

# Index

## A

Above, 105  
 Accelerator, **193**  
 accept\_focus procedure, 124  
 action\_proc procedure, **185**  
 actions, 187  
 Action Table, 186  
 allocate procedure, **48**  
 allowShellResize, **85**  
 AnyButton, 121  
 AnyKey, 119  
 AnyModifier, 119, 121  
 application context, **29**  
 ApplicationShell, **73**, 259  
 applicationShellClassRec, 83  
 ApplicationShellPart, 12, 256  
 ApplicationShellWidget, 77, **80**  
 applicationShellWidgetClass, 44, 45, 77  
 ApplicationShellWidgetClass, 77  
 applicationShellWidgetClass, 45, 272  
 Arg, **39**  
 ArgList, 13, **39**, 40, 41, 50, 52

## #

#augment, 191, 192, 193

## B

Below, 105  
 Boolean, **12**, 175, 254  
 BottomIf, 105  
 ButtonPress, 100, 117, 121, 129, 190, 199, 200, 224, 264, 265, 266, 268  
 ButtonPressMask, 100  
 ButtonRelease, 117, 129, 224, 264, 265, 266, 268  
 ButtonReleaseMask, 100

## C

calloc, 203  
 Cardinal, **12**, 41, 258  
 CenterGravity, 54, 163  
 Chaining:  
   Subclass, 21  
   superclass, 21  
 Chaining, 50, 51, 158  
 change\_managed procedure, 64

CirculateNotify, 265, 268  
 CirculateRequest, 265, 268  
 Class Initialization, 22  
 class\_initialize procedure, **22**, 158  
 class\_name, **17**  
 ClientMessage, 135, 136, 137, 138, 139, 265, 267, 268  
 colorConvertArgs, 162, 164, 172  
 ColormapNotify, 265, 268  
 Composite, **7**  
 CompositeClassExtension, **7**, 8, 63, 68, 69, 247, 251, 256  
 CompositeClassExtensionRec, **7**  
 CompositeClassPart, **7**, 27  
 compositeClassRec, 9  
 CompositePart, 7, **8**, 12, 53, 256  
 CompositePh, 24  
 CompositeWidget, **8**  
   Resources, 9  
 compositeWidgetClass, 8  
 CompositeWidgetClass, **8**  
 compositeWidgetClass, 28, 43, 52, 54, 60, 62  
 CompositeWidgetClass, 63  
 compositeWidgetClass, 65, 67, 68, 69, 70, 73, 103  
 compositeWidgetClass, 58  
 Composite widgets, 62  
 compress\_enterleave field, 131  
 compress\_expose field, 131  
 compress\_motion field, 131  
 ConfigureNotify, 57, 63, 265, 268  
 ConfigureRequest, 265, 268  
 Configure Window, 102  
 ConnectionClosed, 90, 93  
 ConstrainPh, 17  
 Constraint, **9**  
   get\_values\_hook, 72  
 ConstraintClassExtension, **10**, 11, 72, 176  
 ConstraintClassExtensionRec, **10**, 22  
 ConstraintClassPart, 9, **10**, 22, 27, 43, 51, 58, 59, 60, 71, 72, 153  
 constraintClassRec, 11  
 Constraint.h, 15  
 ConstraintPart, 9, **11**, 182  
 ConstraintWidget, **11**  
 ConstraintWidgetClass, **10**  
 constraintWidgetClass, 11  
 ConstraintWidgetClass, 11  
 constraintWidgetClass, 43, 54, 59, 60, 71, 157, 176, 179

constraintWidgetClass, 58, 60  
 ConvertSelection, 221  
 CopyFromParent, 54, 84, 85  
 Core, 1, **3**  
 CoreClassPart, **3**, 43, 45, 59, 96, 153, 186, 187, 189, 242, 247, 254  
 coreClassRec, 6  
 CorePart, 3, **4**, 12, 95, 244, 245, 249, 250, 256  
 CoreRec, 12  
 CoreWidget, **5**  
   Resources, 6  
 CoreWidgetClass, **3**  
 coreWidgetClass, 43, 54, 201  
 coreWidgetClassRec, 252  
 CreateNotify, 265, 268  
 create\_popup\_child\_proc, 98  
 CurrentTime, 211, 212, 213, 218, 219, 223  
 CWBorderWidth, 104  
 CWHeight, 104, 105  
 CWSibling, 104  
 CWStackMode, 104, 111  
 CWWidth, 104, 105  
 CWX, 104  
 CWY, 104

**D**

deallocate procedure, **60**  
 delete\_child procedure, **64**  
 DeleteProperties, 90  
 destroyCallback, 175  
 Destroy Callbacks, 59, 148  
 DestroyNotify, 265, 268  
 destroy procedure, **59**  
 Die, 90, 93  
 Dimension, **12**  
 DirectColor, 163  
 Display, 29, 36  
 display\_accelerator, 268  
 display\_accelerator procedure, **193**

**E**

EastGravity, 54, 163  
 EnterNotify, 117, 129, 224, 264, 265, 267, 268, 270  
 EnterWindow, 100  
 EventMask, 140  
 EventMask., 141  
 Events, 126  
 exit, 61  
 Expose, 132, 144, 181, 225, 265, 268

expose procedure, 133

**F**

False, 6, 12, 23, 43, 53, 62, 63, 68, 69, 70, 84, 85, 86, 87, 88, 89, 91, 92, 93, 98, 100, 116, 117, 118, 123, 125, 126, 128, 129, 130, 134, 135, 143, 144, 163, 165, 173, 175, 209, 214, 216, 220, 232, 246  
 FocusChange, 124  
 FocusIn, 124, 129, 265, 267, 268  
 FocusOut, 124, 129, 265, 267, 268  
 font, 14  
 ForgetGravity, 163  
 free, 203

**G**

Geometry Management, 102  
 geometry\_manager procedure, 102  
 get\_values\_hook procedure, 72, 176, **177**  
 Grabbing Input, 117  
 GrabModeAsync, 100  
 GrabNotViewable, 120, 122  
 GraphicsExpose, 125, 132, 135, 136, 137, 138, 139, 144, 225, 265  
 GraphicsExpose., 268  
 GravityNotify, 265, 268  
 GrayScale, 163

