



Customer Connect

Simplify. Strengthen. Advance.




Customer Connect HPQC User Guide

Revised November 2021

- QC Overview
- QC Folder Structure
- Test Lab Module
 - Test Scripts Execution
 - Test Script Status Scenarios
 - How to avoid multiple test runs
- Defect Module
 - Create Defect
 - Defect Management
- Best Practices
- Other Links

- 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

- 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



Application Lifecycle Management
Quality Center

Name:

Password:

☐ Automatically log in to my last domain and project on this machine

Authenticate

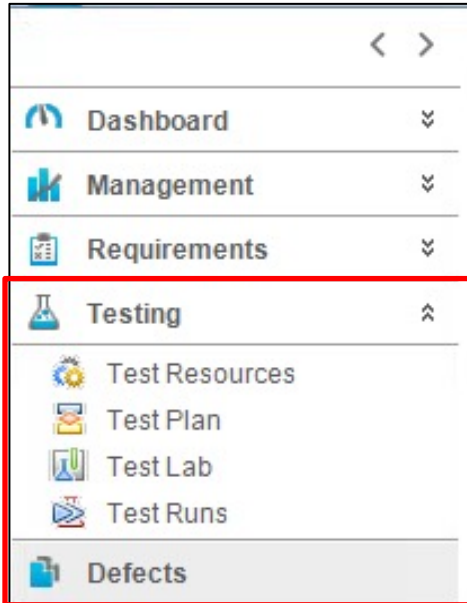
Domain:

Project:

Login

QC Modules are displayed in the left navigation panel

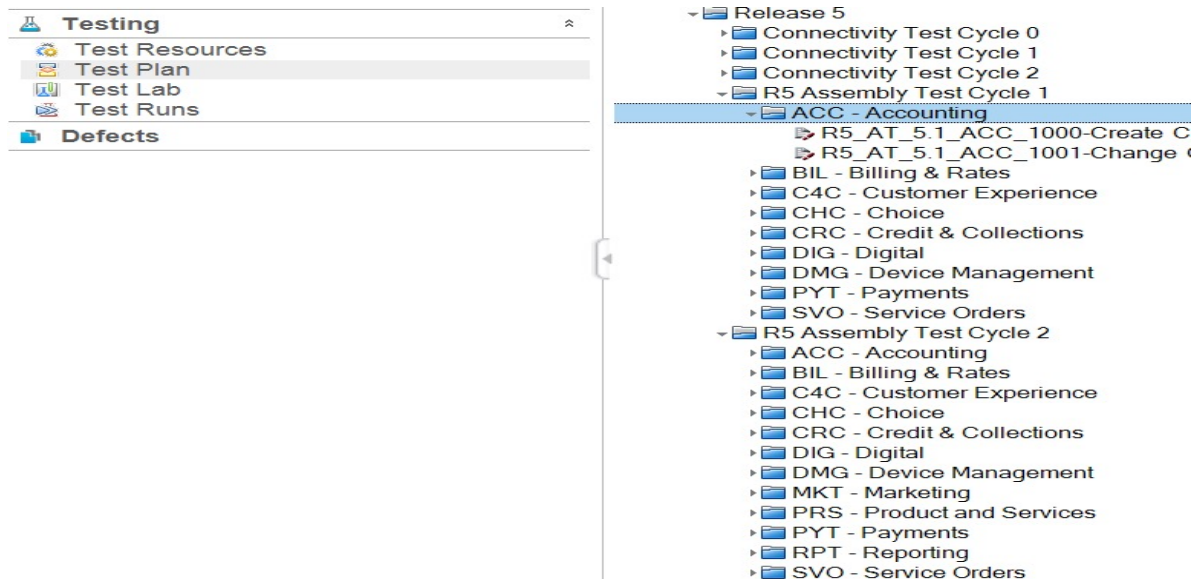
The modules that we will cover include:



- 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 Test Plan Folder Structure:

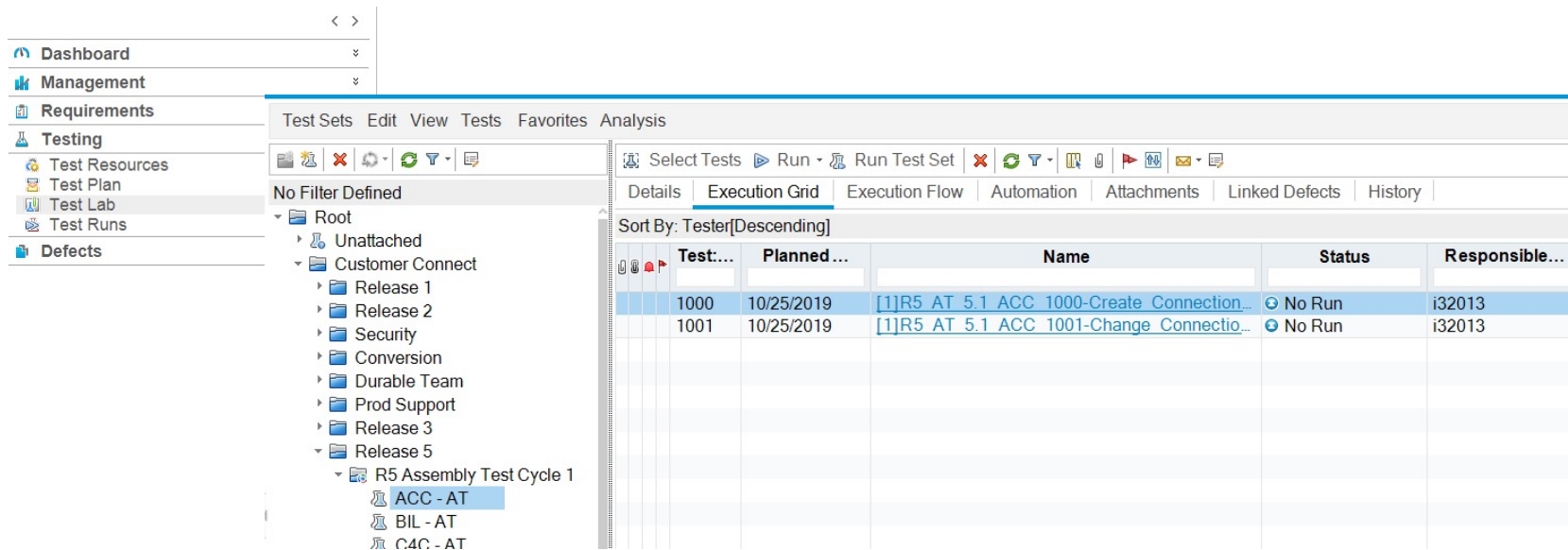
(Note: This is where scripts are uploaded into HPQC and is considered the master script copy from Execution phase onward. Changes must be made here once)



QC FOLDER STRUCTURE

Below is an example of the QC Test Lab Folder Structure

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



The screenshot displays the QC Test Lab interface. On the left, a navigation pane shows the folder structure under 'Testing' > 'Test Lab'. The main area shows a table of test results, sorted by 'Tester[Descending]'. The table has columns for 'Test...', 'Planned...', 'Name', 'Status', and 'Responsible...'. Two test entries are visible, both with a status of 'No Run' and assigned to 'i32013'.

Navigation Pane:

- Dashboard
- Management
- Requirements
- Testing
 - Test Resources
 - Test Plan
 - Test Lab
 - Test Runs
- Defects

Main Area:

Test Sets Edit View Tests Favorites Analysis

No Filter Defined

Root

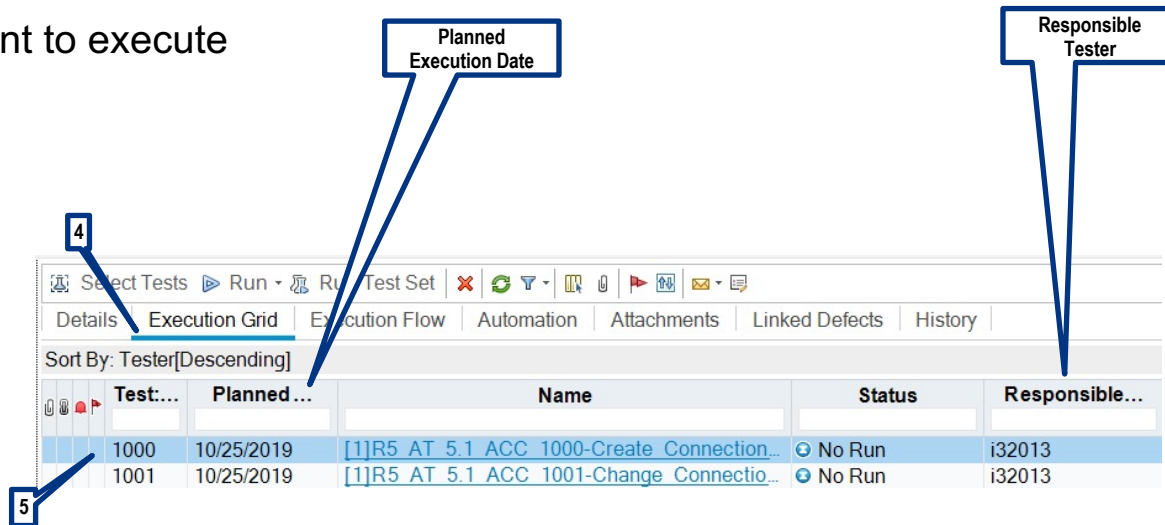
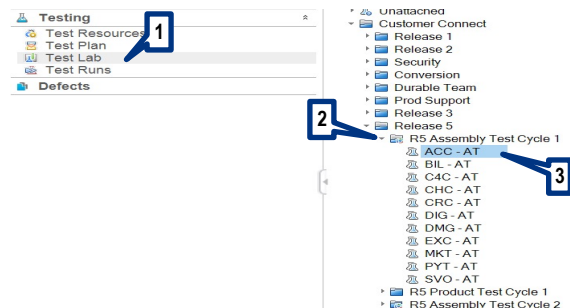
- Unattached
- Customer Connect
 - Release 1
 - Release 2
 - Security
 - Conversion
 - Durable Team
 - Prod Support
 - Release 3
 - Release 5
 - R5 Assembly Test Cycle 1
 - ACC - AT
 - BIL - AT
 - C4C - AT

