Guile-GNOME: Atk

version 2.16.2, updated 9 December 2011

Bill Haneman
Marc Mulcahy
Padraig O'Briain

This manual is for `(gnome atk)` (version 2.16.2, updated 9 December 2011)

Short Contents

1 Overview 1
2 AtkAction 2
3 AtkComponent 4
4 AtkDocument 8
5 AtkEditableText 10
6 AtkGObjectAccessible 12
7 AtkHyperlinkImpl 13
8 AtkHyperlink 14
9 AtkHypertext 17
10 AtkImage 18
11 AtkNoOpObjectFactory 20
12 AtkNoOpObject 21
13 AtkObjectFactory 22
14 AtkObject 23
15 AtkRegistry 29
16 AtkRelationSet 31
17 AtkRelation 33
18 AtkSelection 35
19 AtkStateSet 37
20 AtkState 39
21 AtkStreamableContent 40
22 AtkTable 42
23 AtkText 49
24 AtkUtil 57
25 AtkValue 59
26 Undocumented 61
Type Index 62
Function Index 63

1 Overview

`(gnome atk)` wraps the Accessibility Toolkit (ATK) for Guile. It is a part of Guile-GNOME.

ATK is a technology to allow user interface elements to be traversable, readable, and writable by users that do not use the traditional combination of keyboard, screen, and mouse. This encompasses screen readers, text-to-speech, braille displays, etc.

Technically, ATK is implemented as a set of GObject interfaces that can be implemented by user interface toolkits. This is transparently translated into multiple inheritance on the Scheme level; if a class derives from `<atk-hyperlink>`, then the `<atk-hyperlink>` methods will apply to it.

The GTK+ toolkit interfaces with ATK via the `gtk-widget-get-accessible` method.

See the documentation for `(gnome gobject)` for more information on Guile-GNOME.

2 AtkAction

The ATK interface provided by UI components which the user can activate/interact with,

2.1 Overview

`<atk-action>` should be implemented by instances of `<atk-object>` classes with which the user can interact directly, i.e. buttons, checkboxes, scrollbars, e.g. components which are not "passive" providers of UI information.

Exceptions: when the user interaction is already covered by another appropriate interface such as `<atk-editable-text>` (insert/delete test, etc.) or `<atk-value>` (set value) then these actions should not be exposed by `<atk-action>` as well.

Also note that the `<atk-action>` API is limited in that parameters may not be passed to the object being activated; thus the action must be self-contained and specifiable via only a single "verb". Concrete examples include "press", "release", "click" for buttons, "drag" (meaning initiate drag) and "drop" for drag sources and drop targets, etc.

Though most UI interactions on components should be invocable via keyboard as well as mouse, there will generally be a close mapping between "mouse actions" that are possible on a component and the AtkActions. Where mouse and keyboard actions are redundant in effect, `<atk-action>` should expose only one action rather than exposing redundant actions if possible. By convention we have been using "mouse centric" terminology for `<atk-action>` names.

2.2 Usage

`<atk-action>` [Class]

Derives from `<ginterface>`.

This class defines no direct slots.

`atk-action-do-action` (*self* `<atk-action>`) (*i* `int`) ⇒ (*ret* `bool`) [Function]
`do-action` [Method]

Perform the specified action on the object.

action a `<gobject>` instance that implements AtkActionIface

i the action index corresponding to the action to be performed

ret '`#t`' if success, '`#f`' otherwise

`atk-action-get-n-actions` (*self* `<atk-action>`) ⇒ (*ret* `int`) [Function]
`get-n-actions` [Method]

Gets the number of accessible actions available on the object. If there are more than one, the first one is considered the "default" action of the object.

action a `<gobject>` instance that implements AtkActionIface

ret a the number of actions, or 0 if *action* does not implement this interface.

`atk-action-get-description` (*self* `<atk-action>`) (*i* `int`) ⇒ (*ret* `mchars`) [Function]
`get-description` [Method]

Returns a description of the specified action of the object.

action a `<gobject>` instance that implements AtkActionIface

i the action index corresponding to the action to be performed

ret a description string, or '`#f`' if *action* does not implement this interface.

`atk-action-get-name` (*self* `<atk-action>`) (*i* `int`) ⇒ (*ret* `mchars`) [Function]
`get-name` [Method]

Returns the name of the specified action of the object.

action a `<gobject>` instance that implements AtkActionIface

i the action index corresponding to the action to be performed

ret a name string, or '`#f`' if *action* does not implement this interface.

`atk-action-get-localized-name` (*self* `<atk-action>`) (*i* `int`) ⇒ (*ret* `mchars`) [Function]
`get-localized-name` [Method]

Returns the localized name of the specified action of the object.

action a `<gobject>` instance that implements AtkActionIface

i the action index corresponding to the action to be performed

ret a name string, or '`#f`' if *action* does not implement this interface.

`atk-action-get-keybinding` (*self* `<atk-action>`) (*i* `int`) ⇒ (*ret* `mchars`) [Function]
`get-keybinding` [Method]

Returns a keybinding associated with this action, if one exists.

action a `<gobject>` instance that implements AtkActionIface

i the action index corresponding to the action to be performed

ret a string representing the keybinding, or '`#f`' if there is no keybinding for this action.

`atk-action-set-description` (*self* `<atk-action>`) (*i* `int`) (*desc* `mchars`) ⇒ (*ret* `bool`) [Function]
`set-description` [Method]

Sets a description of the specified action of the object.

action a `<gobject>` instance that implements AtkActionIface

i the action index corresponding to the action to be performed

desc the description to be assigned to this action

ret a gboolean representing if the description was successfully set;

3 AtkComponent

The ATK interface provided by UI components which occupy a physical area on the screen.

3.1 Overview

`<atk-component>` should be implemented by most if not all UI elements with an actual on-screen presence, i.e. components which can be said to have a screen-coordinate bounding box. Virtually all widgets will need to have `<atk-component>` implementations provided for their corresponding `<atk-object>` class. In short, only UI elements which are *not* GUI elements will omit this ATK interface.

A possible exception might be textual information with a transparent background, in which case text glyph bounding box information is provided by `<atk-text>`.

3.2 Usage

`<atk-component>` [Class]

Derives from `<ginterface>`.

This class defines no direct slots.

`bounds-changed` (*arg0* `<atk-rectangle>`) [Signal on `<atk-component>`]

The 'bounds-changed" signal is emitted when the bposition or size of the a component changes.

`atk-component-contains` (*self* `<atk-component>`) (*x* `int`) (*y* `int`) [Function]
(*coord_type* `<atk-coord-type>`) ⇒ (*ret* `bool`)

`contains` [Method]

Checks whether the specified point is within the extent of the *component*.

component
: the `<atk-component>`

x
: x coordinate

y
: y coordinate

coord-type
: specifies whether the coordinates are relative to the screen or to the components top level window

ret
: '`#t`' or '`#f`' indicating whether the specified point is within the extent of the *component* or not

`atk-component-get-extents` (*self* `<atk-component>`) [Function]
(*coord_type* `<atk-coord-type>`) ⇒ (*x* `int`) (*y* `int`) (*width* `int`)
(*height* `int`)

`get-extents` [Method]

Gets the rectangle which gives the extent of the *component*.

component
: an `<atk-component>`

x address of `<gint>` to put x coordinate

y address of `<gint>` to put y coordinate

width address of `<gint>` to put width

height address of `<gint>` to put height

coord-type
specifies whether the coordinates are relative to the screen or to the components top level window

`atk-component-get-layer` (*self* `<atk-component>`) [Function]
⇒ (*ret* `<atk-layer>`)

`get-layer` [Method]

Gets the layer of the component.

component
an `<atk-component>`

ret an `<atk-layer>` which is the layer of the component

`atk-component-get-mdi-zorder` (*self* `<atk-component>`) [Function]
⇒ (*ret* `int`)

`get-mdi-zorder` [Method]

Gets the zorder of the component. The value G_MININT will be returned if the layer of the component is not ATK_LAYER_MDI or ATK_LAYER_WINDOW.

component
an `<atk-component>`

ret a gint which is the zorder of the component, i.e. the depth at which the component is shown in relation to other components in the same container.

`atk-component-get-position` (*self* `<atk-component>`) [Function]
(*coord_type* `<atk-coord-type>`) ⇒ (*x* `int`) (*y* `int`)

`get-position` [Method]

Gets the position of *component* in the form of a point specifying *component*'s top-left corner.

component
an `<atk-component>`

x address of `<gint>` to put x coordinate position

y address of `<gint>` to put y coordinate position

coord-type
specifies whether the coordinates are relative to the screen or to the components top level window

`atk-component-get-size` (*self* `<atk-component>`) ⇒ (*width* `int`) [Function]
(*height* `int`)

`get-size` [Method]

Gets the size of the *component* in terms of width and height.

component
an `<atk-component>`

width address of `<gint>` to put width of *component*

height address of `<gint>` to put height of *component*

`atk-component-grab-focus` (*self* `<atk-component>`) ⇒ (*ret* `bool`) [Function]
`grab-focus` [Method]
Grabs focus for this *component*.

component
an `<atk-component>`

ret '`#t`' if successful, '`#f`' otherwise.

`atk-component-set-extents` (*self* `<atk-component>`) (*x* `int`) (*y* `int`) (*width* `int`) (*height* `int`) (*coord_type* `<atk-coord-type>`) ⇒ (*ret* `bool`) [Function]
`set-extents` [Method]
Sets the extents of *component*.

component
an `<atk-component>`

x x coordinate

y y coordinate

width width to set for *component*

height height to set for *component*

coord-type
specifies whether the coordinates are relative to the screen or to the components top level window

ret '`#t`' or '`#f`' whether the extents were set or not

`atk-component-set-position` (*self* `<atk-component>`) (*x* `int`) (*y* `int`) (*coord_type* `<atk-coord-type>`) ⇒ (*ret* `bool`) [Function]
`set-position` [Method]
Sets the postition of *component*.

component
an `<atk-component>`

x x coordinate

y y coordinate

coord-type
specifies whether the coordinates are relative to the screen or to the components top level window

ret '`#t`' or '`#f`' whether or not the position was set or not

`atk-component-set-size` (*self* `<atk-component>`) (*width* `int`) (*height* `int`) ⇒ (*ret* `bool`) [Function]

`set-size` [Method]

Set the size of the *component* in terms of width and height.

component an `<atk-component>`

width width to set for *component*

height height to set for *component*

ret '`#t`' or '`#f`' whether the size was set or not

`atk-component-get-alpha` (*self* `<atk-component>`) ⇒ (*ret* `double`) [Function]

`get-alpha` [Method]

Returns the alpha value (i.e. the opacity) for this *component*, on a scale from 0 (fully transparent) to 1.0 (fully opaque).

component an `<atk-component>`

ret An alpha value from 0 to 1.0, inclusive.

Since ATK 1.12

4 AtkDocument

The ATK interface which represents the toplevel container for document content.

4.1 Overview

The AtkDocument interface should be supported by any object whose content is a representation or view of a document. The AtkDocument interface should appear on the toplevel container for the document content; however AtkDocument instances may be nested (i.e. an AtkDocument may be a descendant of another AtkDocument) in those cases where one document contains "embedded content" which can reasonably be considered a document in its own right.

4.2 Usage

`<atk-document>` [Class]

Derives from `<ginterface>`.

This class defines no direct slots.

`load-complete` [Signal on `<atk-document>`]

The 'load-complete' signal is emitted when a pending load of a static document has completed. This signal is to be expected by ATK clients if and when AtkDocument implementors expose ATK_STATE_BUSY. If the state of an AtkObject which implements AtkDocument does not include ATK_STATE_BUSY, it should be safe for clients to assume that the AtkDocument's static contents are fully loaded into the container. (Dynamic document contents should be exposed via other signals.)

`reload` [Signal on `<atk-document>`]

The 'reload' signal is emitted when the contents of a document is refreshed from its source. Once 'reload' has been emitted, a matching 'load-complete' or 'load-stopped' signal should follow, which clients may await before interrogating ATK for the latest document content.

