

# I warned you: The dangers of attaching input queues

 [devblogs.microsoft.com/oldnewthing/20080801-00](http://devblogs.microsoft.com/oldnewthing/20080801-00)

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Some people didn't take to heart my cautions on the subject of attached input queues, item number five on the list of [five things every Win32 programmer should know](#). And then they find that their application stops responding.

```
// Code in italics is wrong
void TryToStealFocus(HWND hwnd)
{
    // First try plain SetForegroundWindow
    SetForegroundWindow(hwnd);
    HWND hwndFG = GetForegroundWindow();
    if (hwndFG == hwnd) return;

    // That didn't work - if the foreground window belongs
    // to another thread, attach to that thread and try again
    DWORD dwCurrentThread = GetCurrentThreadId();
    DWORD dwFGThread = GetWindowThreadProcessId(hwndFG, NULL);
    if (dwFGThread == dwCurrentThread) return;

    AttachThreadInput(dwCurrentThread, dwFGThread, TRUE);
    SetForegroundWindow(hwnd); // hangs here
    AttachThreadInput(dwCurrentThread, dwFGThread, FALSE);
}
```

Their customer feedback data shows that this function often hangs at the second call to `SetForegroundWindow`. My exercise for you is to explain why. (Here's [someone else with the same problem](#).)

(Note that both of these customers are trying to circumvent the foreground lock timeout so that they can steal focus and shove a dialog box in the user's face.)



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