

HP ALM Report USER MANUAL

Program: SingTel-Optus

Project : Optus - IVS BBAU

Document Identification

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1. Introduction

The HP ALM Reporting tool is an excel-macro workbook developed with VBA and SQL programming language. The tool fetches Test Case Execution Records (TCER) data from Test Lab folders and Defects data from Test Plan folders to an excel worksheet. These data are stored as master data and used to generate different types of summary reports and metrics in other worksheets.

Purpose

The purpose of this document is to:

- 1. Demonstrate how the tool can be used by the user
- 2. Explain how the tool works
- 3. Provide an overview of all worksheets present in the tool

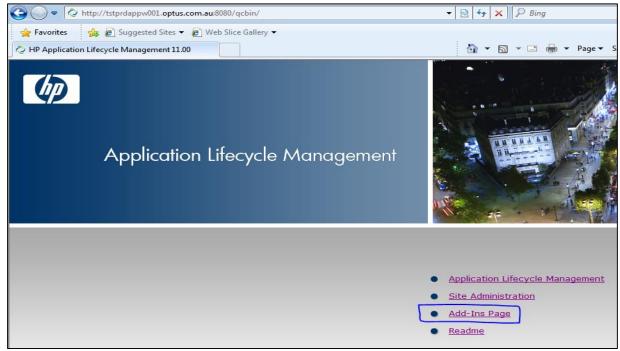
2. Prerequisites

The tool will work only if following conditions are met:

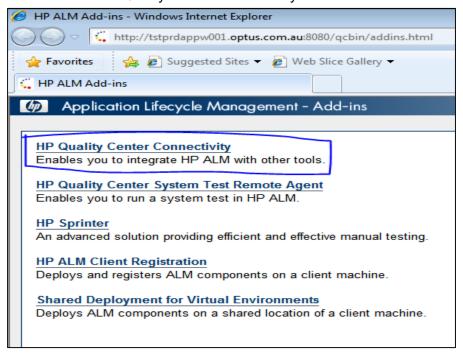
- 1. HP ALM Add-Ins "HP Quality Center Connectivity" and "HP ALM Client Registration" are installed in your machine.
- 2. The excel workbook is not changed by deleting rows/columns or by renaming any worksheet.

Instructions to install HP ALM Add-Ins

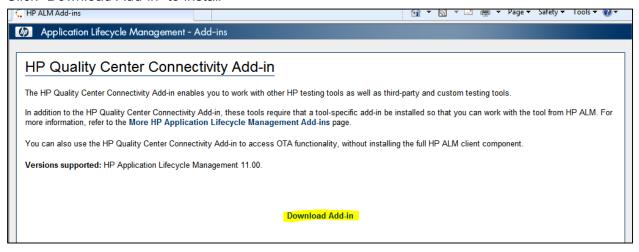
1. Go to the url http://tstprdappw001.optus.com.au:8080/qcbin/, and click Add-Ins Page link



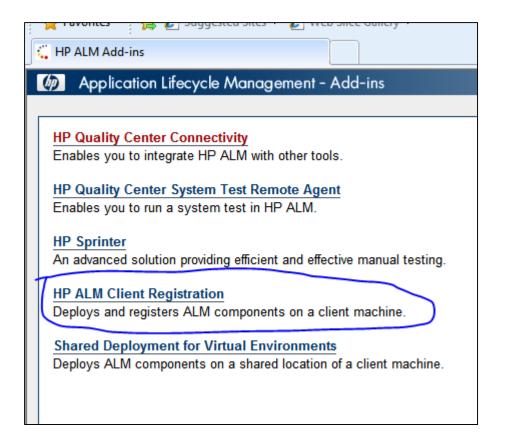
2. Click the "HP Quality Center Connectivity" Add-in



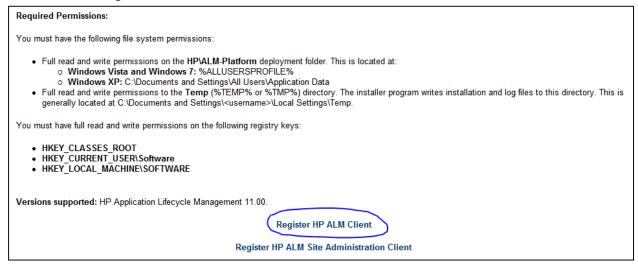
Click "Download Add-in" to install



Once the above add-in is installed then click "HP ALM Client Registration" in the Add-in page



4. Click "Register HP ALM Client"



<u>Note</u>: Admin user credentials will be required on your machine to install the above add-ins. If you do not have admin access then Tech M TIM team can install the add-ins.