**\$**

\$HOME, 35

**I**

IconicState, 88, 163  
 Inheritance, 21, 50, 51, 54, 158  
 Initialization, 22, 50, 51  
 initialize\_hook procedure, **52**  
 initialize procedure, **50**, 51  
 Input Grabbing, 117  
 InputOnly, 54  
 InputOutput, 54  
 insert\_child procedure, 25, **63**, 96, 271  
 Interact, 90, 92  
 InteractDone, 90, 92, 93  
 InteractRequest, 90, 92  
 Intrinsic.h, 4, 5, 8, 9, 10, 11, 127, 244, 245, 248, 249

IntrinsicP.h, 4, 8, 10, 244, 245

## K

KeymapNotify, 265, 268

key modifier, 265

KeyPress, 100, 117, 119, 129, 198, 199, 200, 224, 264, 265, 266, 267, 268

KeyRelease, 117, 129, 198, 224, 264, 265, 267, 268

## L

language procedure, **32**

LC\_ALL, 33

LeaveNotify, 117, 129, 224, 264, 265, 267, 268

libXt.a, 2

## M

malloc, 203

MapNotify, 265, 268

MappingNotify, 135, 136, 137, 138, 139, 195, 265, 267

MapRequest, 265, 268

MenuPopdown, **101**

MenuPopup, **99**

MotionNotify, 117, 129, 224, 264, 265, 266, 267, 268

multiClickTime, **190**

## N

NoExpose, 125, 133, 135, 136, 137, 138, 139, 144, 265, 268

None, 7, 86, 87, 123, 143, 200, 211

NormalState, 163

NorthEastGravity, 163

NorthGravity, 163

NorthWestGravity, 54, 133, 163

NoSymbol, 195, 198

## O

Object, 1, 235, **242**, 244, 245

objectClass, 23, 156, 157, 158, 244

ObjectClass, 244

objectClass, **244**

ObjectClass, **244**

objectClass, 245, 246

ObjectClass, 252

ObjectClassExtension, 48, 59, 60, 244

ObjectClassExtensionRec, **243**

ObjectClassPart, 59, 153, **242**, 243, 244, 247

objectClassRec, 6

ObjectClassRec, **244**

objectClassRec, 245

ObjectPart, 12, 242, **244**, 245, 249, 256

ObjectRec, 12, **245**

Opposite, 105

## #

#override, 191, 192, 193

## O

OverrideShell, 73

OverrideShellWidget, 77

overrideShellWidgetClass, 77

OverrideShellWidgetClass, 77

## P

ParentRelative, 7

Pixel, 166

pop-up:

child, 95

pop-up, **95**

list, 95

child, 96

shell, 96

Position, **12**

PPosition, 85

printf, 227

PropertyNotify, 125, 224, 265, 267, 268

PseudoColor, 163

PSize, 85

## Q

query\_geometry procedure, **110**

## R

realize procedure, 54

realloc, 203

Rectangle, 247

RectObj, **247**, 249

rectObjClass, 158, 182, 247

RectObjClass, **248**

rectObjClass, 249

RectObjClass, 249

rectObjClass, 250

RectObjClassPart, 59, 153, **247**, 248

rectObjClassRec, 6

RectObjClassRec, **248**  
 rectObjClassRec, 250, 252  
 RectObjPart, 12, **249**, 250, 256  
 RectObjRec, 12, **249**  
 ReparentNotify, 265, 268  
  
 #  
  
 #replace, 191, 192, 193  
  
**R**  
  
 resize procedure, **111**  
 ResizeRequest, 265, 268  
 Resource Management, 153  
 Resources:  
   xnlLanguage, 34  
   selectionTimeout, 38  
   synchronous, 38  
   reverseVideo, 162  
   xtDefaultFont, 162  
   xtDefaultFontSet, 163  
   multiClickTime, 190  
 RestartAnyway, 163  
 RestartIfRunning, 163  
 RestartImmediately, 163  
 RestartNever, 163  
 root\_geometry\_manager procedure, 78  
  
 ,  
  
 FALSE, 12  
 LANG, 34  
 NULLQUARK, 7, 10, 26, 43, 49, 59, 60, 69, 72, 78,  
 176, 243  
 RESOURCE\_NAME, 31  
 SESSION\_MANAGER, 89  
 SM\_CLIENT\_ID, 88  
 TRUE, 12  
 WM\_CHANGE\_STATE, 87  
 WM\_CLASS, 45  
 WM\_CLIENT\_LEADER, 86  
 WM\_COMMAND, 45, 88  
 WM\_ICON\_NAME, 87  
 WM\_NAME, 86  
 WM\_TRANSIENT\_FOR, 73, 86, 87  
 WM\_WINDOW\_ROLE, 86  
 XAPPLRESDIR, 35  
 XENVIRONMENT, 34  
 XFILESEARCHPATH, 234, 235, 257

XUSERFILESEARCHPATH, 35, 257

## S

SaveComplete, 90, 93  
 SaveYourself, 90, 92  
 SaveYourselfDone, 90, 93  
 SaveYourselfPhase2, 90, 91  
 SaveYourselfPhase2Request, 90, 91  
 Screen, 166  
 screenConvertArg, 172  
 SelectionClear, 135, 136, 137, 138, 139, 220, 224,  
 265, 267, 268  
 SelectionNotify, 135, 136, 137, 138, 139, 211, 265,  
 267, 268  
 SelectionRequest, 135, 136, 137, 138, 139, 209,  
 210, 216, 265, 267, 268  
 Selections:  
   atomic, 208  
   MULTIPLE, 209  
   TIMESTAMP, 209  
   incremental, 215  
 selectionTimeout, **38**, 208  
 SessionShell, **73**, 259  
 sessionShellClassRec, 84  
 SessionShellWidget, 77, **80**  
 sessionShellWidgetClass, 47, 77  
 SessionShellWidgetClass, 77  
 sessionShellWidgetClass, 89  
 setlocale, 33  
 SetProperties, 90  
 set\_values\_almost procedure, **181**  
 set\_values\_hook procedure, 179, 183, **184**  
 set\_values procedure, **180**, 182  
 Shell, **73**  
   root\_geometry\_manager, 78  
   wm\_timeout, **78**  
   create\_popup\_child\_proc, 98  
 ShellClassExtension, **74**, 78  
 ShellClassExtensionRec, **74**  
 ShellClassPart, 27, 78  
 shellClassRec, 82  
 Shell.h, 77, 296  
 ShellPart, 12, **78**, 256  
 ShellP.h, 77  
 ShellWidget, 77, **80**  
   Resources, 82  
 shellWidgetClass, 77  
 ShellWidgetClass, 77  
 shellWidgetClass, 98, 100  
 ShutdownCancelled, 90, 93  
 sizeof, 27, 155  
 SmDialogError, 92

