

AccessWare Quick Reference

Optegra[®] Release 6

DOC40185-007

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8 January 2001

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Preface

AccessWare Quick Reference is a guide to the items, attributes, and actions used in the definition of an AccessWare user interface.

Related Documents

The following documents may be helpful as you use *AccessWare Quick Reference*:

- *AccessWare Function Reference*
- *AccessWare User Guide*
- *Customizing EPD.Connect*

Book Conventions

The following table illustrates and explains conventions used in writing about Optegra applications.

| Convention | Example | Explanation |
|------------------------------|---|---|
| EPD_HOME | cd \$EPD_HOME/install (UNIX) cd %EPD_HOME%\install (Windows) | Represents the default path where the current version of the product is installed. |
| Menu selections | Vault > Check Out > Lock | Indicates a command that you can choose from a menu. |
| Command buttons and options | Mandatory check box, Add button, Description text box | Names selectable items from dialog boxes: options, buttons, toggles, text boxes, and switches. |
| User input and code | Wheel_Assy_details -xvf /dev/rst0 Enter command> plot_config | Enter the text in a text box or on a command line. Where system output and user input are mixed, user input is in bold. |
| System output | CT_struct.aename | Indicates system responses. |
| Parameter and variable names | tar -cvf /dev/rst0 filename | Supply an appropriate substitute for each parameter or variable; for example, replace filename with an actual file name. |
| Commands and keywords | The ciaddobj command creates an instance of a binder. | Shows command syntax. |
| Text string | "SRFGROUPA" or 'SRFGROUPA' | Shows text strings. Enclose text strings with single or double quotation marks. |
| Integer | n | Supply an integer for <i>n</i> . |
| Real number | x | Supply a real number for <i>x</i> . |
| # | # mkdir /cdrom | Indicates the root (superuser) prompt on command lines. |
| % | % rlogin remote_system_name -l root | Indicates the C shell prompt on command lines. |
| \$ | \$ rlogin remote_system_name -l root | Indicates the Bourne shell prompt on command lines. |
| > | > copy filename | Indicates the MS-DOS prompt on command lines. |
| Keystrokes | Return or Control-g | Indicates the keys to press on a keyboard. |

Online User Documentation

Online documentation for each Optegra book is provided in HTML if the documentation CD-ROM is installed. You can view the online documentation from an HTML browser or from the HELP command.

You can also view the online documentation directly from the CD-ROM without installing it.

From an HTML Browser:

1. Navigate to the directory where the documents are installed. For example,
 `$EPD_HOME/data/html/htmldoc/` (UNIX)
 `%EPD_HOME%\data\html\htmldoc\` (Windows NT)
2. Click `mainmenu.html`. A list of available Optegra documentation appears.
3. Click the book title you want to view.

From the HELP Command:

To view the online documentation for your specific application, click HELP. (Consult the documentation specific to your application for more information.)

From the Documentation CD-ROM:

1. Mount the documentation CD-ROM.
2. Point your browser to:
 `CDROM_mount_point/htmldoc/mainmenu.html` (UNIX)
 `CDROM_Drive:\htmldoc\mainmenu.html` (Windows NT)

Printing Documentation

A PDF (Portable Document Format) file is included on the CD-ROM for each online book. See the first page of each online book for the document number referenced in the PDF file name. Check with your system administrator if you need more information.

You must have Acrobat Reader installed to view and print PDF files.

The default documentation directories are:

- `$EPD_HOME/data/html/pdf/doc_number.pdf` (UNIX)
- `%EPD_HOME%\data\html\pdf\doc_number.pdf` (Windows NT)

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Quick Reference to Items, Attributes, and Actions

This document provides a quick reference to the items, attributes, and actions used in the definition of an AccessWare user interface.

- Window Item Quick Reference
- Item and ACTION Attributes Quick Reference
- Function Quick Reference

Window Item Quick Reference

This section explains all the window items, their attributes, and actions.

- Items represent, for example, text fields and buttons in a window.
- Item attributes characterize the items, for example, size and position.
- Actions are associated with items by an ACTION attribute.

The window item types in the AccessWare user interfaces follow:

Table 1-1 Description of AccessWare Items

| Item | Description |
|---------------|--|
| QWINDOW | Defines a new window. This is the first item defined in the resource file. |
| Q_PANEL | Defines a rectangular area within a window and is used for visual effect. |
| QBUTTON | Defines rectangular buttons within a window. You can select buttons to set options or to invoke an immediate action. |
| QCHOICE | Displays a set of options for both single and multiple selections. |
| QTEXT | Allows you to display and/or enter single line text field text. |
| QMESSAGE | Provides an area in the window for the display labels and text messages. |
| QLIST | Displays a scrollable list of information for the selection of items for an application. |
| QMENU | References the definition of a menu used in conjunction with other window items. |
| QMENUITEM | Defines a single menu item. |
| QCONTROLSTATE | Controls the state of QMENUITEM. The control state can be visibly dependent or active dependent. |
| QEXPRESSION | Defines the boolean of two control states. |
| QPOPUP | Provides the link to the definition of a window in another resource file. |
| QGROUP | Groups a set of items for common actions. |
| QTABCONTROL | Generates tab controls to divide a window into logical areas or to provide a title for an information panel. |
| QMENUBAR | Generates top level menus for an application. |
| QSEPARATOR | Generates a separation within a panel or window. |
| QSLIDER | Generates a slide bar to adjust a numeric value. |

Attributes

The attribute list for each window item type contains the attributes to define the item. An attribute is defined by a keyword followed by the arguments. Attributes must be given on the line following the item keyword. Attribute keywords and arguments are separated by commas.

- `QEND` terminates the list of attributes for each item definition.
- `QATTREND` terminates the file.

QWINDOW Item

The `QWINDOW` item introduces a window definition. It must appear at the beginning of each window resource file.

Attributes

Attributes to define the position and size of the window

| | |
|--------------------|--|
| XLOC , xX | Location from the top left corner |
| YLOC , yY | Location down from top left corner |
| WIDTH , pixels | Width of window in pixels |
| HEIGHT , pixels | Height of window in pixels |
| MINWIDTH , pixels | Minimum width of a window in pixels during creation or resize |
| MINHEIGHT , pixels | Minimum height of a window in pixels during creation or resize |

Attributes to define the closed window icon

| | |
|-------------------|----------------------------------|
| ICON , iconname | Name of the AccessWare icon file |
| ICONLABEL , label | Icon label for the closed window |
| XPOS , xX | Position of window closed icon |
| YPOS , yY | Position of window closed icon |

Other attributes applicable to windows

| | |
|--------------------|-------------------------------------|
| LABEL , text_label | Text label in window header stripe |
| FONT , fontname | Text font to be used for the window |

Attributes that affect the whole interface

| | |
|--------------------|--|
| HELPWIN , filename | Name of the Help window for the interface |
| PALETTE , palette | Name of the color palette file |
| NOBANNER | Suppress a banner page at startup |
| NOSTRIPE | Do not include the window stripes |
| GLOBVARS , file | File of global variables |
| RESIZE , direction | Direction in which to resize a window |
| SPLASH , imagename | The name of a image to be used as a splashscreen |

More about the Attributes

An ACTION attribute applied to a window is used when the window is initiated or it is exited. The associated actions can, for example, be used to clean up on exiting a window.

The width, height, and origin of a window relate to the usable area of the window. That is the area inside the frame placed by the windowing system.

The Identifier of a Window: A QWINDOW item is referenced by the QID of the QPOPUP item that references its resource file. The main window, which does not have an associated QPOPUP item, is referenced by the special identifier mainwin.

