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).