Sort By: Tester[Descending]

Test...	Planned...	Name	Status	Responsible...
1000	10/25/2019	[1]R5 AT 5.1 ACC 1000-Create Connection...	No Run	i32013
1001	10/25/2019	[1]R5 AT 5.1 ACC 1001-Change Connectio...	No Run	i32013

HOW TO EXECUTE A TEST

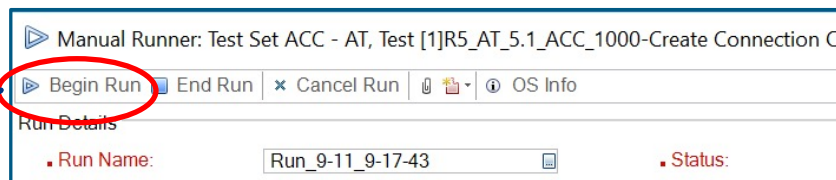
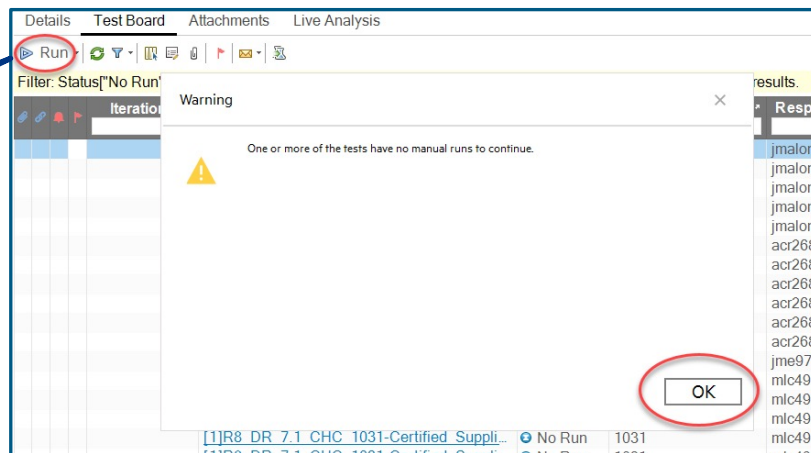
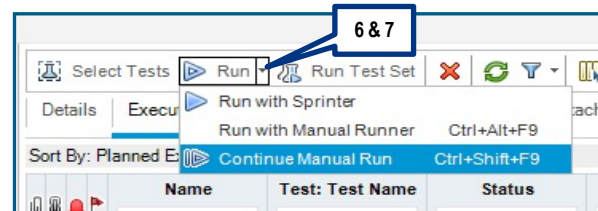
1. Select Test Lab
2. Expand the folders to the Release and tower you will be testing
3. Choose the test set that you want to run (i.e. ACC – AT)
4. View the Execution Grid tab (This is where you can enter your name in the Responsible Tester field and see what Scripts you have to run for each week Planned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



Test...	Planned ...	Name	Status	Responsible...
1000	10/25/2019	[1]R5 AT 5.1 ACC 1000-Create Connection...	No Run	i32013
1001	10/25/2019	[1]R5 AT 5.1 ACC 1001-Change Connectio...	No Run	i32013

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



10. Select the first step in the test script

- Review the step details described in the “Description” section
- Review the Input Data and Screenshots required fields
- Review the “Expected” results for the step

Manual Runner: Test Set ACC - AT, Test [1]R5_AT_5.1_ACC_1000-Create Connection Object to pop

Step Name	Status	Exec Date	Exec Time	Input Data	Screens...	Svstem
1	No Run	9/11/2019	9:23:58 AM		Y	SAP ISU
2	No Run	9/11/2019	9:23:58 AM	T-Code ES...	Y	SAP ISU
3	No Run	9/11/2019	9:23:58 AM		Y	SAP ISU
4	No Run	9/11/2019	9:23:58 AM	Street, Ho...	Y	SAP ISU
5	No Run	9/11/2019	9:23:58 AM		Y	SAP ISU
6	No Run	9/11/2019	9:23:58 AM	Correct ad...	Y	SAP ISU
7	No Run	9/11/2019	9:23:58 AM	Apartment...	Y	SAP ISU
8	No Run	9/11/2019	9:23:58 AM		Y	SAP ISU
9	No Run	9/11/2019	9:23:58 AM		Y	SAP ISU
10	No Run	9/11/2019	9:23:58 AM		Y	SAP ISU