Raise "Freeware - Pre-approved Software" Hub request for TIM to install the above Add-Ins.

If you are located at non-techm office, then check with respective technical team for installing the add-ins

3. How to use the tool

Save the macro enabled excel workbook in local drive. Follow the below steps to use the tool:

- 1. Worksheet 1-ALM Login: To find the required Test Lab Folder Id for your project
 - i. Enter your HP ALM credentials, and project info.

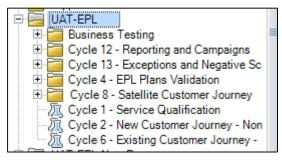
Enter your HP ALM	crendentials:-	
HP ALM Url:	http://tstprdappw001	<mark>.optus.com.</mark> au:8080/qcbin
Login Name:		
Password:		
Domain:		
Project:		
Test Lab Folder Id (for TCER report):		
Test Plan Folder Id (for Defects report):		
Test LAB Folder Id	l,	
	Reset All	Reset Folder List

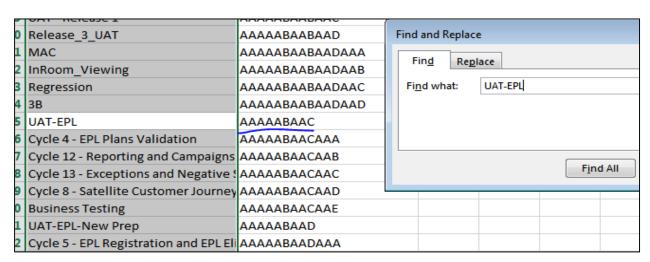
ii. Click "Test LAB Folder Id" button to fetch all Folder Ids and name for the project

Enter your HP ALM	crendentials:-								
HP ALM Url:	http://tstprdappw001.optus	s.com.au:80	080/qc (eg: h	ttp://tstprdappw001.op	tus.com.au:	8080/qcbin)			
Login Name:	anand acharya		(eg: a	nand acharya)					
Password:	optus123		(eg: o	ptus123)					
Domain:	ACTIVE_PROJECTS		(eg: A	CTIVE_PROJECTS)					
Project:	TG004_EPL		(eg:T	G004_EPL)					
Test Lab Folder Id (for TCER report):			(click	"Test Lab Folder Id" butt	on and enter	the required folde	r Id eg: AAAAABAAD or	<i>АААААВАА</i> Д%	6)
Test Plan Folder Id (for Defects report):	Con.	crosoft Excel		n Folder Id" but	ton and ente	r the required fold	er Id eg: AAAAAPAAN o	r AAAAAPAAN!	96)
Test LAB Folder Id Test PLAN Folder Id	·		lders fetched						
Test Lab Folder Name	Folder Id		OK						
deleted	AAAAA								
Business Testing	AAAAAAA								
UAT	AAAAAAAB								
Test	AAAAAAAC								
GSMIS Changes	AAAAAAAD								
Baseline	AAAAAAADAAA								
Regression	AAAAAAAADAAB								
Progression	AAAAAAAADAAC								
Cycle 1 - Apollo Extract	AAAAAAAE								
Cancelled Monthly	AAAAAAAF								
Close Monthly	AAAAAAAG								
1-ALM Login 2-TCER	Summary 3-Defects Summ	nary 4-N	Metrics	5-Plan vs Actual	6-Tŧ	+ : 4			Þ

iii. Search the test lab folder Id for the folder name

For example, if you want folder id of the folder "UAT-EPL" in test lab, then search with that folder name in the folder list fetched in excel





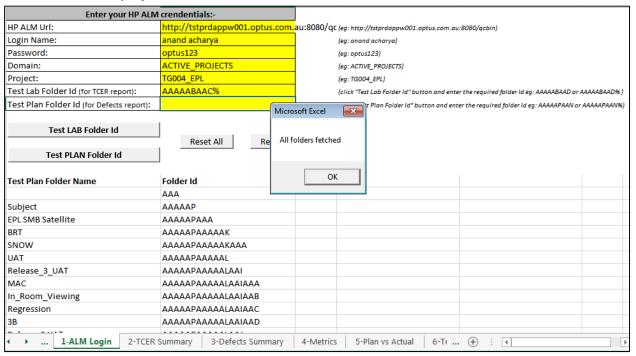
The folder id for the required test lab folder is "AAAABAAC". Enter this folder id in the credentials section.