`load-stopped` [Signal on `<atk-document>`]

The 'load-stopped' signal is emitted when a pending load of document contents is cancelled, paused, or otherwise interrupted by the user or application logic. It should not however be emitted while waiting for a resource (for instance while blocking on a file or network read) unless a user-significant timeout has occurred.

`atk-document-get-document-type` (*self* `<atk-document>`) [Function]
⇒ (*ret* `mchars`)

`get-document-type` [Method]

Gets a string indicating the document type.

document a `<gobject>` instance that implements AtkDocumentIface

ret a string indicating the document type

`atk-document-get-attribute-value` (*self* `<atk-document>`) [Function]
(*attribute_name* `mchars`) ⇒ (*ret* `mchars`)
`get-attribute-value` [Method]

Returns:

document a `<gobject>` instance that implements AtkDocumentIface

attribute-name
a character string representing the name of the attribute whose value is being queried.

ret a string value associated with the named attribute for this document, or NULL if a value for `<attribute-name>` has not been specified for this document.

Since ATK 1.12

`atk-document-set-attribute-value` (*self* `<atk-document>`) [Function]
(*attribute_name* `mchars`) (*attribute_value* `mchars`) ⇒ (*ret* `bool`)
`set-attribute-value` [Method]

Returns:

document a `<gobject>` instance that implements AtkDocumentIface

attribute-name
a character string representing the name of the attribute whose value is being set.

attribute-value
a string value to be associated with `<attribute-name>`.

ret TRUE if `<value>` is successfully associated with `<attribute-name>` for this document, FALSE otherwise (e.g. if the document does not allow the attribute to be modified).

Since ATK 1.12

`atk-document-get-locale` (*self* `<atk-document>`) ⇒ (*ret* `mchars`) [Function]
`get-locale` [Method]

Gets a UTF-8 string indicating the POSIX-style LC_MESSAGES locale of the content of this document instance. Individual text substrings or images within this document may have a different locale, see atk_text_get_attributes and atk_image_get_image_locale.

document a `<gobject>` instance that implements AtkDocumentIface

ret a UTF-8 string indicating the POSIX-style LC_MESSAGES locale of the document content as a whole, or NULL if the document content does not specify a locale.

5 AtkEditableText

The ATK interface implemented by components containing user-editable text content.

5.1 Overview

`<atk-editable-text>` should be implemented by UI components which contain text which the user can edit, via the `<atk-object>` corresponding to that component (see `<atk-object>`).

`<atk-editable-text>` is a subclass of `<atk-text>`, and as such, an object which implements `<atk-editable-text>` is by definition an `<atk-text>` implementor as well.

5.2 Usage

`<atk-editable-text>` [Class]

Derives from `<ginterface>`.

This class defines no direct slots.

`atk-editable-text-set-text-contents` [Function]
(*self* `<atk-editable-text>`) (*string* `mchars`)
`set-text-contents` [Method]

Set text contents of *text*.

text an `<atk-editable-text>`

string string to set for text contents of *text*

`atk-editable-text-insert-text` (*self* `<atk-editable-text>`) [Function]
(*string* `mchars`) (*length* `int`) ⇒ (*position* `int`)
`insert-text` [Method]

Insert text at a given position.

text an `<atk-editable-text>`

string the text to insert

length the length of text to insert, in bytes

position The caller initializes this to the position at which to insert the text. After the call it points at the position after the newly inserted text.

`atk-editable-text-copy-text` (*self* `<atk-editable-text>`) [Function]
(*start_pos* `int`) (*end_pos* `int`)
`copy-text` [Method]

Copy text from *start-pos* up to, but not including *end-pos* to the clipboard.

text an `<atk-editable-text>`

start-pos start position

end-pos end position

`atk-editable-text-cut-text` (*self* `<atk-editable-text>`) [Function]
(*start_pos* `int`) (*end_pos* `int`)
`cut-text` [Method]

Copy text from *start-pos* up to, but not including *end-pos* to the clipboard and then delete from the widget.

text an `<atk-editable-text>`

start-pos start position

end-pos end position

`atk-editable-text-delete-text` (*self* `<atk-editable-text>`) [Function]
(*start_pos* `int`) (*end_pos* `int`)
`delete-text` [Method]

Delete text *start-pos* up to, but not including *end-pos*.

text an `<atk-editable-text>`

start-pos start position

end-pos end position

`atk-editable-text-paste-text` (*self* `<atk-editable-text>`) [Function]
(*position* `int`)
`paste-text` [Method]

Paste text from clipboard to specified *position*.

text an `<atk-editable-text>`

position position to paste

6 AtkGObjectAccessible

This object class is derived from AtkObject and can be used as a basis implementing accessible objects.

6.1 Overview

This object class is derived from AtkObject. It can be used as a basis for implementing accessible objects for GObjects which are not derived from GtkWidget. One example of its use is in providing an accessible object for GnomeCanvasItem in the GAIL library.

6.2 Usage

`<atk-gobject-accessible>` [Class]

Derives from `<atk-object>`.

This class defines no direct slots.

`atk-gobject-accessible-for-object` (*obj* `<gobject>`) ⇒ (*ret* `<atk-object>`) [Function]

Gets the accessible object for the specified *obj*.

obj a `<gobject>`

ret a `<atk-object>` which is the accessible object for the *obj*

`atk-gobject-accessible-get-object` (*self* `<atk-gobject-accessible>`) ⇒ (*ret* `<gobject>`) [Function]

`get-object` [Method]

Gets the GObject for which *obj* is the accessible object.

obj a `<atk-object>`

ret a `<gobject>` which is the object for which *obj* is the accessible objedct

7 AtkHyperlinkImpl

An interface from which the AtkHyperlink associated with an AtkObject may be obtained.

7.1 Overview

AtkHyperlinkImpl allows AtkObjects to refer to their associated AtkHyperlink instance, if one exists. AtkHyperlinkImpl differs from AtkHyperlink in that AtkHyperlinkImpl is an interface, whereas AtkHyperlink is a object type. The AtkHyperlinkImpl interface allows a client to query an AtkObject for the availability of an associated AtkHyperlink instance, and obtain that instance. It is thus particularly useful in cases where embedded content or inline content within a text object is present, since the embedding text object implements AtkHypertext and the inline/embedded objects are exposed as children which implement AtkHyperlinkImpl, in addition to their being obtainable via AtkHypertext:getLink followed by AtkHyperlink:getObject.

7.2 Usage

`<atk-hyperlink-impl>` [Class]

Derives from `<ginterface>`.

This class defines no direct slots.

`atk-hyperlink-impl-get-hyperlink` (*self* `<atk-hyperlink-impl>`) [Function]
⇒ (*ret* `<atk-hyperlink>`)

`get-hyperlink` [Method]

Gets the hyperlink associated with this object.

obj a GObject instance that implements AtkHyperlinkImplIface

ret an AtkHyperlink object which points to this implementing AtkObject.

Since ATK 1.12

8 AtkHyperlink

An ATK object which encapsulates a link or set of links in a hypertext document.

8.1 Overview

An ATK object which encapsulates a link or set of links (for instance in the case of client-side image maps) in a hypertext document. It may implement the AtkAction interface. AtkHyperlink may also be used to refer to inline embedded content, since it allows specification of a start and end offset within the host AtkHypertext object.

8.2 Usage

`<atk-hyperlink>` [Class]

Derives from `<atk-action>`, `<gobject>`.

This class defines the following slots:

`selected-link`
: Specifies whether the AtkHyperlink object is selected

`number-of-anchors`
: The number of anchors associated with the AtkHyperlink object

`end-index`
: The end index of the AtkHyperlink object

`start-index`
: The start index of the AtkHyperlink object

`link-activated` [Signal on `<atk-hyperlink>`]

The signal link-activated is emitted when a link is activated.

`atk-hyperlink-get-uri` (*self* `<atk-hyperlink>`) (*i* `int`) [Function]
⇒ (*ret* `mchars`)

`get-uri` [Method]

Get a the URI associated with the anchor specified by *i* of *link*.

Multiple anchors are primarily used by client-side image maps.

link an `<atk-hyperlink>`

i a (zero-index) integer specifying the desired anchor

ret a string specifying the URI

`atk-hyperlink-get-object` (*self* `<atk-hyperlink>`) (*i* `int`) [Function]
⇒ (*ret* `<atk-object>`)

`get-object` [Method]

Returns the item associated with this hyperlinks nth anchor. For instance, the returned `<atk-object>` will implement `<atk-text>` if *link* is a text hyperlink, `<atk-image>` if *link* is an image hyperlink etc.

Multiple anchors are primarily used by client-side image maps.

link an `<atk-hyperlink>`

i a (zero-index) integer specifying the desired anchor

ret an `<atk-object>` associated with this hyperlinks i-th anchor

`atk-hyperlink-get-end-index` (*self* `<atk-hyperlink>`) ⇒ (*ret* `int`) [Function]
`get-end-index` [Method]

Gets the index with the hypertext document at which this link ends.

link an `<atk-hyperlink>`

ret the index with the hypertext document at which this link ends

`atk-hyperlink-get-start-index` (*self* `<atk-hyperlink>`) ⇒ (*ret* `int`) [Function]
`get-start-index` [Method]

Gets the index with the hypertext document at which this link begins.

link an `<atk-hyperlink>`

ret the index with the hypertext document at which this link begins

`atk-hyperlink-is-valid` (*self* `<atk-hyperlink>`) ⇒ (*ret* `bool`) [Function]
`is-valid` [Method]

Since the document that a link is associated with may have changed this method returns '`#t`' if the link is still valid (with respect to the document it references) and '`#f`' otherwise.

link an `<atk-hyperlink>`

ret whether or not this link is still valid

`atk-hyperlink-is-inline` (*self* `<atk-hyperlink>`) ⇒ (*ret* `bool`) [Function]
`is-inline` [Method]

Indicates whether the link currently displays some or all of its content inline. Ordinary HTML links will usually return '`#f`', but an inline <src> HTML element will return '`#t`'. a *

link an `<atk-hyperlink>`

ret whether or not this link displays its content inline.

`atk-hyperlink-get-n-anchors` (*self* `<atk-hyperlink>`) ⇒ (*ret* `int`) [Function]
`get-n-anchors` [Method]

Gets the number of anchors associated with this hyperlink.

link an `<atk-hyperlink>`

ret the number of anchors associated with this hyperlink

`atk-hyperlink-is-selected-link` (*self* `<atk-hyperlink>`) ⇒ (*ret* `bool`) [Function]
`is-selected-link` [Method]

Determines whether this AtkHyperlink is selected

Returns:

link an `<atk-hyperlink>`

ret True is the AtkHyperlink is selected, False otherwise

Since ATK 1.4 @Deprecated: This method is deprecated since ATK version 1.8. Please use ATK_STATE_SELECTED to indicate when a hyperlink within a Hypertext container is selected.

9 AtkHypertext

The ATK interface which provides standard mechanism for manipulating hyperlinks.

9.1 Overview

An interface used for objects which implement linking between multiple resource or content locations, or multiple 'markers' within a single document. A Hypertext instance is associated with one or more Hyperlinks, which are associated with particular offsets within the Hypertext's included content. While this interface is derived from Text, there is no requirement that Hypertext instances have textual content; they may implement Image as well, and Hyperlinks need not have non-zero text offsets.

9.2 Usage

`<atk-hypertext>` [Class]

Derives from `<ginterface>`.

This class defines no direct slots.

`link-selected` (*arg0* `<gint>`) [Signal on `<atk-hypertext>`]

The "link-selected" signal is emitted by an AtkHyperText object when one of the hyperlinks associated with the object is selected.

`atk-hypertext-get-link` (*self* `<atk-hypertext>`) (*link_index* `int`) ⇒ (*ret* `<atk-hyperlink>`) [Function]

`get-link` [Method]

Gets the link in this hypertext document at index *link-index*

hypertext an `<atk-hypertext>`

link-index an integer specifying the desired link

ret the link in this hypertext document at index *link-index*

`atk-hypertext-get-n-links` (*self* `<atk-hypertext>`) ⇒ (*ret* `int`) [Function]

`get-n-links` [Method]

Gets the number of links within this hypertext document.

hypertext an `<atk-hypertext>`

ret the number of links within this hypertext document

`atk-hypertext-get-link-index` (*self* `<atk-hypertext>`) (*char_index* `int`) ⇒ (*ret* `int`) [Function]

`get-link-index` [Method]

Gets the index into the array of hyperlinks that is associated with the character specified by *char-index*.

hypertext an `<atk-hypertext>`

char-index a character index

ret an index into the array of hyperlinks in *hypertext*, or -1 if there is no hyperlink associated with this character.

