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| **T3 Jenkins Job Execution Documentv4.0** |

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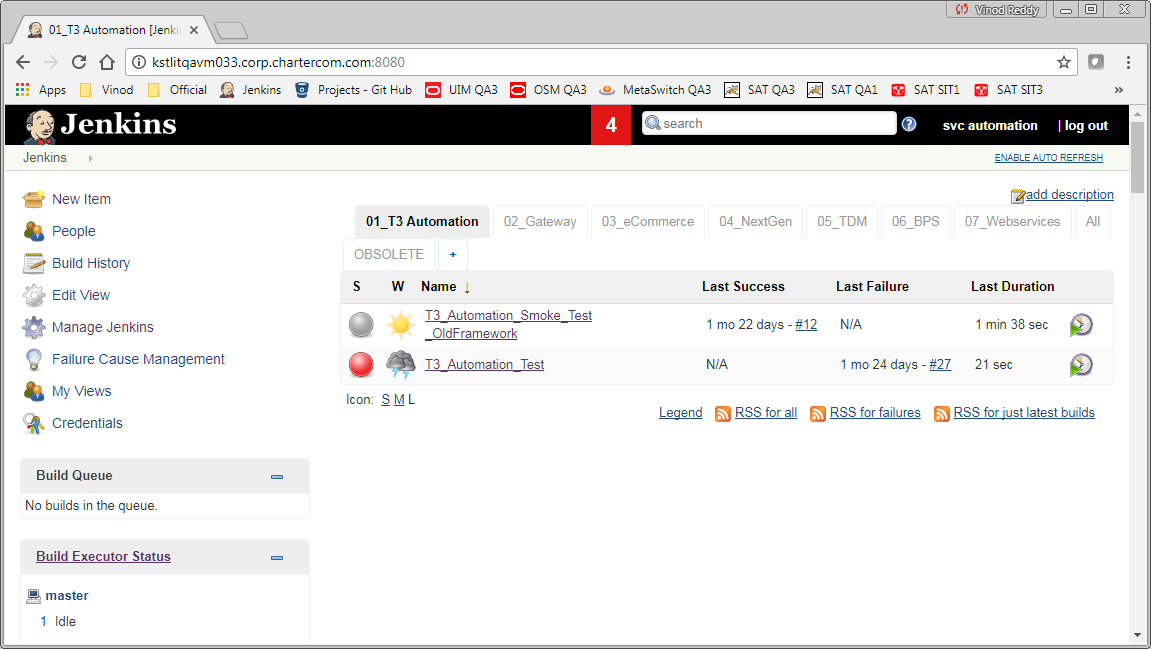
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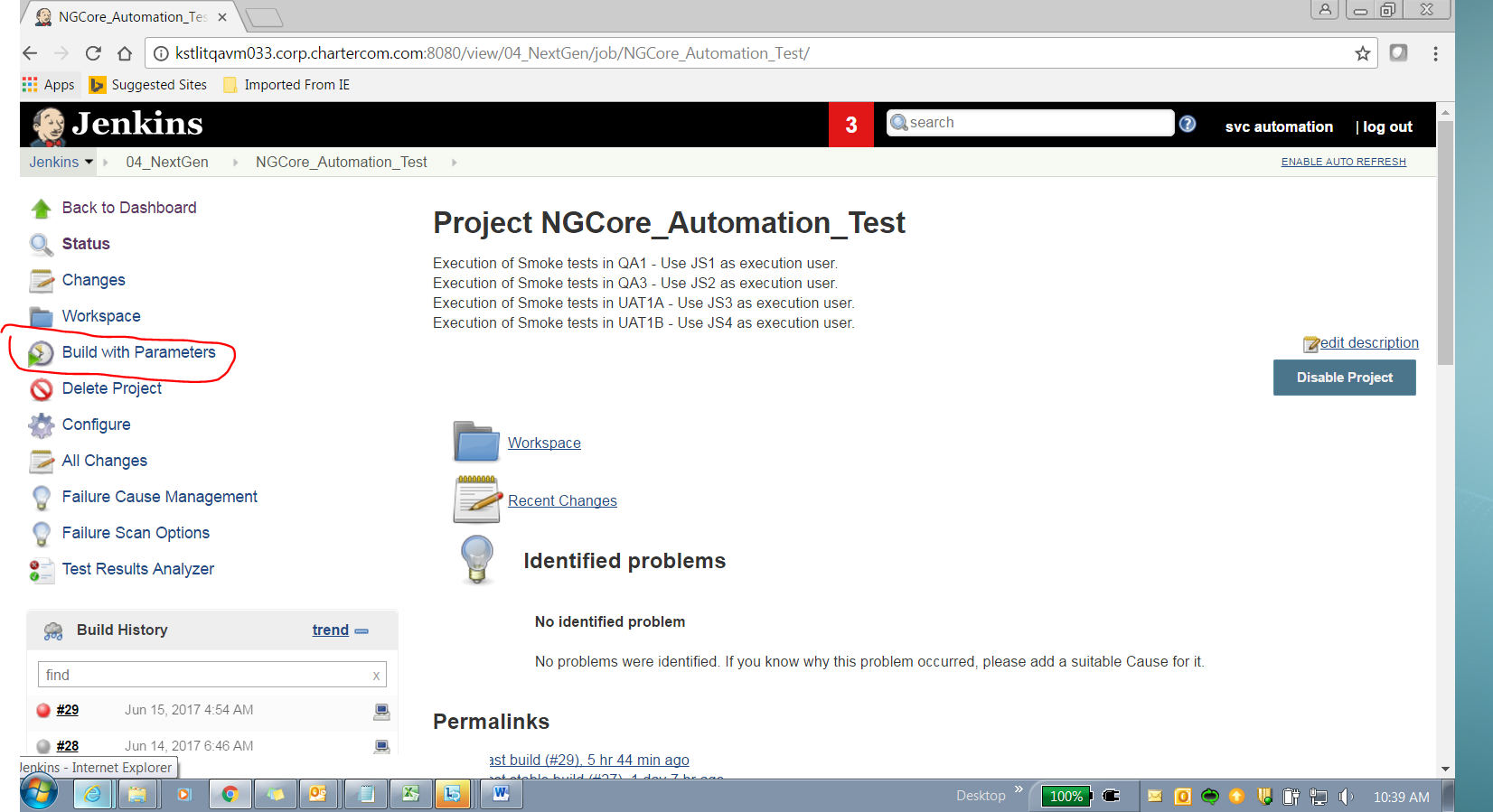
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## 1. Jenkins job execution Process