If there are many folders with same name, then check that the subfolders below the main folder are same as present in Test Lab to ensure that correct main folder id is selected

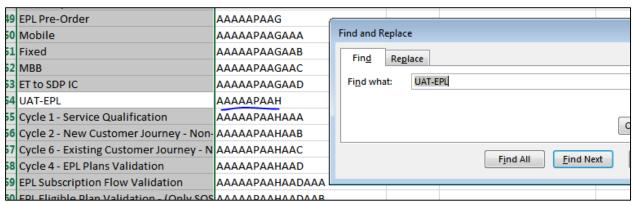
Enter your HP ALM	crendentials:-
HP ALM Url:	http://tstprdappw001.optus.com.au:8
Login Name:	anand acharya
Password:	optus123
Domain:	ACTIVE_PROJECTS
Project:	TG004_EPL
Test Lab Folder Id (for TCER report):	AAAAABAAC%
Test Plan Folder Id (for Defects report):	
Test LAB Folder Id	

Append the folder id with "%" to fetch test sets of all the subfolders too. If "%" is not appended then test sets of only the main folder will be fetched.

iv. Similarly, click "Test PLAN Folder Id" button to fetch all test plan folder Ids and name for the project



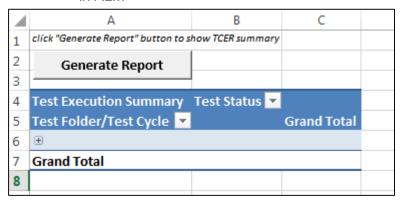
v. Search the test plan folder id for the folder name and enter it in the credentials section

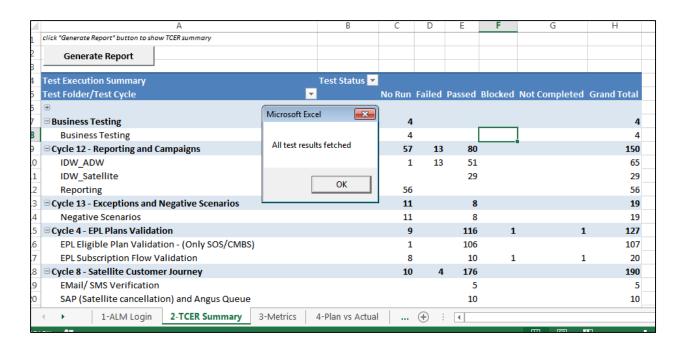


Enter your HP ALM	crendentials:-	
HP ALM Url:	http://tstprdappw001.optus.com.a	au:80
Login Name:	anand acharya	
Password:	optus123	
Domain:	ACTIVE_PROJECTS	
Project:	TG004_EPL	
Test Lab Folder Id (for TCER report):	AAAAABAAC%	
Test Plan Folder Id (for Defects report):	АААААРААН%	
Test Plan Folder Id (for Defects report):	ААААРААН%	

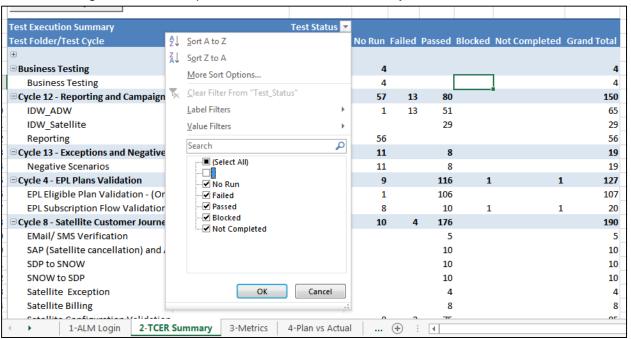
NOTE: The main parent folder id will be always 9 characters. Subfolders of the parent folder will be 12 characters, and subfolders of the subfolder will be 15 characters and so on. So, 3 additional characters are added to the folders hierarchy. This way you can identify your required test lab and plan folders/sub-folders.