Structure of a Resource File

The layout of a resource file is as follows:

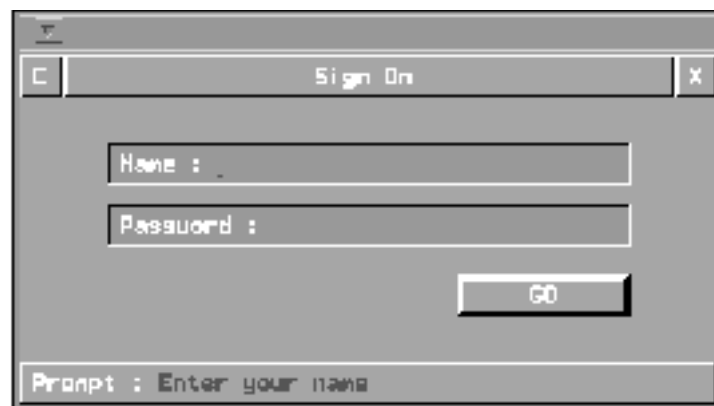
```
QWINDOW
window_attribute_list QEND
item_type
item_attribute_list QEND
QATTREND
```

- **QWINDOW:** Introduces the definition of the window
`window_attribute_list` is a list of attributes to define the window.
- **item_type** is one of the following: `Q_PANEL` `Q_BUTTON` `Q_CHOICE` `Q_TEXT` `Q_MESSAGE` `Q_LIST` `Q_MENU` `Q_POPUP` `Q_MENU_ITEM` `Q_CONTROL_STATE` `Q_EXPRESSION` `Q_GROUP` `Q_TAB_CONTROL` `Q_SEPARATOR` `Q_SLIDER` `Q_MENU_BAR`. Repeat for each `item_type` in the `QWINDOW`.
- `item_attribute_list` is a list of attributes to define the item.
- **QEND:** Terminates the list of attributes for each item definition.
- **QATTREND:** Terminates the file.
- Comment lines are denoted by the `#` symbol in the first column of any row. They cannot be used inside an item definition.

Example

```
QWINDOW
XLOC, 100, YLOC, 200, WIDTH, 400, HEIGHT, 200, QEND
```

Figure 1-1 Example of a Window



QPANEL Item

The QPANEL item defines a rectangular area within a window. It is used for visual effects, for example, to divide a window into logical areas or to provide a title for an information panel. It is also used to provide some specialized functions in an AccessWare interface using specific ACTION codes.

Attributes

Attribute to specify the name of the item

QID , qidname Unique item identifier

Attributes to define the position of an item

XPOS , xX Position of item inside the window

YPOS , yY Position of item inside the window

XOFFSET , x Position of item relative to another

YOFFSET , y Position of item relative to another

XAFTER , x Position of item from end of an item

YAFTER , y Position of item from end of an item

Attributes to define the size of an item

WIDTH , pixels Width of item in pixels

HEIGHT , pixels Height of item in pixels

COLS , characters Width of item in terms of characters

ROWS , lines Height of item in lines of text

Attributes to specify the behavior of an item on resize

MOVEX , percentage Percentage of resize to move item in the X direction

MOVEY , percentage Percentage of resize to move item in the Y direction

STRETCHX , percentage Percentage of resize to stretch item in the X direction

STRETCHY , percentage Percentage of resize to stretch item in the Y direction

Attributes to define the visual appearance of an item

DEPTH , pixels Item depth appearance in pixels

INVERT , boolean Make item recessed: 1 = recessed

ETCH , boolean Give item an etched border: 1 = etched

Attributes to control the color of an item

ITEMCOLOR , col Color of the item

TEXTCOLOR , col Color of the item text

BACKCOLOR , col Color of the selected item

GREYOUTCOL , col Grey-out color

Attributes to assign and position panel text

LABEL , panel_text Text label to be displayed in panel

Attribute to specify a value associated with a panel item

VALUE , integer Number of rows/columns to scroll

Attributes applicable to other panel items

| | |
|----------------------|--------------------------------------|
| VISIBLE , boolean | Specify item visibility: 1 = visible |
| ACTIVE , boolean | Set item active: 1 = active |
| FONT , fontname | Specify the text font for an item |
| PROMPT , string | Specify the prompt to the user |
| HELPPFILE , filename | Specify the name of a help file |

Special Functions

QPANEL items can be used to define scrollbars for QLISTs. The following ACTIONS are provided to define QPANELs as scrollbars:

- ACTION , HEAD , qlist_qid: Defines a scrolling header bar.
- ACTION , VS , qlist_qid: Defines a vertical scroll bar.
- ACTION , HS , qlist_qid: Defines a horizontal scroll bar.

The VALUE attribute defines the amount to scroll the QLIST listing.

QPANEL items can be used to provide prompt and message fields. The following ACTION attributes are provided:

- ACTION , PR: Defines an interface prompt field.
- ACTION , ME: Defines an application message field.

Please note: No input is associated with a panel.

Example

```
QPANEL  
XPOS , 10 , YPOS , 20 , WIDTH , 200 , HEIGHT , 20 , ACTION , HS , VALUE , 3 , QEND
```

Figure 1-2 A QPANEL item with an ACTION,HS attribute to create a scroll bar



QBUTTON Item

A QBUTTON item defines a single button that you can use to select an option or to perform an immediate action. When you click the button, the button appears pressed.

Attributes

Attribute to specify the name of the item

QID , qidname Item identifier

Attributes to define the position of an item

XPOS , xX Position of item inside the window

YPOS , yY Position of item inside the window

XOFFSET , x Position of item relative to another

YOFFSET , y Position of item relative to another

XAFTER , x Position of item from end of an item

YAFTER , y Position of item from end of an item

Attributes to define the size of an item

WIDTH , pixels Width of item in pixels

HEIGHT , pixels Height of item in pixels

COLS , characters Width of item in terms of characters

Attributes used to specify the behavior of an item on resize

MOVEX,percentage Percentage of resize to move item in the X direction

MOVEY,percentage Percentage of resize to move item in the Y direction

STRETCHX,percentage Percentage of resize to stretch item in the X direction

STRETCHY,percentage Percentage of resize to stretch item in the Y direction

Attributes to define the visual appearance of an item

DEPTH , pixels Item depth appearance in pixels

INVERT , boolean Make item recessed: 1 = recessed

ETCH , boolean Give item etched border: 1 = etched

Attributes to control the color of an item

ITEMCOLOR , col Color of the item

TEXTCOLOR , col Color of the item text

BACKCOLOR , col Color of the selected item

SELECTCOLOR , col Text color of the 'selected' item

GREYOUTCOL , col Grey-out color

Other attributes to define the visual appearance of a button

LABEL , button_label Specify a text label on the button

ICON , iconname Icon file for an unselected button

DICON , iconname Icon file for the selected button

STATE , ICONIC Display the button with an icon

STYLE , arrowtype Display the button as an arrowhead

Attribute to associate a value or function to a button

VALUE , string Code to identify a button in actions
VALUE , integer Number of rows or columns to scroll

Attributes to assign special characteristics

DEFAULT , 1 Mark an item as the default item to action when the Return key is pressed
FOCUS , 1, Item takes the keyboard focus when the window is shown

Other attributes applicable to items

VISIBLE , boolean Specify item visibility: 1 = visible
ACTIVE , boolean Set item active: 1 = active
FONT , fontname Specify text font for an item
PROMPT , string Specify the prompt to the user
HELPPFILE , filename Specify the name of a Help file

Attributes to invoke the Help facilities

TIP , string Specify a helpful suggestion of what button does

Synopsis of ACTION Attributes

The following ACTION attributes are associated with buttons:

- ACTION , script_programmatic_action: Specifies the script or program action to be run when the button is selected.
- If two or more buttons invoke the same action, use the VALUE attribute to supply a code with a button to identify it.
- The scrolling action uses the VALUE attribute to define the amount of scrolling, the STYLE attribute takes a keyword: UPARROW , DOWNARROW , LEFTARROW , or RIGHTARROW to indicate the direction of the button.

Example

```
QBUTTON  
XPOS , 100 , YPOS , 200 , WIDTH , 100 , HEIGHT , 50 , LABEL , Button1 , ->  
ACTION , 1001 , QEND
```

Please note: Remember that *all* attributes for each item must be specified on a *single line*.

Figure 1-3 A button and a selected button



QCHOICE Item

The `QCHOICE` item displays a list of options in a button format allowing the user to select one or more options. A `QCHOICE` item can be displayed in a variety of ways depending on the attributes appearing in its definition.

