

Rally Connector to Micro Focus ALM/Quality Center

Walkthrough for Test Cases and Test Runs

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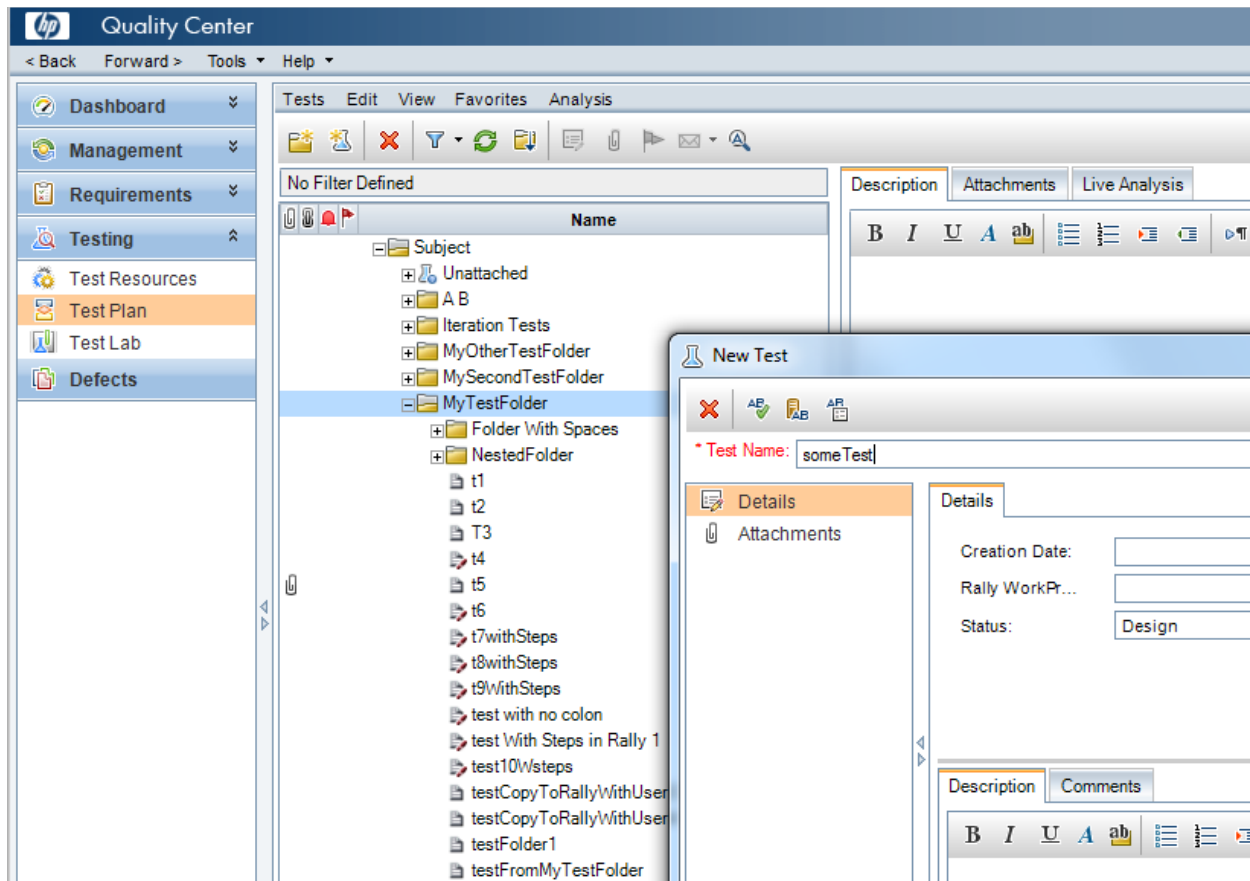
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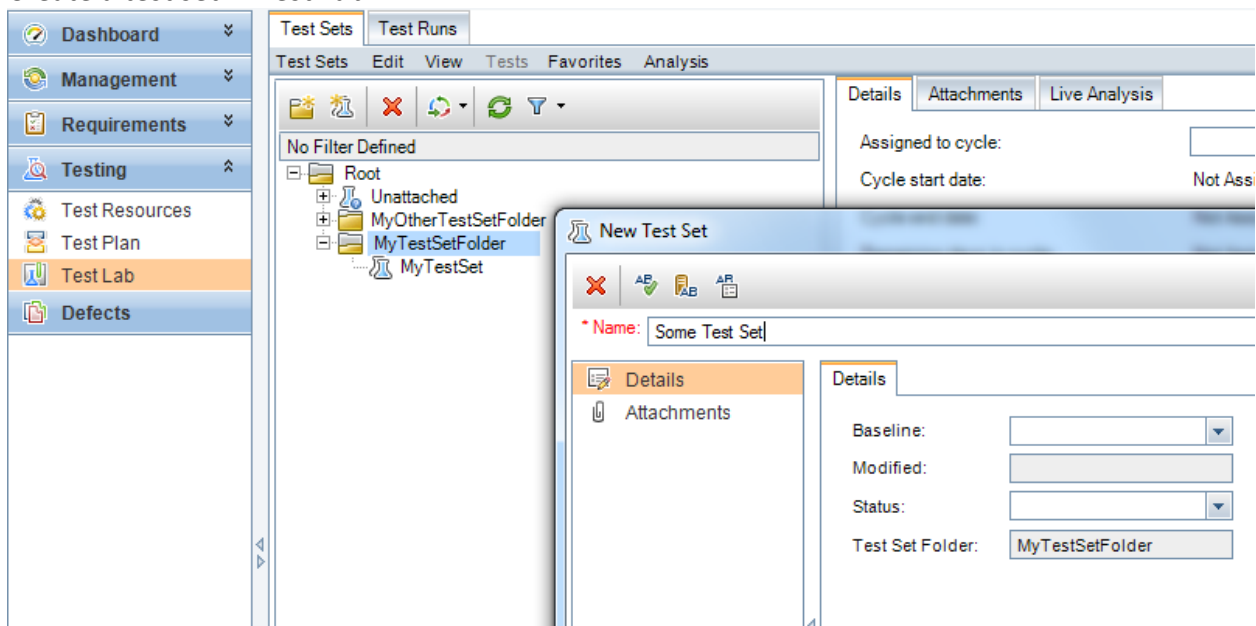
November, 202021

