

# Hands-on Lab 2.4:

## Testing the Orchestration

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### Objectives

In this lab you test the pipeline to ensure that the orchestration you created in the previous three labs works correctly.

### Prerequisites

Before you begin this lab, you should have completed Lab2.3 – Configuring the Pipeline.

## Time

You should be able to complete this lab in 30 minutes.

## Exercise 1: Testing the Orchestration

In this exercise you run a pipeline instance to make sure that it works correctly.

### Task 1: Open the Trey Research Solution

In this task you open the Trey Research solution.

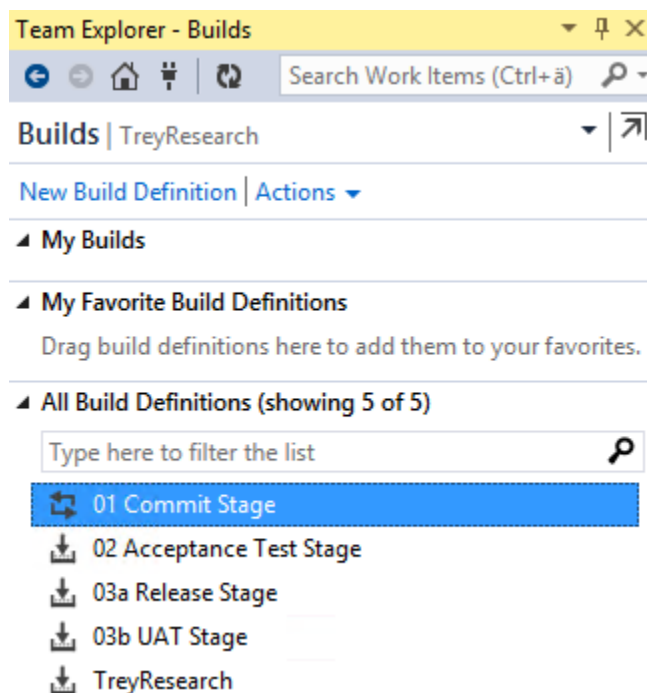
1. Navigate to **Lab02\_Orchestration\Source\TreyResearch**.
2. Open the **TreyResearch.sln** file.

### Task 2: Run the Commit Stage

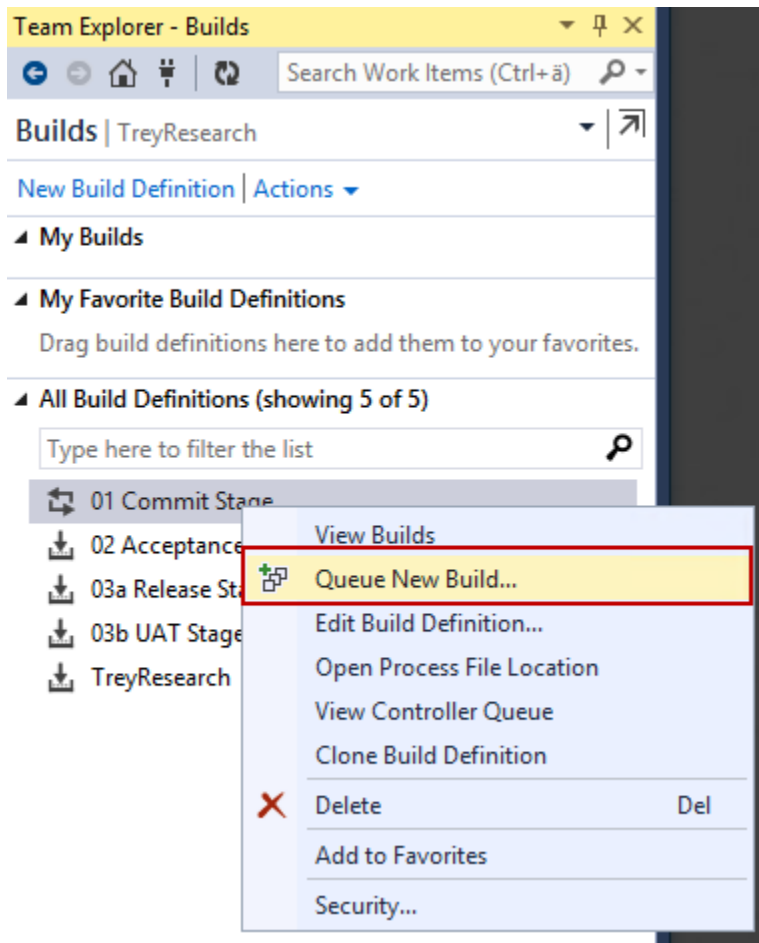
Although the pipeline is normally triggered by a check-in, you can also trigger it manually by queuing the associated build definition. When the pipeline runs, the commit stage receives a new name that is the same as the name of this instance of the pipeline.

