

# Partner Test Management

## Adapter Operations

### Applies to:

SAP Solution Manager 7.2 – Test Suite – Partner Test Management – Adapter

### Summary

*The Partner Test Management – Adapter enables the customer to integrate the SAP Solution Manager & HP ALM (formerly HP QC). This document would explain you the process involved in SAP Solution Manager as well as in the Partner.*

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**Created on:** 20 September 2016

### Author Bio



Detail-oriented Senior Development Expert with over 9 years' of experience in SAP HANA, SAPUI5, FIORI, ABAP (including the new features of 740/ 750), ABAP on HANA, ABAP Objects, ABAP – Webdynpro, Gateway Services (ODATA), FPM, HR-ABAP, Interfacing, ABAP XML Processing (XSLT, Simple Transformations and JSON), Solution Manager 7.1/ 7.2 and upgrade. Skilled in both the "object" and the "classical" sides of ABAP stream, focusing on technical arena involved dynamic programming, design, optimization, and performance tuning.



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## 1. Overview

To speed up testing and improve software quality, you can transfer Solution Documentation and test assets from the SAP® Solution Manager Application management solution to the SAP Quality Center/ ALM application by HP. You can then test in HP ALM (formerly HP QC), display the results in SAP Solution Manager, and synchronize your quality center defects with service desk tickets

### Testing Inefficiencies

Any change to your solution landscape requires testing to ensure software quality and minimize business and IT risk. However, since so many testing tasks require manual effort, quality assurance teams find themselves pressed for time. To stay on schedule, teams must often either delay the release or skip critical tests. Both option results in higher cost and a riskier quality process.

### Better for Both Quality Managers and Product Managers

To address this challenge, SAP has developed an adapter that integrates the SAP® Solution Manager Application management solution and the HP ALM, used for software testing. This allows you to transfer your business blueprint structure and related documents, specifications, business requirements, links, and test objects such as transactions, implementation guide activities, or custom programs. Quality managers use this information to plan and structure their test projects efficiently. Integration between the service desk of SAP Solution Manager and the defect management of SAP Quality Center makes test execution faster and more transparent. Project managers benefit as well. Test results are transferred regularly and automatically into SAP Solution Manager and are monitored centrally. Project managers gain greater control over testing processes and can reuse critical information to support future upgrades and continuous business improvement projects. The result is an integrated testing environment, as shown in the figure below, helping you reduce the time and cost of deploying new software and upgrades.

### Higher Quality, Less Cost, Reduced Risk

Integration between the tools let us testing teams work in their familiar environments. Because information for one application is made visible in the other, your IT staff does not have to master separate testing tools, and you have a far more efficient testing process that improves software quality and reliability. Testing is standardized and integrated project wide, and information is consolidated in a single view to support informed release decisions. The efficiency you gain can reduce costs and, more importantly, help minimize the risk of outages and other problems caused by poor testing

## 2. Compatibility Matrix

Solution Manager Version	HP ALM Version
Solution Manager 7.2 SP03	HP ALM 12.53 Patch 1



### 3. Prerequisites

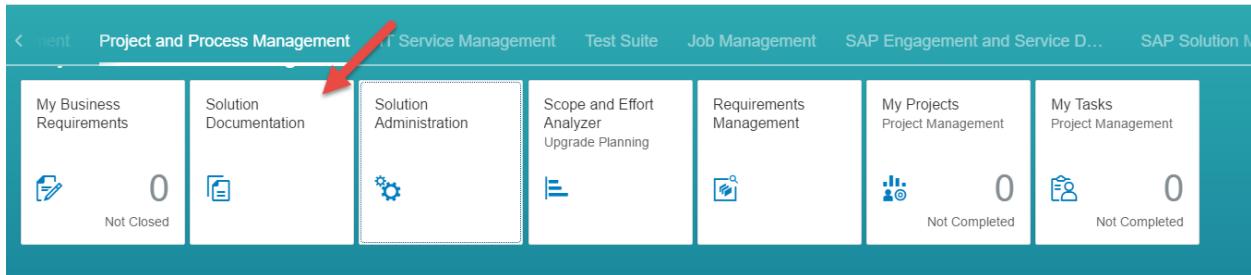
Before starting the operations in the Adapter Administration Console, it is mandatory to setup the Adapter in the SOLMAN\_SETUP. Please follow the below article to do the E2E setup

<http://scn.sap.com/docs/DOC-75248>

### 4. Solution Documentation

Efficient planning, reporting and operation of your SAP solutions requires clear and reliable documentation for these solutions. The documentation of your system landscape and your business processes in SAP Solution Manager is the basis for the additional usage of the comprehensive Application Lifecycle Management (ALM) functions provided by SAP Solution Manager. The documented business processes are used in many ALM phases, for example in the Implementation phase by the Template Management, in the test environment by the test workbench and the Business Process Change Analyzer (BPCA), or in the monitoring environment by the business process monitoring. Therefore, up-to-date documentation of your core business processes is a basic prerequisite for realizing the full potential of the SAP Solution Manager.

To access the Solution Documentation, Launch the Solution Manager Launch Pad & click on the tile “Solution Documentation” or use the transaction SOLADM or SOLDOC.



To create the E2E flow we are going to use the Solution “Final Solution” which has the following branches,

- Production
- Maintenance
- Development

Name	Open	Change Control
Production	Open	
Maintenance	Open	
Development	Open	

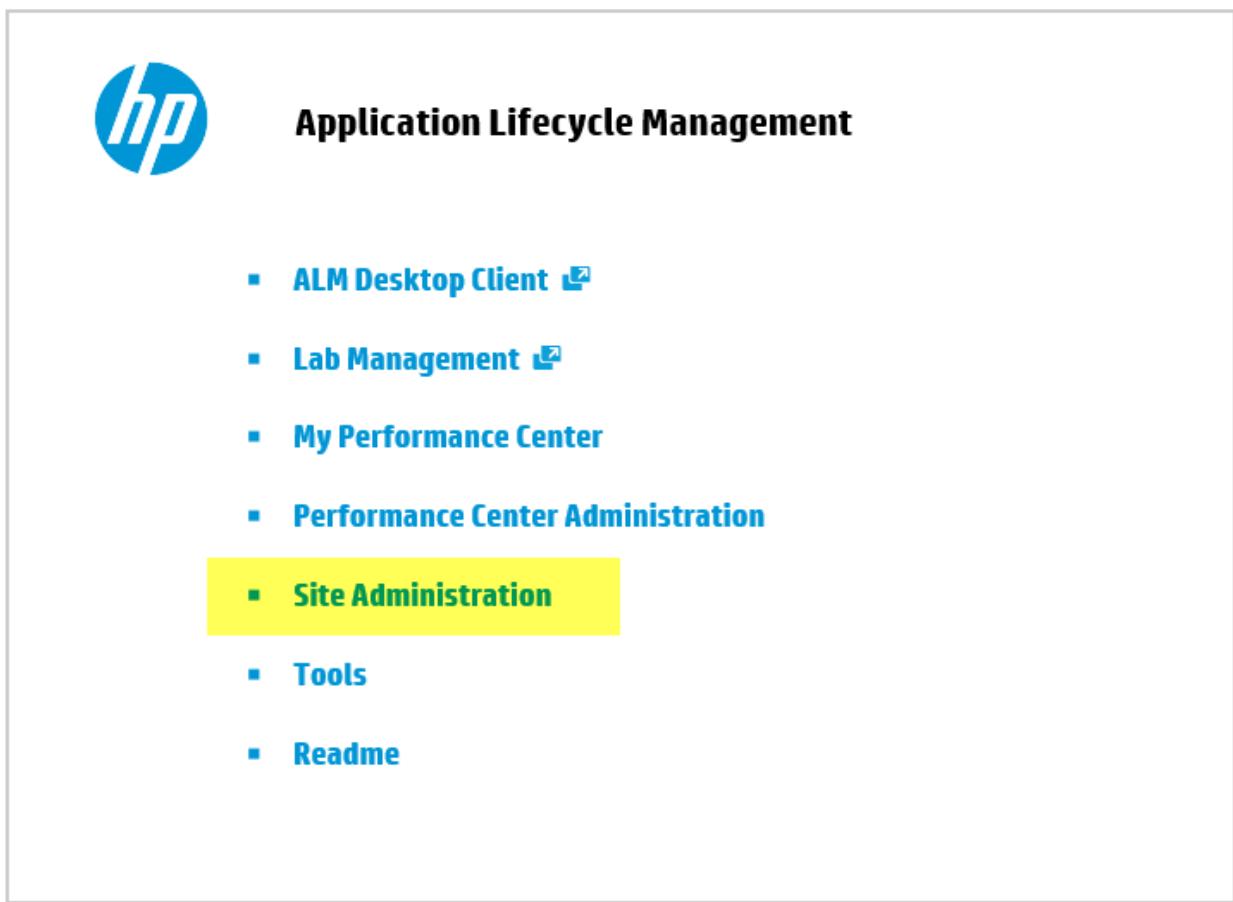
The Solution Documentation Branches needs to be associated to the Partner Project (HP ALM Project). One branch cannot be associated to multiple HP ALM projects.

## 5. Partner Project

In this section, we will get to know the process involved to create the HP ALM project. Login to the HP ALM Site Administration

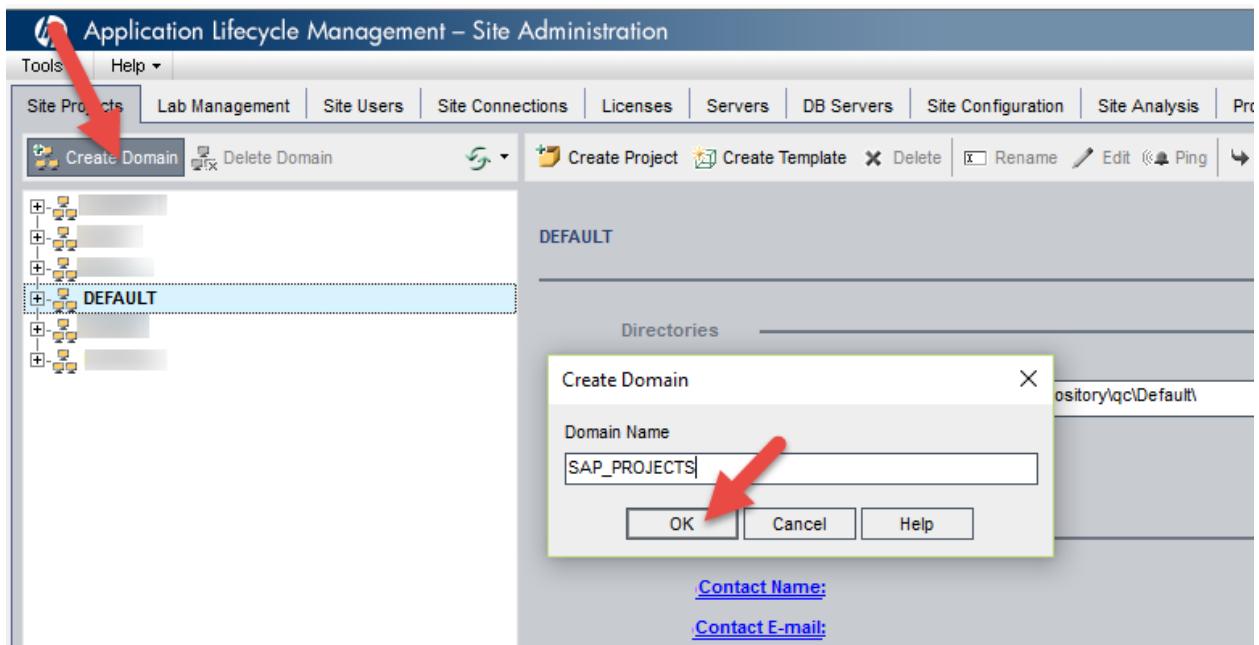
<http://<>host name>:8080/qcbin/>

**Step 1:** Launch the Site Administration

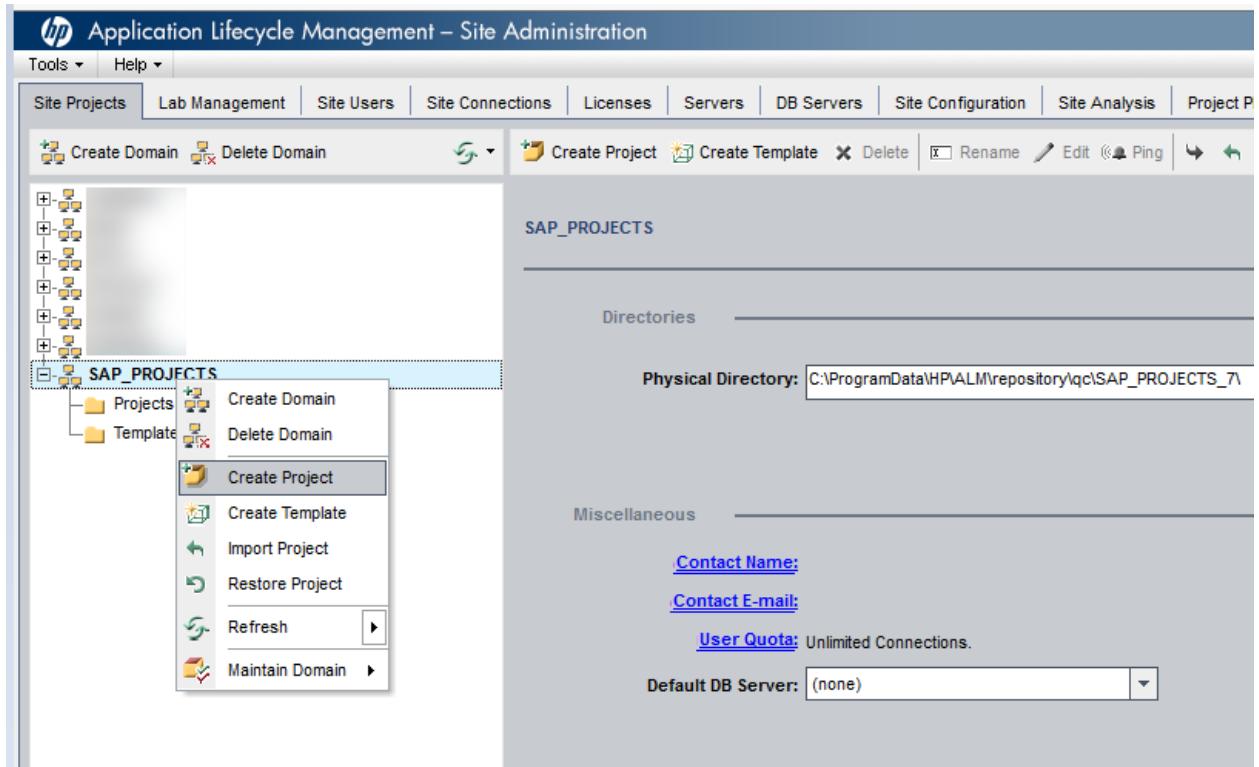


- [ALM Desktop Client](#) ↗
- [Lab Management](#) ↗
- [My Performance Center](#)
- [Performance Center Administration](#) ↗
- **Site Administration**
- [Tools](#)
- [Readme](#)

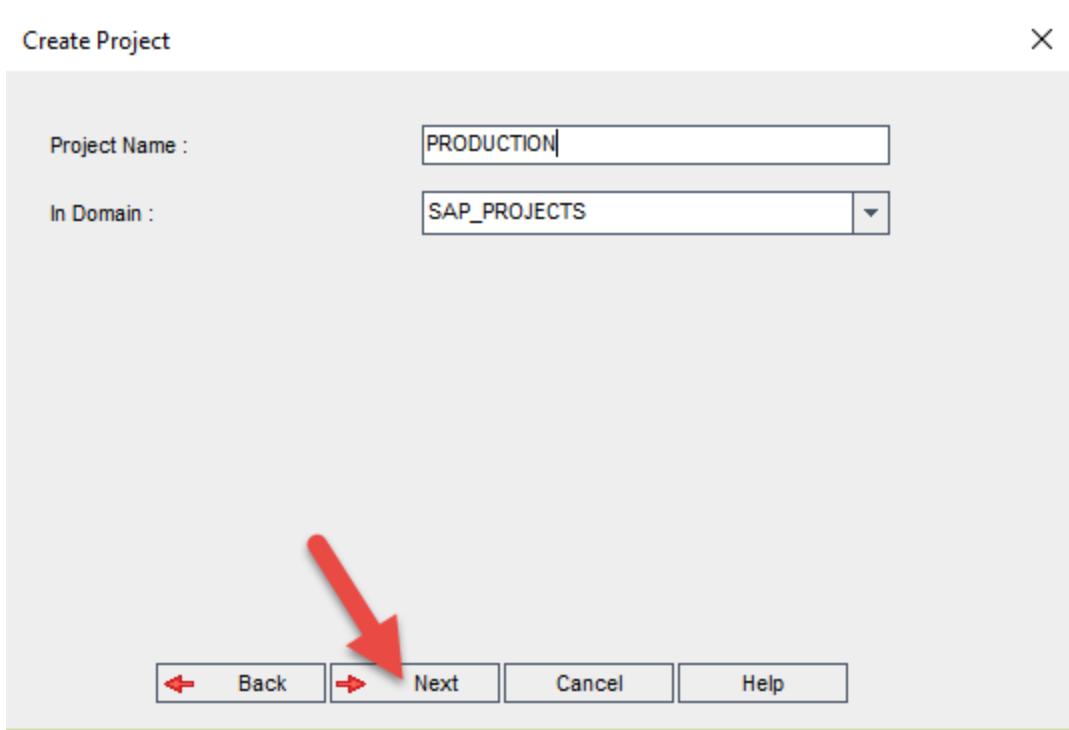
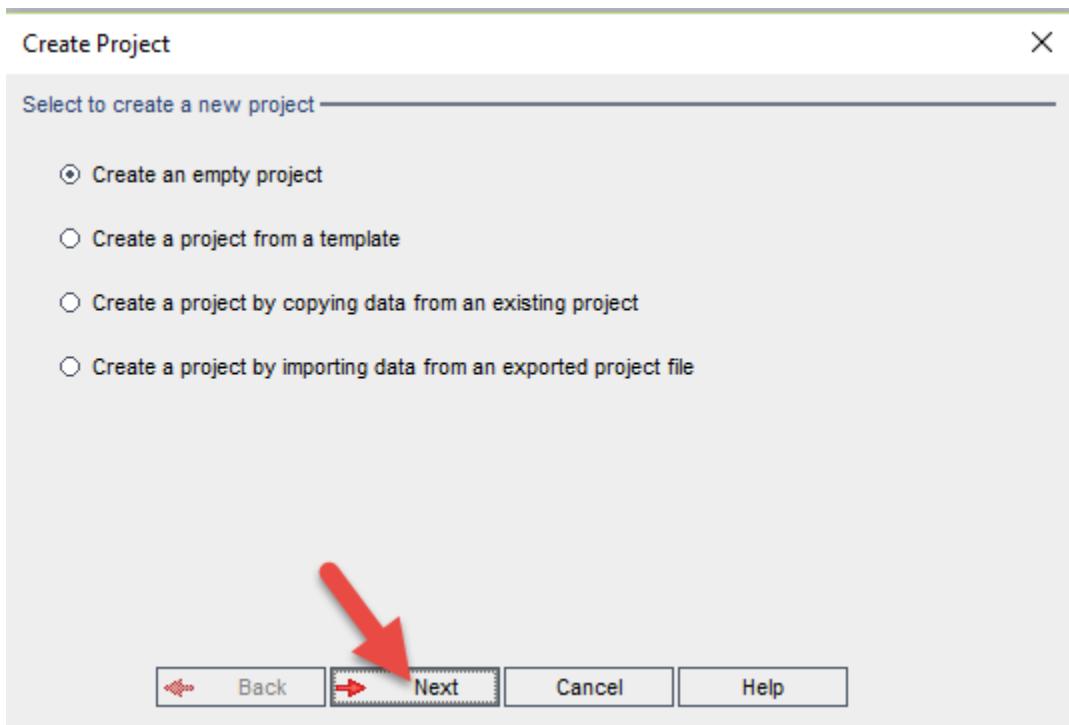
**Step 2:** Create a domain



