

NAME

XvCreateImage, XvShmCreateImage - create an XvImage

SYNOPSIS

```
#include <X11/extensions/Xvlib.h>
```

```
XvImage * XvCreateImage (Display *dpy, XvPortID port,  
int id, char *data,  
int width, int height);
```

```
XvImage * XvShmCreateImage (Display *dpy, XvPortID port,  
int id, char *data,  
int width, int height,  
XShmSegmentInfo *shminfo);
```

ARGUMENTS

dpy Specifies the connection to the X server.

port Specifies the port the XvImage will be used with.

id Specifies the format of the image to be created by the XvImageFormatValues id.

data Specifies the image data.

width, height
Specifies the desired width and height of the image.

DESCRIPTION

XvCreateImage(3) is similar to **XCreateImage(3)**. **XvShmCreateImage(3)** is similar to **XShmCreateImage(3)**. The library will allocate the XvImage structure and fill out all fields except for *data*. *Width* and *height* may be enlarged in some YUV formats. The size of the data buffer that needs to be allocated will be given in the *data_size* field in the XvImage. Image data is not allocated by this function. The client may pass a pointer to the preallocated memory as *data* or may allocate the memory and fill in the XvImage structure's data field after the *data_size* field has been filled out by the server. The XvImage structure may be freed by **XFree(3)**. Shared memory segments are attached/detached with **XShmAttach(3)/XShmDetach(3)**.

RETURN VALUES

XvImage has the following structure:

```
typedef struct {
    int id;
    int width, height;
    int data_size;
    int num_planes;
    int *pitches;
    int *offsets;
    char *data;
    XPointer obdata;
} XvImage;
```

id A descriptor for the format from the XvImageFormatValues structure returned by **XvListImageFormats(3)**.

width, height
The width and height of the image in pixels.

data_size The size of the data buffer in bytes.

num_planes
The number of image planes.

pitches An array of size *num_planes* indicating the scanline pitch in bytes. Each plane may have a different pitch.

offsets An array of size *num_planes* indicating the byte offset from *data* to the start of each plane.

data A pointer to the start of the data buffer.

obdata A private field for holding SHM info. This field will be set up by the client libraries so the programmer will generally need not be concerned with this field.

DIAGNOSTICS

[XvBadPort]

Generated if the requested port does not exist.

[XvBadAlloc]

Generated if the X server was unable to allocate resources required to complete the operation.

[BadMatch]

Generated if incompatible arguments were supplied, such as a port that isn't capable of displaying XvImages.

SEE ALSO

XvListImageFormats(3), XCreateImage(3), XShmCreateImage(3), XShmAttach(3), XShmDetach(3).