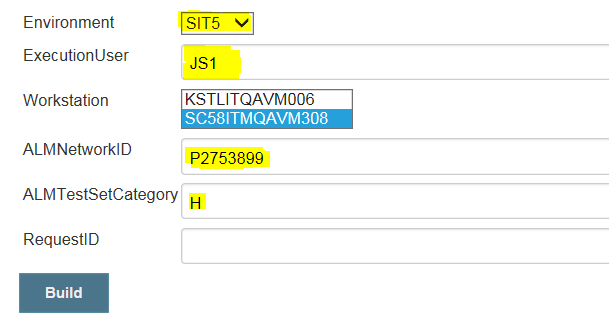
1. Log onto Jenkins server with the following credentials.
   1. URL: <http://kstlitqavm033.corp.chartercom.com:8080/login?from=%2F>
   2. Username: svc\_automation
   3. Password: Aut0m@tion
2. The T3 project has two Slave machines ‘SC58ITMQAVM308’ and ‘KSTLITQAVM006’ assigned and setup for T3 automation suite execution.
   1. Each machine is configured for up to 3 tests at once, a new build will be started for each smoke test up to 6 total at a time by following the steps below.
3. Navigate to the 01\_T3 Automation tab across the top and Click on the [T3\_Automation\_Test](http://kstlitqavm033.corp.chartercom.com:8080/job/T3_Automation_Test/) link.



1. Click on ‘Build with Parameters’ link on the left hand side

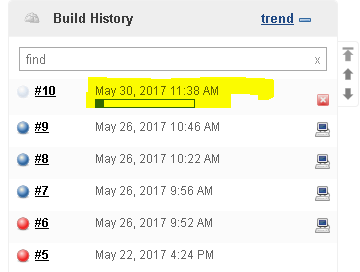


1. In the displayed Project “[T3\_Automation\_Test](http://kstlitqavm033.corp.chartercom.com:8080/job/T3_Automation_Test/) page”, update the highlighted fields below according to the test you are running.

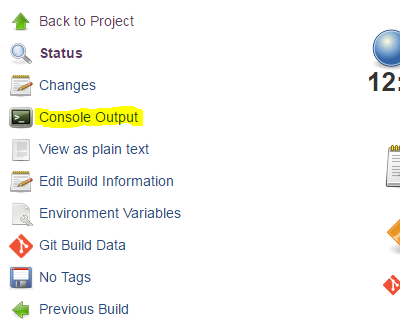


* 1. Select the environment you will test in from the Environment dropdown.(SIT5 is the default option)
  2. TC55 (New\_EVPL\_E2E) will be the only smoke test for UAT3. TC56 (New\_FI\_E2E) and TC1912 (New\_EVPL\_E2E) are the smoke tests for SIT3.
  3. Select the Workstation ’SC58ITMQAVM308’ or ‘KSTLITQAVM006’ assigned from dropdown. (SC58ITMQAVM308 is the default machine)
     1. If scheduling more than one job, alternate the slave machine assigned to the job. Keep in mind any more than 3 jobs assigned will queue and wait for a job to complete.
  4. Enter your NTLogin user id.
  5. ALMTestsetCategory: Enter the test set category used in the HPALM worksheet as described above. If you are executing a regression test you will use Test Set A, if you are executing a Smoke test then Test Set B will be used.
  6. Click on ‘Build’ button.

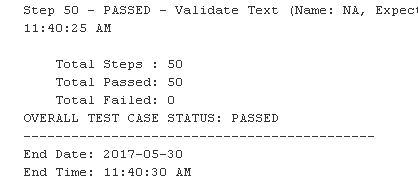
1. After a few seconds, a new number is generated under “Build History” on the bottom left side of screen as shown in the screenshot below.



1. Build has started and jar file is being created for execution. Click on the build number.
2. Now from left side menu bar, click on “Console Output” option to see the execution logs.



1. You will see the Test run logs being printed and execution started on the virtual machine.
2. User can monitor the logs to view successful execution or Failures/ERRORS.



## 2. Execution via Test Utility

**NOTE: To execute from Test Utility login to any slave machine and access the Test Utility. If you want to execute from your local machine, go to Software Center and search for Java run time client. Install the latest which is version 1.8 now.**

1. Click on Jenkins sheet in Test Utility
2. Copy paste the below rows.
3. Click on Submit. This will start the build in Jenkins. NOTE: if you have 7 rows below, then 7 execution builds will be started in Jenkins and this can be updated by the Execution lead on the functional team.

|  |  |  |  |
| --- | --- | --- | --- |
| **ALMTestSetCategory** | **ExecutionUser** | **Environment** | **Workstation** |
| I | JR1 | SIT5 | SC58ITMQAVM308 |
| I | JR2 | SIT5 | KSTLITQAVM006 |
| I | JR3 | SIT5 | KSTLITQAVM017 |
| I | JR4 | SIT5 | SC58ITMQAVM308 |
| I | JR5 | SIT5 | KSTLITQAVM006 |
| I | JR6 | SIT5 | KSTLITQAVM017 |
| I | JR7 | SIT5 | SC58ITMQAVM308 |
| I | JR8 | SIT5 | KSTLITQAVM006 |
| I | JR9 | SIT5 | KSTLITQAVM017 |
|  |  |  |  |

* 1. The above rows will execute all regression tests cases across 3 slave machines.