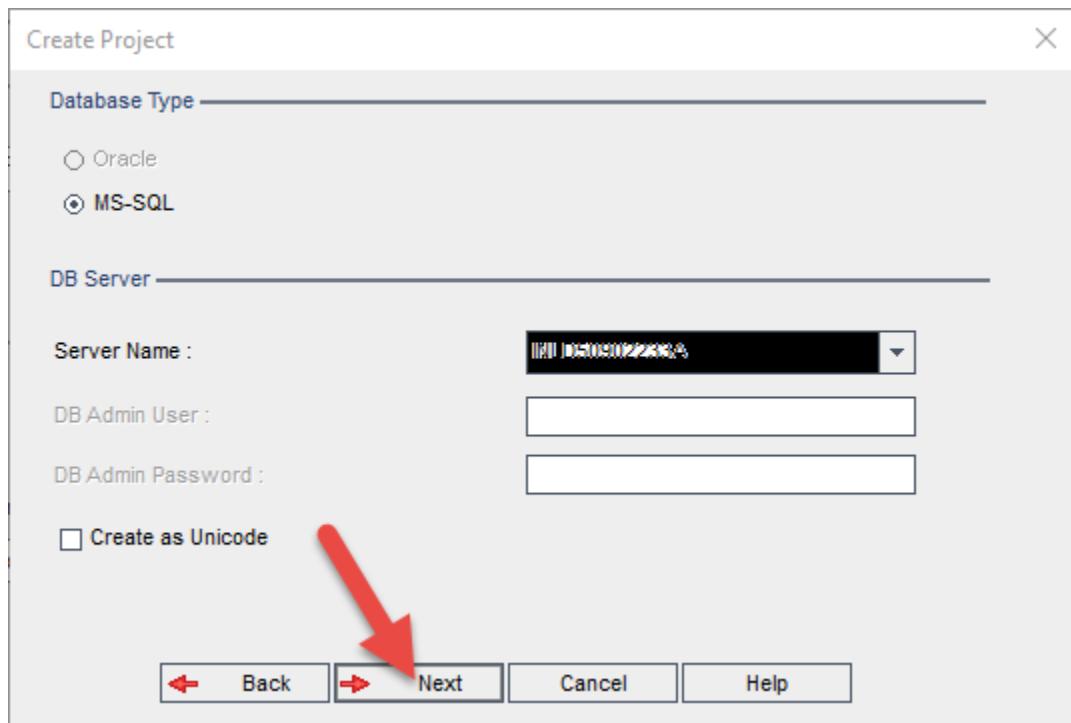
### Step 3: Create a project "PRODUCTION"



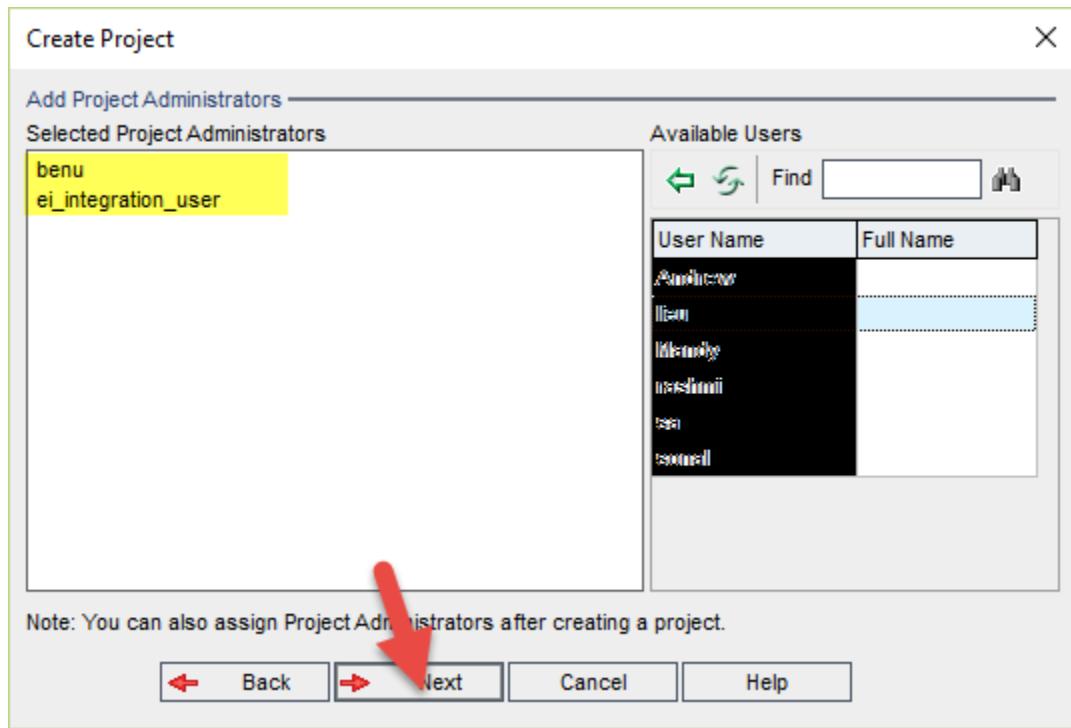
### Step 4: Create an empty project



**Step 5:** Choose the DB Type,

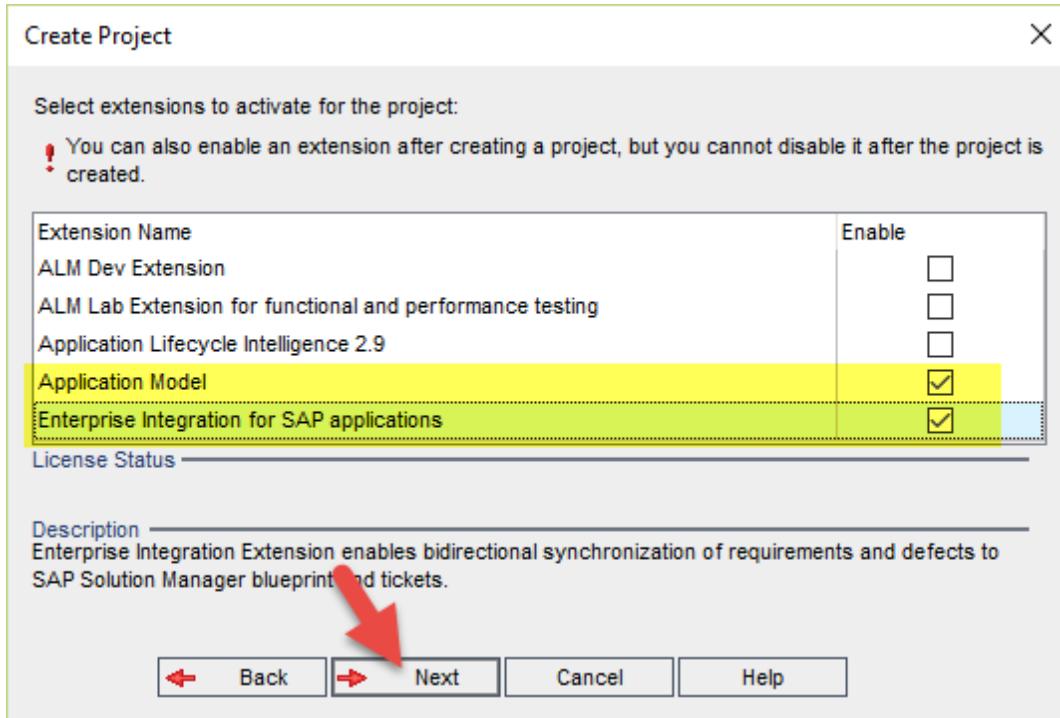


**Step 6:** Choose the users for the project administrators,

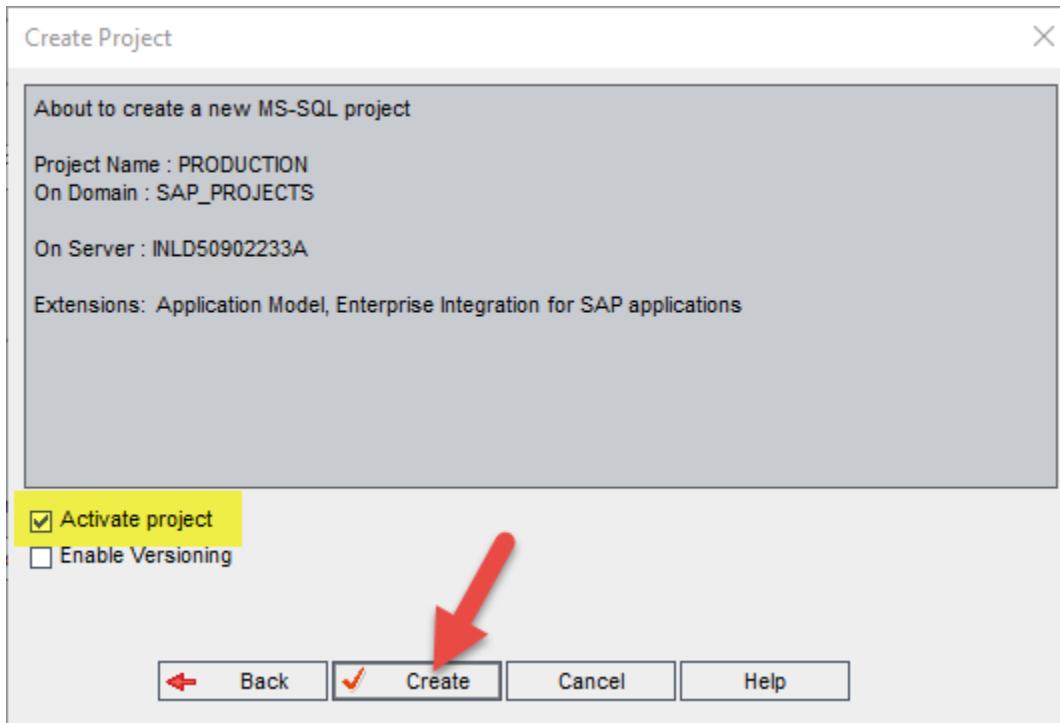


**Step 7:** Choose the following extensions,

- Application Model
- Enterprise Integration for SAP Applications

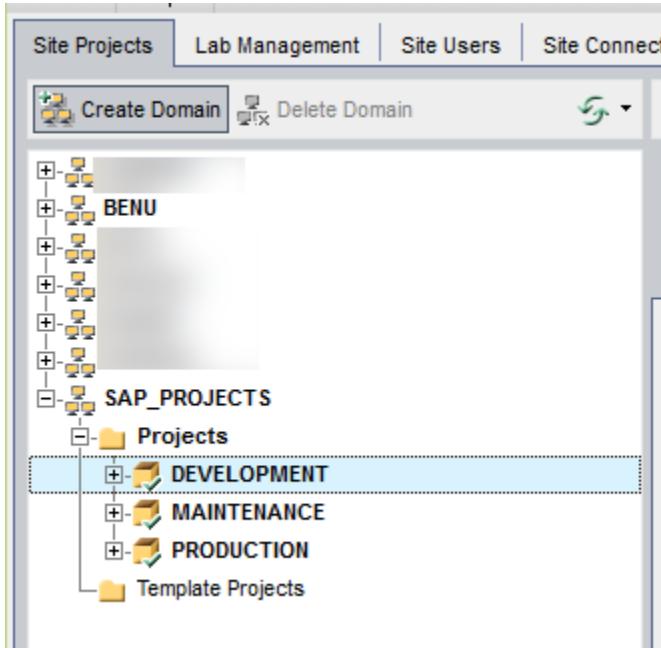


**Step 8:** Activate and create the project



The aforementioned instructions would create the project in the HP ALM. To proceed with an E2E flow, create two more projects (mentioned below) by referring the steps.

- MAINTENANCE
- DEVELOPMENT

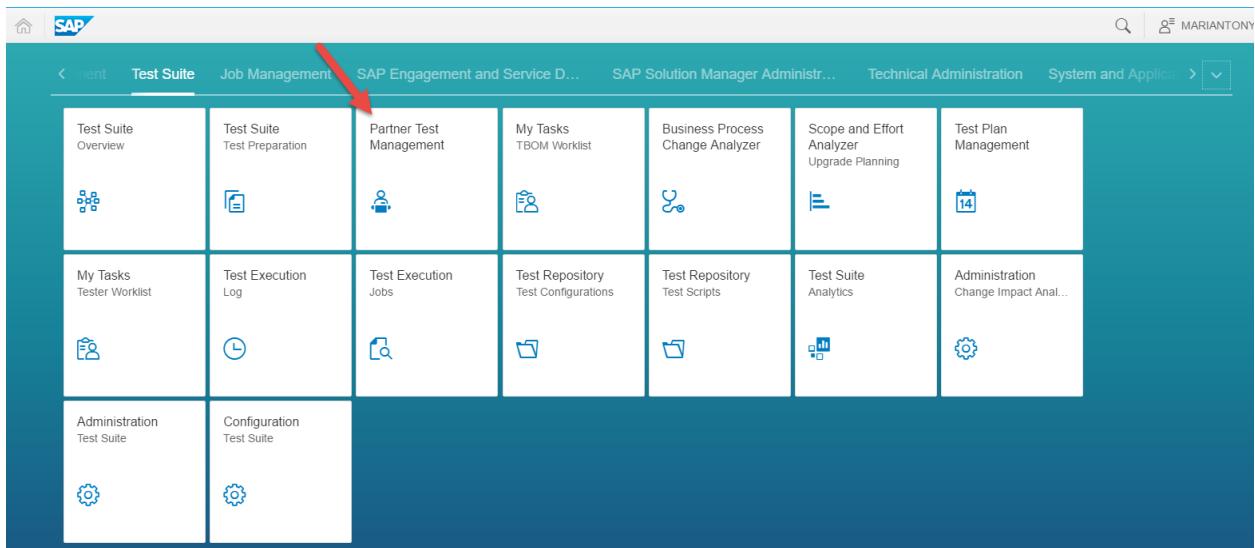


## 6. Partner Test Management – Administrator Console

In the Adapter Administration Console, the user needs to associate the Solution Documentation Branch with the HP ALM Partner Project. The following operations are possible with the administrator console.

Launch the “Administrator Console” by clicking on the Partner Test Management tile as shown below. The UI lets you do the following,

- [Association](#)
- [Push the Solution Documentation](#)
- [To display the Test Results](#)
- [Partner Logs](#)
- [Keyword Mapping](#)
- [Test Object Filters](#)



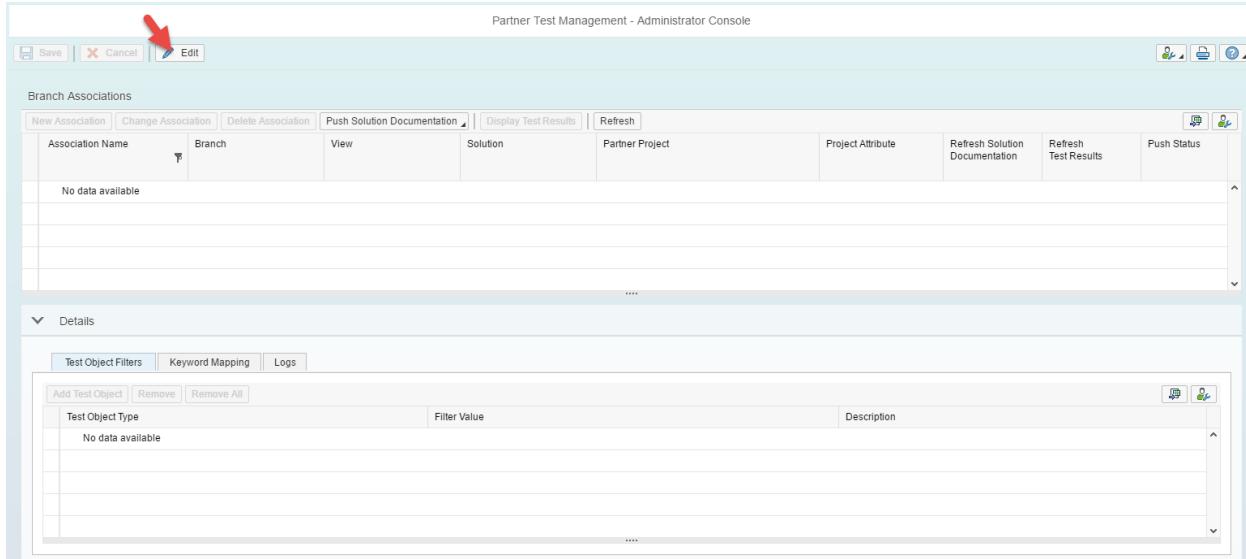
## 7. Adapter – An User Story

I would like to have a User Story to perform E2E Operations,

- [Associate the branches](#)
  - Production
  - Maintenance
  - Development
- [Transfer the Solution Documentation](#)
- [Import the Solution Documentation from HP ALM](#)
- [Create the Test Cases in HP ALM](#)
  - [Test Set Creation](#)
  - [Test Cases Assignment](#)
- [Perform the Manual Testing](#)
- [HP ALM Defects](#)
  - [Field Mapping](#)
  - [Create Defect Sync to Solution Manager System](#)
  - [Responsibility Transfer](#)
  - [Assign the Defect to the Test Cases](#)
- [Test Results & Incident Processing in Solution Manager](#)
  - [Update the Test Results](#)
  - [Test Results Display](#)
  - [Process the Incident & Propose Solution](#)
  - [Retest & Close an Incident](#)

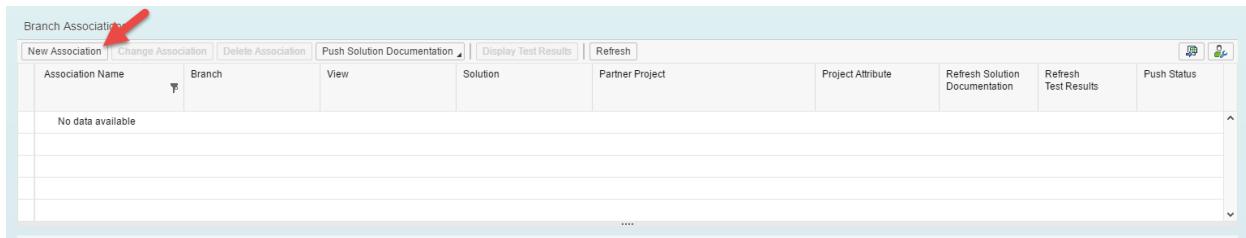
## 7.1. Branch Association

**Step 1:** In the Adapter, every branch needs to be associated to the HP ALM project. Please refer the following section.



The screenshot shows the 'Branch Associations' screen in the Partner Test Management - Administrator Console. The top navigation bar includes 'Save', 'Cancel', and 'Edit' buttons. Below the navigation is a toolbar with icons for 'New Association', 'Change Association', 'Delete Association', 'Push Solution Documentation', 'Display Test Results', and 'Refresh'. The main area displays a table titled 'Branch Associations' with columns: Association Name, Branch, View, Solution, Partner Project, Project Attribute, Refresh Solution Documentation, Refresh Test Results, and Push Status. A message 'No data available' is shown below the table. At the bottom, there is a 'Details' section with tabs for 'Test Object Filters', 'Keyword Mapping', and 'Logs', and a 'Test Object Type' section with 'Add Test Object', 'Remove', and 'Remove All' buttons.

**Step 2:** Click on the button “New Association”



This screenshot is identical to the one above, showing the 'Branch Associations' screen. However, the 'New Association' button in the top toolbar has been highlighted with a red arrow to indicate the next step.

**Step 3:** Choose the Solution Documentation artifacts such as Solution, Branch and the View & the Partner Details

Create/ Change Association

**Solution Documentation**

\* Association Name: MainSolution\_Production

\* Solution: Main Solution

\* Branch: Production

\* View: Default View

**Partner Project**

\* Partner Alias: BENU\_HPALM

\* Partner Project: PRODUCTION

Project Attribute: SAP\_PROJECTS

**Synchronization**

Refresh Solution Documentation:

Refresh Test Results:

**Create/ Change Association** **Cancel**



<b>Partner Alias</b>	The Partner Alias you had created in the Step – 5 (Define Partner Connections) in SOLMAN_SETUP
<b>Partner Project</b>	HP ALM Project
<b>Project Attribute</b>	HP ALM Domain
<b>Refresh Solution Documentation</b>	Syncs the Solution Documentation with HP ALM Project on the periodic time intervals (Daily)
<b>Refresh Test Results</b>	Syncs the Test Results from the HP ALM to Solution Manager system (weekly once)

After filling in the details, click on “Create/ Change Association” in order to create an association.

