

# Intuition

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# Chapter 1

## Intuition

### 1.1 Intuition-related Classes for AmigaTalk© 1998-2002:

Described herein are the classes & their methods for manipulating Amiga-Intuition objects with AmigaTalk. Please be aware that each Class that I've added to AmigaTalk is generic & all-purpose. So there is a lot of methods that you won't have to use all of the time. I would encourage you to write your own subClasses, & just use your own standard Window sizes, Images, BitMaps, etc.

The class hierarchy is:

**Workbench** (parent class is Object) - New for V2.0+

**BasicIFF** (parent class is Object) - New for V1.9+

**ExamineIFF** - New for V1.9+

**Glyph** (parent class is Object)

**GadTools** - New for V1.9+

**NewGadgets** - New for V1.9+

**NewMenus** - New for V1.9+

**Screen**

**Window**

**Menu**

**Gadget**

**Color**

**Requester**

**Border**

**BitMap**

**Painter**

**Image**

**IStruct** -- NOT implemented yet!

**Animation** -- NOT implemented yet!

**Font**

**IText**

**Icon** - New for V1.8+

## 1.2 Workbench Class:

Workbench Class implements the functions that the AmigaOS uses to interface to workbench. Dealings with Icons are performed in

**Icon Class** . Some methods in this Class

use Tags that are located in WorkbenchTags.st

The Methods are:

closeWorkbench

Returns true if the Workbench was closed, false if not.

openWorkbench

Returns true if the Workbench was opened, false if not.

workbenchToBack

Returns true if Workbench was moved, false if not.

workbenchToFront

Returns true if Workbench was moved, false if not.

addAppWindow: windowObj port: msgPort id: id data: userData tags: tagArray

Returns an appWindow Object or nil.

removeAppWindow: appWindowObject

Returns true if the AppWindow was removed or false, if not.

addAppIcon: text port: msgPort id: id data: userData lock: fileLock

icon: diskObj tags: tagArray

Returns an appIcon Object or nil.

removeAppIcon: appIconObject

Returns true if the AppIcon was removed, false if not.

addAppMenuItem: text port: msgPort id: id data: userData tags: tagArray

Returns an appMenuItem Object or nil.

removeAppMenuItem: appMenuItemObject

Returns true if the AppMenuItem was removed, false if not.

workbenchInfo: objName lock: fileLock screen: screenObject

<primitive 209 1 8 private fileLock objName screenObject>

openWorkbenchObject: objName tags: tagArray

Returns true or false.

closeWorkbenchObject: objName tags: tagArray

Returns true or false.

workbenchControl: objName tags: tagArray

Returns true or false.

addAppWindowDropZone: appWindow id: id data: userData tags: tagArray

Returns an appWindowDropZone Object or nil.

removeAppWindowDropZone: appWindow dropZone: appWindowDropZoneObject

Returns true or false.

changeWorkbenchSelection: objName hook: hookObject tags: tagArray

Returns true or false.

makeWorkbenchObjectVisible: objName tags: tagArray

Returns true or false.

### 1.3 BasicIFF Class:

The BasicIFF Class interfaces AmigaTalk to the iffparse.library. See class IDNumbers in IFFConstants.st file for valid ID numbers that identify valid IFF chunks that IFF files & Objects contain.

EXAMPLE: 16r424F4459 is 'BODY'

You should have access to the documentation for iffparse.library (or wait for me to write some examples of how to use this Class ;). I'm NOT going to re-hash the IFF documentation for iffparse.library. The Help directory is getting complicated as it is.

The Methods are:

closeIFF

Dispose of the IFF Object that was in the System.

openIFF: iffFileName type: fileType mode: mode

Open a file that contain IFF object(s). fileType here means:

0 for a file, & 1 for a clipboard. mode is either

#IFFF\_READ, #IFFF\_WRITE or #IFFF\_RWBITS.

initIFFHook: hookObj flags: flags

Add a hook to the IFF object.

initIFFAsDOS

Initialize an IFF object as an AmigaDOS file.

initIFFAsClip

Initialize an IFF object as an AmigaDOS Clipboard.

closeClipboard

Close the previously opened Clipboard.

openClipboard: clipUnitNumber

Open a Clipboard with the given clipUnitNumber. Range for clipUnitNumber is 0 to 255. If you supply an out-of-range

clipUnitNumber, this method will open clip number 0.

parseIFF: mode

Parse the IFF object using the supplied mode. Valid values for mode are:

#IFFPARSE\_SCAN

#IFFPARSE\_STEP

#IFFPARSE\_RAWSTEP

readChunkBytes: byteArray size: numBytes

Read a chunk of bytes from the IFF object into the byteArray that's numBytes in size.

readChunkRecords: byteArray size: numBytes number: numRecords

Read the given number of records (numRecords) into a chunk of bytes from the IFF object into the byteArray that's numBytes in size.

writeChunkBytes: byteArray size: numBytes

Write a chunk of bytes from the byteArray that's numBytes in size to the IFF object.

writeChunkRecords: byteArray size: numBytes number: numRecords

Write the given number of records (numRecords) from a chunk of bytes to the IFF object. The byteArray is numBytes in size.

stopChunk: type id: id

Tell parseIFF: which chunks to stop upon entry into the given chunk.

The most common types are:

#ID\_ILBM, #ID\_FTXT, #ID\_SMUS, #ID\_8SVX, #ID\_ANIM

See IDNumbers Class in IFFConstants.st for id values.

stopChunks: iffObj with: propertyArray size: numPairs

Do a bunch of stopChunk settings at once. The propertyArray is constructed as follows:

```
ele[1] <- type, ele[2] <- id,
```

```
ele[3] <- nextType, ele[4] <- nextid,
```

...

currentChunk

Return the current chunk as an Object.

propertyChunk: type id: id

Tell parseIFF: what chunks this IFF object is supposed to have.

propertyChunks: iffObj with: propertyArray size: numPairs

Do a bunch of propertyChunk settings at once. The propertyArray is constructed as follows:

```
ele[1] <- type, ele[2] <- id,
```

```
ele[3] <- nextType, ele[4] <- nextid,
```

...

findProperty: type id: id

Tell iffparse.library which chunk to find.

collectionChunk: type id: id

Collect ALL instances of a specified chunk.

collectionChunks: iffObj with: propertyArray size: numPairs

Do a bunch of collectionChunk settings at once. The propertyArray is constructed as follows:

ele[1] <- type, ele[2] <- id,

ele[3] <- nextType, ele[4] <- nextid,

...

findCollection: type id: id

Find the collected chunks currently in scope.

stopOnExit: type id: id

Tell iffParse: to stop just before leaving the given chunk.

addEntryHandlerHook: hookObj for: anObject type: type id: id position: pos

Install a custom chunk entry handler that will be invoked after the parser enters the given chunk.

WARNING: If you don't know what this does (I certainly don't!), then DO NOT use it!

addExitHandlerHook: hookObj for: anObject type: type id: id position: pos

Install a custom chunk exit handler that will be invoked before the parser leaves the given chunk.

WARNING: If you don't know what this does (I certainly don't!), then DO NOT use it!

pushChunk: type id: id size: size

Tell iffParse: you are about to begin writing a new chunk.

size can also be #IFFSIZE\_UNKNOWN if you dont know the size, but this is slower than supplying the correct size.

popChunk

When you are through writing data to a chunk, complete the write by using this method. Every call to pushChunk MUST have a corresponding call to this method!

parentChunk

Find the parent of a relevant context node object.

allocateLocalItem: ident type: type id: id size: dataSize

Create a local item having the specified type, id, & ident values; and with dataSize bytes of buffer space for your application to use.

getLocalItemData

---



Obtain a local item buffer Object. Remember that the size of this buffer is what you asked for with `allocateLocalItem:type:id:size:`

`storeLocalItem: position`

Store a local item Object in a context node. The position argument determines where the local item is stored. The possible values are:

`#IFFSLI_ROOT, #IFFSLI_TOP & #IFFSLI_PROP.`

`storeItemInContext`

Use this when you already have a context node Object to which you want to attach a local item Object.

`findPropertyContext`

Find the topmost context Object for `storeLocalItem:`

`findLocalItem: ident type: type id: id`

After you've stored your local item Object in a context node Object, you can retrieve it later with this method.