Description

Logon to SAP-ISU

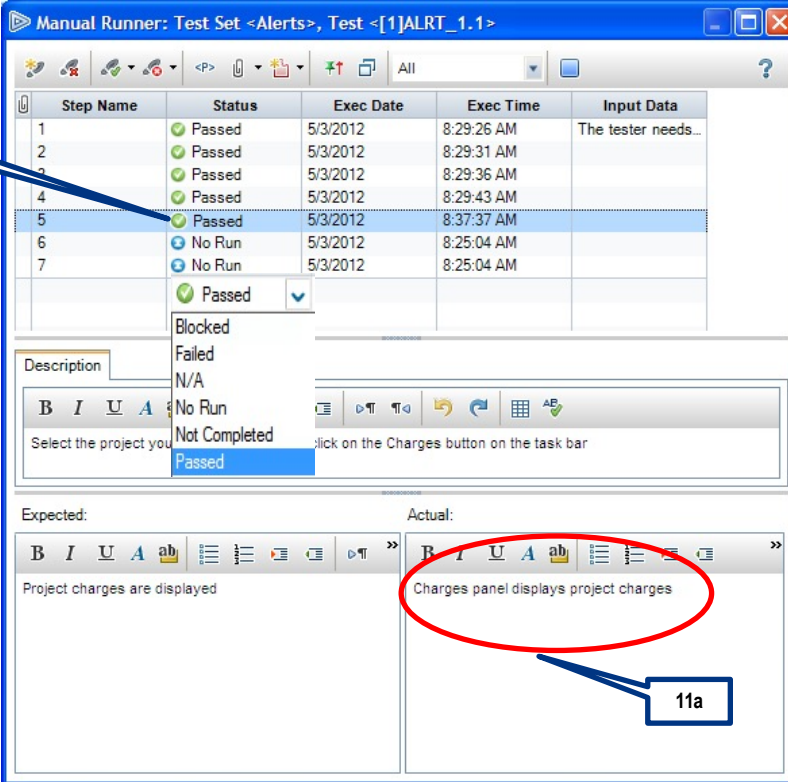
Expected:

Successful logon

Actual:

11. Execute the test step

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



Step Name	Status	Exec Date	Exec Time	Input Data
1	Passed	5/3/2012	8:29:26 AM	The tester needs...
2	Passed	5/3/2012	8:29:31 AM	
3	Passed	5/3/2012	8:29:36 AM	
4	Passed	5/3/2012	8:29:43 AM	
5	Passed	5/3/2012	8:37:37 AM	
6	No Run	5/3/2012	8:25:04 AM	
7	No Run	5/3/2012	8:25:04 AM	

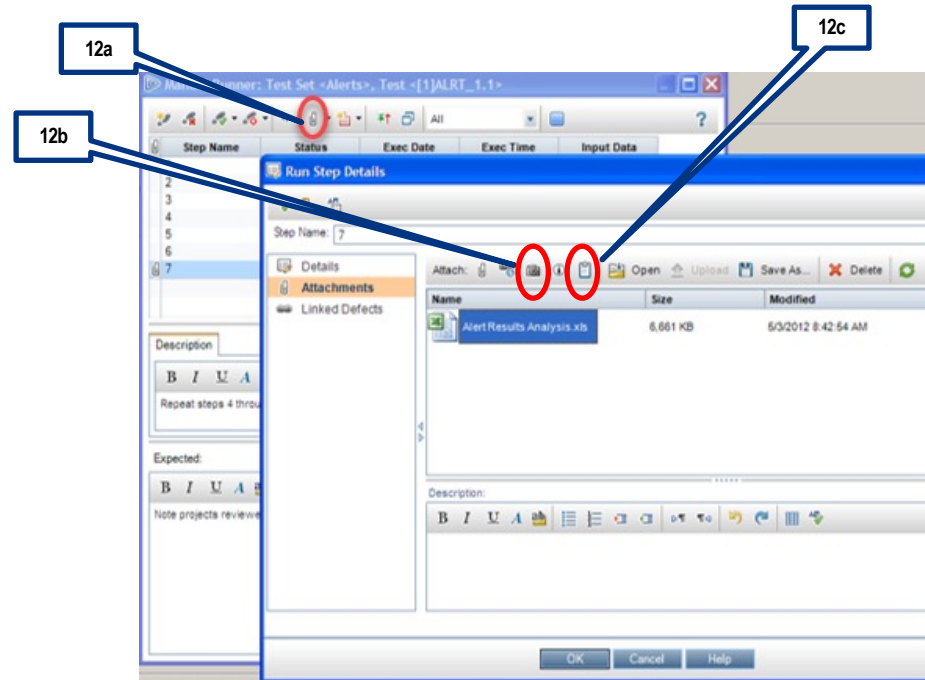
Expected:

Actual:

Charges panel displays project charges

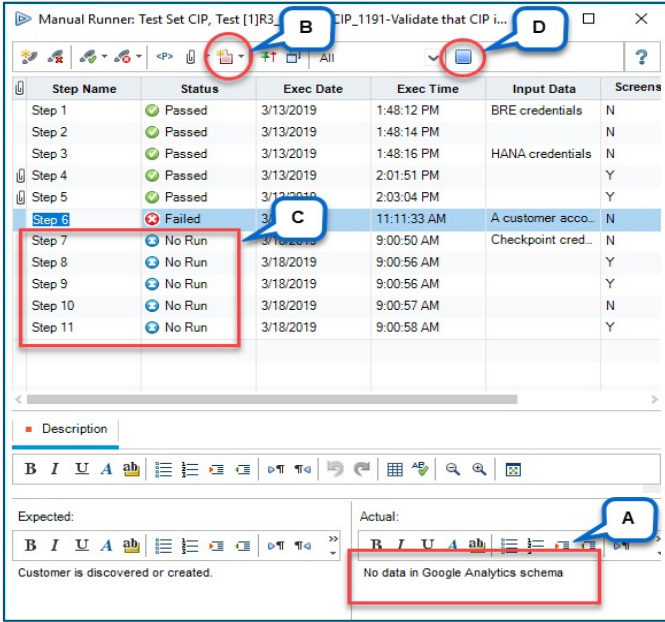
HOW TO EXECUTE A TEST

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



13. If a step is **FAILED** :

- Document the Actual result explain the reason for the failure
- Create and/or Link existing defect (The Business Priority of the linked defect must be Medium/ Low)
- If possible, continue to test all steps after the defect has been found
- After executing the remaining steps, click End Run



The screenshot shows the 'Manual Runner: Test Set CIP, Test [1]R3' window. The table below lists the test steps and their execution results. Step 6 is highlighted in blue and marked as 'Failed'. A red box highlights the 'Actual' result for Step 6, which is 'No data in Google Analytics schema'. A blue callout 'A' points to this text. Another blue callout 'C' points to the 'Failed' status of Step 6. A blue callout 'B' points to the 'End Run' button in the top right corner. A blue callout 'D' points to the 'Test Set CIP, Test [1]R3' title bar.

Step Name	Status	Exec Date	Exec Time	Input Data	Screens
Step 1	Passed	3/13/2019	1:48:12 PM	BRE credentials	N
Step 2	Passed	3/13/2019	1:48:14 PM		N
Step 3	Passed	3/13/2019	1:48:16 PM	HANA credentials	N
Step 4	Passed	3/13/2019	2:01:51 PM		Y
Step 5	Passed	3/13/2019	2:03:04 PM		Y
Step 6	Failed	3/13/2019	11:11:33 AM	A customer acco...	N
Step 7	No Run	3/18/2019	9:00:50 AM	Checkpoint cred...	N
Step 8	No Run	3/18/2019	9:00:56 AM		Y
Step 9	No Run	3/18/2019	9:00:56 AM		Y
Step 10	No Run	3/18/2019	9:00:57 AM		N
Step 11	No Run	3/18/2019	9:00:58 AM		Y

Description

Expected: Customer is discovered or created.

Actual: No data in Google Analytics schema

HOW TO EXECUTE A TEST

14. If a step is **BLOCKED** :

- Document the Actual result explain the reason for the failure
- Create and/or Link an existing defect (The Business Priority of the linked defect must be Critical/ High)
- 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

14b

12c

Manual Runner: test Set PRS - PI, test [2]R5..._1.3.1.3.9_C4C_1460-Update credit card expiration d

Step Name	Status	Exec Date	Exec Time	Input Data	Screens...	System
Step 1	<input checked="" type="checkbox"/> Blocked	10/6/2021	9:47:14 AM	NA	N	C4C
Step 2	<input type="checkbox"/> No Run	10/6/2021	9:46:46 AM	There sho...	N	C4C
Step 3	<input type="checkbox"/> No Run	10/6/2021	9:46:46 AM	N/A	N	C4C
Step 4	<input type="checkbox"/> No Run	10/6/2021	9:46:46 AM	NA	N	C4C
Step 5	<input type="checkbox"/> No Run	10/6/2021	9:46:46 AM	NA	N	C4C
Step 6	<input type="checkbox"/> No Run	10/6/2021	9:46:46 AM	N/A	N	C4C
Step 7	<input type="checkbox"/> No Run	10/6/2021	9:46:46 AM	N/A	Y	C4C

Description

Expected:

User should be able to successfully log in.

Actual:

Defect 33799 - C4C | when clicking "update cc" this website appears

14a

- 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

- 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

- 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

- 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

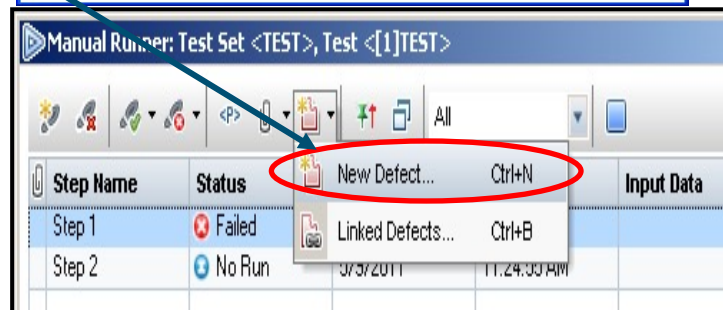
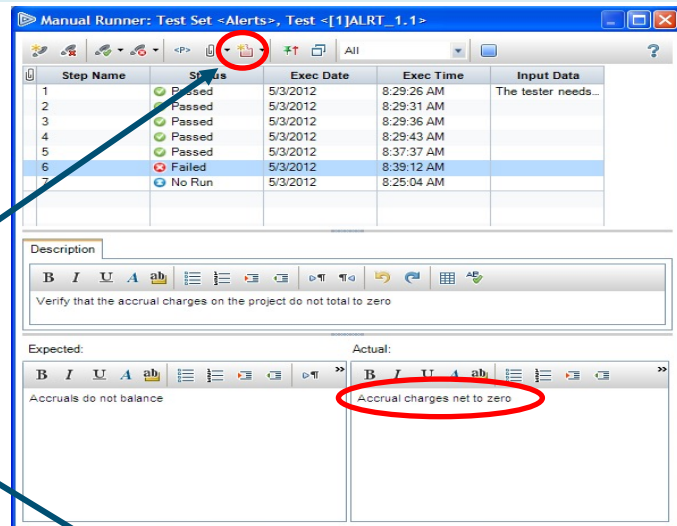
- Scenario 9:
 - Tester has defect returned as Ready for Retest on a Failed/Blocked Script and they go into Test Lab and Continue Manual Run and validates the step now passes. Tester is successful and passes that initially failed step now fails on a later step of the script. Tester looks and links or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

- 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

- 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



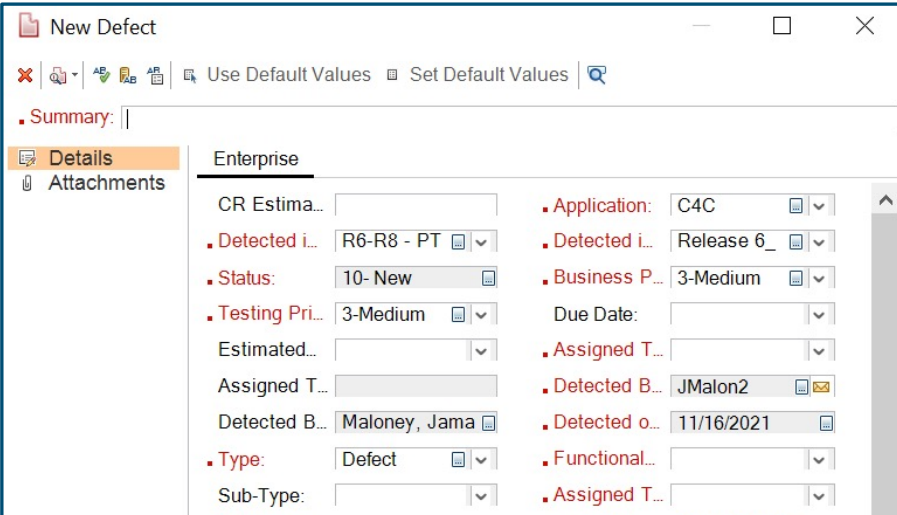
HOW TO CREATE A CUSTOMER CONNECT DEFECT

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



New Defect

✕ | 📄 | 📁 | 📧 | 📧 | Use Default Values | Set Default Values | 🔍

Summary: |

Details | Attachments

Enterprise

CR Estima... | Application: C4C | Detected i...: R6-R8 - PT | Status: 10- New | Testing Pri...: 3-Medium | Estimated... | Assigned T... | Detected B...: Maloney, Jama | Type: Defect | Sub-Type: |

Detected i...: Release 6_ | Business P...: 3-Medium | Due Date: | Assigned T... | Detected B...: JMallon2 | Detected o...: 11/16/2021 | Functional... | Assigned T...

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

Sprint Team/N...	<input type="text"/>	Jurisdiction:	<input type="text" value="DEC;DEF;DEMW;"/>
Build Notes:	<input type="text"/>	Transports:	<input type="text"/>
Training Impact...	<input type="text"/>	Communicatio...	<input type="text"/>
Change Reque...	<input type="text"/>	Subject Groupi...	<input type="text"/>
Fix It Complexit...	<input type="text"/>	Actual Fixed da...	<input type="text"/>
Remedy Incide...	<input type="text"/>	Identified in To...	<input type="text"/>
Business Funct...	<input type="text"/>	Approval Date:	<input type="text"/>

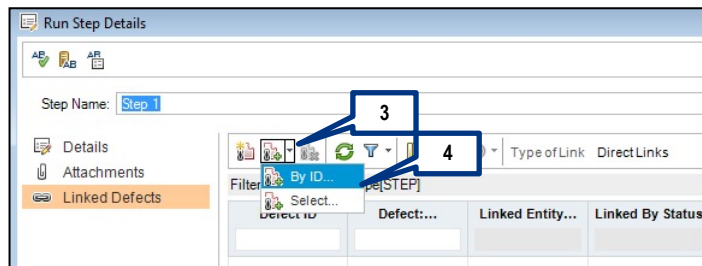
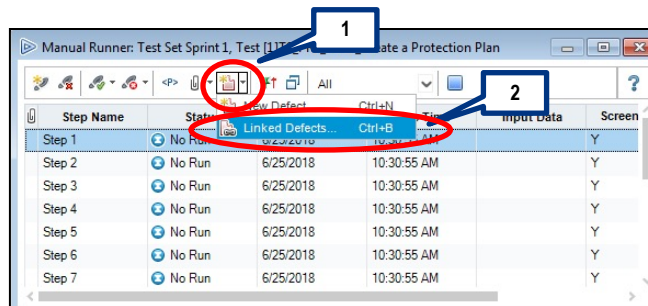
Tip: You can "Set Default Values" for the dropdowns you use most (e.g., Project) to pre-fill the form for future defects

