

Try/Catch/Finally/End Actions

The Try action, along with the Catch, Finally and End actions provide structured exception handling. They allow you to create localised error handling and resource protection, just as you do in programming languages such as C++, C#, Delphi etc.

For each Try action, there should be a matching End Action at the same level. The Try must also have either a Catch Action or a Finally Action as it's next sibling. The actions can be used in the combinations listed below.

Try ... Catch block

Description	Enabled	Ignore Failure	Status
Try	<input checked="" type="checkbox"/>		Completed
Raise Exception [Exception raised]	<input checked="" type="checkbox"/>		Error
Catch	<input checked="" type="checkbox"/>		Completed
The exception will be handled here	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Completed
End	<input checked="" type="checkbox"/>		Completed

Try ... Finally block

Description	Enabled	Ignore Failure	Status
Try	<input checked="" type="checkbox"/>		Completed
Raise Exception	<input checked="" type="checkbox"/>		Error
Finally	<input checked="" type="checkbox"/>		Completed
This action will run regardless of whether the try fails or succeeds.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Completed
End	<input checked="" type="checkbox"/>		Completed

A Finally Action will almost always execute it's child actions, the exception being if there is a structural error with the try or catch (ie. a missing end, or finally before catch etc).

Try ... Catch ... Finally block

Description	Enabled	Ignore Failure	Status
Try	<input checked="" type="checkbox"/>		Completed
Raise Exception [Exception raised]	<input checked="" type="checkbox"/>		Error
Catch	<input checked="" type="checkbox"/>		Completed
The exception will be handled here	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Completed
Finally	<input checked="" type="checkbox"/>		Completed
This will be executed before the action list finishes	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Completed
End	<input checked="" type="checkbox"/>		Completed

A more complete example:

Description	Enabled	Ignore Failure	Status
*****	<input checked="" type="checkbox"/>		
A simple example of using Try...Catch...Finally to handle errors in a project.	<input checked="" type="checkbox"/>		
*****	<input checked="" type="checkbox"/>		
T Try	<input checked="" type="checkbox"/>		Completed
The first action below will fail, and control will move to the "Catch" section, below	<input checked="" type="checkbox"/>		
<input checked="" type="checkbox"/> Check if File Exists [c:\TempFinalBuilderDirectory\NonExistent.ini]	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Error
<input checked="" type="checkbox"/> Read Ini File (This action will never run)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C Catch	<input checked="" type="checkbox"/>		Completed
<input checked="" type="checkbox"/> Beep [Exclamation]	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Completed
The actions in the Catch section will run if any action fails in the Try section.	<input checked="" type="checkbox"/>		
The Catch section will prevent the failed actions setting a failure status for the build.	<input checked="" type="checkbox"/>		
Therefore the failed actions will not trigger the OnFailure action list.	<input checked="" type="checkbox"/>		
F Finally	<input checked="" type="checkbox"/>		Completed
This action will always run	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Completed
Any child actions of the Finally action are run regardless of the success or failure	<input checked="" type="checkbox"/>		
or failure of the actions in the Try block. In this example, the Finally section will run	<input checked="" type="checkbox"/>		
after the Catch section is finished.	<input checked="" type="checkbox"/>		
E End	<input checked="" type="checkbox"/>		Completed
The End action marks the end of a Try..Catch, Try/Catch/Finally or Try..Finally block.	<input checked="" type="checkbox"/>		
The Catch block "caught" the error from the try block, so the build continues from here	<input checked="" type="checkbox"/>		
Some other actions go here	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Completed

Retrying Try Actions

All actions have the option to [retry multiple times before failing outright](#). Try action retries work differently to normal action retries. If you set a number of Retry Attempts on a Try action, the entire try block (ie all of the child actions) will be retried if one of the actions from that block fails.

The image shows the 'Try' dialog box in Visual Studio, with the 'Runtime' tab selected. The 'General Runtime Options' section includes 'Action Enabled' (checked) and 'Ignore Failure' (unchecked). The 'Action Timing Settings' sub-dialog is open, showing the following settings:

- Pause:** Pause after run: 0 ms
- Retries:** Retry attempts: 0, Retry pause: 1000 ms
- Timeout:** Enable timeout: 1 minutes (unchecked)

At the bottom of the dialog, the 'Script Language' is set to 'VBScript', and a note states: 'Condition must return a boolean value (True or False) Condition syntax defined by script language'. Buttons for 'OK', 'Cancel', and 'Help' are visible at the bottom of the dialog.

The Catch (or Finally) section of the Try/Catch/Finally will not be run until all the retries have failed.



Retrying Try Actions may give unpredictable behaviour when used inside [Known Problems](#) for details.