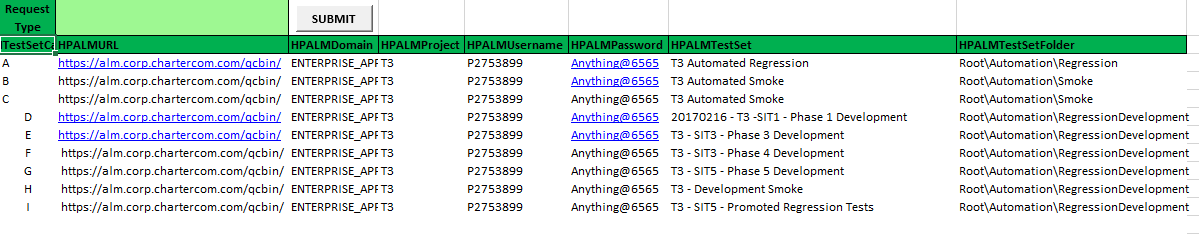
## 3. Available Test Cases and Execution test sets.

* 1. When executing a Regression test case in Jenkins, Test Set A will be used in Jenkins.
     1. Corresponding test set is T3 Automation Regression in the Regression folder in ALM.
     2. All promoted test cases are assigned to users JR1, JR2, JR3, JR4, JR5, and JR6. Building 6 jobs with these users will execute all regression tests available.
  2. When executing a Smoke test case in Jenkins, Test Set B will be used in Jenkins.
     1. Corresponding test set is T3 AutomatedSmoke tests Java in the Smoke folder in ALM.

## 4. Updating the Execution Tab in the Test Utility

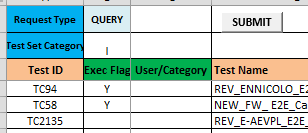
**NOTE: To execute from Test Utility login to any slave machine and access the Test Utility. If you want to execute from your local machine, go to Software Center and search for Java run time client. Install the latest which is version 1.8 now.**

1. The HPALM tab should be queried first before any updates are made to the Execution tab. The HPALM tab is the 7th tab across the bottom.
   1. This tab corresponds with the appropriate folder in ALM. This can be updated by the Execution lead.



* 1. To query the HPALM test sets, click on Cell B1 and choose query then hit submit.

1. Click on the Execution Tab in the Test Utility, this is located across the bottom and is next to the HPALM tab.
2. On the Execution tab you must first query the existing test set. You can do this by clicking Cell B1 and choosing Query from the drop down, next you will choose cell B2 and select the corresponding test set from the Test Set Category.



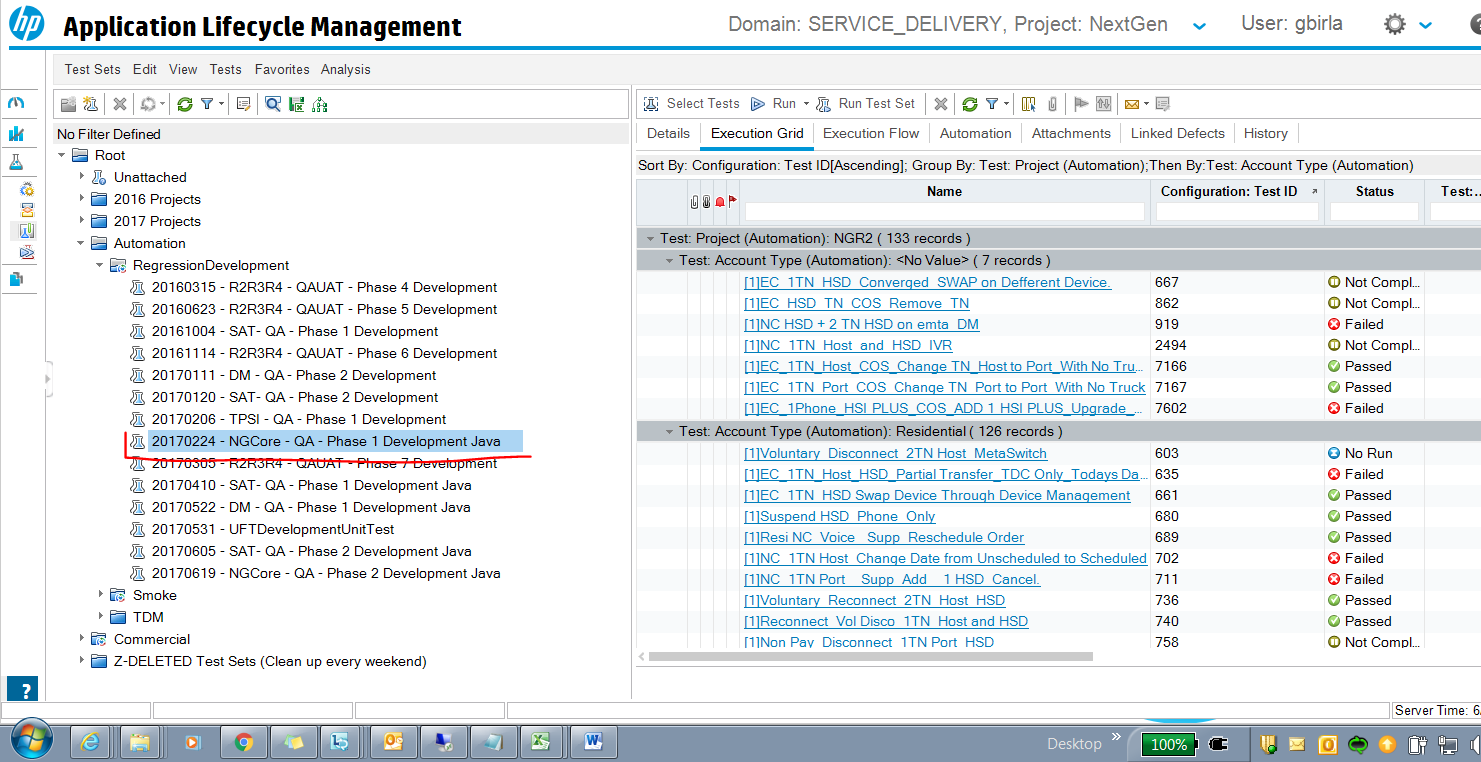
1. Click the submit button.
2. The test set will load with all applicable tests marked with a “Y” flag in the execution column.