HOW TO LINK A DEFECT

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

- 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)	<p>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.</p> <p>Critical issues do not have workarounds.</p>
High	<p>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.</p>
Medium	<p>A problem with a non-critical daily operational process where a workaround has been identified and approved by a Functional Lead.</p>
Low	<p>A problem with a non-critical daily operational process that does not require any workaround.</p>

- **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	<p>Testing cannot continue until defect is fixed. Blocks >50% scripts planned for execution for the day.</p> <p>Goal is to provide updates every 4 hours from the Fix-it Lead to the Test Lead and Program leadership.</p>
High	<p>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.</p> <p>Goal is to provide updates every day from the Fix-it Lead to the Test Lead.</p>
Medium	<p>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.</p>
Low	<p>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.</p>

DEPENDENT PARTNER IDENTIFIED DEFECTS

- 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 Details

Defect ID: 6382

Summary: MDM "NULL" field passed to MDM which requires blank

Enter

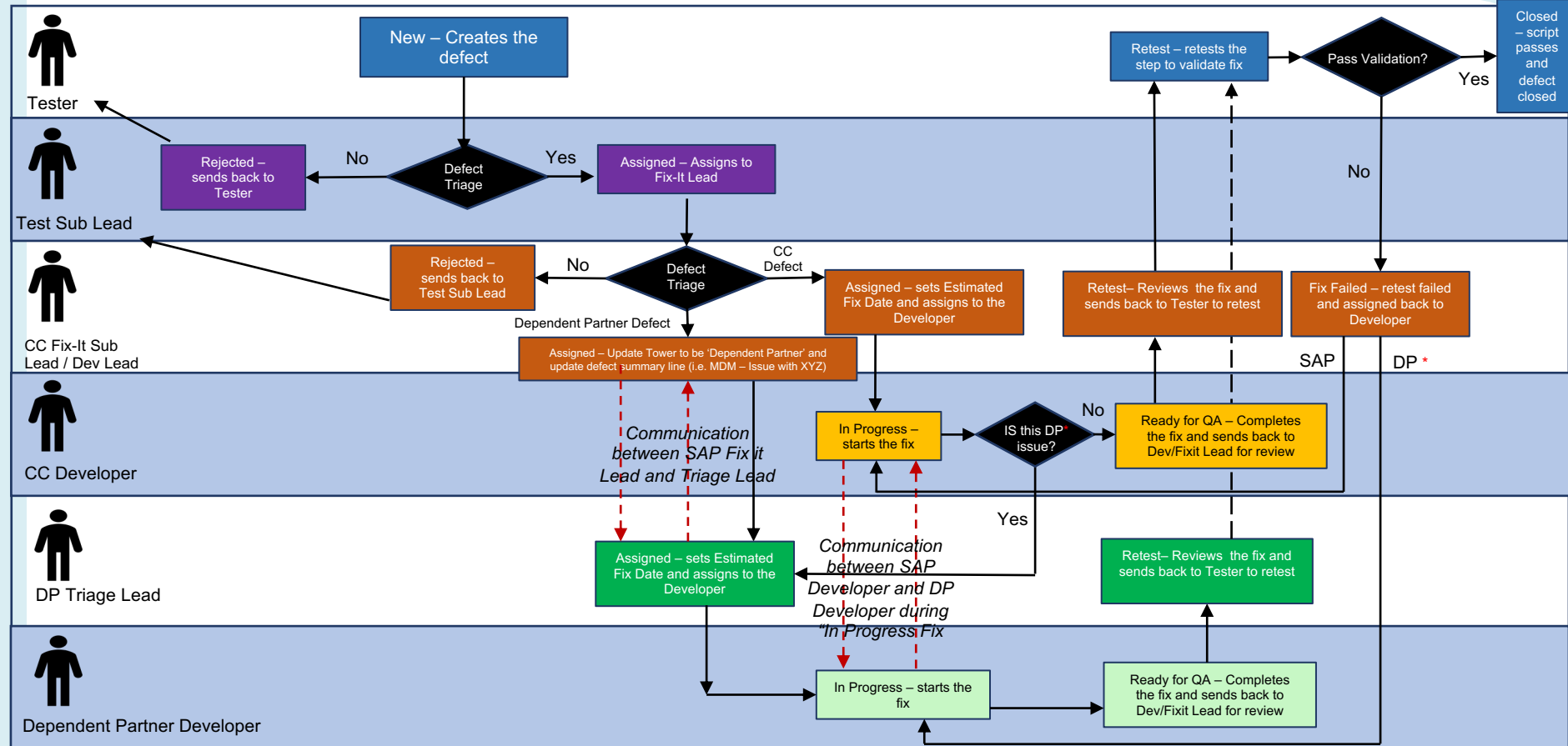
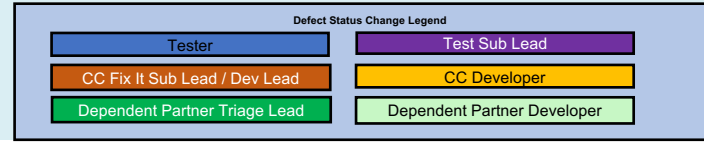
Application:	SAP ISU	Detected in Test Cycle:	R5 - AT 2019 Cycle 1
Detected in Release:	Release 5	Status:	35- Closed
Business Priority:	3-Medium	Testing Priority:	3-Medium
Due Date:		Estimated Fix Date:	
Assigned To:	tvecchi	Assigned To Full Name:	Vecchio, Thiago
Detected By:	agomez2	Detected By Full Name:	Gomez, Alexander
Detected on Date:	9/17/2019	Type:	Defect
Functional Tower:	DMG - Device Management	Sub-Type:	
Assigned Team:	Dependent Partner	Sprint Team/Number:	
Build Notes:		Transports:	
Training Impacted?:		Communication Required:	
Change Request Number:		Subject Grouping:	
Fix It Complexity:		Actual Fixed date:	

