

CA Test Data Manager - 4.1

Configure Test Data Management for ALM

Date: 11-Aug-2017



CA Test Data Manager - 4.1

This Documentation, which includes embedded help systems and electronically distributed materials, (hereinafter referred to as the "Documentation") is for your informational purposes only and is subject to change or withdrawal by CA at any time. This Documentation is proprietary information of CA and may not be copied, transferred, reproduced, disclosed, modified or duplicated, in whole or in part, without the prior written consent of CA.

If you are a licensed user of the software product(s) addressed in the Documentation, you may print or otherwise make available a reasonable number of copies of the Documentation for internal use by you and your employees in connection with that software, provided that all CA copyright notices and legends are affixed to each reproduced copy.

The right to print or otherwise make available copies of the Documentation is limited to the period during which the applicable license for such software remains in full force and effect. Should the license terminate for any reason, it is your responsibility to certify in writing to CA that all copies and partial copies of the Documentation have been returned to CA or destroyed.

TO THE EXTENT PERMITTED BY APPLICABLE LAW, CA PROVIDES THIS DOCUMENTATION "AS IS" WITHOUT WARRANTY OF ANY KIND, INCLUDING WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NONINFRINGEMENT. IN NO EVENT WILL CA BE LIABLE TO YOU OR ANY THIRD PARTY FOR ANY LOSS OR DAMAGE, DIRECT OR INDIRECT, FROM THE USE OF THIS DOCUMENTATION, INCLUDING WITHOUT LIMITATION, LOST PROFITS, LOST INVESTMENT, BUSINESS INTERRUPTION, GOODWILL, OR LOST DATA, EVEN IF CA IS EXPRESSLY ADVISED IN ADVANCE OF THE POSSIBILITY OF SUCH LOSS OR DAMAGE.

The use of any software product referenced in the Documentation is governed by the applicable license agreement and such license agreement is not modified in any way by the terms of this notice.

The manufacturer of this Documentation is CA.

Provided with "Restricted Rights." Use, duplication or disclosure by the United States Government is subject to the restrictions set forth in FAR Sections 12.212, 52.227-14, and 52.227-19(c)(1) - (2) and DFARS Section 252.227-7014(b)(3), as applicable, or their successors.

Copyright © 2017 CA. All rights reserved. All trademarks, trade names, service marks, and logos referenced herein belong to their respective companies.

Table of Contents

Create Data Sets and Data Pools	5
Create Test Match Data Pool	5
Create Publish Data Pool	6
Create CA Agile Requirements Designer Data Set	7
 Create Flow	 7
Expose Flow to TDoD	10

Configure Test Data Management for ALM

As a Test Data Engineer, configure Test Data Management to complete the integration with HP ALM. Integration lets the testers publish data criteria for each test case and request the data to attach to the test case.



We strongly recommend that you configure the test match to use the new Tester Self Service capability in the CA TDM Portal. The Microsoft Silverlight-based [Test Data on Demand \(TDoD\)](https://docops.ca.com/display/TDM41/Tester+Self-Service+using+TDoD) (<https://docops.ca.com/display/TDM41/Tester+Self-Service+using+TDoD>) user interface is deprecated. The TDoD functionality is now available in an improved interface within the CA TDM Portal. TDoD users can use all the same capabilities by using the [Self-Service Catalog](https://docops.ca.com/display/TDM41/Find+and+Reserve+Test+Data+Interactively) (<https://docops.ca.com/display/TDM41/Find+and+Reserve+Test+Data+Interactively>) interface in the CA TDM Portal. Additionally, no license migration is required; the same TDoD licenses are valid with the CA TDM Portal functionality. For more information about how to use the CA TDM Portal as the location for testers to request data, see [Configure Test Data Reservation Service](https://docops.ca.com/display/TDM41/Configure+Test+Data+Reservation+Service) (<https://docops.ca.com/display/TDM41/Configure+Test+Data+Reservation+Service>). Existing users can still use the TDoD functionality, but we recommend that you start using the Self-Service Catalog functionality in the CA TDM Portal.

Create Data Sets and Data Pools

Create the following data set and data pools. these items are used to edit TCDC table, and to publish and attach the Flow.

- Data Pool of Normal type
- Data Pool of Test Match type
- Data Set of CA Agile Requirements Designer type

Select the **Available on demand** check box when you create the data sets and pools.

Create Test Match Data Pool

Create a data pool of test match type in TDM. Ceate the pool under the project that holds the data that is required for the tests. The test match data pool holds the TCDC table where the data criteria is published. The data criteria is specified by the tester. To perform the test match, associate the test match data pool with appropriate test mart .

- After you create the data pool, run the test match at least once successfully.

- In the **Default Publish** tab, associate the latest successful run of test match data pool properties.

Create Publish Data Pool

Create a normal type data pool in TDM under the same project as the test match data pool. The new data pool is used to publish the data to the TESTCASE_DATA_CRITERIA (TCDC) table of the test match data pool.

Follow these steps:

1. Create a data pool. Ensure the **Available on demand** check box is selected.
2. Right-click and select **Edit Data**.
3. Double-click the TESTCASE_DATA_CRITERIA table.
4. Edit the following mandatory columns with the values that are specified and save the changes:
Note: The following values are examples for three test conditions. You can edit the number of test conditions as necessary.

- **Test Name**

Value: ~testname~

Note: Case sensitive

- **Test Active**

Value: Y

- **Test Repeater**

Value: ~repeat~

- **Test Conditions**

Value: ~condition1~

- **Hpalm Path**

Value: td://~almp~.~almd~.<alm host>/qcbn/%5bAnyModule%5d?