Note: In Build Explorer, make sure that the **Only show builds requested by me** option is **not** selected. If it is selected, you won't be able to see the results for the automatically triggered acceptance test stage.

1. In Team Explorer, click the **Builds** tab.



2. Right-click **01 Commit Stage** and select **Queue New Build**.



3. The **Queue Build** dialog box opens.
4. Leave the defaults. Click **Queue** to start a new build. The settings you see were defined in the build definition you created in the previous lab.

Queue Build "TreyResearch" ? x

General Parameters

Build definition:  
01 Commit Stage

What do you want to build?  
Latest sources

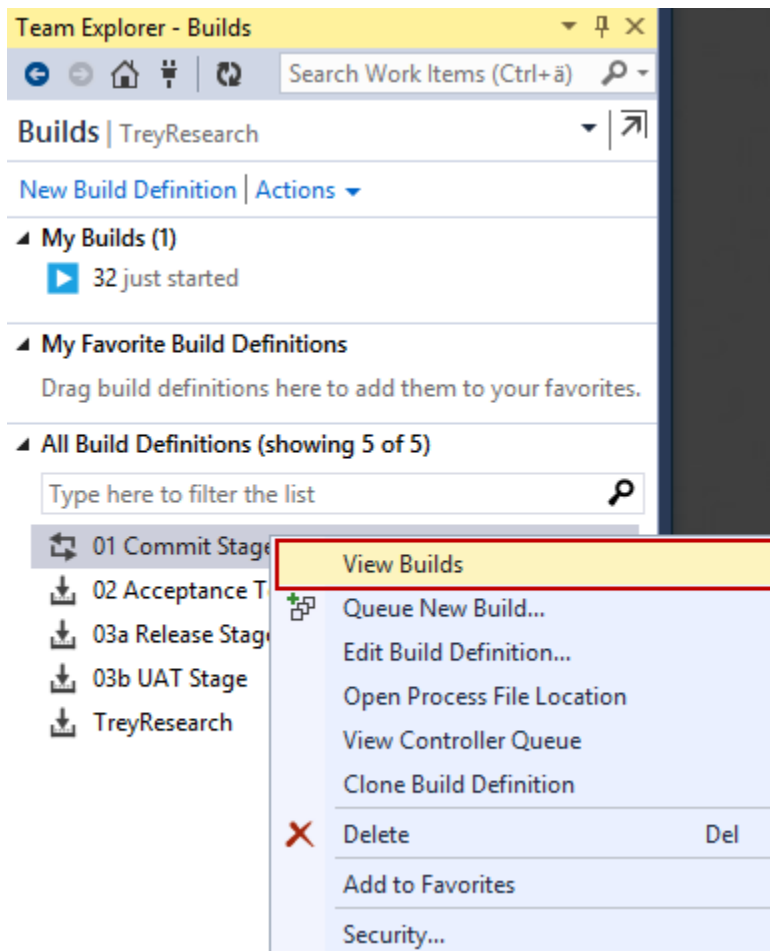
Build controller:  
VSALM - Controller

Priority in queue: Normal Position: 1

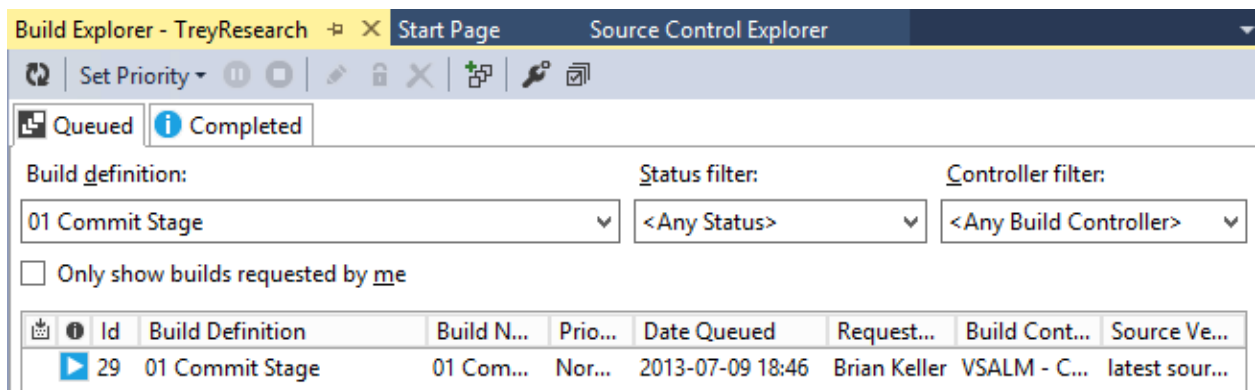
Drop folder for this build:  
\\vsalm\ffdrops\Lab02\_Orchestration

Queue Cancel

5. In Team Explorer, right-click **01 Commit Stage** and select **View Builds**.



- When **Build Explorer** launches, you should see that **01 Commit Stage** is in the build queue.



- If the commit stage completes successfully, the next stage, 02 Acceptance Test Stage, is triggered automatically. The following screenshot shows the results when both stages complete successfully.

Build Explorer - TreyResearch Start Page Source Control Explorer