NOTE: All Tests case available in the test utility will load, however the tests marked with a “Y” flag belong to that corresponding test set in HP ALM.

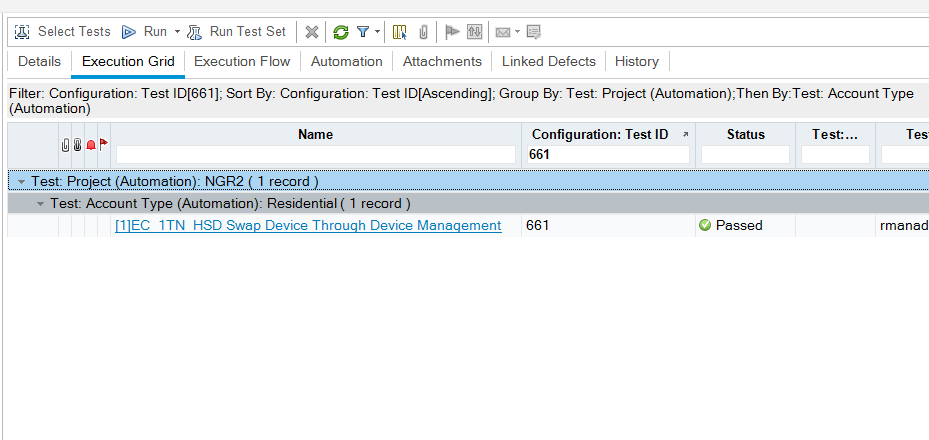
1. The User/Category column should be the only column that is updated once the tests have been flagged with a “Y”.

## 5. View results in ALM Test lab.

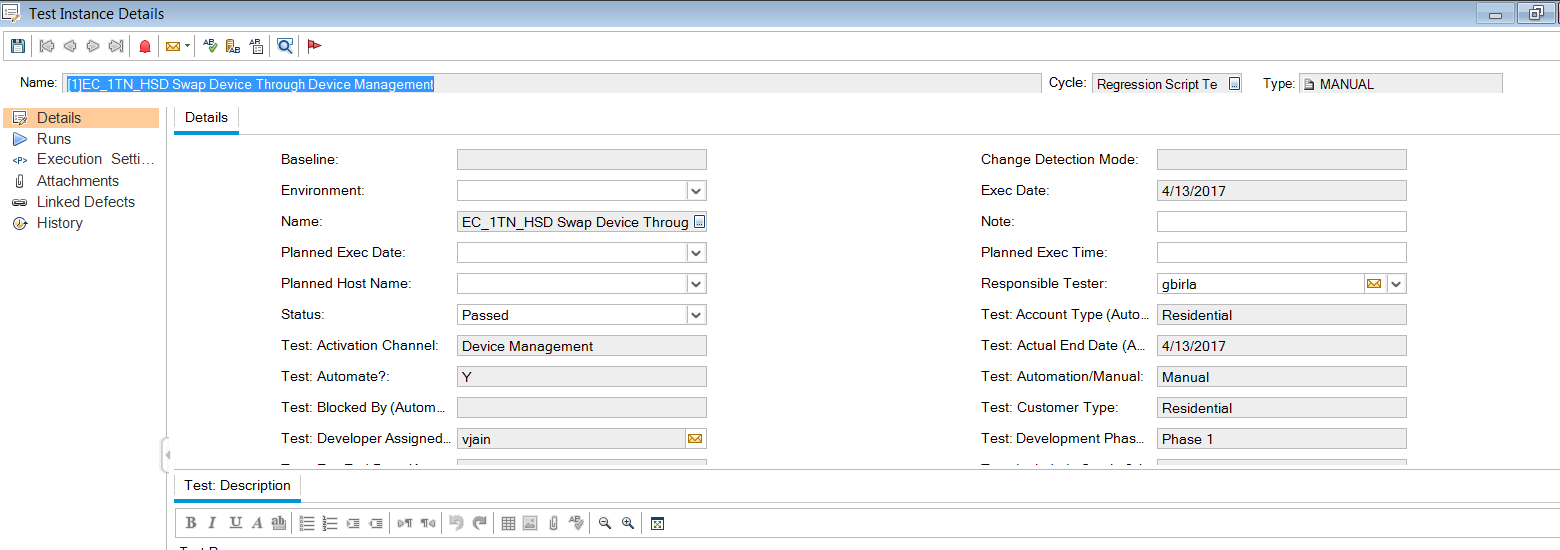
1. Navigate to test lab and test set, setup in the HPALM worksheet for which execution is in-progress.



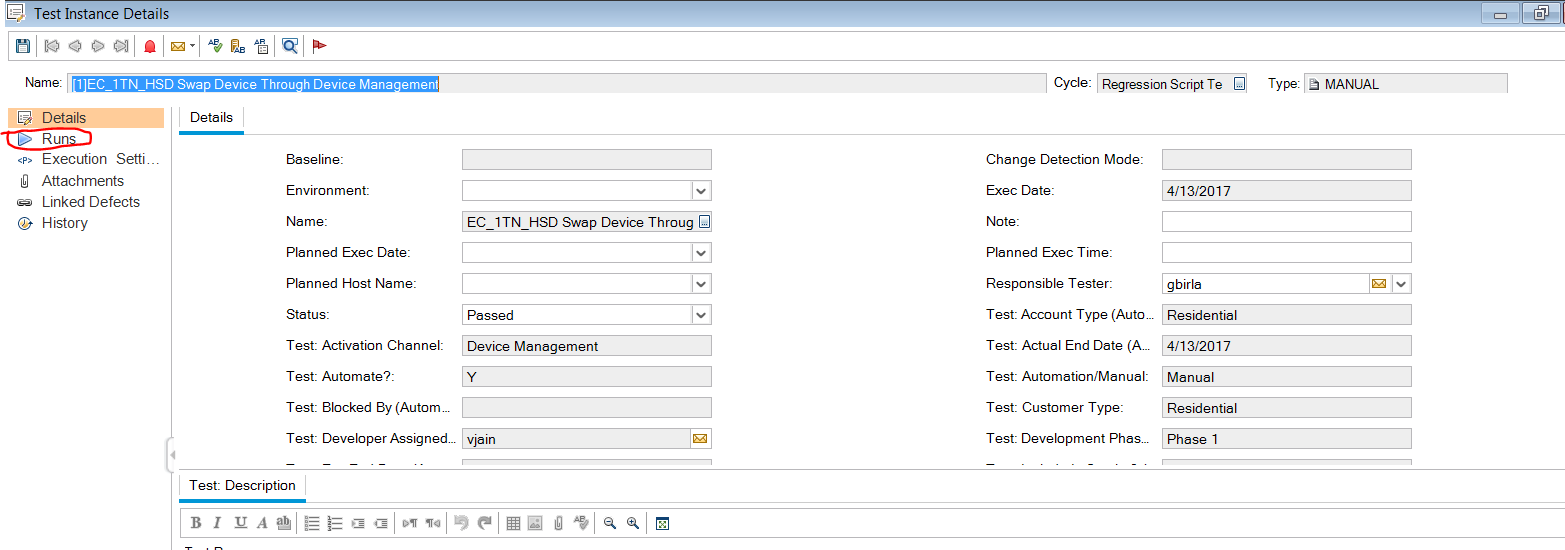
1. Search for test id being executed.



