

# Progress Bar Control Update

Return Values

## CHAPTER 15

### Progress Bar Control Update Overview

This section provides a brief overview about new and updated features now supported by progress bar controls.

#### Extended Range Values:

Progress bar controls now support 32-bit range values. To set range values in excess of 65,535, use the **PBM\_SETRANGE32** message. To retrieve 32-bit range values, use the **PBM\_GETRANGE** message.

#### New Progress Bar Control Styles:

Progress bar controls can now display progress information vertically, using the **PBS\_VERTICAL** style. Also, a smooth progress mode is supported using the **PBS\_SMOOTH** style. Using the **PBS\_SMOOTH** style causes the control to display a contiguous progress bar instead of a segmented bar.

### Progress Bar Control Reference

#### Progress Bar Control Messages Update

This section contains information about the following new or updated progress bar control messages.

**PBM\_GETPOS**

**PBM\_GETRANGE**

**PBM\_SETRANGE32**

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## PBM\_GETPOS

This message retrieves the current position of the progress bar.

**PBM\_GETPOS**

**wParam = 0;**

**lParam = 0;**

Returns a **UINT** that represents the current position of the progress bar.

## PBM\_GETRANGE

This message retrieves information about the current high and low limits of a given progress bar control.

### PBM\_GETRANGE

```
wParam = (
    WPARAM
)(
    BOOL
) fWhichLimit;
lParam = (
    LPARAM
)(
    PPBRANGE
) ppBRange;
```

#### *fWhichLimit*

Flag value specifying which limit value is to be used as the message's return value. This parameter can be one of the following values.

Value	Meaning
TRUE	Return the low limit.
FALSE	Return the high limit.

#### *ppBRange*

Address of a **PBRANGE** structure that is to be filled with the high and low limits of the progress bar control. If this parameter is set to NULL, the control will return only the limit specified by *fWhichLimit*.

Returns an INT that represents the limit value specified by *fWhichLimit*. If lParam is not NULL, lParam must point to a **PBRANGE** structure that is to be filled with both limit values.

## PBM\_SETRANGE32

This message sets the range of a progress bar control to a 32-bit value.

### PBM\_SETRANGE32

```
wParam = (
    WPARAM
)(
    int
) iLowLim;
lParam = (
    LPARAM
)(
    int
) iHighLim;
```

#### *iLowLim*

A 32-bit value that represents the low limit to be set for the progress bar control.

#### *iHighLim*

A 32-bit value that represents the high limit to be set for the progress bar control.

Returns a DWORD that holds the previous 16-bit low limit in its low word, and the previous 16-bit high limit in its high word. If the previous ranges were 32-bit values, the return value consists of the low words of both 32-bit limits.

To retrieve the entire high and low 32-bit values, use the **PBM\_GETRANGE** message.

## Progress Bar Control Structures

This section contains information about the following new structure used with progress bar controls.

### PBRANGE

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## PBRANGE

This structure contains information about the high and low limits of a progress bar control. This structure is used with the **PBM\_GETRANGE** message.

```
typedef struct {
    int iLow;
    int iHigh;
} PBRANGE, *PPBRANGE;
```

### **iLow**

Low limit currently set for the progress bar control.

### **iHigh**

High limit currently set for the progress bar control.

## Progress Bar Control Styles Update

Progress bar controls now support control styles. You can set progress bar styles in the same way as other common controls (**CreateWindowEx**, **GetWindowLong**, **SetWindowLong**). The following are the supported styles.

### **PBS\_SMOOTH**

The progress bar displays progress status in a smooth scrolling bar instead of the default segmented bar.

### **PBS\_VERTICAL**

The progress bar displays progress status vertically, from bottom to top.