Attributes

Attribute to specify the name of the item

QID , qidname Item identifier

Attributes to define the position of an item

XPOS , xX Position of item inside the window

YPOS , yY Position of item inside the window

XOFFSET , x Position of item relative to another

YOFFSET , y Position of item relative to another

XAFTER , x Position of item from end of an item

YAFTER , y Position of item from end of an item

Attributes to define the size of an item

WIDTH , pixels Width of item in pixels

HEIGHT , pixels Height of item in pixels

COLS , characters Width of item in terms of characters

Attributes used to specify the behavior of an item on resize

MOVEX , percentage Percentage of resize to move item in the X direction

MOVEY , percentage Percentage of resize to move item in the Y direction

STRETCHX , percentage Percentage of resize to stretch item in the X direction

STRETCHY , percentage Percentage of resize to stretch item in the Y direction

Attributes to define the visual appearance of an item

DEPTH , pixels Item depth appearance in pixels

Attributes to control the color of an item

ITEMCOLOR , col Color of the item

TEXTCOLOR , col Color of the item text

BACKCOLOR , col Color of the selected item

SELECTCOLOR , col Text color of the selected item

GREYOUTCOL , col Grey-out color

Attributes to assign special characteristics

FOCUS , 1, The item will take the keyboard focus when the window is shown

Other attributes that affect the appearance of a choice item

LAYOUT , orient Orientation: H/V = horizontal/vertical

STYLE , TOGGLE Display item as toggle or radio buttons

MODE , MULTI Set multiple item selection mode

Attributes to assign labels to the item

LABEL , labels_string Define the list of options

VALUE , string Specify the default selection

Other attributes applicable to items

| | |
|----------------------|--------------------------------------|
| VISIBLE , boolean | Specify item visibility: 1 = visible |
| ACTIVE , boolean | Set item active: 1 = active |
| FONT , fontname | Specify the text font for an item |
| PROMPT , string | Specify the prompt to the user |
| HELPPFILE , filename | Specify the name of a Help file |

Defining QCHOICE Button Labels

The LABEL attribute defines the number of buttons and the list of options to be displayed on the buttons. The options are separated by tilde (~) characters and terminated by the keyword QQ.

For example,

```
... , LABEL, A0~A1~A2~A3~QQ, ...
```

The VALUE attribute specifies the button that is selected by default.

Toggle buttons are displayed with labels to the right of each button. The shape of the buttons depends on the selection MODE:

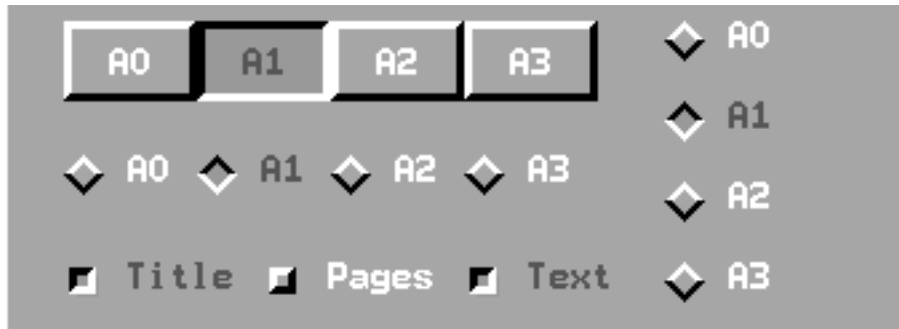
- Diamond-shaped buttons for single-selection mode
- Square buttons for multiple-selection mode.

The hot spot for each button is defined by the SIZE attributes.

Example

```
QCHOICE  
XPOS , 100 , YPOS , 200 , WIDTH , 40 , HEIGHT , 25 , LABEL , A0~A1~A2~A3~QQ , ->  
VALUE , 2 , STYLE , TOGGLE , LAYOUT , V , QEND
```

Figure 1-4 Various styles of QCHOICE items using LAYOUT, STYLE and MODE



QMESSAGE Item

The QMESSAGE item provides a single line text field in the window to display a string of text to the user. It is used to display a permanent message in the window or a label for another item.

QMESSAGE items are also used to provide pulldown menus from a menu header bar.

Attributes

Attribute to specify the name of the item

QID, qidname Item identifier

Attributes to define the position of an item

XPOS, xX Position of item inside the window
YPOS, yY Position of item inside the window
XOFFSET, x Position of item relative to another
YOFFSET, y Position of item relative to another
XAFTER, x Position of item from end of an item
YAFTER, y Position of item from end of an item

Attributes to define the size of an item

WIDTH, pixels Width of item in pixels
HEIGHT, pixels Height of item in pixels
COLS, characters Width of item in terms of characters

Attributes used to specify the behavior of an item on resize

| | |
|-----------------------|---|
| MOVEX , percentage | Percentage of resize to move item in the X direction |
| MOVEY , percentage | Percentage of resize to move item in the Y direction |
| STRETCHX,percentage | Percentage of resize to stretch item in the X direction |
| STRETCHY , percentage | Percentage of resize to stretch item in the Y direction |

Attributes to control the color of an item

| | |
|------------------|----------------------------|
| ITEMCOLOR , col | Color of the item |
| TEXTCOLOR , col | Color of the item text |
| BACKCOLOR , col | Color of the selected item |
| GREYOUTCOL , col | Grey-out color |

Attributes to assign the text string to a message item

| | |
|-----------------|--------------------------|
| LABEL , message | Specify a message string |
|-----------------|--------------------------|

Other attributes applicable to items

| | |
|----------------------|--------------------------------------|
| VISIBLE,boolean | Specify item visibility: 1 = visible |
| ACTIVE , boolean | Set item active: 1 = active |
| FONT , fontname | Specify the text font for an item |
| PROMPT , string | Specify the prompt to the user |
| HELPPFILE , filename | Specify the name of a Help file |

Using QMESSAGE Item

The QMESSAGE item can be used to provide pulldown menus from a menu bar. Each option keyword in the menu bar is defined using a QMESSAGE item with an ACTION,MU attribute as follows:

```
... ,ACTION,MU,menu_qid, ...
```

When the QMESSAGE item is clicked, the QMENU item identified by menu_qid is displayed.

Please note: The menu itself is defined by the QMENU item, but it is referenced by the QMESSAGE item. Click the QMESSAGE item to invoke the menu.

Example

```
QMESSAGE  
XPOS,10,YPOS,25,WIDTH,75,HEIGHT,25,LABEL,File, ->  
ACTION,MU,filemenu,QEND
```

Figure 1-5 Example of a menu header bar using QMESSAGE items



QTEXT Item

The QTEXT item provides a text field that accepts user typed input. Text editing functions are made available for the user to edit the data while entering it.

Please note: For information regarding the Cut, Copy, Paste, Drag, and Drop operations, and for information on creating a link between a textbox and a listbox, refer to the *AccessWare User Guide*.

Attributes

Attribute to specify the name of the item

QID , qidname Item identifier

Attributes to define the position of an item

XPOS , xX Position of item inside the window
 YPOS , yY Position of item inside the window
 XOFFSET , x Position of item relative to another
 YOFFSET , y Position of item relative to another
 XAFTER , x Position of item from end of an item
 YAFTER , y Position of item from end of an item

Attributes to define the size of an item

WIDTH , pixels Width of item in pixels
 HEIGHT , pixels Height of item in pixels
 COLS , characters Width of item in terms of characters
 ROWS , lines Height of item in lines of text
 MAXWIDTH , pixels Logical maximum width of item in pixels
 MAXHEIGHT , pixels Logical maximum height of item in pixels
 MAXCOLS , characters Logical maximum width of item in terms of characters
 MAXROWS , lines Logical maximum height of item in lines of text

Attributes used to specify the behavior of an item on resize

MOVEX , percentage Percentage of resize to move item in the X direction
 MOVEY , percentage Percentage of resize to move item in the Y direction
 STRETCHX , percentage Percentage of resize to stretch item in the X direction
 STRETCHY , percentage Percentage of resize to stretch item in the Y direction