10 AtkImage

The ATK Interface implemented by components which expose image or pixmap content on-screen.

10.1 Overview

`<atk-image>` should be implemented by `<atk-object>` subtypes on behalf of components which display image/pixmap information onscreen, and which provide information (other than just widget borders, etc.) via that image content. For instance, icons, buttons with icons, toolbar elements, and image viewing panes typically should implement `<atk-image>`.

`<atk-image>` primarily provides two types of information: coordinate information (useful for screen review mode of screenreaders, and for use by onscreen magnifiers), and descriptive information. The descriptive information is provided for alternative, text-only presentation of the most significant information present in the image.

10.2 Usage

`<atk-image>` [Class]

Derives from `<ginterface>`.

This class defines no direct slots.

`atk-image-get-image-position` (*self* `<atk-image>`) [Function]
(*coord_type* `<atk-coord-type>`) ⇒ (*x* `int`) (*y* `int`)

`get-image-position` [Method]

Gets the position of the image in the form of a point specifying the images top-left corner.

image a `<gobject>` instance that implements AtkImageIface

x address of `<gint>` to put x coordinate position; otherwise, -1 if value cannot be obtained.

y address of `<gint>` to put y coordinate position; otherwise, -1 if value cannot be obtained.

coord-type specifies whether the coordinates are relative to the screen or to the components top level window

`atk-image-get-image-description` (*self* `<atk-image>`) [Function]
⇒ (*ret* `mchars`)

`get-image-description` [Method]

Get a textual description of this image.

image a `<gobject>` instance that implements AtkImageIface

ret a string representing the image description

`atk-image-set-image-description` (*self* `<atk-image>`) [Function]
(*description* `mchars`) ⇒ (*ret* `bool`)
`set-image-description` [Method]
Sets the textual description for this image.

image a `<gobject>` instance that implements AtkImageIface

description
a string description to set for *image*

ret boolean TRUE, or FALSE if operation could not be completed.

`atk-image-get-image-size` (*self* `<atk-image>`) ⇒ (*width* `int`) [Function]
(*height* `int`)
`get-image-size` [Method]
Get the width and height in pixels for the specified image. The values of *width* and *height* are returned as -1 if the values cannot be obtained (for instance, if the object is not onscreen).

image a `<gobject>` instance that implements AtkImageIface

width filled with the image width, or -1 if the value cannot be obtained.

height filled with the image height, or -1 if the value cannot be obtained.

`atk-image-get-image-locale` (*self* `<atk-image>`) ⇒ (*ret* `mchars`) [Function]
`get-image-locale` [Method]
Since ATK 1.12

image An `<atk-image>`

ret a string corresponding to the POSIX LC_MESSAGES locale used by the image description, or NULL if the image does not specify a locale.

11 AtkNoOpObjectFactory

The AtkObjectFactory which creates an AtkNoOpObject.

11.1 Overview

The AtkObjectFactory which creates an AtkNoOpObject. An instance of this is created by an AtkRegistry if no factory type has not been specified to create an accessible object of a particular type.

11.2 Usage

`<atk-no-op-object-factory>` [Class]

Derives from `<atk-object-factory>`.

This class defines no direct slots.

`atk-no-op-object-factory-new` ⇒ (*ret* `<atk-object-factory>`) [Function]

Creates an instance of an `<atk-object-factory>` which generates primitive (non-functioning) `<atk-objects>`.

ret an instance of an `<atk-object-factory>`

12 AtkNoOpObject

An AtkObject which purports to implement all ATK interfaces.

12.1 Overview

An AtkNoOpObject is an AtkObject which purports to implement all ATK interfaces. It is the type of AtkObject which is created if an accessible object is requested for an object type for which no factory type is specified.

12.2 Usage

`<atk-no-op-object>` [Class]

Derives from `<atk-table>`, `<atk-action>`, `<atk-image>`, `<atk-value>`, `<atk-hypertext>`, `<atk-component>`, `<atk-editable-text>`, `<atk-document>`, `<atk-selection>`, `<atk-text>`, `<atk-object>`.

This class defines no direct slots.

`atk-no-op-object-new` (*obj* `<gobject>`) ⇒ (*ret* `<atk-object>`) [Function]

Provides a default (non-functioning stub) `<atk-object>`. Application maintainers should not use this method.

obj a `<gobject>`

ret a default (non-functioning stub) `<atk-object>`

13 AtkObjectFactory

The base object class for a factory used to create accessible objects for objects of a specific GType.

13.1 Overview

This class is the base object class for a factory used to create an accessible object for a specific GType. The function `atk-registry-set-factory-type` is normally called to store in the registry the factory type to be used to create an accessible of a particular GType.

13.2 Usage

`<atk-object-factory>` [Class]

Derives from `<gobject>`.

This class defines no direct slots.

`atk-object-factory-invalidate` (*self* `<atk-object-factory>`) [Function]
`invalidate` [Method]

Inform *factory* that it is no longer being used to create accessibles. When called, *factory* may need to inform `<atk-objects>` which it has created that they need to be re-instantiated. Note: primarily used for runtime replacement of `<atk-object-factorys>` in object registries.

factory an `<atk-object-factory>` to invalidate

14 AtkObject

The base object class for the Accessibility Toolkit API.

14.1 Overview

This class is the primary class for accessibility support via the Accessibility ToolKit (ATK). Objects which are instances of `<atk-object>` (or instances of AtkObject-derived types) are queried for properties which relate basic (and generic) properties of a UI component such as name and description. Instances of `<atk-object>` may also be queried as to whether they implement other ATK interfaces (e.g. `<atk-action>`, `<atk-component>`, etc.), as appropriate to the role which a given UI component plays in a user interface.

All UI components in an application which provide useful information or services to the user must provide corresponding `<atk-object>` instances on request (in GTK+, for instance, usually on a call to `#gtk-widget-get-accessible`), either via ATK support built into the toolkit for the widget class or ancestor class, or in the case of custom widgets, if the inherited `<atk-object>` implementation is insufficient, via instances of a new `<atk-object>` subclass.

14.2 Usage

`<atk-object>` [Class]

Derives from `<gobject>`.

This class defines the following slots:

`accessible-name`
: Object instance's name formatted for assistive technology access

`accessible-description`
: Description of an object, formatted for assistive technology access

`accessible-parent`
: Is used to notify that the parent has changed

`accessible-value`
: Is used to notify that the value has changed

`accessible-role`
: The accessible role of this object

`accessible-component-layer`
: The accessible layer of this object

`accessible-component-mdi-zorder`
: The accessible MDI value of this object

`accessible-table-caption`
: Is used to notify that the table caption has changed; this property should not be used. accessible-table-caption-object should be used instead

`accessible-table-column-description`
: Is used to notify that the table column description has changed

`accessible-table-column-header`
: Is used to notify that the table column header has changed

`accessible-table-row-description`
: Is used to notify that the table row description has changed

`accessible-table-row-header`
: Is used to notify that the table row header has changed

`accessible-table-summary`
: Is used to notify that the table summary has changed

`accessible-table-caption-object`
: Is used to notify that the table caption has changed

`accessible-hypertext-nlinks`
: The number of links which the current AtkHypertext has

`children-changed` (*arg0* `<guint>`) (*arg1* `<gpointer>`) [Signal on `<atk-object>`]
The signal "children-changed" is emitted when a child is added or removed form an object. It supports two details: "add" and "remove"

`focus-event` (*arg0* `<gboolean>`) [Signal on `<atk-object>`]
The signal "focus-event" is emitted when an object gains or loses focus.

`property-change` (*arg0* `<gpointer>`) [Signal on `<atk-object>`]
The signal "property-change" is emitted when an object's property value changes. The detail identifies the name of the property whose value has changed.

`state-change` (*arg0* `<gchararray>`) (*arg1* `<gboolean>`) [Signal on `<atk-object>`]
The "state-change" signal is emitted when an object's state changes. The detail value identifies the state type which has changed.

`visible-data-changed` [Signal on `<atk-object>`]
The "visible-data-changed" signal is emitted when the visual appearance of the object changed.

`active-descendant-changed` (*arg0* `<gpointer>`) [Signal on `<atk-object>`]
The "active-descendant-changed" signal is emitted by an object which has the state ATK_STATE_MANAGES_DESCENDANTS when the focus object in the object changes. For instance, a table will emit the signal when the cell in the table which has focus changes.

`<atk-implementor>` [Class]
Derives from `<ginterface>`.

This class defines no direct slots.

`atk-implementor-ref-accessible` (*self* `<atk-implementor>`) [Function]
⇒ (*ret* `<atk-object>`)
`ref-accessible` [Method]
Gets a reference to an object's `<atk-object>` implementation, if the object implements `<atk-object-iface>`

implementor
: The `<gobject>` instance which should implement `<atk-implementor-iface>` if a non-null return value is required.

ret
: a reference to an object's `<atk-object>` implementation

`atk-object-get-name` (*self* `<atk-object>`) ⇒ (*ret* `mchars`) [Function]
`get-name` [Method]

Gets the accessible name of the accessible.

accessible
: an `<atk-object>`

ret
: a character string representing the accessible name of the object.

`atk-object-get-description` (*self* `<atk-object>`) ⇒ (*ret* `mchars`) [Function]
`get-description` [Method]

Gets the accessible description of the accessible.

accessible
: an `<atk-object>`

ret
: a character string representing the accessible description of the accessible.

`atk-object-get-parent` (*self* `<atk-object>`) ⇒ (*ret* `<atk-object>`) [Function]
`get-parent` [Method]

Gets the accessible parent of the accessible.

accessible
: an `<atk-object>`

ret
: a `<atk-object>` representing the accessible parent of the accessible

`atk-object-ref-accessible-child` (*self* `<atk-object>`) (*i* `int`) [Function]
⇒ (*ret* `<atk-object>`)
`ref-accessible-child` [Method]

Gets a reference to the specified accessible child of the object. The accessible children are 0-based so the first accessible child is at index 0, the second at index 1 and so on.

accessible
: an `<atk-object>`

i
: a gint representing the position of the child, starting from 0

ret
: an `<atk-object>` representing the specified accessible child of the accessible.

`atk-object-ref-relation-set` (*self* `<atk-object>`) [Function]
⇒ (*ret* `<atk-relation-set>`)
`ref-relation-set` [Method]

Gets the `<atk-relation-set>` associated with the object.

accessible
: an `<atk-object>`

ret
: an `<atk-relation-set>` representing the relation set of the object.

`atk-object-get-layer` (*self* `<atk-object>`) ⇒ (*ret* `<atk-layer>`) [Function]
`get-layer` [Method]

'`atk_object_get_layer`' is deprecated and should not be used in newly-written code. Use atk_component_get_layer instead.

Gets the layer of the accessible.

Returns:

accessible an `<atk-object>`

ret an `<atk-layer>` which is the layer of the accessible

`atk-object-get-mdi-zorder` (*self* `<atk-object>`) ⇒ (*ret* `int`) [Function]
`get-mdi-zorder` [Method]

'`atk_object_get_mdi_zorder`' is deprecated and should not be used in newly-written code. Use atk_component_get_mdi_zorder instead.

Gets the zorder of the accessible. The value G_MININT will be returned if the layer of the accessible is not ATK_LAYER_MDI.

Returns:

accessible an `<atk-object>`

ret a gint which is the zorder of the accessible, i.e. the depth at which the component is shown in relation to other components in the same container.