SmDialogNormal, 91, 92  
 SmInteractStyleAny, 90  
 SmInteractStyleErrors, 90  
 SmInteractStyleNone, 90, 93  
 SmRestartAnyway, 89  
 SmRestartIfRunning, 88, 89  
 SmRestartImmediately, 89  
 SmRestartNever, 89  
 SmSaveBoth, 90  
 SmSaveGlobal, 90  
 SmSaveLocal, 90  
 SouthEastGravity, 163  
 SouthGravity, 163  
 SouthWestGravity, 163  
 special, 14  
 StaticColor, 163  
 StaticGravity, 163  
 StaticGray, 163  
 String, 14, 41, 50, 154, 164  
 string, 166  
 String, 263  
 String Constants:  
   resource names, 290  
   resource classes, 292  
   representation types, 293  
   resource names, 296  
   resource classes, 297  
   representation types, 299  
 StringDefs.h, 290  
 Subclass Chaining, **21**  
 Substitution, **232**  
 SubstructureNotify, 57  
 superclass, **17**  
 Superclass Chaining, **21**, 50, 51, 158  
 synchronous, **38**

## T

TARGETS, 209  
 this, 14  
 TopIf, 105  
 TopLevel, 87  
 TopLevelShell, 73  
   resources, 83  
 topLevelShellClassRec, 83  
 TopLevelShellPart, 12, 254, 255, 256  
 TopLevelShellWidget, 77  
 topLevelShellWidgetClass, 77  
 TopLevelShellWidgetClass, 77  
 topLevelShellWidgetClass, 276  
 TransientShell, 73  
   resources, 83  
 transientShellClassRec, 83

TransientShellPart, 254, 255  
 TransientShellWidget, 77  
 transientShellWidgetClass, 77  
 TransientShellWidgetClass, 77  
 Translation tables, 189, 263  
 True, 6, 12, 20, 31, 38, 53, 54, 58, 62, 63, 65, 67,  
 68, 69, 70, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93,  
 98, 99, 100, 104, 116, 117, 118, 119, 121, 124,  
 126, 128, 129, 130, 131, 134, 135, 136, 139, 143,  
 144, 162, 165, 173, 175, 179, 181, 209, 214, 216,  
 220, 232, 233, 247, 251, 256  
 TrueColor, 163

## U

UnmapGravity, 163  
 UnmapNotify, 100, 265, 268  
 unrealizeCallback, **57**  
 USPosition, 85  
 USSize, 85

## V

varargs, **41**  
 VendorShell, 73  
 VendorShellWidget, 77  
 vendorShellWidgetClass, 77  
 VendorShellWidgetClass, 77  
 version, **17**  
 Visibility, 134  
 VisibilityFullyObscured, 134  
 VisibilityNotify, 134, 144, 265, 268  
 VisibilityPartiallyObscured, 134  
 VisibilityUnobscured, 134

## W

WestGravity, 54, 163  
 Widget, 4, **5**  
   class initialization, 23  
   class extension records, 26  
   class initialization, 158  
 Widget Allocation, 48  
 WidgetClass, **3**  
   widgetClass, 4  
   WidgetClass, 4  
   widget\_class, **12**  
   widgetClassRec, 17  
 WidgetList, 65  
 WidgetRec, 12  
   widget\_size, **17**  
 WM\_COLORMAP\_WINDOWS, **231**  
 WMSHELL, 73

resources, 82  
 WMShell, 260  
 wmShellClassRec, 82  
 WMShellPart, 12, 255, 256, 258, 259  
 WMShellPart., 254  
 WMShellWidget, 77  
 wmShellWidgetClass, 77  
 WMShellWidgetClass, 77  
 wm\_timeout, **78**

## X

X11/Intrinsic.h, 1, 171  
 X11/IntrinsicP.h, 1, 20  
 X11/keysymdef.h, 268  
 X11/Shell.h, 1, 260  
 X11/StringDefs.h, 1, 13, 154, 155  
 X11/Xatoms.h, 1  
 X11/Xaw/Label.h, 2  
 X11/Xaw/Scrollbar.h, 2  
 X11/X.h, 104, 105  
 X11/Xresource.h, 164  
 X11/Xutil.h, 225  
 XAPPLRESDIR, **35**  
 XA\_PRIMARY, 208, 211, 213  
 XA\_SECONDARY, 208  
 XA\_STRING, 208, 211  
 XClearArea, 179, 181  
 XCloseDisplay, 32  
 XConfigureWindow, 57, 65, 104, 108, 109  
 XCreateFontSet, 163  
 XCreateGC, 207  
 XCreateWindow, 53, 54, 55

,

## X

XDestroyWindow, 57, 58, 59  
 XFILESEARCHPATH, **234**  
 XFilterEvent, 119, 121, 128, 143  
 XFreeGC, 60  
 XFreePixmap, 60  
 XGetWindowAttributes, 85  
 XGrabButton, 121  
 XGrabKey, 119  
 XGrabKeyboard, 120  
 XGrabPointer, 122  
 XListFonts, 162  
 XMapRaised, 98