Branch Associations

New Association	Change Association	Delete Association	Push Solution Documentation	Display Test Results	Refresh
MainSolution_Production	Production	Default View	Main Solution	PRODUCTION	SAP_PROJECTS
...					

Once the association is created, you can do the following operations,

<b>Change Association</b>	The following details can only be changed, ➤ Association Name
---------------------------	--

	<ul style="list-style-type: none"> <li>➤ View</li> <li>➤ Refresh Solution Documentation</li> <li>➤ Refresh Test Results</li> </ul>
<i>Delete Association</i>	De-Associates the association between Solution Documentation branch and Partner Project
<i>Push Solution Documentation</i>	Transfer the Solution Documentation to HP ALM
<i>Display Test Results</i>	Tester would update the Solution Manager system with the Test Results after the test cycle. The results can be viewed by clicking on this button
<i>Refresh</i>	The Table would be refreshed after the Asynchronous activity

**Step 4:** Create the associations for Maintenance and Development Branch as well.

- Associate the Maintenance Branch

**Create/ Change Association** ✖

---

**Solution Documentation**

\* Association Name:

\* Solution:

\* Branch:

\* View:

**Partner Project**

\* Partner Alias:  ✖

\* Partner Project:  ✖

Project Attribute: SAP\_PROJECTS

**Synchronization**

Refresh Solution Documentation:

Refresh Test Results:

Create/ Change Association
Cancel

- Associate the Development Branch

Create/ Change Association □ X

[Display Message Log](#)

**Solution Documentation**

\*Association Name:

\*Solution:

\*Branch:

\*View:

**Partner Project**

\*Partner Alias:

\*Partner Project:

Project Attribute: SAP\_PROJECTS

**Synchronization**

Refresh Solution Documentation:

Refresh Test Results:

[Create/ Change Association](#)   [Cancel](#)

Branch Associations									
<a href="#">New Association</a>	<a href="#">Change Association</a>	<a href="#">Delete Association</a>	<a href="#">Push Solution Documentation</a>	<a href="#">Display Test Results</a>	<a href="#">Refresh</a>				
MainSolution_Development	Development	Default View	Main Solution	DEVELOPMENT	SAP_PROJECTS	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
MainSolution_Maintenance	Maintenance	Default View	Main Solution	MAINTENANCE	SAP_PROJECTS	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
MainSolution_Production	Production	Default View	Main Solution	PRODUCTION	SAP_PROJECTS	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
....									

### 7.1.1. Test Object Filters

The Test Object filters are used to filter the Solution Documentation nodes while transferring the Solution Documentation. The filter can be made on the following types,

- Documentation Types
- Executables

In case the filters are not maintained in Test Object filters, the entire Solution Documentation would be transferred to the HP ALM system.

#### Documentation Types:

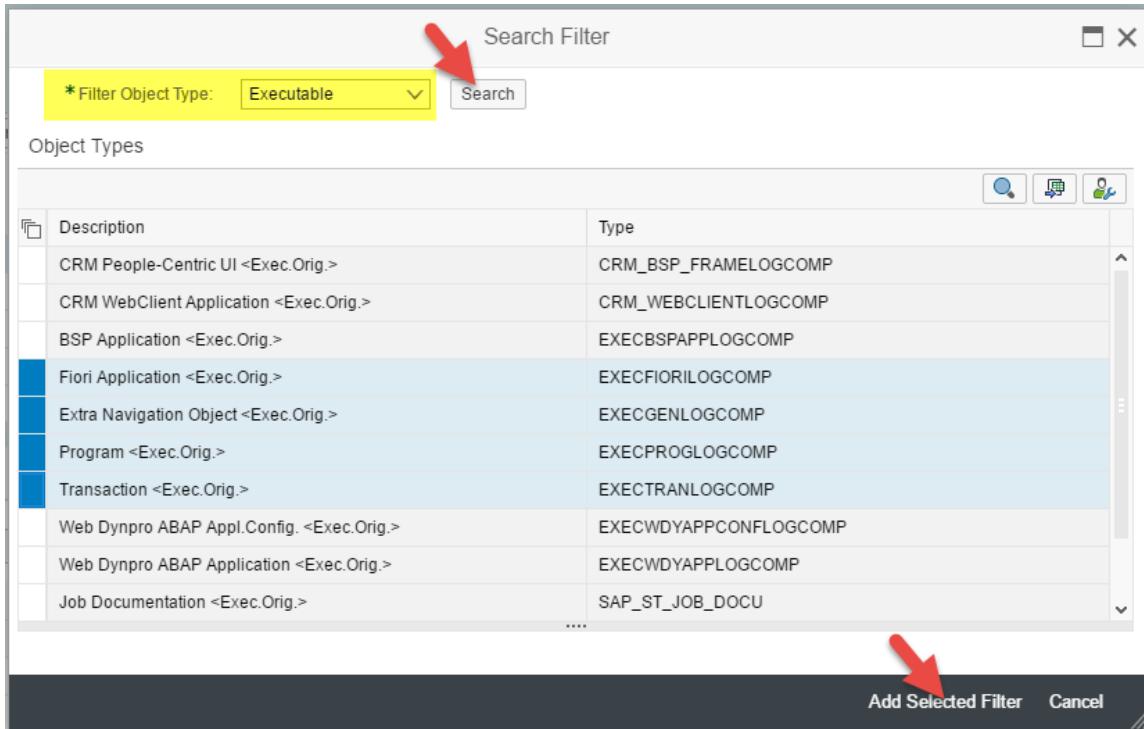
In case you wish to transfer only the documents of specific document type, you can select the document types from the popup.

The screenshot shows a software interface with a search filter dialog overlaid on a main window. The main window has tabs for 'Test Object Filters', 'Keyword Mapping', and 'Logs'. A red arrow points to the 'Add Test Object' button. The search filter dialog has a title 'Search Filter' and a dropdown menu 'Filter Object Type' set to 'Documentation'. A red arrow points to this dropdown. Below it is a 'Search' button. The main content area is titled 'Object Types' and contains a table with columns 'Description' and 'Type'. The table lists various document types: Functional Interface Specification (0FISP), Functional Specification (0FUSP), LG\_CG\_Configuration Guide (0LGCG), Signature Test: 1 Step (0SIG01), Signature Test: 2 Step (0SIG02), Test Note/Test Result for Test Case (0ST), Test Case Description (0TD1), Technical Design (0TEDE), User Guide (0USGU), and LG\_TS\_Technical Specification (1LGTS). At the bottom of the dialog, there are buttons 'Add Selected Filter' and 'Cancel', with a red arrow pointing to 'Add Selected Filter'.

Description	Type
Functional Interface Specification	0FISP
Functional Specification	0FUSP
LG_CG_Configuration Guide	0LGCG
Signature Test: 1 Step	0SIG01
Signature Test: 2 Step	0SIG02
Test Note/Test Result for Test Case	0ST
Test Case Description	0TD1
Technical Design	0TEDE
User Guide	0USGU
LG_TS_Technical Specification	1LGTS

### Executables:

The Executables can be filtered by choosing an executable filter,



Upon adding the filters, the “Test Object Filters” would be shown with the selected filters,

Test Object Type	Filter Value	Description
Documentation	0FUSP	Functional Specification
Documentation	0LGCG	LG_CG_Configuration Guide
Documentation	0SIG01	Signature Test: 1 Step
Documentation	0SIG02	Signature Test: 2 Step
Executable	EXECFIORILOGCOMP	Fiori Application <Exec.Orig.>
Executable	EXECGENLOGCOMP	Extra Navigation Object <Exec.Orig. >

## 7.1.2. Attribute Mapping

By default, the default attributes will be transferred to the HP ALM project when you push the Solution Documentation. In case you need to push an extra SAP/ Customer attributes, you can map the Solution Documentation attribute to HP ALM UDFs (User Defined Fields).

### 7.1.2.1. How to create UDF (User Defined Fields) in HP ALM

**Step 1:** Logon to the HP ALM project

**Step 2:** Choose “Customize” from Tools

Domain: BENU, Project:

Req ID	Direct Cover Status	Author
	N/A	
1	Not Covered	Solution Manager
2	Not Covered	Solution Manager
3	Not Covered	Solution Manager
4	Not Covered	ei_integration_user
5	Not Covered	ei_integration_user

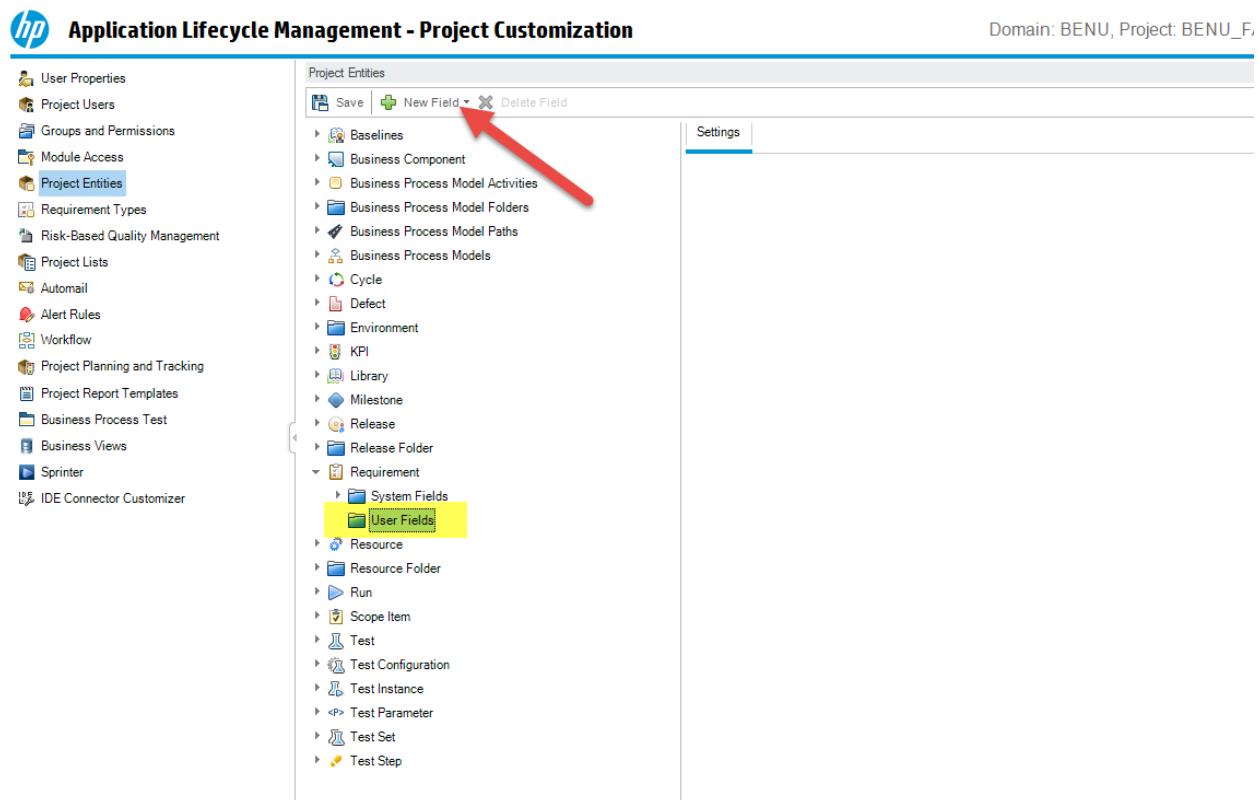
User: benu   ? Log

 Customize...

- Clear History...
- Task Manager...
- Download Images ▾
- Spelling and Grammar ▾
- New Defect...
- SAP Tools ▾

**Step 3:** Click on the “Project Entities” >> Requirement >> “User Fields” in the Project Customization view

Application Lifecycle Management - Project Customization Domain: BENU, Project: BENU\_F



The screenshot shows the 'Project Entities' section of the customization interface. On the left is a navigation sidebar with various project management options. The main area displays a tree structure of entities under 'Requirement'. The 'User Fields' node is highlighted with a yellow box and a red arrow points to the 'New Field' button in the toolbar above the tree.

**Step 4:** Create the new Field

The screenshot shows the 'Project Entities' screen in a software application. On the left, there is a tree view of project entities. A red arrow points to the 'Save' button in the toolbar at the top. The 'User Fields' node under 'Requirement' is expanded, and a new field named 'ATTRIBUTE01' is selected. On the right, the 'Settings' tab is active, displaying the configuration for 'ATTRIBUTE01'. The settings include:

Name:	RQ_USER_01
Label:	ATTRIBUTE01
Type:	String
Length:	255
Sanitization type:	Text
<input type="checkbox"/> History	
<input type="checkbox"/> Masked	
<input checked="" type="checkbox"/> Searchable	

Similarly, create two more Attributes,

The screenshot shows the 'Project Entities' screen again. The 'User Fields' node under 'Requirement' is expanded, and three attributes are listed: 'ATTRIBUTE01', 'ATTRIBUTE02', and 'ATTRIBUTE03'. The entire 'User Fields' section is highlighted with a yellow box.

**Step 5:** Choose “Requirement Types” in the Project Customization View

**Application Lifecycle Management - Project Customization**

Domain: BENU, Project: BE

User Properties  
Project Users  
Groups and Permissions  
Module Access  
Project Entities  
**Requirement Types** (highlighted)  
Risk-Based Quality Management  
Project Lists  
Automail  
Alert Rules  
Workflow  
Project Planning and Tracking

Requirement Types

Save New Type Rename Type Delete Type

Details System Fields User Defined Fields Rich Text Template

Type icon: Keep current image  
Risk Based Quality Management: Perform Analysis  
Test coverage:

Requirement Type	In Type
Undefined	<input type="checkbox"/>
<b>Folder</b> <span style="background-color: yellow;">(highlighted)</span>	<input checked="" type="checkbox"/>
Group	<input type="checkbox"/>
Functional	<input type="checkbox"/>
Business	<input type="checkbox"/>
Testing	<input type="checkbox"/>
Performance	<input type="checkbox"/>
Business Model	<input type="checkbox"/>

**Step 6:** Choose the User Defined Fields for the following Requirement Types,

- Folder
- Business
- Testing

Requirement Types

Save New Type Rename Type Delete Type

Details System Fields **User Defined Fields** Rich Text Template

User Defined Fields

Field	In Type
ATTRIBUTE01	<input checked="" type="checkbox"/>
ATTRIBUTE02	<input checked="" type="checkbox"/>
ATTRIBUTE03	<input checked="" type="checkbox"/>

Requirement Types

Save New Type Rename Type Delete Type

Details System Fields User Defined Fields Rich Text Template

User Defined Fields

Field	In Type
ATTRIBUTE01	<input checked="" type="checkbox"/>
ATTRIBUTE02	<input checked="" type="checkbox"/>
ATTRIBUTE03	<input checked="" type="checkbox"/>

Requirement Types

Save New Type Rename Type Delete Type

Details System Fields User Defined Fields Rich Text Template

User Defined Fields

Field	In Type
ATTRIBUTE01	<input checked="" type="checkbox"/>
ATTRIBUTE02	<input checked="" type="checkbox"/>
ATTRIBUTE03	<input checked="" type="checkbox"/>

The screenshot shows the 'Requirement Types' screen with the 'User Defined Fields' tab selected. A red arrow points to the 'Save' button in the top toolbar. The 'User Defined Fields' table contains three rows: ATTRIBUTE01, ATTRIBUTE02, and ATTRIBUTE03, all with checked 'In Type' and 'Required' checkboxes.

Field	In Type	Required
ATTRIBUTE01	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ATTRIBUTE02	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ATTRIBUTE03	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Save the User Defined Fields & click on Return,

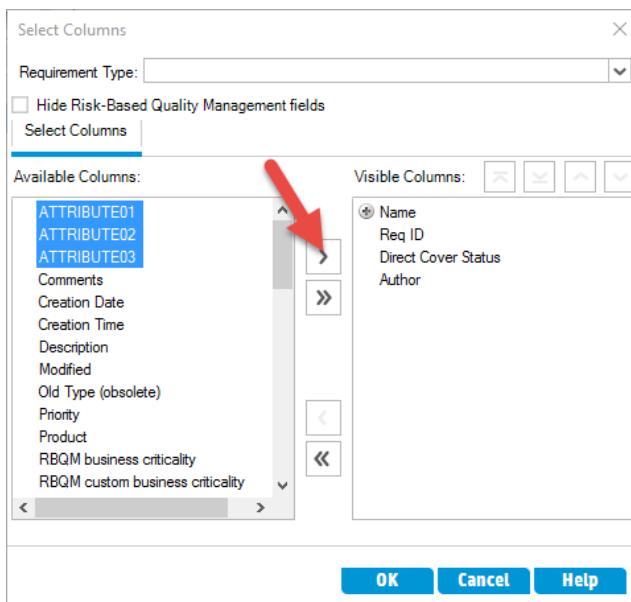
The screenshot shows the 'Management - Project Customization' screen. A red arrow points to the 'Save' button in the top toolbar. Another red arrow points to the 'Return' button in the top right corner. The 'User Defined Fields' table is identical to the one in the previous screenshot.

**Step 7:** Click on “Major Change” & hit “OK”

The screenshot shows the 'Customization Changes' dialog box. It displays a message about changes to Project Customization and asks when changes become available. Two radio button options are shown: 'Major Change' (selected) and 'Minor Change'. A red arrow points to the 'OK' button at the bottom. The 'OK' button is highlighted with a blue background.

**Step 8:** The User Defined Fields are created by now. Choose the fields in the Requirements module,

### Step 9: Choose the fields



The attributes are displayed in the Requirements Module,

	Name	Req ID	Direct Cover Status	Author	ATTRIBUTE01	ATTRIBUTE02	ATTRIBUTE03
Solution Documentation	213	Not Covered	Solution Manager				
Solution Manager Blueprints	1	Not Covered	Solution Manager				
Solution Manager Blueprints Trash	87	Not Covered	Solution Manager				
Solution Documentation Trash	215	Not Covered	Solution Manager				

Once the UDFs are created, you can map the attributes in the Administration console,

Details

Test Object Filters Attribute Mapping Logs

Map Attribute Remove

Solution Manager Attribute Name	Solution Manager Attribute Text	Solution Manager Attribute Label	Partner Attribute Name	Partner Attribute Text	Partner Attribute Type
No data available					

### Choose the Solution Documentation attribute

Attribute Mapping

Solution Manager Attribute

\* Attribute:

Text:

Label:

Partner Attribute

\* Attribute:

Text:

Type:

**Map** Cancel

Search: Attribute

Search Criteria Hide Search Criteria

Attribute Type	Description	Label
SAPSOLBUILDER	Scope Item Version ID	
SENDERLOGCOMPID	Sending Logical Component Group	Sending Log. Component Group
SFPFID	Form	Object
SITEID		Site
SMUD_CLOUD_DOC_ID	ID for cloud document	Object
SMUD_CLOUD_PROVIDER		Cloud provider
SOLCATEGORY	Document Type	Category
SOLFILEID		Solution File ID
SOLPACKID		Solution Package Version ID
STRUID	Structure	Object
TABLID	Table	Object

### Choose the HP ALM User Defined Attribute,

Attribute Mapping

Solution Manager Attribute

\* Attribute: SITEID

Text:

Label: Site

Partner Attribute

\* Attribute:

Text:

Type:

**Map** Cancel

Search: Attribute

Attribute Name	Attribute Type	Attribute Text	Attribute Length
RQ_USER_01	String	ATTRIBUTE01	255
RQ_USER_02	String	ATTRIBUTE03	255
RQ_USER_03	String	ATTRIBUTE02	255

Similarly map the other two attributes as well,

Solution Manager Attribute Name	Solution Manager Attribute Text	Solution Manager Attribute Label	Partner Attribute Name	Partner Attribute Text	Partner Attribute Type
SITEID		Site	RQ_USER_01	ATTRIBUTE01	String
ACHNAME		Folder Structure Name	RQ_USER_02	ATTRIBUTE03	String
CORE		Activity	RQ_USER_03	ATTRIBUTE02	String

**Note:** In Solution Manager 7.2 SP03, the “Map Attribute” was named as “Map Keyword” where we allow user to map the keywords (maintained in 7.1) to the HP ALM User Defined Fields. (We cannot map the Solution Documentation Standard/ Custom Attribute with HP ALM UDFs)

### 7.1.3. Logs

Each actions in the Adapter Administration console, will be logged in this section.

