

AbortOnRTE has very low overhead and should not significantly slow program execution.

#### Details

In terms of programming style, you should consider using AbortOnRTE (preceded by a semicolon) on the same line as the command that may give rise to an abort condition.

When using AbortOnRTE after a related sequence of commands, then it should be placed on its own line.

When used with try-catch-endtry, you should place a call to **GetRTEError**(1) in your catch section to clear the runtime error.

#### Example

Abort if the wave does not exist:

```
WAVE someWave; AbortOnRTE
```

#### See Also

**Flow Control for Aborts** on page IV-48 and **AbortOnRTE Keyword** on page IV-49 for further details.

The **try-catch-endtry** flow control statement.

## AbortOnValue

**AbortOnValue** *abortCondition*, *abortCode*

The AbortOnValue flow control keyword will abort function execution when the *abortCondition* is nonzero and it will then return the numeric *abortCode*. No dialog will be displayed when such an abort occurs.

#### Parameters

*abortCondition* can be any valid numeric expression using comparison or logical operators.

*abortCode* is a nonzero numeric value returned to any abort or error handling code by AbortOnValue whenever it causes an abort.

#### Details

When used with try-catch-endtry, you should place a call to **GetRTEError**(1) in your catch section to clear the runtime error.

#### See Also

**Flow Control for Aborts** on page IV-48 and **AbortOnValue Keyword** on page IV-49 for further details.

The **AbortOnRTE** keyword and the **try-catch-endtry** flow control statement.

## abs

**abs** (*num*)

The abs function returns the absolute value of the real number *num*. To calculate the absolute value of a complex number, use the cabs function.

#### See Also

The **cabs** function.

## acos

**acos** (*num*)

The acos function returns the inverse cosine of *num* in radians in the range  $[0, \pi]$ .

In complex expressions, *num* is complex and acos returns a complex value.

#### See Also

**cos**

## acosh

**acosh** (*num*)

The acosh function returns the inverse hyperbolic cosine of *num*. In complex expressions, *num* is complex and acosh returns a complex value.