



- ? Calls XtCheckSubclass to ensure popup\_shell is a subclass of Shell.
- ? Generates an error if the shell's popped\_up field is already True.
- ? Calls the callback procedures on the shell's popup\_callback list.
- ? Sets the shell popped\_up field to True, the shell spring\_loaded field to False, and the shell grab\_kind field from grab\_kind.
- ? If the shell's create\_popup\_child field is non-NULL, XtPopup calls it with popup\_shell as the parameter.
- ? If grab\_kind is either XtGrabNonexclusive or XtGrabExclusive, it calls:
  - XtAddGrab(popup\_shell, (grab\_kind == XtGrabExclusive), False)
- ? Calls XtRealizeWidget with popup\_shell specified.
- ? Calls XMapWindow with popup\_shell specified.

The XtPopupSpringLoaded function performs exactly as XtPopup except that it sets the shell spring\_loaded field to True and always calls XtAddGrab with exclusive True and spring\_loaded True.

The XtCallbackNone, XtCallbackNonexclusive, and XtCallbackExclusive functions call XtPopup with the shell specified by the client data argument and grab\_kind set as the name specifies. XtCallbackNone, XtCallbackNonexclusive, and XtCallbackExclusive specify XtGrabNone, XtGrabNonexclusive, and XtGrabExclusive, respectively. Each function then sets the widget that executed the callback list to be insensitive by using XtSetSensitive. Using these functions in callbacks is not required. In particular, an application must provide customized code for callbacks that create pop-up shells dynamically or that must do more than desensitizing the button.

XtMenuPopup is known to the translation manager, which must perform special actions for spring-loaded pop-ups. Calls to XtMenuPopup in a translation specification are mapped into calls to a nonexported action procedure, and the translation manager fills in parameters based on the event specified on the left-hand side of a translation.

If XtMenuPopup is invoked on ButtonPress (possibly with modifiers), the translation manager pops up the shell with grab\_kind set to XtGrabExclusive and spring\_loaded set to True. If XtMenuPopup is invoked on EnterWindow (possibly with modifiers), the translation manager pops up the shell with grab\_kind set to XtGrabNonexclusive and spring\_loaded set to False. Otherwise, the translation manager generates an error. When the widget is popped up, the following actions occur:

- ? Calls XtCheckSubclass to ensure popup\_shell is a subclass of Shell.

- ? Generates an error if the shell's popped\_up field is already True.
- ? Calls the callback procedures on the shell's popup\_callback list.
- ? Sets the shell popped\_up field to True and the shell grab\_kind and spring\_loaded fields appropriately.
- ? If the shell's create\_popup\_child field is non-NULL, it is called with popup\_shell as the parameter.
- ? Calls:
  - XtAddGrab(popup\_shell, (grab\_kind == XtGrabExclusive), spring\_loaded)
- ? Calls XtRealizeWidget with popup\_shell specified.
- ? Calls XMapWindow with popup\_shell specified.

(Note that these actions are the same as those for XtPopup.) XtMenuPopup tries to find the shell by searching the widget tree starting at the parent of the widget in which it is invoked. If it finds a shell with the specified name in the pop-up children of that parent, it pops up the shell with the appropriate parameters. Otherwise, it moves up the parent chain as needed. If XtMenuPopup gets to the application widget and cannot find a matching shell, it generates an error.

SEE ALSO

XtCreatePopupShell(3), XtPopdown(3)

X Toolkit Intrinsic - C Language Interface

Xlib - C Language X Interface

X Version 11

libXt 1.2.1

XtPopup(3)