Operation	Created on	Created by	Description	Log	Status
Push Solution Documentation	14.05.2016 11:50:09 CET	MARIANTONY		Launch Log	Green
Push Solution Documentation	22.04.2016 12:30:07 CET	SOLMAN_BTC1	SOAP:1027 SRT: Serialization / ...	Launch Log	Red
Push Solution Documentation	04.04.2016 12:05:04 CET	MARIANTONY		Launch Log	Green
Push Solution Documentation	04.04.2016 12:01:15 CET	MARIANTONY		Launch Log	Green

The “Launch Log” would display the HP ALM Log file with the exact error message,

## 7.2. Transfer Solution Documentation

The “Push Solution Documentation” is to transfer the Solution Documentation to the HP ALM System based upon the Test Object Filters. In case of no Test Object Filters, an entire Solution Documentation is transferred.

There are two options for “Push Solution Documentation”

- Run in foreground
- Run in background

In this case, we are going to transfer the “Development Branch” to Partner Project.

## Business Process:

Main Solution - Development

Solution > Business Processes > US > Order To Cash > Order to Cash - Standard Order > Create Sales Order

Elements of 'Create Sales Order'

Name	Type	Group
Create Sales Order	Transaction <Exec.Ref>	Executables

## Libraries:

Main Solution - Development

Solution > Libraries > Executable Library > SAP\_ERP > SD > SD-BIL

Elements of 'SD-BIL'

Name	Type	Object	Group	Logical Component Group
Create Billing Document	Transaction <Exec.Orig.>	VF01	Executables	SAP_ERP

### 7.2.1. Run in foreground

The Push Solution Documentation would transfer the Solution Documentation in the foreground mode.

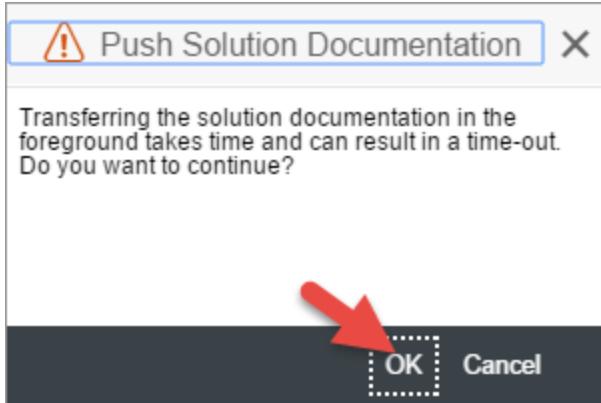
Branch Associations

New Association | Change Association | Delete Association | Push Solution Documentation | Display Test Results | Refresh

Run in foreground

Association Name	Branch	Solution	Partner Project	Project Attribute	Refresh Solution Documentation	Refresh Test Results	Push Status	
MainSolution_Development	Development	Default View	Main Solution	DEVELOPMENT	SAP_PROJECTS	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
MainSolution_Maintenance	Maintenance	Default View	Main Solution	MAINTENANCE	SAP_PROJECTS	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
MainSolution_Production	Production	Default View	Main Solution	PRODUCTION	SAP_PROJECTS	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Use this option only IF the Branch is having less number of nodes. There will be a warning asking the user to confirm the Push Solution Documentation,



Upon the successful completion of the Push Solution Documentation, the rating shows as Green.

Association Name	Branch	View	Solution	Partner Project	Project Attribute	Refresh Solution Documentation	Refresh Test Results	Push Status
MainSolution_Development	Development	Default View	Main Solution	DEVELOPMENT	SAP_PROJECTS	<input type="checkbox"/>	<input type="checkbox"/>	<span style="color: green;">■</span>
MainSolution_Maintenance	Maintenance	Default View	Main Solution	MAINTENANCE	SAP_PROJECTS	<input type="checkbox"/>	<input type="checkbox"/>	<span style="color: yellow;">◊</span>
MainSolution_Production	Production	Default View	Main Solution	PRODUCTION	SAP_PROJECTS	<input type="checkbox"/>	<input type="checkbox"/>	<span style="color: yellow;">◊</span>

In addition, the Log created for the “Push Solution Documentation”. The HP ALM LOG is launched in the browser upon clicking on the “Launch Log”. The status of every node in Solution Documentation is displayed in the Log File.

EI Audit Log										
EI Audit Log GUID		70b30737-8406-11e6-b9b3-73250a35954f								
ALM Domain Name		SAP_PROJECTS								
ALM Project Name		DEVELOPMENT								
Audit Log Records		191								
Status Level:		SUCCESS								
<a href="#">Show All</a>										
DB Date and Time	Action Type	ALM Req ID	SM Node ID	SM Node Ref1 ID	SM Node Ref2 ID	SM Node Description	Test ID	Test Name	Status	Message
2016-09-26 21:59:49	ADD	2	051MkmEK7jQTpQyXs17jETW			DEVELOPMENT	N/A	N/A	SUCCESS	
2016-09-26 21:59:49	ADD	3	051MkmEK7jQRpvPzpSMETW			Business Processes	N/A	N/A	SUCCESS	
2016-09-26 21:59:49	ADD	4	051MkmEK7kQTWe3jBW9pvG			US	N/A	N/A	SUCCESS	
2016-09-26 21:59:49	ADD	5	051MkmEK7kQTWe3nTpOvrm			Order To Cash	N/A	N/A	SUCCESS	
2016-09-26 21:59:50	ADD	6	051MkmEK7kQTWeqjMrSpvG			Order To Cash - Standard Order	N/A	N/A	SUCCESS	
2016-09-26 21:59:50	ADD	7	051MkmEK7jQTpQmXGwvVjW			Create Sales Order	N/A	N/A	SUCCESS	
2016-09-26 21:59:50	ADD	8	051MkmEK7jQTpQlqutwJjW	051MkmEK7jQTpQmXGwvVjW	051MkmEK7jQTpQlqutxVjW	Executables	N/A	N/A	SUCCESS	
2016-09-26 21:59:50	ADD	9	051MkmEK7kQTWezj7wek4W	051MkmEK7jQTpQmXGwvVjW	051MkmEK7jQTpQlqutxVjW	Create Sales Order	N/A	N/A	SUCCESS	
2016-09-26 21:59:50	ADD	10	051MkmEK7jQTpQyOXqZjkw			Create Quotation	N/A	N/A	SUCCESS	
2016-09-26 21:59:51	ADD	11	051MkmEK7jQTpQyOXqXvkW	051MkmEK7jQTpQyOXqZjkw		Executables	N/A	N/A	SUCCESS	
2016-09-26 21:59:51	ADD	12	051MkmEK7jQTpQyOXqMvkW	051MkmEK7jQTpQyOXqZjkw	051MkmEK7jQTpQyOXqXjkw	Create Quotation	N/A	N/A	SUCCESS	

*Note: The Push Solution Documentation (in foreground) is not entertained for the branch that has huge number of nodes.*

## 7.2.2. Run in background

This is the recommended approach for transferring the Solution Documentation. During the process the following tasks are performed internally,

- The associations is locked for any further operations
- The SM37 background job would be created with the name “TSTM\_ADAPTER\_SOLDOC\_PUSH”
- Once the Job is completed & the requirements tree is created successfully, HP ALM would send a notification back in Solution Manager to unlock the association

Branch Associations								
New Association		Change Association		Delete Association		Push Solution Documentation		Display Test Results
Association Name		Branch		Solution		Partner Project		Project Attribute
Run in foreground	Run in background	Solution	Partner Project	Project Attribute	Refresh Solution Documentation	Refresh Test Results	Push Status	
MainSolution_Development	Development	Default View	Main Solution	DEVELOPMENT	SAP_PROJECTS	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
MainSolution_Maintenance	Maintenance	Default View	Main Solution	MAINTENANCE	SAP_PROJECTS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MainSolution_Production	Production	Default View	Main Solution	PRODUCTION	SAP_PROJECTS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The association would be locked after the asynchronous process,

Branch Associations								
New Association		Change Association		Delete Association		Push Solution Documentation		Display Test Results
Association Name		Branch		View		Solution		Partner Project
Run in foreground	Run in background	Solution	Partner Project	Project Attribute	Refresh Solution Documentation	Refresh Test Results	Push Status	
MainSolution_Development	Development	Default View	Main Solution	DEVELOPMENT	SAP_PROJECTS	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
MainSolution_Maintenance	Maintenance	Default View	Main Solution	MAINTENANCE	SAP_PROJECTS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MainSolution_Production	Production	Default View	Main Solution	PRODUCTION	SAP_PROJECTS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The SM37 Job is created,

Job Overview									
Refresh		Release		Spool		Job log		Step	
Job overview from:		26.09.2016 at:		:		:		:	
to:		26.09.2016 at:		:		:		:	
Selected job names:		TSTM_ADAPTER_SOLDOC_PUSH		Selected user names:		MARIANTONY			
<input type="checkbox"/> Scheduled		<input checked="" type="checkbox"/> Released		<input checked="" type="checkbox"/> Ready		<input checked="" type="checkbox"/> Active		<input checked="" type="checkbox"/> Finished	
<input type="checkbox"/> Event controlled		Event ID:							
<input type="checkbox"/> ABAP program		Program name :							
JobName		Spool	Job doc	Job CreatedB	Status	Start date	Start Time	Duration(sec.)	Delay (sec.)
<input checked="" type="checkbox"/> TSTM_ADAPTER_SOLDOC_PUSH		(H)		MARIANTONY	Finished	26.09.2016	19:13:48	38	0
<input type="checkbox"/> TSTM_ADAPTER_SOLDOC_PUSH		(H)		MARIANTONY	Finished	26.09.2016	19:16:36	64	0
*Summary								102	0

Once the requirement tree is created in HP ALM, the notification is sent back to Solution Manager system to unlock the association,

Branch Associations

Association Name	Branch	View	Solution	Partner Project	Project Attribute	Refresh Solution Documentation	Refresh Test Results	Push Status
MainSolution_Development	Development	Default View	Main Solution	DEVELOPMENT	SAP_PROJECTS	<input type="checkbox"/>	<input type="checkbox"/>	
MainSolution_Maintenance	Maintenance	Default View	Main Solution	MAINTENANCE	SAP_PROJECTS	<input type="checkbox"/>	<input type="checkbox"/>	
MainSolution_Production	Production	Default View	Main Solution	PRODUCTION	SAP_PROJECTS	<input type="checkbox"/>	<input type="checkbox"/>	

Details

Test Object Filters	Keyword Mapping	Logs																				
<table border="1"> <thead> <tr> <th>Operation</th> <th>Created on</th> <th>Created by</th> <th>Log</th> <th>Status</th> </tr> </thead> <tbody> <tr> <td>Push Solution Documentation</td> <td>26.09.2016 19:18:22 CET</td> <td>MARIANTONY</td> <td>Launch Log</td> <td></td> </tr> <tr> <td>Push Solution Documentation</td> <td>26.09.2016 19:15:08 CET</td> <td>MARIANTONY</td> <td>Launch Log</td> <td></td> </tr> <tr> <td>Push Solution Documentation</td> <td>26.09.2016 18:30:28 CET</td> <td>MARIANTONY</td> <td>Launch Log</td> <td></td> </tr> </tbody> </table>			Operation	Created on	Created by	Log	Status	Push Solution Documentation	26.09.2016 19:18:22 CET	MARIANTONY	Launch Log		Push Solution Documentation	26.09.2016 19:15:08 CET	MARIANTONY	Launch Log		Push Solution Documentation	26.09.2016 18:30:28 CET	MARIANTONY	Launch Log	
Operation	Created on	Created by	Log	Status																		
Push Solution Documentation	26.09.2016 19:18:22 CET	MARIANTONY	Launch Log																			
Push Solution Documentation	26.09.2016 19:15:08 CET	MARIANTONY	Launch Log																			
Push Solution Documentation	26.09.2016 18:30:28 CET	MARIANTONY	Launch Log																			

## HP ALM – Requirements Overview:

Application Lifecycle Management

Domain: SAP\_PROJECTS, Project: DEVELOPMENT User: benu

Requirements Edit View Favorites Analysis

No Filter Defined

Name	Req ID	Direct Cover Status	Author
Requirements	0	N/A	
Main Solution	1	Not Covered	Solution Manager
DEVELOPMENT	2	Not Covered	ei_integration_us...
Business Processes	3	Not Covered	ei_integration_us...
US	4	Not Covered	ei_integration_us...
Order To Cash	5	Not Covered	ei_integration_us...
Order to Cash - Standard Order	6	Not Covered	ei_integration_us...
Create Sales Order	7	Not Covered	ei_integration_us...
Executables	8	Not Covered	ei_integration_us...
Create Sales Order	9	Not Covered	ei_integration_us...
Create Quotation	10	Not Covered	ei_integration_us...
Executables	11	Not Covered	ei_integration_us...
Create Quotation	12	Not Covered	ei_integration_us...
Create Outbound Inv. with Order Ref.	13	Not Covered	ei_integration_us...
Executables	14	Not Covered	ei_integration_us...
Create Outbound Inv. with Order Ref.	15	Not Covered	ei_integration_us...
Change Outbound Delivery	16	Not Covered	ei_integration_us...
Executables	17	Not Covered	ei_integration_us...
Change Outbound Delivery	18	Not Covered	ei_integration_us...
Create Billing Document	19	Not Covered	ei_integration_us...
Executables	20	Not Covered	ei_integration_us...
Create Billing Document	21	Not Covered	ei_integration_us...
Procure To Pay	22	Not Covered	ei_integration_us...
Procure To Pay - Standard	23	Not Covered	ei_integration_us...

Name	Req ID	Direct Cover Status	Author
Create Purchase Order	27	Not Covered	ei_integration_us...
Executables	28	Not Covered	ei_integration_us...
Create Purchase Order	29	Not Covered	ei_integration_us...
Goods Movement	30	Not Covered	ei_integration_us...
Executables	31	Not Covered	ei_integration_us...
Goods Movement	32	Not Covered	ei_integration_us...
Enter Incoming Invoice	33	Not Covered	ei_integration_us...
Executables	34	Not Covered	ei_integration_us...
Enter Incoming Invoice	35	Not Covered	ei_integration_us...
Payment Run _ Debit Memo Run	36	Not Covered	ei_integration_us...
Executables	37	Not Covered	ei_integration_us...
Payment Run _ Debit Memo Run	38	Not Covered	ei_integration_us...
APJ	39	Not Covered	ei_integration_us...
Demo Scenario	40	Not Covered	ei_integration_us...
Demo Process	41	Not Covered	ei_integration_us...
Financing Contracts	42	Not Covered	ei_integration_us...
Executables	43	Not Covered	ei_integration_us...
Financing Contracts	44	Not Covered	ei_integration_us...
Financing Contracts	45	Not Covered	ei_integration_us...
Sales Targets by Partners	46	Not Covered	ei_integration_us...
Executables	47	Not Covered	ei_integration_us...
Sales Targets by Partners	48	Not Covered	ei_integration_us...
Sales Targets by Partners	49	Not Covered	ei_integration_us...
User Maintenance	50	Not Covered	ei_integration_us...

## Process Step Library:

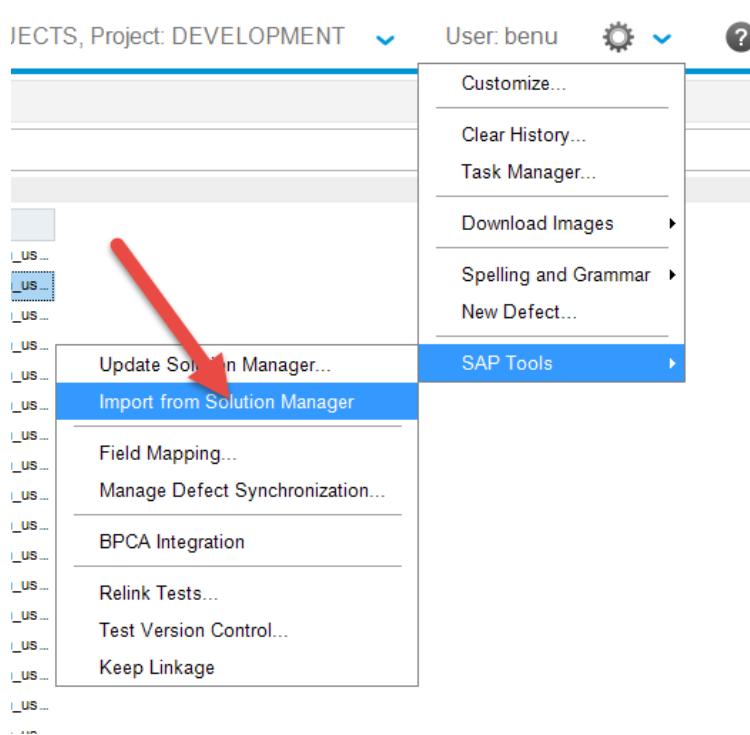
Name	Req ID	Direct Cover Status	Author
Libraries	59	Not Covered	ei_integration_us...
Process Step Library	60	Not Covered	ei_integration_us...
VA01	61	Not Covered	ei_integration_us...
Executables	62	Not Covered	ei_integration_us...
Create Sales Order	63	Not Covered	ei_integration_us...
Financing Contracts	64	Not Covered	ei_integration_us...
Executables	65	Not Covered	ei_integration_us...
Financing Contracts	66	Not Covered	ei_integration_us...
Financing Contracts	67	Not Covered	ei_integration_us...
Sales Targets by Partners	68	Not Covered	ei_integration_us...
Executables	69	Not Covered	ei_integration_us...
Sales Targets by Partners	70	Not Covered	ei_integration_us...
Sales Targets by Partners	71	Not Covered	ei_integration_us...
SAP_CRM	72	Not Covered	ei_integration_us...
CRM	73	Not Covered	ei_integration_us...
CRM-IU	74	Not Covered	ei_integration_us...
BSP WD Component	75	Not Covered	ei_integration_us...
Executables	76	Not Covered	ei_integration_us...
BSP WD Component	77	Not Covered	ei_integration_us...
BSP WD Component	78	Not Covered	ei_integration_us...
-			
Create Sales Order	81	Not Covered	ei_integration_us...
Executables	82	Not Covered	ei_integration_us...
Create Sales Order	83	Not Covered	ei_integration_us...
SAP_ERP	84	Not Covered	ei_integration_us...

## Executable Library:

Name	Req ID	Direct Cover Status	Author
Libraries	59	Not Covered	ei_integration_us...
Process Step Library	60	Not Covered	ei_integration_us...
Executable Library	146	Not Covered	ei_integration_us...
SAP_ERP	147	Not Covered	ei_integration_us...
FI	148	Not Covered	ei_integration_us...
FI-CA	149	Not Covered	ei_integration_us...
Payment Run _ Debit Memo Run	150	Not Covered	ei_integration_us...
CA	151	Not Covered	ei_integration_us...
CA-EPT	152	Not Covered	ei_integration_us...
CA-EPT-BCV	153	Not Covered	ei_integration_us...
CC Query Application Configurator (FPM)	154	Not Covered	ei_integration_us...
CA-WUI	155	Not Covered	ei_integration_us...
CA-WUI-APF	156	Not Covered	ei_integration_us...
Starts the CRM UI Application Frame	157	Not Covered	ei_integration_us...
BC	158	Not Covered	ei_integration_us...
BC-SEC	159	Not Covered	ei_integration_us...
BC-SEC-USR	160	Not Covered	ei_integration_us...
User Maintenance	161	Not Covered	ei_integration_us...
PM	162	Not Covered	ei_integration_us...
PM-WOC	163	Not Covered	ei_integration_us...
PM-WOC-CP	164	Not Covered	ei_integration_us...
Create Assignment	165	Not Covered	ei_integration_us...
SD	166	Not Covered	ei_integration_us...
SD-BIL	167	Not Covered	ei_integration_us...