Attributes to define the visual appearance of an item

DEPTH , pixels Item depth appearance in pixels
 INVERT , boolean Make item recessed: 1 = recessed

Attributes to control the color of an item

ITEMCOLOR , col Color of the item
 TEXTCOLOR , col Color of the item text
 BACKCOLOR , col Color of the selected item
 GREYOUTCOL , col Grey-out color

Attributes to assign a label to the text field

LABEL , message Specify a message string

Attribute to supply an initial defaults entry to the field

VALUE , string An initial default text string

Attributes to assign special characteristics to a text field

| | |
|------------------|--|
| STATE , SECURE | Specify field as secure entry |
| STATE , READONLY | Do not permit text to be modified |
| MODE , case | Convert on input to lowercase or uppercase |
| MODE , number | Validate input for integer/real number |
| MODE , MULTI | Provide multi-line text |
| FOCUS , 1, | The item will take the keyboard focus when the window is shown |

Other attributes applicable to items

| | |
|----------------------|--------------------------------------|
| VISIBLE , boolean | Specify item visibility: 1 = visible |
| ACTIVE , boolean | Set item active: 1 = active |
| FONT , fontname | Specify the text font for an item |
| PROMPT , string | Specify the prompt to the user |
| HELPPFILE , filename | Specify the name of a Help file |

More about the Attributes

A STATE , SECURE field echoes back user typed text as asterisks.

The MODE attribute takes the keywords LOWER/UPPER or INTEGER/REAL to specify the required input text mode.

The MODE , MULTI attribute automatically wraps text on entry. The height of the text field must be specified with the ROWS attribute.

Any printable characters are considered valid input to a QTEXT item. Any data validation must be performed by the application.

Example

```
QTEXT  
XPOS , 50 , YPOS , 50 , WIDTH , 300 , HEIGHT , 25 , INVERT , 1 , LABEL , Filename : , QEND
```

Figure 1-6 Use of different types of Text fields without and with label offset



QLIST Item

The `QLIST` item displays a list of data allowing the user to select one or more rows. It enables the list file to be displayed either as a scrollable list of text information or as a tree.

Please note: For information on creating a link between a textbox and a list box, *AccessWare User Guide*.

Attributes

Attribute to specify the name of the item

QID , qidname Item identifier

Attributes to define the position of an item

XPOS , xX Position of item inside the window

YPOS , yY Position of item inside the window

XOFFSET , x Position of item relative to another

YOFFSET , y Position of item relative to another

XAFTER , x Position of item from end of an item

YAFTER , y Position of item from end of an item

Attributes to define the size of an item

WIDTH , pixels Width of item in pixels

HEIGHT , pixels Height of item in pixels

COLS , characters Width of item in terms of characters

ROWS , lines Height of item in lines of text

Attributes used to specify the behavior of an item on resize

MOVEX , percentage Percentage of resize to move item in the X direction

MOVEY , percentage Percentage of resize to move item in the Y direction

STRETCHX , percentage Percentage of resize to stretch item in the X direction

STRETCHY , percentage Percentage of resize to stretch item in the Y direction

Attributes to define the visual appearance of an item

DEPTH , pixels Item depth appearance in pixels

INVERT , boolean Make item recessed: 1 = recessed

ETCH , boolean Give item etched border: 1 = etched

Attributes to control the color of an item

ITEMCOLOR , col Color of the item

TEXTCOLOR , col Color of the item text

BACKCOLOR , col Color of the selected item

SELECTCOLOR , col Text color of the chosen item

GREYOUTCOL , col Grey-out color

Attributes to define the field contents or defaults to an item

ITEMFILE , filename Specify the list contents text file

LISTFILE , filename Same as ITEMFILE (Use ITEMFILE instead.)

LISTMENU , filename Specify the popup menu file name

Attributes to assign special characteristics

| | |
|---------------|---|
| STATE , TREE | Display a tree from a formatted file |
| MODE , MULTI | Permit multiple item selection |
| STYLE , name | Specify a look and feel for a tree; name = FAN, ANGLED or FMGR (file manager style) |
| FOCUS , 1, | The item will take the keyboard focus when the window is shown |
| OVERVIEW , id | For a tree, overview another tree item |

Other attributes applicable to items

| | |
|----------------------|--------------------------------------|
| VISIBLE , boolean | Specify item visibility: 1 = visible |
| ACTIVE , boolean | Set item active: 1 = active |
| FONT , fontname | Specify the text font for an item |
| PROMPT , string | Specify the prompt to the user |
| HELPPFILE , filename | Specify the name of a Help file |

Displaying a List as a Tree

The STATE , TREE attribute implies that the data in the ITEMFILE attribute referenced by the QLIST item conforms to the format of the tree definition file in AccessWare, for example:

```
1    root  0    R    1    0    11    1    4
2    child1  R    1    0    11    1    4
3    leaf1  2    R    1    0    11    1    4
```

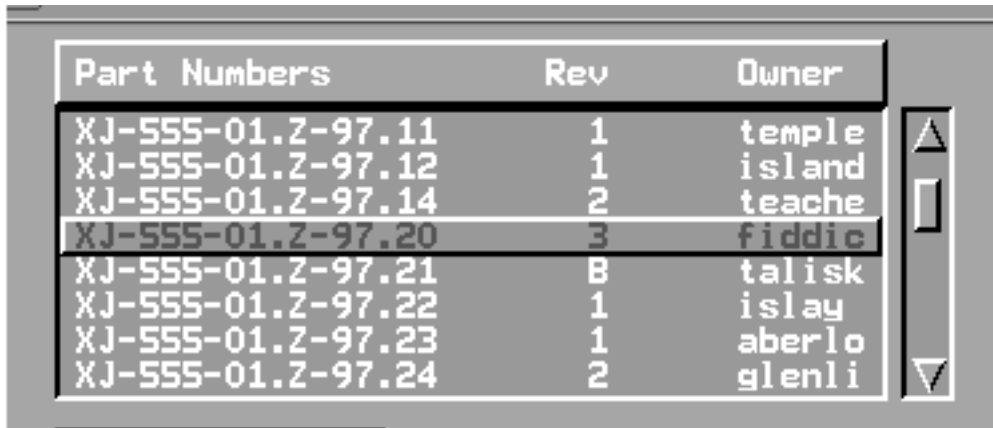
More about the Attributes

Scrolling list header bars and scrollbars are defined independently as QPANEL items using in-built actions to provide the required functions. Refer to the notes under the QPANEL items.

Example

```
QLIST
QID,drg_list,XPOS,50,YPOS,50,COLS,36,ROWS,8, ->
ITEMFILE,drawing_lis,QEND
```

Figure 1-7 Example of a QLIST with scrollbar and header



| Part Numbers | Rev | Owner |
|-------------------|-----|--------|
| XJ-555-01.Z-97.11 | 1 | temple |
| XJ-555-01.Z-97.12 | 1 | island |
| XJ-555-01.Z-97.14 | 2 | teache |
| XJ-555-01.Z-97.20 | 3 | fiddic |
| XJ-555-01.Z-97.21 | 8 | talisk |
| XJ-555-01.Z-97.22 | 1 | islay |
| XJ-555-01.Z-97.23 | 1 | aberlo |
| XJ-555-01.Z-97.24 | 2 | gleni |

QMENU Item

The QMENU item defines a list of options to be displayed in the form of a menu. It defines the menu format and references the name of a text file which contains the list of menu options and their actions.

Please note:

- The menu is invoked by another item with an ACTION, MU attribute, which references the QMENU item.
- Menus can also be invoked by a QTEXT item.