`freeLocalItem`

Dispose of the local item Object obtained via `allocateLocalItem:type:id:size:`

`setLocalItemPurge: hookObj`

Add a hook that the parser will call before deleting local item(s).

`getErrorString: errorNumber`

Return a String Object that describes the given errorNumber.

`idToString: identifier`

Convert the given 32-bit identifier into a String object. Probably useful someday.

`getPropertySize: propertyObject`

Return an Integer describing the size of the propertyObject.

`getPropertyData: propertyObject`

Return an Integer describing the data location of the propertyObject.

`getCollectionSize: collectionObject`

Return an Integer describing the size of the collectionObject.

`getCollectionData: collectionObject`

Return an Integer describing the data location of the collectionObject.

## 1.4 ExamineIFF Class:

The ExamineIFF Class allows the User to obtain various chunks from an IFF file (NOT clipboards).

Available methods for this class are:

`initialize`

Use this method after: `myIFFExaminer <- ExamineIFF new`

privateObtainChunk: chunkType from: fileName id: chunkID parent: pID

You DO NOT need to use this method!

obtainBMHD: fileName

Return an Integer Object that describes the BitMap Header chunk found in the given fileName.

obtainCMAP: fileName

Return an Integer Object that describes the ColorMap chunk found in the given fileName.

obtainCAMG: fileName

Return an Integer Object that describes the ViewModes chunk found in the given fileName.

obtainPixelData: fileName

Return an Integer Object that describes the Pixel data chunk found in the given fileName.

obtainCHRS: fileName

Return an Integer Object that describes the Text data chunk found in the given fileName.

obtainVHDR: fileName

Return an Integer Object that describes the Voice Header chunk found in the given fileName.

obtainVoiceData: fileName

Return an Integer Object that describes the Voice data chunk found in the given fileName.

## 1.5 Glyph Class:

Class Glyph is an abstract class that serves as a parent class for all Intuition-related classes.

glyphType

Return the receiver class asString. In class Glyph, this method simply returns an error message.

isDisplayed

Return true if the object is being displayed, else return false.

For class Glyph, this method simply returns as error message.

---

## 1.6 GadTools Class:

GadTools class is the Parent class that interfaces AmigaTalk to the gadtools.library in AmigaDOS. Most of the methods in this class do NOT have to be used by the programmer. The methods you should use are:

**drawBoxFrom:** sPoint to: ePoint tags: tagArray

Draw a beveled box in the previously registered window Object.

The tags supplied will say whether it's recessed or not.

**WARNING:** The coordinates you supply are NOT checked against window boundaries!

**windowIs**

Tell subclasses what Window they are attached to.

**registerTo:** aWindowObject

Set the instance variable windowObj to aWindowObject.

This method is usually over-ridden by a subclass.

**visualInfoObject**

Tell subclasses what VisualInfo they have to use.

**freeVisualInfo**

Dispose of the VisualInfo Object. visualInfoObj cannot be used after this unless you perform getVisualInfo:tags: again.

This method is usually called from a subclass.

**getVisualInfo:** screenObj tags: tagArray

Get VisualInfo information from the screenObj supplied & specified by the tagArray. This method is usually called from a subclass.

**xxxWaitForSelection**

Smalltalk code has to call this inside a loop if there is more than one IDCMP event expected. You do NOT need to use beginRefresh or endRefresh around this method. This method will return an Array

Object with two elements:

rval at: 1 -- value of Gadget (Boolean, String, Prop value or an appropriate value from a NewGadget) or Menu String.

rval at: 2 -- Gadget or Menu UserData field.

Subclass methods utilize this method, so you do NOT have to use it.

Methods that the casual (read in-expert) User has no need for:

**beginRefresh**

Internally, this is a call to GT\_BeginRefresh().

**endRefresh:** completeFlag

Internally, this is a call to GT\_EndRefresh().

**getIMsg**

Internally, this is a call to `GT_GetIMsg()`.

`replyIMsg`

Internally, this is a call to `GT_ReplyIMsg()`.

`refreshWindow`

Internally, this is a call to `GT_RefreshWindow()`.

`postFilterIMsg`

Internally, this is a call to `GT_PostFilterIMsg()`.

`filterIMsg`

Internally, this is a call to `GT_FilterIMsg()`.

SEE ALSO, [NewGadgets](#) , [NewMenus](#)

## 1.7 NewGadgets Class:

`NewGadgets` Class is the class that interfaces `AmigaTalk` to the new gadgets portion of `gadtools.library`. The methods for this class are:

`disposeGadgetList: gadgetListObj`

Remove a `gadgetListObj` from `AmigaTalk` memory.

`allocateGadgetList`

Make a `gadgetListObj`.

`createGadgetList`

Initialize a `gadgetList` Object.

`disposeNewGadget: unNeededNewGadgetObj`

You will have to keep track of every `newGadgetObj` returned from `makeNewGadget: &` use this method on ALL of them

(unless you have memory to burn). Once you've called

`addGadgetToList:type:tags:`, a `newGadgetObj` is no longer

needed & perhaps you should use this method after `addGadgetToList:type:tags:`

`makeNewGadget: structureArray`

`structureArray` is an Array Object with the following elements in the given order:

`ele[1] <- ng_LeftEdge, ele[2] <- ng_TopEdge,`

`ele[3] <- ng_Width, ele[4] <- ng_Height,`

`ele[5] <- ng_GadgetText, ele[6] <- ng_TextAttr, (TextAttr can be 0)`

`ele[7] <- ng_GadgetID, ele[8] <- ng_Flags,`

`ele[9] <- ng_VisualInfo, ele[10] <- ng_UserData`

`ele[11] <- NewGadget Type Tag`

`ele[10]` can be any `AmigaTalk` Object (especially useful is a Symbol describing a method to call!).

`newStructArray: initArray`

This method is used to create a `structureArray` for `makeNewGadget`:

Example usage:

```
gType <- intuition getGadgetType: #BUTTON_KIND
```

```
newGadget <- NewGadgets new
```

```
vi <- newGadget visualInfoObject
```

```
newStruct <- newStructArray: #( 10 40 100 20 'My Gadget'
```

```
textAttrObj id myFlags vi userData gType)
```

```
newGadgetObj <- newGadget makeNewGadget: newStruct
```

```
addGadgetToList: gadgetObj type: gType tags: tagArray
```

Add a new Gadget to the `gadgetList` Object.

```
setGadgetAttrs: tagArray
```

Change the attributes (as specified by `tagArray`) of a Gadget.

```
getGadgetAttrs: tagArray
```

Return some attributes (as specified by `tagArray`) of the Gadget.

```
registerTo: aWindowObject
```

Tell the instance of this Class what Window Object to use.

```
waitForGadgetValue
```

Smalltalk code has to call this inside a loop if there is more than one IDCMP event expected. You do NOT need to use `beginRefresh` or `endRefresh` around this method.

Use the returned Object (or copy it) BEFORE using any `waitFor...` method (such as `waitForGadgetUserData` or `waitForMenuString`, etc) again!

```
waitForGadgetUserData
```

Smalltalk code has to call this inside a loop if there is more than one IDCMP event expected. You do NOT need to use `beginRefresh` or `endRefresh` around this method. Any `AmigaTalk` Object is valid as the `UserData` stored in the `NewGadget` (especially useful is a `Symbol` describing a method to call!).

Example:

```
rval <- thisGadget waitForGadgetUserData
```

```
amigatalk perform: rval withArguments: #(onObject parm1 parm2 ...)
```

Use the returned Object (or copy it) BEFORE using any `waitFor...` method (such as `waitForMenuString`, `waitForGadgetValue`, etc) again!

SEE ALSO, [NewMenus](#) , [GadTools](#)

## 1.8 NewMenus Class:

NewMenus Class is the class that interfaces AmigaTalk to the new Menus portion of gadtools.library. Read the Test file in AmigaTalk:TestFiles/TestNewMenu for an example on how to use this Class.