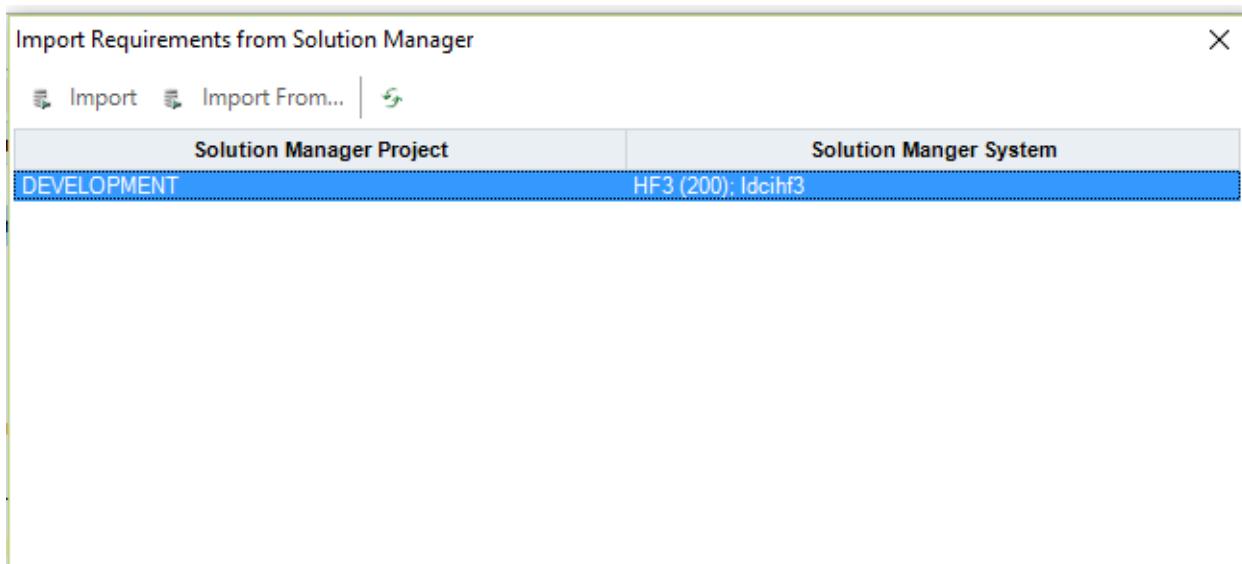
## 7.3. Import Solution Documentation from HP ALM

The Solution Documentation can be imported from HP ALM system as well. This is done using the option, *Tools >> SAP Tools >> Import from Solution Manager*

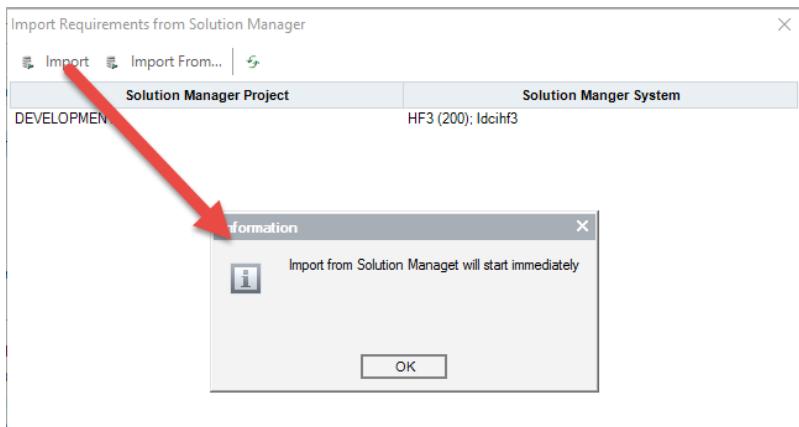


The popup “Import Requirements from Solution Manager” is launched with the following options

<i>Import</i>	Imports the Solution Documentation Branch
<i>Import From</i>	The Administrator Console launches where user could push the Solution Documentation branch by changing the View

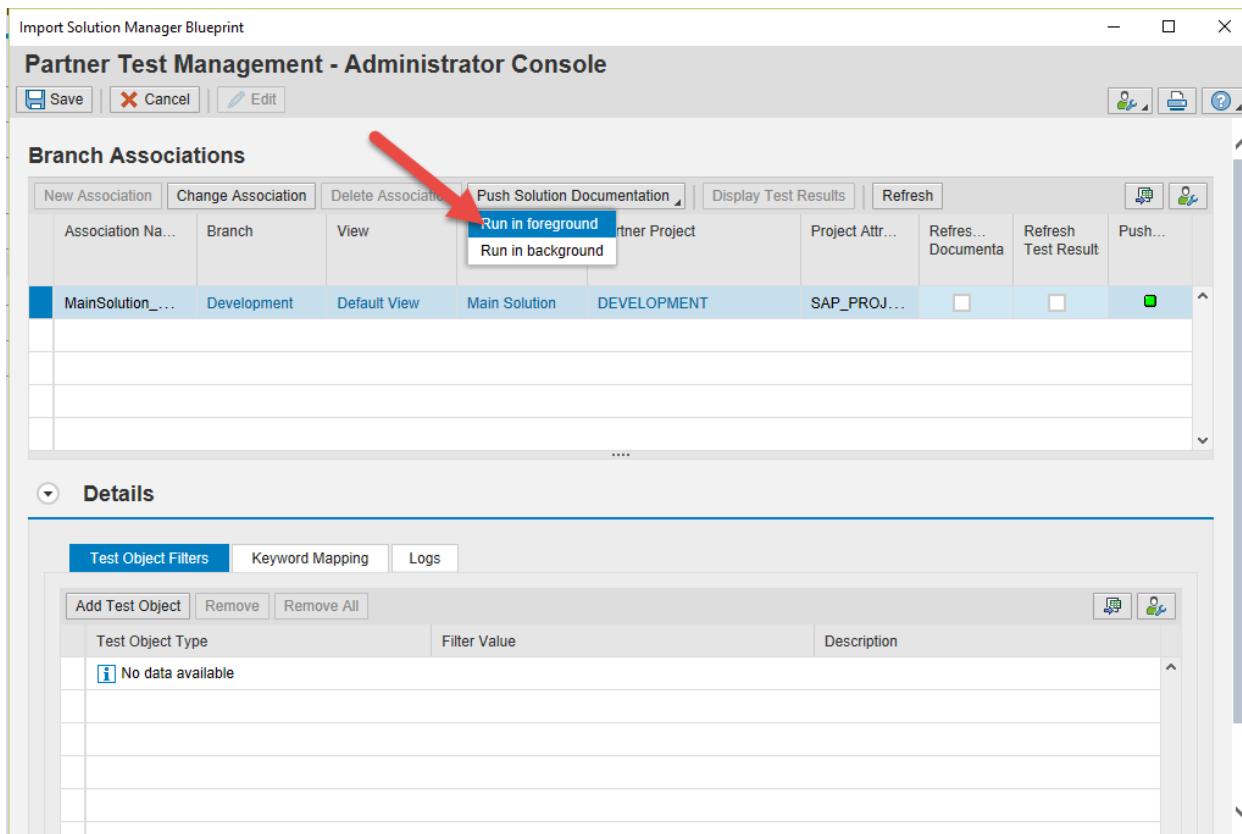


## Import:



## Import from:

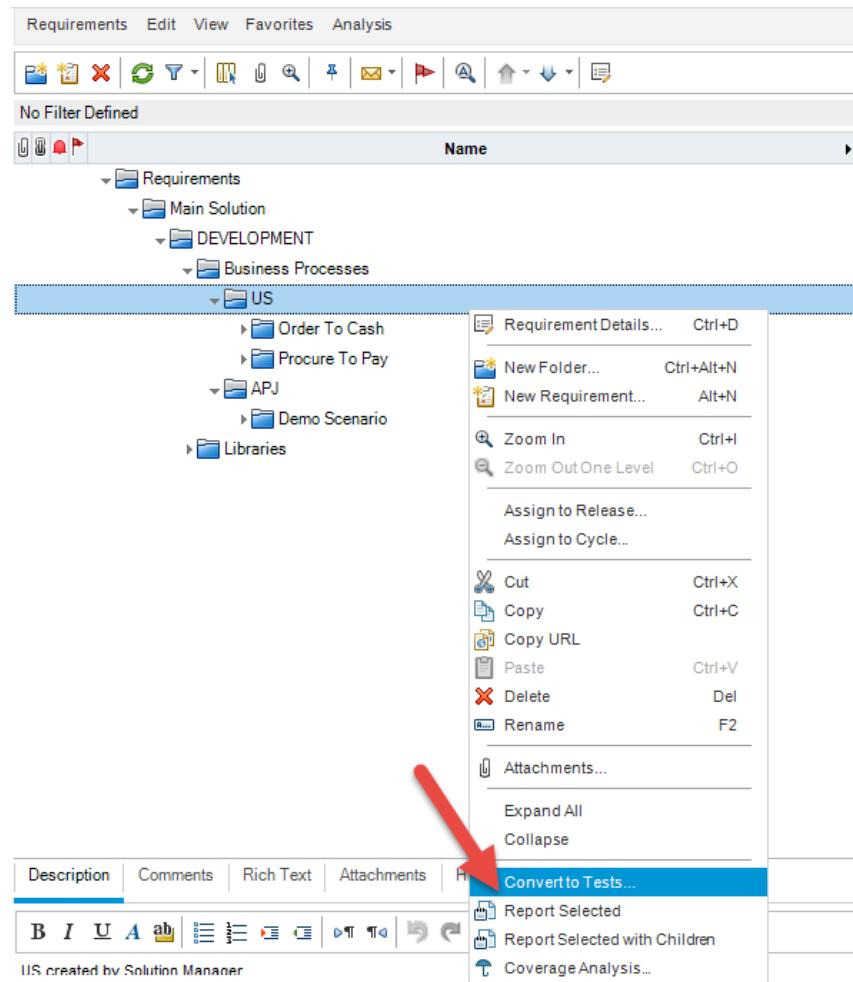
The “Import from” launches the “Administrator Console” (as a popup) with an association for which the HP ALM Project is associated. The user gets a chance to change the Solution Documentation – View, before pushing the Solution Documentation.



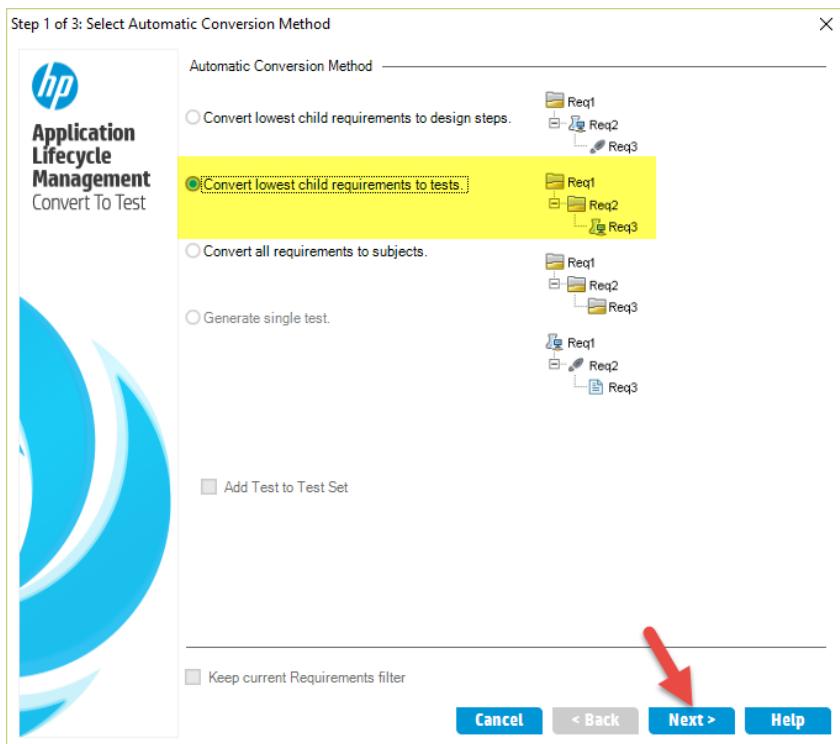
## 7.4. Create the Test Cases in HP ALM

The Solution Documentation was transferred to HP ALM & the Requirements are built in HP ALM. In order to do the testing, the Test Cases has to be created from the created requirements. In the below diagram we are creating the Test Cases for the Business Process in US region,

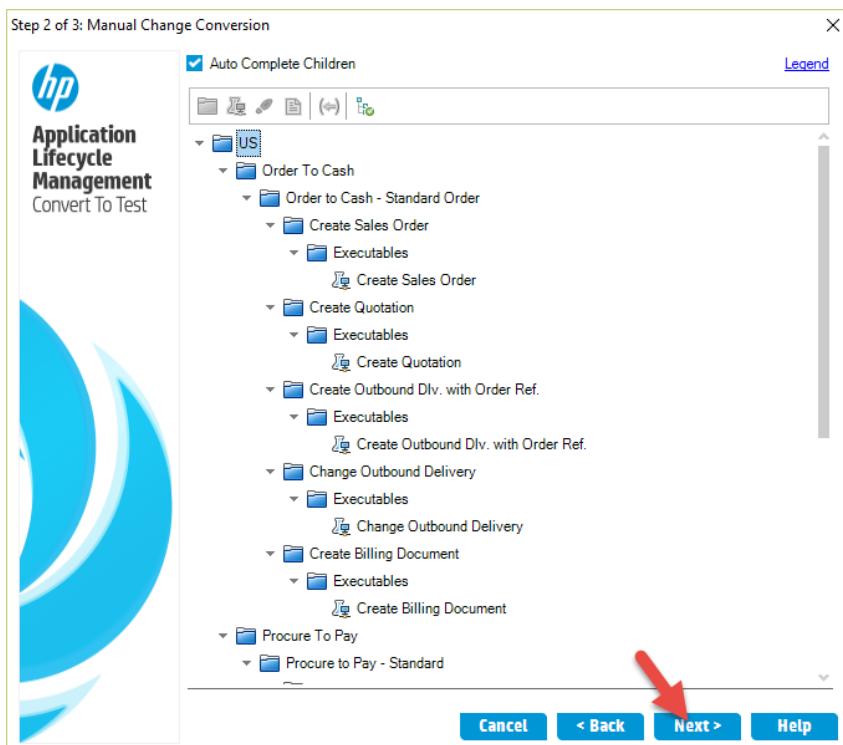
**Step 1:** Right Click on the region “US” and click on “Convert Tests”



**Step 2:** Choose the lowest child requirements to tests. This would create the Test Cases for the Executables and Documentation. (Because Executables and Documentation are the lowest requirements in the node)



**Step 3:** Click on Next & Finish the wizard with the default options.



The created Test Cases can be seen in the “Test Plan” section

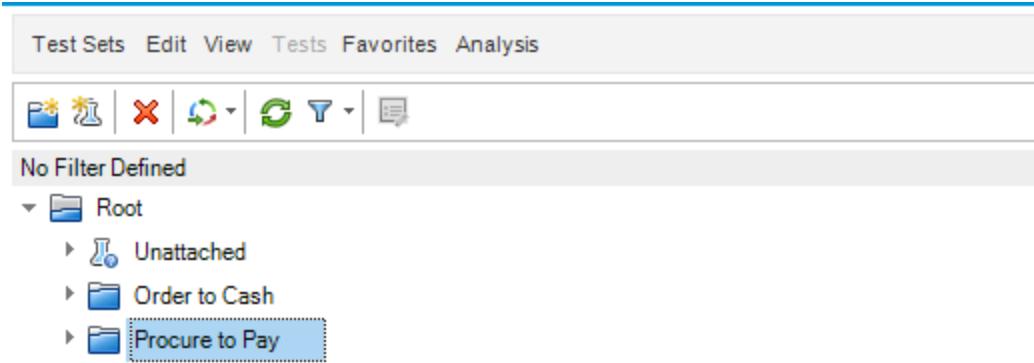
The screenshot shows the SAP Test Plan module interface. On the left is a navigation bar with links like Dashboard, Management, Requirements, Testing, Test Resources, Business Components, Test Plan (which is highlighted in yellow), Test Lab, Test Runs, and Defects. The main area has a toolbar with icons for New, Open, Save, Print, etc. Below the toolbar is a search bar with the placeholder 'No Filter Defined'. The main content area displays a hierarchical tree of test cases. At the top level is 'Subject' with 'Unattached' and 'Generated Tests' branches. 'Generated Tests' has a 'US' branch, which further has 'Order To Cash' and 'Procure To Pay' branches. 'Order To Cash' contains 'Order to Cash - Standard Order', which has several sub-items: Change Outbound Delivery, Create Billing Document, Create Outbound Dlv. with Order Ref., Create Quotation, and Create Sales Order. 'Procure To Pay' contains 'Procure to Pay - Standard', which has sub-items: Create Purchase Order, Create Purchase Requisition, Enter Incoming Invoice, Goods Movement, and Payment Run \_ Debit Memo Run.

#### 7.4.1. Test Set Creation

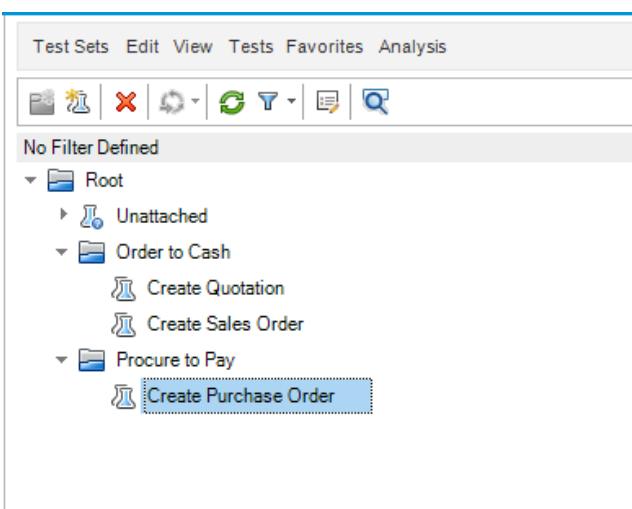
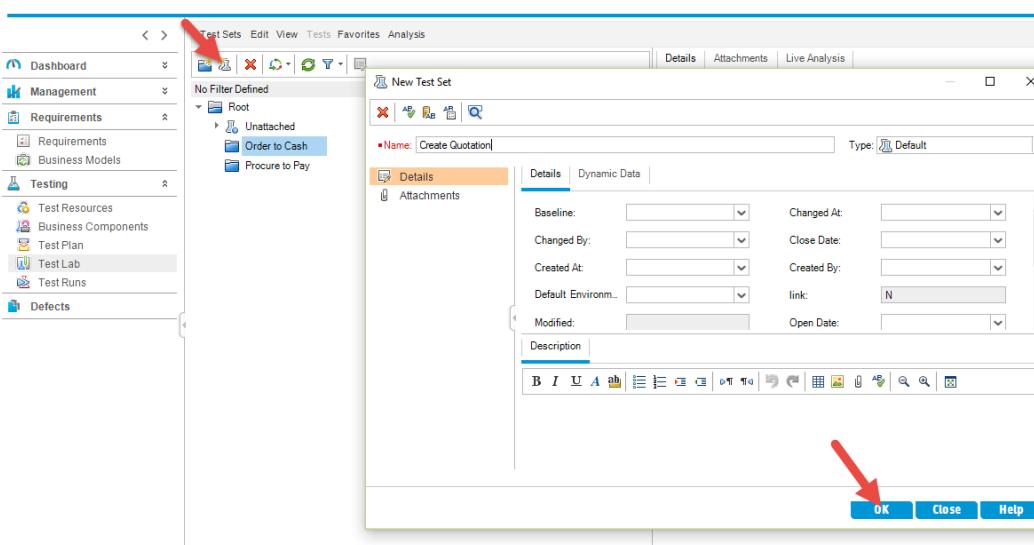
Once test design using Test Plan module is completed, testers organize test execution by creating test sets in the Test Lab module. A test set contains a set of the tests that are designed to achieve specific test goals.