Attributes

Attribute to specify the name of the item

QID , qidname Item identifier

Attributes to define the position of an item

XPOS , xX Position of item inside the window

YPOS , yY Position of item inside the window

XOFFSET , x Position of item relative to another

YOFFSET , y Position of item relative to another

XAFTER , x Position of item from end of an item

YAFTER , y Position of item from end of an item

Attributes to define the size of an item

WIDTH , pixels Width of item in pixels

HEIGHT , pixels Height of item in pixels

COLS , characters Width of item in terms of characters

ROWS , lines Height of item in lines of text

Attributes used to specify the behavior of an item on resize

MOVEX , percentage Percentage of resize to move item in the X direction

MOVEY , percentage Percentage of resize to move item in the Y direction

STRETCHX , percentage Percentage of resize to stretch item in the X direction

STRETCHY , percentage Percentage of resize to stretch item in the Y direction

Attributes to define the visual appearance of an item

DEPTH , pixels Item depth appearance in pixels

Attributes to control the color of an item

ITEMCOLOR , col Color of the item

TEXTCOLOR , col Color of the item text

BACKCOLOR , col Color of the selected item

SELECTCOLOR , col Text color of the selected item

Attributes to define the field contents or defaults to an item

ITEMFILE , filename Specify the Menu Definition File

LISTFILE , filename Same as ITEMFILE (Use ITEMFILE instead.)

Other attributes applicable to items

ACTIVE , boolean Set item active: 1 = active

FONT , fontname Specify the text font for an item

The Menu Definition File

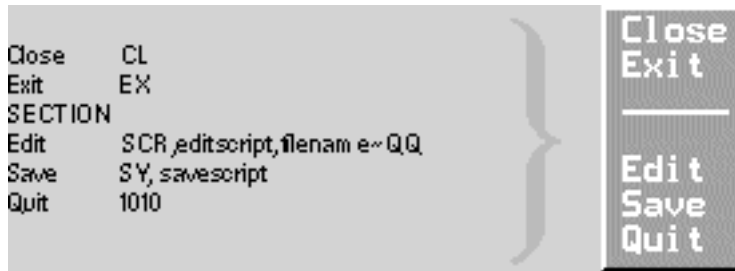
The Menu Definition File is an external text file which defines the list of menu options and actions to be performed when the items are selected. The format of a

line in the Menu Definition File is:

```
Menu_Text<TAB>AccessWare_Action
```

A line containing the keyword `SECTION` denotes a section break, used to separate different types of options in the menu.

Figure 1-8 : Example of a Section Break



Walking Menus: A menu option can be expanded into a series of submenus. Each submenu is defined as a separate `QMENU` item; a menu option that invokes a submenu initiates it by an `ACTION, MU` attribute in its Menu Definition File.

More about the Attributes

If an `ACTION` is not specified for an option in the file or an option is not selected, a default `ACTION` specified in the `QMENU` definition is initiated instead.

Example

```
QMESSAGE
XPOS, 10, YPOS, 25, WIDTH, 75, HEIGHT, 25, LABEL, File, ->
ACTION, MU, filemenu, QEND
...
QMENU
QID, filemenu, COLS, 8, ROWS, 6, ITEMFILE, /usr/abc/menus/menu1, ->
DEPTH, 1, QEND
```

Figure 1-5, “Example of a menu header bar using `QMESSAGE` items,” on page 1-16 illustrates the above example.

QMENUIITEM Item

The `QMENUIITEM` item defines a single menu item of a menu such as `FILE > NEW` where `FILE` is the menu and `NEW` is the menu item. Each menu item is associated with an `ACTION` and it can have control state object objects using `ACTIVEDEP` and `VISIBLEDEP` attributes.

Attributes

Attribute to specify the name of the item

QID , qidname Item identifier

Attributes to assign labels to the item

LABEL , label_text Specify a text label for a menu item when it is displayed as part of a menu.

Other attributes applicable to items

ACTIVEDEP , qidname Set menu item for a QCONTROLSTATE or QEXPRESSION
 QID

VISIBLEDEP , qidname Set menu item for a QCONTROLSTATE or QEXPRESSION
 QID

UDATA , string Define user data.

Synopsis of the ACTION Attribute

Each menu item of a menu is defined using a QMENUITEM item with an ACTION attribute that indicates the action to be carried out. ACTION attributes are same as for ordinary menus.

Example:

```
... ,ACTION,MU,menu_qid, ...
```

Please note: The menu itself is defined by the QMENU item, but the items within a menu are defined by the QMENUITEM item using this style of menus. The old format, ordinary menu definitions still work.

Example

```
QMENUITEM
QID, CM_MENUID_CLOSE_ASSM_CAMU, VISIBLEDEP, CA_STATE_CM_MODE, ->
ACTIVEDEP, CM_STATE_SIGNON, LABEL, $CM_MENUID_CLOSE_ASSM_CAMU_LBL, ->
ACTION, 6501, UDATA, $CM_MENUID_CLOSE_ASSM_CAMU_LBL 6501 222, QEND
```

QCONTROLSTATE Item

The QCONTROLSTATE item is defined for each occurrence of ACTIVEDEP and VISIBLEDEP in QMENUITEM definitions. A QCONTROLSTATE item can be used in more than one QMENUITEM definition.

Attributes

Attribute to specify the name of the item

QID, qidname Item identifier

Other attributes applicable to items

VALUE, boolean Specify menu item state: 1=active or shown menu item

Example

```
QCONTROLSTATE
QID, CA_STATE_SYSADMIN_SIGNON, VALUE, 0, QEND
```

QEXPRESSION Item

The QEXPRESSION item is used to define the boolean of two or more control states. Operators supported for this expression object are && (and) and || (or).

Attributes

Attribute to specify the name of the item

QID, qidname Item identifier

Other attributes applicable to items

RULES, logical_expression Define the boolean of two or more control states.

If QCONTROLSTATE and QEXPRESSION objects are defined in a separate file such as `states.r`, then it should have a QWINDOW definition as:

```
QWINDOW
XLOC, 100, YLOC, 100, WIDTH, 10, HEIGHT, 10, LABEL, states, QEND
```

In the above case, the LABEL specifies the QID of the QPOPUP object in the resource file of parent window of these menu items.

Examples

```
QEXPRESSION
QID, SYSADMINORPROJADMIN, VALUE, 0, RULES, ->
CA_STATE_SYSADMIN_SIGNON || CA_STATE_PROJADMIN_SIGNON, QEND
```

```
QEXPRESSION
QID, SAP_STATE_VLT_SAP_SIGNON, VALUE, 0, RULES, ->
SAP_STATE_SIGNON && CA_STATE_SIGNON, QEND
```

```
QEXPRESSION
QID , CA_EXPR_STD_OR_SAP_OR_CAMU , VALUE , 1 , RULES , ->
CA_STATE_STD_MODE || CA_STATE_SAP_MODE || CA_STATE_CAMU_MODE , QEND
```

QPOPUP Item

The QPOPUP item identifies another window in the interface, which can be a popup window for display with the current window, or a window to which control is transferred. It provides the link to the other window by referencing its resource file.

Attributes

Attribute to specify the name of the item

QID , qidname Item identifier

Other attributes applicable to items

VISIBLE , boolean Specify item visibility: 1 = visible

Attributes to assign labels to the item

LABEL , resource_file The resource file of the new window

The popup window is invoked by another AccessWare item with an ACTION, POP, or POPREL attribute that references the QID of the QPOPUP item.

The QPOPUPS are the items that link all the windows to each other in an AccessWare application interface. The new window can be used as a window to which control is to be transferred. It can also be used as a supplementary window used in conjunction with a current window.

The Identifier of a Window: In AccessWare an action is a QWINDOW item referenced by the QID of the QPOPUP item that references its resource file. The main window, which does not have an associated QPOPUP, is referenced using mainwin.

Example

```
QPOPUP
QID , new_win , VISIBLE , 0 , LABEL , ->
/usr/resource_files/new_window.res , QEND
```

QGROUP Item

The QGROUP item references a list of items that form a group. Any action applied to the group affects all items in the group.

Attributes

Attribute to specify the name of the item

`QID , qidname` Item identifier

Attributes to define the group contents

`ITEMFILE , filename` Define the group contents text file

`LISTFILE , filename` Same as `ITEMFILE` (Use `ITEMFILE` instead.)

The Group Definition File

The Group Definition File is the external text file that defines the items to be grouped for common actions. The format of a group definition file is as follows:

```
qid1
qid2
...
qidn
<EOF>
```

`ACTION` attributes that can be applied to the group as a whole are as follows:

`ACTION , SH:` show all items in group

`ACTION , HI:` hide all items in group

`ACTION , GI:` grey-in (activate) all items in group

`ACTION , GO:` grey-out all items in group

Please note: Any actions defined individually for items included in the group do not affect the other items in the group.