`atk-object-get-role` (*self* `<atk-object>`) ⇒ (*ret* `<atk-role>`) [Function]
`get-role` [Method]

Gets the role of the accessible.

accessible an `<atk-object>`

ret an `<atk-role>` which is the role of the accessible

`atk-object-ref-state-set` (*self* `<atk-object>`) [Function]
⇒ (*ret* `<atk-state-set>`)
`ref-state-set` [Method]

Gets a reference to the state set of the accessible; the caller must unreference it when it is no longer needed.

accessible an `<atk-object>`

ret a reference to an `<atk-state-set>` which is the state set of the accessible

`atk-object-get-index-in-parent` (*self* `<atk-object>`) ⇒ (*ret* `int`) [Function]
`get-index-in-parent` [Method]

Gets the 0-based index of this accessible in its parent; returns -1 if the accessible does not have an accessible parent.

accessible an `<atk-object>`

ret an integer which is the index of the accessible in its parent

`atk-object-set-name` (*self* `<atk-object>`) (*name* `mchars`) [Function]
`set-name` [Method]

Sets the accessible name of the accessible.

accessible an `<atk-object>`

name a character string to be set as the accessible name

`atk-object-set-description` (*self* `<atk-object>`) [Function]
(*description* `mchars`)
`set-description` [Method]

Sets the accessible description of the accessible.

accessible an `<atk-object>`

description
a character string to be set as the accessible description

`atk-object-set-parent` (*self* `<atk-object>`) (*parent* `<atk-object>`) [Function]
`set-parent` [Method]

Sets the accessible parent of the accessible.

accessible an `<atk-object>`

parent an `<atk-object>` to be set as the accessible parent

`atk-object-set-role` (*self* `<atk-object>`) (*role* `<atk-role>`) [Function]
`set-role` [Method]

Sets the role of the accessible.

accessible an `<atk-object>`

role an `<atk-role>` to be set as the role

`atk-object-notify-state-change` (*self* `<atk-object>`) [Function]
(*state* `unsigned-int64`) (*value* `bool`)
`notify-state-change` [Method]

Emits a state-change signal for the specified state.

accessible an `<atk-object>`

state an `<atk-state>` whose state is changed

value a gboolean which indicates whether the state is being set on or off

`atk-object-add-relationship` (*self* `<atk-object>`) [Function]
(*relationship* `<atk-relation-type>`) (*target* `<atk-object>`) ⇒ (*ret* `bool`)
`add-relationship` [Method]

Adds a relationship of the specified type with the specified target.

object The `<atk-object>` to which an AtkRelation is to be added.

relationship
The `<atk-relation-type>` of the relation

target The `<atk-object>` which is to be the target of the relation.

ret TRUE if the relationship is added.

`atk-object-remove-relationship` (*self* `<atk-object>`) [Function]
(*relationship* `<atk-relation-type>`) (*target* `<atk-object>`) ⇒ (*ret* `bool`)
`remove-relationship` [Method]

Removes a relationship of the specified type with the specified target.

object The `<atk-object>` from which an AtkRelation is to be removed.

relationship
The `<atk-relation-type>` of the relation

target The `<atk-object>` which is the target of the relation to be removed.

ret TRUE if the relationship is removed.

`atk-role-get-name` (*role* `<atk-role>`) ⇒ (*ret* `mchars`) [Function]
Gets the description string describing the `<atk-role>`*role*.

role The `<atk-role>` whose name is required

ret the string describing the AtkRole

`atk-role-get-localized-name` (*role* `<atk-role>`) ⇒ (*ret* `mchars`) [Function]
Gets the localized description string describing the `<atk-role>`*role*.

role The `<atk-role>` whose localized name is required

ret the localized string describing the AtkRole

`atk-role-for-name` (*name* `mchars`) ⇒ (*ret* `<atk-role>`) [Function]
Get the `<atk-role>` type corresponding to a rolew name.

name a string which is the (non-localized) name of an ATK role.

ret the `<atk-role>` enumerated type corresponding to the specified name, or `<atk-role-invalid>` if no matching role is found.

15 AtkRegistry

An object used to store the GType of the factories used to create an accessible object for an object of a particular GType.

15.1 Overview

The AtkRegistry is normally used to create appropriate ATK "peers" for user interface components. Application developers usually need only interact with the AtkRegistry by associating appropriate ATK implementation classes with GObject classes via the atk_registry_set_factory_type call, passing the appropriate GType for application custom widget classes.

15.2 Usage

`<atk-registry>` [Class]

Derives from `<gobject>`.

This class defines no direct slots.

`atk-registry-set-factory-type` (*self* `<atk-registry>`) (*type* `<gtype>`) (*factory_type* `<gtype>`) [Function]

`set-factory-type` [Method]

Associate an `<atk-object-factory>` subclass with a `<g-type>`. Note: The associated *factory-type* will thereafter be responsible for the creation of new `<atk-object>` implementations for instances appropriate for *type*.

registry the `<atk-registry>` in which to register the type association

type an `<atk-object>` type

factory-type an `<atk-object-factory>` type to associate with *type*. Must implement AtkObject appropriate for *type*.

`atk-registry-get-factory-type` (*self* `<atk-registry>`) (*type* `<gtype>`) ⇒ (*ret* `<gtype>`) [Function]

`get-factory-type` [Method]

Provides a `<g-type>` indicating the `<atk-object-factory>` subclass associated with *type*.

registry an `<atk-registry>`

type a `<g-type>` with which to look up the associated `<atk-object-factory>` subclass

ret a `<g-type>` associated with type *type*

`atk-registry-get-factory` (*self* `<atk-registry>`) (*type* `<gtype>`) ⇒ (*ret* `<atk-object-factory>`) [Function]

`get-factory` [Method]

Gets an `<atk-object-factory>` appropriate for creating `<atk-objects>` appropriate for *type*.

registry an `<atk-registry>`

type a `<g-type>` with which to look up the associated `<atk-object-factory>`

ret an `<atk-object-factory>` appropriate for creating `<atk-objects>` appropriate for *type*.

`atk-get-default-registry` ⇒ (*ret* `<atk-registry>`) [Function]

Gets a default implementation of the `<atk-object-factory>`/type registry. Note: For most toolkit maintainers, this will be the correct registry for registering new `<atk-object>` factories. Following a call to this function, maintainers may call `atk-registry-set-factory-type` to associate an `<atk-object-factory>` subclass with the GType of objects for whom accessibility information will be provided.

ret a default implementation of the `<atk-object-factory>`/type registry

16 AtkRelationSet

A set of AtkRelations, normally the set of AtkRelations which an AtkObject has.

16.1 Overview

The AtkRelationSet held by an object establishes its relationships with objects beyond the normal "parent/child" hierarchical relationships that all user interface objects have. AtkRelationSets establish whether objects are labelled or controlled by other components, share group membership with other components (for instance within a radio-button group), or share content which "flows" between them, among other types of possible relationships.

16.2 Usage

`<atk-relation-set>` [Class]

Derives from `<gobject>`.

This class defines no direct slots.

`atk-relation-set-new` ⇒ (*ret* `<atk-relation-set>`) [Function]

Creates a new empty relation set.

ret a new `<atk-relation-set>`

`atk-relation-set-contains` (*self* `<atk-relation-set>`) [Function]
(*relationship* `<atk-relation-type>`) ⇒ (*ret* `bool`)

`contains` [Method]

Determines whether the relation set contains a relation that matches the specified type.

set an `<atk-relation-set>`

relationship an `<atk-relation-type>`

ret '`#t`' if *relationship* is the relationship type of a relation in *set*, '`#f`' otherwise

`atk-relation-set-remove` (*self* `<atk-relation-set>`) [Function]
(*relation* `<atk-relation>`)

`remove` [Method]

Removes a relation from the relation set. This function unref's the `<atk-relation>` so it will be deleted unless there is another reference to it.

set an `<atk-relation-set>`

relation an `<atk-relation>`

`atk-relation-set-add` (*self* `<atk-relation-set>`) [Function]
(*relation* `<atk-relation>`)

`add` [Method]

Add a new relation to the current relation set if it is not already present. This function ref's the AtkRelation so the caller of this function should unref it to ensure that it will be destroyed when the AtkRelationSet is destroyed.

set an `<atk-relation-set>`

relation an `<atk-relation>`

`atk-relation-set-get-n-relations` (*self* `<atk-relation-set>`) [Function]
⇒ (*ret* `int`)
`get-n-relations` [Method]

Determines the number of relations in a relation set.

set an `<atk-relation-set>`

ret an integer representing the number of relations in the set.

`atk-relation-set-get-relation` (*self* `<atk-relation-set>`) (*i* `int`) [Function]
⇒ (*ret* `<atk-relation>`)
`get-relation` [Method]

Determines the relation at the specified position in the relation set.

set an `<atk-relation-set>`

i a gint representing a position in the set, starting from 0.

ret a `<atk-relation>`, which is the relation at position i in the set.

17 AtkRelation

An object used to describe a relation between a object and one or more other objects.

17.1 Overview

An AtkRelation describes a relation between an object and one or more other objects. The actual relations that an object has with other objects are defined as an AtkRelationSet, which is a set of AtkRelations.

17.2 Usage

`<atk-relation>` [Class]

Derives from `<gobject>`.

This class defines the following slots:

`relation-type`
: The type of the relation

`target`
: An array of the targets for the relation

`atk-relation-type-register` (*name* `mchars`) [Function]
⇒ (*ret* `<atk-relation-type>`)

Associate *name* with a new `<atk-relation-type>`

name
: a name string

ret
: an `<atk-relation-type>` associated with *name*

`atk-relation-type-get-name` (*type* `<atk-relation-type>`) [Function]
⇒ (*ret* `mchars`)

Gets the description string describing the `<atk-relation-type>`*type*.

type
: The `<atk-relation-type>` whose name is required

ret
: the string describing the AtkRelationType

`atk-relation-type-for-name` (*name* `mchars`) [Function]
⇒ (*ret* `<atk-relation-type>`)

Get the `<atk-relation-type>` type corresponding to a relation name.

name
: a string which is the (non-localized) name of an ATK relation type.

ret
: the `<atk-relation-type>` enumerated type corresponding to the specified name, or `<atk-relation-null>` if no matching relation type is found.

`atk-relation-get-relation-type` (*self* `<atk-relation>`) [Function]
⇒ (*ret* `<atk-relation-type>`)

`get-relation-type` [Method]

Gets the type of *relation*

relation
: an `<atk-relation>`

ret
: the type of *relation*

`atk-relation-add-target` (*self* `<atk-relation>`) [Function]
(*target* `<atk-object>`)
`add-target` [Method]

Adds the specified AtkObject to the target for the relation, if it is not already present.

relation an `<atk-relation>`

target an `<atk-object>`

Since ATK 1.9

18 AtkSelection

The ATK interface implemented by container objects whose children can be selected.

18.1 Overview

`<atk-selection>` should be implemented by UI components with children which are exposed by `<atk-object-ref-child>` and `<atk-object-get-n-children>`, if the use of the parent UI component ordinarily involves selection of one or more of the objects corresponding to those `<atk-object>` children - for example, selectable lists.

Note that other types of "selection" (for instance text selection) are accomplished a other ATK interfaces - `<atk-selection>` is limited to the selection/deselection of children.

18.2 Usage

`<atk-selection>` [Class]

Derives from `<ginterface>`.

This class defines no direct slots.

`selection-changed` [Signal on `<atk-selection>`]

The "selection-changed" signal is emitted by an object which implements AtkSelection interface when the selection changes.

`atk-selection-add-selection` (*self* `<atk-selection>`) (*i* `int`) [Function]
⇒ (*ret* `bool`)

`add-selection` [Method]

Adds the specified accessible child of the object to the object's selection.

selection a `<gobject>` instance that implements AtkSelectionIface

i a `<gint>` specifying the child index.

ret TRUE if success, FALSE otherwise.

`atk-selection-clear-selection` (*self* `<atk-selection>`) [Function]
⇒ (*ret* `bool`)

`clear-selection` [Method]

Clears the selection in the object so that no children in the object are selected.

selection a `<gobject>` instance that implements AtkSelectionIface

ret TRUE if success, FALSE otherwise.

`atk-selection-ref-selection` (*self* `<atk-selection>`) (*i* `int`) [Function]
⇒ (*ret* `<atk-object>`)

`ref-selection` [Method]

Gets a reference to the accessible object representing the specified selected child of the object. Note: callers should not rely on '`#f`' or on a zero value for indication of whether AtkSelectionIface is implemented, they should use type checking/interface checking macros or the `atk-get-accessible-value` convenience method.

selection a `<gobject>` instance that implements AtkSelectionIface

i a `<gint>` specifying the index in the selection set. (e.g. the ith selection as opposed to the ith child).

ret an `<atk-object>` representing the selected accessible , or '`#f`' if *selection* does not implement this interface.