XMatchVisualInfo, 163  
 xmh, 38  
 XMoveWindow, 65, 108  
 XNextEvent, 126  
 xnlLanguage, **34**, 234, 258  
 XOpenDisplay, 31, 37  
 XParseGeometry, 154  
 XPeekEvent, 126  
 XPending, 126  
 XPointer, 256  
 XResourceManagerString, 34  
 XrmGetDatabase, 36, 235  
 XrmOptionDescRec, **37**, 256  
 XrmParseCommand, 30, 31, 37, 39, 273  
 XrmPutLineResource, 36  
 XrmSetDatabase, 31, 35  
 XrmStringToQuark, 26, 171  
 XrmValue, 156, 164, 256, 277  
 XScreenResourceString, 34  
 XSelectInput, 135, 136, 138, 139, 140, 141  
 XSetInputFocus, 123, 124  
 XSetLocaleModifiers, 33  
 XSetWindowAttributes, 52, 54, 139  
 XSizeHints, 255  
 XStdICCTextStyle, 86, 87  
 XSupportsLocale, 33  
 XSynchronize, 31, 38  
 XtAcceptFocusProc, **124**  
 XtActionHookId, 188  
 XtActionHookProc, 187, **188**  
 XtActionList, 185  
 XtActionProc, **185**  
 XtActionsRec, 185  
 XtAddActions, 187, 273, **280**  
 XtAddCallback, 59, **149**, 236, 237, 238, 246  
 XtAddCallbacks, **150**, 236, 238, 246  
 XtAddCallbacks., 237  
 XtAddConverter, 175, **277**, 278  
 XtAddEventHandler, 127, **135**, 136, 137, 138, 139, 252  
 XtAddExposureToRegion, **225**  
 XtAddGrab, 98, 117, **118**, 128, 252  
 XtAddInput, 273, **275**  
 XtAddRawEventHandler, 136, **137**, 138, 139, 252  
 XtAddress, **171**  
 XtAddressMode, 171  
 XtAddTimeOut, 273, **276**  
 XtAddWorkProc, 273, **276**  
 XtAllEvents, 136, 139  
 XtAllocateGC, **205**, 206, 207  
 XtAllocateProc, **48**, 49  
 XtAlmostProc, **181**  
 XtAppAddActionHook, **188**

XtAppAddActionHook., 188  
 XtAppAddActions, **187**, 280  
 XtAppAddBlockHook, **114**, 260  
 XtAppAddBlockHook, 114  
 XtAppAddConverter, 175, **277**, 278  
 XtAppAddInput, 90, **112**, 113, 126, 276  
 XtAppAddInput, 113  
 XtAppAddSignal, **116**, 117, 260  
 XtAppAddTimeOut, 60, **115**, 276  
 XtAppAddTimeOut, 115  
 XtAppAddWorkProc, **130**, 276  
 XtAppContext, **29**  
 XtAppCreateShell, 28, 29, **44**, 46, 47, 157, 236, 252, 253, 272, 274, 276

—

\_XtAppCreateShell, 300

## X

XtAppError, **231**, 283  
 XtAppErrorMsg, 168, **229**, 231, 282, 283  
 XtAppGetErrorDatabase, **226**, 227, 281  
 XtAppGetErrorDatabaseText, **227**, 228, 281  
 XtAppGetExitFlag, **147**, 260  
 XtAppGetSelectionTimeout, **208**, 281  
 XtAppInitialize, 29, 144, 253, 258, 259, **271**, 272, 273  
 XtAppLock, 128, **146**, 260  
 XtAppLock., 145  
 XtAppMainLoop, 112, 127, **128**, 147, 274  
 XtAppNextEvent, 115, 116, **126**, 127, 128, 130, 147, 274  
 XtAppPeekEvent, **126**, 147, 275  
 XtAppPending, 117, **126**, 275  
 XtAppProcessEvent, 115, 116, 117, 126, **127**, 130, 147, 275  
 XtAppReleaseCacheRefs, **174**  
 XtAppSetErrorHandler, **230**, 283  
 XtAppSetErrorMsgHandler, **228**, 229, 282  
 XtAppSetExitFlag, **146**, 260  
 XtAppSetFallbackResources, **36**, 37, 47, 272  
 XtAppSetSelectionTimeout, **208**, 280  
 XtAppsetTypeConverter, **169**, 170, 278  
 XtAppSetWarningHandler, **231**, 284  
 XtAppSetWarningMsgHandler, **229**, 282  
 XtAppUnlock, 128, **146**, 260  
 XtAppUnlock., 146  
 XtAppWarning, **231**, 284  
 XtAppWarningMsg, 165, 168, **230**, 231, 283, 284  
 XtArgsFunc, **184**  
 XtArgsProc, **52**, 177

XtArgVal, **12**, 40, 41  
 XtAugmentTranslations, **191**, 237, 238, 252  
 XtBaseOffset, **171**, 172  
 XtBlockHookProc, **114**  
 XtBuildEventMask, **139**, 140, 252  
 XtButtonBoxAddButton, 271  
 XtButtonBoxDeleteButton, 271  
 XtCacheAll, **169**, 173, 278  
 XtCacheByDisplay, **169**, 173, 175  
 XtCacheNone, **169**, 173  
 XtCacheRef, 174, 175  
 XtCacheRefCount, **169**, 173  
 XtCacheType, **169**  
 XtCallAcceptFocus, **124**, 125, 252  
 XtCallActionProc, 188, 198, **200**, 252  
 XtCallbackExclusive, 97, **99**, 253  
 XtCallbackHasNone, 149, 152  
 XtCallbackHasSome, 152  
 XtCallbackList, **148**  
 XtCallbackNoList, 152  
 XtCallbackNone, 97, **99**, 253  
 XtCallbackNonexclusive, 97, **99**, 253  
 XtCallbackPopdown, 100, **101**, 253  
 XtCallbackProc, 59, **148**  
 XtCallbackRec, **148**  
 XtCallbackReleaseCacheRef, **174**, 175  
 XtCallbackReleaseCacheRefList, **174**  
 XtCallbackStatus, 149  
 XtCallCallbackList, 149, **151**, 152, 236, 246  
 XtCallCallbacks, **151**, 236, 246  
 XtCallConverter, 171, **173**, 174, 175, 279  
 XtCalloc, 60, 203, **204**, 214, 220  
 XtCancelConvertSelectionProc, **217**  
 XtCancelSelectionRequest, **223**, 261  
 XtCaseProc, 195, **196**, 197, 256  
 XtChangeHookData, 237  
 XtChangeHookSetValuesData, **237**  
 XtChangeManagedSet, 62, **67**, 68, 69, 237, 250, 259  
 XtCheckpointToken, **90**  
 XtCheckpointTokenRec, **90**  
 XtCheckSubclass, 2, **20**, 21, 98, 100, 236, 246  
 XtClass, **19**, 236, 246  
 XtCloseDisplay, **32**, 169, 175  
 XtCompositeExtensionVersion, 8  
 XtConfigureHookData, **239**  
 XtConfigureHookData., 239  
 XtConfigureWidget, 65, 102, 107, 108, **109**, 250, 251  
 XtConstraintExtensionVersion, 11  
 XtConvert, 246, **278**, 279  
 XtConvertAndStore, 145, 173, **175**, 246, 279  
 XtConvertArgProc, **171**, 172