Example

```
QGROUP
QID , group1 , ITEMFILE , /usr/grp/my_group , QEND
```

QTABCONTROL Item

The `QTABCONTROL` item defines tab controls for a window. It is used for visual effects, for example, to divide a window into logical areas or to provide a title for an information panel.

Attributes

Attribute to specify the name of the item

QID , qidname Item identifier

Attributes to define the position of an item

XPOS , xX Position of item inside the window

YPOS , yY Position of item inside the window

XOFFSET,x Position of item relative to another

YOFFSET , y Position of item relative to another

XAFTER , x Position of item from end of an item

YAFTER,y Position of item from end of an item

Attributes to define the size of an item

WIDTH , pixels Width of item in pixels

HEIGHT , pixels Height of item in pixels

Attributes used to specify the behavior of an item on resize

MOVEX,percentage Percentage of resize to move item in the X direction

MOVEY , percentage Percentage of resize to move item in the Y direction

STRETCHX , percentage Percentage of resize to stretch item in the X direction

STRETCHY,percentage Percentage of resize to stretch item in the Y direction

Attributes to define the visual appearance of an item

DEPTH,pixels Item depth appearance in pixels

INVERT,boolean Make item recessed: 1 = recessed

ETCH , boolean Give item etched border: 1 = etched

Attributes to control the color of an item

ITEMCOLOR , col Color of the item

Attributes to assign and position panel text

LABEL , panel_text Text label to be displayed in panel

Attribute to specify a value associated with a panel item

VALUE , integer Number of rows/columns to scroll

Attributes to assign special characteristics

FOCUS , 1, The item will take the keyboard focus when the window is shown

Other attributes applicable to panel items

VISIBLE,boolean Specify item visibility: 1 = visible

ACTIVE , boolean Set item active: 1 = active

FONT , fontname Specify the text font for an item

PROMPT , string Specify the prompt to the user

HELPPFILE , filename Specify the name of a Help file

The `VALUE` attribute defines the amount to scroll the `QLIST` listing.

Synopsis of the `ACTION` Attribute

The following `ACTION` is associated with `QTABCONTROL`:

`ACTION, programmatic_action`: specifies the program action to be run when the tab is selected.

Please note: No input is associated with a panel.

Example

```
QTABCONTROL
XPOS, 10, YPOS, 20, WIDTH, 200, HEIGHT, 20, LABEL, ->
General~Attributes~QQ, VALUE, 1, QEND
```

`QMENUBAR` Item

The `QMENUBAR` item defines top level menus for an application.

Attributes

Attribute to specify the name of the item

`QID, qidname` Item identifier

Attributes to define the position of an item

`XPOS, xX` Position of item inside the window

`YPOS, yY` Position of item inside the window

Attributes to define the size of an item

`WIDTH, pixels` Physical width of item in pixels

`HEIGHT, pixels` Physical height of item in pixels

Attributes or define the field contents or defaults to an item

`ITEMFILE, filename` Define the list contents text file

`LISTFILE, filename` Same as `ITEMFILE` (Use `ITEMFILE` instead.)

Other attributes applicable to items

`FONT, fontname` Specify the text font for an item

Please note: No input is associated with a panel.

Example

```
QMENUBAR  
XPOS,0,YPOS,0,WIDTH,100,HEIGHT,25,DEPTH,2,ITEMFILE,myfile,QEND
```

QSEPARATOR Item

The QSEPARATOR item generates a separation within a panel or window.

Attributes

Attribute to specify the name of the item

QID , qidname Item identifier

Attributes to define the position of an item

XPOS , xX Position of item inside the window
YPOS , yY Position of item inside the window
XOFFSET , x Position of item relative to another
YOFFSET , y Position of item relative to another
XAFTER , x Position of item from end of an item
YAFTER , y Position of item from end of an item

Attributes to define the size of an item

WIDTH , pixels Width of item in pixels
HEIGHT , pixels Height of item in pixels

Attributes used to specify the behavior of an item on resize

MOVEX , percentage Percentage of resize to move item in the X direction
MOVEY , percentage Percentage of resize to move item in the Y direction
STRETCHX , percentage Percentage of resize to stretch item in the X direction
STRETCHY , percentage Percentage of resize to stretch item in the Y direction

Attributes to define the visual appearance of an item

DEPTH , pixels Item depth appearance in pixels

Attributes to control the color of an item

ITEMCOLOR , col Color of the item
GREYOUTCOL , col Grey-out color

Attributes to assign special characteristics

FOCUS , 1 , The item will take the keyboard focus when the window is shown

Other attributes applicable to items

VISIBLE , boolean Specify item visibility: 1 = visible
FONT , fontname Specify the text font for an item

Attributes to invoke the Help facilities

HELPPFILE , filename Specify the name of a Help file

Please note: No input is associated with a panel.

Example

QSEPARATOR
XPOS , 10 , YAFTER , 2 , WIDTH , 150 , HEIGHT , 148 , DEPTH , 1 , QEND

QSLIDER Item

The `QSLIDER` item generates a slide bar to adjust a numeric value.

Attributes

Attribute to specify the name of the item

QID,qidname Item identifier

Attributes to define the position of an item

XPOS , xX Position of item inside the window
YPOS , yY Position of item inside the window
XOFFSET , x Position of item relative to another
YOFFSET , y Position of item relative to another
XAFTER , x Position of item from end of an item
YAFTER , y Position of item from end of an item

Attributes to define the size of an item

WIDTH , pixels Width of item in pixels
HEIGHT , pixels Height of item in pixels

Attributes used to specify the behavior of an item on resize

MOVEX , percentage Percentage of resize to move item in the X direction
MOVEY , percentage Percentage of resize to move item in the Y direction
STRETCHX , percentage Percentage of resize to stretch item in the X direction
STRETCHY ,percentage Percentage of resize to stretch item in the Y direction

Attributes to control the color of an item

ITEMCOLOR , col Color of the item

Attributes to define the field contents or defaults to an item

MINVALUE , string Minimum value of an object where applicable
MAXVALUE , string Maximum value of an object where
LAYOUT , orient Orientation: H/V = horizontal/vertical
INTERVAL , value For objects that can have a range of values, specify the interval by which they increment.

Attributes to assign and position panel text

LABEL , panel_textText Label to be displayed in panel

Attribute to specify a value associated with a panel item

VALUE , integer Number of rows or columns to scroll

Attributes to assign special characteristics

FOCUS , 1, The item will take the keyboard focus when the window is shown

Other attributes applicable to panel items

| | |
|----------------------|--------------------------------------|
| VISIBLE , boolean | Specify item visibility: 1 = visible |
| ACTIVE , boolean | Set item active: 1 = active |
| FONT , fontname | Specify the text font for an item |
| PROMPT , string | Specify the prompt to the user |
| HELPPFILE , filename | Specify the name of a Help file |

Synopsis of ACTION Attribute

The following ACTION is associated with the slider bar:

- ACTION , programmatic_action: specifies the program action to be run when the slider is moved.

Please note: No input is associated with a panel.

Example

```
QSLIDER
QID,xsliderr,ETCH,4,XPOS,0,YAFTER,0,WIDTH,130,HEIGHT,25,->
LAYOUT,H,LABEL,0~100~QQ,VALUE,10,ACTION,1001,MINVALUE,0,->
MAXVALUE,100,VISIBLE,1,QEND
```

Item and ACTION Attributes Quick Reference

This section describes all item attributes and action attributes for defining a window in an AccessWare graphical user interface. Item attributes characterize the items, for example, size and position. Actions are associated with items by an ACTION attribute.

Item Attributes

Items in a user interface are characterized by their attributes. The key points to note when entering item attributes are as follows:

- An attribute is defined by a keyword followed by its arguments.
- A comma terminates a keyword and each argument; spaces and tabs in the attribute list can be used only in text strings.
- All attributes must appear on a single line in the resource file. This line must immediately follow the item keyword. Blank lines and comment lines cannot be used in the definition of an item.
- The order in which attributes are defined is not significant.
- The definition of an item is completed by the keyword QEND.

