

# Stages

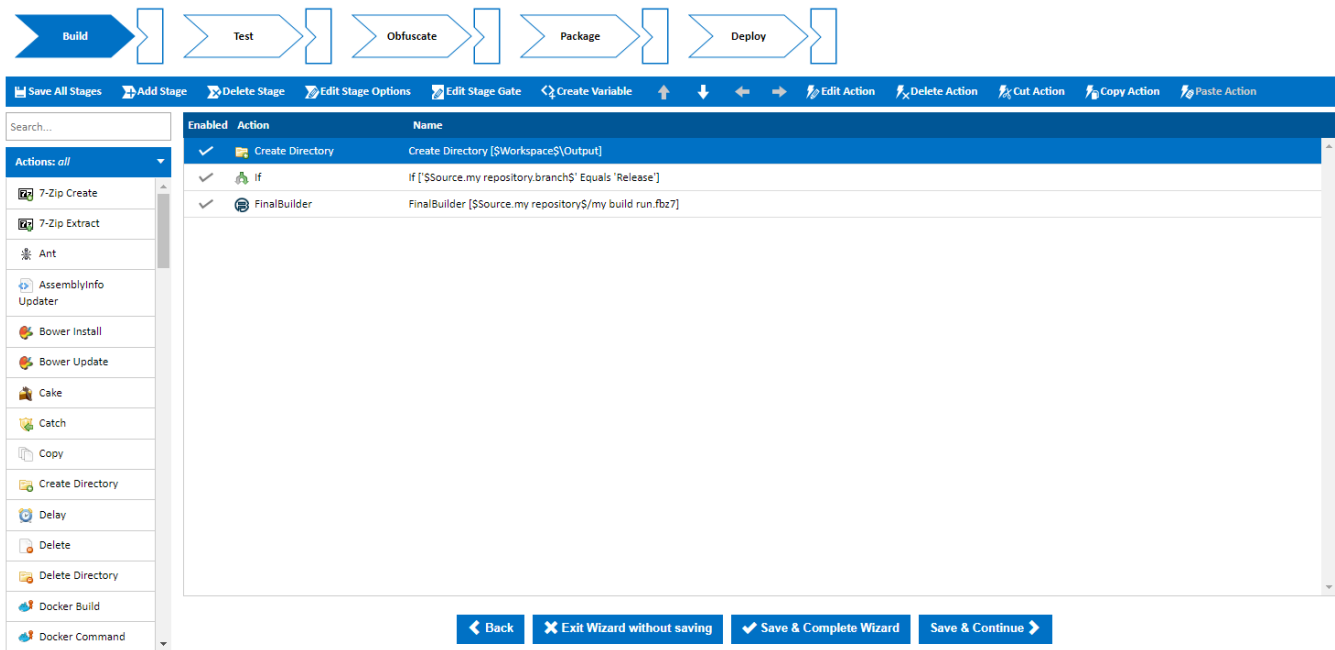
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## Additional Stage Information

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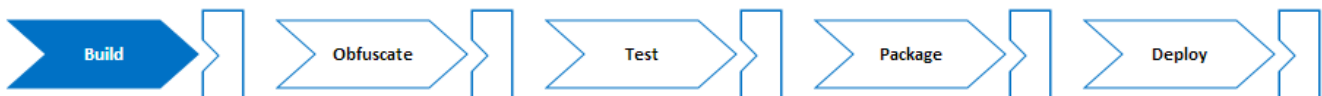
## Workflow Editor

The workflow editor is where you define what your build will do when it is executed. It allows you to break up your build into logical blocks, called Stages. Within these stages you can define the individual actions that are the steps your build will execute when running a build. The image below demonstrates a dummy build within the workflow editor.



## UI Elements

### Stages and Stage Gates



Above is an example of the stage and stage gate editor which can be found at the top of the workflow editor. Each stage within your workflow is shown as a white and blue chevron while each stage gate is represented as block with an triangle removed.

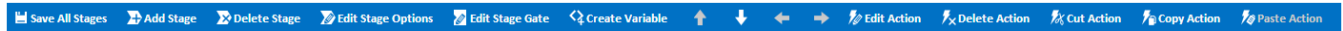
Clicking and selecting a stage will display all the actions within that stage in the 'Action workflow' editor.

Double clicking the stage will display the 'Edit Stage' dialog. See [Stage Options](#) for an in-depth guide of the 'Edit Stage' dialog.

Stages can be reordered by dragging and dropping them into the correct location.

Clicking a stage gate will open the 'Edit Stage Gate' dialog. See the 'Edit Stage Gate' section at the bottom of this page for more information about stage gates.

Stage and Action Toolbar



The Stage and Action tool bar provides functionality to modify stages and actions. The table below provides a short description of each option.

Functionality	Result
Save All Stages	All changes made in the workflow editor will be saved.
Add Stage	Creates a new Stage at the end of the Stage Editor
Delete Stage	Deletes the currently selected stage.
Edit Stage Options	Pops up a dialog and displays the currently selected stage's options. You can also see this screen by double-clicking the Stage.
Edit Stage Gate	Pops up a dialog and displays the currently selected stage's stage gate. You can also see this screen by double-clicking the Stage's Stage Gate.
Create Variable	Pops up a Create Variable dialog like the ones seen on the Variables wizard pages. Variables created through this dialog are Configuration Variables.
Move Up	Moves the currently selected action up the workflow. Actions can also be moved up with the 'Ctrl + UP' keys
Move Down	Moves the currently selected action down the workflow. Actions can also be moved down with the 'Ctrl + DOWN' keys
Move Left	Makes the currently selected action a child of the previous action. Actions can also be moved up with the 'Ctrl + LEFT' keys
Move Right	Makes the currently selected action a sibling of the previous action. Actions can also be moved up with the 'Ctrl + RIGHT' keys
Edit Action	Pops up a dialog containing the currently selected action's options. You can also see this screen by double-clicking an action.
Delete Action	Prompts the user to delete the currently selected action. You can also delete an action with the delete key.
Cut Action	Removes the selected action and its children and places it on the clipboard
Copy Action	Copies the selected action and its children and places it on the clipboard
Paste Action	Inserts the current clipboard action and its children into the current stage

Using the Editor

Editing Stage Options

See [Stage Options](#)

Editing Stage Gates

**Edit Stage Gate**

These conditions must evaluate to true for the build to progress to the next stage.  
If this is the final Stage Gate then these conditions must evaluate to true to complete the build successfully.

<input type="text" value="\$Stage.IsSuccessful\$"/>	<input type="text" value="Equals"/>	<input type="text" value="True"/>	<input type="button" value="⊖"/>
<input type="text" value="\$Stage.Metrics.UnitTests.Failed\$"/>	<input type="text" value="Equals"/>	<input type="text" value="0"/>	<input type="button" value="⊖"/>
<input type="text" value="\$Stage.Metrics.UnitTests.Error\$"/>	<input type="text" value="Equals"/>	<input type="text" value="0"/>	<input type="button" value="⊖"/>
<input type="text" value="Left Value"/>	<input type="text" value=""/>	<input type="text" value="Right Value"/>	<input type="button" value="⊕"/>

Expression Logic

Specify the logical operator that should be applied to the gate conditions above.

Stage Gates are attached to a stage and are simply a list of conditions that must be met before the next stage is executed. For example, you can create a condition where it will only evaluate to true once the server's local time reaches midnight. Stage Gates also come with default conditions which specify that all unit tests that ran in the previous stage must have passed. You can however choose to remove these default conditions.

## Action Workflow

See [Actions](#) for details on editing the action workflow