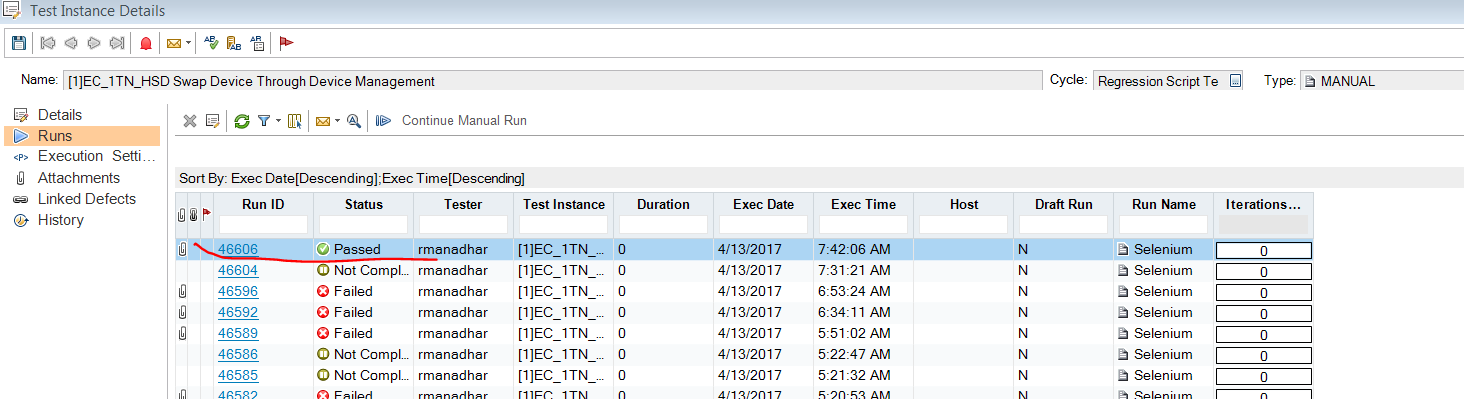
1. Click on the test name (link). Below screen will show up.



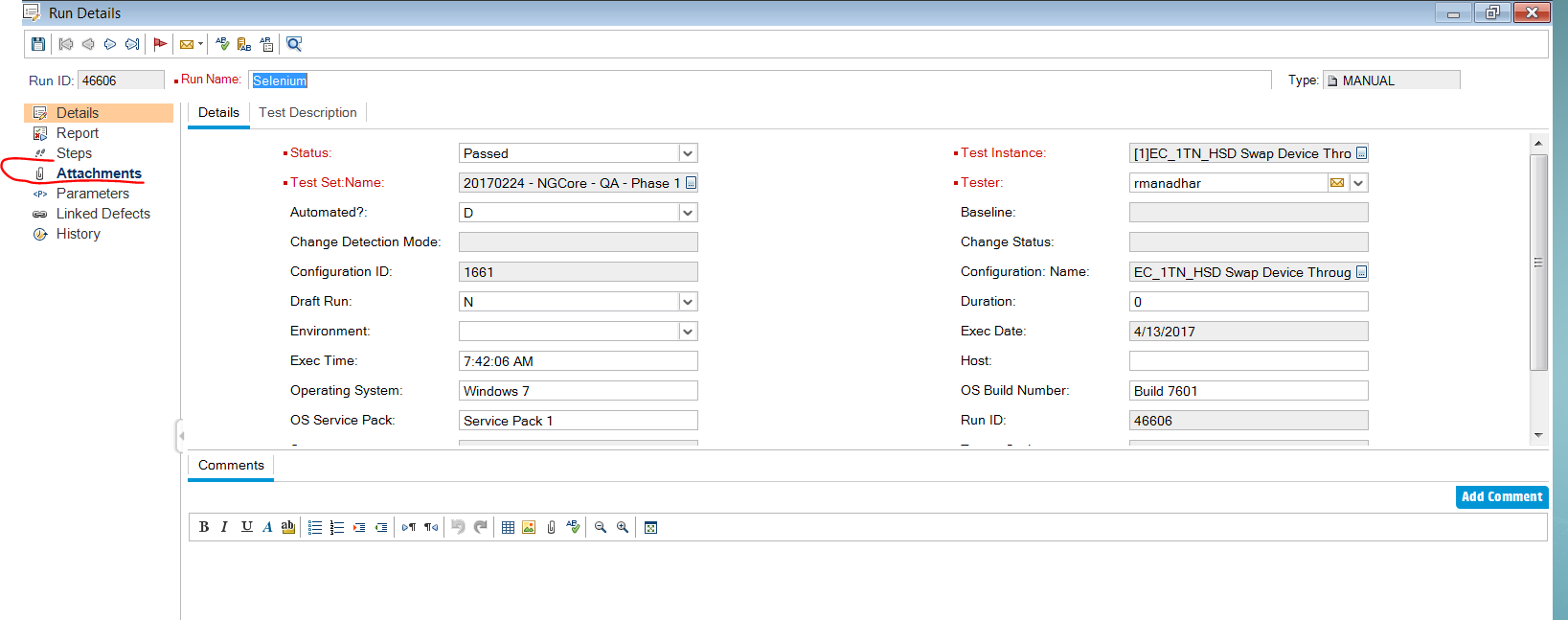
1. Click on Runs on the left hand side.