The methods for this Class are:

disposeMenu

Wipe the instance from AmigaTalk memory.

allocateNewMenu: numItems

Allocate an Array of NewMenu objects & place it in newMenuArrayObj.

endOfMenuArray: intuitionObj

Make an Array Object for the #NM\_END NewMenu terminator that's required by gadtools.library.

xxxMakeArray: t k: k f: f x: ex data: data

Do NOT call this method, use the initMenuArray: (etc) methods instead!

initMenuArray: intObj title: title key: commKey flags: flags

exclude: mx data: userData

Make a new Menu structureArray for fillNewMenuItem:with:

initMenuItemArray: intObj title: title key: commKey flags: flags

exclude: mx data: userData

Make a new MenuItem structureArray for fillNewMenuItem:with:

initSubItemArray: intObj title: title key: commKey flags: flags

exclude: mx data: userData

Make a new SubItem structureArray for fillNewMenuItem:with:

initMenuItemArray: intObj title: title key: commKey flags: flags

exclude: mx data: userData

Make a new MenuItem (Image) structureArray for fillNewMenuItem:with:

initSubImageArray: intObj title: title key: commKey flags: flags

exclude: mx data: userData

Make a new SubItem (Image) structureArray for fillNewMenuItem:with:

fillNewMenuItem: itemNumber with: structureArray

structureArray is an Array Object with the following elements

in the given order:

ele[1] <- nm\_Type, ele[2] <- nm\_Label,

ele[3] <- nm\_CommKey, ele[4] <- nm\_Flags,

ele[5] <- nm\_MutualExclude, ele[6] <- nm\_UserData

ele[6] can be any AmigaTalk Object (especially useful is a Symbol describing a method to call!).

NOTE: Use the `initMenuArray:` (etc) methods to create `structureArray`.

`createMenuStrip:` `tagArray`

Create the menu Object that Window Objects can use to display Menus.

This means that you MUST hang onto the return value from this method until you use `windowObj addMenuStrip: yourMenuStrip`

Valid tags for this method are:

`#GTMN_FrontPen` (Pen number for text & separators (default: 0))

`#GTMN_FullMenu` (true or false (default: false))

`#GTMN_NewLookMenus` (true or false)

`#GTMN_CheckMark` (value is an Image Object)

`#GTMN_AmigaKey` (value is an Image Object)

`#GTMN_SecondaryError` (value is an Integer Object)

`initializeMenus:` `tagArray`

This method returns true if successful, false if the menus could NOT be laid-out, nil if there is an error condition.

Valid tags for the method are:

`#GTMN_TextAttr` (value is a TextAttr Object)

`waitForMenuString`

Smalltalk code has to call this inside a loop if there is more than one IDCMP event expected.

Use the returned Object (or copy it) BEFORE using any `waitFor...` method again!

`waitForMenuUserData`

Smalltalk code has to call this inside a loop if there is more than one IDCMP event expected.

Make sure that you use only AmigaTalk Objects as the UserData stored in the NewMenu. This method will return nil if the Menu Item selected was NULL.

Use the returned Object (or copy it) BEFORE using any `waitFor...` method again!

Any AmigaTalk Object is valid as the UserData stored in the NewMenu (especially useful is a Symbol describing a method to call!).

Example:

```
rval <- thisMenu waitForMenuUserData
```

```
amigatalk perform: rval withArguments: #(onObject parm1 parm2 ...)
```

```
registerTo: aWindowObject
```

Tell the instance of this Class what Window Object to use.

`visualInfo`

Ask the Parent Class what the visualInfo Object is. You do NOT need to use this method, it's for other methods in this Class.

SEE ALSO, [NewGadgets](#) , [GadTools](#)

## 1.9 Screen Class:

Class Screen allows the AmigaTalk system to manipulate Amiga screens.

The Methods are:

`new: newScreenModeID`

Create a new Screen Object with the mode of `newScreenModeID`.

NOTE: The order of methods for making a Screen is as follows:

`scr <- Screen new`

`scr setTitle: 'My Screen Title'`

`scr new: screenMode`

or:

`scr <- Screen new`

"Set any Screen parameters in here."

`scr openScreen: screenMode title: 'My Screen Title'`

`openScreen: screenMode title: screenTitle`

Create a new Screen Object with the given `screenMode` & `screenTitle` & open it.

`setScreenModeID: newScreenModeID`

Set the Screen Object's `ModeID` to `newScreenModeID`.

`getScreenModeID`

Return the current `screenModeID`.

`close`

Close the Screen Object.

`pullScreenUp: numLines`

Move a screen up by `numLines` (see `intuition.library`

`function MoveScreen()`). `numLines` has to be  $\leq 0$ .

`pushScreenDown: numLines`

Move a screen down by `numLines` (see `intuition.library`

`function MoveScreen()`). `numLines` has to be  $\geq 0$ .

`redrawScreen`

Re-draw the Screen Object (see `intuition.library` functions

`MakeScreen()` & `RethinkDisplay()`).

`reOpenScreen`

Re-open the screen with any new parameters that were changed by the user, such as a new `screenModeID`, `Depth`, etc.

`displayBeep`

Call the intuition function `DisplayBeep()` for the given screen.

`screenToBack`

Place the given screen behind all other open screens (see



intuition.library function ScreenToBack()).

screenToFront

Place the given screen in front of all other open screens (see intuition.library function ScreenToFront()).

turnOffTitle

Blank out the screenTitle (see intuition.library function ShowTitle()).

showTitle

Enable the screenTitle display (see intuition.library function ShowTitle()).

NOTE: All of the set Parameter methods won't take effect until a call to openScreen: or reOpenScreen is given.

In general, it's best to perform all of the set parameter methods before you open the screen, then a call to reOpenScreen isn't necessary.

setOrigin: aPoint

Set the starting point of the screen to the given point aPoint.

setScreenSize: sizePoint

Set the width & height of the Screen to (sizePoint x) & (sizePoint y) respectively.

setScreenPens: pensPoint

Set the Foreground & Background pens to (pensPoint x) & (pensPoint y) respectively.

setTitle: newTitle

Change the title of the Screen to newTitle.

setDepth: newDepth

Change the number of bit-planes that the screen will use. The depth of a screen determines how many colors it has.

setFont: newFontName

Change the **Font** used to render text in the screen.

setBitMap: newBitMap

Change the bitmap of the given screen.

getOrigin

Return the current value of the LeftEdge & TopEdge of the screen as a Point .

getScreenPens

Return the current value of the foreground & background pens for the screen as a Point .

getFlags

---

Return the current value of the Flags for the screen.

getType

Return the current value of the Type of the screen.

getViewMode

Return the current value of the ViewMode of the screen.

getTitle

Return the current value of the Title of the screen.

getDepth

Return the current value of the Depth of the screen.

getFontName

Return the name of the current **Font** for the screen.

getBitmapName

Return the name of the current bitmap for the screen.

openScreenWithTags: tagArray

Open a screen with the given tagArray Object. Valid tag values for Screens are documented in ScreenTags.st & the ScreenTags class is instantiated by the Intuition Class, located in SetupIntuition.st. You use the getScreenTag: method in Intuition to obtain the correct tag value for a given ScreenTag Symbol from ScreenTags as follows:

```
intuition <- Intuition new
```

```
tag1 <- intuition getScreenTag: #SA_Top
```

```
data1 <- myScreenTopInteger "Usually 0"
```

```
...
```

```
tagArray <- Array new: (howManyTagPairs * 2)
```

```
tagArray at: 1 put: tag1
```

```
tagArray at: 2 put: data1
```

```
...
```

```
myScreen <- openScreenWithTags: tagArray
```

NOTE:

This method assumes you included an SA\_Title tag!

This might seem to be a complicated way to open a screen, but if you make your own subclass of Screen & bury all of this in a method, you only have to write the method once & you can use it over & over (the Data is encapsulated, do I have to teach you Object-Oriented programming too?)

getScreenErrorString: errorNumber

Translate an errorNumber into a String Object

selectAndOpenScreen

Query the User for a Screen title & a ScreenModeID

from the ScreenMode ASL requester & open a new Screen.

## 1.10 Window Class:

Class Window allows the AmigaTalk system to manipulate Amiga windows.

The Methods are:

`new: newWindowTitle`

Create a new Window Object & set the title to `newWindowTitle`.

