

**NAME**

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

**SYNTAX**

```
#include <X11/Intrinsic.h>
```

```
Widget XtAppInitialize(XtAppContext* app_context_return, const char *application_class, XrmOption-
DescRec* options, Cardinal num_options, int *argc_in_out, char **argv_in_out, String *fall-
back_resources, ArgList args, Cardinal num_args);
```

```
Widget XtVaAppInitialize(XtAppContext* app_context_return, const char *application_class, XrmOption-
DescRec* options, Cardinal num_options, int *argc_in_out, char **argv_in_out, String *fall-
back_resources, ...);
```

**ARGUMENTS**

*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 values 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.

**DESCRIPTION**

The **XtAppInitialize** function calls **XtToolkitInitialize** followed by **XtCreateApplicationContext**, then calls **XtOpenDisplay** with *display\_string* NULL and *application\_name* NULL, and finally calls **XtAppCreateShell** with *application\_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 superseded by **XtOpenApplication** and **XtVaOpenApplication** respectively.

**SEE ALSO**

XtOpenApplication(3), XtVaOpenApplication(3)

*X Toolkit Intrinsics – C Language Interface*

*Xlib – C Language X Interface*