

XtAllocateGC – obtain a sharable GC with modifiable fields

GC XtAllocateGC(*w*, *depth*, *value_mask*, *values*, *dynamic_mask*, *unused_mask*)

Widget *w*;
Cardinal *depth*;
XtGCMask *value_mask*;
XGCValues **values*;
XtGCMask *dynamic_mask*;
XtGCMask *unused_mask*;

values Specifies the actual values for this GC.
value_mask Specifies which fields of the values are specified.
w Specifies the widget.
depth Specifies the depth for which the returned GC is valid, or 0.
dynamic_mask Specifies the fields of the GC that will be modified by the caller.
unused_mask Specifies the fields of the GC that will not be needed by the caller.

The **XtAllocateGC** function returns a sharable GC that may be modified by the client. The *screen* field of the specified widget or of the nearest widget ancestor of the specified object and the specified *depth* argument supply the root and drawable depths for which the GC is to be valid. If *depth* is zero the depth is taken from the *depth* field of the specified widget or of the nearest widget ancestor of the specified object.

The *value_mask* argument specifies the fields of the GC that will be initialized with the respective members of the *values* structure. The *dynamic_mask* argument specifies fields that the caller intends to modify during program execution. The caller must ensure that the corresponding GC field is *sdet* prior to each use of the GC. The *unused_mask* argument specifies fields of the GC that are of no interest to the caller. The caller may make no assumptions about the contents of any fields specified in *unused_mask*. The caller may assume that at all times all fields not specified in either *dynamic_mask* or *unused_mask* have their default value if not specified in *value_mask* or the value specified by *values*. If a field is specified in both *value_mask* and *dynamic_mask*, the effect is as if it were specified only in *dynamic_mask* and then immediately set to the value in *values*. If a field is set in *unused_mask* and also in either *value_mask* or *dynamic_mask*, the specification in *unused_mask* is ignored.

XtAllocateGC tries to minimize the number of unique GCs created by comparing the arguments with those of previous calls and returning an existing GC when there are no conflicts. **XtAllocateGC** may modify and return an existing GC if it was allocated with a nonzero *unused_mask*.

XtGetGC

X Toolkit Intrinsics – C Language Interface

Xlib – C Language X Interface