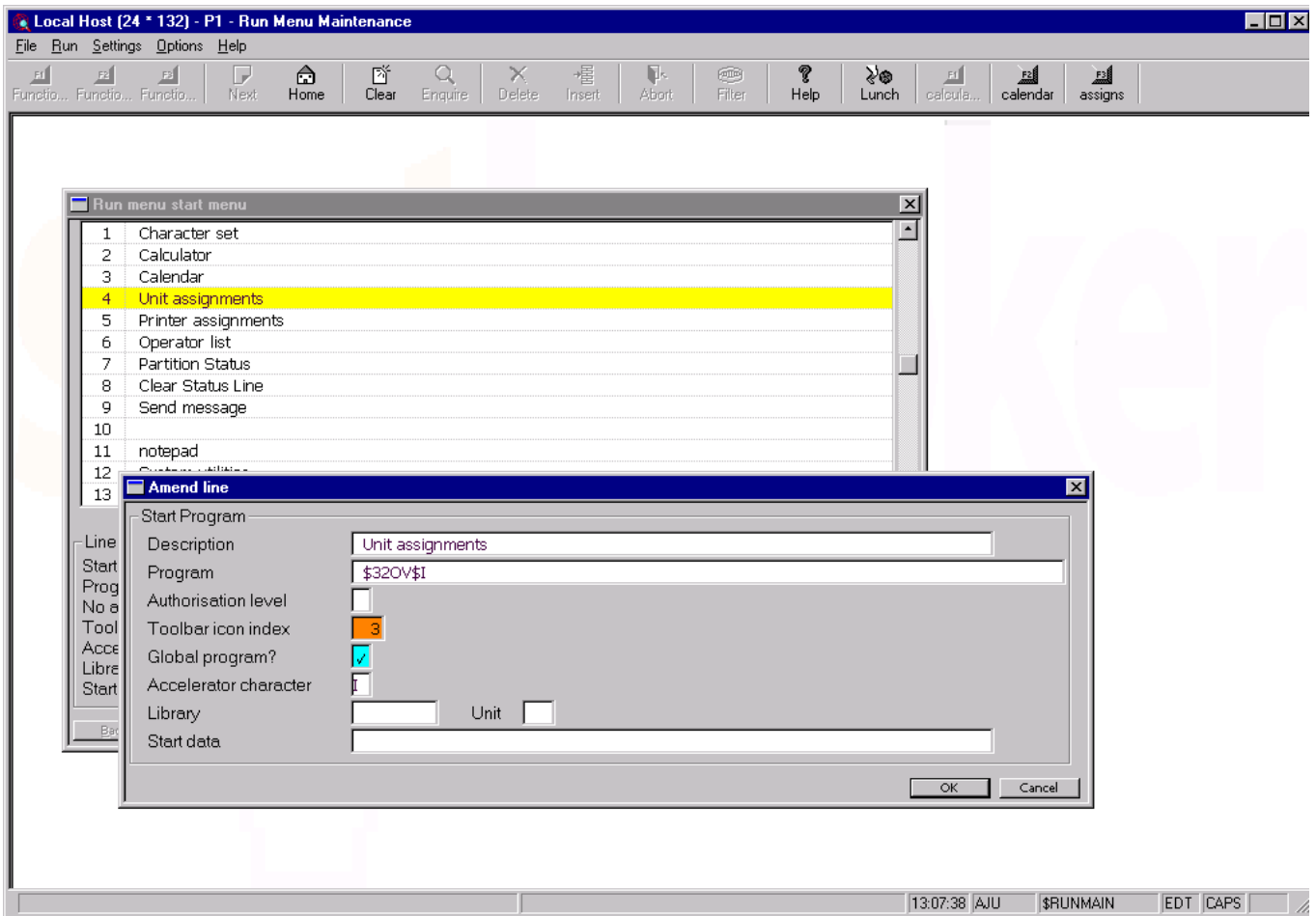
Corresponding Example \$RUNMAIN Screen Shots



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Version Requirements

GX V3.3c

GSM SP-14