`openOnScreen: screenObject`

Open a new window on the given screen (`screenObject` is what you get from `screenObject <- Screen new: 16r40D20001` for example).

`close`

Close the given window.

`setPointer: spriteObject size: sizePt offset: offPt`

Change the mouse pointer to the given sprite `spriteObject`.

`sizePt` & `offPt` are Points .

`addGadget: gadgetObject`

Add a `gadgetObject` to the given window.

`setFirstGadget: newGadget`

Change the `FirstGadget` to `newGadget`.

NOTE: Make sure that the `newGadget` is chained to all the other gadgets you want for the window (See `setNextGadget` method for **Gadget** ).

`refreshWindowFrame`

Execute a call to `RefreshWindowFrame()` (see `intuition.library`).

`refreshGadgets`

Execute a call to `RefreshGadgets()` (see `intuition.library`).

`removeGadget: gadgetObject`

Delete a **Gadget** from the Window Object.

`reportMouse: boolvalue`

Turn `reportMouse` events on or off.

`getMouseCoords`

Return the current x & y-coordinates of the mouse position as a Point .

`printIText: iTextObject at: aPoint`

Display the given **IText** structure in the Window at the given Point .

`handleIntuition`

Wait for the user to select a `Gadget` or `MenuItem` from the window.

NOTE: Only `IDCMP_CLOSEWINDOW`, `IDCMP_GADGETUP` & `IDCMP_MENUPICK` events are currently recognized. This method will return the name of

the first Gadget or MenuItem selected by the user.

windowToBack

Place the Window behind all other windows.

windowToFront

Place the Window in front of all other windows.

showRequester: requesterObject

Display the given Requester to the user.

addMenuStrip: menuObject

Display the given menu(s) in the Window.

removeMenuStrip

Remove the current menu strip from the Window.

moveWindow: deltaPoint

Move the Window to the new Point of origin.

infoReq: msg title: t

Display an information Requester to the user.

yesNoReq: msg title: t

Obtain a yes or no response from the user.

getUserChoice: msg title: t choices: bstr

Obtain a choice from the user from the given bstr (Button strings).

Example: 'YES|NO|MAYBE'

setWindowSize: sizePoint

Change the size of the Window to the given values (sizePoint x) & (sizePoint y).

getOrigin

Return the current LeftEdge & TopEdge values for the Window as a Point .

getWindowSize

Return the current Width & Height values for the Window as a Point .

getWindowPens

Return the current foreground & background pen values for the Window as a Point .

getFlags: windowTitle

Return the current Flags value for the given Window.

getIDCMPFlags: windowTitle

Return the current IDCMPFlags value for the given Window.

getTitle: windowTitle

Return the current Title value for the given Window.

changeTitle: newTitle

---

Change the title of the Window to newTitle.

getTitle

Get the title of the **Screen** that the given Window is attached to.

beginRefresh

Execute a call to BeginRefresh() for the Window.

(see intuition.library)

endRefresh

Execute a call to EndRefresh() for the Window.

(see intuition.library)

remakeDisplay

Execute a call to RemakeDisplay() for the Window.

(see intuition.library)

rethinkDisplay

Execute a call to RethinkDisplay() for the Window.

(see intuition.library)

NOTE: All of the set Parameter methods won't take effect until a call to openOnScreen:{UB} is given.

setWindowOrigin: aPoint

Change the LeftEdge & TopEdge of the receiver to the new values.

setWindowPens: pensPoint

Change the foreground & background pens of the receiver to the new values (foreground <- pensPoint x) & (background <- pensPoint y).

setFlags: newFlags

Change the Flags of the Window to the new value.

setIDCMPFlags: windowTitle to: newIDCMP

Change the IDCMPFlags of the Window to the new value.

setMinSize: newMinPoint

Change the MinWidth & MinHeight of the Window to the new values.

setMaxSize: newMaxPoint

Change the MaxWidth & MaxHeight of the Window to the new values.

getReqCount

Return a count of the **Requesters** (reqcount)for the Window.

getPointerSize

Return the width & height of the mouse pointer for the Window as a Point .

setCheckMark: newCheckMark

---

Change the CheckMark Image of the Window to the new value specified by 'newCheckMark', which is an **Image** .

getWindowOffset

Return the current x & y-offset coordinates for the Window as a Point .

setBitMap: newBitMap

Change the **BitMap** of the Window to the new value specified by 'newBitMap'.

changeWindowSize: deltaPoint

Ask Intuition to size the Window the specified amounts.

NOTE: This method is different from setWindowSize:

changeWindowSize: operates on a Window that's open.

## 1.11 Menu Class:

Class Menu allows the AmigaTalk system to manipulate Amiga menus.

Actual display of any Menus are taken care of in the **Window Class** by setMenuStrip & removeMenuStrip.

The Methods for the Menu Class are:

new: newMenuName

Add a menu to the AmigaTalk internal system list.

remove

Remove a Menu from the AmigaTalk internal system list.

registerTo: windowTitle

Inform the AmigaTalk internal system which window is the parent of the Menu.

getStartPoint

Return the LeftEdge & TopEdge of the Menu.

getMenuSize

Return the Width & Height of the Menu.

getFlags

Return the Flags of the Menu.

getNextMenu

Return the name of the NextMenu for the Menu.

getFirstItem

Return the name of the FirstItem for the Menu.

getMenuName

Return the name of the Menu. This is a silly function, since you have to know the name of the menu to use it!

---

setStartPoint: newPoint

Set the LeftEdge & TopEdge of the Menu to the given values.

setMenuSize: sizePoint

Set the Width & Height of the Menu to the given values.

setFlags: newFlags

Set the Flags of the Menu to the given value.

setNextMenu: newNextMenu

Set the NextMenu of the Menu to the given value.

setFirstItem: newFirstItem

Set the FirstItem of the Menu to the given value.

setMenuName: newMenuName

Set the name of the Menu to the new name given.

See Also [MenuItems](#) , [SubItems](#)

## 1.12 MenuItem Class:

Class MenuItem allows the AmigaTalk system to manipulate Amiga MenuItem. Actual display of any Menus are taken care of in the [Window Class](#) by setMenuStrip & removeMenuStrip.

The Methods for the MenuItem Class are:

new: newMenuItemName

Add a MenuItem to the AmigaTalk internal system list.

remove

Remove a MenuItem from the AmigaTalk internal system list.

getStartPoint

Return the LeftEdge & TopEdge of the MenuItem.

getItemSize

Return the Width & Height of the MenuItem.

setStartPoint: newPoint

Set the LeftEdge & TopEdge of the MenuItem to the given values.

setItemSize: sizePoint

Set the Width & Height of the MenuItem to the given values.

getFlags

Return the Flags of the MenuItem.

setFlags: newFlags

Set the Flags of the MenuItem to the given value.

getMutualExclude

Return the MutualExclude value of the MenuItem.

setMutualExclude: newMutualExclude

---

Set the MutualExclude of the MenuItem to the given value.

getCommand

Return the Command (menu key-equivalent) value of the MenuItem.

setCommand: newCommand

Set the Command (menu key-equivalent) of the MenuItem to the given value.

getNextItem

Return the name of the NextItem from the MenuItem.

setNextItem: newNextItem

Set the NextItem of the MenuItem to the given value.

setItemFill: newItemFill

Set the ItemFill ( **IText** or **Image** name) of the MenuItem.

setSelectFill: newSelectFill

Set the SelectFill ( **IText** or **Image** name) of the MenuItem.

setSubItem: newSubItem

Set the SubItem of the MenuItem to the given value.

getSubItem

Return the name of the first SubItem attached to the MenuItem.

getItemFill

Return the name of the ItemFill (either **IText** or **Image** ) from the MenuItem.

getSelectFill

Return the name of the SelectFill (either **IText** or **Image** ) from the MenuItem.

See Also **Menus** , **SubItems**

### 1.13 SubItem Class:

Class SubItem allows the AmigaTalk system to manipulate Amiga Menu SubItems. Actual display of any Menus are taken care of in the **Window Class** by setMenuStrip & removeMenuStrip.