Queued Completed

Build definition: <Any Build Definition> Quality filter: <Any Build Quality> Date filter: Today

☐ Only show builds requested by me

Name	Build Definition	Build...	Date C...	Requested By	So...
02 Acceptance Test Stage 0.0.0709.32	02 Acceptance Test Stage		2013-07...	Administrator	cha...
01 Commit Stage 0.0.0709.32	01 Commit Stage		2013-07...	Brian Keller	cha...

### Task 3: Validate the Steps in the Commit Stage

In this task you validate that all the steps in the commit stage ran successfully.

1. Validate that all the unit tests passed. Select the **01 Commit Stage 0.0.0709.32** build in Build Explorer. The **Build Details** view opens and shows a summary of what occurred during the build.

**Note:** Your version number will be different from the one used in this lab.



## 01 Commit Stage 0.0.0709.32 - Build succeeded

[View Summary](#) | [View Log](#) - [Open Drop Folder](#) | [Diagnostics](#) ▼ | [<No Quality Assigned>](#) ▼ | [Actions](#) ▼

Brian Keller triggered 01 Commit Stage (TreyResearch) for changeset 71

Ran for 19 seconds (VSALM - Controller), completed 2,1 minutes ago

### Latest Activity

Build last modified by Administrator 2,1 minutes ago.

### Request Summary

[Request 29](#), requested by Brian Keller 2,4 minutes ago, Completed

### Summary

#### Debug | Any CPU

0 error(s), 0 warning(s)