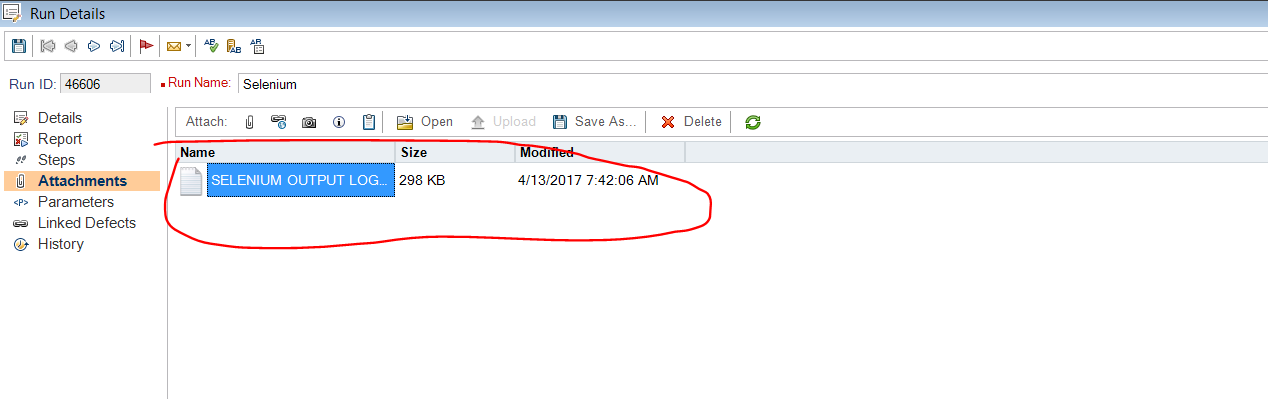
1. Below screen will be displayed. Click on the latest run id.



1. Below screen will be displayed up once you click on run id.



1. Click on Attachments on the above screen and below screen will show up



1. Now double click on the red highlighted file and it will open the log file for the given test id.

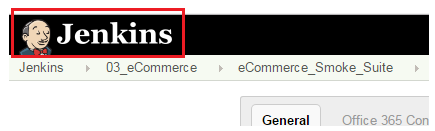
## 6. Troubleshooting Jenkins Slave Machine offline issue.

Follow the steps below only if you see issues in running the Jenkins job for the selected machine.

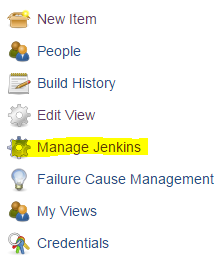
**\*\*\*\*\*\*\*Important Note\*\*\*\*\*\*\***

**If you are logging into the slave machine directly, the resolution must be set to 1366 x 768. Logging in with any other resolution will cause the test to fail. Instructions to set the resolution of the slave are below.**

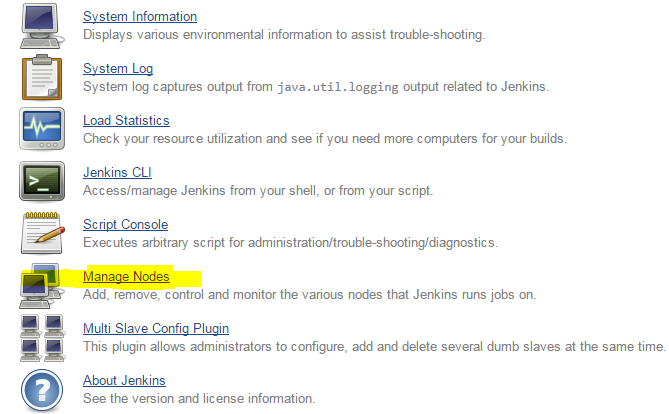
1. Go to Jenkins home page i.e. click on Jenkins image.



1. Click on Manage Jenkins option from left side menu.



1. From center menu options, click on Manage Nodes.



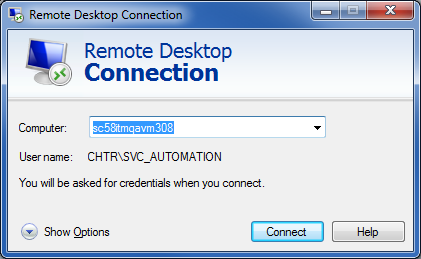
1. Check the status of VM - selected Workstation as in step 5 (E.g.SC58ITMQAVM308). If it shows offline i.e. **RED ‘X’** on Computer then log on to VM using below credentials.
   1. Machine name: Selected Workstation as in step 5 (E.g.SC58ITMQAVM308)

Username: svc\_automation

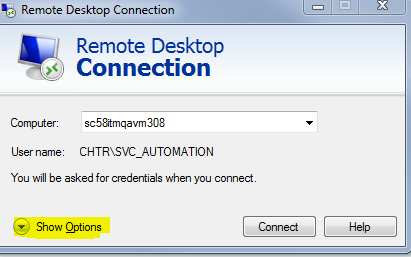
Password: Aut0m@tion



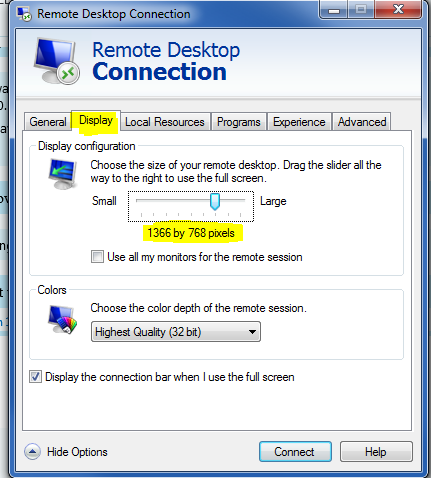
1. To log into the the slave machine. Launch Remote Desktop Connection from the start menu. This can be done by searching for “Remote Desktop Connection” if you do not have this in your start menu.



* 1. Type in the name of the slave machine you are logging into.
  2. Click the chow Options down arrow.

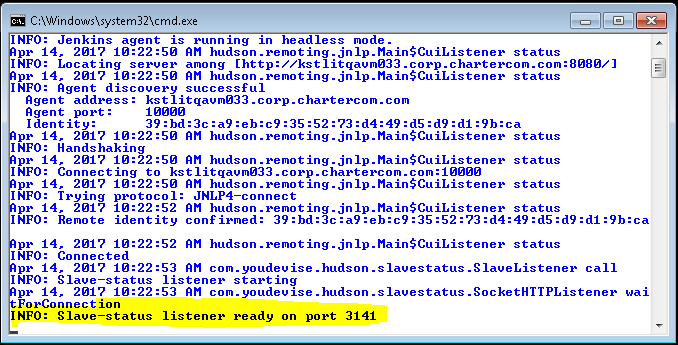


* 1. Click the Display Options tab across the top and make sure the resolution is set to 1366 by 768.



1. Once logged in, check if there is a CMD Prompt already running. If not, then double-click on “slave-start.bat” file. Once the CMD Prompt starts up, come back to Jenkins and click on Refresh button. The **RED ‘X’** should not be there anymore for VM (E.g. SC58ITMQAVM308).



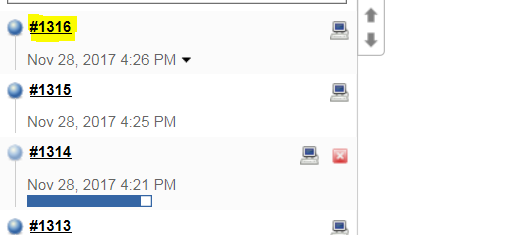




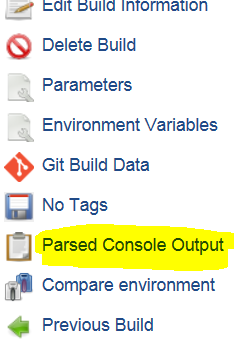
## 7. Troubleshooting Test Case Failures

Jenkins Failure Analysis

* In Jenkins after job execution, a Parsed Console Output has been added to help view the errors in a log. To access the Parsed Console Output, first click the Job Build Number.

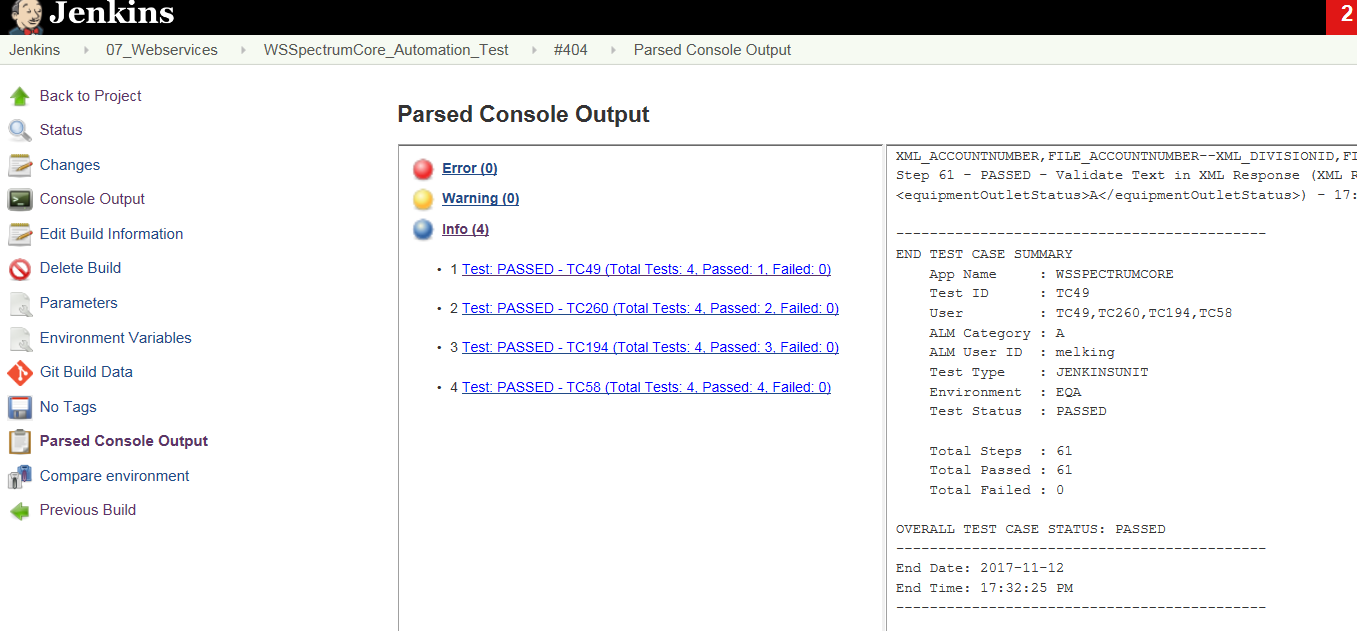


* After you have clicked on the Job Build Number, click on the Parsed Console Output hyperlink from the left hand side.



After you have clicked on the Parsed Console Output you will get the following view.

* The Info link will display the status for all of the tests executed in the job and give totals for each of the tests executed thus far.  Additionally, if a test case step has failed, clicking on the Error hyperlink will take you to the spot in the log file where this specific failure occurred.



## 8. Common Failure Points and possible Resolutions.

* When analyzing a failure, it is best take note of the failed step as well as the component the step has failed in. To identify the component, scroll up in the log from the failure point and identify the component in which the step has failed.
* An example of a component is shown below. This will be identified with the Text Case Number and Test Set in the title.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

-------------------------------------------------

SETACCOUNTDETAILS - (TC2353, H, TC2353)

-------------------------------------------------

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

* If a failure occurs in one of the components listed below, the test case will need to be executed again. These components are common across all test cases and a failure is typically caused by environment and/or slave latency.
  + SetAcountDetails
  + CRMLaunchLogin
  + CustomerAccount
  + BillingAccount
  + ServiceAccount1
  + ServiceAccount2
  + ServiceAccount3
  + Agreement
  + Quote
  + Opportunities
  + CreateNewProduct
  + CompleteActivities
  + CompleteOppActivities
* The below table lists a few common failures in the components listed above.

|  |  |  |
| --- | --- | --- |
| Failure From Log | Failure Reason | Possible Next Steps |
| FAILED - Check for Loading Page | The page has not loaded after the set amount of time of 120 seconds | This could indicate latency in the environment and/or the slave running the tests. The test should be re ran. |
| FAILED - Click Button (Name: ACCOUNT\_PlusButton | The Account Plus Button was not clickable after the page loaded | This could indicate latency in the environment and/or the slave running the tests. The test should be re ran. |
| FAILED - Click Button (Name: Address\_Tab | The Address tab was not clickable after the page loaded | This could indicate latency in the environment and/or the slave running the tests. The test should be re ran. |
| FAILED - Click Button (Name: ACCOUNT\_Hierarchy) - \*\*\*\*\*\*\*\*\*\*\*\*\*\*\* EXCEPTION \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* - org.openqa.selenium.UnhandledAlertException: unexpected alert open: {Alert text : "CRM 60001:  **Service Not Available, Contact T3 Support Team** | This failure reason is generally that the AIA service is down. This failure may also be seen when the script attempts to click the validate button when adding an address. | Contact the AIA team. |

\*\*\* If these failures keep occurring we can add some wait time at the last step that passed\*\*\*

* Product Specific failures are caused with a specific product and typically indicate the order was not completed successfully and/or timed out. Most common product specific failures are identified below.

|  |  |  |
| --- | --- | --- |
| Failure From Log | Failure Reason | Possible Next Steps |
| FAILED - Get Text (Name: OrderNumber, Value: FILE--OrderNumber, Text: ) - \*\*\*\*\*\*\*\*\*\*\*\*\*\*\* EXCEPTION \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* - org.openqa.selenium.UnhandledAlertException: unexpected alert open: | This failure is caused when the submit order button is pressed and the an unexpected alert is open. | This alert box may indicate that there are critical flags in the order. Search the log for “AuctoCust” for the customer account number and then click Quote and Validation Report. This test can be re started or manually completed. |
| FAILED - Get Text (Name: OrderNumber, Value: FILE--OrderNumber, Text: ) - \*\*\*\*\*\*\*\*\*\*\*\*\*\*\* EXCEPTION \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* - org.openqa.selenium.UnhandledAlertException: unexpected alert open: **{Alert text : Error invoking service 'SWISubmitOrder', method 'process' at step 'Submit Order WS'.(SBL-BPR-00162)**  --  A JMS exception occurred in EAI JMS Transport: 'An unexpected error occurred (see StackTrace): getUser called with null partitionName'. | This failure is caused by the order submit feature not working properly in the application. The bolded text shows the difference between the first order. | Contact the T3 team to investigate further. |
|  |  |  |

* Failures that occur in OSM have typically occurred during the Construction Tasks phase. These failures occur because of the previous task was not completed successfully. This can indicate that the tasks is not moving forward in OSM. When this happens, the order can be manually completed and the test passed, however if this occurs from multiple test cases please check with the OSM team. The most common OSM specific failures are listed below.

|  |  |  |
| --- | --- | --- |
| Failure From Log | Failure Reason | Possible Next Steps |
| \*\*\*UpdateServiceDesign NOT found in Webservice response T3OSMSOMQueryOrders\*\*\* | Update Service Design task was not found after looping for 120 seconds. This could be because the previous task was not completed or the order is stuck. | Search the Log for “OrderValue” and copy the order number. Review the order in OSM to make sure the task is available. If the task is not available it may be stuck in OSM. Consult the OSM team. If the task is available you can manually complete the test case or Re Run it again from the beginning. |
| \*\*\*\*\*PerformDetailSiteSurvey NOT found in Webservice response T3OSMSOMQueryOrders\*\*\* | PerformDetailSiteSurvey task was not found after looping for 120 seconds. This could be because the previous task was not completed or the order is stuck. | Search the Log for “OrderValue” and copy the order number. Review the order in OSM to make sure the task is available. If the task is not available it may be stuck in OSM. Consult the OSM team. If the task is available you can manually complete the test case or Re Run it again from the beginning. |
| \*\*\*\*\*ComplexEngineeringTask NOT found in Webservice response T3OSMSOMQueryOrders\*\*\* | ComlplexEngineering task was not found after looping for 120 seconds. This could be because the previous task was not completed or the order is stuck. | Search the Log for “OrderValue” and copy the order number. Review the order in OSM to make sure the task is available. If the task is not available it may be stuck in OSM. Consult the OSM team. If the task is available you can manually complete the test case or Re Run it again from the beginning. |
| \*\*\*\*\*GraniteFalloutConstructSiteTask NOT found in Webservice response T3OSMSOMQueryOrders\*\*\* | GraniteFalloutConstruct task was not found after looping for 120 seconds. This could be because the previous task was not completed or the order is stuck. | Search the Log for “OrderValue” and copy the order number. Review the order in OSM to make sure the task is available. If the task is not available it may be stuck in OSM. Consult the OSM team. If the task is available you can manually complete the test case or Re Run it again from the beginning. |

## Contact US:

In case of any issues/failures/questions, please contact DL TMO Automation Team [DLTMOAutomationTeam@charter.com](mailto:DLTMOAutomationTeam@charter.com) or the respective Project’s Automation Team lead.