XtRealizeWidget, XtIsRealized, XtUnrealizeWidget – realize and unrealize widgets

void XtRealizeWidget(w)
   Widget w;
Boolean XtIsRealized(w)
   Widget w;
void XtUnrealizeWidget(w)
   Widget w;

w Specifies the widget.

If the widget is already realized, XtRealizeWidget simply returns. Otherwise, it performs the following:

- Binds all action names in the widget’s translation table to procedures (see Section 10.1.2).
- Makes a post-order traversal of the widget tree rooted at the specified widget and calls the change_managed procedure of each composite widget that has one or more managed children.
- Constructs an XSetWindowAttributes structure filled in with information derived from the Core widget fields and calls the realize procedure for the widget, which adds any widget-specific attributes and creates the X window.
- If the widget is not a subclass of compositeWidgetClass, XtRealizeWidget returns; otherwise, it continues and performs the following:
  - Descends recursively to each of the widget’s managed children and calls the realize procedures. Primitive widgets that instantiate children are responsible for realizing those children themselves.
  - Maps all of the managed children windows that have mapped_when Managed True. (If a widget is managed but mapped_when_managed is False, the widget is allocated visual space but is not displayed. Some people seem to like this to indicate certain states.)

If the widget is a top-level shell widget (that is, it has no parent), and mapped_when_managed is True, XtRealizeWidget maps the widget window.

The XtIsRealized function returns True if the widget has been realized, that is, if the widget has a nonzero X window ID.

Some widget procedures (for example, set_values) might wish to operate differently after the widget has been realized.

The XtUnrealizeWidget function destroys the windows of an existing widget and all of its children (recursively down the widget tree). To recreate the windows at a later time, call XtRealizeWidget again. If the widget was managed, it will be unmanaged automatically before its window is freed.

XtManageChildren(3Xt)
X Toolkit Intrinsics – C Language Interface
Xlib – C Language X Interface