Creating Test Runs in Micro Focus ALM/Quality Center

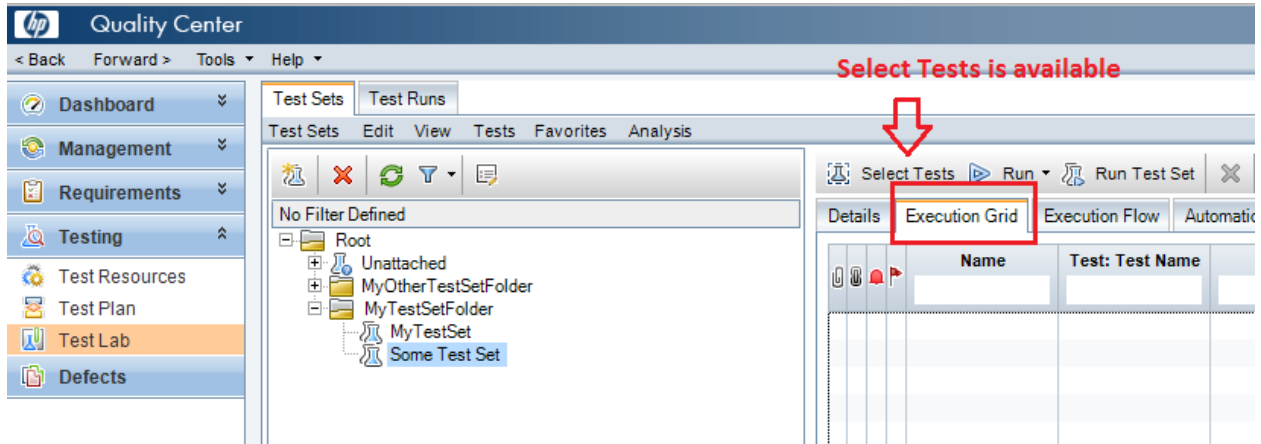
1. Create a test in Test Plan.



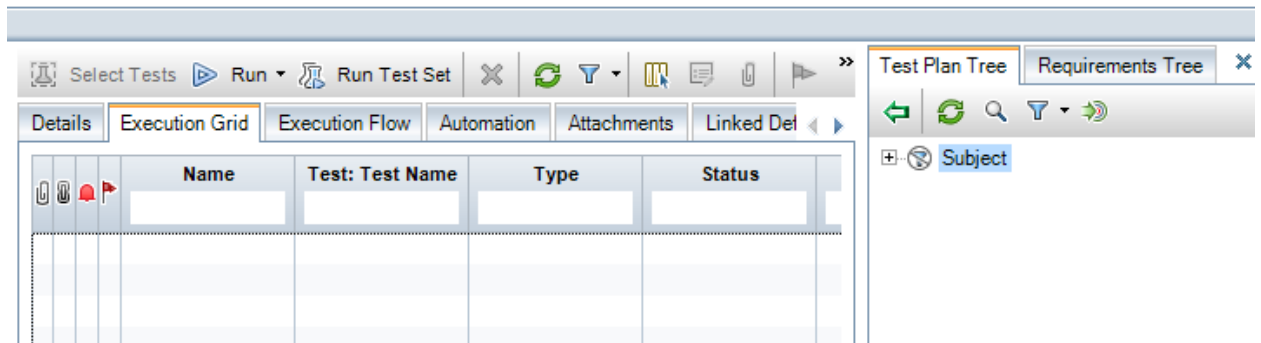
2. Create a test set in Test Lab.



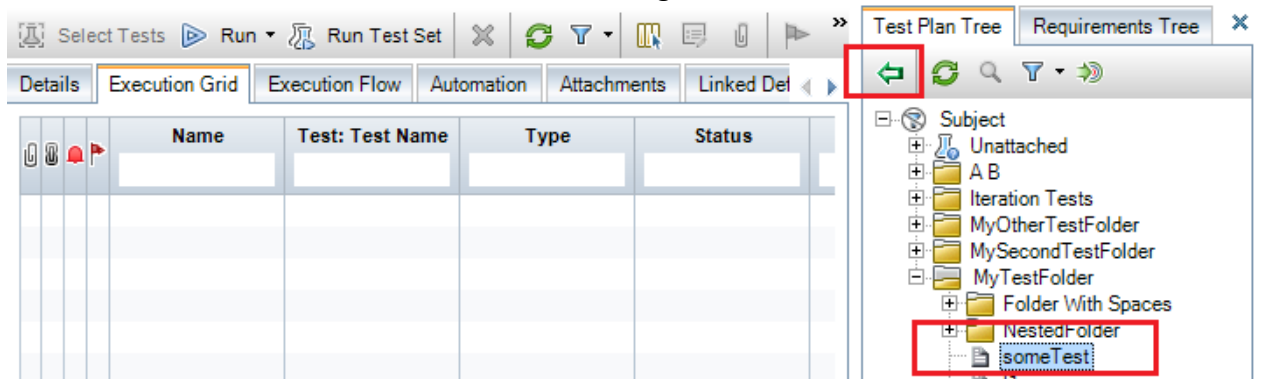
3. Go to the **Execution Grid** tab.



