

## Chapter IV-10 — Advanced Topics

There are several ways to prevent a window being killed. You might want to do this in order to enforce use of a Done or Do It button, or to prevent killing a control panel while some hardware action is taking place.

The best method is to use /K=2 when creating the window (see **Display** or **NewPanel**). Then the only way to kill the window is via the DoWindow/K command, or KillWindow command. In general, you would provide a button that kills the window after checking for any conditions that would prevent it.

The KillVote event is more flexible but harder to use. It gives your code a chance to decide whether or not killing is allowed. This means the user can close and kill the window with the window close box when it is allowed.

Returning 2 for the window kill event is not recommended. If you have old code that uses this method, we strongly recommend changing it to return 2 for the killVote event. New code should never return 2 for the kill event.

As of Igor Pro 7, returning 2 for the window kill event does not prevent the window from being killed. If you have old code that uses this technique, change it to return 2 for the killVote event instead.

### Window Hook Show and Hide Events

Igor sends the show event to your hook function when the affected window is about to be shown but is still hidden. Likewise, Igor sends the hide event when the window is about to be hidden but is still visible. Other events, notably resize or move events, may be triggered by showing or hiding a window and may be sent before the change in visibility actually occurs. Here is an example that illustrates this issue:

```
Function MyHookFunction(s)
    STRUCT WMWinHookStruct &s

    strswitch(s.eventName)
        case "resize":
            GetWindow $(s.winName) hide
            if (V_value)
                Print "Resized while hidden"
            else
                Print "Resized while visible"
            endif
            break

        case "moved":
            GetWindow $(s.winName) hide
            if (V_value)
                Print "Moved while hidden"
            else
                Print "Moved while visible"
            endif
            break

        case "hide":
            print "Hide event"
            break

        case "show":
            print "Show event"
            break
    endswitch

    return 0    // Don't interfere with Igor's handling of events
End

Function MakePanelWithHook()
    NewPanel/N=MyPanel/HIDE=1
```