##### Step 1: Create a Folder in the Test Lab

The screenshot shows the SAP Test Lab module interface. On the left is a navigation bar with links like Dashboard, Management, Requirements, Testing, Test Resources, Business Components, Test Plan, Test Lab (which is highlighted in grey), Test Runs, and Defects. The main area has a toolbar with icons for New, Open, Save, Print, etc. Below the toolbar is a search bar with the placeholder 'No Filter Defined'. The main content area displays a hierarchical tree. At the top level is 'Root' with an 'Unattached' item. A modal dialog box titled 'New Test Set Folder' is open in the foreground. It has a text input field 'Test Set Folder Name:' containing 'Order to Cash |'. At the bottom of the dialog are two buttons: 'OK' (highlighted with a red arrow) and 'Cancel'.



## Step 2: Create the Test Set



## 7.4.2. Test Case Assignment

**Step 1:** Assign the Test Cases to the Test Sets. “Choose Select Tests” in the Test Set

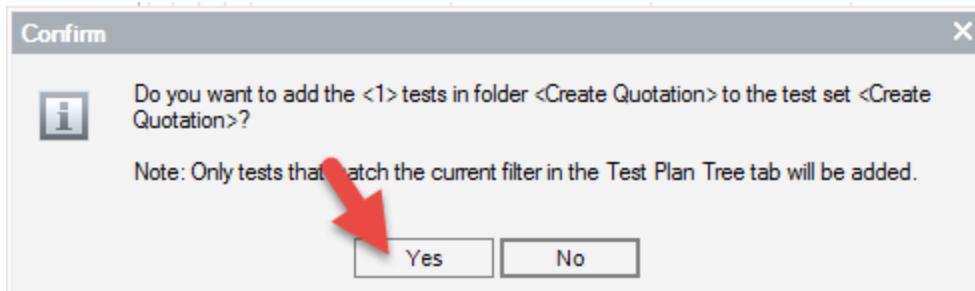
The screenshot shows the SAP Test Plan Tree interface. On the left, there is a tree view labeled "Test Plan Tree" with nodes like "Root", "Unattached", "Order to Cash" (which contains "Create Quotation" and "Create Sales Order"), and "Procure to Pay" (which contains "Create Purchase Order"). On the right, there is a grid titled "Select Tests" with columns "Name", "Test: Test Name", "Type", "Status", and "Iterations". A red arrow points to the "Create Quotation" node in the tree view.

The “Test Plan Tree” is displayed in the last pane,

The screenshot shows the SAP Test Plan Tree interface. On the left, there is a tree view labeled "Test Plan Tree" with nodes like "Root", "Unattached", "Generated Tests" (which contains "US" and "Procure To Pay"), and "Order to Cash" (which contains "Order to Cash - Standard Order", "Change Outbound Delivery", "Create Billing Document", "Create Outbound Div. with Order Ref.", "Create Quotation", and "Create Sales Order"). On the right, there is a grid titled "Select Tests" with columns "Name", "Test: Test Name", "Type", "Status", and "Iterations". A yellow box highlights the "Test Plan Tree" pane on the right, which displays a detailed tree structure of test cases under "Subject".

**Step 2:** Add Tests to Test Set

The screenshot shows the SAP Test Plan Tree interface. On the left, there is a tree view labeled "Test Plan Tree" with nodes like "Root", "Unattached", "Order to Cash" (which contains "Create Quotation" and "Create Sales Order"), and "Procure to Pay". On the right, there is a grid titled "Select Tests" with columns "Name", "Test: Test Name", "Type", "Status", and "Iterations". A red arrow points to the "Create Quotation" node in the tree view. A red box highlights the "Add Tests to Test Set" button at the bottom of the right pane, which has a tooltip "Quotation".



Test Sets Edit View Tests Favorites Analysis

No Filter Defined

- Root
  - Unattached
  - Order to Cash
    - Create Quotation
    - Create Sales Order
  - Procure to Pay
    - Create Purchase Order

Name	Test: Test Name	Type	Status	Iterations	Plan
[1]Create Quotati...	Create Quotati...	MANUAL	No Run		

**Step 3:** Follow Step – 1 and Step – 2 to assign the Test Cases to the other Test Sets.

Test Sets Edit View Tests Favorites Analysis

No Filter Defined

- Root
  - Unattached
  - Order to Cash
    - Create Quotation
    - Create Sales Order**
  - Procure to Pay
    - Create Purchase Order

Name	Test: Test Name	Type	Status
[1]Create Sales...	Create Sales Order	MANUAL	No Run

Test Sets Edit View Tests Favorites Analysis

No Filter Defined

- Root
  - Unattached
  - Order to Cash
    - Create Quotation
    - Create Sales Order
  - Procure to Pay
    - Create Purchase Order

Name	Test: Test Name	Type	Status
[1]Create Purcha...	Create Purchase Order	MANUAL	No Run

## 7.5. Perform Manual Testing

After the creation of the Test Set, the tester will start the testing by clicking on “Run”

### Step 1: Run the Test Case

The screenshot shows the SAP Quality Management Test Set interface. On the left, there's a navigation tree under 'Root' with nodes like 'Unattached', 'Order to Cash' (which is expanded, showing 'Create Quotation' and 'Create Sales Order'), and 'Procure to Pay' (showing 'Create Purchase Order'). On the right, the 'Execution Grid' tab is active in the ribbon. Below it is a table with columns: Name, Test: Test Name, Type, Status, and Iteration. One row is highlighted in blue, showing 'I1>Create Quotation' as the name, 'Create Quotation' as the test name, 'MANUAL' as the type, and 'No Run' as the status. A red arrow points to the 'Run' button in the toolbar above the grid.

**Step 2:** A popup is launched with the set of instructions, which lets you do the testing (manually). Maintain the Status based on the outcome of the Testing

The screenshot shows the 'Manual Runner' dialog box. It has tabs for 'Begin Run', 'End Run', 'Cancel Run', and 'OS Info'. The 'Run Details' tab is active. It contains fields for 'Run Name' (set to 'Run\_9-28\_11-11-18'), 'Test Instance' (set to '[1]Create Quotation'), 'Tester' (set to 'benu'), 'Status' (set to 'Failed' - indicated by a red arrow), 'Test Set:Name' (set to 'Create Quotation'), 'Baseline', 'Change Detection', 'Configuration ID' (set to '1002'), and 'Comments' (containing the text 'Failed. The transaction is not launched'). There are also tabs for 'Test Description' and 'Add Comment'.

**Step 3:** Click on “End Run”. This would show the Test Result in the Execution Grid

The screenshot shows the HP ALM interface. On the left, there's a tree view under 'Root' with nodes like 'Unattached', 'Order to Cash' (which contains 'Create Quotation' and 'Create Sales Order'), and 'Procure to Pay' (which contains 'Create Purchase Order'). On the right, an 'Execution Grid' tab is selected, displaying a table with columns: Name, Test: Test Name, Type, and Status. A red arrow points to the 'Status' column for the 'Create Quotation' row, which is marked as 'Failed'.

Name	Test: Test Name	Type	Status
I1>Create Quotati...	Create Quotation	MANUAL	<span style="color: red;">✖ Failed</span>

#### Step 4: Follow the Step 1 to 3 in order to test the other Test Sets

This screenshot shows the continuation of the test set execution. The 'Execution Grid' tab is selected, and the table now includes two more rows: 'I1>Create Sales...' (Status: Passed) and 'I1>Create Purcha...' (Status: Failed). The 'Create Sales Order' row has a green checkmark icon in the status column. The 'Create Purchase Order' row has a red '✖ Failed' icon in the status column.

Name	Test: Test Name	Type	Status
I1>Create Sales...	Create Sales Order	MANUAL	<span style="color: green;">✓ Passed</span>
I1>Create Purcha...	Create Purchase Order	MANUAL	<span style="color: red;">✖ Failed</span>

## 7.6. HP ALM Defects

In this section, we need to create the defects & sync those to the Solution Manager System

### 7.6.1. Field Mapping

The Field Mapping is required to Map the “Defect Fields” in HP ALM and Solution Manager. This is mandatory before creating the defect. The Field Mapping Dialog can be done in the Field Mapping Dialog. *Tools >> SAP Tools >> Field Mapping*

Domain: SAP\_PROJECTS, Project: DEVELOPMENT User: benu

The screenshot shows a SAP Quality Center interface. At the top, it displays "Domain: SAP\_PROJECTS, Project: DEVELOPMENT" and "User: benu". A context menu is open, with "SAP Tools" highlighted. Under "SAP Tools", the "Field Mapping..." option is selected, indicated by a blue background.

**Step 1:** The Field “Detected by” needs to be mapped to the SAP Field “Reported by”,

Field Mapping

Application: HF3 (200); Idcihf3

Status	QC Field Label	QC Field Data; Type	SAP Field Label
	Detected By	Free Value; char (60)	

SAP Field Label	SAP Field Name	SAP Field Data; Type
Reported by	SAPReporterId	Free Value; Char (32)

**Value Mapping...**

Field Mapping

Application: HF3 (200); Idcihf3

Status	QC Field Label	QC Field Data; Type	SAP Field Label
<input checked="" type="checkbox"/>	Detected By	Free Value; char (60)	Reported by
<input checked="" type="checkbox"/>	Severity	Values List; char (70)	Priority

SAP Field Label	SAP Field Name	SAP Field Data; Type

**Value Mapping...**

**Step 2:** The Field “Severity” needs to be mapped to SAP Field “Priority”

### Field Mapping

Application: HF3 (200); Idchf3

Required Fields			
Status	QC Field Label	QC Field Data; Type	SAP Field Label
	Severity	Values List: char (70)	

SAP Field Label	SAP Field Name	SAP Field Data; Type
Priority	SAPPriority	Values List: Char (80)

### **Step 3: Do the Value Mapping**

### Field Mapping

Application: HF3 (200); Idcif3

Required Fields				SAP Field Label	SAP Field Name	SAP Field Data; Type
Status	QC Field Label	QC Field Data; Type	SAP Field Label			
<input checked="" type="checkbox"/>	Detected By	Free Value; char (60)	Reported by			
<input checked="" type="checkbox"/>	Severity	Values List; char (70)	Priority			

**<<**

**>>**

**Value Mapping...**

## Value Mapping

Severity Values		Priority Values	
QC Value	SAP Value	SAP Value	SAP Field Name
1-Low		1: Very High	1
2-Medium		2: High	2
3-High		3: Medium	3
4-Very High		4: Low	4
5-Urgent			

#### **Step 4: Map all the Severity Values**

Value Mapping

Severity Values		Priority Values	
QC Value	SAP Value	SAP Value	SAP Field Name
1-Low	4: Low	1: Very High	1
2-Medium	3: Medium	2: High	2
<b>3-High</b>	<b>2: High</b>	3: Medium	3
4-Very High	1: Very High	4: Low	4
5-Urgent	1: Very High		

<<
>>

➡
OK
Cancel

**Step 5:** Choose the check box “Apply Append Only” mode to defects comments & perform Apply and OK

Field Mapping

Application: HF3 (200); ldcihf3 Reset

Status	QC Field Label	QC Field Data; Type	SAP Field Label
<input checked="" type="checkbox"/>	Detected By	Free Value; char (60)	Reported by
<input checked="" type="checkbox"/>	Severity	Values List; char (70)	Priority

<<
>>

**Value Mapping...**

Status	QC Field Label	QC Field Data; Type	SAP Field Label
Actual Fix Time		Free Value; number (5)	
Assigned To		Free Value; char (60)	
Attachment		Free Value; char (1)	
Closed By Solution...		Free Value; char (1)	
Closed in Version		Values List; char (70)	
Detected in Cycle		Values List; char (-1)	
Detected in Release		Values List; char (-1)	
Detected in Version		Values List; char (70)	
Detected on...		Values List; char (-1)	
Estimated Fix Time		Free Value; number (5)	

SAP Field Label	SAP Field Name	SAP Field Data; Type
MessageImpact	SAPMessageImpact	Values List; Char (255)
FrontEnd	SAPFrontend	Free Value; Char (30)
MessageSolutionCategory	SAPMessageSolutionCateg...	Values List; Char (255)
MessageUrgency	SAPMessageUrgency	Values List; Char (255)
SoftwareComponentPatch	SAPSoftwareComponentPa...	Free Value; Char (255)
End customer requirement	SAPRequestedEnd	Free Value; Date (0)
Category	SAPCategory	Values List; Char (255)
Database	SAPDatabase	Free Value; Char (30)
SoftwareComponent	SAPSoftwareComponent	Free Value; Char (30)
Start customer requirement	SAPRequestedBegin	Free Value; Date (0)

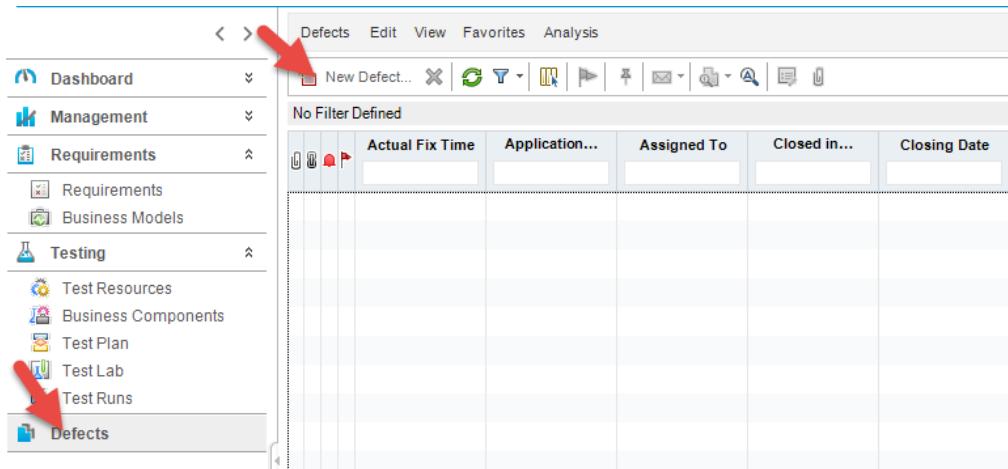
**Value Mapping...**

[Apply "Append Only" mode to defects.comments.]

Legend: ✓ Valid Mapping --- Not Mapped ✗ Value Mapping is incomplete
OK
Cancel
➡ Apply

## 7.6.2. Create HP ALM Defect

### Step 1: Create a “New Defect”



### Step 2: Choose the Defect Type as “SAP Related Defect” & click on “SAP Related Details” tab

The screenshot shows the 'New Defect' dialog box. The 'Summary' field contains the text 'Create Quotation is Failed'. A red arrow points to the 'SAP Related Details' tab, which is currently selected. The 'Details' tab is also visible. The 'SAP Related Details' tab contains fields for 'Detected By' (benu), 'Severity' (4-Very High), 'Assigned To' (dropdown), 'Closing Date' (dropdown), 'Detected in Cycle' (dropdown), 'Detected in Version' (dropdown), 'Detected on Date' (9/28/2016), 'Actual Fix Time' (dropdown), 'Closed in Version' (dropdown), 'Defect type' (highlighted in yellow and set to 'SAP Related Defect'), 'Detected in Release' (dropdown), 'Detected on Environ...' (dropdown), and 'Description' (text area containing 'Create Quotation is Failed'). At the bottom right are 'Submit', 'Close', and 'Help' buttons.

### Step 3: Fill the Application Component from the Drop Down

New Defect

Summary: Create Quotation is Failed

Details SAP Related Details

Attachments

Application Component:	Responsible System:																
Service Desk System:	<input type="text"/> View by Group																
SM Language:	<table border="1"> <thead> <tr> <th>Name</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>SV-SMG-OP</td> <td>Solution Directory</td> </tr> <tr> <td>SV-SMG-OST</td> <td>Toolset for One Service</td> </tr> <tr> <td>SV-SMG-PSM</td> <td>Process Scheduling Manageme...</td> </tr> <tr> <td>SV-SMG-QC</td> <td>Adapter for SAP Quality Center...</td> </tr> <tr> <td>SV-SMG-RCD</td> <td>Rapid Content Delivery</td> </tr> <tr> <td>SV-SMG-RQM</td> <td>Connector for IBM Rational Qua...</td> </tr> <tr> <td>SV-SMG-SDA</td> <td>Solution Documentation Assista...</td> </tr> </tbody> </table>	Name	Description	SV-SMG-OP	Solution Directory	SV-SMG-OST	Toolset for One Service	SV-SMG-PSM	Process Scheduling Manageme...	SV-SMG-QC	Adapter for SAP Quality Center...	SV-SMG-RCD	Rapid Content Delivery	SV-SMG-RQM	Connector for IBM Rational Qua...	SV-SMG-SDA	Solution Documentation Assista...
Name	Description																
SV-SMG-OP	Solution Directory																
SV-SMG-OST	Toolset for One Service																
SV-SMG-PSM	Process Scheduling Manageme...																
SV-SMG-QC	Adapter for SAP Quality Center...																
SV-SMG-RCD	Rapid Content Delivery																
SV-SMG-RQM	Connector for IBM Rational Qua...																
SV-SMG-SDA	Solution Documentation Assista...																
Description:	<input type="button" value="OK"/> <input type="button" value="Cancel"/> <input type="button" value="Clear"/>																

#### Step 4: Choose the System ID and Client

New Defect

Summary: Create Quotation is Failed

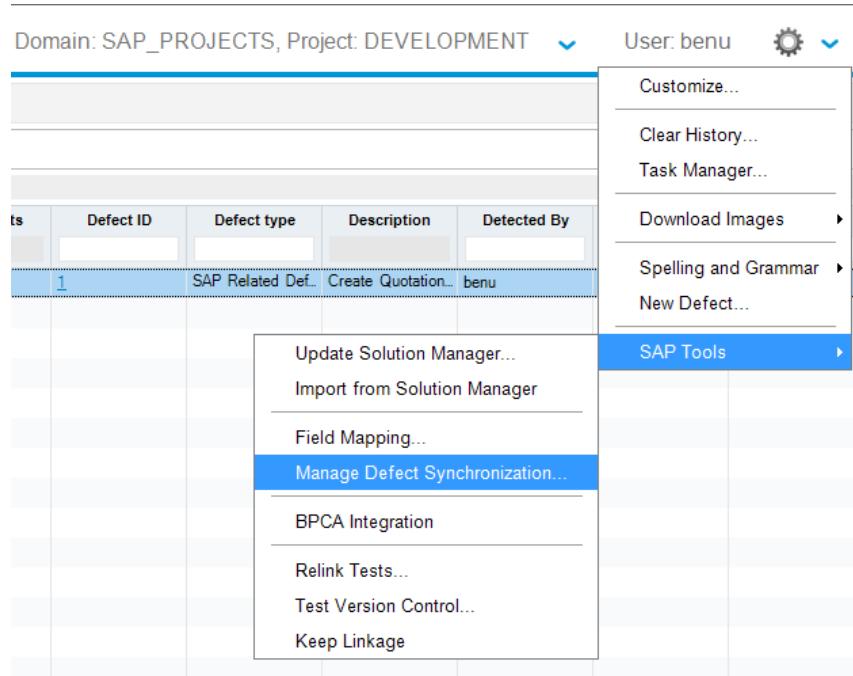
Details SAP Related Details

Attachments

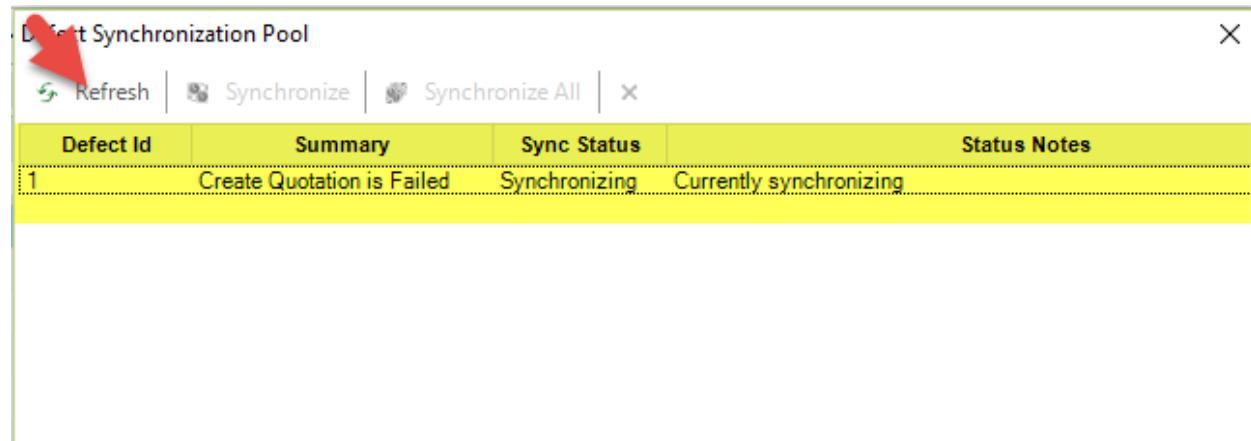
Application Component:	SV-SMG-QC	Responsible System:	Quality Center
Service Desk System:	HF3 (200); Idcifhf3	SM Client:	200
SM Language:	EN	System ID:	HF3

Description:  
Create Quotation is Failed  
Regards,  
Benu

**Step 5:** As soon as the SAP Related Defect is created in the HP System, the Defect would be synced with Solution Manager system. The Sync Status can be seen in the Tools >> SAP Tools >> Manage Defect Synchronization



**Step 6:** Click on “Refresh” to see the Sync Status. Once the defect is synced with Solution Manager System, the defect would be removed from this dialog (This indicates the defect synchronization is successful with Solution Manager System)



**Step 7:** Go to the Solution Manager system in order to see the Created Defect. Launch the CRM UI (using the transaction *CRM\_UI* in Solution Manager System)

### Step 8: The Defect is transferred. Open the Defect & verify the details forwarded from HP ALM

### Step 9: For more details about Solution Documentation & HP ALM Project, Expand the Tab "External Help Desk" to see more details,

The screenshot shows the External Help Desk interface. At the top, there are tabs for 'External Help Desk' and 'Request Responsibility'. Below the tabs is a toolbar with various icons. A main table displays project assignment details:

Actions	Help Desk	Third-Party Type	Interface Status	External Mess...	Agent ID	Message exch...	Automatic syn...	Logical Port
	BENU_HPALM	SAP Quality Center by HP	In External Pr...	1		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	ICT_SERVICE...