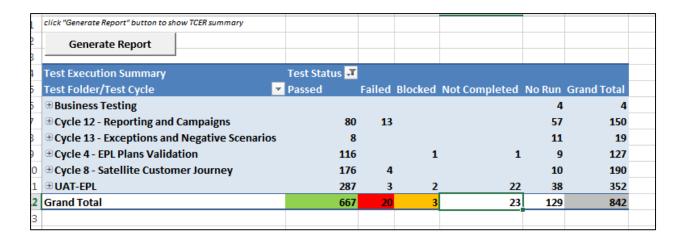
- 2. Worksheet 2-TCER Summary: Generate TCER Summary report for selected test lab folder test sets
 - i. Click "Generate Report" button to display a summary of the test case status updated in ALM



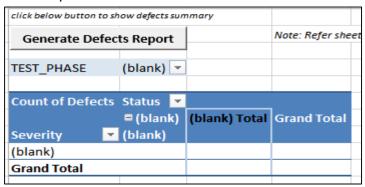


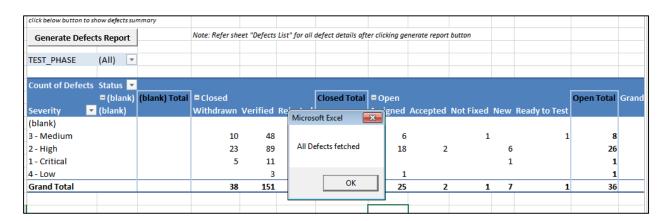
ii. Filter out the blank test status from the report, and expand/ contract the Folder name to get a detail/ compact view of the TCER summary



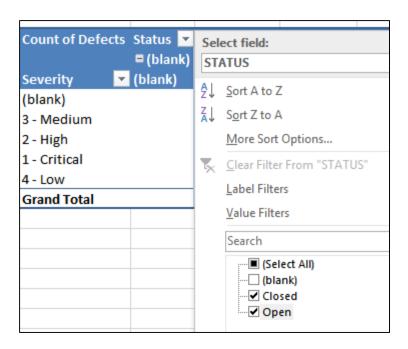


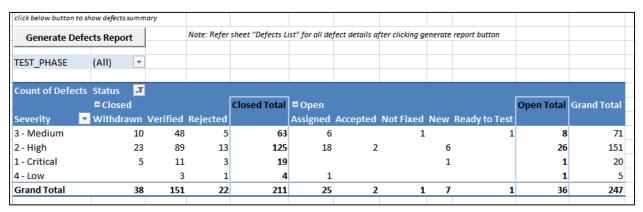
- 3. Worksheet 3-Defects Summary: Generate Defects Summary for the selected test plan folder test sets
 - i. Click "Generate Defects Report" button to display a summary of the defects list updated in ALM





ii. Filter out the blank status to change the view of the report





4. Worksheet 4-Metrics: Different metrics for the total TCER and Defects are automatically calculated

Sr. No	Testing Metric	TCER Data			Test Sets Repo	ort	•		
1	Total Test Cases	842			TEST CYCLE				
2	Total Valid Test Cases	842							
		J 12	ı						
3	Total Test Cases Passed	678	81%]					
4	Total Test Cases Failed	20	2%	1					
5	Total Test Cases Blocked	3	0%						
6	Total Test Cases Not Completed	23	3%						
7	Total Test Cases No Run	118	14%						
8	Total Test Cases N/A	0	0%						
9	Total Test Cases Retest	0	0%						
10	Total Test Cases Deferred	0	0%						
			•	•					
11	Total Test Cases Executed	698	83%						
12	Total Test Cases Not Executed	144	17%						
				-					
13	Total Identified Defects	247							
14	Total Valid Defects	187	76%						
15	Total Open Defects	36	15%						
16	Total Closed Defects	211	85%						
17	Total Severity 1&2 Defects	171	69%						
18	Total Severity 3&4 Defects	76	31%						
19	Total Rejected Defects	60	24%						
20	Average Defect Age	24.45	days						
				-					
4)	2-TCER Summary 3-Defe	cts Summar	y 4-Me	trics	5-Plan vs Actual	6-Tester effo	ort TC	. +	4