`atk-selection-get-selection-count` (*self* `<atk-selection>`) [Function]
⇒ (*ret* `int`)
`get-selection-count` [Method]

Gets the number of accessible children currently selected. Note: callers should not rely on '`#f`' or on a zero value for indication of whether AtkSelectionIface is implemented, they should use type checking/interface checking macros or the `atk-get-accessible-value` convenience method.

selection a `<gobject>` instance that implements AtkSelectionIface

ret a gint representing the number of items selected, or 0 if *selection* does not implement this interface.

`atk-selection-is-child-selected` (*self* `<atk-selection>`) (*i* `int`) [Function]
⇒ (*ret* `bool`)
`is-child-selected` [Method]

Determines if the current child of this object is selected Note: callers should not rely on '`#f`' or on a zero value for indication of whether AtkSelectionIface is implemented, they should use type checking/interface checking macros or the `atk-get-accessible-value` convenience method.

selection a `<gobject>` instance that implements AtkSelectionIface

i a `<gint>` specifying the child index.

ret a gboolean representing the specified child is selected, or 0 if *selection* does not implement this interface.

`atk-selection-remove-selection` (*self* `<atk-selection>`) (*i* `int`) [Function]
⇒ (*ret* `bool`)
`remove-selection` [Method]

Removes the specified child of the object from the object's selection.

selection a `<gobject>` instance that implements AtkSelectionIface

i a `<gint>` specifying the index in the selection set. (e.g. the ith selection as opposed to the ith child).

ret TRUE if success, FALSE otherwise.

`atk-selection-select-all-selection` (*self* `<atk-selection>`) [Function]
⇒ (*ret* `bool`)
`select-all-selection` [Method]

Causes every child of the object to be selected if the object supports multiple selections.

selection a `<gobject>` instance that implements AtkSelectionIface

ret TRUE if success, FALSE otherwise.

19 AtkStateSet

An AtkStateSet determines a component's state set.

19.1 Overview

An AtkStateSet determines a component's state set. It is composed of a set of AtkStates.

19.2 Usage

`atk-state-set-new` ⇒ (*ret* `<atk-state-set>`) [Function]

Creates a new empty state set.

ret a new `<atk-state-set>`

`atk-state-set-is-empty` (*self* `<atk-state-set>`) ⇒ (*ret* `bool`) [Function]
`is-empty` [Method]

Checks whether the state set is empty, i.e. has no states set.

set an `<atk-state-type>`

ret '`#t`' if *set* has no states set, otherwise '`#f`'

`atk-state-set-add-state` (*self* `<atk-state-set>`) [Function]
(*type* `<atk-state-type>`) ⇒ (*ret* `bool`)
`add-state` [Method]

Add a new state for the specified type to the current state set if it is not already present.

set an `<atk-state-set>`

type an `<atk-state-type>`

ret '`#t`' if the state for *type* is not already in *set*.

`atk-state-set-clear-states` (*self* `<atk-state-set>`) [Function]
`clear-states` [Method]

Removes all states from the state set.

set an `<atk-state-set>`

`atk-state-set-contains-state` (*self* `<atk-state-set>`) [Function]
(*type* `<atk-state-type>`) ⇒ (*ret* `bool`)
`contains-state` [Method]

Checks whether the state for the specified type is in the specified set.

set an `<atk-state-set>`

type an `<atk-state-type>`

ret '`#t`' if *type* is the state type is in *set*.

`atk-state-set-remove-state` (*self* `<atk-state-set>`) [Function]
(*type* `<atk-state-type>`) ⇒ (*ret* `bool`)

`remove-state` [Method]

Removes the state for the specified type from the state set.

set an `<atk-state-set>`

type an `<atk-type>`

ret '`#t`' if *type* was the state type is in *set*.

`atk-state-set-and-sets` (*self* `<atk-state-set>`) [Function]
(*compare_set* `<atk-state-set>`) ⇒ (*ret* `<atk-state-set>`)

`and-sets` [Method]

Constructs the intersection of the two sets, returning '`#f`' if the intersection is empty.

set an `<atk-state-set>`

compare-set
another `<atk-state-set>`

ret a new `<atk-state-set>` which is the intersection of the two sets.

`atk-state-set-or-sets` (*self* `<atk-state-set>`) [Function]
(*compare_set* `<atk-state-set>`) ⇒ (*ret* `<atk-state-set>`)

`or-sets` [Method]

Constructs the union of the two sets.

set an `<atk-state-set>`

compare-set
another `<atk-state-set>`

ret a new `<atk-state-set>` which is the union of the two sets, returning '`#f`' is empty.

`atk-state-set-xor-sets` (*self* `<atk-state-set>`) [Function]
(*compare_set* `<atk-state-set>`) ⇒ (*ret* `<atk-state-set>`)

`xor-sets` [Method]

Constructs the exclusive-or of the two sets, returning '`#f`' is empty. The set returned by this operation contains the states in exactly one of the two sets.

set an `<atk-state-set>`

compare-set
another `<atk-state-set>`

ret a new `<atk-state-set>` which contains the states which are in exactly one of the two sets.

20 AtkState

An AtkState describes a component's particular state.

20.1 Overview

An AtkState describes a component's particular state. The actual state of an component is described by its AtkStateSet, which is a set of AtkStates.

20.2 Usage

`atk-state-type-get-name` (*type* `<atk-state-type>`) [Function]
⇒ (*ret* `mchars`)

Gets the description string describing the `<atk-state-type>`*type*.

type The `<atk-state-type>` whose name is required

ret the string describing the AtkStateType

`atk-state-type-for-name` (*name* `mchars`) [Function]
⇒ (*ret* `<atk-state-type>`)

Gets the `<atk-state-type>` corresponding to the description string *name*.

name a character string state name

ret an `<atk-state-type>` corresponding to *name*

21 AtkStreamableContent

The ATK interface which provides access to streamable content.

21.1 Overview

An interface whereby an object allows its backing content to be streamed to clients. Typical implementors would be images or icons, HTML content, or multimedia display/rendering widgets.

Negotiation of content type is allowed. Clients may examine the backing data and transform, convert, or parse the content in order to present it in an alternate form to end-users.

The AtkStreamableContent interface is particularly useful for saving, printing, or post-processing entire documents, or for persisting alternate views of a document. If document content itself is being serialized, stored, or converted, then use of the AtkStreamableContent interface can help address performance issues. Unlike most ATK interfaces, this interface is not strongly tied to the current user-agent view of the a particular document, but may in some cases give access to the underlying model data.

21.2 Usage

`<atk-streamable-content>` [Class]

Derives from `<ginterface>`.

This class defines no direct slots.

`atk-streamable-content-get-stream` [Function]

(*self* `<atk-streamable-content>`) (*mime_type* `mchars`) ⇒ (*ret* `<gio-channel>`)

`get-stream` [Method]

Gets the content in the specified mime type.

streamable
: a GObject instance that implements AtkStreamableContentIface

mime-type
: a gchar* representing the mime type

ret
: A `<gio-channel>` which contains the content in the specified mime type.

`atk-streamable-content-get-uri` [Function]

(*self* `<atk-streamable-content>`) (*mime_type* `mchars`) ⇒ (*ret* `mchars`)

`get-uri` [Method]

Get a string representing a URI in IETF standard format (see http://www.ietf.org/rfc/rfc2396.txt) from which the object's content may be streamed in the specified mime-type, if one is available. If mime_type is NULL, the URI for the default (and possibly only) mime-type is returned.

Note that it is possible for get_uri to return NULL but for get_stream to work nonetheless, since not all GIOChannels connect to URIs.

streamable
: a GObject instance that implements AtkStreamableContentIface

mime-type
: a gchar* representing the mime type, or NULL to request a URI for the default mime type.

ret
: Returns a string representing a URI, or NULL if no corresponding URI can be constructed.

Since ATK 1.12

22 AtkTable

The ATK interface implemented for UI components which contain tabular or row/column information.

22.1 Overview

<atk-table> should be implemented by components which present elements ordered via rows and columns. It may also be used to present tree-structured information if the nodes of the trees can be said to contain multiple "columns". Individual elements of an <atk-table> are typically referred to as "cells", and these cells are exposed by <atk-table> as child <atk-objects> of the <atk-table>. Both row/column and child-index-based access to these children is provided.

Children of <atk-table> are frequently "lightweight" objects, that is, they may not have backing widgets in the host UI toolkit. They are therefore often transient.

Since tables are often very complex, <atk-table> includes provision for offering simplified summary information, as well as row and column headers and captions. Headers and captions are <atk-objects> which may implement other interfaces (<atk-text>, <atk-image>, etc.) as appropriate. <atk-table> summaries may themselves be (simplified) <atk-tables>, etc.

22.2 Usage

<atk-table> [Class]

Derives from <ginterface>.

This class defines no direct slots.

row-inserted (*arg0* <gint>) (*arg1* <gint>) [Signal on <atk-table>]

The "row-inserted" signal is emitted by an object which implements the AtkTable interface when a column is inserted.

column-inserted (*arg0* <gint>) (*arg1* <gint>) [Signal on <atk-table>]

The "column-inserted" signal is emitted by an object which implements the AtkTable interface when a column is inserted.

row-deleted (*arg0* <gint>) (*arg1* <gint>) [Signal on <atk-table>]

The "row-deleted" signal is emitted by an object which implements the AtkTable interface when a column is inserted.

column-deleted (*arg0* <gint>) (*arg1* <gint>) [Signal on <atk-table>]

The "column-deleted" signal is emitted by an object which implements the AtkTable interface when a column is deleted.

row-reordered [Signal on <atk-table>]

The "row-reordered" signal is emitted by an object which implements the AtkTable interface when the columns are reordered.

column-reordered [Signal on <atk-table>]

The "column-reordered" signal is emitted by an object which implements the AtkTable interface when the columns are reordered.

`model-changed` [Signal on `<atk-table>`]

The "model-changed" signal is emitted by an object which implements the AtkTable interface when the model displayed by the table changes.

`atk-table-ref-at` (*self* `<atk-table>`) (*row* `int`) (*column* `int`) [Function]
⇒ (*ret* `<atk-object>`)

`ref-at` [Method]

Get a reference to the table cell at *row*, *column*.

table a GObject instance that implements AtkTableIface

row a `<gint>` representing a row in *table*

column a `<gint>` representing a column in *table*

ret a AtkObject* representing the referred to accessible

`atk-table-get-index-at` (*self* `<atk-table>`) (*row* `int`) (*column* `int`) [Function]
⇒ (*ret* `int`)

`get-index-at` [Method]

Gets a `<gint>` representing the index at the specified *row* and *column*.

table a GObject instance that implements AtkTableIface

row a `<gint>` representing a row in *table*

column a `<gint>` representing a column in *table*

ret a `<gint>` representing the index at specified position. The value -1 is returned if the object at row,column is not a child of table or table does not implement this interface.

`atk-table-get-column-at-index` (*self* `<atk-table>`) (*index_* `int`) [Function]
⇒ (*ret* `int`)

`get-column-at-index` [Method]

Gets a `<gint>` representing the column at the specified *index*.

table a GObject instance that implements AtkTableInterface

index a `<gint>` representing an index in *table*

ret a gint representing the column at the specified index, or -1 if the table does not implement this interface

`atk-table-get-row-at-index` (*self* `<atk-table>`) (*index_* `int`) [Function]
⇒ (*ret* `int`)

`get-row-at-index` [Method]

Gets a `<gint>` representing the row at the specified *index*.

table a GObject instance that implements AtkTableInterface

index a `<gint>` representing an index in *table*

ret a gint representing the row at the specified index, or -1 if the table does not implement this interface

`atk-table-get-n-columns` (*self* `<atk-table>`) ⇒ (*ret* `int`) [Function]
`get-n-columns` [Method]

Gets the number of columns in the table.

table a GObject instance that implements AtkTableIface

ret a gint representing the number of columns, or 0 if value does not implement this interface.