Below the table, the 'Project Assignment' section lists:

- Association Name: MainSolution\_Development
- Solution Name: Main Solution
- Branch Name: Development
- External Project ID: DEVELOPMENT
- External Project Attribute: SAP\_PROJECTS

The 'Test Details' section contains:

- Test ID: [empty]
- Test name: [empty]
- Test object ID: [empty]
- Test object name: [empty]

Note: *The defect is only synced with Solution Manager System. This does not mean that user could process the incident. This is READ-ONLY. In order to process the incident, the responsibility has to be transferred to Solution Manager System (Refer [section 7.6.3](#))*

#### Step 10: Create another Defect for “Purchase Order Failure”

The screenshot shows the HP ALM Defects module. The top navigation bar includes 'Defects', 'Edit', 'View', 'Favorites', and 'Analysis'. Below the navigation is a toolbar with various icons. A table lists the defects:

Actual Fix Time	Application...	Assigned To	Closed in...	Closing Date	C	Defect ID	Defect type	Description	Detected By	Detected in...	Detected in...
						1	SAP Related Def.	Create Quotation is Failed Regards, Benu	benu		
						2	SAP Related Def.	Purchase Order is failed. Please check Ciao Benu	benu		

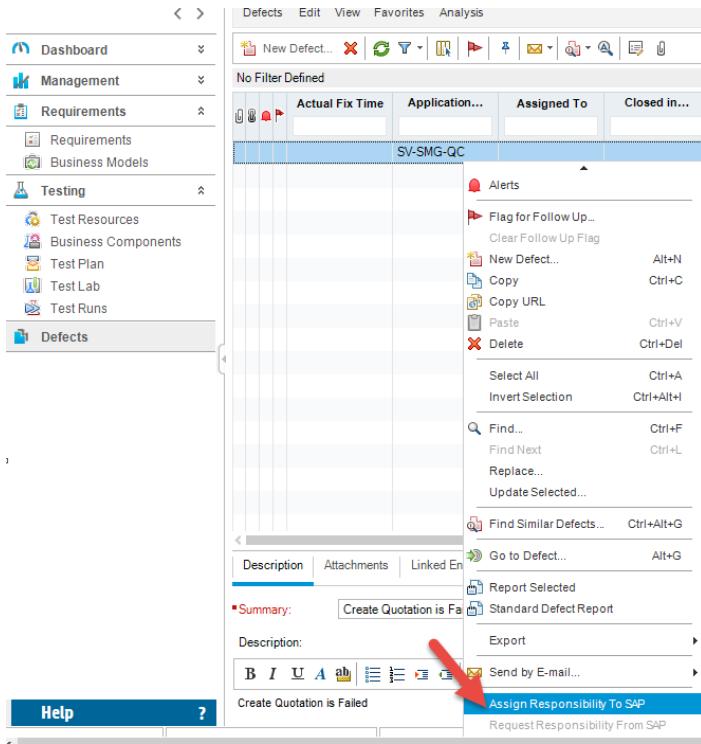
Below the table, a 'Result List: 2 Incidents Found' section shows the same two defects in a grid format:

ID	Description	Priority	Status	Created On	Mess...	Supp...	Categ...	IRT Usage	IRT St...	IRT Text...	MPT...	MPT...	MI
800...	Create Quotation is Failed	1: Very High	Forwarded	28.09.2016				0%	<span style="color: green;">█</span>	0%	<span style="color: green;">█</span>		
800...	Create Purchase Order is Failed	1: Very High	Forwarded	28.09.2016				0%	<span style="color: green;">█</span>	0%	<span style="color: green;">█</span>		

#### 7.6.3. Responsibility Transfer

In order to process the incident in Solution Manager System, the Tester in HP ALM must assign the Responsibility to Solution Manager. There are two options to achieve this.

**Option 1:** Right Click on the HP ALM Defect & choose “Assign Responsibility to SAP”



**Option 2:** In the CRM Defect (in Solution Manager), user can request the responsibility

Actions	Help Desk	Third-Party Type	Interface Status	External Mess...	Agent ID	Message exch...	Automatic syn...	Logical Port
	BENU_HPALM	SAP Quality Center by HP	In External Pr...	1				ICT_SERVICE..

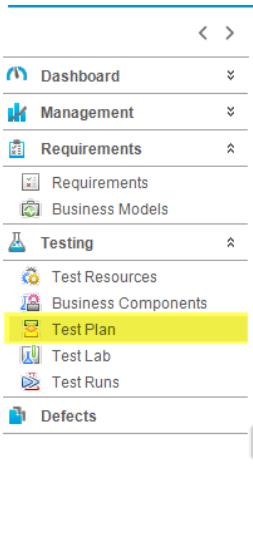
Once the responsibility is transferred, the status will be changed to “In Internal Processing” & user can process the incident

Actions	Help Desk	Third-Party Type	Interface Status	External Mess...	Agent ID	Message exch...	Automatic syn...	Logical Port
	BENU_HPALM	SAP Quality Center by HP	In Internal Processing	1				ICT_SERVICE..

#### 7.6.4. Assign the Defect to the Test Case

The created defect needs to be assigned to the Test Cases (in the result of the [Manual Testing](#)).

**Step 1:** Launch the Test Plan in HP ALM



### Step 2: Click on the Test Case

Name	Type	Status
Create Purchase Order	Test Case	Pending
Create Purchase Requisition	Test Case	Pending
Enter Incoming Invoice	Test Case	Pending
Goods Movement	Test Case	Pending
Payment Run _ Debit Memo Run	Test Case	Pending

### Step 3: Select the Tab “Linked Defects” & add the created defect

Defect ID	Defect: Summary	Linked Entity...	Linked By Status	Link Comment
1	Create Purchase Order is Failed	Create Purch...	Failed	

Choose the Defect

Now the failed Test Cases are linked with the defects, & do the same for the rest of the test cases,

The screenshot shows the SAP Test Environment interface. On the left, there's a tree view under 'Subject' with nodes like 'Unattached', 'Generated Tests', 'US', 'Order To Cash', and 'Executables'. A red arrow points to the 'Create Quotation' node under 'Order To Cash'. On the right, a table titled 'Defect ID' shows a single row with ID 1, summary 'Create Quotation is Failed', linked entity 'Create Quotat.', and status 'Failed'. A red box highlights the 'Linked Defects' tab at the top of the table area.

## 7.7. Test Results & Incident Processing in Solution Manager

This section explains you how to update the Test Results to Solution Manager & how the incidents are processed in Solution Manager System

### 7.7.1. Update the Test Results to Solution Manager

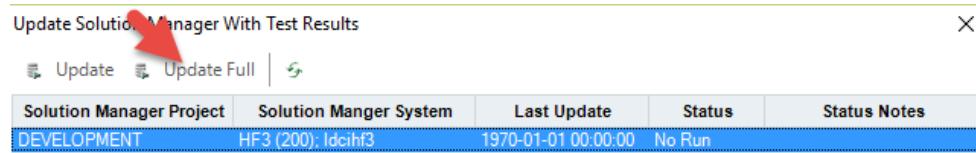
Update the Test Results to the Solution Manager using *Tools >> SAP Tools >> Update Solution Manager*

The screenshot shows the SAP Test Environment interface with a context menu open over a table of requirements. The menu has a gear icon and includes options like 'Customize...', 'Clear History...', 'Task Manager...', 'Download Images', 'Spelling and Grammar', 'New Defect...', 'SAP Tools', and 'Update Solution Manager...'. A red arrow points to the 'Update Solution Manager...' option, which is highlighted in blue.

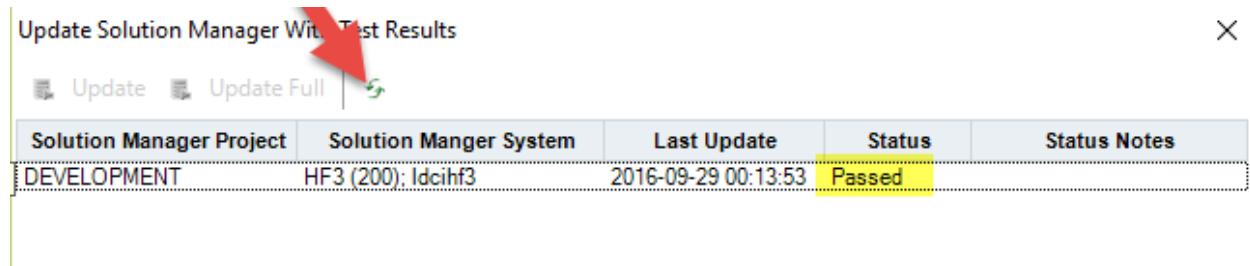
There are two options,

<b>Update</b>	Only the changes (Delta) are transferred
<b>Update Full</b>	The Entire Test Results are transferred. This option is recommended if you are doing the update very first time.

As we are going to update the Solution Manager very first time, let's use "Update Full"



After the successful update to Solution Manager, the status would be displayed as "Passed"



### 7.7.2. Display Test Results in the Solution Manager system

Launch the Adapter Administration Console as shown in [Section - 6](#)

#### Step 1: Choose the Association

Association Name	Branch	View	Solution	Partner Project	Project Attribute	Refresh Solution Documentation	Refresh Test Results	Push Status
MainSolution_Development	Development	Default View	Main Solution	DEVELOPMENT	SAP_PROJECTS	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
MainSolution_Maintenance	Maintenance	Default View	Main Solution	MAINTENANCE	SAP_PROJECTS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MainSolution_Production	Production	Default View	Main Solution	PRODUCTION	SAP_PROJECTS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

#### Step 2: Launch the Test Results UI by clicking on the "Display Test Results"

Test Results							
Solution Documentation		Partner Project					
Solution: Main Solution	Branch: Development	Partner Name: BENU_HPALM	Project: DEVELOPMENT	Synchronized on: 28.09.2016 20:54:15 CET	Project Attribute: SAP_PROJECTS	Synchronized by: benu	
Test Results	Type	Tester	Status	Tested on	Navigate to	System (Client)	Total Defects
Business Processes	Folder						
US	Scenario						
Procure To Pay	Process						
Procure To Pay - Standard	Process Step <Ref>						
Create Purchase Requ...	Process Step <Ref>						
Create Purchase Order	Process Step <Ref>		Failed				0 Defects
Create Purchase Order	Partner's Test Case				Test Case		1 Defects
Create Purchase Order	Partner's Test Set				Test Set		
3	Partner's Test Run	benu	Failed	28.09.2016 07:50:44 CET	Test Run	:	0 Defects
Goods Movement	Process Step <Ref>						
Enter Incoming Invoice	Process Step <Ref>						
Payment Run / Debit M...	Process Step <Ref>						

Test Results							
Solution Documentation		Partner Project					
Solution: Main Solution	Branch: Development	Partner Name: BENU_HPALM	Project: DEVELOPMENT	Synchronized on: 28.09.2016 20:54:15 CET	Project Attribute: SAP_PROJECTS	Synchronized by: benu	
Test Results	Type	Tester	Status	Tested on	Navigate to	System (Client)	Total Defects
Business Processes	Folder						
US	Scenario						
Procure To Pay	Scenario						
Order To Cash	Scenario						
Order To Cash - Standard ...	Process						
Create Sales Order	Process Step <Ref>		Passed				0 Defects
Create Sales Order	Partner's Test Case				Test Case		0 Defects
Create Sales Order	Partner's Test Set				Test Set		
2	Partner's Test Run	benu	Passed	28.09.2016 07:45:14 CET	Test Run	:	0 Defects
Create Quotation	Process Step <Ref>		Failed				0 Defects
Create Quotation	Partner's Test Case				Test Case		1 Defects
Create Quotation	Partner's Test Set				Test Set		
1	Partner's Test Run	benu	Failed	28.09.2016 07:43:37 CET	Test Run	:	0 Defects
Create Outbound Deliv...	Process Step <Ref>						
Change Outbound Deliv...	Process Step <Ref>						
Create Billing Document	Process Step <Ref>						

### Step 3: Launch the Defect

Solution Documentation		Partner Project					
Solution: Main Solution	Branch: Development	Partner Name: BENU_HPALM	Project: DEVELOPMENT	Synchronized on: 28.09.2016 20:54:15 CET	Project Attribute: SAP_PROJECTS	Synchronized by: benu	
Test Results	Type	Tester	Status	Tested on	Navigate to	System (Client)	Total Defects
Business Processes	Folder						
US	Scenario						
Procure To Pay	Process						
Order To Cash	Process						
Order To Cash - Standard ...	Process Step <Ref>						
Create Sales Order	Process Step <Ref>						
Create Sales Order	Partner's Test Case				Test Case		0 Defects
Create Sales Order	Partner's Test Set				Test Set		
2	Partner's Test Run	benu					0 Defects
Create Quotation	Process Step <Ref>						
Create Quotation	Partner's Test Case				Test Case		1 Defects
Create Quotation	Partner's Test Set				Test Set		
1	Partner's Test Run	benu					0 Defects
Create Outbound Deliv...	Process Step <Ref>						
Change Outbound Deliv...	Process Step <Ref>						
Create Billing Document	Process Step <Ref>						
APJ	Folder						

Launches the CRM Defect

Launches the HP ALM

System (Client) Total Defects

0 Defects

#### Step 4: Launch the CRM Defect by clicking on the Incident Number

The screenshot shows the SAP Solution Manager IT Service Management interface. The title bar reads "SAP Solution Manager IT Service Management". The main area displays an incident titled "Incident: 8000000103, Create Quotation is Failed". The "General Data" section contains fields: ID (8000000103), Description (Create Quotation is Failed), Sold-To Party (highlighted in yellow), Reported by (benu), Support Team, Message Processor, Category (Level 1, Level 2, Level 3, Level 4), and Solution Category. The "Processing Data" section includes Status (Forwarded), Reason ID, Impact, Urgency, Recommended Priority (Priority: 1: Very High), Dates, Relationships (Related Problem, Related Request for Change, Related Knowledge Article), and Reference Objects. A sidebar on the left shows navigation links like Home, Master Data, Inbox, Requirements Management, Change Request Mgmt, IT Service Management, Service Operations, and Create (Incident, Incident from Template, Service Request, Change Cycle, Request for Change, RFC from Template, Task).

#### 7.7.3. Process an Incident & Propose the Solution

The Solution Manager Business User would provide the solution for the defect created & provide a solution to HP ALM

##### Step 1: Add the Reply

The screenshot shows the SAP Solution Manager IT Service Management interface. The title bar reads "Incident: 8000000103, Create Quotation is Failed". The main area displays a reply message: "The issue is owing to the ST22 dump in the transaction. The dump was fixed and transported to Quality and Production System. Please re-test & confirm the incident." Below the message, it says "Regards, Benu". Navigation links on the left include Create (Incident, Incident from Template, Service Request, Change Cycle, Request for Change, RFC from Template, Task).

##### Step 2: Expand the Tab “External Help Desk” & click on Propose Solution

The screenshot shows the SAP Solution Manager IT Service Management interface. The title bar reads "External Help Desk". The main area displays a table with columns: Action, Help Desk, Third-Party Type, Interface Status, External Mess..., Agent ID, Message exch..., Automatic syn..., Logical Port. One row is visible: BENU\_HPALM, SAP Quality Center by HP, In Internal Processing, 1, checked, checked, ICT\_SERVICE... A red arrow points to the "Action" column header.

The Solution is proposed & the responsibility is transferred to HP ALM.

#### 7.7.4. Retest and Close an Incident

Once the Solution is proposed, the tester retests the Test Case & close the defect

### Step 1: Test the Test Case & make the Test Result to passed Status

The screenshot shows the HP ALM interface. On the left, there's a navigation sidebar with sections like Dashboard, Management, Requirements, Testing, and Defects. The main area is titled 'Test Sets' and shows an execution grid. One row in the grid is highlighted, showing a test case named 'Create Quotation' with a status of 'Passed'. A red arrow points to the 'Passed' status cell.

### Step 2: Close the HP ALM Defect by changing the Status from "Fixed" to "Closed"

The screenshot shows the 'Defect Details' dialog for a defect with ID 1. The defect summary is 'Create Quotation is Failed'. In the 'Details' tab, there's a 'Status' dropdown menu. A red arrow points to the 'Closed' option in this dropdown. The dialog also contains fields for Estimated Fix Time, Planned Closing, Project, Priority, Reproducible, Subject, and Target Release. Below the details, there's a 'Description' section with the text 'Create Quotation is Failed' and a 'Comments' section containing a reply message. At the bottom are 'OK', 'Cancel', and 'Help' buttons.

### Step 3: Once the Defect is closed in HP ALM, an Incident created in Solution Manager would be closed as well. The status of the Incident closure can be tracked in Tools >> SAP Tools >> Manage Defect Synchronization

The screenshot shows the 'Defect Synchronization Pool' in SAP Solution Manager. It has tabs for Refresh, Synchronize, and Synchronize All. A table lists defects with columns for Defect Id, Summary, Sync Status, and Status Notes. One defect is shown with the ID 1, Summary 'Create Quotation is Failed', Sync Status 'Closing', and Status Notes 'Currently closing'.

After the closure, the Solution Manager Incident is also closed.

