

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

XVisualInfo *XGetVisualInfo(*display*, *vinfo_mask*, *vinfo_template*, *nitems_return*)

```
    Display *display;
    long vinfo_mask;
    XVisualInfo *vinfo_template;
    int *nitems_return;
```

Status **XMatchVisualInfo**(*display*, *screen*, *depth*, *class*, *vinfo_return*)

```
    Display *display;
    int screen;
    int depth;
    int class;
    XVisualInfo *vinfo_return;
```

VisualID **XVisualIDFromVisual**(*visual*)

```
    Visual *visual;
```

<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.

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.

The **XVisualInfo** structure contains:

```
/* Visual information mask bits */
```

```
lw(.5i) lw(2.5i) lw(.8i). T{ #define T} T{ VisualNoMask T} T{ 0x0 T} T{ #define T} T{
VisualIDMask T} T{ 0x1 T} T{ #define T} T{ VisualScreenMask T} T{ 0x2 T} T{ #define
T} T{ VisualDepthMask T} T{ 0x4 T} T{ #define T} T{ VisualClassMask T} T{ 0x8 T} T{
#define T} T{ VisualRedMaskMask T} T{ 0x10 T} T{ #define T} T{ VisualGreenMaskMask
T} T{ 0x20 T} T{ #define T} T{ VisualBlueMaskMask T} T{ 0x40 T} T{ #define T} T{
VisualColormapSizeMask T} T{ 0x80 T} T{ #define T} T{ VisualBitsPerRGBMask T} T{
0x100 T} T{ #define T} T{ VisualAllMask T} T{ 0x1FF T}
```

```
/* Values */
```

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

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

XFree(3X11)

Xlib – C Language X Interface