The Methods for the SubItem Class are:

new: newSubItemName

Add a SubItem to the AmigaTalk internal system list.

remove

Remove a SubItem from the AmigaTalk internal system list.

getStartPoint

---



Return the LeftEdge & TopEdge of the SubItem.

getSubSize

Return the Width & Height of the SubItem.

setStartPoint: newPoint

Set the LeftEdge & TopEdge of the SubItem to the given values.

setSubSize: sizePoint

Set the Width & Height of the SubItem to the given values.

getFlags

Return the Flags of the SubItem.

setFlags: newFlags

Set the Flags of the SubItem to the given value.

getMutualExclude

Return the MutualExclude value of the SubItem.

setMutualExclude: newMutualExclude

Set the MutualExclude of the SubItem to the given value.

getCommand

Return the Command (menu key-equivalent) value of the SubItem.

setCommand: newCommand

Set the Command (menu key-equivalent) of the SubItem to the given value.

getNextItem

Return the name of the NextItem from the SubItem.

setNextItem: newNextItem

Set the NextItem of the SubItem to the given value.

setItemFill: newItemFill

Set the ItemFill ( **IText** or **Image** name) of the SubItem.

setSelectFill: newSelectFill

Set the SelectFill ( **IText** or **Image** name) of the SubItem.

getItemFill

Return the name of the ItemFill (either **IText** or **Image** ) from the SubItem.

getSelectFill

Return the name of the SelectFill (either **IText** or **Image** ) from the SubItem.

See Also **Menus** , **MenuItems**

---

## 1.14 Gadget Class:

Class Gadget is an abstract class that serves as a parent class for all Gadget-related classes. The methods it defines are only useful for system-wide purposes:

`gadgetTypeIs: gadgetName`

Return the type of the gadget given by `gadgetName`. The return values are:

`BOOLEAN = 1`

`PORPORTIONAL = 3`

`STRING = 4`

`new: newGadgetName`

Create a new Gadget to the `newGadgetName` & the default type of `BoolGadget`.

SubClasses: `BoolGadget`

`StrGadget`

`PropGadget`

## 1.15 Boolean Gadget Class:

Class `BoolGadget` allows the AmigaTalk system to manipulate Amiga Boolean Gadgets. The Methods are:

`new: newGadgetName`

Add a `BoolGadget` to the AmigaTalk system. This method allocates an internal memory structure to the AmigaTalk system.

`remove`

Remove a `BoolGadget` from the AmigaTalk system.

`registerTo: windowTitle`

Set the name of the gadget's parent to the `windowTitle`.

`setStartPoint: newPoint`

Set the origin of the gadget to the given point value.

`setGadgetSizeTo: sizePoint`

Set the size of the gadget to the given width & height.

`getLeftEdge`

Return the `LeftEdge` value of the `BoolGadget`.

`getTopEdge`

Return the `TopEdge` value of the `BoolGadget`.

`getWidth`

Return the `Width` value of the `BoolGadget`.

---

getHeight

Return the Height value of the BoolGadget.

getFlags

Return the Flags value of the BoolGadget.

getActivation

Return the Activation value of the BoolGadget.

getGadgetType

Return the Type of the BoolGadget.

NOTE: only needed because of GZZGADGET & REQGADGET type flags.

getGadgetID

Return the GadgetID number for the BoolGadget.

getNextGadgetName

Return the name of the NextGadget for the BoolGadget.

getITextName

Return the name of the **IText** attached to the BoolGadget.

getRenderName

Return the name of the gadget rendering ( **IText** or **Image** ) for the BoolGadget.

getSelectName

Return the name of the gadget selection rendering ( **IText** or **Image** ) for the BoolGadget.

setFlags: newFlags

Set the gadget Flags to the new value(s).

setActivation: newActivation

Set the gadget Activation to the new value.

setGadgetType: newGadgetType

Set the gadget Type to the new value.

NOTE: only needed because of GZZGADGET & REQGADGET type flags.

setGadgetID: newGadgetID

Set the GadgetID to the new value.

setNextGadgetName: newNextGadgetName

Set the NextGadget to the Gadget attached to newNextGadgetName.

setITextName: newITextName

Set the **IText** to the new value.

setRenderName: newRenderName

Set the BoolGadget rendering to the name of the **IText** or **Image** supplied.

setSelectName: newSelectName

Set the gadget selection rendering to the name of the **IText** or **Image** supplied.

---

## 1.16 String Gadget Class:

Class StrGadget allows the AmigaTalk system to manipulate Amiga String Gadgets. The Methods are:

new: newGadgetName

Add a StrGadget to the AmigaTalk system. This method allocates an internal memory structure to the AmigaTalk system.

remove

Remove a StrGadget from the AmigaTalk system.

registerTo: windowTitle

Set the name of the StrGadget's parent to the windowTitle.

setStartPoint: newPoint

Set the origin of the StrGadget to the given point value.

setGadgetSize: sizePoint

Set the size of the StrGadget to the given point value.

changeBufferSize: newSize

Change the internal buffer size for the StrGadget.

getBufferSize

Return the size of the StrGadget buffer (in bytes).

getLeftEdge

Return the LeftEdge value of the StrGadget.

getTopEdge

Return the TopEdge value of the StrGadget.

getWidth

Return the Width value of the StrGadget.

getHeight

Return the Height value of the StrGadget.

getFlags

Return the Flags value of the StrGadget.

getActivation

Return the Activation value of the StrGadget.

getGadgetType

Return the Type of the StrGadget.

NOTE: only needed because of GZZGADGET & REQGADGET type flags.

getGadgetID

Return the GadgetID number for the StrGadget.

getNextGadgetName

Return the name of the NextGadget for the StrGadget.

getITextName

---

Return the name of the **IText** attached to the StrGadget.

getRenderName

Return the name of the gadget rendering ( **IText** or **Image** ) for the StrGadget.

getSelectName

Return the name of the gadget selection rendering ( **IText** or **Image** ) for the StrGadget.

setFlags: newFlags

Set the StrGadget Flags to the new value(s).

setActivation: newActivation

Set the StrGadget Activation to the new value.

setGadgetType: newGadgetType

Set the StrGadget Type to the new value.

NOTE: only needed because of GZZGADGET & REQGADGET type flags.

setGadgetID: newGadgetID

Set the GadgetID to the new value.

setNextGadgetName: newNextGadgetName

Set the NextGadget to the Gadget attached to newNextGadgetName.

setITextName: newITextName

Set the @ { "IText " LINK "ITextClass" } to the new value.

setRenderName: newRenderName

Set the StrGadget rendering to the name of the **IText** or **Image** supplied.

setSelectName: newSelectName

Set the StrGadget selection rendering to the name of the **IText** or **Image** supplied.

## 1.17 Proportional Gadget Class:

Class PropGadget allows the AmigaTalk system to manipulate Amiga Proportional Gadgets. The Methods are:

new: gadgetName

Add a PropGadget to the AmigaTalk system. This method allocates an internal memory structure to the AmigaTalk system.

remove

Remove a PropGadget from the AmigaTalk system.

registerTo: windowTitle

Set the name of the PropGadget's parent to the windowTitle.

setStartPoint: newPoint

---

Set the origin of the PropGadget to the given point value.

setGadgetSize: sizePoint

Set the size of the PropGadget to the given width & height.

modifyProps: newFlags hPot: hp vPot: vp hBody: hb vBody: vb

windowName: windowTitle

Change the given porportional values for the PropGadget.

setProps: gadgetName flags: newFlags hPot: hp vPot: vp

hBody: hb vBody: vb

Initialize the porportional gadget values.

getPropFlags

Return the PropFlags value for the PropGadget.

getHPot

Return the HPot value of the PropGadget.

getVPot

Return the VPot value of the PropGadget.

getHBody

Return the HBody value of the PropGadget.

getVBody

Return the VBody value of the PropGadget.

getLeftEdge

Return the LeftEdge value of the PropGadget.

getTopEdge

Return the TopEdge value of the PropGadget.

getWidth

Return the Width value of the PropGadget.

getHeight

Return the Height value of the PropGadget.

getFlags

Return the Flags value of the PropGadget.

getActivation

Return the Activation value of the PropGadget.

getGadgetType

Return the Type of the PropGadget.