Incident: 8000000103, Create Quotation is Failed

<input type="button" value="Save"/>	<input type="button" value="Display"/>	<input type="button" value="Cancel"/>	<input type="button" value="Confirm"/>	<input type="button" value="Edit"/>	<input type="button" value="New"/>	<input type="button" value="New from Template"/>	<input type="button" value="Create Follow-Up"/>	<input type="button" value="Actions"/>	<input type="button" value="Auto Complete"/>	<input type="button" value="More"/>																																							
The message is already closed																																																	
<input checked="" type="checkbox"/> Details <input type="button" value="Edit"/>																																																	
<b>General Data</b> <table border="1"> <tr> <td>ID: 8000000103</td> <td colspan="4"><b>Category</b></td> </tr> <tr> <td>Description: Create Quotation is Failed</td> <td>Level 1:</td> </tr> <tr> <td>Sold-To Party:</td> <td>Level 2:</td> </tr> <tr> <td>Reported by: benu</td> <td>Level 3:</td> </tr> <tr> <td>Support Team:</td> <td>Level 4:</td> </tr> <tr> <td>Message Processor:</td> <td colspan="4">Solution Category:</td> </tr> </table>					ID: 8000000103	<b>Category</b>				Description: Create Quotation is Failed	Level 1:	Sold-To Party:	Level 2:	Reported by: benu	Level 3:	Support Team:	Level 4:	Message Processor:	Solution Category:				<b>Processing Data</b> <table border="1"> <tr> <td>Status: <b>Closed</b></td> <td colspan="4"><b>Relationships</b></td> </tr> <tr> <td>Reason ID:</td> <td>Related Problem:</td> </tr> <tr> <td>Impact:</td> <td>Related Request for Change:</td> </tr> <tr> <td>Recommended Priority:</td> <td>Related Knowledge Article:</td> </tr> <tr> <td>Priority: 1: Very High</td> <td colspan="4"><b>Reference Objects</b></td> </tr> <tr> <td>Dates</td> <td colspan="4">Configuration Item:</td> </tr> </table>						Status: <b>Closed</b>	<b>Relationships</b>				Reason ID:	Related Problem:	Impact:	Related Request for Change:	Recommended Priority:	Related Knowledge Article:	Priority: 1: Very High	<b>Reference Objects</b>				Dates	Configuration Item:			
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Priority: 1: Very High	<b>Reference Objects</b>																																																
Dates	Configuration Item:																																																

#### Step 4: Update the Solution Manager with new Test results. Tools >> SAP Tools >> Update Solution Manager

This time only the Delta (changes) needs to be transferred by clicking on “Update”

Update Solution Manager With Test Results

Solution Manager Project	Solution Manager System	Last Update	Status	Status Notes
DEVELOPMENT	HF3 (200): ldcihf3	2016-09-29 00:24:15	Passed	

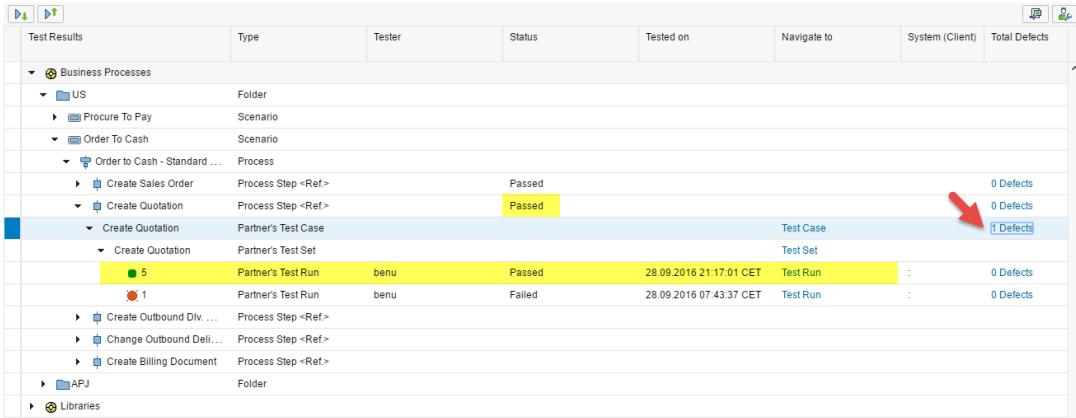
Update Solution Manager With Test Results

Solution Manager Project	Solution Manager System	Last Update	Status	Status Notes
DEVELOPMENT	HF3 (200): ldcihf3	2016-09-29 00:24:15	In Progress	

Update Solution Manager With Test Results

Solution Manager Project	Solution Manager System	Last Update	Status	Status Notes
DEVELOPMENT	HF3 (200): ldcihf3	2016-09-29 00:54:59	Passed	

#### Step 5: Display the Test Results UI in the Solution Manager to check the updated Test Result

Solution Documentation		Partner Project	
Solution: Main Solution	Branch: Development	Partner Name: BENU_HPALM	Project: DEVELOPMENT
View: Default View		Project Attribute: SAP_PROJECTS	Synchronized on: 28.09.2016 21:24:59 CET
Synchronized by: benu			
			

### Step 6: Launch the Defect to check the status of the Incident

Defects					
Solution Manager Incident ID	Incident Status	Partner Defect ID	Defect Status	Description	
43B9467D854211E6865...	Closed	1	New	Create Quotation is ...	 

## 8. Merge and Sync

In the Solution Documentation, according to our use case we have three branches – Production, Maintenance and Development.

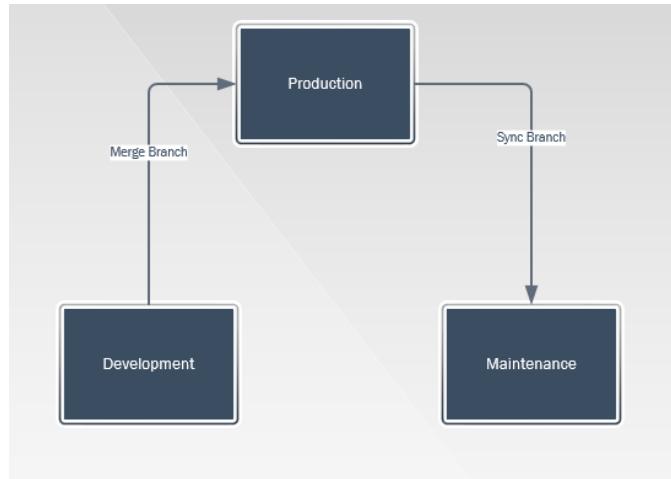
So far, we were playing around only with the Development Branch.

- The content was built only in the Development Branch (Scenarios, Business Process & Process Steps).
- The Production and Maintenance Branch are empty
- The content would be replicated (copied) to the Production & Maintenance branch once the Development Branch is released

### 8.1. Solution Documentation Branch Release

Once the Development Branch is released, the following actions would happen automatically

- The Content of the Development Branch would be transferred to the Base Branch (Production Branch). This Process is called as ***Merge***.
- Once the changes are available in the Production Branch, the content would be transferred to Sub Branches. (Maintenance Branch). This process is called as ***Sync***



At this moment, we have the content only in the Development Branch & Production and Maintenance branch is empty.

### Production Branch (Empty)

Main Solution - Production (Read-Only)

Browser	List	Search Result	Where Used List	Reporting
---------	------	---------------	-----------------	-----------

Solution > Business Processes

Business Processes  
Libraries

### Maintenance Branch (Empty)

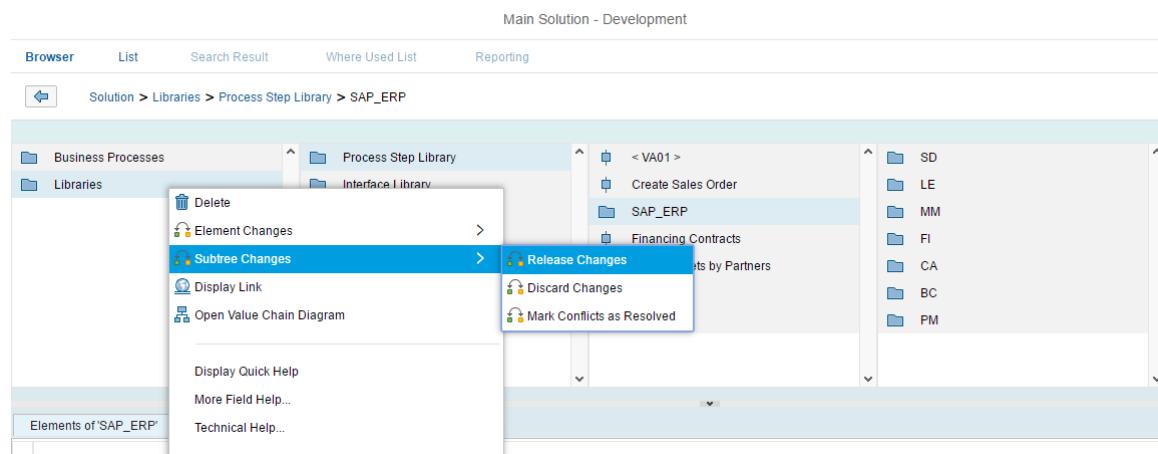
Main Solution - Maintenance

Browser	List	Search Result	Where Used List	Reporting
---------	------	---------------	-----------------	-----------

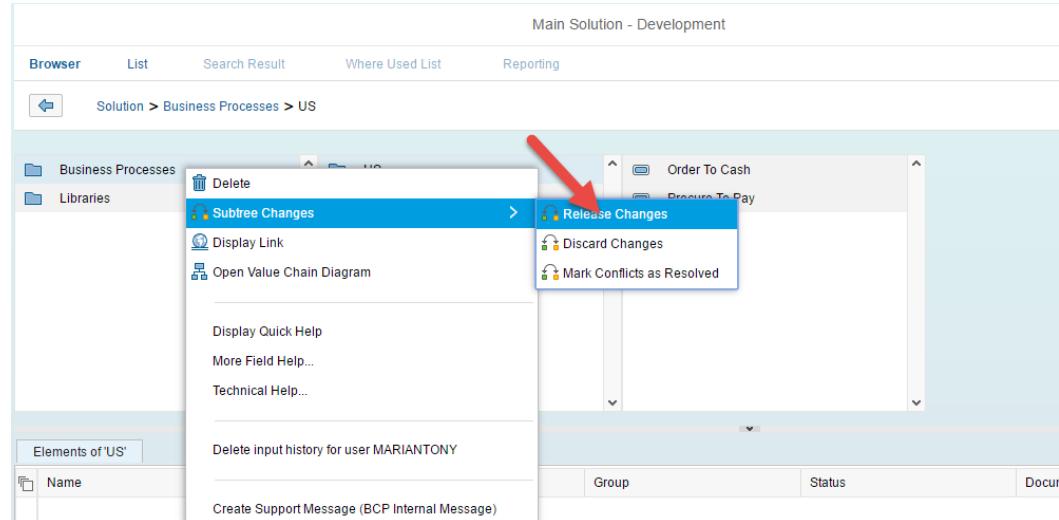
Solution > Business Processes

Business Processes  
Libraries

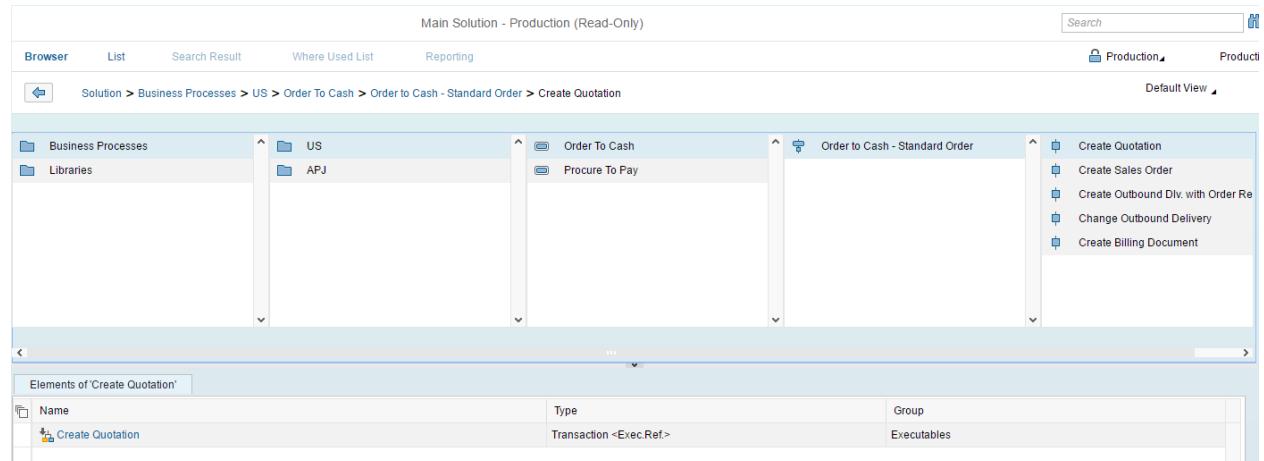
## Step 1: Release the *Libraries* from Development Branch



## Step 2: Release the *Business Process* from Development Branch



## Step 3: Check the Production Branch. (The content of the Development Branch is merged to Production Branch)



**Step 4:** Check the Maintenance Branch. (The content of the Development Branch is Synced to Maintenance Branch)

## 8.2. HP ALM Branch Release

After the Branch Release in Solution Documentation, the changes are merged/ synced to BASE branch and SUB branches automatically. However in HP ALM, user has to trigger this manually.

- After the branch release, a notification is sent to HP ALM System
- HP ALM Tester must trigger the Merge to the Production Branch Manually
- Once the merge is completed, the DEVELOPMENT project is synced.
- **Scope of Merge/ Sync:** Test Cases only

**Step 1:** Check the Pending Merge Request from Solution Manager

After the Branch Release, the notification is sent to the HP ALM system where tester could see the pending requests. *Tools >> SAP Tools >> Test Version Control*

Choose the PRODUCTION project & click on “Check Pending Request”

Test Version Control

Sync Tests Merge Tests Check Pending Request ResolveConflict

Branch ID	Branch Name	Status	State	Domain Name	Project Name
051MkmEK7...	PRODUCTION	Stable	SAP_PROJECTS	PRODUCTION	PRODUCTION
051MkmEK7...	DEVELOPMENT	Stable	SAP_PROJECTS	DEVELOPMENT	DEVELOPMENT

Repository Pending Request

Sync Tests Merge Tests Check Pending Request ResolveConflict

Order	Request Type	Branch ID	Branch Name	Domain Name	Project Name
1	SAP Branch Merged	051MkmEK7...	DEVELOPMENT	SAP_PROJECTS	DEVELOPMENT

## Step 2: Merge Tests on the DEVELOPMENT to PRODUCTION

The PRODUCTION project does not have a REQUIREMENTS transferred from Solution Manager System. Thus, this merge process would do the following during the “Merge Tests”

- Import the Solution Documentation from Production Branch
- Compare the DEVELOPMENT & PRODUCTION project
- Check for the Conflicts
- Move the Changes

Test Version Control

Sync Tests Merge Tests Check Pending Request ResolveConflict

Branch ID	Branch Name	Status	State	Domain Name	Project Name
051MkmEK7...	PRODUCTION	Stable	SAP_PROJECTS	PRODUCTION	PRODUCTION
051MkmEK7...	DEVELOPMENT	Stable	SAP_PROJECTS	DEVELOPMENT	DEVELOPMENT

Test Version Control

Sync Tests Merge Tests Check Pending Request ResolveConflict

Branch ID	Branch Name	Status	State	Domain Name	Project Name
051MkmEK7...	PRODUCTION	Importing blueprint	Stable	SAP_PROJECTS	PRODUCTION
051MkmEK7...	DEVELOPMENT	Stable	SAP_PROJECTS	DEVELOPMENT	DEVELOPMENT

Test Version Control

Branch ID	Branch Name	Status	State	Domain Name	Project Name
051MkmEK7...	PRODUCTION	Comparing Entities	Stable	SAP_PROJECTS	PRODUCTION
051MkmEK7...	DEVELOPMENT		Stable	SAP_PROJECTS	DEVELOPMENT

Test Version Control

Branch ID	Branch Name	Status	State	Domain Name	Project Name
051MkmEK7...	PRODUCTION	Merging	Stable	SAP_PROJECTS	PRODUCTION
051MkmEK7...	DEVELOPMENT		Stable	SAP_PROJECTS	DEVELOPMENT

**Step 3:** Let us check whether the Test Cases are copied to the PRODUCTION project

- The Production Branch is imported to the Production Project

cycle Management

Domain: SAP\_PROJECTS, Project: PRODUCTION

Name	Req ID	Direct Cover Status	Author
Main Solution	1	Not Covered	Solution Manager
PRODUCTION	2	Not Covered	ei_integration_us...
Business Processes	3	Not Covered	ei_integration_us...
US	4	Not Covered	ei_integration_us...
APJ	39	Not Covered	ei_integration_us...
Libraries	59	Not Covered	ei_integration_us...

- The Test cases are copied as well

**Step 4:** Sync the PRODUCTION project to MAINTENANCE project

- Login to the MAINTENANCE & click on the Test Version Control. Tools >> SAP Tools >> Test Version Control
- Choose the PRODUCTION branch & do a "Sync Tests"

Test Version Control

Branch ID	Branch Name	Status	State	Domain Name	Project Name
051MkmEK7...	PRODUCTION	Stable	SAP_PROJECTS	PRODUCTION	
051MkmEK7...	MAINTENANCE	Stable	SAP_PROJECTS	MAINTENANCE	

- This process would import the Maintenance Branch & copy the Test Cases from the PRODUCTION project

Test Version Control

Branch ID	Branch Name	Status	State	Domain Name	Project Name
051MkmEK7...	PRODUCTION	Stable	SAP_PROJECTS	PRODUCTION	
051MkmEK7...	MAINTENANCE	Importing blueprint	Stable	SAP_PROJECTS	MAINTENANCE

Test Version Control

Branch ID	Branch Name	Status	State	Domain Name	Project Name
051MkmEK7...	PRODUCTION	Stable	SAP_PROJECTS	PRODUCTION	
051MkmEK7...	MAINTENANCE	Comparing...	Stable	SAP_PROJECTS	MAINTENANCE

Test Version Control

Branch ID	Branch Name	Status	State	Domain Name	Project Name
051MkmEK7...	PRODUCTION	Stable	SAP_PROJECTS	PRODUCTION	
051MkmEK7...	MAINTENANCE	Merging	Stable	SAP_PROJECTS	MAINTENANCE

- The Maintenance branch is imported in MAINTENANCE project

cycle Management

Domain: SAP\_PROJECTS, Project: MAINTENANCE

Name	Req ID	Direct Cover Status	Author
Requirements	0	N/A	
Main Solution	1	Not Covered	Solution Manager
MAINTENANCE	2	Not Covered	ei_integration_us...
Business Processes	3	Not Covered	ei_integration_us...
US	4	Not Covered	ei_integration_us...
Order To C...	5	Not Covered	ei_integration_us...
Procure To...	22	Not Covered	ei_integration_us...
API	39	Not Covered	ei_integration_us...
Libraries	59	Not Covered	ei_integration_us...
Process Step L...	60	Not Covered	ei_integration_us...
Executable Libr...	146	Not Covered	ei_integration_us...

- The Test Cases are also copied from the PRODUCTION project,

**Application Lifecycle Management**

The screenshot shows the SAP Application Lifecycle Management (ALM) interface. The left sidebar contains navigation links for Dashboard, Management, Requirements, Testing, Test Resources, Business Components, Test Plan (which is selected), Test Lab, Test Runs, and Defects. The main area displays a hierarchical tree view under the 'Generated Tests' node. The tree is color-coded: yellow for 'Unattached' and 'Generated Tests' nodes, and green for 'US' and 'Procure To Pay' nodes. Under 'Generated Tests', there are several sub-nodes: Order To Cash (with Order to Cash - Standard Order, Change Outbound Delivery, Create Billing Document, Create Outbound Dlv. with Order Ref., Create Quotation, Create Sales Order), Procure To Pay (with Procure to Pay - Standard, Create Purchase Order, Create Purchase Requisition, Enter Incoming Invoice, Goods Movement, Payment Run \_ Debit Memo Run), and Unattached.

- Generated Tests
  - Order To Cash
    - Order to Cash - Standard Order
    - Change Outbound Delivery
    - Create Billing Document
    - Create Outbound Dlv. with Order Ref.
    - Create Quotation
    - Create Sales Order
  - Procure To Pay
    - Procure to Pay - Standard
    - Create Purchase Order
    - Create Purchase Requisition
    - Enter Incoming Invoice
    - Goods Movement
    - Payment Run \_ Debit Memo Run
  - Unattached