Modifying the CS_NOCLOSE style does affect all windows of the class, just not necessarily in an immediately noticeable way

devblogs.microsoft.com/oldnewthing/20150305-00

March 5, 2015



Raymond Chen

In a discussion of <u>how not to disable the Close button</u>, Rick C claims that <u>changing the style</u> <u>does not affect windows that are already created</u>.

Actually, it does. You can't see it, but the effect is there.

Take our <u>scratch program</u> and make these changes:

```
DWORD CALLBACK NewThread(void *)
{
  CreateWindow(
      TEXT("Scratch"),
      TEXT("Scratch 2"),
      WS_VISIBLE | WS_OVERLAPPEDWINDOW,
      CW_USEDEFAULT, CW_USEDEFAULT,
      CW_USEDEFAULT, CW_USEDEFAULT,
      NULL, NULL, q_hinst, 0);
  MSG msg;
  while (GetMessage(&msg, NULL, 0, 0)) {
    TranslateMessage(&msg);
    DispatchMessage(&msg);
  }
  return 0;
}
void OnChar(HWND hwnd, TCHAR ch, int cRepeat)
{
  DWORD id;
  switch (ch) {
  case ' ':
    SetClassLong(hwnd, GCL_STYLE,
                 GetClassLong(hwnd, GCL_STYLE) ^ CS_NOCLOSE);
    break;
  case '+':
    CloseHandle(CreateThread(0, 0, NewThread, 0, 0, &id));
    break;
  }
}
```

```
HANDLE_MSG(hwnd, WM_CHAR, OnChar);
```

Run this program, hit the + to open another window, then hit the space bar to set the CS_NOCLOSE style.

The window that is passed to **SetClassLong** updates its close button, but the other window does not.

But this is purely a visual artifact. If you try to click on the close button of either window, it will not work.

So don't change the **CS_NOCLOSE** style thinking that it affects just your window. It actually affects all windows of the class. But it may not look that way at a casual glance.

Raymond Chen

Follow