▶ `$/TreyResearch/Source/TreyResearch.sln` compiled

▲ 1 test run completed - 100% pass rate

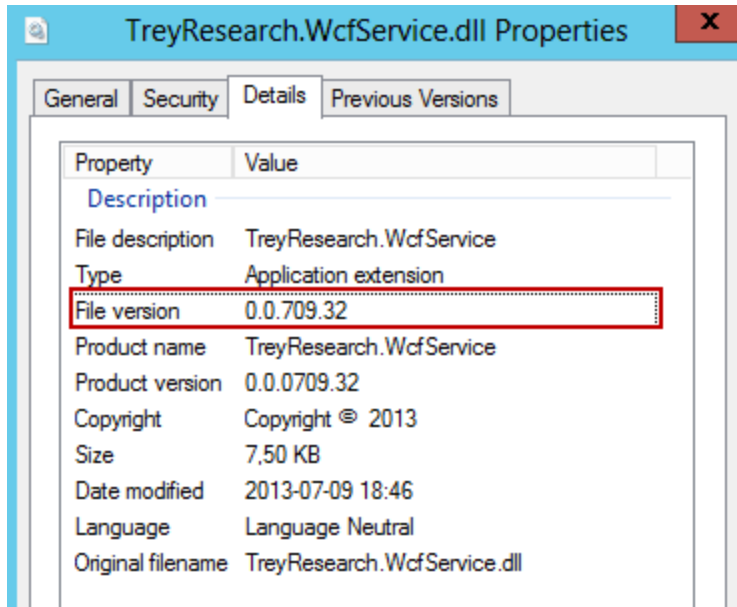
[Administrator@VSALM 2013-07-09 18:47:01\\_Any CPU\\_Debug](#), 4 of 4 test(s) passed

No Code Coverage Results

#### Release | Any CPU

0 error(s), 0 warning(s)

2. Validate that the code analysis was performed. Click **View Log**. The amount of information retained in the build log depends on the logging verbosity value. If it is **Normal**, the log shows some code analysis warnings at the end of the build log. The warning IDs will start with "CA." (You can use the **Logging Verbosity** build process parameter to manage the verbosity of the information that is logged and stored.)
3. Validate that the file version number for the generated assemblies in the drop location is the same as the name of the pipeline instance. To do this find the file named **TreyReserach.WpfClient.exe** in the build location. (An example of a build location is `\\BUILD_SERVER\Builds\01 Commit Stage\ 01 Commit Stage 0.0.0709.25\Release`.) Right-click on the file and examine its properties. Its file version should match the name of the pipeline instance, which is also the name of the commit stage. In the following screenshot, the file version of **TreyResearch.WcfService.dll** matches the name of the commit stage.



#### Task 4: Run the Manually Triggered Stages

In this task you run the manually triggered release and UAT stages.

1. In Team Explorer, under the **Builds** tab, queue a build for **03a Release Stage**.
2. Select **Queue New Build**.
3. The **Queue Build** dialog box opens.
4. Select the **Parameters** tab. Specify the value for the pipeline instance, which is the same as the number that was assigned to the commit stage. You should also specify the drop location. In the following screenshot, the pipeline instance is set to 0.0.0709.32 and the pipeline instance drop location is \\vsalm\ffdrops\Lab02\_Orchestration\01 Commit Stage\01 Commit Stage 0.0.0709.32\Release. The pipeline instance drop location is \\TreyBuildServer-10\Builds\01 Commit Stage 0.0.0530.84.



Queue Build "TreyResearch" ? x

General Parameters

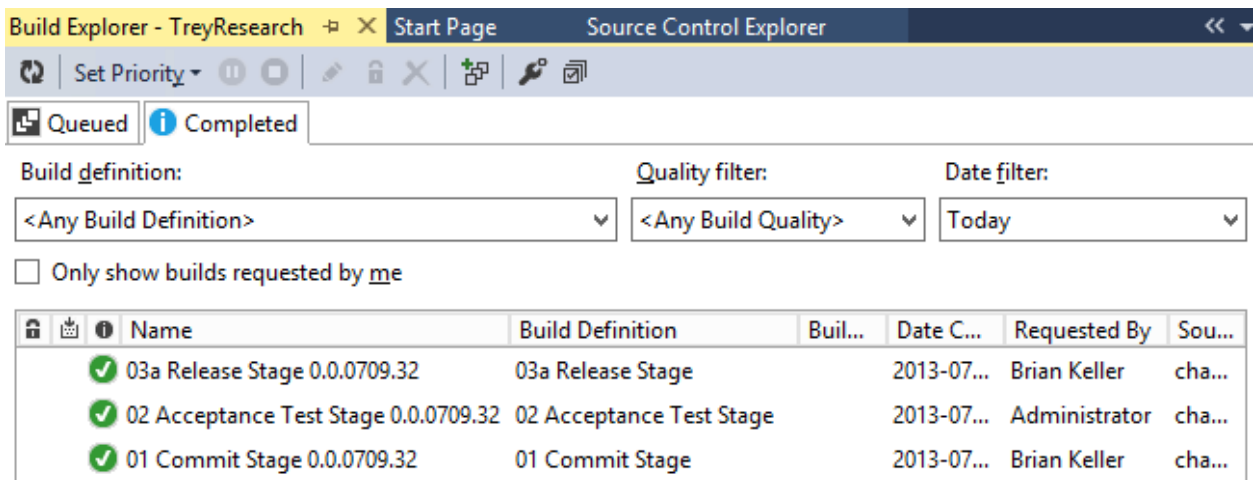
Build process parameters:

