

Storyboard Validator Integration with Jenkins CI Tool

Introduction

This guide will provide a brief introduction to Jenkins and demonstrate how Storyboard Validator can be triggered as part of your continuous integration workflow.

Follow <u>https://www.jenkins.io/doc/pipeline/ tour/ getting-started/</u> for instructions on how to download, install and launch Jenkins, if you already have a Jenkins environment setup, you can skip this step.

Integration of Validator into Jenkins requires two steps. One windows batch command (or shell command if running Jenkins in a Unix environment), and one post-build action to publish JUnit test result report.

It is assumed that you already have a project created. In this example, we started with a Freestyle project.

Prerequisites

The JUnit plugin for Jenkins https://plugins.jenkins.io/junit/

Adding Validator Launch Command

1 Add a build step to execute Windows batch command:

Dashboard > Validator > Configuration	
Configure Image: Source Code Management Image: Source Code Management	Delete workspace before build starts Use secret text(s) or file(s) Add timestamps to the Console Output Inspect build log for published build scans Terminate a build if it's stuck With Ant
Build Steps Post-build Actions	Build Steps Execute Windows batch command ? Command
	See the list of available environment variables "C::/Program Files\Crank_Software\Storyboard_Designer\Crank Storyboard.exe" -application com.crank.validator.ui.validatortestrunner model="%USERPROFILE%\storyboard_workspace\Thermostat\Thermostat.gde" config=Thermostat.gde-Simulator xml="%WORKSPACE%\test_report.xml" -data %USERPROFILE%\storyboard_workspace"
	Add build step * Save Apply



Adjust the following command to suit your needs, change the Storyboard installation, GDE model file path, launch configuration name and Storyboard workspace as required:

"C:\Program Files\Crank_Software\Storyboard_Designer\Crank Storyboard.exe" -application sb.validator model="%USERPROFILE%\storyboard_workspace\Thermostat\Thermostat.gde" config=Thermostat.gde-Simulator xml="%WORKSPACE%\test_report.xml" -data "%USERPROFILE%\storyboard_workspace

2 Add a post-build action for Publish JUnit test result report:

C	Post-build Actions
onfigure General Source Code Management Build Triggers Build Environment	Publish JUnit test result report ? Test report XMLs Fileset 'includes' setting that specifies the generated raw XML report files, such as 'myproject/target/test-reports/*xml'. Basedir of the fileset is the workspace root. test_report.xml
Build Steps	Retain long standard output/error
Post-build Actions	Health report amplification factor ?
	1.0
	1% failing tests scores as 99% health. 5% failing tests scores as 95% health
	Additional test report features
	E Publish test attachments
	Add -
	Allow empty results ?

Set the test filter to test_report.xml

3 From the dashboard you can trigger a new build for verification:

A Jenkins					Q Search (CTRL+K)	⑦ ① Mike Marchand ~	⊖ log o
+ New Item			AI +			Ø Ado	l description
			S W Name 1	Last Success	Last Failure	Last Duration	
			✓ ☆ Validator	7 min 55 sec #61	1 hr 1 min #53	2 min 52 sec	\triangleright
Build Queue No builds in the queue. Build Executor Status 1 Idle 2 Indicates		~	lcon: S M L		lcon legend के Atom feed for all के At	om feed for failures 🔊 Atom feed for just	latest builds
<u>valicator</u>	<u>#62</u>					BEST ADI	Jenkins 2.41



The Project will maintain a history of the build and test results:



The test results can be examined:

E Status	Test Result					
- status	lest Result					
Console Output	0 failures (±0)					33 tests (±
G Edit Build Information						Took 0 m
History	All Tests					
] Test Result	Package	Duration	Fail	(diff) Skip (diff)	Pass (diff)	Total (diff)
- Previous Build	DataTestSequence01	0 ms	0	0	3	3
	DropdownTestSequence01	0 ms	0	0	12	12
	FullTestSequence01	0 ms	0	0	3	3
	FullTestSequence02	0 ms	0	0	2	2
	FullTestSequence03	0 ms	0	0	6	6
	Test001Sequence01	0 ms	0	0	2	2
	Test006Sequence01	0 ms	0	0	4	4
	Test007Sequence01	0 ms	0	0	1	1

The presentation of data from within Storyboard Validator is more detailed and easier to work with than the experience in the Jenkins user interface, but it is useful to be able to dig into some results without having to open Storyboard.



When one or more tests fail the build is marked as unstable:



