Customer Connect
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DUKE ENERGY®

Customer Connect HPQC User Guide

Revised November 2021

HPQC TRAINING - TABLE OF CONTENTS

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HPQC OVERVIEW

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- Quality Center (QC) is a test and defect management tool used for projects in which testing is required

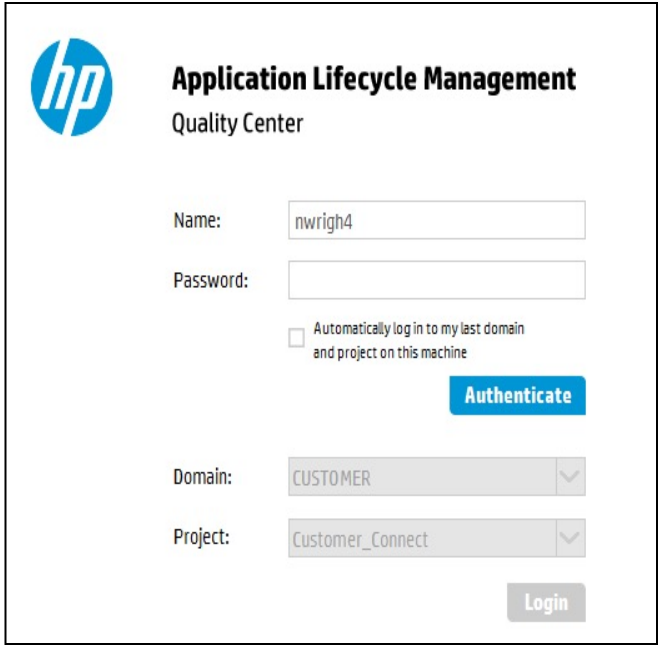
- This presentation covers:
  - How to login QC
  - How to execute a Test script
  - How to create a Defect
  - Best Practices

HOW TO LOGIN

- QC Access link: https://hpqualitycenteralm.duke-energy.com/qcbin/start_a.jsp

- User Name: LAN ID
- Password: LAN Password
- Click the “Authenticate” button

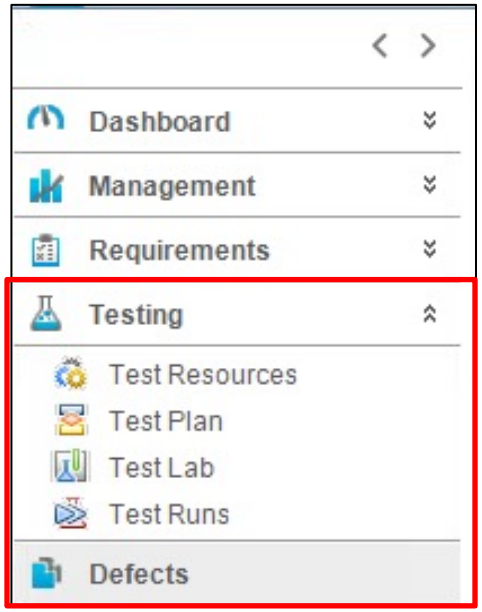
- Domain: CUSTOMER
- Project: Customer_Connect
- Click the “Login” button



QC MODULES

QC Modules are displayed in the left navigation panel

The modules that we will cover include:

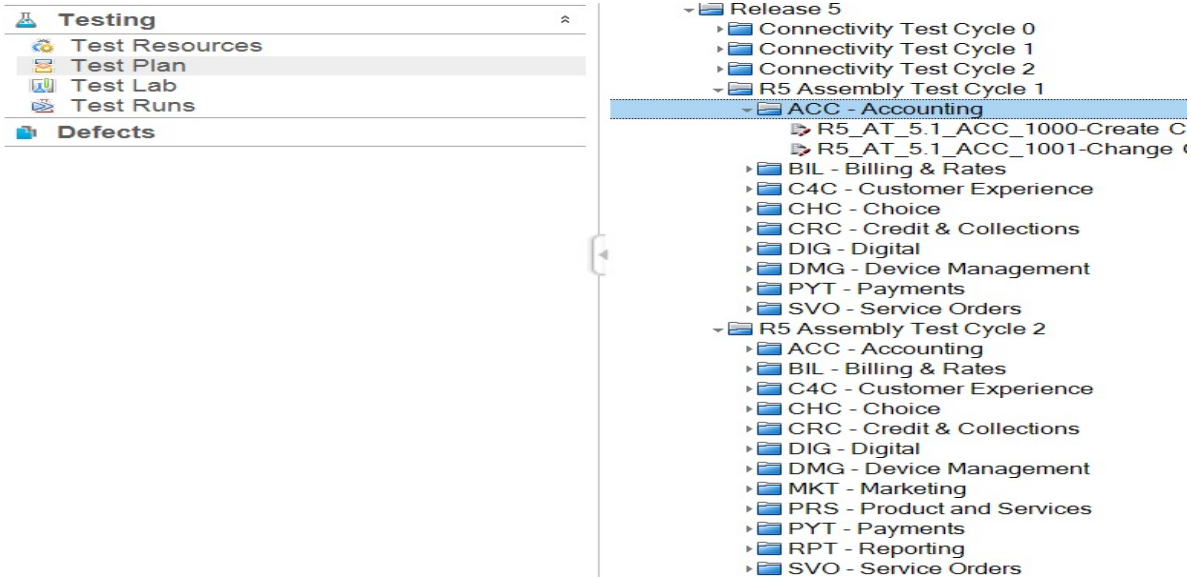


- Test Plan
  - Test scripts are uploaded
- Test Lab
  - Tests scripts will be assigned and scheduled
  - Testers execute scripts
- Defects
  - Defects are created
  - Defects are tracked

QC FOLDER STRUCTURE

QC Test Plan Folder Structure:

(Note: This is where scripts are uploaded into HPQC and is considered the master script copy from Execution phase onward. Changes must be made here once)



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QC FOLDER STRUCTURE

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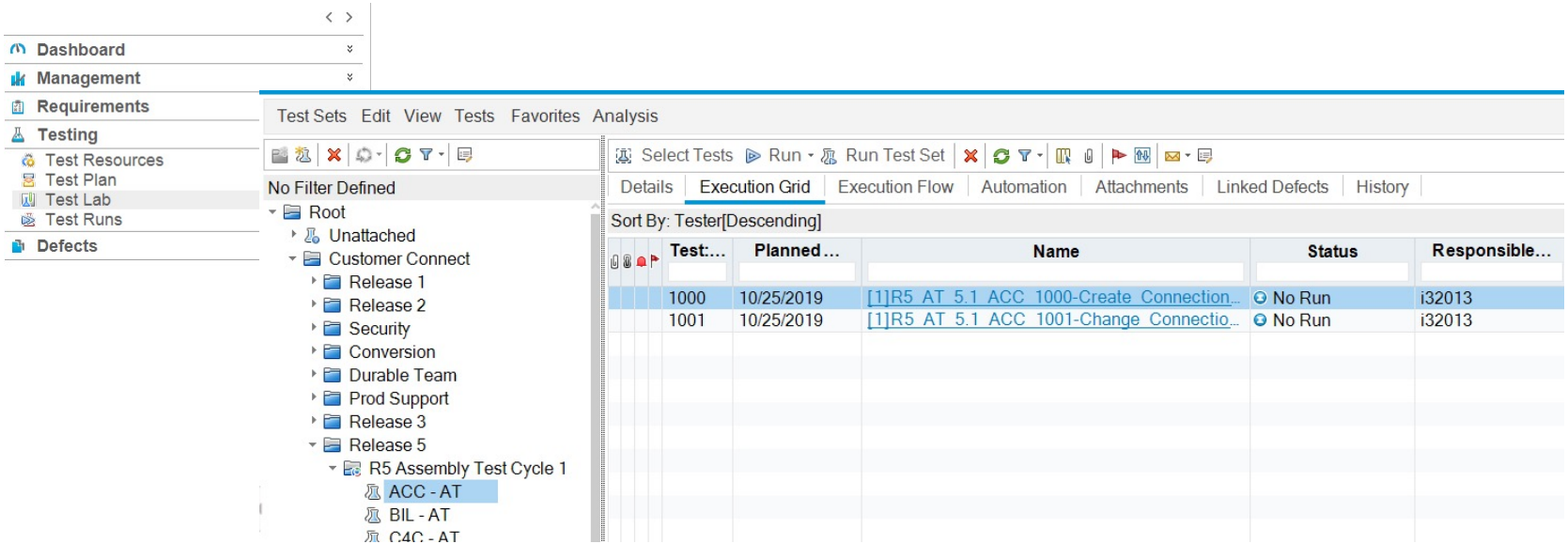
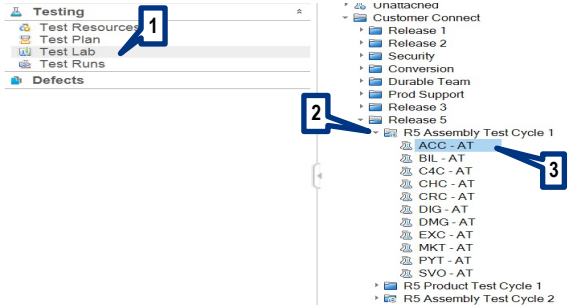
Below is an example of the QC Test Lab Folder Structure

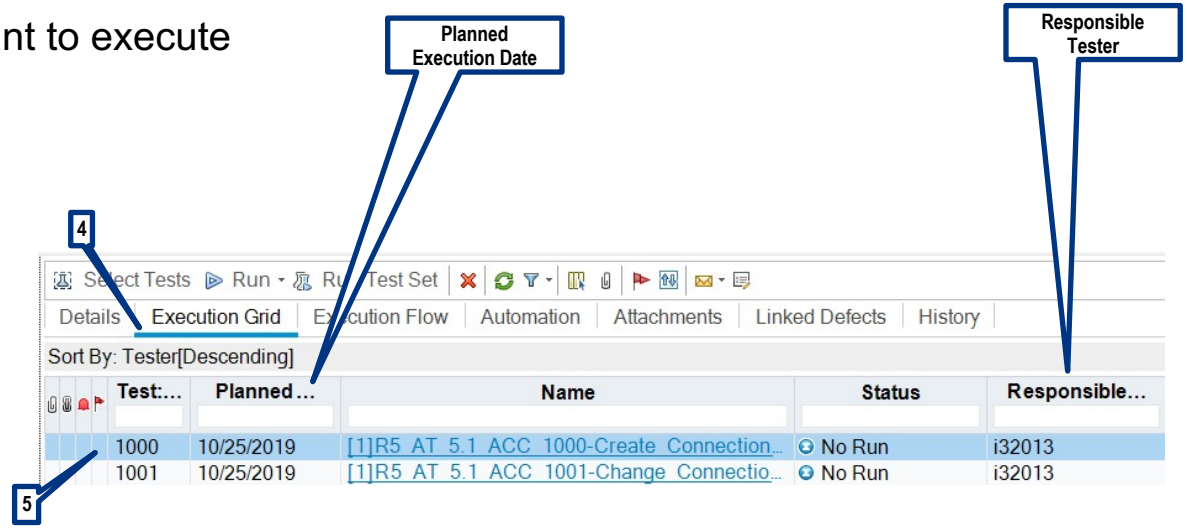
(Note: Scripts will be placed here for execution from the Test Plan folders.)



HOW TO EXECUTE A TEST

1. Select Test Lab
2. Expand the folders to the Release and tower you will be testing
3. Choose the test set that you want to run (i.e. ACC – AT)
4. View the Execution Grid tab (This is where you can enter your name in the Responsible Tester field and see what Scripts you have to run for each week Planned Execution date.)
5. Next, highlight the test you want to execute





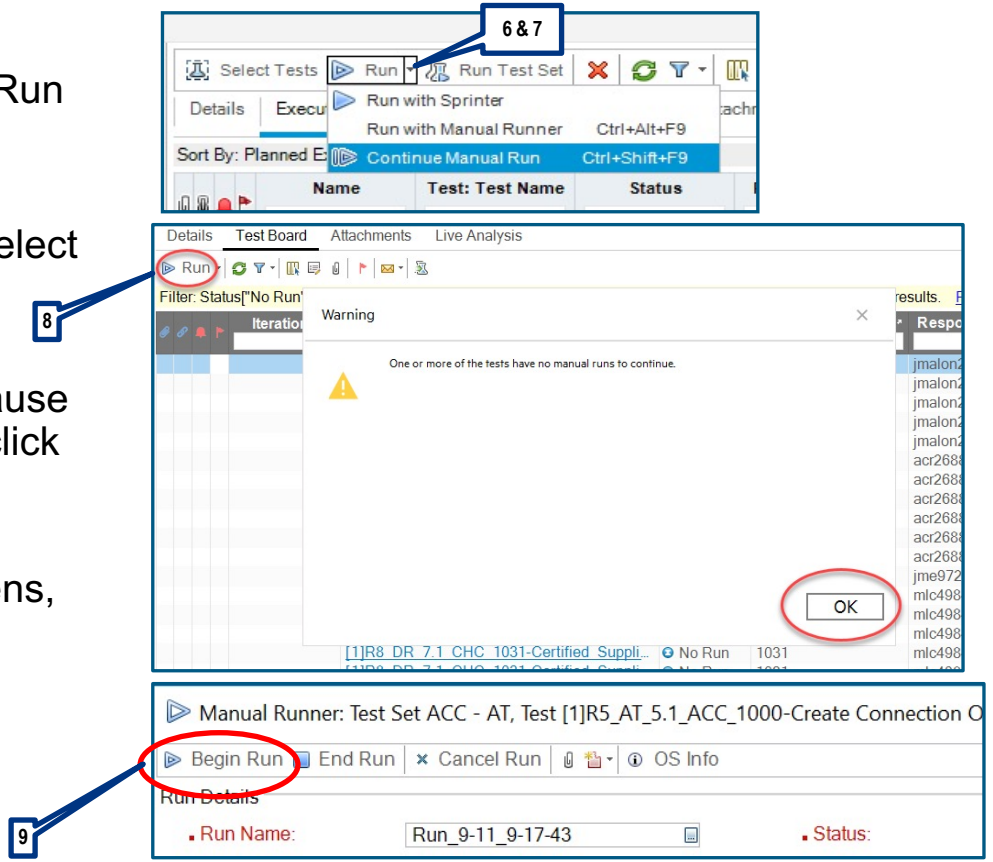
HOW TO EXECUTE A TEST

6. Select the drop down arrow next to Run option on your menu bar

7. When the drop down is displayed, select **Continue with Manual** Run

8. If a Warning message displays because there's no existing run to continue, click OK and then click Run

9. Once the Manual runner screen opens, click the "Begin Run" button



HOW TO EXECUTE A TEST

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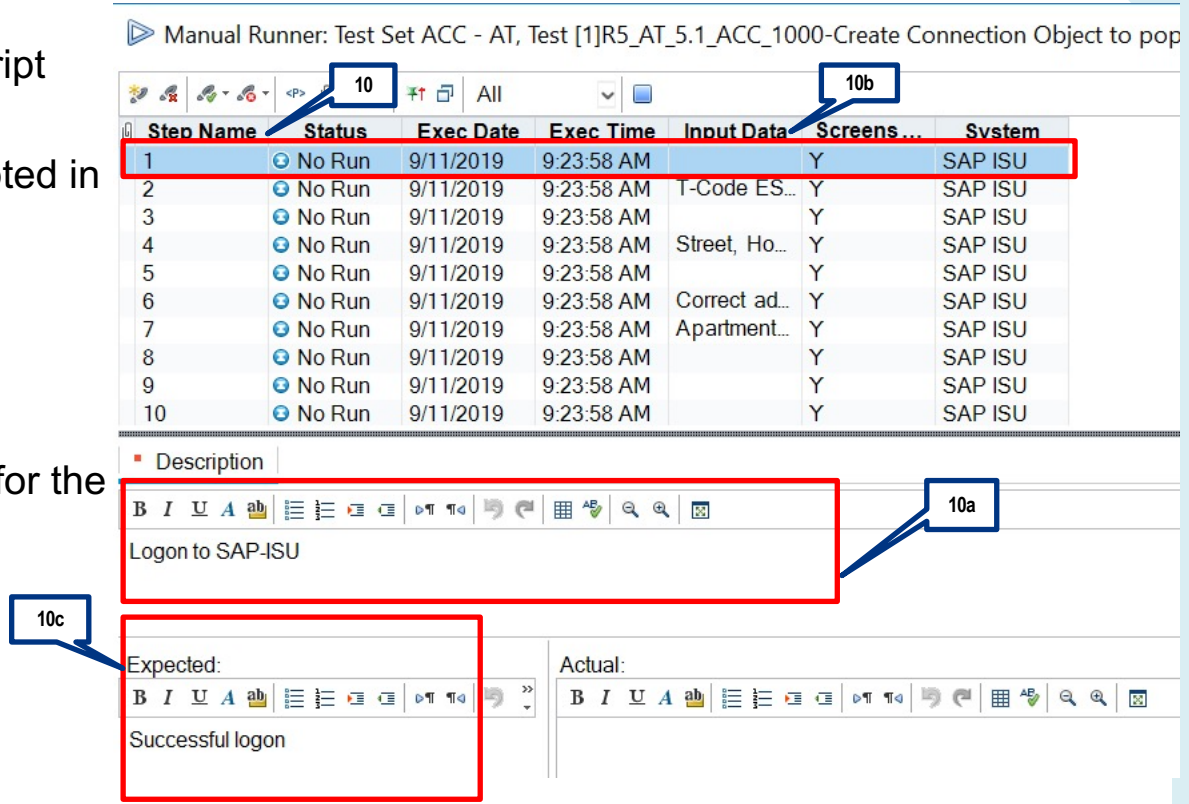
10. Select the first step in the test script

    a) Review the step details descripted in the “Description” section

    b) Review the Input Data and Screenshots required fields

    c) Review the “Expected” results for the step



HOW TO EXECUTE A TEST

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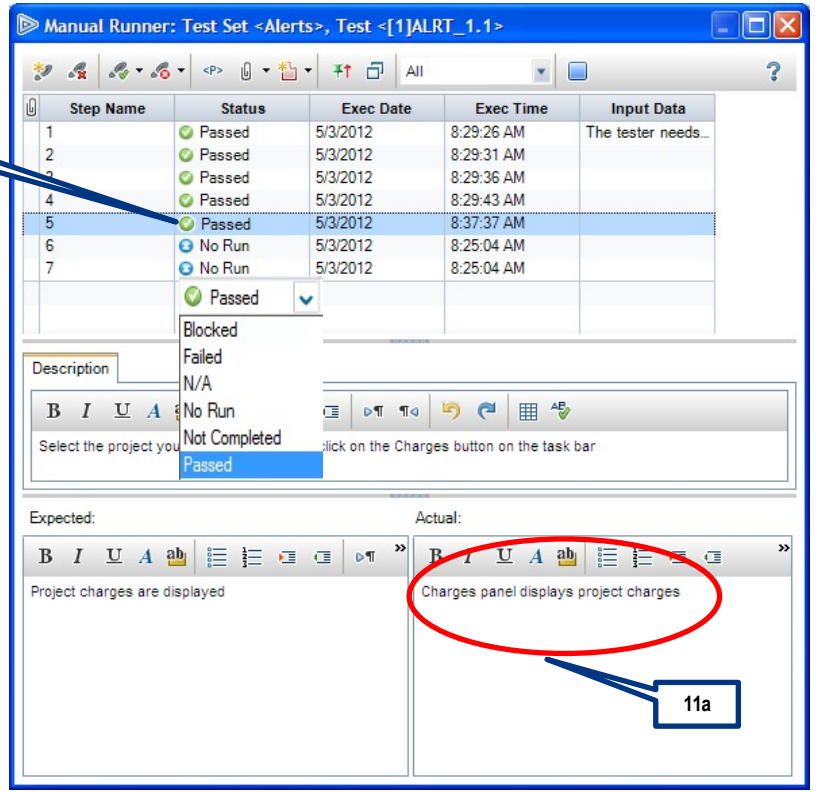
11. Execute the test step

a) After you have executed the actions needed for the Step you are on, you must enter an “Actual” result, compare with the “Expected” result to validate test

b) Next, you must mark PASSED, FAILED, or BLOCKED. The next step will be automatically selected, repeat for all the steps



HOW TO EXECUTE A TEST

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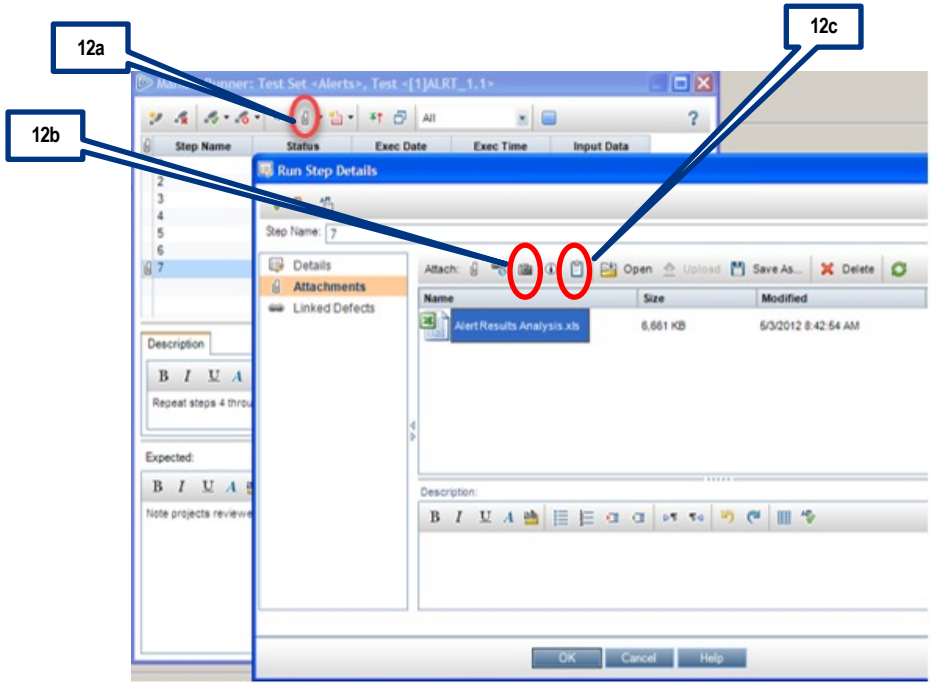
12. For a PASSED step that shows Screenshot required, you must attach evidence to show success by clicking on the attachment icon and select attach to step

    a) To attach file(s), click the ‘paper clip’ icon and navigate to the file to attach

    b) To attach screenshots, click the camera icon and follow the instructions

    c) You may also use the clipboard for quick screenshot paste from Snag it or Snip it



HOW TO EXECUTE A TEST

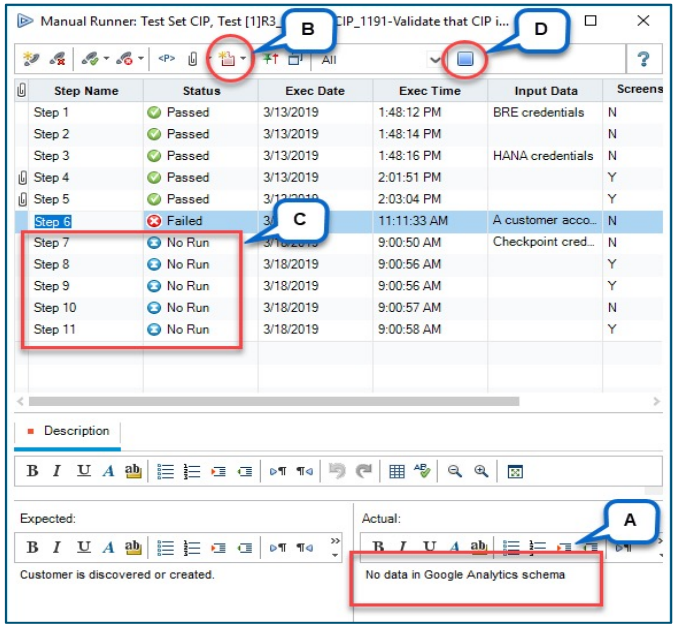
13. If a step is FAILED :

a) Document the Actual result explain the reason for the failure

b) Create and/or Link existing defect (The Business Priority of the linked defect must be Medium/ Low)

c) If possible, continue to test all steps after the defect has been found

d) After executing the remaining steps, click End Run



HOW TO EXECUTE A TEST

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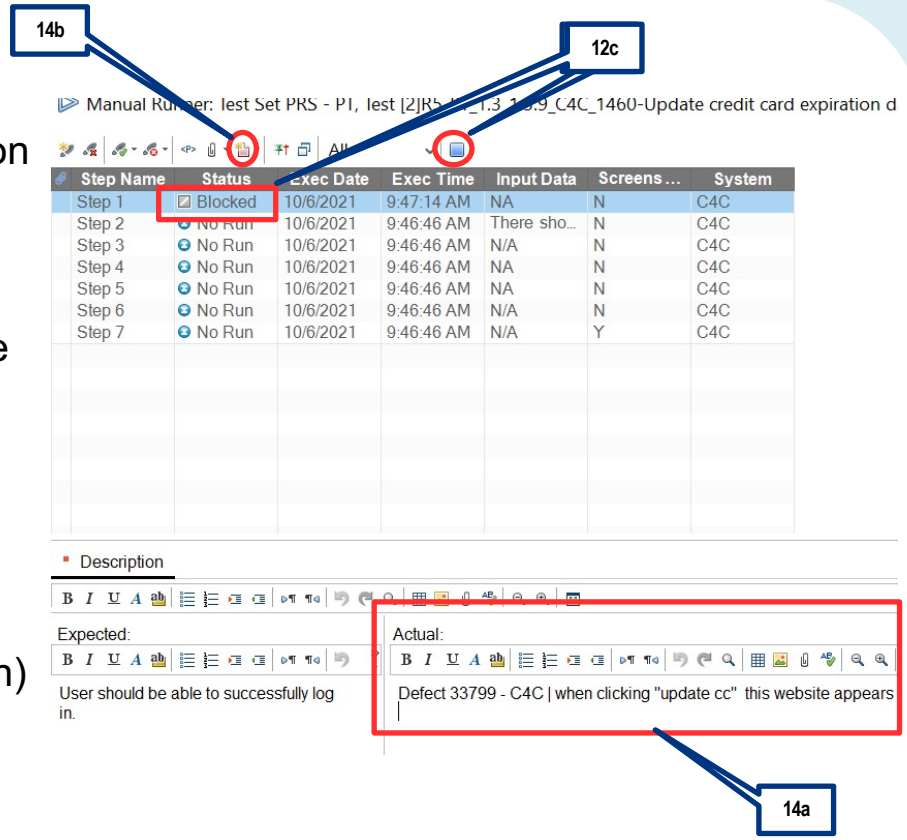
14. If a step is BLOCKED :

a) Document the Actual result explain the reason for the failure

b) Create and/or Link an existing defect (The Business Priority of the linked defect must be Critical/ High)

c) If you cannot continue to execute the remaining steps due to the defect, **Block** the current failed step and end the run or if you need to stop testing and will come back to finish at a later time, leave steps as is (no run) and end the run



TEST SCRIPT STATUS SCENARIOS

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- Scenario 1:
  - Tester executes Script and all steps within script Pass, expected results captured and Tester ends run.
  - Additional Tester Action: None
  - Script Status: Passed

- Scenario 2:
  - Tester starts to execute Script and steps are all Passing so far but tester needs to go to another meeting/activity and cannot continue to execute the test further at that time. Tester ends run.
  - Additional Tester Action: None
  - Script Status: Not Complete

TEST SCRIPT STATUS SCENARIOS - CONTINUED

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- Scenario 3:
  - Tester starts to execute Script and Step 1 passes, Step 2 fails. Tester checks for existing defect and if found links, and if not creates defect to link from step that failed. Tester then looks at step 3 and CANNOT continue. Tester ends run and leaves remaining steps in the default no run status.
  - Additional Tester Action: None
  - Script Status: Blocked

- Scenario 4:
  - Tester prepares to execute Script and is aware of defect that they know will stop them in the script as well.
  - Additional Tester Action: In Test Lab, tester should start the run of the script, block the first step, link the existing defect and stop the run
  - Script Status: Blocked

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TEST SCRIPT STATUS SCENARIOS - CONTINUED

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- Scenario 5:
  - Tester starts to execute Script and Step 1 passes, Step 2 fails. Tester checks for existing defect and if found links, and if not creates defect to link from step that failed. Tester then looks at step 3 and CAN continue. Tester continues to test and is able to pass the rest of the steps. Tester ends run.
  - Additional Tester Action: None
  - Script Status: Failed
- Scenario 6:
  - Tester starts to execute Script and Step 1 passes, Step 2 fails. Tester checks for existing defect and if found links, and if not creates defect to link from step that failed. Tester then looks at step 3 and CAN continue. Tester continues to test, pass a few more steps, and then fails a step, creates/links defect and now CANNOT continue. Tester sets the current step as Blocked. Tester Ends Run.
  - Additional Tester Action: None
  - Script Status: Blocked

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TEST SCRIPT STATUS SCENARIOS - CONTINUED

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- Scenario 7:
  - Tester has defect returned as Ready for Retest on a Failed/Blocked Script and they go into Test Lab and Continue Manual Run and validates the step now passes. Tester is successful and passes that initially failed step and is able to execute and pass the remaining steps of the script.
  - Additional Tester Action: Update the defect with comments and close
  - Script Status: Passed
- Scenario 8:
  - Tester has defect returned as Ready for Retest on a Failed/Blocked Script and they go into Test Lab and Continue Manual Run and validates the step now passes. Tester is successful and passes that initially failed step now fails on a later step of the script. Tester looks and links or creates defect, determines they CAN continue with remaining steps and is able to pass the rest of the steps.
  - Additional Tester Action: Update the retested successfully defect with comments and close
  - Script Status: Failed

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TEST SCRIPT STATUS SCENARIOS - CONTINUED

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- Scenario 9:
  - Tester has defect returned as Ready for Retest on a Failed/Blocked Script and they go into Test Lab and Continue Manual Run and validates the step now passes. Tester is successful and passes that initially failed step now fails on a later step of the script. Tester looks and links or creates defect, determines they CANNOT continue. Tester sets that step as Blocked and ends the run.
  - Additional Tester Action: None
  - Script Status: Blocked

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TIPS TO AVOID CREATING FAST RUNS AND MULTIPLE RUNS BY MISTAKE

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- Fast Runs will occur if the status for a script is changed without running it properly
- Do not Manually change the status of a script on the Execution Grid Screen
- Multiple runs will occur if a test is run partway and then run again instead of continuing the existing run
- Always select Continue Manual Run
- If a Fast Run is created in error, contact the HPQC Team

HOW TO CREATE A CUSTOMER CONNECT DEFECT

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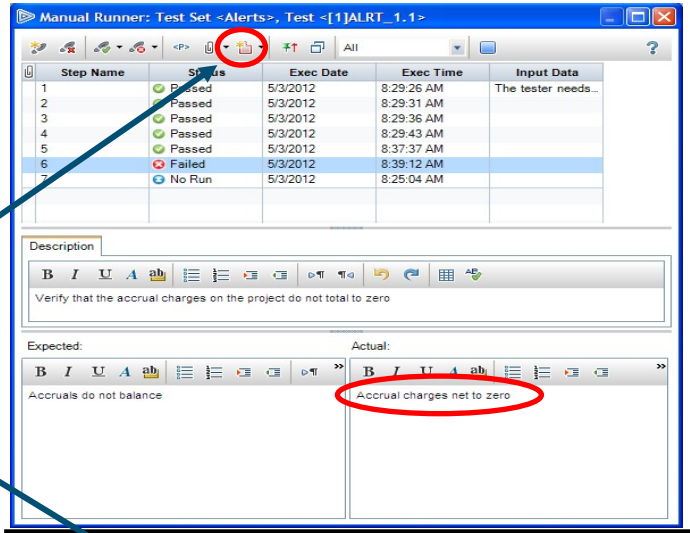
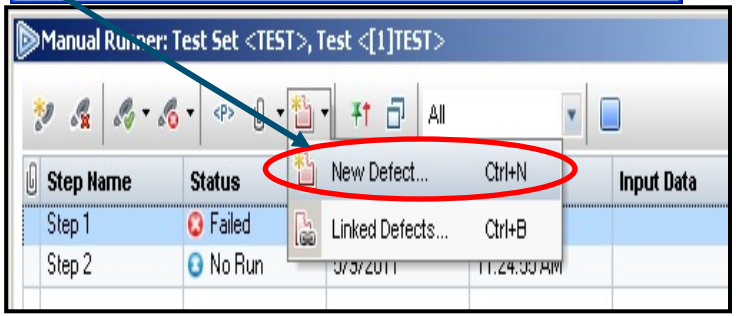
- If a defect is found during execution, the Tester does not need to go to the Defect module to create a new defect. The Tester can actually create the new defect from the Test step/Script

1. Select “Add Defect” dropdown arrow icon

2. Click “New Defect” - This will open up a new window





HOW TO CREATE A CUSTOMER CONNECT DEFECT

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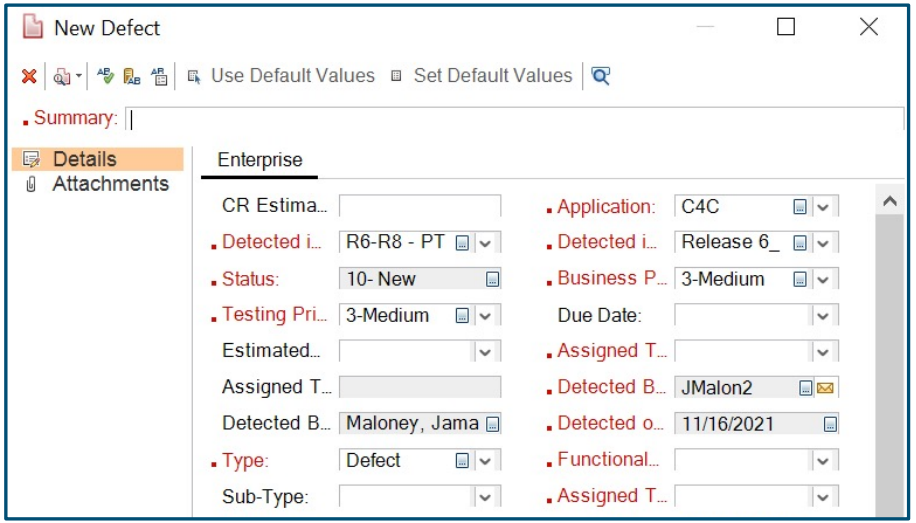
The “Add Defect” screen will appear. Fill out the form and press the “Submit” button

Red labels with an asterisk are required fields at creation

***Summary:** Will appear on defect reports – keep it brief and make it clear to all audiences including the appropriate high level facts (who, what, when, where, how)

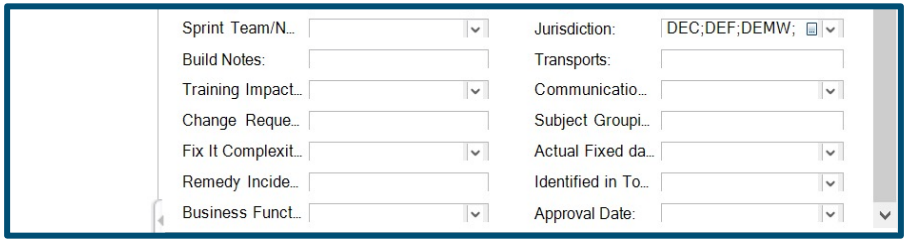
- ***Application**: The application the defect is found in. Choose from dropdown
- ***Detected In Cycle:** What release and phase the defect occurred in. Choose from dropdown
- ***Detected In Release:** What release the defect occurred in. Choose from dropdown
- ***Status:** Defaulted to New and you do not need to modify at creation
- ***Business Priority:** Defaulted to Medium, Please refer to the ***Priority Matrix*** for setting this value. This drives the defect’s impact to the business. *Used for Reporting*. If you are not sure leave as Medium
- ***Testing Priority**: Defaulted to Medium and you do not need to modify at creation.
- ***Assigned To (LAN ID)**: At creation, this is the Fix-it Lead who triages defects. They will reassign as part of the triage
- ***Detected By (LAN ID):** Display only ID of who created the defect
- ***Detected on Date:** Display only date when the defect is created
- ***Type:** Defaulted to Defect (i.e., Defect; Change Request; Work Item (Work item signifies training or change management related tasks that need performed))
- ***Functional Tower:** Tower that owns the script. The tower lead will manage the defects within their tower
- ***Assigned Team:** Team that owns the fix



HOW TO CREATE A DEFECT

***Field that are in **Black** are not required, BUT should be populated

- **Jurisdiction: Defaulted to all jurisdictions. You have the option to select the dropdown and check/ uncheck jurisdictions**
- **Training Impacted?:** Select Training Required, if there are training impacts. The Training team will take this as handoff
- **Communication Required: advising if a communication is required**
- **Change Request Number:** If a change request, enter the KBD number



Tip: You can “Set Default Values” for the dropdowns you use most (e.g., Project) to pre-fill the form for future defects

HOW TO LINK A DEFECT

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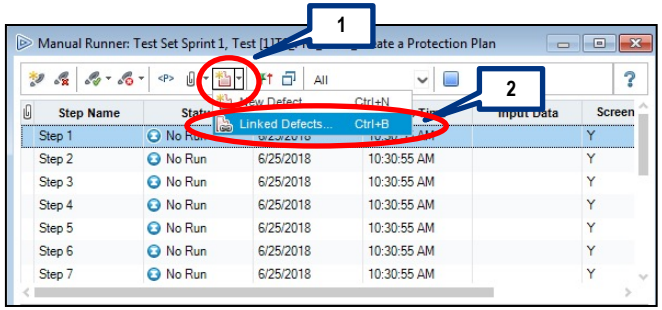
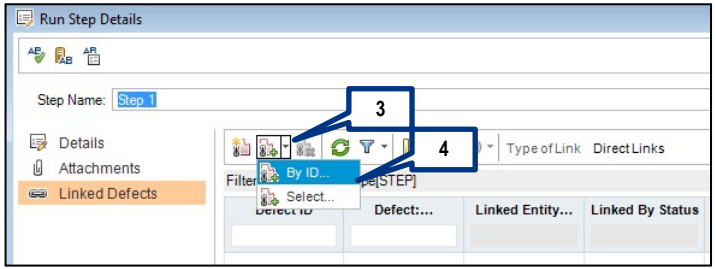
Before creating a defect for the FAILED step, check to see if there is an existing defect for same issue

If there is an existing defect:

1. Click the ‘Defect’ dropdown
2. Click ‘Linked Defects‘
3. Click the ‘Link Existing Defect’ dropdown and click ‘By ID’
4. Enter the Defect ID to link
5. Click 'Link' Button





BUSINESS PRIORITY MATRIX

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- The defect will be defaulted to Medium but upon review by the Test sub lead or Triage lead may be updated to better reflect the impact to the testing teams

- Business Priority will be what is used for Program Leadership reporting purposes and will also drive Exit Criteria

- Note: These are guidelines to help identify the impact of the defect to the project team during testing. They are subject for discussion and are meant to provide a common set of guidelines across all Towers

Defect Business Priority	Break/Fix Definition
Critical (Emergency)	A severe problem that stops a critical daily operational process, major customer or company data corruption, major customer disruption, or serious financial impact or damages that need to be resolved before the next day. Critical issues do not have workarounds.
High	A problem with a critical daily operational process where a temporary workaround has been identified or a non-critical operational process where no workaround has been identified.
Medium	A problem with a non-critical daily operational process where a workaround has been identified and approved by a Functional Lead.
Low	A problem with a non-critical daily operational process that does not require any workaround.

TESTING PRIORITY MATRIX

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- **Testing Priority –** How impactful is this defect in proceeding with a testing effort that stabilizes our solution and minimizes major impacts?

Testing Priority	Definition
Critical	Testing cannot continue until defect is fixed. Blocks >50% scripts planned for execution for the day. Goal is to provide updates every **4 hours** from the Fix-it Lead to the Test Lead and Program leadership.
High	Testing can continue but only on part of the system. The defect stops multiple test scripts and impacts a major functionality. Testing of the functionality cannot continue until defect is fixed and there is no work around. Considerable Testing Impact – more than 25% and less than 50% of the test scripts planned for that day are blocked. Goal is to provide updates **every day** from the Fix-it Lead to the Test Lead.
Medium	Does not allow users to perform a function or process through normal course of business but has a reasonable workaround with minor awkwardness in the application. This does not prevent testing from proceeding.
Low	The defect has no impact on the testing to achieve successful completion. The defect is cosmetic in nature or a “nice-to-have” feature not currently available.

DEPENDENT PARTNER IDENTIFIED DEFECTS

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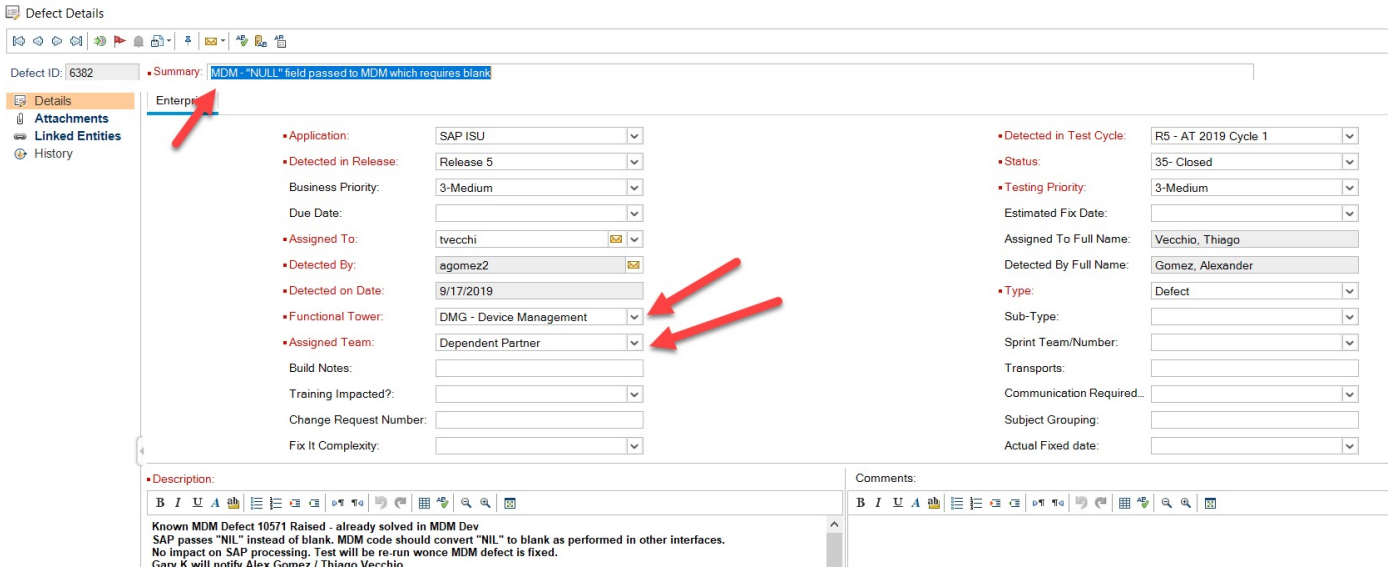
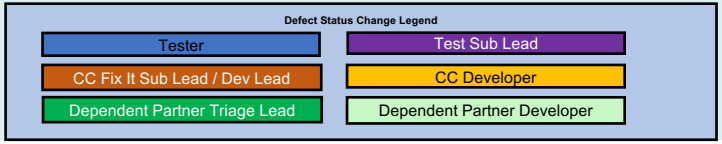
- Defects identified by or for a Dependent Partner in Customer Connect Functionality should be created by selecting the testing **Functional Tower** field
- The **Assigned Team** field will be “Dependent Partner”
- The name of the specific dependent partner will be placed in the front of **Summary** section. (see example below)



DEFECT LIFECYCLE



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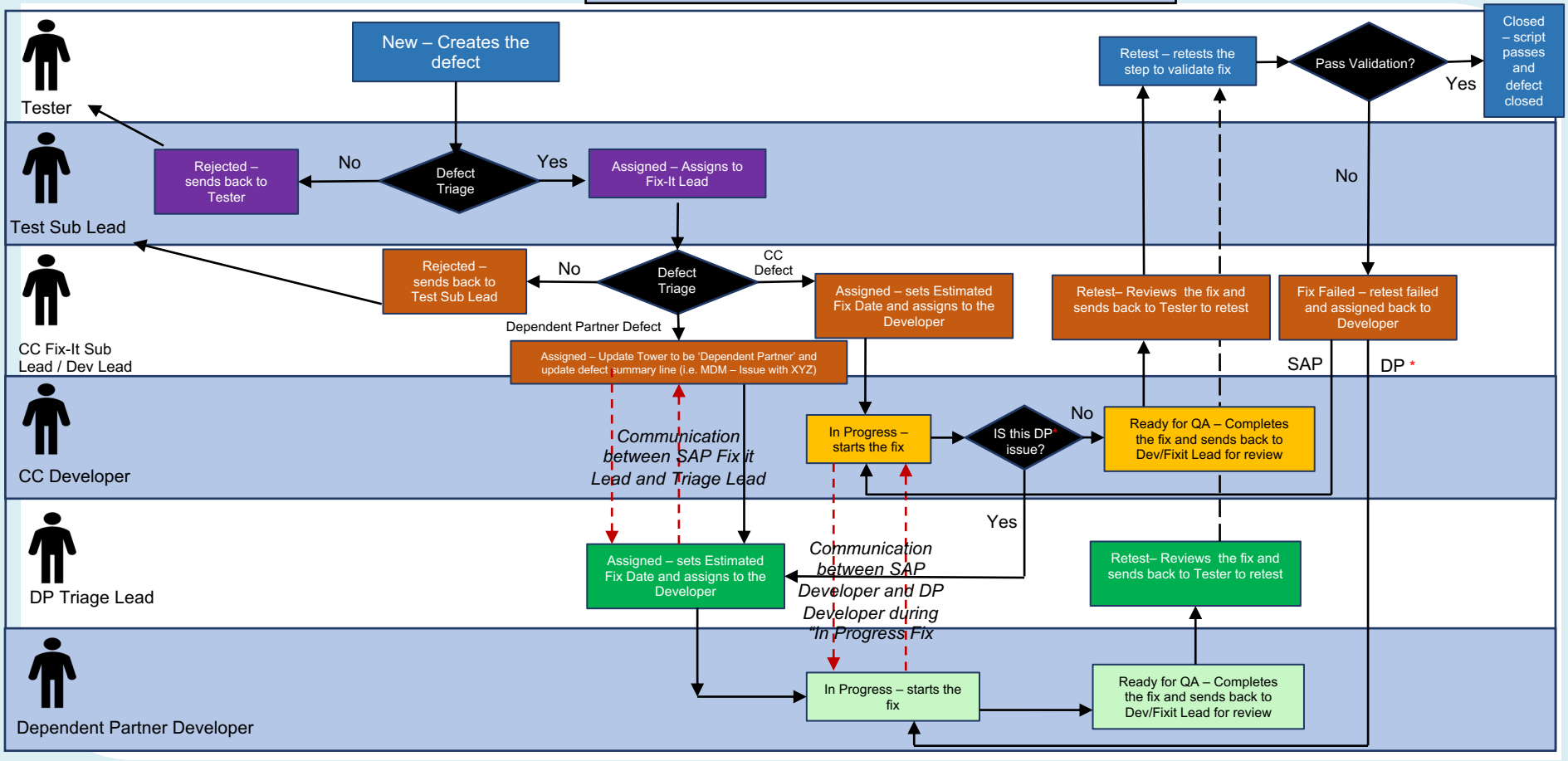

*DP – Dependent Partner

DEFECT LIFECYCLE

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- Defect management tracks and manages the discovery, resolution, and retest of system defects identified during test execution
- Refer to the Defect Management Process document on SharePoint – including using HPQC and the defect status workflow

Role	Defect Status	Definition
Tester → Test Sub Lead	10 New	Default
Fix it Sub-Lead → CC Dev Tower Lead/Dependent Partner Triage Lead	15 Assigned	Confirms / updates testing priority and business severity and assigns as part of triage
Developer	20 In Progress	Developer starts Fix
Developer → CC Fix-it Sub-Lead / DP Triage Lead	22 Ready for QA	Defect is ready for transport release to QA. Developer assigns to Fix it/Dev Tower Lead for review before migrated to QA.
CC Fix-it Sub-Lead / DP Triage Lead→ Tester	25 Retest	Assign to original tester (detected by) for retest
Tester → Fix It Sub-Lead	30 Fix/Failed	Retest failed , assign back to triage
Fix It Lead → Tester	40 Rejected	Rejected (test script error, data, etc.) and assign back to tester
Tester	35 Closed	Test passed or rejection agreed to - Close defect

- New defects will be created with default Business Priority and Testing Severity = Medium, Triage team will review and update defect priority/severity

BEST PRACTICES

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- Defect Comments should be added when there is any update in the defect
- Screenshots and detailed description should be attached to clearly explain the defect
- For every Passed step that indicates a screenshot is required (a Y is in the screenshot needed column), ensure an attachment is added at the script/ run/ or step level
- Ensure to link Active defects to Blocked/ Failed test scripts (Active: New; Assigned; In Progress; Ready for QA; Fix/ Failed; On Hold; Retest)
- Continue the test for all steps if possible (some failures may not impact the ability to complete the remaining test steps)

- Examples of common causes of System Test defects could be:
  - Business requirements not met by the system
  - Configuration not working per the initial design
  - A technical component is not working properly
  - Performance problems occurring during testing
  - Reports or queries produce
  - information that is inconsistent with data in the system
  - Reports or queries do not match approved design layouts
  - Security does not work as expected in the test

VALIDATING REQUIREMENTS ARE LINKED

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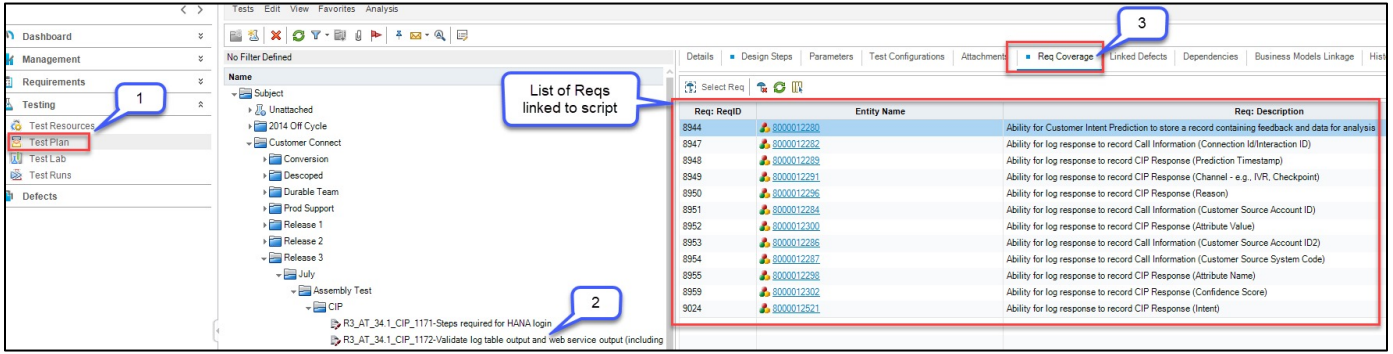
1. Navigate to Test Plan

2. Go to the location of your test scripts and click on the test script

3. Click on the *Req Coverage* tab to view requirements linked to the script



OTHER LINKS

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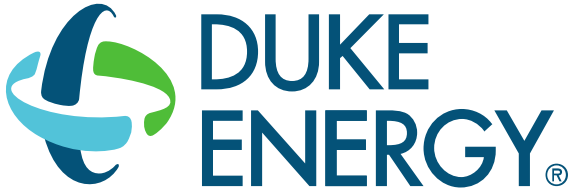
- **QC URL**
  - https://hpqualitycenteralm.duke-energy.com/qcbin/start_a.jsp

- **Quality Center User Guides**
  - https://team.duke-energy.com/sites/CIS/testing/Test/Quality%20Center%20Documents/Quality%20Center%20User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