

## UInt64

AbortOnValue. A user abort is generated when the user clicks the Abort button or presses the user abort key combination.

When code executes in the try-catch area, a programmatic abort immediately jumps to the code in the catch-endtry area rather than jumping to the end of the user function. A user abort jumps to the catch-endtry area when a flow control keyword such as for or while executes or at the end of the try code. Normal flow (no aborts) skips all code within the catch-endtry area.

### Details

During execution of code in the catch-endtry area, user aborts are suppressed. This means that, if the user attempts to abort procedure execution by pressing the **User Abort Key Combinations** or by clicking the Abort button, this will not abort the catch code itself.

When an abort occurs, information about the cause of the abort is returned via the `V_AbortCode` variable as follows:

- 4: Abort triggered by AbortOnRTE.
- 3: Abort caused by Abort operation.
- 2: Stack overflow abort.
- 1: User abort.
- >=1: Abort triggered by AbortOnValue.

### See Also

**Flow Control for Aborts** on page IV-48 and **try-catch-endtry Flow Control** on page IV-49 for further details.

The **AbortOnRTE** and **AbortOnValue** keywords, and the **Abort** operation.

## UInt64

### `uint64 localName`

Declares a local unsigned 64-bit integer in a user-defined function or structure.

UInt64 is available in Igor Pro 7 and later. See **Integer Expressions** on page IV-38 for details.

### See Also

**Int, Int64**

## UniqueName

### `UniqueName (baseName, objectType, startSuffix [, windowNameStr])`

The UniqueName function returns the concatenation of `baseName` and a number such that the result is not in conflict with any other object name.

`windowNameStr` is optional. If missing, it is taken to be the top graph, panel, layout, or notebook according to the value of `objectType`.

In Igor Pro 9.00 or later, you can use the **CreateDataObjectName** function as a replacement for some combination of CheckName, CleanupName, and UniqueName to create names of waves, global variables, and data folders.

### Details

`baseName` should be an unquoted name, such as you might receive from the user via a dialog or control panel.

*objectType* is one of the following:

- 1 Wave
- 2 Reserved
- 3 Numeric variable
- 4 String variable
- 5 XOP target window
- 6 Graph window
- 7 Table window
- 8 Layout window
- 9 Control panel window
- 10 Notebook window
- 11 Data folder
- 12 Symbolic path
- 13 Picture
- 14 Annotation in the named or topmost graph or layout
- 15 Control in the named or topmost graph or panel
- 16 Notebook action character in the named or topmost notebook
- 17 Gizmo window (added in Igor Pro 9.00)

*startSuffix* is the number used as a starting point when generating the numeric suffix that makes the name unique. Normally you should pass zero for *startSuffix*. If you know that names of the form base0 through baseN are in use, you can make UniqueName run a bit faster by passing N+1 as the *startSuffix*.

The *windowNameStr* argument is used only with object types 14, 15, and 16. The returned name is unique only to the window (other windows might have objects with the same name). If a named window is given but does not exist, UniqueName returns *baseName startSuffix*. *windowNameStr* is ignored for other object types.

### The Main Namespace

Waves, numeric variables, string variables, built-in and external functions, built-in and external operations, user-defined functions, macros and reserved keywords exist in the main namespace. The names of each of those objects must be unique in that namespace.

### Window Namespace

Values of *objectType* from 5 through 10 refer to the window namespace.

The expression

```
CheckName("<name>", x) // where x is 5, 6, 7, 8, 9 or 10
```

returns 0 if the specified name is syntactically legal and unique in the window namespace.

That does not guarantee that the name is allowed as a window name because the DoWindow/C operation, which changes a window's name, requires that the name also not conflict with objects in the main namespace. Consequently, to determine if a name is allowed as a window name, use this:

```
// Window names must be unique in both the window and main namespaces
Variable nameOK = CheckName("<name>", 6)==0 && CheckName("<name>", 1)==0
```

### Window Macro Names

Window macro names are treated different from other main namespace names. DoWindow/C allows you to change the name of a window to the name of an existing window macro but not to any other name in the main namespace. Also this expression:

```
CheckName("<name>", x) // where x is 1, 3, 4 (main namespace)
returns 0 even if the specified name is used as a window macro name.
```

### UniqueName Thread Safety

As of Igor Pro 8.00, you can call UniqueName from an Igor preemptive thread but only if *objectType* is 1 (wave), 3 (global numeric variable), 4, (global string variable), 11 (data folder), or 12 (symbolic path). For any other value of *objectType*, UniqueName returns a runtime error.