**XtAppInitialize, XtVaAppInitialize – initialize, open, or close a display**

**Widget XtAppInitialize(***app_context_return***,** *application_class***,** *options***,** *num_options***,** *argc_in_out***,** *argv_in_out***,** *fallback_resources***,** *args***,** *num_args***)**
**XtAppContext** *app_context_return***;**
**String** *application_class***;**
**XrmOptionDescRec*** *options***;**
**Cardinal** *num_options***;**
**int*** *argc_in_out***;**
**String*** *argv_in_out***;**
**String*** *fallback_resources***;**
**ArgList** *args***;**
**Cardinal** *num_args***;**

Widget XtVaAppInitialize(*app_context_return*, *application_class*, *options*, *num_options*, *argc_in_out*, *argv_in_out*, *fallback_resources*, ...)
XtAppContext *app_context_return*;
String *application_class*;
XrmOptionDescRec* *options*;
Cardinal *num_options*;
int* *argc_in_out*;
String* *argv_in_out*;
String* *fallback_resources*;

*app_context_return*
Specifies the application context.

*application_class* Specifies the class name of this application, which usually is the generic name for all instances of this application.

*options* Specifies how to parse the command line for any application-specific resources. The options argument is passed as a parameter to **XrmParseCommand**. For further information, see *Xlib – C Language X Interface*.

*num_options* Specifies the number of entries in the options list.

*argc_in_out* Specifies a pointer to the number of command line parameters.

*argv_in_out* Specifies the command line parameters.

*fallback_resources* Specifies resource valus to be used if the application class resource file cannot be opened or read, or NULL.

*args* Specifies the argument list to override any other resource specification for the created shell widget.

*num_args* Specifies the number of entries in the argument list.

... Specifies the variable argument list to override any other resource specification for the created shell widget.

**The XtAppInitialize** function calls **XtToolkitInitialize** followed by **XtCreateApplicationContext**, then calls **XtOpenDisplay** with *display_string* NULL and *application_name* NULL, and finally calls **XtAppCreateShell** with *appcation_name* NULL, *widget_class* **applicationShellWidgetClass**, and the specified *args* and *num_args* and returns the created shell. The modified *argc* and *argv* returned by **XtDisplayInitialize** are returned in *argc_in_out* and *argv_in_out*. If *app_context_return* is not NULL, the created application context is also returned. If the display specified by the command line cannot be opened, an error message is issued and **XtAppInitialize** terminates the application. If *fallback_resources* is non-NULL, **XtAppSetFallbackResources** is called with the value prior to calling **XtOpenDisplay**.

XtAppInitialize and XtVaAppInitialize have been superceded by **XtOpenApplication** and **XtVaOpenApplication** respectively.

**XtOpenApplication(3Xt), XtVaOpenApplication(3Xt)**
*X Toolkit Intrinsics – C Language Interface*
*Xlib – C Language X Interface*