NOTE: only needed because of GZZGADGET & REQGADGET type flags.

getGadgetID

Return the GadgetID number for the PropGadget.

getNextGadgetName

Return the name of the NextGadget for the PropGadget.

getITextName

---

Return the name of the @ { " IText " LINK "ITextClass"} attached to the PropGadget.

getRenderName

Return the name of the gadget rendering ( **IText** or **Image** ) for the PropGadget.

getSelectName

Return the name of the gadget selection rendering ( **IText** or **Image** ) for the PropGadget.

setFlags: newFlags

Set the gadget Flags to the new value(s).

setActivation: newActivation

Set the PropGadget Activation to the new value.

setGadgetType: newGadgetType

Set the PropGadget Type to the new value.

NOTE: only needed because of GZZGADGET & REQGADGET type flags.

setGadgetID: newGadgetID

Set the GadgetID to the new value.

setNextGadgetName: newNextGadgetName

Set the NextGadget to the Gadget attached to newNextGadgetName.

setITextName: newITextName

Set the **IText** to the new value.

setRenderName: newRenderName

Set the PropGadget rendering to the name of the **IText** or **Image** supplied.

setSelectName: newSelectName

Set the PropGadget selection rendering to the name of the **IText** or **Image** supplied.

## 1.18 Colors Class:

Class Colors allows the AmigaTalk system to manipulate Amiga Colors.

The Methods are:

make: colorMapName size: numColors

Allocate a new ColorMap.

dispose

Free the given ColorMap from the system.

loadColors: c from: colorMapFileName

Load the amount of color registers c with the values given in the colorMapFileName file.

getColor: sourceType from: sourceName which: n

Return an RGB representation from the given source (window = 1 or colormap) for the nth register.

setWindowColorReg: n red: r green: g blue: b

Set the color register n to the RGB values supplied.

setMapValue: sourceType from: source num: n red: r green: g blue: b

Set the color register n for the given source (window = 1 or colormap) to the RGB values supplied.

copyMap: source to: dest sourceType: type

Copy a ColorMap from the source of sourceType (window = 1 or colormap) to the destination (ColorMap).

saveColorsTo: colorMapFileName

Save the color register values to the given filename.

## 1.19 Requester Class:

Class Requester implements control of Amiga Requesters for AmigaTalk, except for displaying them, which is done inside the [Window](#) class.

The methods are:

initialize: requesterName withArray: reqValues

Initialize a Requester for the AmigaTalk system.

reqValues is an Array with the following fields:

LeftEdge, TopEdge,

Width, Height,

RelLeft, RelTop,

ReqGadget, ReqBorder, ReqText,

Flags BackFill, ImageBMap

new: requesterName

Register a Requester with the AmigaTalk system.

remove

Remove a Requester from the AmigaTalk system.

getStartPoint

Return the LeftEdge & TopEdge of the receiver.

getReqSize

Return the Width & Height of the receiver.

getRelativePoint

Return the RelLeft & RelTop variable of the receiver.

getFlags

Return the Flags variable of the receiver.

getBackFill

---



Return the background pen number of the receiver.

getReqText

Return the name of the **IText** attached to the receiver.

getReqGadget

Return the name of the first Gadget attached to the receiver.

getReqBorder

Return the name of the **Border** attached to the receiver.

getReqBitMap

Return the name of the **BitMap** attached to the receiver.

setStartPoint: newPoint

Change the LeftEdge & TopEdge of the receiver to the supplied values.

setReqSize: sizePoint

Change the Width & Height of the receiver to the values supplied.

setRelativePoint: newRelPoint

Change the RelLeft & RelTop of the receiver to the values given.

NOTE: You should also add the POINTREL value to the Flags of the receiver in order to use this feature.

receiver in order to use this feature.

setFlags: newFlags

Change the Flags of the receiver to newFlags.

setBackFill: newBackFill

Change the background pen number to newBackFill for the receiver.

setReqText: newReqText

Change the **IText** attached to the receiver to newReqText.

setReqBorder: newReqBorder

Change the **Border** attached to the receiver to newReqBorder.

setReqGadget: newReqGadget

Change the **Gadget** attached to the receiver to newReqGadget.

setReqBitMap: newReqBMap

Change the **BitMap** attached to the receiver to newReqBMap.

## 1.20 Alert Class:

Class Alert implements control of Amiga Alerts for the AmigaTalk system.

The message string that the user supplies will be truncated at 128 characters & the alert number will be prepended to it.

new: newAlertName

Add an Alert to the AmigaTalk system.

remove

Remove an Alert from the AmigaTalk system.

getAlertNumber

Return the alert number attached to the receiver.

getAlertHeight

Return the height of the receiver.

getAlertMessage

Return the alert String attached to the receiver.

setAlertNumber: num

Change the alert number of the receiver to num.

setAlertHeight: height

Change the alert height of the receiver to height.

setAlertMessage: newMsg

Change the alert String of the receiver to newMsg.

displayAlert

Display the receiver to the user.

## 1.21 Border Class:

The Class Border (in this implementation) is an abstract class that normally is attached to other objects, such as Gadgets or Requesters.

This is why there is no method for actually drawing borders into

Windows in this Class. See drawPolygon in the Class [Painter](#)

if you need to draw a Border in a [Window](#) .

SubClasses: [Line](#)

[Triangle](#)

[Rectangle](#)

new: newBorderName

Add the receiver to the AmigaTalk system. Initialize the new

Border Object as follows:

name <- newBorderName

nextBorderName <- nil

leftEdge <- 0

topEdge <- 0

frontPen <- 1

backPen <- 0

drawMode <- 1

count <- 2

remove

Remove the receiver from the AmigaTalk system.

registerTo: windowTitle

Set the parent name of the receiver to windowTitle.

getLeftEdge

Return the LeftEdge of the receiver.

getTopEdge

Return the TopEdge of the receiver.

getFrontPen

Return the foreground pen number of the receiver.

getBackPen

Return the background pen number of the receiver.

getDrawMode

Return the drawing mode of the receiver. Currently known values

are:

JAM1 = 0

JAM2 = 1

COMPLEMENT = 2

INVERSEVID = 4

getCount

Return the number of points in the receiver.

getNextBorderName

Return the name of the next Border attached to the receiver.

setStartPoint: sPoint

Change the starting point of the receiver to sPoint.

This method sets LeftEdge & TopEdge.

setFrontPen: newFrontPen

Change the foreground pen number of the receiver.

setBackPen: newBackPen

Change the background pen number of the receiver.

setDrawMode: newDrawMode

Change the drawing mode of the receiver. Currently known values

are:

---

JAM1 = 0

JAM2 = 1

COMPLEMENT = 2

INVERSEVID = 4

setCount: newCount

Change the number of points in the receiver.

setNextBorderName: newBorder

Change the name of the next Border attached to the receiver.

setBorderPoint: thePt to: newPoint

Change the value of a point in the receiver.

## 1.22 Line Class (Border sub-class):

makeLine: lineName from: fPoint to: tPoint

Add a **Border** with two points & register it with the AmigaTalk system.

## 1.23 Triangle Class (Border sub-class):

makeTriangle: triangleName vert1: v1Point vert2: v2Point vert3: v3Point

Add a **Border** with 4 points & register it with the AmigaTalk system.

## 1.24 Rectangle Class (Border sub-class):

makeRectangle: rectangleName from: fPoint to: tPoint

Add a **Border** with 5 points & register it with the AmigaTalk system.

## 1.25 Font Class:

Class Font implements control of Amiga Fonts.

The methods for Font are:

new: newFontName

Add a Font to the AmigaTalk system.

remove

Remove an Font from the AmigaTalk system.

getName

Return the name of the Font.

getYSize

Return the Height of the Font (in pixels - ta\_YSize).

getStyle

---

Return the style (ta\_Style) of the Font such as PLAIN, BOLD, UNDERLINED or ITALIC, etc.

getFlags

Return the Flags of the receiver (ta\_Flags).

setName: newName

Change the name of the Font to newName (ta\_Name <- newName).

This method is probably not really needed.

setSize: newSize

Set the Height of the Font (ta\_YSize <- newSize).

setStyle: newStyle

Change the style of the Font (ta\_Style <- newStyle).

setFlags: newFlags

Change the Flags of the Font (ta\_Flags <- newFlags).