1. Required	
Lab Process Settings	To see or edit the details, click ...
2. Basic	
Logging Verbosity	Normal
3. Release pipeline	
Next stages in pipeline	
Pipeline Instance - ONLY FOR MAI	0.0.0709.32
Pipeline Instance Drop Location -	\\vsalm\ffdrops\Lab02_Orchestration\0
4. Misc	
Timeout For Each Deployment Scri	30

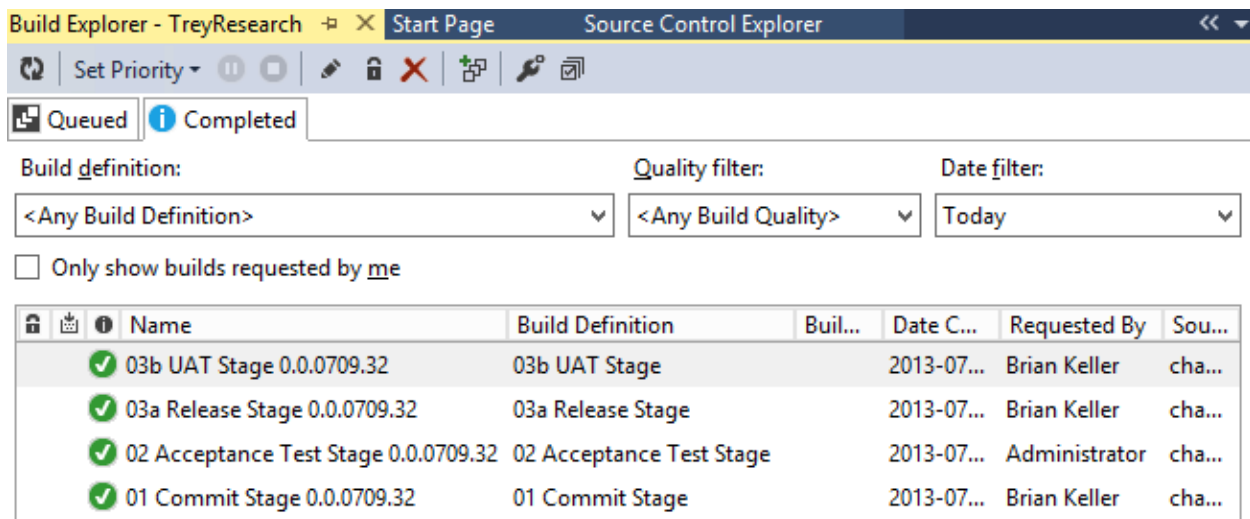
4. Misc

Queue Cancel

5. Click **Queue** to start the build.
6. Go to Build Explorer to verify that the **03a Release Stage** built successfully. This might take several minutes.



- Repeat steps 1 through 6 for 03b UAT Stage.
- You have completed running this instance of the pipeline. The following screenshot shows the results of a successful run.



## Summary

In this lab you triggered an instance of the pipeline by queuing the build manually. You verified that the steps within the commit stage completed successfully. The commit stage triggers the acceptance test stage automatically.

You next ran the two manual stages. To do this you needed to supply the parameters for the pipeline instance name and the pipeline instance drop location.

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