Description:

Known MDM Defect 10571 Raised - already solved in MDM Dev
SAP passes "NIL" instead of blank. MDM code should convert "NIL" to blank as performed in other interfaces.
No impact on SAP processing. Test will be re-run wonce MDM defect is fixed.
Garu K will notify Alex Gomez / Thiago Vecchio

Comments:

DEFECT LIFECYCLE



*DP – Dependent Partner

- 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

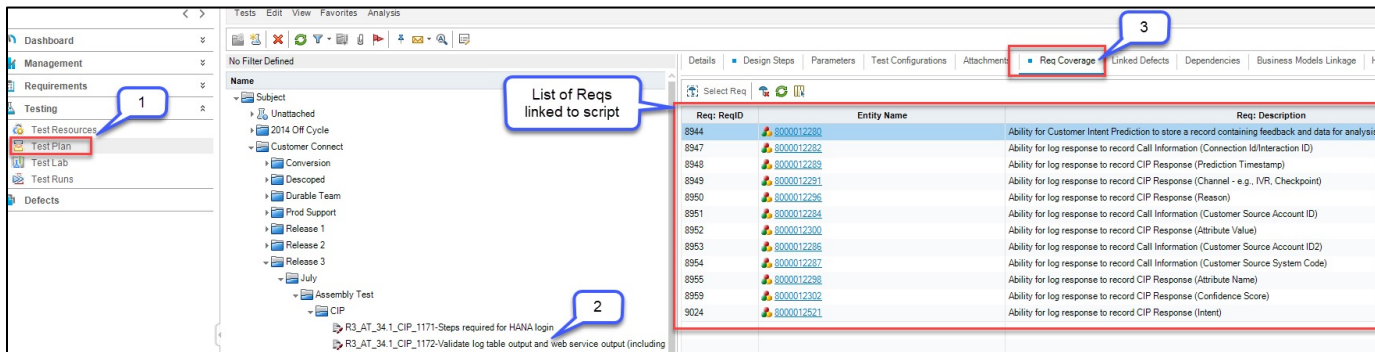
- New defects will be created with default Business Priority and Testing Severity = Medium, Triage team will review and update defect priority/severity

- 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

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



The screenshot displays the Customer Connect interface. On the left, the 'Testing' section is expanded, and 'Test Plan' is selected (Callout 1). The main pane shows a tree view of test plans, with 'R3_AT_34_1_CIP_1172-Validate log table output and web service output (including' selected (Callout 2). The right pane shows the 'Req Coverage' tab, which displays a table of requirements linked to the selected test script.

Req: ReqID	Entity Name	Req: Description
8944	0000012280	Ability for Customer Intent Prediction to store a record containing feedback and data for analysis
8947	0000012282	Ability for log response to record Call Information (Connection Id/Interaction ID)
8948	0000012289	Ability for log response to record CIP Response (Prediction Timestamp)
8949	0000012291	Ability for log response to record CIP Response (Channel - e.g., IVR, Checkpoint)
8950	0000012296	Ability for log response to record CIP Response (Reason)
8951	0000012284	Ability for log response to record Call Information (Customer Source Account ID)
8952	0000012300	Ability for log response to record CIP Response (Attribute Value)
8953	0000012286	Ability for log response to record Call Information (Customer Source Account ID2)
8954	0000012287	Ability for log response to record Call Information (Customer Source System Code)
8955	0000012298	Ability for log response to record CIP Response (Attribute Name)
8959	0000012302	Ability for log response to record CIP Response (Confidence Score)
9024	0000012521	Ability for log response to record CIP Response (Intent)

- **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>