See Also [IText Class](#)

## 1.26 IText Class:

Class IText implements control of Amiga IntuiText except for actually displaying it, which is in the [Window](#) class.

The methods for IText are:

new: newITextName

Add an IText (IntuiText) to the AmigaTalk system.

remove

Remove an IText from the AmigaTalk system.

registerTo: windowTitle

Set the parent name of the receiver to windowTitle.

getFrontPen

Return the foreground pen number of the receiver.

getBackPen

Return the background pen number of the receiver.

getDrawMode

Return the drawing mode of the receiver. Currently known values are:

JAM1 = 0

JAM2 = 1

COMPLEMENT = 2

INVERSEVID = 4

getLeftEdge

Return the LeftEdge of the receiver.

getTopEdge

---

Return the TopEdge of the receiver.

getFontName

Return the name of the rendering font of the receiver.

getIText

Return the String that the the receiver will display.

getNextText

Return the name of the next IntuiText of the receiver.

getTextLength

Return the length (in pixels) of the text of the receiver.

setFrontPen: newFrontPen

Change the foreground pen of the receiver.

setBackPen: newBackPen

Change the background pen of the receiver.

setDrawMode: newDrawMode

Change the drawing mode of the receiver. Currently known values are:

JAM1 = 0

JAM2 = 1

COMPLEMENT = 2

INVERSEVID = 4

setLeftEdge: newLeftEdge

Change the LeftEdge of the receiver.

setTopEdge: newTopEdge

Change the TopEdge of the receiver.

setFontName: newFontName

Change the name of the rendering font of the receiver.

setIText: iTextName to: newIText

Change the text String of the receiver.

setNextText: newNextText

Change the name of the next IText of the receiver.

See Also [Font Class](#)

## 1.27 Icon Class:

Class Icon implements control of Amiga Icons.

The methods for Icon are:

openIcon: iconFileName

Add an Icon to the AmigaTalk system.

new: iconFileName

Same as openIcon: method.

---

closeIcon

Remove an Icon from the AmigaTalk system.

editToolTypes

Display the ToolTypes in a GUI for editing purposes. Not all Icon types have ToolTypes (just Tool & Project icon types).

displayIconInfo

Display a GUI containing information about the Icon.

NOTE: The Icon colors displayed might not be correct (working on it!).

displayIconImages

Display only the Icon images. NOTE: The Icon colors displayed might not be correct (working on it!).

setIconPosition: newPoint

Set the physical screen location of an Icon to newPoint .

moveIcon: deltaPoint

Move the physical screen location of an Icon by deltaPoint .

editIcon: externalEditorName

Invoke the named external Icon editor (such as Sys:Tools/IconEdit), so that you can edit the Icon with the editor of your choosing.

addToolType: toolString

Add a ToolType to the Icon (only Tool & Project Icon types have ToolTypes).

deleteToolType: toolString

Delete a ToolType from the Icon (only Tool & Project Icon types have ToolTypes).

getIconWidth

Return the Width (in pixels) of the Icon.

getIconHeight

Return the Height (in pixels) of the Icon.

getIconFlags

Return the Flags (usually related to Display mode) of the Icon.

^ <primitive 219 12 private>

getIconImagePtr

Return the address (as an Integer) of the Icon Image.

getIconAlternateImagePtr

Return the address (as an Integer) of the Icon alternate Image.

getIconType

Return an Integer representing the type of the Icon. The returned value is decoded as follows:

---

WBDISK = 1, WBDRAWER = 2

WBTOOL = 3, WBPROJECT = 4

WBGARBAGE = 5, WBDEVICE = 6

WBKICK = 7, WBAPPICON = 8

getDefaultTool

Return a String representing the Default Tool of the Icon (only Project & Disk Icon types have Default Tools).

getStackSize

Return an Integer representing the Stack Size of the Icon.

getWindowWidth

Return an Integer representing the Window Width of the Icon. Only Disk, Drawer & Garbage icon types have a valid value for this.

getWindowHeight

Return an Integer representing the Window Height of the Icon. Only Disk, Drawer & Garbage icon types have a valid value for this.

getWindowTopEdge

Return an Integer representing the Window TopEdge of the Icon. Only Disk, Drawer & Garbage icon types have a valid value for this.

getWindowLeftEdge

Return an Integer representing the Window LeftEdge of the Icon. Only Disk, Drawer & Garbage icon types have a valid value for this.

setIconWidth: newWidth

Change the Width of the Icon to newWidth.

WARNING: This method updates the Icon to disk, so do NOT change it unless you're willing (or you have a backup) to live with the consequences.

setIconHeight: newHeight

Change the Height of the Icon to newHeight.

WARNING: This method updates the Icon to disk, so do NOT change it unless you're willing (or you have a backup) to live with the consequences.

setIconFlags: newFlags

Change the Flags of the Icon to newFlags.

WARNING: This method updates the Icon to disk, so do NOT change it unless you're willing (or you have a backup) to live with the consequences.

setIconImage: imageObject

Change the Image of the Icon to **imageObject**.

WARNING: This method updates the Icon to disk, so do NOT change



it unless you're willing (or you have a backup) to live with the consequences.

setIconAlternateImage: imageObject

Change the alternate Image of the Icon to **imageObject** .

WARNING: This method updates the Icon to disk, so do NOT change it unless you're willing (or you have a backup) to live with the consequences.

setIconType: newType

Change the type of the Icon to newType.

WARNING: This method updates the Icon to disk, so do NOT change it unless you're willing (or you have a backup) to live with the consequences.

Valid types are:

WBDISK = 1, WBDRAWER = 2

WBTOOL = 3, WBPROJECT = 4

WBGARBAGE = 5, WBDEVICE = 6

WBKICK = 7, WBAPPICON = 8

setDefaultTool: newDefaultTool

Change the Default Tool of the Icon to newDefaultTool. Only Disk & Project Icon types have a Default Tool.

WARNING: This method updates the Icon to disk, so do NOT change it unless you're willing (or you have a backup) to live with the consequences.

setStackSize: newStackSize

Change the Stack Size of the Icon to newStackSize.

WARNING: This method updates the Icon to disk, so do NOT change it unless you're willing (or you have a backup) to live with the consequences.

setWindowWidth: newWidth

Change the Width of the Icon Window to newWidth. Only Disk, Drawer & Garbage Icon types have Windows.

WARNING: This method updates the Icon to disk, so do NOT change it unless you're willing (or you have a backup) to live with the consequences.

setWindowHeight: newHeight

Change the Height of the Icon Window to newHeight. Only Disk, Drawer & Garbage Icon types have Windows.

WARNING: This method updates the Icon to disk, so do NOT change it unless you're willing (or you have a backup) to live

---

with the consequences.

setWindowTopEdge: newTopEdge

Change the TopEdge of the Icon Window to newTopEdge. Only Disk, Drawer & Garbage Icon types have Windows.

WARNING: This method updates the Icon to disk, so do NOT change it unless you're willing (or you have a backup) to live with the consequences.

setWindowLeftEdge: newLeftEdge

Change the LeftEdge of the Icon Window to newLeftEdge. Only Disk, Drawer & Garbage Icon types have Windows.

WARNING: This method updates the Icon to disk, so do NOT change it unless you're willing (or you have a backup) to live with the consequences.

readInAsciiImage: fileName

The image read in will be placed in the Icon normal Image (icon->do\_Gadget.GadgetRender for you programmers), then the Icon will be written to the file system.

The ASCII image file has the following format:

width, height, depth \n

datum \n datum \n datum \n ... \n<EOF>

Only writeAsciiImage: can create these types of files.

NOTE: This is NOT the same as an **Image** object (or an Intuition Image)!

writeAsciiImage: fileName

Write the normal Icon Image (icon->do\_Gadget.GadgetRender for you programmers) to the fileName in the following format:

width, height, depth\n

datum \n datum \n datum \n ... <EOF>

Only readInAsciiImage: can make use of these types of files.

NOTE: This is NOT the same as an **Image** object (or an Intuition Image)!

See Also **Image Class**

## 1.28 BitMap Class:

Class BitMap implements control of Amiga BitMaps for the Amigatalk system. Valid values for Flags are:

BMB\_CLEAR = 0

BMB\_DISPLAYABLE = 1

---

BMB\_INTERLEAVED = 2

BMB\_STANDARD = 3

BMB\_MINPLANES = 4

new: newBitMapName

Add an instance of a BitMap to the AmigaTalk system.