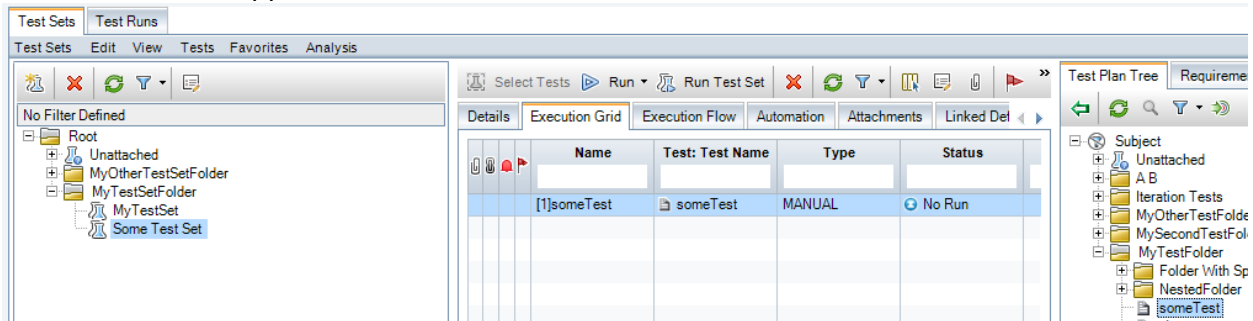
Select **Select Tests**. The Test Plan Tree is now available.



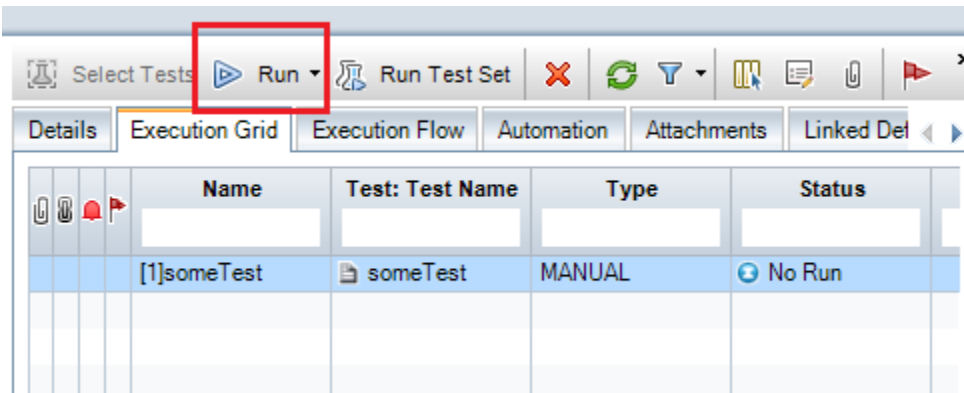
4. Select the test from **Test Plan Tree** and select the green arrow icon to create a Test Instance.



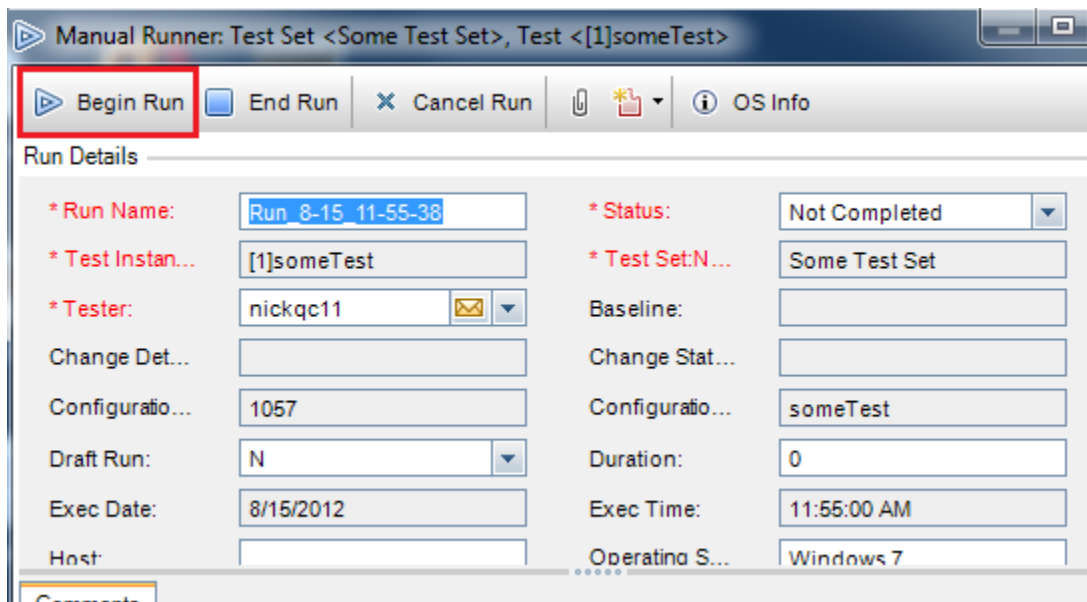
The Test Instance appears in the **Execution Grid** tab:



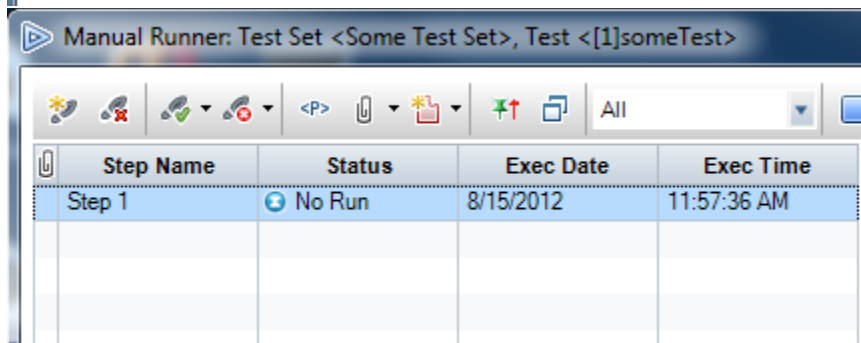
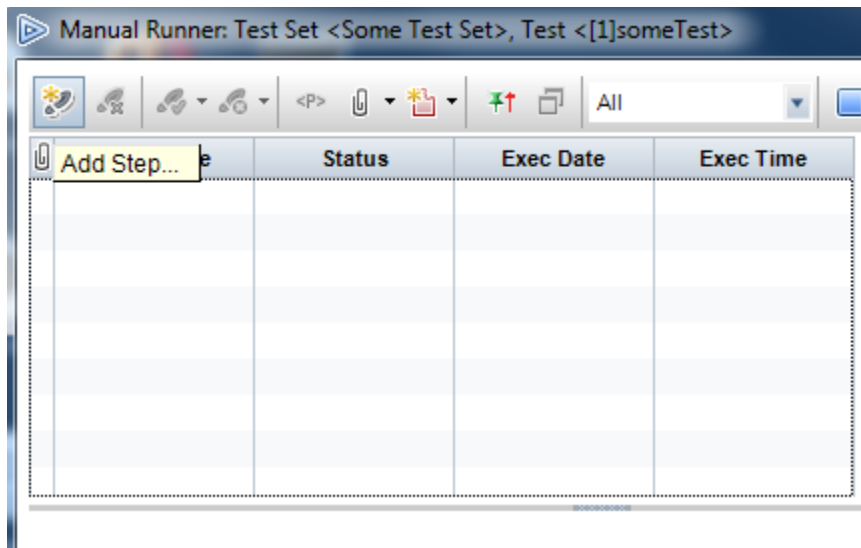
5. Select **Run**.



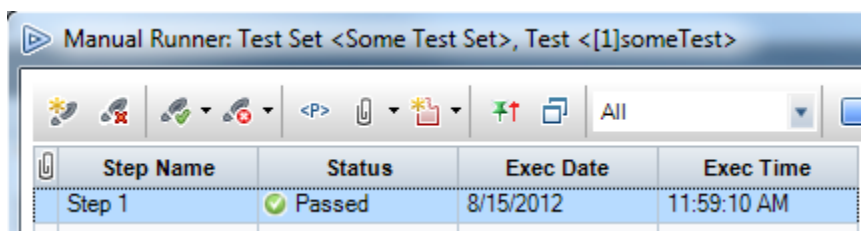
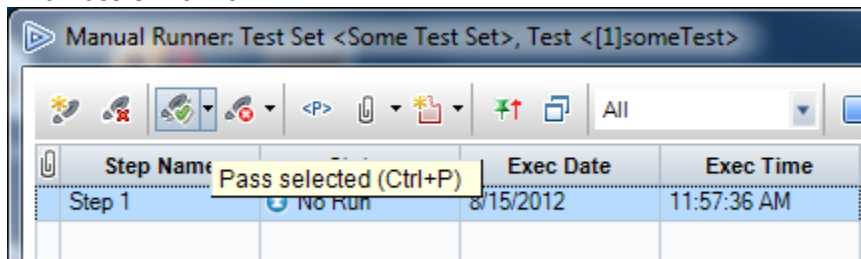
Select **Begin Run**.



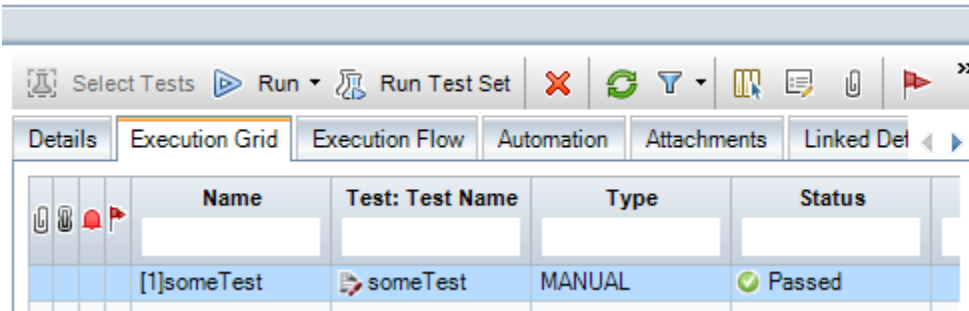
You may add a step:



And Pass or Fail it:



Save the test run:



The screenshot displays the Rally test run interface. At the top, there is a toolbar with icons for 'Select Tests', 'Run', 'Run Test Set', and various status and filter icons. Below the toolbar, there are tabs for 'Details', 'Execution Grid', 'Execution Flow', 'Automation', 'Attachments', and 'Linked Del'. The 'Execution Grid' tab is currently selected, showing a table with the following data:

	Name	Test: Test Name	Type	Status
[1]	someTest	someTest	MANUAL	Passed

Using the Connector to Copy Tests and Runs from Micro Focus ALM/Quality Center to Rally

1. Install and configure the connector following the steps outlined in the guide:
[Installation and User Guide for the Rally Connector to Micro Focus ALM/Quality Center](#)

Repeating the entire guide is outside of the scope of this document, but the following screenshots illustrate custom fields created in Micro Focus ALM/Quality Center for test and run artifact types, and a custom field created in Rally for test case artifact type. Those fields are intended to store the ID of the corresponding artifact from the other system.