XtConvertArgRec, 171  
 XtConvertCase, **197**, 198  
 XtConverter, 256, 276, **277**  
 XT\_CONVERT\_FAIL, 211, 219  
 XtConvertSelectionIncrProc, **215**, 222  
 XtConvertSelectionProc, **208**, 209, 210, 222  
 XtCreateApplicationContext, **29**, 47, 144, 187, 272  
 XtCreateApplicationShell, 273, **276**  
 XtCreateHookData, **236**  
 XtCreateManagedWidget, 62, 65, **66**, 169, 236, 250, 251, 253  
 XtCreatePopupChildProc, **98**  
 XtCreatePopupShell, 45, **96**, 97, 236, 252, 253

—

\_XtCreatePopupShell, 300

## X

XtCreateSelectionRequest, 221, **222**, 223, 261  
 XtCreateWidget, 6, 23, 39, **42**, 43, 44, 53, 62, 63, 66, 71, 148, 153, 158, 159, 169, 175, 236, 245, 246, 247, 251, 271  
 XtCreateWindow, **54**, 55, 57, 252  
 XtCurrentDirectory, **163**  
 XtCvtColorToPixel, 163  
 XtCvtIntToBool, 164  
 XtCvtIntToBoolean, 164  
 XtCvtIntToColor, 164  
 XtCvtIntToDimension, 164  
 XtCvtIntToFloat, 164  
 XtCvtIntToFont, 164  
 XtCvtIntToPixel, 164  
 XtCvtIntToPixmap, 164  
 XtCvtIntToPosition, 164  
 XtCvtIntToShort, 164  
 XtCvtIntToUnsignedChar, 164  
 XtCvtPixelToColor, 164  
 XtCvtStringToAcceleratorTable, 162  
 XtCvtStringToAtom, 162  
 XtCvtStringToBool, 162  
 XtCvtStringToBoolean, 162  
 XtCvtStringToCommandArgArray, 162  
 XtCvtStringToCursor, 162  
 XtCvtStringToDimension, 162  
 XtCvtStringToDirectoryString, 162  
 XtCvtStringToDisplay, 162  
 XtCvtStringToFile, 162  
 XtCvtStringToFloat, 162  
 XtCvtStringToFont, 162  
 XtCvtStringToFontSet, 162  
 XtCvtStringToFontStruct, 162

XtCvtStringToGravity, 162  
 XtCvtStringToInitialState, 162  
 XtCvtStringToInt, 162  
 XtCvtStringToPixel, 162  
 XtCvtStringToPosition, 162  
 XtCvtStringToRestartStyle, 162  
 XtCvtStringToShort, 162  
 XtCvtStringToTranslationTable, 162  
 XtCvtStringToUnsignedChar, 162  
 XtCvtStringToVisual, 162  
 XtCWQueryOnly, 104, 106, 107  
 XtDatabase, **36**  
 XtDeallocateProc, **60**  
 XtDefaultBackground, 6, 38, **162**, 167

—

\_XtDefaultError, **230**  
 \_XtDefaultErrorMsg, 229

## X

XtDefaultFont, **162**, 167  
 XtDefaultFontSet, **163**  
 XtDefaultForeground, 6, 38, 156, **162**, 167

—

\_XtDefaultWarning, **231**  
 \_XtDefaultWarningMsg, 229, **230**

## X

XtDestroyApplicationContext, **29**, 32, 61  
 XtDestroyGC, **279**, 280  
 XtDestroyHookData, 240  
 XtDestroyWidget, 28, **58**, 60, 61, 62, 64, 67, 72, 95, 240, 246  
 XtDestroyWidget, 53  
 XtDestructor, **167**  
 XtDirectConvert, 171, 175, **278**, 279  
 XtDisownSelection, **214**, 215, 220, 252  
 XtDispatchEvent, 58, 118, 119, 121, 123, 127, **128**, 143, 224, 225, 258, 260, 274  
 XtDispatchEventToWidget, 143, **144**, 252, 260  
 XtDisplay, **55**, 56, 252  
 XtDisplayInitialize, 29, **30**, 31, 32, 33, 34, 36, 37, 38, 39, 44, 45, 47, 190, 208, 228, 234, 258, 272  
 XtDisplayOfObject, **56**, 236, 246  
 XtDisplayStringConversionWarning, **168**, 277  
 XtDisplayToApplicationContext, 165, **168**, 169  
 XtDoChangeProc, 69  
 XtEnum, **12**, 254

XtError, 229, 282, **283**

—

\_XtError, 283

## X

XtErrorHandler, **230**

XtErrorMsg, 21, 204, 205, **282**

XtErrorMsgHandler, **227**

XtEventDispatchProc, **143**

XtEventHandler, **134**, 254

XtExposeCompressMaximal, 132

XtExposeCompressMultiple, **132**

XtExposeCompressSeries, **132**

XtExposeGraphicsExpose, **132**

XtExposeGraphicsExposeMerged, **132**

XtExposeNoCompress, **132**, 133

XtExposeNoExpose, **132**

XtExposeNoRegion, 132, 133, 259

XtExposeProc, **133**

XtExtensionSelectProc, 142

XtFilePredicate, **232**

XtFindFile, 232, **233**, 234

XtFree, 41, 42, 60, 157, 199, 201, 203, **204**, 205, 208, 211, 217, 222, 233, 235, 241