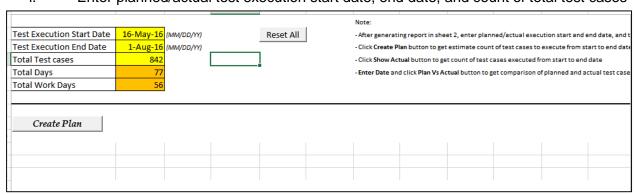
Click "Test Sets Report" button to generate summary for each test set in below format.

TCER Da	ta	Test	Sets Report									
842		TEST_C	YCLE	%COMPLE	TOTAL TCs	TOTAL EXE	PASSED	FAILED	BLOCKED	NOT COM	NO RUN	DESCOPED
842		Busine	ess Testing	0%	4	0	0	0	0	0	4	0
		IDW_A	DW	98%	65	64	51	13	0	0	1	0
578	81%	IDW_S	atellite	100%	29	29	29	0	0	0	0	C
20	2%	Report	ting	0%	56	0	0	0	0	0	56	C
3	0%	Negati	ive Scenarios	100%	19	19	19	0	0	0	0	C
23	3%	EPL Eli	gible Plan Vali	99%	107	106	106	0	0	0	1	C
118	14%	EPL Su	bscription Flo	50%	20	10	10	0	1	1	8	(
)	0%	EMail/	SMS Verificat	100%	5	5	5	0	0	0	0	(
)	0%	SAP (S	atellite cancel	100%	10	10	10	0	0	0	0	(
)	0%	SDP to	SNOW	100%	10	10	10	0	0	0	0	(
		SNOW	to SDP	100%	10	10	10	0	0	0	0	(
598	83%	Satelli	te Exception	100%	4	4	4	0	0	0	0	(
.44	17%	Satelli	te Billing	100%	8	8	8	0	0	0	0	(
		Satelli	te Configurati	91%	85	77	75	2	0	0	8	(
247		Satelli	te OrderProvi	100%	13	13	13	0	0	0	0	(
L87	76%	Satelli	te Provisionin	100%	25	25	25	0	0	0	0	(
6	15%	Satelli	te Servicing	80%	10	8	8	0	0	0	2	(
11	85%	Satelli	te Smart Card	100%	10	10	8	2	0	0	0	(
71	69%	Cycle 1	L - Service Qua	72%	130	93	93	0	0	0	37	(
76	31%	Cycle 2	2 - New Custor	76%	94	71	68	3	2	20	1	(
50	24%	Cycle 6	5 - Existing Cus	98%	128	126	126	0	0	2	0	(
4.45	days	TOTAL		83%	842	698	678	20	3	23	118	

Click "Defect sub report" button to generate defects report in below format.

SUBJECT	SEV-1	SEV-2	SEV-3	SEV-4
Cycle 2 - New Cu	1	22	1	
Cycle 1 - Service	0	5	0	
UAT-EPL	6	43	10	
EPL Eligible Plan	1	5	0	
EPL Subscription	1	2	0	
Cycle 4 - EPL Plar	1	4	1	
Cycle 12 - Report	0	0	4	
Cycle 5 - EPL Eligi	0	19	11	
Cycle 6 - Existing	0	0	1	
Cycle 8 - Satellite	2	2	0	
Satellite Provisio	0	0	1	
RDSL	8	42	41	
Cycle 7-Existing	0	6	1	
Cycle 3 - New Cu	0	1	0	
TOTAL	20	151	71	

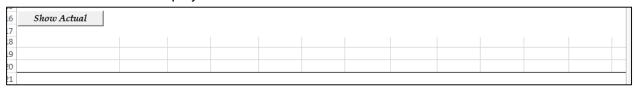
- 5. Worksheet 5-Plan vs Actual: can be used to create a plan to estimate count of daily test cases to execute, show count of actual test cases executed daily, and compare the count of plan and actual test cases on any day.
 - i. Enter planned/actual test execution start date, end date, and count of total test cases



ii. Click "Create Plan" button, and a plan is displayed for the daily test cases to be executed from start to end date to complete the total number of test cases

