

## XtMakeGeometryRequest, XtMakeResizeRequest – make geometry manager request

```
XtGeometryResult XtMakeGeometryRequest(w, request, reply_return)
    Widget w;
    XtWidgetGeometry *request;
    XtWidgetGeometry *reply_return;

XtGeometryResult XtMakeResizeRequest(w, width, height, width_return, height_return)
    Widget w;
    Dimension width, height;
    Dimension *width_return, *height_return;
```

*reply\_return* Returns the allowed widget size or may be NULL if the requesting widget is not interested in handling **XtGeometryAlmost**.

*request* Specifies the desired widget geometry (size, position, border width, and stacking order).

*w* Specifies the widget that is making the request.

*width\_return*

*height\_return* Return the allowed widget width and height.

**Depending on the condition, XtMakeGeometryRequest** performs the following:

- If the widget is unmanaged or the widget's parent is not realized, it makes the changes and returns **XtGeometryYes**.
- If the parent is not a subclass of **compositeWidgetClass** or the parent's *geometry\_manager* is NULL, it issues an error.
- If the widget's *being\_destroyed* field is **True**, it returns **XtGeometryNo**.
- If the widget *x*, *y*, *width*, *height* and *border\_width* fields are all equal to the requested values, it returns **XtGeometryYes**; otherwise, it calls the parent's *geometry\_manager* procedure with the given parameters.
- If the parent's *geometry\_manager* returns **XtGeometryYes** and if **XtCWQueryOnly** is not set in the *request\_mode* and if the widget is realized, **XtMakeGeometryRequest** calls the **XConfigureWindow** Xlib function to reconfigure the widget's window (set its size, location, and stacking order as appropriate).
- If the *geometry\_manager* returns **XtGeometryDone**, the change has been approved and actually has been done. In this case, **XtMakeGeometryRequest** does no configuring and returns **XtGeometryYes**. **XtMakeGeometryRequest** never returns **XtGeometryDone**.

Otherwise, **XtMakeGeometryRequest** returns the resulting value from the parent's *geometry\_manager*.

Children of primitive widgets are always unmanaged; thus, **XtMakeGeometryRequest** always returns **XtGeometryYes** when called by a child of a primitive widget.

The **XtMakeResizeRequest** function, a simple interface to **XtMakeGeometryRequest**, creates a **XtWidgetGeometry** structure and specifies that *width* and *height* should change. The *geometry\_manager* is free to modify any of the other window attributes (position or stacking order) to satisfy the resize request. If the return value is **XtGeometryAlmost**, *width\_return* and *height\_return* contain a compromise width and height. If these are acceptable, the widget should immediately make an **XtMakeResizeRequest** and request that the compromise width and height be applied. If the widget is not interested in **XtGeometryAlmost** replies, it can pass NULL for *width\_return* and *height\_return*.

### XtConfigureWidget(3Xt), XtQueryGeometry(3Xt)

*X Toolkit Intrinsics – C Language Interface*

*Xlib – C Language X Interface*