XtGeometryAlmost, 78, 103, 105, 106, 107, 110, 111, 179, 181, 182

XtGeometryDone, 104, 107, 179

XtGeometryHandler, **106**, 110

XtGeometryHookData, 239, 240

XtGeometryMask, 103

XtGeometryNo, 78, 85, 104, 107, 110, 111, 179, 182

XtGeometryResult, 104

XtGeometryYes, 78, 103, 104, 106, 107, 110, 111, 179, 251

XtGetActionKeysym, **198**

XtGetActionList, **201**

XtGetApplicationNameAndClass, **228**, 235

XtGetApplicationResources, **160**, 161, 166, 169, 172, 173, 246

XtGetClassExtension, **27**, 259

XtGetConstraintResourceList, **157**, 246

XtGetDisplays, **240**, 261

XtGetErrorDatabase, **281**

XtGetErrorDatabaseText, **281**

XtGetErrorDatabaseText, 281

XtGetGC, 60, **206**, 207, 246

XtGetKeyboardFocusWidget, 143, **144**, 260

XtGetKeysymTable, **195**, 199

XtGetMultiClickTime, **190**

XtGetResourceList, **156**, 157, 246

XtGetSelectionParameters, **221**, 222, 261

XtGetSelectionRequest, **209**, 210, 216, 252

XtGetSelectionTimeout, 273, **280**

XtGetSelectionValue, **211**, 212, 213, 218, 221, 222, 223, 252

XtGetSelectionValueIncremental, **218**, 219, 221, 222, 223, 252

XtGetSelectionValues, 211, **212**, 213, 221, 222, 223, 252

XtGetSelectionValuesIncremental, 218, **219**, 221, 222, 223, 252

XtGetSubresources, **159**, 160, 166, 169, 172, 173, 246

XtGetSubvalues, 177, **178**

XtGetValues, 71, 72, 85, 148, 153, 157, **176**, 177, 236, 246

XtGrabButton, **121**, 122, 128, 199, 200, 252

XtGrabExclusive, 98, 99, 100

XtGrabKey, **119**, 120, 123, 124, 128, 199, 200, 252

XtGrabKeyboard, **120**, 123, 124, 252

XtGrabKind, 97

XtGrabNone, 87, 99

XtGrabNonexclusive, 98, 99, 100

XtGrabPointer, **122**, 252

XtHaddCallback, 238

XtHaddCallbacks, 238

XtHasCallbacks, **152**, 236, 246

XtHaugmentTranslations, 238

XtHconfigure, 239

XtHcreate, 236

XtHdestroy, 240

XtHmanageChildren, 237

XtHmanageSet, 238

XtHmapWidget, 239

XtHooksOfDisplay, **235**, 261

XtHoverrideTranslations, 238

XtHpopdown, 239

XtHpopup, 239

XtHpopupSpringLoaded, 239

XtHpostGeometry, 240

XtHpreGeometry, 240

XtHrealizeWidget, 238

XtHremoveAllCallbacks, 238

XtHremoveCallback, 238

XtHremoveCallbacks, 238

XtHsetKeyboardFocus, 238

XtHsetMappedWhenManaged, 239

XtHsetValues, 237

XtHsetWMColormapWindows, 238

XtHuninstallTranslations, 238

XtHunmanageChildren, 237

- XtHunmanageSet, 237
- XtHunmapWidget, 239
- XtHunrealizeWidget, 238
- XtIMAll, 127
- XtIMAlternateInput, 126, 127
- XtImmediate, **171**
- XtIMSignal, 116, 117, 126, 127
- XtIMTimer, 126, 127
- XtIMXEvent, 126, 127
- XtInherit, 24
- 
- \_XtInherit, 24
- X**
- XtInheritAcceptFocus, 25
- XtInheritAllocate, 25, 49, 60
- XtInheritChangeManaged, 25, 69
- XtInheritDeallocate, 25, 49, 60
- XtInheritDeleteChild, 25
- XtInheritDisplayAccelerator, 25
- XtInheritExpose, 25
- XtInheritGeometryManager, 25
- XtInheritInsertChild, 25
- XtInheritQueryGeometry, 25
- XtInheritRealize, 25
- XtInheritResize, 25
- XtInheritRootGeometryManager, 25, 78
- XtInheritSetValuesAlmost, 25, 181
- XtInheritTranslations, 25, 189
- XtInitialize, 258, **273**, 274, 275, 276, 280, 281
- XtInitializeWidgetClass, **23**, 24, 245
- XtInitProc, **50**, 51, 254, 255
- XtInputCallbackProc, **113**
- XtInputExceptMask, **113**
- XtInputReadMask, **113**
- XtInputWriteMask, **113**
- XtInsertEventHandler, **136**, 137, 139, 252
- XtInsertEventTypeHandler, 140, 141, 142, 143, 252, 260
- XtInsertRawEventHandler, 136, 138, **139**, 140, 252
- XtInstallAccelerators, **194**, 252
- XtInstallAllAccelerators, **194**, 252
- XtIsApplicationShell, **20**, 236, 246
- XtIsComposite, **20**, 236, 246
- XtIsConstraint, **20**, 236, 246
- XtIsManaged, **69**, 246
- XtIsObject, **20**, 236, 246
- XtIsOverrideShell, **20**, 236, 246
- XtIsRealized, **53**, 246
- XtIsRectObj, **20**, 236, 246
- XtIsSensitive, **129**, 130, 246
- XtIsSessionShell, **20**, 236, 246, 259
- XtIsShell, **20**, 236, 246
- XtIsSubclass, **20**, 236, 246
- XtIsTopLevelShell, **20**
- XtIsToplevelShell, 236, 246
- XtIsTransientShell, **20**, 236, 246
- XtIsVendorShell, **20**, 236, 246
- XtIsWidget, **20**, 236, 246
- XtIsWMSHELL, **20**, 236, 246
- XtKeyProc, 194, **195**, 196, 198, 265
- XtKeysymToKeycodeList, 198, **199**
- XtLabelCreate, 271
- XtLanguageProc, **32**
- XtLastEventProcessed, **224**, 260
- XtLastTimestampProcessed, 128, **224**
- XtListHead, 137
- XtListPosition, **136**
- XtListTail, 137, 140
- XtLoseSelectionIncrProc, 216, **217**
- XtLoseSelectionProc, **210**
- XtMainLoop, 273, **274**
- XtMakeGeometryRequest, 28, 78, 102, **103**, 104, 105, 107, 110, 111, 239, 250, 251
- XtMakeResizeRequest, 78, 102, **105**, 110, 111, 239, 250, 251
- XtMalloc, 60, **203**, 204, 205, 214, 220
- XtManageChild, 25, 39, 62, **65**, 66, 237, 250, 271
- XtManageChildren, 53, 62, **64**, 65, 68, 237, 250, 271
- XtMapWidget, **70**, 237, 239, 252
- XtMenuPopdown, 85, 100, **101**, 187, 280
- XtMenuPopup, 85, 96, 97, **99**, 100, 187, 280
- XtMenuPopupAction, 100
- XtMergeArgLists, **40**, 41
- XtMoveWidget, 65, 102, 107, **108**, 250, 251
- XtMoveWidget, 102
- XtName, **57**, 236, 246
- XtNameToWidget, **202**, 203, 246, 252
- XtNchildren, 9
- XtNew, 2, **205**
- XtNewString, **205**
- XtNextEvent, 273, **274**
- XtNinitialResourcesPersistent, **175**
- XtNinsertPosition, 9, 63
- XtNnumChildren, 9
- XtNoticeSignal, **116**, 260
- XtNumber, 2, 40, **202**
- XtNunrealizeCallback, 57
- XtObjectExtensionVersion, 244
- XtOffset, 2, **158**
- XtOffsetOf, 2, 156, **158**