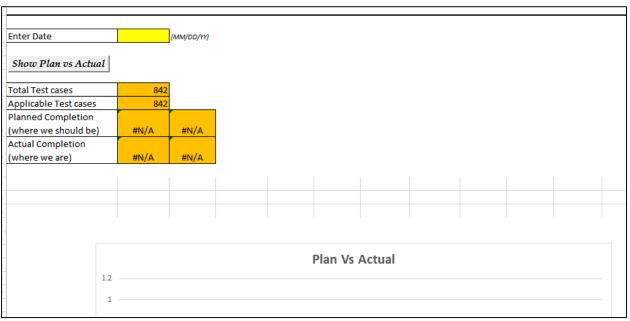
8													
9	Create Plan												
10			_										
11	Date	16-May-16	17-May-16	18-May-16	19-May-16	20-May-16	21-May-16	22-May-16	23-May-16	24-May-16	25-May-16	26-May-16	27-
12	Daily Planned	15	15	15	15	15	0	0	15	15	15	15	
13	Total Planned	15	30	45	60	75	75	75	90	105	120	135	
14													

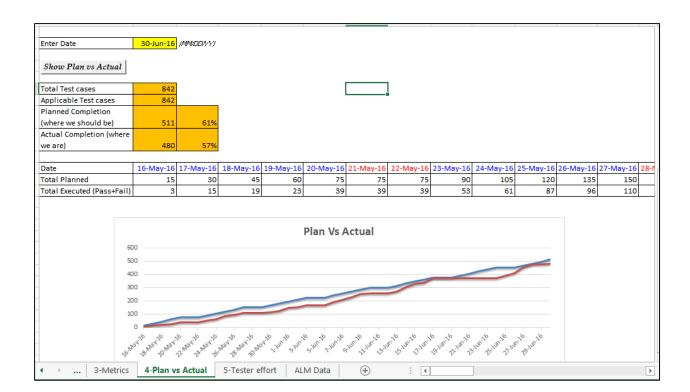
iii. Click "Show Actual" button, and the count of actual test cases executed from start to end date is displayed



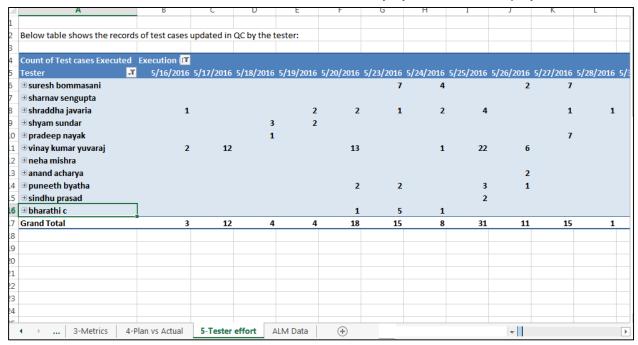
L5 L6 L7	Show Actual			ı									
L8	Date	16-May-16	17-May-16	18-May-16	19-May-16	20-May-16	21-May-16	22-May-16	23-May-16	24-May-16	25-May-16	26-May-16	27-=
L9	Daily Executed (Pass+Fail)	3	12	4	4	16	0	0	14	8	26	9	
20	Total Executed (Pass+Fail)	3	15	19	23	39	39	39	53	61	87	96	j I
21								•					

iv. To compare plan vs actual till a particular date, enter the required date and click "Show Plan vs Actual"





6. Worksheet 6-Tester Effort: Test cases executed daily by a tester are displayed



7. Worksheet TCER Data: contains all the TCER data for the test sets fetched from HP ALM for selected test lab folder and subfolders. This sheet is the master data sheet and should not be altered or renamed. Any manual changes done to this sheet may result in error while running the tool.