`atk-table-get-n-rows` (*self* `<atk-table>`) ⇒ (*ret* `int`) [Function]
`get-n-rows` [Method]

Gets the number of rows in the table.

table a GObject instance that implements AtkTableIface

ret a gint representing the number of rows, or 0 if value does not implement this interface.

`atk-table-get-column-extent-at` (*self* `<atk-table>`) (*row* `int`) (*column* `int`) ⇒ (*ret* `int`) [Function]
`get-column-extent-at` [Method]

Gets the number of columns occupied by the accessible object at the specified *row* and *column* in the *table*.

table a GObject instance that implements AtkTableIface

row a `<gint>` representing a row in *table*

column a `<gint>` representing a column in *table*

ret a gint representing the column extent at specified position, or 0 if value does not implement this interface.

`atk-table-get-row-extent-at` (*self* `<atk-table>`) (*row* `int`) (*column* `int`) ⇒ (*ret* `int`) [Function]
`get-row-extent-at` [Method]

Gets the number of rows occupied by the accessible object at a specified *row* and *column* in the *table*.

table a GObject instance that implements AtkTableIface

row a `<gint>` representing a row in *table*

column a `<gint>` representing a column in *table*

ret a gint representing the row extent at specified position, or 0 if value does not implement this interface.

`atk-table-get-caption` (*self* `<atk-table>`) ⇒ (*ret* `<atk-object>`) [Function]
`get-caption` [Method]

Gets the caption for the *table*.

table a GObject instance that implements AtkTableInterface

ret a AtkObject* representing the table caption, or '`#f`' if value does not implement this interface.

`atk-table-get-column-description` (*self* `<atk-table>`) [Function]
(*column* `int`) ⇒ (*ret* `mchars`)
`get-column-description` [Method]

Gets the description text of the specified *column* in the table

table a GObject instance that implements AtkTableIface

column a `<gint>` representing a column in *table*

ret a gchar* representing the column description, or '`#f`' if value does not implement this interface.

`atk-table-get-row-description` (*self* `<atk-table>`) (*row* `int`) [Function]
⇒ (*ret* `mchars`)
`get-row-description` [Method]

Gets the description text of the specified row in the table

table a GObject instance that implements AtkTableIface

row a `<gint>` representing a row in *table*

ret a gchar* representing the row description, or '`#f`' if value does not implement this interface.

`atk-table-get-column-header` (*self* `<atk-table>`) (*column* `int`) [Function]
⇒ (*ret* `<atk-object>`)
`get-column-header` [Method]

Gets the column header of a specified column in an accessible table.

table a GObject instance that implements AtkTableIface

column a `<gint>` representing a column in the table

ret a AtkObject* representing the specified column header, or '`#f`' if value does not implement this interface.

`atk-table-get-row-header` (*self* `<atk-table>`) (*row* `int`) [Function]
⇒ (*ret* `<atk-object>`)
`get-row-header` [Method]

Gets the row header of a specified row in an accessible table.

table a GObject instance that implements AtkTableIface

row a `<gint>` representing a row in the table

ret a AtkObject* representing the specified row header, or '`#f`' if value does not implement this interface.

`atk-table-get-summary` (*self* `<atk-table>`) ⇒ (*ret* `<atk-object>`) [Function]
`get-summary` [Method]

Gets the summary description of the table.

table a GObject instance that implements AtkTableIface

ret a AtkObject* representing a summary description of the table, or zero if value does not implement this interface.

`atk-table-set-caption` (*self* `<atk-table>`) (*caption* `<atk-object>`) [Function]
`set-caption` [Method]

Sets the caption for the table.

table a GObject instance that implements AtkTableIface

caption a `<atk-object>` representing the caption to set for *table*

`atk-table-set-row-description` (*self* `<atk-table>`) (*row* `int`) (*description* `mchars`) [Function]
`set-row-description` [Method]

Sets the description text for the specified *row* of *table*.

table a GObject instance that implements AtkTableIface

row a `<gint>` representing a row in *table*

description a `<gchar>` representing the description text to set for the specified *row* of *table*

`atk-table-set-column-description` (*self* `<atk-table>`) (*column* `int`) (*description* `mchars`) [Function]
`set-column-description` [Method]

Sets the description text for the specified *column* of the *table*.

table a GObject instance that implements AtkTableIface

column a `<gint>` representing a column in *table*

description a `<gchar>` representing the description text to set for the specified *column* of the *table*

`atk-table-set-row-header` (*self* `<atk-table>`) (*row* `int`) (*header* `<atk-object>`) [Function]
`set-row-header` [Method]

Sets the specified row header to *header*.

table a GObject instance that implements AtkTableIface

row a `<gint>` representing a row in *table*

header an `<atk-table>`

`atk-table-set-column-header` (*self* `<atk-table>`) (*column* `int`) (*header* `<atk-object>`) [Function]
`set-column-header` [Method]

Sets the specified column header to *header*.

table a GObject instance that implements AtkTableIface

column a `<gint>` representing a column in *table*

header an `<atk-table>`

`atk-table-set-summary` (*self* `<atk-table>`) [Function]
(*accessible* `<atk-object>`)
`set-summary` [Method]
Sets the summary description of the table.

table a GObject instance that implements AtkTableIface

accessible an `<atk-object>` representing the summary description to set for *table*

`atk-table-is-column-selected` (*self* `<atk-table>`) (*column* `int`) [Function]
⇒ (*ret* `bool`)
`is-column-selected` [Method]
Gets a boolean value indicating whether the specified *column* is selected

table a GObject instance that implements AtkTableIface

column a `<gint>` representing a column in *table*

ret a gboolean representing if the column is selected, or 0 if value does not implement this interface.

`atk-table-is-row-selected` (*self* `<atk-table>`) (*row* `int`) [Function]
⇒ (*ret* `bool`)
`is-row-selected` [Method]
Gets a boolean value indicating whether the specified *row* is selected

table a GObject instance that implements AtkTableIface

row a `<gint>` representing a row in *table*

ret a gboolean representing if the row is selected, or 0 if value does not implement this interface.

`atk-table-is-selected` (*self* `<atk-table>`) (*row* `int`) (*column* `int`) [Function]
⇒ (*ret* `bool`)
`is-selected` [Method]
Gets a boolean value indicating whether the accessible object at the specified *row* and *column* is selected

table a GObject instance that implements AtkTableIface

row a `<gint>` representing a row in *table*

column a `<gint>` representing a column in *table*

ret a gboolean representing if the cell is selected, or 0 if value does not implement this interface.

`atk-table-add-column-selection` (*self* `<atk-table>`) (*column* `int`) [Function]
⇒ (*ret* `bool`)
`add-column-selection` [Method]
Adds the specified *column* to the selection.

table a GObject instance that implements AtkTableIface

column a `<gint>` representing a column in *table*

ret a gboolean representing if the column was successfully added to the selection, or 0 if value does not implement this interface.

`atk-table-add-row-selection` (*self* `<atk-table>`) (*row* `int`) ⇒ (*ret* `bool`) [Function]
`add-row-selection` [Method]

Adds the specified *row* to the selection.

table a GObject instance that implements AtkTableIface

row a `<gint>` representing a row in *table*

ret a gboolean representing if row was successfully added to selection, or 0 if value does not implement this interface.

`atk-table-remove-column-selection` (*self* `<atk-table>`) (*column* `int`) ⇒ (*ret* `bool`) [Function]
`remove-column-selection` [Method]

Adds the specified *column* to the selection.

table a GObject instance that implements AtkTableIface

column a `<gint>` representing a column in *table*

ret a gboolean representing if the column was successfully removed from the selection, or 0 if value does not implement this interface.

`atk-table-remove-row-selection` (*self* `<atk-table>`) (*row* `int`) ⇒ (*ret* `bool`) [Function]
`remove-row-selection` [Method]

Removes the specified *row* from the selection.

table a GObject instance that implements AtkTableIface

row a `<gint>` representing a row in *table*

ret a gboolean representing if the row was successfully removed from the selection, or 0 if value does not implement this interface.

23 AtkText

The ATK interface implemented by components with text content.

23.1 Overview

<atk-text> should be implemented by <atk-objects> on behalf of widgets that have text content which is either attributed or otherwise non-trivial. <atk-objects> whose text content is simple, unattributed, and very brief may expose that content via <atk-object-get-name> instead; however if the text is editable, multi-line, typically longer than three or four words, attributed, selectable, or if the object already uses the 'name' ATK property for other information, the <atk-text> interface should be used to expose the text content. In the case of editable text content, <atk-editable-text> (a subtype of the <atk-text> interface) should be implemented instead.

<atk-text> provides not only traversal facilities and change notification for text content, but also caret tracking and glyph bounding box calculations. Note that the text strings are exposed as UTF-8, and are therefore potentially multi-byte, and caret-to-byte offset mapping makes no assumptions about the character length; also bounding box glyph-to-offset mapping may be complex for languages which use ligatures.

23.2 Usage

<atk-text> [Class]

Derives from <ginterface>.

This class defines no direct slots.

text-changed (*arg0* <gint>) (*arg1* <gint>) [Signal on <atk-text>]

The "text-changed" signal is emitted when the text of the object which implements the AtkText interface changes, This signal will have a detail which is either "insert" or "delete" which identifies whether the text change was an insertion or a deletion

text-caret-moved (*arg0* <gint>) [Signal on <atk-text>]

The "text-caret-moved" signal is emitted when the caret position of the text of an object which implements AtkText changes.

text-selection-changed [Signal on <atk-text>]

The "text-selection-changed" signal is emitted when the selected text of an object which implements AtkText changes.

text-attributes-changed [Signal on <atk-text>]

The "text-attributes-changed" signal is emitted when the text attributes of the text of an object which implements AtkText changes.

atk-text-get-text (*self* <atk-text>) (*start_offset* int) [Function]
(*end_offset* int) ⇒ (*ret* mchars)

get-text [Method]

Gets the specified text.

text an <atk-text>

start-offset
: start position

end-offset
: end position

ret
: the text from *start-offset* up to, but not including *end-offset*.

`atk-text-get-character-at-offset` (*self* `<atk-text>`) (*offset* `int`) ⇒ (*ret* `unsigned-int32`) [Function]

`get-character-at-offset` [Method]

Gets the specified text.

text
: an `<atk-text>`

offset
: position

ret
: the character at *offset*.

`atk-text-get-text-after-offset` (*self* `<atk-text>`) (*offset* `int`) (*boundary_type* `<atk-text-boundary>`) ⇒ (*ret* `mchars`) (*start_offset* `int`) (*end_offset* `int`) [Function]

`get-text-after-offset` [Method]

Gets the specified text.

If the boundary_type if ATK_TEXT_BOUNDARY_CHAR the character after the offset is returned.

If the boundary_type is ATK_TEXT_BOUNDARY_WORD_START the returned string is from the word start after the offset to the next word start.

The returned string will contain the word after the offset if the offset is inside a word or if the offset is not inside a word.

If the boundary_type is ATK_TEXT_BOUNDARY_WORD_END the returned string is from the word end at or after the offset to the next work end.

The returned string will contain the word after the offset if the offset is inside a word and will contain the word after the word after the offset if the offset is not inside a word.

If the boundary type is ATK_TEXT_BOUNDARY_SENTENCE_START the returned string is from the sentence start after the offset to the next sentence start.

The returned string will contain the sentence after the offset if the offset is inside a sentence or if the offset is not inside a sentence.

If the boundary_type is ATK_TEXT_BOUNDARY_SENTENCE_END the returned string is from the sentence end at or after the offset to the next sentence end.

The returned string will contain the sentence after the offset if the offset is inside a sentence and will contain the sentence after the sentence after the offset if the offset is not inside a sentence.

If the boundary type is ATK_TEXT_BOUNDARY_LINE_START the returned string is from the line start after the offset to the next line start.

If the boundary_type is ATK_TEXT_BOUNDARY_LINE_END the returned string is from the line end at or after the offset to the next line start.

text
: an `<atk-text>`

offset position

boundary-type
An `<atk-text-boundary>`

start-offset
the start offset of the returned string

end-offset the offset of the first character after the returned substring

ret the text after *offset* bounded by the specified *boundary-type*.

