

StretchDIBits

The **StretchDIBits** function copies the color data for a rectangle of pixels in a device-independent bitmap (DIB) to the specified destination rectangle. If the destination rectangle is larger than the source rectangle, this function stretches the rows and columns of color data to fit the destination rectangle. If the destination rectangle is smaller than the source rectangle, this function compresses the rows and columns by using the specified raster operation.

```
int StretchDIBits(  
    HDC hdc,                // handle of device context  
    int XDest,              // x-coordinate of upper-left corner of dest. rect.  
    int YDest,              // y-coordinate of upper-left corner of dest. rect.  
    int nDestWidth,         // width of destination rectangle  
    int nDestHeight,        // height of destination rectangle  
    int XSrc,               // x-coordinate of upper-left corner of source rect.  
    int YSrc,               // y-coordinate of upper-left corner of source rect.  
    int nSrcWidth,          // width of source rectangle  
    int nSrcHeight,         // height of source rectangle  
    CONST VOID *lpBits,     // address of bitmap bits  
    CONST BITMAPINFO * lpBitsInfo, // address of bitmap data  
    UINT iUsage,            // usage  
    DWORD dwRop,            // raster operation code  
);
```

Parameters

hdc

Identifies the destination device context.

XDest

Specifies the x-coordinate, in logical units, of the upper-left corner of the destination rectangle.

YDest

Specifies the y-coordinate, in logical units, of the upper-left corner of the destination rectangle.

nDestWidth

Specifies the width, in logical units, of the destination rectangle.

nDestHeight

Specifies the height, in logical units, of the destination rectangle.

XSrc

Specifies the x-coordinate, in pixels, of the source rectangle in the DIB.

YSrc

Specifies the y-coordinate, in pixels, of the source rectangle in the DIB.

nSrcWidth

Specifies the width, in pixels, of the source rectangle in the DIB.

nSrcHeight

Specifies the height, in pixels, of the source rectangle in the DIB.

lpBits

Points to the DIB bits, which are stored as an array of bytes.

lpBitsInfo

Points to a [**BITMAPINFO**](#) structure that contains information about the DIB.

iUsage

Specifies whether the **bmiColors** member of the **BITMAPINFO** structure was provided and, if so, whether **bmiColors** contains explicit red, green, blue (RGB) values or indices. The *iUsage* parameter must be one of the following values:

Value	Description
DIB_PAL_COLORS	The array contains 16-bit indices into the logical palette of the source device context.
DIB_RGB_COLORS	The color table contains literal RGB values.

dwRop

Specifies how the source pixels, the destination device context's current brush, and the destination pixels are to be combined to form the new image.

Return Value

If the function succeeds, the return value is the number of scan lines copied.

If the function fails, the return value is GDI_ERROR. To get extended error information, call [GetLastError](#).

Remarks

The origin of a bottom-up DIB is the bottom-left corner; the origin of a top-down DIB is the upper-left corner.

StretchDIBits creates a mirror image of a bitmap if the signs of the *nSrcWidth* and *nDestWidth* parameters, or of the *nSrcHeight* and *nDestHeight* parameters differ. If *nSrcWidth* and *nDestWidth* have different signs, the function creates a mirror image of the bitmap along the x-axis. If *nSrcHeight* and *nDestHeight* have different signs, the function creates a mirror image of the bitmap along the y-axis.