# **MSBuild Action**

(i)

The MSBuild action in Continua is a wrapper around the MSBuild.exe command line. If you're having trouble using the MSBuild action, please refer to the Command Line Reference.

The MSBuild action provides an XML schema for a project file that controls how the build platform processes and builds software.

# **MSBuild**

MSBuild Action		
MSBuild Settings Pro	perties Options Environment Comments	
		Required Field
Name	MSBuild []	
	Enabled	
Project File or Folder	\$Source.myRepository\$\src\myProject.proj	🥶
	The path to a supported project file or a project folder. Leave blank to build the workspace folder.	
Targets	build	<b>a</b>
	Build the specified targets in the project. Separate targets by a semicolon. [/target]	
Configuration	Release	<b>a</b>
	The configuration to build. [/property:configuration]	
Platform		æ
	The platform to build. Leave blank to use the default for the specified configuration. [/property:platform]	
Output Path	\$Workspace\$\Output	<b>a</b>
	The build's output path. [/property:outpath]	
Using	MSBuild.16.0	•
Ø Validate	Save X Cancel	(2) Help

#### Name

A name for this action (this will appear within the stage action list).

## Enabled

An action which is not enabled is effectively skipped when executing the given stage.

## **Project File or Folder**

Enter the path and file name of a supported MSBuild project file or a project folder. These are usually .proj or .sln files.

## Targets

MSBuild targets the action will build. To specify multiple targets, separate them by a semicolon. Targets with spaces in them will be handled correctly and don't require you to wrap them in quotes. [/target:]

## Configuration

The Configuration that MSBuild should build. This is usually set to Configuration or Release. [/property:configuration=]

## Platform

The platform to build. Leave blank to use the default for the specified configuration. [/property:platform=]

#### **Output Path**

Where MSBuild should save the executed build. With the default stage workspace rules, if the project is save to \$Workspace\$/Output then it will be copied back from the Agent to the Continua Server. [/property:outpath=]

#### Using

The Using drop down is populated by any property collector properties whose namespace matches the pattern defined by the MSBuild action. The pattern for this action is <u>msbuild</u>...\*

If you create a property collector for this action, make sure you select the **Path Finder PlugIn** type and give it a name that will match the pattern above in blue. Example names listed here, search the table's Plugin column for "**MSBuild**".

For more in-depth explanations on property collectors see Property Collectors.

Alternatively, you can select the **Custom** option from the Using drop down list and specify a path in the resulting input field that will be displayed. Please read Why it's a good idea to use a property collector before using this option.

# Settings

MSBuild Act	tion																
MSBuild	Settings	Prope	rties	Options	Environmen	ıt	Comments	;									
															Re	quire	d Field
	Max CPU	Count	0														
			The nu	mber of MS	Build processe	es to :	spawn. Set	to 0 for de	fault. [/ma	excpucount]	]						
		,		able Node F													
					d to disable re issues with file							main after tł	he bu	ild finisl	ned.		
	ToolsV		4.0								1						œ
	TOOISV			the ToolsV	ersion to use, l	eave	blank for d	efault [/to	olsversion	1							
										1							
	MSBuild B		Defa		MSBuild execu	.tabl	_									•	
				iness of the	IVISDUIIU EXECU		c.										_
	Extra Paran		C:6														đ
		;	specity	any extra c	ommand line ;	parar	meters nere	2 									
⊘ Valida	ate											🔒 Save	9	🗙 Ca	ncel	0	) Help

#### Max CPU Count

Specifies the number of processes MSBuild will spawn. By default this is 0, which means MSBuild will spawn 1 process per CPU core on the agent that is running the action. [/maxcpucount]

#### **Disable Node Reuse**

Ensure this is ticked to disable reuse of MSBuild nodes. If this is not checked nodes will remain after the build finished. This may result in issues with files being locked in subsequent actions. [/nodeReuse]

#### **ToolsVersion**

Specify the tools version to use. Leave blank for default. [/toolsversion]

#### **MSBuild Bitness**

# Properties

MSBuild Act	tion					
MSBuild	Settings	Propertie	s Options	Environment	Comments	
						Required Field
	Prop	perties pr	operty_name=p	property_value		æ
		Spe	cify one MSBui	ld property per li	ne. [/property]	
⊘ Valida	ate				🖹 Save 🗶 🕻	Cancel 🧿 Help

# Properties

You can pass properties to MSBuild by specifying each property on a new line. The format for a property is *name=value*. [/property:]

Options

MSBuild Action				
MSBuild Settings Prop	erties Options	Environment	Comments	
				Required Field
Verbosity	Normal			•
	Specifies the amou	nt of information	to display in the build log. [/verbosity]	
Timeout (in seconds)	0			
	How long to wait for seconds (24 hours)		nish running before timing out. Leaving this blank (or zero) will defau	ılt to 86400
	Treat failure as	-		
	Tick to continue bu	ild on failure mar	rking the action with a warning status.	
	Ignore warning	S		
<b>⊘</b> Validate			Save	X Cancel ③ Help

# Verbosity

Sets the amount of MSBuild output that gets logged to Continua CI's build log. [/verbosity:]

# Timeout (in seconds)

How long to wait for the action to finish running before timing out. Leaving this blank (or zero) will default to 86400 seconds (24 hours).

#### Treat failure as warning

Tick to continue build on failure marking the action with a warning status.

# Ignore warnings

If this is ticked, any warnings logged will not mark the action with a warning status.

# **Environment Variables**

MSBuild Action									
MSBuild	Settings	Prope	rties	Options	Environment	Comments			
						Re	quired Field		
Envir	onment Vari	iables	varial	ole_name=va	ariable_value		æ		
			C:6-:		Q				
					& value pair per l	ine.			
					nt variables				
					m environment v / environment va	ranapies riables prefixed with 'ContinuaCI.' for system objects and variables.			
Maxin	num Environ	nment	0						
	Variable L	-				an error if the length of an environment variable is too long. Use this to truncate the			
			value o	f environme	ent variables pass	ed to the MSBuild process. Leave as 0 to use the default system property.			
⊘ Valid	ate					Save X Cancel	Help		

# **Environment Variables**

Multiple environment variables can be defined - one per line. These are set before the command line is run.

#### Log environment variables

If this is ticked, environment variable values are written to the build log.

#### Generate system environment variables

Tick this checkbox to set up a list of new environment variables prefixed with 'ContinuaCI.' for all current system expression objects and variables.

# Mask sensitive variable values in system environment variables

This checkbox is visible only if the 'Generate system environment variables' checkbox is ticked.

If this is ticked, the values of any variables marked as sensitive will be masked with \*\*\*\* when setting system environment variables. Clear this to expose the values.