`atk-text-get-text-at-offset` (*self* `<atk-text>`) (*offset* `int`) [Function]
(*boundary_type* `<atk-text-boundary>`) ⇒ (*ret* `mchars`) (*start_offset* `int`) (*end_offset* `int`)

`get-text-at-offset` [Method]

Gets the specified text.

If the boundary_type if ATK_TEXT_BOUNDARY_CHAR the character at the offset is returned.

If the boundary_type is ATK_TEXT_BOUNDARY_WORD_START the returned string is from the word start at or before the offset to the word start after the offset.

The returned string will contain the word at the offset if the offset is inside a word and will contain the word before the offset if the offset is not inside a word.

If the boundary_type is ATK_TEXT_BOUNDARY_WORD_END the returned string is from the word end before the offset to the word end at or after the offset.

The returned string will contain the word at the offset if the offset is inside a word and will contain the word after to the offset if the offset is not inside a word.

If the boundary type is ATK_TEXT_BOUNDARY_SENTENCE_START the returned string is from the sentence start at or before the offset to the sentence start after the offset.

The returned string will contain the sentence at the offset if the offset is inside a sentence and will contain the sentence before the offset if the offset is not inside a sentence.

If the boundary_type is ATK_TEXT_BOUNDARY_SENTENCE_END the returned string is from the sentence end before the offset to the sentence end at or after the offset.

The returned string will contain the sentence at the offset if the offset is inside a sentence and will contain the sentence after the offset if the offset is not inside a sentence.

If the boundary type is ATK_TEXT_BOUNDARY_LINE_START the returned string is from the line start at or before the offset to the line start after the offset.

If the boundary_type is ATK_TEXT_BOUNDARY_LINE_END the returned string is from the line end before the offset to the line end at or after the offset.

text an `<atk-text>`

offset position

boundary-type
An `<atk-text-boundary>`

start-offset
the start offset of the returned string

end-offset the offset of the first character after the returned substring

ret the text at *offset* bounded by the specified *boundary-type*.

`atk-text-get-text-before-offset` (*self* `<atk-text>`) (*offset* `int`) [Function]
(*boundary_type* `<atk-text-boundary>`) ⇒ (*ret* `mchars`) (*start_offset* `int`) (*end_offset* `int`)

`get-text-before-offset` [Method]

Gets the specified text.

If the boundary_type if ATK_TEXT_BOUNDARY_CHAR the character before the offset is returned.

If the boundary_type is ATK_TEXT_BOUNDARY_WORD_START the returned string is from the word start before the word start before the offset to the word start before the offset.

The returned string will contain the word before the offset if the offset is inside a word and will contain the word before the word before the offset if the offset is not inside a word.

If the boundary_type is ATK_TEXT_BOUNDARY_WORD_END the returned string is from the word end before the word end at or before the offset to the word end at or before the offset.

The returned string will contain the word before the offset if the offset is inside a word or if the offset is not inside a word.

If the boundary type is ATK_TEXT_BOUNDARY_SENTENCE_START the returned string is from the sentence start before the sentence start before the offset to the sentence start before the offset.

The returned string will contain the sentence before the offset if the offset is inside a sentence and will contain the sentence before the sentence before the offset if the offset is not inside a sentence.

If the boundary_type is ATK_TEXT_BOUNDARY_SENTENCE_END the returned string is from the sentence end before the sentence end at or before the offset to the sentence end at or before the offset.

The returned string will contain the sentence before the offset if the offset is inside a sentence or if the offset is not inside a sentence.

If the boundary type is ATK_TEXT_BOUNDARY_LINE_START the returned string is from the line start before the line start ar or before the offset to the line start ar or before the offset.

If the boundary_type is ATK_TEXT_BOUNDARY_LINE_END the returned string is from the line end before the line end before the offset to the line end before the offset.

text an `<atk-text>`

offset position

boundary-type
An `<atk-text-boundary>`

start-offset
the start offset of the returned string

end-offset the offset of the first character after the returned substring

ret the text before *offset* bounded by the specified *boundary-type*.

`atk-text-get-caret-offset` (*self* `<atk-text>`) ⇒ (*ret* `int`) [Function]
`get-caret-offset` [Method]
Gets the offset position of the caret (cursor).

text an `<atk-text>`

ret the offset position of the caret (cursor).

`atk-text-get-character-extents` (*self* `<atk-text>`) (*offset* `int`) [Function]
(*coords* `<atk-coord-type>`) ⇒ (*x* `int`) (*y* `int`) (*width* `int`) (*height* `int`)
`get-character-extents` [Method]
Get the bounding box containing the glyph representing the character at a particular text offset.

text an `<atk-text>`

offset The offset of the text character for which bounding information is required.

x Pointer for the x cordinate of the bounding box

y Pointer for the y cordinate of the bounding box

width Pointer for the width of the bounding box

height Pointer for the height of the bounding box

coords specify whether coordinates are relative to the screen or widget window

`atk-text-get-character-count` (*self* `<atk-text>`) ⇒ (*ret* `int`) [Function]
`get-character-count` [Method]
Gets the character count.

text an `<atk-text>`

ret the number of characters.

`atk-text-get-offset-at-point` (*self* `<atk-text>`) (*x* `int`) (*y* `int`) [Function]
(*coords* `<atk-coord-type>`) ⇒ (*ret* `int`)
`get-offset-at-point` [Method]
Gets the offset of the character located at coordinates *x* and *y*. *x* and *y* are interpreted as being relative to the screen or this widget's window depending on *coords*.

text an `<atk-text>`

x screen x-position of character

y screen y-position of character

coords specify whether coordinates are relative to the screen or widget window

ret the offset to the character which is located at the specified *x* and *y* coordinates.

`atk-text-get-n-selections` (*self* `<atk-text>`) ⇒ (*ret* `int`) [Function]
`get-n-selections` [Method]

Gets the number of selected regions.

text an `<atk-text>`

ret The number of selected regions, or -1 if a failure occurred.

`atk-text-get-selection` (*self* `<atk-text>`) (*selection_num* `int`) [Function]
⇒ (*ret* `mchars`) (*start_offset* `int`) (*end_offset* `int`)
`get-selection` [Method]

Gets the text from the specified selection.

text an `<atk-text>`

selection-num
The selection number. The selected regions are assigned numbers that correspond to how far the region is from the start of the text. The selected region closest to the beginning of the text region is assigned the number 0, etc. Note that adding, moving or deleting a selected region can change the numbering.

start-offset
passes back the start position of the selected region

end-offset passes back the end position of (e.g. offset immediately past) the selected region

ret the selected text.

`atk-text-add-selection` (*self* `<atk-text>`) (*start_offset* `int`) [Function]
(*end_offset* `int`) ⇒ (*ret* `bool`)
`add-selection` [Method]

Adds a selection bounded by the specified offsets.

text an `<atk-text>`

start-offset
the start position of the selected region

end-offset the offset of the first character after the selected region.

ret '`#t`' if success, '`#f`' otherwise

`atk-text-remove-selection` (*self* `<atk-text>`) (*selection_num* `int`) [Function]
⇒ (*ret* `bool`)
`remove-selection` [Method]

Removes the specified selection.

text an `<atk-text>`

selection-num
The selection number. The selected regions are assigned numbers that correspond to how far the region is from the start of the text. The selected region closest to the beginning of the text region is assigned the number 0, etc. Note that adding, moving or deleting a selected region can change the numbering.

ret '`#t`' if success, '`#f`' otherwise

`atk-text-set-selection` (*self* `<atk-text>`) (*selection_num* `int`) [Function]
(*start_offset* `int`) (*end_offset* `int`) ⇒ (*ret* `bool`)

`set-selection` [Method]

Changes the start and end offset of the specified selection.

text an `<atk-text>`

selection-num
The selection number. The selected regions are assigned numbers that correspond to how far the region is from the start of the text. The selected region closest to the beginning of the text region is assigned the number 0, etc. Note that adding, moving or deleting a selected region can change the numbering.

start-offset
the new start position of the selection

end-offset the new end position of (e.g. offset immediately past) the selection

ret '`#t`' if success, '`#f`' otherwise

`atk-text-set-caret-offset` (*self* `<atk-text>`) (*offset* `int`) [Function]
⇒ (*ret* `bool`)

`set-caret-offset` [Method]

Sets the caret (cursor) position to the specified *offset*.

text an `<atk-text>`

offset position

ret '`#t`' if success, '`#f`' otherwise.

`atk-text-attribute-get-name` (*attr* `<atk-text-attribute>`) [Function]
⇒ (*ret* `mchars`)

Gets the name corresponding to the `<atk-text-attribute>`

attr The `<atk-text-attribute>` whose name is required

ret a string containing the name; this string should not be freed

`atk-text-attribute-for-name` (*name* `mchars`) [Function]
⇒ (*ret* `<atk-text-attribute>`)

Get the `<atk-text-attribute>` type corresponding to a text attribute name.

name a string which is the (non-localized) name of an ATK text attribute.

ret the `<atk-text-attribute>` enumerated type corresponding to the specified name, or `<atk-text-attribute-invalid>` if no matching text attribute is found.

`atk-text-attribute-get-value` (*attr* `<atk-text-attribute>`) [Function]
(*index_* `int`) ⇒ (*ret* `mchars`)

Gets the value for the index of the `<atk-text-attribute>`

attr The `<atk-text-attribute>` for which a value is required

index The index of the required value

ret a string containing the value; this string should not be freed; NULL is returned if there are no values maintained for the attr value.

24 AtkUtil

A set of ATK utility functions for event and toolkit support.

24.1 Overview

A set of ATK utility functions which are used to support event registration of various types, and obtaining the 'root' accessible of a process and information about the current ATK implementation and toolkit version.

24.2 Usage

`<atk-util>` [Class]

Derives from `<gobject>`.

This class defines no direct slots.

`atk-remove-focus-tracker` (*tracker_id* `unsigned-int`) [Function]

Removes the specified focus tracker from the list of functions to be called when any object receives focus.

tracker-id the id of the focus tracker to remove

`atk-focus-tracker-notify` (*object* `<atk-object>`) [Function]

Cause the focus tracker functions which have been specified to be executed for the object.

object an `<atk-object>`

`atk-remove-global-event-listener` (*listener_id* `unsigned-int`) [Function]

Removes the specified event listener

listener-id the id of the event listener to remove

`atk-remove-key-event-listener` (*listener_id* `unsigned-int`) [Function]

Removes the specified event listener

listener-id the id of the event listener to remove

`atk-get-root` ⇒ (*ret* `<atk-object>`) [Function]

Gets the root accessible container for the current application.

ret the root accessible container for the current application

`atk-get-focus-object` ⇒ (*ret* `<atk-object>`) [Function]

Gets the currently focused object.

Returns:

ret the currently focused object for the current application

Since ATK 1.6

`atk-get-toolkit-name` ⇒ (*ret* `mchars`) [Function]

Gets name string for the GUI toolkit implementing ATK for this application.

ret name string for the GUI toolkit implementing ATK for this application

`atk-get-toolkit-version` ⇒ (*ret* `mchars`) [Function]

Gets version string for the GUI toolkit implementing ATK for this application.

ret version string for the GUI toolkit implementing ATK for this application

25 AtkValue

The ATK interface implemented by valuators and components which display or select a value from a bounded range of values.

25.1 Overview

`<atk-value>` should be implemented for components which either display a value from a bounded range, or which allow the user to specify a value from a bounded range, or both. For instance, most sliders and range controls, as well as dials, should have `<atk-object>` representations which implement `<atk-value>` on the component's behalf. `<at-kvalues>` may be read-only, in which case attempts to alter the value return FALSE to indicate failure.

25.2 Usage

`<atk-value>` [Class]

Derives from `<ginterface>`.

This class defines no direct slots.