Default values are as follows:

name <- newBitMapName

width <- 1

height <- 1

depth <- 1

remove

Remove a BitMap from the AmigaTalk system.

getBitMapWidth

Return the width (in pixels) of the receiver.

getBitMapHeight

Return the height (in pixels) of the receiver.

getBitMapFlags

Return the Flags of the receiver.

getBitMapDepth

Return the depth (number of bitplanes) of the receiver.

setBitMapWidth: newWidth

Change the width (in pixels) of the receiver.

setBitMapHeight: newHeight

Change the height (in pixels) of the receiver.

setBitMapFlags: newFlags

Change the Flags of the receiver.

setBitMapDepth: newDepth

Change the depth (number of bitplanes) of the receiver.

readBitMapFile: bitMapFile

Load a BitMap from the given file. The file format is unique to AmigaTalk.

writeBitMapFile: bitMapFile

Save a BitMap to the given file. The file format is unique to AmigaTalk.

---

## 1.29 Painter Class:

Class Painter allows the user to draw simple graphics onto

**Windows** . The methods are:

`new: newOwnerWindow`

Initialize a new instance of Painter by setting the Window that will be used by the Painter.

`setLinePattern: newPatternMask`

Set a pattern to use for drawing lines. For example, if `newPatternMask` is `2r1100110011001100110011001100`, a dashed line will be drawn.

`setAPen: pen`

Change the foreground pen number of the given Window.

`setBPen: pen`

Change the background pen number of the given Window.

`setOPen: pen`

Change the outline pen number of the given Window.

`setDrawMode: mode`

Change the drawing mode of the given Window. Currently known values are:

`JAM1 = 0`

`JAM2 = 1`

`COMPLEMENT = 2`

`INVERSEVID = 4`

`getPens`

Return the foreground pen & the background pen as a Point .

`getOPen`

Return an Integer representing the outline pen color Register number.

`getDrawMode`

Return an Integer representing the drawing mode (See `setDrawMode:`)

`location`

Return the coordinates, where the pen is located, as a Point .

`ownerIs`

Return an Object representing the Window that the Painter is attached to.

`movePenTo: newPoint`

Change the drawing Point (without drawing anything!) on the given Window.

`drawTo: aPoint`

Draw a line from the current Window location to the given point.

drawLineFrom: fPoint to: tPoint

Draw a line from fPoint to tPoint.

drawBoxFrom: fPoint to: tPoint

Draw a box from fPoint to tPoint.

drawCircle: cPoint radius: r

Draw a circle of radius r with center point cPoint.

drawEllipse: cPoint minaxis: a maxaxis: b

Draw an ellipse at center point cPoint.

drawPolygon: borderObject

Draw a **Border** Object.

drawPixelAt: aPoint

Draw a single pixel at the point given.

drawText: iTextObject at: aPoint

Draw an **IText** at the point given.

NOTE: You should set the foreground pen, background pen & the drawing mode before using this method!

initializeArea: numPoints tmpXSize: x tmpYSize: y

You **MUST** use this method **BEFORE** using any of the Area/Filled methods

down to disposeArea:y: (which **MUST** be used after you're done with the Area/Filled method(s). x & y should specify the dimensions of the largest rectangular area that will be drawn.

drawFilledEllipse: cPoint minaxis: a maxaxis: b

Same as drawEllipse:minaxis:maxaxis:, only the ellipse is a solid color.

drawFilledCircle: cPoint radius: r

Same as drawCircle:radius:, only the circle is a solid color.

areaMoveTo: newPoint

Same as movePenTo: method, only for Area/Filled methods.

areaDrawTo: aPoint

Same as drawTo: method, only for Area/Filled methods.

drawFilledBoxFrom: fPoint to: tPoint

This uses the RectFill() function.

floodFill: mode at: aPoint

If mode is 0 (outline mode), every pixel surrounding aPoint that is NOT the outline Pen color will be changed to the flood Pen color (or flood pattern). If the mode is 1 (color mode), whatever the color is at aPoint and all surrounding pixels of the same color will be flood-filled (or patterned).

areaEnd

Complete the Area/Filled polygons. Use this after

---

areaDrawTo:, drawFilledEllipse:minaxis:maxaxis:,  
& drawFilledCircle:radius: only.

setAreaPattern: patternWords size: size

Similar to setLinePattern:

patternWords is a ByteArray that is divisible by two. Each pair of bytes in patternWords is interpreted as a UWORD value.

size is a power of two, indicating how tall the pattern is,

which means that the number of elements in patternWords must be  $2 * 2^{\text{size}}$ .

(example: 0 = two ByteArray elements (1 line),

1 = four elements (2 lines),

2 = 4 lines, 3 = 8 lines, 4 = 16, etc). No checking is done,

so get it right (or write your own method!).

outlineOff

Turn off usage of the outline Pen. Part of the Area/Filled methods.

outlineOn

Turn on usage of the outline Pen. Part of the Area/Filled methods.

disposeArea: xSize y: ySize

xSize & ySize MUST be the same dimensions that were used in the initializeArea:tmpXSize:tmpYSize: method.

### 1.30 Image Class:

Class Image allows the user to draw Amiga Images

onto **Windows** . The methods are:

ownerIs

Return the **Window** object that contains the Image.

registerTo: windowObject

Set the parent Object of the receiver Image to windowObject.

disposeImage

Remove an Image from the AmigaTalk system.

drawImageAt: aPoint

Display an Image at the given aPoint coordinates.

drawImageAt: aPoint inState: state

Same as drawImageAt: except that the state of the Image can be specified. Valid values for state are:

0 = IDS\_NORMAL: // same as drawImageAt:

1 = IDS\_SELECTED: // represents the 'selected state' of a Gadget

2 = IDS\_DISABLED: // the 'ghosted state' of a gadget

3 = IDS\_BUSY: // for future functionality  
4 = IDS\_INDETERMINATE: // for future functionality  
5 = IDS\_INACTIVENORMAL: // for gadgets in window border  
6 = IDS\_INACTIVSESELECTED: // for gadgets in window border  
7 = IDS\_INACTIVEDISABLED: // for gadgets in window border  
8 = IDS\_SELECTEDDISABLED: // disabled and selected

pointInImage: testPoint  
If the testPoint is inside the Image boundaries, return true.

eraseImageStartingAt: aPoint  
Erase part or ALL of an Image.

setImageDataFrom: imageFile  
Load Image data from the given file.

getStartPoint  
Return the LeftEdge & TopEdge of the receiver as a Point .

getImageSize  
Return the Width & Height of the receiver as a Point .

getImageDepth  
Return the Depth of the receiver.

getImagePlanePick  
Return the PlanePick variable of the receiver.

getImagePlaneOnOff  
Return the PlaneOnOff variable of the receiver.

getNextImage  
Return the next Image Object in the receiver.

setOrigin: aPoint  
Set the LeftEdge & TopEdge of the receiver to the Point given.

setExtent: sizePoint  
Set the Width & Height of the receiver to the Point given.

setImageDepth: newDepth  
Set the Depth (range: 1 to 8) of the receiver.

setImagePlanePick: pp  
Set the PlanePick variable of the receiver.

setImagePlaneOnOff: po  
Set the PlaneOnOff variable of the receiver.

setNextImage: nextImage  
Set the next Image Object in the receiver.

grabImageFrom: windowObj startPoint: s endPoint: e  
Initialize the receiver data from the Window Object's display from the given coordinates. WARNING: Make sure that the receiver

---

has enough room before you use this method. No checks for overflowing the internal memory area can be performed!

getImageObject

Return an Image Object that represents the Receiver.

addImage: width height: h depth: d

Initialize the receiver Object. Use this method after:

```
myImage <- Image new
```

### 1.31 IStruct Class:

Not Implemented yet!

Class IStruct allows access to various Amiga OS structures used by Intuition. These are:

ViewPorts

Views

PlayFields

RastPorts

RasInfo

Blitter

Copper

### 1.32 Animation Class:

Not Implemented yet!

Class Anim

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