Here is the custom field created for the Micro Focus ALM/Quality Center Test to hold the Object ID of corresponding Rally test case:

The screenshot shows the 'Project Entities' settings window in Rally. On the left is a tree view of project entities, including Baselines, Business Component, Business Process Model Elements, Business Process Model Folders, Business Process Model Paths, Business Process Models, Cycle, Defect, KPI, Library, Milestone, Release, Release Folder, Requirement, Resource, Resource Folder, Run, Scope Item, Test, System Fields, User Fields, Rally WorkProduct, and RallyID. The 'RallyID' field under 'User Fields' is selected. On the right, the 'Settings' tab is active, displaying the configuration for the selected field:

- Name: TS_USER_01
- Label: RallyID
- Type: String
- Length: 255
- History: ☐
- Required: ☐
- Masked: ☐
- Searchable: ☐

Here is the custom field created for the Micro Focus ALM/Quality Center Run to hold the Object ID of the corresponding Rally test case result:

Project Entities

Save New Field Delete Field

Baselines
Business Component
Business Process Model Elements
Business Process Model Folders
Business Process Model Paths
Business Process Models
Cycle
Defect
KPI
Library
Milestone
Release
Release Folder
Requirement
Resource
Resource Folder
Run
System Fields
User Fields
RallyID

Settings

Name: RN_USER_01

Label: RallyID

Type: String

Length: 255

☐ History ☐ Required
☐ Masked ☐ Searchable

Here is the custom field created for the Rally test case to hold ID of corresponding QC test:

<https://rally1.rallydev.com/slm/at/edit.sp>

Edit Field » TCEXternalID

Name:	TCEXternalID
Display Name:	TCEXternalID
Type:	String
Hidden:	<input type="checkbox"/>
Occurrences:	61
Required:	<input type="checkbox"/>

Note that this is not symmetrical. The Rally TestCaseResult artifact type does not allow creation of custom fields to begin with, and as far as the support for mapping runs from Micro Focus ALM/Quality Center to test case results from Rally, we only support Copy service in one direction, from Micro Focus ALM/Quality Center to Rally.

As far as how these fields are represented in the xml configuration files, here are the relevant extracts from the files:

In config file for tests/test cases, in <RallyConnection>, there is

```
<ArtifactType>TestCase</ArtifactType>
  <ExternalIDField>TCEXternalID</ExternalIDField>
```

In the same config for test cases, in <QCConnection>, there is

```
<TestFolder>MyTestFolder</TestFolder>
  <IDField>TS_TEST_ID</IDField>
  <ExternalIDField>TS_USER_01</ExternalIDField>
```

In config file for runs/test case results, in <RallyTestResultConnection> the artifact type is specified by

```
<ArtifactType>TestCaseResult</ArtifactType>
```

but there is no such thing as ExternalIDField in Rally.

In the same config file for runs/test case results, in <QCRunConnection> there is

```
<IDField>RN_RUN_ID</IDField>
  <ExternalIDField>RN_USER_01</ExternalIDField>
  <TestExternalIDField>TS_USER_01</TestExternalIDField>
```

Notice that <TestExternalIDField> has the same value here as <ExternalIDField> in the tests/test cases config. That's how the link between a run and test (test case result and test case) is maintained.

2. In the first part of this document, a test in a Micro Focus ALM/Quality Center Test Plan and a run in Test Lab were created.

Run the connector with both config files:

```
C:\CONNECTORS\QC2.8.1>rally2_qc_connector.exe t3.xml run3.xml -1
```

Here is a screenshot of the rallylog entry related to the copy of QC test to Rally test case:

```
[2012-08-16 00:45:34 Z] INFO : QCConnection.find_new - Found 1 New tests in QC
[2012-08-16 00:45:34 Z] INFO : Connector.copy_to_rally - Copy to Rally
[2012-08-16 00:45:34 Z] DEBUG : Connector.block in map_fields_to_rally - Mapping TS_NAME(someTest) - to - Name(someTest)
[2012-08-16 00:45:35 Z] INFO : RallyConnection.create_internal - Created TC103
[2012-08-16 00:45:35 Z] DEBUG : QCConnection.update_external_id_fields - set QC Test TS_TEST_ID: 57 external id field TS_USER_01 --> |7533087462|
[2012-08-16 00:45:35 Z] INFO : Connector.copy_to_rally - Quality Center test 57 copied to Rally testcase TC103
[2012-08-16 00:45:35 Z] INFO : ConnectorRunner.process_service - Finished Service COPY_QUALITY_CENTER_TO_RALLY
```

Here is a screenshot of the rallylog entry related to the copy of QC run to Rally test case result:

```
[2012-08-16 00:47:37 Z] INFO : ConnectorRunner.process_service - Starting Service COPY_QUALITY_CENTER_TESTS_TO_RALLY
[2012-08-16 00:47:37 Z] INFO : QCRunConnection.find_new - find_new query: RN_USER_01 = "" and RN_EXECUTION_DATE >= "2012-08-14"
[2012-08-16 00:47:37 Z] DEBUG : QCRunConnection.find_new - find_new returned 1 total Test Runs
[2012-08-16 00:47:37 Z] DEBUG : QCRunConnection.find_new - find_new found 1 Test Runs with corresponding Rally tests
[2012-08-16 00:47:37 Z] INFO : QCRunConnection.find_new - Found 1 New runs in QC
[2012-08-16 00:47:37 Z] INFO : Connector.copy_to_rally - Copy to Rally
[2012-08-16 00:47:38 Z] DEBUG : Connector.block in map_fields_to_rally - Mapping RN_TEST_ID(57) - to - TestCase(someTest)
[2012-08-16 00:47:38 Z] DEBUG : Connector.block in map_fields_to_rally - Mapping RN_STATUS(Passed) - to - Verdict(Pass)
[2012-08-16 00:47:38 Z] DEBUG : Connector.block in map_fields_to_rally - Mapping RN_EXECUTION_DATE(2012-08-15 00:00:00 -0600) - to - Date(2012-08-15 17:59:37 UTC)
[2012-08-16 00:47:38 Z] DEBUG : Connector.block in map_fields_to_rally - Mapping RN_RUN_NAME(Run_8-15_11-55-38) - to - Build(Run_8-15_11-55-38)
```

Here is the screenshot of the details page of the newly created Rally test case. Notice that the Results link on the left shows that there is also a test case result associated with this test case.

