

GetDCEX

The **GetDCEX** function retrieves the handle of a display device (DC) context for the specified window. The display device context can be used in subsequent GDI functions to draw in the client area.

This function is an extension to the [GetDC](#) function that gives an application more control over how and whether clipping occurs in the client area.

```
HDC GetDCEX(  
    HWND hWnd,           // handle of window  
  
    HRGN hrgnClip,       // handle of clip region  
    DWORD flags           // device-context creation flags  
);
```

Parameters

hWnd

Identifies the window where drawing will occur.

hrgnClip

Specifies a clipping region that may be combined with the visible region of the client window.

flags

Specifies how the device context is created. This parameter can be a combination of the following values:

Value	Meaning
DCX_WINDOW	Returns a device context corresponding to the window rectangle rather than the client rectangle.
DCX_CACHE	Returns a device context from the cache, rather than the OWND or CLASSDC window. Essentially overrides CS_OWND and CS_CLASSDC.
DCX_PARENTCLIP	Uses the visible region of the parent window. The parent's WS_CLIPCHILDREN and CS_PARENTDC style bits are ignored. The device context origin is set to the upper-left corner of the window identified by <i>hWnd</i> .
DCX_CLIPSIBLINGS	Excludes the visible regions of all sibling windows above the window identified by <i>hWnd</i> .
DCX_CLIPCHILDREN	Excludes the visible regions of all child windows below the window identified by <i>hWnd</i> .
DCX_NORESETATTRS	Does not reset the attributes of this device context to the default attributes when this device context is released.
DCX_LOCKWINDOWUPDATE	Allows drawing even if there is a LockWindowUpdate call in effect that would otherwise exclude this window. Used for drawing during tracking.
DCX_EXCLUDERGN	The clipping region identified by

DCX_EXCLUDERGN	The clipping region identified by <i>hrgnClip</i> is excluded from the visible region of the returned device context.
DCX_INTERSECTRGN	The clipping region identified by <i>hrgnClip</i> is intersected with the visible region of the returned device context.
DCX_VALIDATE	When specified with DCX_INTERSECTUPDATE, causes the device context to be completely validated. Using this function with both DCX_INTERSECTUPDATE and DCX_VALIDATE is identical to using the BeginPaint function.

Return Value

If the function succeeds, the return value is the handle of the device context for the given window.

If the function fails, the return value is NULL. An invalid value for the *hWnd* parameter will cause the function to fail.

Remarks

Unless the display device context belongs to a window class, the **ReleaseDC** function must be called to release the device context after painting. Because only five common device contexts are available at any given time, failure to release a device context can prevent other applications from accessing a device context.

A device context belonging to the window's class is returned by the **GetDC** function if CS_CLASSDC, CS_OWNDC or CS_PARENTDC was specified as a style in the **WNDCLASS** structure when the class was registered.