Form of the ITEM Attribute

Item attributes take various types of argument, including integer and real numbers, text strings, file names and keywords. Text strings include all characters between the commas including leading and trailing spaces. File names can be defined with full or relative path name.

Summary of Item Attributes

Attribute to specify the name of the item

QID , qidname Item identifier

Attributes to define the position and size of the window

XLOC , xX Location from top left corner

YLOC , yY Location down from top left corner

Attributes to define the position of an item

XPOS , xX Position of item inside the window

YPOS , yY Position of item inside the window

XOFFSET , x Position of item relative to another

YOFFSET , y Position of item relative to another

XAFTER , x Position of item from end of an item

YAFTER , y Position of item from end of an item

Attributes to define the size of an item

WIDTH , pixels Physical width of item in pixels

HEIGHT,pixels Physical height of item in pixels

MINWIDTH , pixels Minimum width of a window in pixels during creation or resize

MINHEIGHT , pixels Minimum Height of a window in pixels during creation or resize

MAXWIDTH , pixels Logical maximum width of item in pixels

MAXHEIGHT,pixels Logical maximum height of item in pixels

COLS , characters Physical width of item in terms of characters

ROWS , lines Physical height of item in lines of text

MAXCOLS , characters Logical maximum width of item in terms of characters

MAXROWS , lines Logical maximum height of item in lines of text

Attributes used to specify the behavior of an item on resize

MOVEX , percentage Percentage of resize to move item in the X direction

MOVEY,percentage Percentage of resize to move item in the Y direction

STRETCHX , percentage Percentage of resize to stretch item in the X direction

STRETCHY , percentage Percentage of resize to stretch item in the Y direction

Attributes to define the visual appearance of an item

DEPTH , pixels Item depth appearance in pixels

INVERT , boolean Make item recessed: 1 = recessed

ETCH , boolean Give item etched border: 1 = etched

Attributes to control the color of an item

| | |
|-------------------|-------------------------------|
| ITEMCOLOR , col | Color of the item |
| TEXTCOLOR , col | Color of the item text |
| BACKCOLOR , col | Color of the selected item |
| GREYOUTCOL , col | Grey-out color |
| SELECTCOLOR , col | Text color of the chosen item |

Attributes to define the visual style of an item

| | |
|----------------------|-----------------------------------|
| STYLE , keyword | Specify an item style |
| LAYOUT , orientation | Supply an item orientation |
| ICON , iconname | Specify an icon file for the item |
| DICON , iconname | Icon file for a selected item |

Attributes to assign labels to the item

| | |
|--------------------|----------------------|
| LABEL , label_text | Specify a text label |
|--------------------|----------------------|

Attributes to define the field contents or defaults to an item

| | |
|---------------------|---|
| ITEMFILE , filename | Define the list contents text file |
| LISTFILE , filename | Same as ITEMFILE (Use ITEMFILE instead.) |
| MINVALUE , string | Minimum value of an object where applicable |
| MAXVALUE , string | Maximum value of an object where applicable |
| VALUE , string | Initial default values |

Attributes to assign special characteristics

| | |
|------------------|---|
| STATE , state | Special characteristics for item |
| MODE , option | Set select option /text display mode |
| INTERVAL , value | For objects that can have a range of values, specify the interval by which they increment. See QSLIDER. |
| DEFAULT , 1 | Mark an item as the default item to action when the ENTER or RETURN key is pressed |
| FOCUS , 1, | Item will take the keyboard focus when the window is shown |
| OVERVIEW , id | For a tree, overview another tree item |

Other attributes applicable to items

| | |
|----------------------------|--|
| VISIBLE , boolean | Specify item visibility: 1 = visible |
| ACTIVE , boolean | Set item active: 1 = active |
| ACTIVEDEP , qidname | Set menu item for a QCONTROLSTATE or QEXPRESSION QID |
| VISIBLEDEP , qidname | Set menu item for a QCONTROLSTATE or QEXPRESSION QID |
| RULES , logical_expression | Define the boolean of two or more control states. |
| UDATA , string | Define user data |
| FONT , fontname | Specify the text font for an item |
| LISTMENU , filename | Define the popup menu for a QLIST |

Attributes to invoke the Help facilities

| | |
|----------------------|--|
| PROMPT , string | Specify the prompt to the user |
| HELPPFILE , filename | Specify the name of a Help file |
| HELPWIN , filename | Name of Help window for the interface |
| TIP , string | Specify the information to be put in a tooltip |

Other attributes that affect the whole interface

| | |
|--------------------|--|
| RESIZE , direction | Specific direction in which to resize a window |
| SPLASH , imagename | Name of a image to use as a splashscreen |
| PALETTE , palette | Specify the color palette file name |
| NOBANNER | Suppress a banner page at startup |
| NOSTRIPE | Do not include the window stripes |
| GLOBVARS , file | Specify a file of global variables |

ACTION Attributes

An action is associated with an AccessWare item by the ACTION attribute. Actions are associated with buttons, but they can be linked to any item in the window.

Form of the ACTION Attribute

An ACTION attribute can be included anywhere in the attribute list. The ACTION attribute takes the following forms and does the following:

- ACTION , keyword, arguments
Initiates an AccessWare in-built function
- ACTION , integer_number
Invokes some code from the programmatic interface

Summary of ACTION Attributes

The ACTION attributes can be categorized in groups as follows:

Application Interface Actions

| | |
|-----------------------------------|--|
| Integer | Identify an element of application code |
| FCN , function_name,action_number | Calls the function name with given user action number. |

The Action Command File

| | |
|---------------|------------------------------|
| CF , filename | A list of AccessWare actions |
|---------------|------------------------------|

Actions that Operate on Windows

| | |
|----|--------------------------|
| CL | Close the current window |
| EX | Exit the current window |

Actions That Modify the State of an Item

| | |
|---------------|-------------------------------|
| GO , item_qid | Deactivate (grey-out) an item |
| GI , item_qid | Activate (grey-in) an item |
| HI , item_qid | Hide an item |
| SH , item_qid | Show an item |

Actions That Set Values for Items

| | |
|------------------|---------------------------------|
| SV , sv_filename | A file setting values for items |
|------------------|---------------------------------|

Actions That Denote Special Fields

| | |
|-------------|---------------------|
| PRConfigure | QPANEL for Prompts |
| MEConfigure | QPANEL for messages |

Actions That Invoke Menus and Popups

| | |
|--------------------|------------------------------------|
| MU , qmenu_id | Invoke a popup menu |
| POP , popup_id | Invoke a popup window |
| POPREL , qpopup_id | Position popup relative to an item |

Actions to Call Scripts

| | |
|--------------------------|--|
| SY , command | Execute system command or script |
| SCR , script,args | SY call with an argument list |
| MACRO | Defines a macro containing perl script statements. |
| UL , script,args,list_id | SCR call plus the update QLIST item |

Actions That Issue CADD5 Commands

| | |
|---------------------|-------------------------------------|
| CAD , command_line | Send a line to CADD5 |
| CAD1 , command_line | Send a line without carriage return |

Special Actions for QPANEL Items Associated with QLIST Items

| | |
|------------------------------|--|
| HEAD , qlist_id | Configure the QPANEL as a header bar |
| VS , qlist_id | Configure the QPANEL as a vertical scrollbar |
| HS , qlist_id | Configure the QPANEL as a horizontal scrollbar |
| MVS , qlist_id1~qlist_id2~QQ | Configure the QPANEL to scroll many vertical lists |
| MHS , qlist_id1~qlist_id2~QQ | Configure the QPANEL to scroll many horizontal lists |

Actions to Toggle the Help facility

| | |
|------------|------------------------|
| HELPToggle | System Help on and off |
|------------|------------------------|

Function Quick Reference

A procedure call summary of all AccessWare functions follows.