A	А	D	C	U	E	r	G	п	1	J	N	L	IVI
1	Test_Folder	Test_Cycle	Test_Status	Tester	Plan_Execution	Actual_Execution_	Test_Priori	t Test_Name					
2	Business Tes	Business Te	No Run				High	TC_EPL_UAT	_EPL_Prov	risioning_S	OS_Mobil	e_EPL_Incl	uded_Plan
3	Business Tes	Business Te	No Run				High	TC_EPL_UAT	_Satellite	Provision	ing_SOS_N	/lobile_EPL	_Included_
4	Business Tes	Business Te	No Run				High	TC_EPL_UAT	_Satellite	Provision	ing_SOS_N	/lobile_EPL	_Excluded_
5	Business Tes	Business Te	No Run				High	TC_EPL_UAT	_EPL_Prov	risioning_S	OS_Mobil	e_EPL_Excl	uded_Plan
6	Cycle 12 - Re	IDW_ADW	Failed	suresh bo	mmasani	5/26/2016 0:00	High	TC_EPL_UAT	_IDWADW	/_35			
7	Cycle 12 - Re	IDW_ADW	Failed	suresh bo	mmasani	5/26/2016 0:00	High	TC_EPL_UAT	_IDWADW	/_24			
8	Cycle 12 - Re	IDW_ADW	Failed	suresh bo	mmasani	5/27/2016 0:00	High	TC_EPL_UAT	_IDWADW	/_37			
9	Cycle 12 - Re	IDW_ADW	Failed	suresh bo	mmasani	5/27/2016 0:00	High	TC_EPL_UAT	_IDWADW	/_38			
10	Cycle 12 - Re	IDW_ADW	Passed	suresh bo	mmasani	5/27/2016 0:00	High	TC_EPL_UAT	_IDWADW	/_49			
11	Cycle 12 - Re	IDW_ADW	Failed	suresh bo	mmasani	5/27/2016 0:00	High	TC_EPL_UAT	_IDWADW	/_36			
12	Cycle 12 - Re	IDW_ADW	Passed	suresh bo	mmasani	5/27/2016 0:00	High	TC_EPL_UAT	_IDWADW	/_22			

8. Worksheet Defects List: contains all the defect details that are fetched from HP ALM for the selected test plan folder and subfolders. This sheet is the master defects sheet and should not be altered or renamed. Any manual changes done to this sheet may result in error while running the tool.

A	В	С	D	E	F	G	Н	I	J	K	L	М	N 4
TEST_PHA	A DEFECT_ID	SUMMAR	COMPON	SEVERITY	PRIORITY	STATUS	ASSIGNED	DETECTED	DETECTION_DATE	CLOSING_DATE	ROOT_CA	ROOT_CA	RESOLU"
4. UAT	56	Project EF	Config - S	3 - Mediu	P2 - Mand	Closed	sharnav se	Shraddha	5/17/2016 0:00	5/18/2016 0:00	Invalid De	Test Data	Withdra
4. UAT	60	EPL UAT: 0	OCA	2 - High	P2 - Mand	Closed	vinay kum	vinay kum	5/18/2016 0:00	7/1/2016 0:00	Configura	Configura	Verified
4. UAT	62	EPL UAT: 0	ОРОМ	2 - High	P2 - Mand	Closed	shyam sur	sharnav se	5/18/2016 0:00	5/27/2016 0:00	Configura	Configura	Verified
4. UAT	73	EPL UAT -	SOS OC	2 - High	P2 - Mand	Closed	pradeep n	Pradeep N	5/19/2016 0:00	5/31/2016 0:00	Configura	Configura	Verified
4. UAT	76	EPL UAT: 0	SOS OC	1 - Critical	P2 - Mand	Closed	pradeep n	Pradeep N	5/19/2016 0:00	6/3/2016 0:00	Test Envir	Build / Ve	Verified
4. UAT	77	EPL UAT: 0	SOS SQ	2 - High	P3 - Desir	Closed	sharnav se	sharnav se	5/19/2016 0:00	6/4/2016 0:00	Invalid De	Test Data	Withdra
4. UAT	78	Project EF	Config - S	2 - High	P2 - Mand	Closed	shraddha	Shraddha	5/19/2016 0:00	5/24/2016 0:00	Test Envir	Build / Ve	Verified
4. UAT	93	EPL UAT: 0	Config - S	2 - High	P2 - Mand	Closed	vinay kum	vinay kum	5/20/2016 0:00	6/8/2016 0:00	Configura	Configura	Verified
4. UAT	94	EPL UAT:C	Config - S	2 - High	P2 - Mand	Closed	vinay kum	vinay kum	5/20/2016 0:00	5/24/2016 0:00	Invalid De	Not a Req	Rejected
4. UAT	96	EPL UAT: 0	SOS OC	2 - High	P2 - Mand	Closed	pradeep n	Pradeep N	5/20/2016 0:00	5/24/2016 0:00	Invalid De	Tester Err	Withdra