`atk-value-get-current-value` (*self* `<atk-value>`) (*value* `<gvalue>`) [Function]
`get-current-value` [Method]

Gets the value of this object.

obj a GObject instance that implements AtkValueIface

value a `<gvalue>` representing the current accessible value

`atk-value-get-maximum-value` (*self* `<atk-value>`) (*value* `<gvalue>`) [Function]
`get-maximum-value` [Method]

Gets the maximum value of this object.

obj a GObject instance that implements AtkValueIface

value a `<gvalue>` representing the maximum accessible value

`atk-value-get-minimum-value` (*self* `<atk-value>`) (*value* `<gvalue>`) [Function]
`get-minimum-value` [Method]

Gets the minimum value of this object.

obj a GObject instance that implements AtkValueIface

value a `<gvalue>` representing the minimum accessible value

`atk-value-set-current-value` (*self* `<atk-value>`) (*value* `<gvalue>`) [Function]
⇒ (*ret* `bool`)
`set-current-value` [Method]

Sets the value of this object.

obj a GObject instance that implements AtkValueIface

value a `<gvalue>` which is the desired new accessible value.

ret '`#t`' if new value is successfully set, '`#f`' otherwise.

`atk-value-get-minimum-increment` (*self* `<atk-value>`) [Function]
(*value* `<gvalue>`)
`get-minimum-increment` [Method]

Gets the minimum increment by which the value of this object may be changed. If zero, the minimum increment is undefined, which may mean that it is limited only by the floating point precision of the platform.

obj a GObject instance that implements AtkValueIface

value a `<gvalue>` representing the minimum increment by which the accessible value may be changed

Since ATK 1.12

26 Undocumented

The following symbols, if any, have not been properly documented.

26.1 (gnome gw atk)

`atk-component-ref-accessible-at-point` [Variable]

`atk-object-factory-create-accessible` [Variable]

`atk-object-factory-get-accessible-type` [Function]

`atk-object-get-n-accessible-children` [Variable]

`atk-relation-set-add-relation-by-type` [Variable]

`atk-relation-set-get-relation-by-type` [Variable]

`atk-streamable-content-get-mime-type` [Variable]

`atk-streamable-content-get-n-mime-types` [Variable]

Type Index

<atk-action> 2
<atk-component> 4
<atk-document> 8
<atk-editable-text> 10
<atk-gobject-accessible> 12
<atk-hyperlink-impl> 13
<atk-hyperlink> 14
<atk-hypertext> 17
<atk-image> 18
<atk-implementor> 24
<atk-no-op-object-factory> 20
<atk-no-op-object> 21
<atk-object-factory> 22
<atk-object> 23
<atk-registry> 29
<atk-relation-set> 31
<atk-relation> 33
<atk-selection> 35
<atk-streamable-content> 40
<atk-table> 42
<atk-text> 49
<atk-util> 57
<atk-value> 59

Function Index

A

active-descendant-changed on <atk-object> 24
add 31
add-column-selection 47
add-relationship 27
add-row-selection 48
add-selection 35, 54
add-state 37
add-target 34
and-sets 38
atk-action-do-action 2
atk-action-get-description 3
atk-action-get-keybinding 3
atk-action-get-localized-name 3
atk-action-get-n-actions 2
atk-action-get-name 3
atk-action-set-description 3
atk-component-contains 4
atk-component-get-alpha 7
atk-component-get-extents 4
atk-component-get-layer 5
atk-component-get-mdi-zorder 5
atk-component-get-position 5
atk-component-get-size 5
atk-component-grab-focus 6
atk-component-set-extents 6
atk-component-set-position 6
atk-component-set-size 7
atk-document-get-attribute-value 9
atk-document-get-document-type 8
atk-document-get-locale 9
atk-document-set-attribute-value 9
atk-editable-text-copy-text 10
atk-editable-text-cut-text 11
atk-editable-text-delete-text 11
atk-editable-text-insert-text 10
atk-editable-text-paste-text 11
atk-editable-text-set-text-contents 10
atk-focus-tracker-notify 57
atk-get-default-registry 30
atk-get-focus-object 57
atk-get-root 57
atk-get-toolkit-name 57
atk-get-toolkit-version 58
atk-gobject-accessible-for-object 12
atk-gobject-accessible-get-object 12
atk-hyperlink-get-end-index 15
atk-hyperlink-get-n-anchors 15
atk-hyperlink-get-object 14
atk-hyperlink-get-start-index 15
atk-hyperlink-get-uri 14
atk-hyperlink-impl-get-hyperlink 13
atk-hyperlink-is-inline 15
atk-hyperlink-is-selected-link 15
atk-hyperlink-is-valid 15
atk-hypertext-get-link 17
atk-hypertext-get-link-index 17
atk-hypertext-get-n-links 17
atk-image-get-image-description 18
atk-image-get-image-locale 19
atk-image-get-image-position 18
atk-image-get-image-size 19
atk-image-set-image-description 19
atk-implementor-ref-accessible 24
atk-no-op-object-factory-new 20
atk-no-op-object-new 21
atk-object-add-relationship 27
atk-object-factory-get-accessible-type ... 61
atk-object-factory-invalidate 22
atk-object-get-description 25
atk-object-get-index-in-parent 26
atk-object-get-layer 25
atk-object-get-mdi-zorder 26
atk-object-get-name 25
atk-object-get-parent 25
atk-object-get-role 26
atk-object-notify-state-change 27
atk-object-ref-accessible-child 25
atk-object-ref-relation-set 25
atk-object-ref-state-set 26
atk-object-remove-relationship 27
atk-object-set-description 27
atk-object-set-name 26
atk-object-set-parent 27
atk-object-set-role 27
atk-registry-get-factory 29
atk-registry-get-factory-type 29
atk-registry-set-factory-type 29
atk-relation-add-target 34
atk-relation-get-relation-type 33
atk-relation-set-add 31
atk-relation-set-contains 31
atk-relation-set-get-n-relations 32
atk-relation-set-get-relation 32
atk-relation-set-new 31
atk-relation-set-remove 31
atk-relation-type-for-name 33
atk-relation-type-get-name 33
atk-relation-type-register 33
atk-remove-focus-tracker 57
atk-remove-global-event-listener 57
atk-remove-key-event-listener 57
atk-role-for-name 28
atk-role-get-localized-name 28
atk-role-get-name 28
atk-selection-add-selection 35
atk-selection-clear-selection 35
atk-selection-get-selection-count 36

atk-selection-is-child-selected 36
atk-selection-ref-selection 35
atk-selection-remove-selection 36
atk-selection-select-all-selection 36
atk-state-set-add-state 37
atk-state-set-and-sets 38
atk-state-set-clear-states 37
atk-state-set-contains-state 37
atk-state-set-is-empty 37
atk-state-set-new 37
atk-state-set-or-sets 38
atk-state-set-remove-state 38
atk-state-set-xor-sets 38
atk-state-type-for-name 39
atk-state-type-get-name 39
atk-streamable-content-get-stream 40
atk-streamable-content-get-uri 40
atk-table-add-column-selection 47
atk-table-add-row-selection 48
atk-table-get-caption 44
atk-table-get-column-at-index 43
atk-table-get-column-description 45
atk-table-get-column-extent-at 44
atk-table-get-column-header 45
atk-table-get-index-at 43
atk-table-get-n-columns 44
atk-table-get-n-rows 44
atk-table-get-row-at-index 43
atk-table-get-row-description 45
atk-table-get-row-extent-at 44
atk-table-get-row-header 45
atk-table-get-summary 45
atk-table-is-column-selected 47
atk-table-is-row-selected 47
atk-table-is-selected 47
atk-table-ref-at 43
atk-table-remove-column-selection 48
atk-table-remove-row-selection 48
atk-table-set-caption 46
atk-table-set-column-description 46
atk-table-set-column-header 46
atk-table-set-row-description 46
atk-table-set-row-header 46
atk-table-set-summary 47
atk-text-add-selection 54
atk-text-attribute-for-name 55
atk-text-attribute-get-name 55
atk-text-attribute-get-value 56
atk-text-get-caret-offset 53
atk-text-get-character-at-offset 50
atk-text-get-character-count 53
atk-text-get-character-extents 53
atk-text-get-n-selections 54
atk-text-get-offset-at-point 53
atk-text-get-selection 54
atk-text-get-text 49
atk-text-get-text-after-offset 50
atk-text-get-text-at-offset 51
atk-text-get-text-before-offset 52
atk-text-remove-selection 54
atk-text-set-caret-offset 55
atk-text-set-selection 55
atk-value-get-current-value 59
atk-value-get-maximum-value 59
atk-value-get-minimum-increment 60
atk-value-get-minimum-value 59
atk-value-set-current-value 59

B

bounds-changed on <atk-component> 4

C

children-changed on <atk-object> 24
clear-selection 35
clear-states 37
column-deleted on <atk-table> 42
column-inserted on <atk-table> 42
column-reordered on <atk-table> 42
contains 4, 31
contains-state 37
copy-text 10
cut-text 11

D

delete-text 11
do-action 2

F

focus-event on <atk-object> 24

G

get-alpha 7
get-attribute-value 9
get-caption 44
get-caret-offset 53
get-character-at-offset 50
get-character-count 53
get-character-extents 53
get-column-at-index 43
get-column-description 45
get-column-extent-at 44
get-column-header 45
get-current-value 59
get-description 3, 25
get-document-type 8
get-end-index 15
get-extents 4
get-factory 29
get-factory-type 29
get-hyperlink 13
get-image-description 18

get-image-locale ... 19
get-image-position ... 18
get-image-size ... 19
get-index-at ... 43
get-index-in-parent ... 26
get-keybinding ... 3
get-layer ... 5, 25
get-link ... 17
get-link-index ... 17
get-locale ... 9
get-localized-name ... 3
get-maximum-value ... 59
get-mdi-zorder ... 5, 26
get-minimum-increment ... 60
get-minimum-value ... 59
get-n-actions ... 2
get-n-anchors ... 15
get-n-columns ... 44
get-n-links ... 17
get-n-relations ... 32
get-n-rows ... 44
get-n-selections ... 54
get-name ... 3, 25
get-object ... 12, 14
get-offset-at-point ... 53
get-parent ... 25
get-position ... 5
get-relation ... 32
get-relation-type ... 33
get-role ... 26
get-row-at-index ... 43
get-row-description ... 45
get-row-extent-at ... 44
get-row-header ... 45
get-selection ... 54
get-selection-count ... 36
get-size ... 5
get-start-index ... 15
get-stream ... 40
get-summary ... 45
get-text ... 49
get-text-after-offset ... 50
get-text-at-offset ... 51
get-text-before-offset ... 52
get-uri ... 14, 40
grab-focus ... 6

I

insert-text ... 10
invalidate ... 22
is-child-selected ... 36
is-column-selected ... 47
is-empty ... 37
is-inline ... 15
is-row-selected ... 47
is-selected ... 47
is-selected-link ... 15
is-valid ... 15

L

link-activated on <atk-hyperlink> ... 14
link-selected on <atk-hypertext> ... 17
load-complete on <atk-document> ... 8
load-stopped on <atk-document> ... 8

M

model-changed on <atk-table> ... 43

N

notify-state-change ... 27

O

or-sets ... 38

P

paste-text ... 11
property-change on <atk-object> ... 24

R

ref-accessible ... 24
ref-accessible-child ... 25
ref-at ... 43
ref-relation-set ... 25
ref-selection ... 35
ref-state-set ... 26
reload on <atk-document> ... 8
remove ... 31
remove-column-selection ... 48
remove-relationship ... 27
remove-row-selection ... 48
remove-selection ... 36, 54
remove-state ... 38
row-deleted on <atk-table> ... 42
row-inserted on <atk-table> ... 42
row-reordered on <atk-table> ... 42

S

select-all-selection ... 36
selection-changed on <atk-selection> ... 35
set-attribute-value ... 9
set-caption ... 46
set-caret-offset ... 55
set-column-description ... 46
set-column-header ... 46
set-current-value ... 59
set-description ... 3, 27
set-extents ... 6

set-factory-type 29
set-image-description 19
set-name 26
set-parent 27
set-position 6
set-role 27
set-row-description 46
set-row-header 46
set-selection 55
set-size 7
set-summary 47
set-text-contents 10
state-change on <atk-object> 24

T

text-attributes-changed on <atk-text> 49
text-caret-moved on <atk-text> 49
text-changed on <atk-text> 49
text-selection-changed on <atk-text> 49

V

visible-data-changed on <atk-object> 24

X

xor-sets 38