Initiating and Exiting AccessWare

```
int aw_init_windows ( resource_file )  
int aw_exit_windows ( status )
```

Retrieving Item Values and Attributes

```
int aw_get_item_position ( qid, x, y )  
int aw_get_item_xposition ( qid )  
int aw_get_item_yposition ( qid )  
int aw_get_item_dimension ( qid, width, height )  
int aw_get_item_width ( qid )  
int aw_get_item_height ( qid )  
int aw_get_item_cols ( qid )  
int aw_get_item_rows ( qid )  
int aw_get_window_position ( qid, x, y )  
int aw_get_window_dimension ( qid, width, height )  
int aw_get_window_width ( qid )  
int aw_get_window_height ( qid )  
int aw_get_item_depth ( qid )  
int aw_get_item_invert ( qid )  
int aw_get_item_etch ( qid )  
int aw_get_item_itemcolor ( qid )  
int aw_get_item_backcolor ( qid )  
int aw_get_item_textcolor ( qid )  
int aw_get_item_greycolor ( qid )  
char *aw_get_item_label ( qid )  
char *aw_get_item_icon ( qid )  
char *aw_get_item_dicon ( qid )  
char *aw_get_item_font ( qid )  
char *aw_get_window_font ( qid )  
int aw_get_item_lowercase ( qid )  
int aw_get_item_uppercase ( qid )  
int aw_get_item_mixedcase ( qid )  
int aw_get_item_integer ( qid )  
int aw_get_item_real ( qid )  
int aw_get_item_readonly ( qid )  
int aw_is_item_readonly ( qid )  
int aw_get_text_lowercase ( qid )  
int aw_get_text_uppercase ( qid )  
int aw_get_text_mixedcase ( qid )  
int aw_get_text_integer ( qid )  
int aw_get_text_real ( qid )  
int aw_get_text_readonly ( qid )  
int aw_get_item_multiselect ( qid )  
int aw_is_item_multiselect ( qid)
```

```
int aw_get_item_action ( qid )
int aw_get_item_visible ( qid )
int aw_is_item_visible ( qid )
int aw_get_item_active ( qid )
int aw_is_item_active ( qid )
char *aw_get_active_id ( )
char *aw_get_item_caret ( )
char *aw_get_item_value ( qid )
int aw_get_item_bit ( qid,bit )
int aw_is_item_bit_set ( qid, number )
char *aw_get_item_prompt ( qid )
char *aw_get_item_helpfile ( qid )
int aw_get_window_stripe ( qid )
char *aw_get_window_resource ( qid )
int aw_get_state ( char *qid )
char *aw_get_ufile ( char *qid )
int aw_get_menuitem_state (char *id )
```

Setting Item Values and Attributes

```
int aw_set_item_position ( qid,x,y )
int aw_set_item_xposition ( qid,xvalue )
int aw_set_item_yposition ( qid,yvalue )
int aw_set_window_position ( qid, x, y )
int aw_set_item_width ( qid, width )
int aw_set_item_height ( qid, height )
int aw_set_item_cols ( qid,cols )
int aw_set_item_rows ( qid,rows )
int aw_set_window_width ( qid, width )
int aw_set_window_height ( qid, height )
int aw_set_item_depth ( qid,depth )
int aw_set_item_invert ( qid,state )
int aw_set_item_etch ( qid, value )
int aw_set_item_itemcolor ( qid, color )
int aw_set_item_backcolor ( qid, color )
int aw_set_item_textcolor ( qid, color )
int aw_set_item_selectcolor ( qid, color )
int aw_set_item_greycolor ( qid,color )
int aw_set_item_label ( qid, new_label )
int aw_set_item_icon ( qid, icon_name )
int aw_set_item_dicon ( qid,icon_name )
int aw_set_item_font ( qid,fontname )
int aw_set_item_lowercase ( qid )
int aw_set_item_uppercase ( qid )
int aw_set_item_mixedcase ( qid )
int aw_set_item_integer ( qid )
int aw_set_item_real ( qid )
int aw_set_item_readonly ( qid, state )
int aw_set_text_lowercase ( qid )
int aw_set_text_mixedcase ( qid )
int aw_set_text_integer ( qid )
int aw_set_text_real ( qid )
```

```
int aw_set_text_readonly ( qid,state )
int aw_set_item_multiselect ( qid, on/off )
int aw_set_item_action ( qid, action_no )
int aw_set_item_visible ( qid,state )
int aw_set_item_active ( qid,state )
int aw_set_item_caret (qid)
int aw_set_item_value ( qid, new_value )
int aw_set_item_bit ( qid, value )
int aw_reset_item_bit ( qid, value )
int aw_set_item_helpfile ( qid,filename )
int aw_set_item_prompt ( qid,string )
int aw_prompt ( prompt_string )
int aw_win_prompt ( qid, prompt_string )
int aw_clear_prompt ( )
int aw_message ( message_string )
int aw_win_message ( qid, message_string )
int aw_clear_message ( )
int aw_set_state ( qid, state_value )
```

Updating Item Appearance

```
int aw_activate_item ( qid )
int aw_deactivate_item ( qid )
int aw_show_item ( qid )
int aw_show_item_relative ( qid, relative_id, xoffset, yoffset )
int aw_hide_item ( qid )
int aw_hide_all_popups ( )
int aw_open_window ( qid )
int aw_close_window ( qid )
int aw_refresh_window ( qid )
int aw_set_window_resource ( qid, resource_file )
```

Procedure Calls Associated with Lists

```
int aw_get_list_width ( qid )
int aw_get_list_length ( qid )
int aw_mark_list_line ( qid, line_no, char_pos, mark )
char *aw_get_list_line ( qid )
char *aw_get_line ( qid, lineno )
int aw_get_scroll_char ( qid )
int aw_get_scroll_line ( qid )
int aw_scroll_to_line ( qid, line_no )
int aw_scroll_to_char ( qid, char_no )
int aw_add_line_to_list ( qid, line, pos )
int aw_delete_line_from_list ( qid, line, pos )
char *aw_get_list_file ( qid )
char *aw_get_list_heading ( qid )
int aw_set_item_heading ( qid, heading )
int aw_set_list_heading ( qid,string )
int aw_refresh_list ( qid )
int aw_update_list ( qid )
```

```
int aw_save_listfile ( qid, listfile )
int aw_reset_list ( qid )
int aw_set_list_file ( qid, listfile )
int aw_switch_list_font ( qid,fontname )
```

Procedure Calls Associated with Tree Nodes

```
int aw_get_node_selected ( qid, line_no_of_listfile )
int aw_get_node_highlighted ( qid, line_no_of_listfile )
int aw_get_node_visible ( qid, line_no_of_listfile )
int aw_is_node_selected ( qid, line_no_of_listfile )
int aw_is_node_highlighted ( qid, line_no_of_listfile )
int aw_is_node_visible ( qid, line_no_of_listfile )
int aw_get_node_textcolor ( qid,line_number )
int aw_get_node_linkcolor ( qid, line_no_of_listfile )
int aw_get_node_access ( qid, line_no_of_listfile )
int aw_set_node_selected ( qid, line_no_of_listfile, sel_state )
int aw_set_node_highlight ( qid, line_no_of_listfile, color )
int aw_set_node_visible ( qid,line_no_of_listfile,state,repaint )
int aw_set_node_linkcolor ( qid, line_no_of_listfile, color )
int aw_set_node_access ( qid, line_no_of_listfile, color )
int aw_create_cgm_file ( tree_qid, cgm_filename, scale,
paper_size, is_all_tiers, tier_from, tier_to,
is_multiple_cgm_pages )
```

Miscellaneous Procedure Calls

```
int aw_add_item_to_group ( group,qid )
int aw_del_item_from_group ( group,qid )
int aw_get_cursor_position ( x, y )
int aw_cursor_into_item ( qid )
int aw_get_global ( global, string )
int aw_set_global ( global, string )
char *aw_search_path ( file )
int aw_perl_exec ( )
int aw_system ( call )
int aw_to_cadds ( cmd )
void aw_beep ( )
int aw_start_macro ( )
int aw_exit_macro ( )
int aw_register_repository ( char* filename )
int aw_register_repository_latest ( file )
```

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