The screenshot shows the Rally test case details page for 'Test Case TC103: someTest'. The page has a dark blue header with 'NMQC11' and 'P_0' in the top left, and navigation tabs: 'My Home', 'Plan', 'Track', 'Quality', 'Reports', and 'Search'. On the left, there is a sidebar with links: 'Details for TC103', 'Defects (0)', 'Test Sets (0)', 'Results (1)', 'Discussion (0)', and 'Revisions (2)'. The main content area is titled 'General' and contains the following information:

- General:** ID: TC103, Name: someTest, Tags: , Description: , Attachments: , Owner: , Project: P_0, Test Folder: .
- Test Case:** Objective: , Work Product: , Type: Acceptance, Method: Manual, Priority: , Risk: , Pre-Conditions: , Steps: Input, Validation, Post-Conditions: .
- Result:** Last Verdict: Pass, Last Run: 08/15/2012, Last Build: Run_8-15_11-55-38.
- Custom:** QCAttachments: , QCReqID: , TCExternalID: 57.

The screenshot shows the Rally test case results page for 'Test Case TC103: someTest'. The page has a dark blue header with 'NMQC11' and 'P_0' in the top left, and navigation tabs: 'My Home', 'Plan', 'Track', 'Quality', 'Reports', and 'Search'. On the left, there is a sidebar with links: 'Details for TC103', 'Defects (0)', 'Test Sets (0)', 'Results (1)', 'Discussion (0)', and 'Revisions (2)'. The main content area is titled 'Test Case Results' and contains a table with the following data:

Build	Date	Test Set	Verdict	Duration	Tester
Run_8-15_11-55-38	08/15/2012		Pass		Nick M

At the bottom right, there is a pagination control showing '1 Item' and a 'Display: 20' dropdown menu.

Using the Connector to Copy Test Cases from Rally to Micro Focus ALM/Quality Center

1. Create a test case in Rally:

2. In xml config file of tests/test cases, in the <QCConnection> section there must be a pre-existing QC Test Folder(from Test Plan) specified ,e.g.

<TestFolder>MyTestFolder</TestFolder>

When the test case from Rally is copied to Micro Focus ALM/Quality Center it should land in this folder.

3. Run the connector:

```
[2012-08-16 01:01:07 Z] INFO : ConnectorRunner.process_service - Starting Service COPY_RALLY_TO_QUALITY CENTER
[2012-08-16 01:01:07 Z] INFO : RallyConnection.find_new - Find New Rally testcases
[2012-08-16 01:01:07 Z] INFO : RallyConnection.find_new - Found 1 new testcases in Rally
[2012-08-16 01:01:07 Z] INFO : Connector.copy_to_other - Copy to Quality Center
[2012-08-16 01:01:07 Z] DEBUG : Connector.block in map_fields_to_other - Mapping Name(some Test Case from Rally) - to - TS_NAME(some Test Case from Rally)
[2012-08-16 01:01:07 Z] DEBUG : QCConnection.create_internal - set all artifact fields
[2012-08-16 01:01:07 Z] INFO : QCConnection.create_internal - Created test 58 in QC
[2012-08-16 01:01:07 Z] INFO : RallyConnection.update_internal - Updating TC104
[2012-08-16 01:01:09 Z] INFO : Connector.copy_to_other - Rally testcase TC104 copied to Quality Center test 58
[2012-08-16 01:01:09 Z] INFO : ConnectorRunner.process_service - Finished Service COPY_RALLY_TO_QUALITY CENTER
```

The test is created in Micro Focus ALM/Quality Center. Notice the TS_USER_01 labeled “RallyID” field populated with Object ID of the corresponding Rally test case.

The screenshot shows the Micro Focus Quality Center interface. On the left is a navigation pane with options like Dashboard, Management, Requirements, Testing, Test Resources, Test Plan, Test Lab, and Defects. The main area displays a tree view of test cases under 'No Filter Defined'. A test case named 'some Test Case from Rally' is selected. On the right, the 'Details' tab is active, showing fields for Test Name, Creation Date, Rally WorkProduct, Status, Type, Designer, RallyID, and Test ID. The RallyID field is populated with '7533172981'.

In Rally, the original test case now has its custom field TCExternalID populated with the ID of the corresponding QC test:

The screenshot shows the Rally interface. At the top, there's a header with 'NMQC11' and 'P_0'. Below it are tabs for 'My Home', 'Plan', 'Track', 'Quality', 'Reports', and 'Search'. The main content area is titled 'Test Case TC104: some Test Case from Rally'. On the left, there's a sidebar with links for 'Details for TC104', 'Defects (0)', 'Test Sets (0)', 'Results (0)', 'Discussion (0)', and 'Revisions (2)'. The main area displays the details of the test case, including fields for ID, Name, Tags, Description, Attachments, Owner, Project, and Test Folder. The 'Test Case' section shows fields for Objective, Work Product, Type, Priority, Pre-Conditions, Steps, and Post-Conditions. The 'Result' section shows fields for Last Verdict and Last Run. The 'Custom' section shows fields for QCAttachments, QCReqID, and TCExternalID. The TCExternalID field is highlighted with a red box and contains the value '58'.

At this point, if a Test Instance of this test needs to be created in Test Lab and a run needs to be copied from Micro Focus ALM/Quality Center to Rally, follow the steps described in the previous section of this document. Note that runs can only be copied from Micro Focus ALM/Quality Center to Rally. The connector does not support copy service from Rally to Micro Focus ALM/Quality Center for test case results.

Using the Connector to Update Test Cases from Rally to Micro Focus ALM/Quality Center

1. Updated test case in Rally:

Edit Test Case » TC104: some Test Case from Rally

General	
ID:	TC104
Name:	some Test Case from Rally
Tags:	Choose Tags
Description:	<div>Normal </div> <div>description entered in Rally</div>

This is a test case that was originally created in Rally and copied to Micro Focus ALM/Quality Center as described previously in this document.