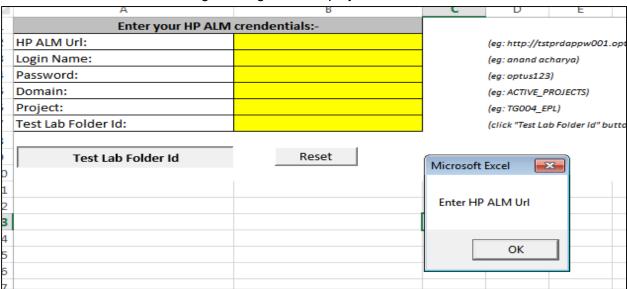
4. How the tool works

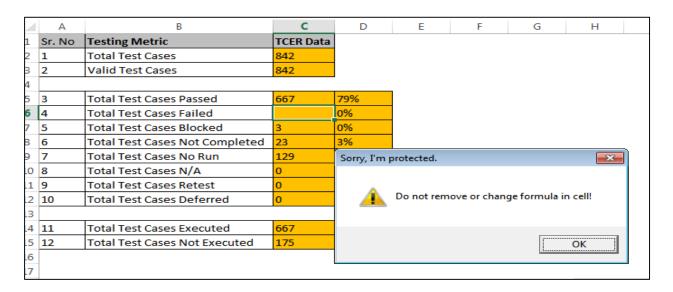
- i. In worksheet "1-ALM Login" when the Test Lab/Plan Folder Id button is clicked, a connection is established with HP ALM with the entered user credentials. Once connection is successfully established all the Test lab/Plan Folder names and Ids are fetched using SQL query and is displayed in the excel sheet.
- ii. In worksheet "2-TCER Summary" and "3-Defects Summary" when the Generate Report button is clicked, a connection is established with HP ALM with the entered user credentials. Once connection is successfully established, all TCER data of the test sets for entered test lab folder Id is fetched and stored in the "TCER Data" worksheet. Also, all defects data of the test sets for entered test plan folder Id is fetched and stored in the "Defects List" worksheet. These sheets are used to create TCER and defects summary pivot table that is displayed to the user.
- iii. The data in the "TCER Data" and "Defects List" sheets are also used to calculate different metrics displayed in "3-Metrics" sheet, and to create tester effort pivot table displayed in "5-Tester effort" sheet.
- iv. In the worksheet "4-Plan vs Actual" when the Create Plan button is clicked, the start date, end date and total test cases are used to create a plan. When the Show Actual button is clicked, data is fetched from the "TCER Data" sheet from start date to end date. When Plan vs Actual button is clicked, the planned and actual data is compared to display the result till the entered date.

v. The code used to develop the tool can viewed by clicking Visual Basic in Developer tab in the excel workbook. To add Developer tab, go to File → Options → Customize Ribbon → select Developer checkbox in list of main tabs → click OK

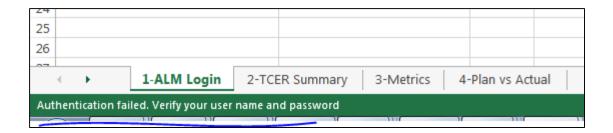
5. Error Handling

Different types of validations are incorporated in the tool so that user mistakes are captured. For instance if user does not enter inputs in a mandatory field or if user deletes a contents of a cell with formula, then warning messages are displayed for such actions.





Apart from above validations, if any other type of error occurs then the error type is shown in the status bar of the excel sheet.



6. References

Following are some sites/ forums referred for writing VBA and SQL code to develop the tool:

http://community.hpe.com

http://alm-help.saas.hpe.com/

http://superuser.com/

http://stackoverflow.com

http://www.sqaforums.com

https://msdn.microsoft.com

http://www.learnexcelmacro.com

https://community.hpe.com/t5/Quality-Center-ALM-Practitioners/QC-Test-Lab-Export-Test-

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