XtOpenApplication, 29, **46**, 47, 48, 144, 252, 259, 271, 274  
 XtOpenDisplay, 29, **31**, 37, 47, 258, 272, 274  
 XtOrderProc, **63**  
 XtOverrideTranslations, 191, **192**, 237, 238, 252  
 XtOwnSelection, 209, **213**, 214, 252  
 XtOwnSelectionIncremental, 209, 216, **219**, 220, 252  
 XtParent, **55**, 236, 246  
 XtParseAcceleratorTable, **193**, 194  
 XtParseTranslationTable, 189, **191**  
 XtPeekEvent, 273, **275**  
 XtPending, 273, **275**  
 XtPointer, **12**, 156, 174, 254  
 XtPopdown, 85, **100**, 101, 237, 239, 253  
 XtPopdownID, 101  
 XtPopup, 85, 87, 97, **98**, 99, 100, 117, 237, 239, 253  
 XtPopupSpringLoaded, 97, 98, 100, 237, 239, 253  
 XtProc, **22**  
 XtProcedureArg, **171**  
 XtProcessEvent, 273, **274**, 275  
 XtProcessLock, **146**, 260  
 XtProcessLock., 146  
 XtProcessUnlock, **146**, 260  
 XtQueryGeometry, **109**, 110, 111, 250, 255  
 XtQueryOnly, 251  
 XtRAcceleratorTable, 154, 162  
 XTranslateCoordinates, 225  
 XtRAtom, 154, 162  
 XtRBitmap, 154  
 XtRBool, 154, 162, 164  
 XtRBoolean, 154, 162, 164  
 XtRCallback, 149, 152, 154  
 XtRCardinal, 154  
 XtRColor, 154, 163, 164  
 XtRColormap, 154  
 XtRCommandArgArray, 154, 162  
 XtRCursor, 154, 162  
 XtRDimension, 154, 162, 164  
 XtRDirectoryString, 154, 162  
 XtRDisplay, 154, 162  
 XtRealizeProc, **53**  
 XtRealizeWidget, 28, 39, **52**, 53, 54, 65, 68, 97, 98, 133, 139, 237, 238, 252  
 XtRealloc, 203, **204**, 214, 220  
 XtREditMode, 155  
 XtRegisterCaseConverter, **197**  
 XtRegisterDrawable, **125**, 226, 252, 260  
 XtRegisterExtensionSelector, **141**, 142, 260  
 XtRegisterGrabAction, 100, **199**  
 XtReleaseGC, 60, **207**, 246, 280  
 XtReleasePropertyAtom, **224**, 261  
 XtRemoveActionHook, **188**, 189  
 XtRemoveAllCallbacks, **151**, 236, 237, 238, 246  
 XtRemoveBlockHook, **114**, 260  
 XtRemoveCallback, 59, **150**, 236, 237, 238, 246  
 XtRemoveCallbacks, 150, **151**, 236, 237, 238, 246  
 XtRemoveEventHandler, 60, **136**, 252  
 XtRemoveEventTypeHandler, 141, 252, 260  
 XtRemoveGrab, 100, 117, **118**, 252  
 XtRemoveInput, **113**, 114  
 XtRemoveRawEventHandler, **138**, 139, 141, 252  
 XtRemoveSignal, **117**, 260  
 XtRemoveTimeOut, 60, **115**, 116  
 XtRemoveWorkProc, **130**, 131  
 XtREnum, 154  
 XtREnvironmentArray, 154  
 XtRequestId, **215**  
 XtReservePropertyAtom, 223, **224**, 261  
 XtResizeWidget, 65, 102, 107, **108**, 109, 111, 250, 251  
 XtResizeWindow, **109**, 239, 252  
 XtResolvePathname, 35, 36, 232, **233**, 234, 257  
 XtResource, 153  
 XtResourceDefaultProc, 156  
 XtResourceList, 12, 153  
 XtResourceQuark, **171**, 172  
 XtResourceString, **171**, 172  
 XtRFile, 154, 162  
 XtRFloat, 154, 162, 164  
 XtRFont, 154, 162, 164  
 XtRFontSet, 154, 162, 163  
 XtRFontStruct, 154, 162  
 XtRFunction, 154  
 XtRGeometry, 154  
 XtRGravity, 154, 162  
 XtRInitialState, 154, 162  
 XtRInt, 154, 162, 164  
 XtRJustify, 155  
 XtRLongBoolean, 154  
 XtRObject, 154  
 XtROrientation, 155  
 XtRPixel, 154, 162, 163, 164  
 XtRPixmap, 154, 164  
 XtRPointer, 154  
 XtRPosition, 154, 162, 164  
 XtRRestartStyle, 154, 162  
 XtRScreen, 154  
 XtRShort, 154, 162, 164  
 XtRSmcConn, 154  
 XtRString, 154, 156, 162, 163, 165  
 XtRStringArray, 154  
 XtRStringTable, 154  
 XtRTranslationTable, 154, 162  
 XtRUnsignedChar, 154, 162, 164