2. Run the connector

```
[2012-08-16 17:36:51 Z] INFO : RallyConnection.find_updates - Found 1 updated testcases in Rally
[2012-08-16 17:36:51 Z] DEBUG : Connector.block in map_fields_to_other - Mapping Name(some Test Case from Rally) - to - TS_NAME(some Test Case from Rally)
[2012-08-16 17:36:51 Z] DEBUG : Connector.block in map_fields_to_other - Mapping Description(description entered in Rally.) - to - TS_DESCRIPTION(<html><bc
[2012-08-16 17:36:51 Z] INFO : QCConnection.update_internal - Updated test 58 in QC
[2012-08-16 17:36:51 Z] INFO : Connector.update_other - Quality Center test 58 updated from Rally testcase TC104
```

Test Details

Test ID: 58 * Test Name: some Test Case from Rally * Type: MANUAL

Details

Creation Date: 8/15/2012 Designer: nickqc11
Rally WorkPr... RallyID: 7533172981
Status:

Description **Comments**

description entered in Rally.

Using the Connector to Update Test Cases from Micro Focus ALM/Quality Center to Rally

1. Updated test case in QC:

Test Details

Test ID: 58 * Test Name: some Test Case from Rally * Type: MANUAL

Details

Creation Date: 8/15/2012 Designer: nickqc11

Rally WorkPr... RallyID: 7533172981

Status:

Description Comments

description entered in Rally.
description entered in QC.

2. Run the connector. The corresponding test case in Rally is updated:

```
[2012-08-16 19:26:56 Z] INFO : ConnectorRunner.process_service - Starting Service UPDATE_QUALITY_CENTER_TO_RALLY
[2012-08-16 19:26:56 Z] INFO : QCConnection.find_updates - Looking for updates made after QC server time of: '2012-08-16 11:36:45'
[2012-08-16 19:26:56 Z] INFO : QCConnection.find_updates - Found 1 Updated tests in QC
```

NMQC11

P_0

My Home Plan Track Quality Reports Search

Test Case TC104: some Test Case from Rally

Details for TC104

Defects (0)

Test Sets (0)

Results (0)

Discussion (0)

Revisions (0)

General

ID: TC104

Name: some Test Case from Rally

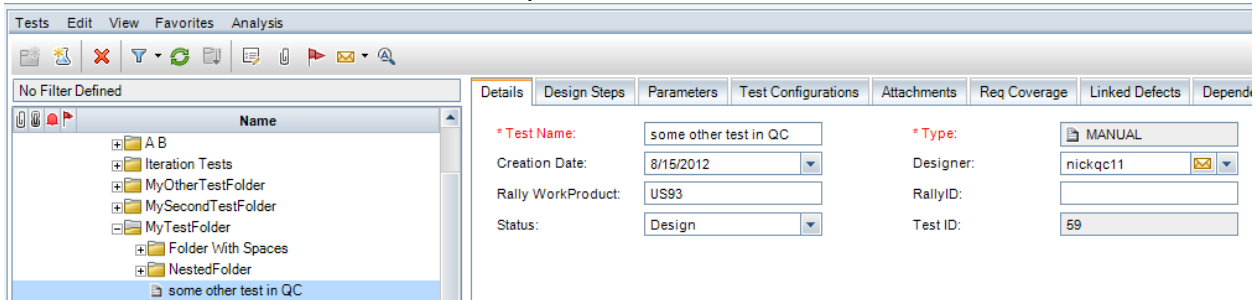
Tags:

Description: description entered in Rally.
description entered in QC.

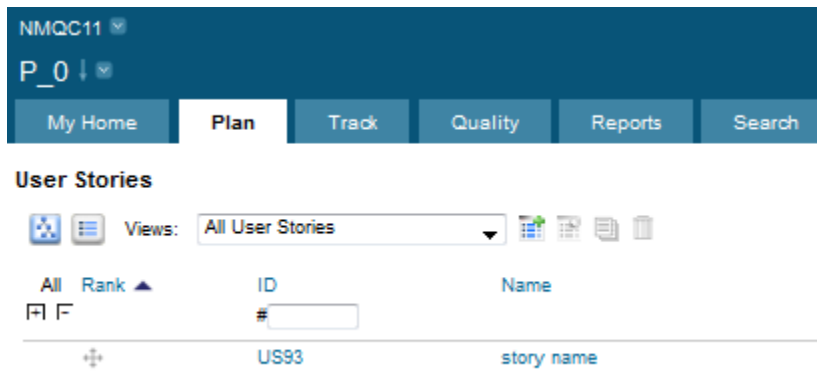
Attachments:

Using the Connector to Link a Rally Story to a Rally Test Case

1. Create a test in Micro Focus ALM/Quality Center.

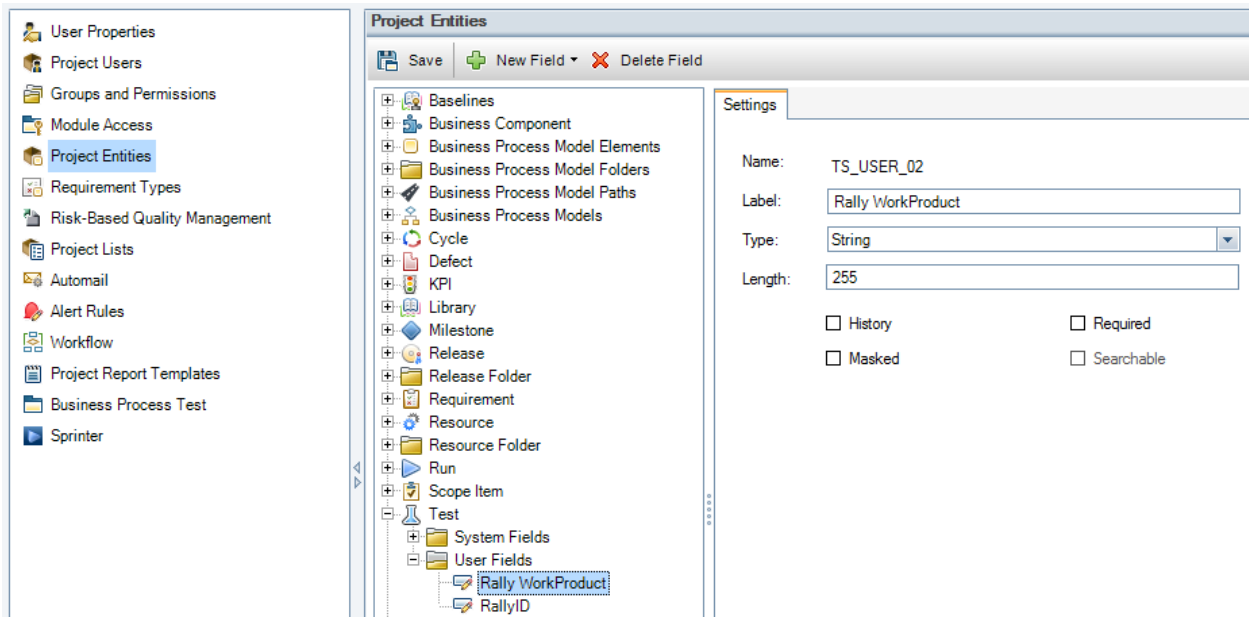


Notice a Formatted ID of Rally user story “US93” in the Rally WorkProduct field that references a real story in Rally in the same Rally workspace/project indicated in the config file:



The goal of this setup is to make sure that when a test is copied from Micro Focus ALM/Quality Center to Rally, it is linked to a pre-existing user story in Rally by following the steps below. In Rally the linking happens via a WorkProduct field of TestCase object.

- a) Create a user field in Micro Focus ALM/Quality Center for a Test artifact to hold the Rally Formatted ID. The field must be of type String.



- b) Add this mapping to the <FieldMapping> section of the config file for tests/test cases:
 <Field><Rally>WorkProduct</Rally><Other>TS_USER_02</Other></Field>

- c) Add <RallyReferenceFieldHandler> to the <RallyFieldHandlers> section of the same config:

```
<RallyReferenceFieldHandler>
  <FieldName>WorkProduct</FieldName>
  <ReferencedFieldLookupID>FormattedID</ReferencedFieldLookupID>
</RallyReferenceFieldHandler>
</RallyFieldHandlers>
```

Here is an example of the syntax in the context of <Connector> section of the xml config file

```
<Connector>
  <FieldMapping>
    <Field><Rally>Name</Rally><Other>TS_NAME</Other></Field>
    <Field><Rally>WorkProduct</Rally><Other>TS_USER_02</Other></Field>
    <Field><Rally>Description</Rally><Other>TS_DESCRIPTION</Other></Field>
  </FieldMapping>
  <RallyFieldHandlers>
    <RallyReferenceFieldHandler>
      <FieldName>WorkProduct</FieldName>
      <ReferencedFieldLookupID>FormattedID</ReferencedFieldLookupID>
    </RallyReferenceFieldHandler>
  </RallyFieldHandlers>
</Connector>
```

2. Run the connector:

```
C:\CONNECTORS\QC2.8.1>rally2_qc_connector.exe t3.xml -1
```

```
[2012-08-16 01:33:44 Z] INFO : ConnectorRunner.process_service - Starting Service COPY_QUALITY_CENTER_TO_RALLY
[2012-08-16 01:33:44 Z] INFO : QCConnection.find_new - Found 1 New tests in QC
[2012-08-16 01:33:44 Z] INFO : Connector.copy_to_rally - Copy to Rally
[2012-08-16 01:33:44 Z] DEBUG : Connector.block in map_fields_to_rally - Mapping TS_NAME(some other test in QC) - to - Name(some other test in QC)
[2012-08-16 01:33:45 Z] DEBUG : Connector.block in map_fields_to_rally - Mapping TS_USER_02(US93) - to - WorkProduct(story name)
```

The test case is created in Rally, linked to a Rally story:

The screenshot displays the Rally web interface for a test case. The top navigation bar includes 'My Home', 'Plan', 'Track', 'Quality', 'Reports', and 'Search'. The main header shows 'P_0' and 'Test Case TC105: some other test in QC'. The left sidebar contains links for 'Details for TC105', 'Defects (0)', 'Test Sets (0)', 'Results (0)', 'Discussion (0)', and 'Revisions (1)'. The main content area is divided into sections: 'General', 'Test Case', 'Result', 'Custom', and 'Notes'. The 'General' section includes fields for ID (TC105), Name (some other test in QC), Tags, Description (some description), Attachments, Owner, Project (P_0), and Test Folder. The 'Test Case' section includes Objective, Work Product (US93: story name), Type (Acceptance), Priority, Pre-Conditions, Steps (Input, Validation), and Post-Conditions. The 'Result' section includes Last Verdict and Last Run. The 'Custom' section includes QCAttachments, QCReqID, and TCEXternalID (59). The 'Notes' section is at the bottom.

General	
ID:	TC105
Name:	some other test in QC
Tags:	
Description:	some description
Attachments:	
Owner:	
Project:	P_0
Test Folder:	

Test Case	
Objective:	
Work Product:	US93: story name
Type:	Acceptance
Priority:	
Pre-Conditions:	
Steps:	Input Validation
Post-Conditions:	

Result	
Last Verdict:	
Last Run:	

Custom	
QCAttachments:	
QCReqID:	
TCEXternalID:	59

Notes	
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Revision History

November, 2020

