

**NAME**

XGetVisualInfo, XMatchVisualInfo, XVisualIDFromVisual, XVisualInfo – obtain visual information and visual structure

**SYNTAX**

```
XVisualInfo *XGetVisualInfo(Display *display, long vinfo_mask, XVisualInfo *vinfo_template, int
*nitems_return);
```

```
Status XMatchVisualInfo(Display *display, int screen, int depth, int class, XVisualInfo *vinfo_return);
```

```
VisualID XVisualIDFromVisual(Visual *visual);
```

**ARGUMENTS**

<i>class</i>	Specifies the class of the screen.
<i>depth</i>	Specifies the depth of the screen.
<i>display</i>	Specifies the connection to the X server.
<i>nitems_return</i>	Returns the number of matching visual structures.
<i>screen</i>	Specifies the screen.
<i>visual</i>	Specifies the visual type.
<i>vinfo_mask</i>	Specifies the visual mask value.
<i>vinfo_return</i>	Returns the matched visual information.
<i>vinfo_template</i>	Specifies the visual attributes that are to be used in matching the visual structures.

**DESCRIPTION**

The **XGetVisualInfo** function returns a list of visual structures that have attributes equal to the attributes specified by *vinfo\_template*. If no visual structures match the template using the specified *vinfo\_mask*, **XGetVisualInfo** returns a NULL. To free the data returned by this function, use **XFree**.

The **XMatchVisualInfo** function returns the visual information for a visual that matches the specified depth and class for a screen. Because multiple visuals that match the specified depth and class can exist, the exact visual chosen is undefined. If a visual is found, **XMatchVisualInfo** returns nonzero and the information on the visual to *vinfo\_return*. Otherwise, when a visual is not found, **XMatchVisualInfo** returns zero.

The **XVisualIDFromVisual** function returns the visual ID for the specified visual type.

**STRUCTURES**

The **XVisualInfo** structure contains:

```
/* Visual information mask bits */
#define VisualNoMask 0x0
#define VisualIDMask 0x1
#define VisualScreenMask 0x2
#define VisualDepthMask 0x4
#define VisualClassMask 0x8
#define VisualRedMaskMask 0x10
#define VisualGreenMaskMask 0x20
#define VisualBlueMaskMask 0x40
#define VisualColormapSizeMask 0x80
#define VisualBitsPerRGBMask 0x100
#define VisualAllMask 0x1FF
/* Values */
```

```
typedef struct {
    Visual *visual;
```

```
VisualID visualid;  
int screen;  
int depth;  
int class;  
unsigned long red_mask;  
unsigned long green_mask;  
unsigned long blue_mask;  
int colormap_size;  
int bits_per_rgb;  
} XVisualInfo;
```

**SEE ALSO**

XFree(3)

*Xlib – C Language X Interface*