XtRVisual, 154, 162, 163  
 XtRWidget, 154  
 XtRWidgetClass, 154  
 XtRWidgetList, 154  
 XtRWindow, 154  
 XtScreen, **55**, 56, 252  
 XtScreenDatabase, 34, **36**  
 XtScreenOfObject, **56**, 236, 246  
 XtSelectionCallbackProc, **211**  
 XtSelectionDoneIncrProc, **217**  
 XtSelectionDoneProc, 208, **210**, 211  
 XtSendSelectionRequest, 222, **223**, 261  
 XtSendSelectionRequest., 221  
 XtSessionGetToken, **91**, 92, 93, 260  
 XtSessionReturnToken, **91**, 92, 93, 260  
 XtSetArg, 2, **40**  
 XtSetErrorHandler, **283**  
 XtSetErrorMsgHandler, **281**  
 XtSetEventDispatcher, **143**, 260  
 XtSetKeyboardFocus, **123**, 237, 238, 246, 252  
 XtSetKeyTranslator, **196**  
 XtSetLanguageProc, 28, 29, **32**, 33, 144, 258  
 XtSetMappedWhenManaged, 53, 62, **70**, 237, 239, 252  
 XtSetMultiClickTime, **190**  
 XtSetSelectionParameters, **221**, 261  
 XtSetSelectionTimeout, 273, **280**  
 XtSetSensitive, 97, 99, 101, **129**, 250  
 XtSetSubvalues, **182**, 183  
 XtSetTypeConverter, **169**, 170, 278  
 XtSetValues, 13, 57, 70, 71, 93, 94, 97, 102, 103, 129, 148, 153, 157, **179**, 180, 181, 182, 184, 192, 236, 237, 246, 251  
 XtSetValues., 300  
 XtSetValuesFunc, **180**, 182, 254, 255  
 XtSetWarningHandler, **283**  
 XtSetWarningMsgHandler, **282**  
 XtSetWMColormapWindows, **231**, 232, 237, 238, 252  
 XtShellExtensionVersion, **78**  
 XtSignalCallbackProc, **116**  
 XtSMDontChange, 105, 111  
 XtSpecificationRelease, 17, **254**  
 XtStringConversionWarning, **277**  
 XtStringProc, **193**  
 XtSuperclass, **20**, 26, 236, 246  
 XtTimerCallbackProc, **115**  
 XtToolkitInitialize, 28, **29**, 47, 259, 272, 274  
 XtToolkitThreadInitialize, 28, 29, **144**, 260  
 XtTranslateCoords, **225**, 250  
 XtTranslateKey, 196  
 XtTranslateKeycode, **196**, 198  
 XtTranslations, 191  
 XtTypeConverter, **164**, 277  
 XtTypedArgList, **48**  
 XtUngrabButton, **121**, 122, 252  
 XtUngrabKey, **119**, 120, 252  
 XtUngrabKeyboard, 119, **120**, 123, 128, 252  
 XtUngrabPointer, 121, **122**, 123, 128, 252  
 XtUninstallTranslations, **192**, 193, 237, 238, 252  
 XtUnmanageChild, 58, 62, **67**, 237, 250  
 XtUnmanageChildren, 62, **66**, 67, 68, 237, 250, 259, 271  
 XtUnmanageChildren, 53  
 XtUnmapWidget, 61, **70**, 237, 239, 252  
 XtUnrealizeWidget, 53, **57**, 237, 238, 252, 255  
 XtUnregisterDrawable, **125**, 260  
 XtUnspecifiedPixmap, 6, **7**, 54  
 XtUnspecifiedShellInt, **85**, 86  
 XtUnspecifiedWindow, 85, **87**  
 XtUnspecifiedWindowGroup, **87**  
 XtVaAppCreateShell, **45**, 46, 252, 253  
 XtVaAppInitialize, 253, 258, 271, **272**, 273  
 XtVaCreateArgsList, **42**  
 XtVaCreateManagedWidget, 65, **66**, 250, 253  
 XtVaCreatePopupShell, 96, **97**, 252, 253  
 XtVaCreateWidget, 41, **44**, 53, 245, 246  
 XtVaGetApplicationResources, **161**, 172, 246  
 XtVaGetSubresources, 159, **160**, 172, 246  
 XtVaGetSubvalues, **178**  
 XtVaGetValues, **177**, 236, 246  
 XtVaNestedList, **41**, 42  
 XtVaOpenApplication, 46, **47**, 48, 252, 271  
 XtVarArgsList, 42  
 XtVaSetSubvalues, **183**  
 XtVaSetValues, **179**, 180, 184, 236, 237, 246  
 XtVaTypedArg, **41**, 42, 48, 50, 52, 177, 178, 183  
 XtVersion, 17  
 XtVersionDontCheck, 17  
 XtWarning, 33, 230, 282, **284**  
 —  
 \_XtWarning, 284  
**X**  
 XtWarningMsg, 277, **282**  
 XtWidgetBaseOffset, **171**, 172  
 XtWidgetClassProc, **23**  
 XtWidgetGeometry, 103, 104, 105, 110  
 XtWidgetProc, **59**, 60, 63, 64, 111  
 XtWidgetToApplicationContext, **30**, 236, 246  
 XtWindow, **56**, 252  
 XtWindowOfObject, **56**, 246  
 XtWindowToWidget, 125, **226**, 253, 260

XtWorkProc, **130**  
XUngrabButton, 121, 122  
XUngrabKey, 119, 120  
XUngrabKeyboard, 120  
XUngrabPointer, 122, 123  
XUSERFILESEARCHPATH, **35**  
XWMGeometry, 85, 86, 87