EntityType=ITest&EntityID=~almoid~

<alm host> is the HP ALM server address.

5. Create DataSet substitutions for the preceding variables as shown in the following screen capture:

Variable Name	Default Value	Variable Description	Validation	List
almd	ALMD	ALM Domain		
almoid	1	almoid		
almp	ALMP	ALM Project		
cond1_val	@execsql(select test_conditions from FNV_608_2385 where test_name=~testname~)@	Test condition		
condition1	~cond1_val~	Condition for the data criteria		
repeat	@execsql(select test_repeater from FNV_608_2385 where test_name=~testname~)@	Number of data items to be reserved		
testname	Default test case	Test case name		

You can replace the default values as required to your enterprise environment.

6. In the preceding example, the table name **FNV_608_2385** represents the TESTCASE_DATA_CRITERIA of the Test Match data pool. To correct the value on your environment, do the following steps :
 - a. Open the TESTCASE_DATA_CRITERIA (TCDC) of the test match data pool. Right click the **TESTCASE_DATA_CRITERIA** tab.
 - b. Select **Copy External View Name 'XXXX'**.
 - c. Use the copied value in place of FNV_608_2385.
7. Perform publish to test match data pool. Ensure that the successful run is associated in the **Default Publish** tab of publish data pool properties.

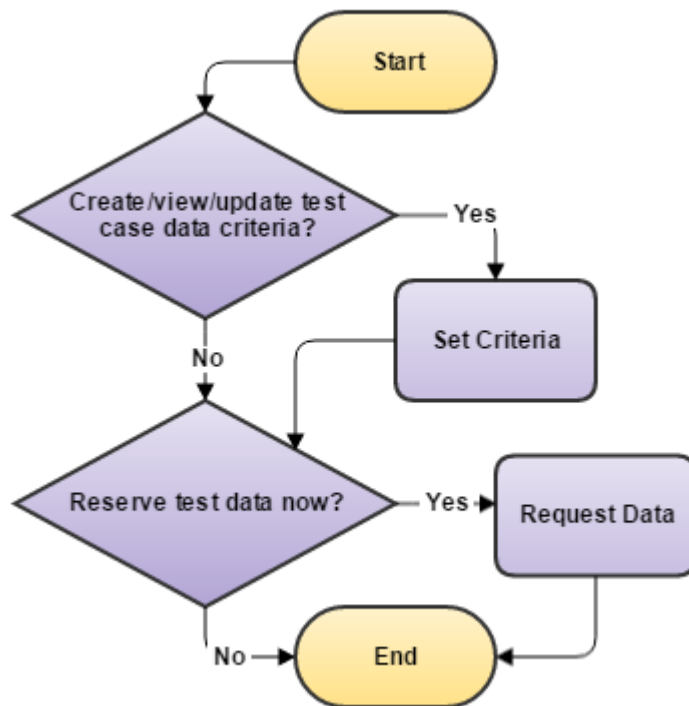
Create CA Agile Requirements Designer Data Set

Create a data set of CA Agile Requirements Designer type in TDM under the same project as test match data pool. The new data set is used to associate the Flow.

Create Flow

CA Agile Requirements Designer lets you design the visual and active flow chart and various TDM actions. When you expose the designed flow to TDoD, run the flow to perform the defined actions. For example, you can set criteria and request data for a specific test case. Run the flow that is designed with respective actions to perform in Test Data Management.

The following diagram shows the recommended design of the flow:



When you create the flow for the defined process block, specify the following values:

Set Criteria

1. Double-click the **Set Criteria** process block, go to the **Make System Data** tab, and click **Set Publish**.
2. Associate to the publish data pool and configure variable options as shown in the following screen capture:

		Variable	Use in TDoD	Fixed	Resolve	Value
1	↑ ↓	<input checked="" type="checkbox"/> condition1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	~cond1_val~
2	↑ ↓	<input checked="" type="checkbox"/> repeat	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	@execsql(R,select test_repeater from FNV_608_2385 where test_name='~testname~')@
3	↑ ↓	<input checked="" type="checkbox"/> testname	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Default test case
4	↑ ↓	<input checked="" type="checkbox"/> almp	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ALMP
5	↑ ↓	<input checked="" type="checkbox"/> almd	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ALMD
6	↑ ↓	<input checked="" type="checkbox"/> almoid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
7	↑ ↓	<input type="checkbox"/> cond1_val	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	@execsql(R,select test_conditions from FNV_608_2385 where test_name='~testname~')@

Request Data

1. Double-click the **Request Data** process block, go to the **Find System Data** tab, and click **Set Test Match**.
2. Select the test match data pool to attach, and click **OK**.
3. Go to TDoD **Options** and select the required test match options to expose to TDoD.

4. Modify the following test match options names as required:

- **Clear Down Prior Matches** (Default)
Recommended: Release previous data reservations?
- **Allow Partial Matches** (Default)
Recommended: Allow partial data reservations?

5. Go to **Details** tab and specify a value in **ALM** field. Following are the valid values:

- **ATTACH_ALL** or **ATTACH_ALL_TM_RESULTS**
Performs the synchronization (CSV upload to HP-ALM) of all the tests.
- **ATTACH_TM_RESULTS**
Performs the synchronization (CSV upload to HP-ALM) for a specific test.

(Optional) Specify TEST_NAME Variable

You can create a TEST_NAME variable to specify the test case name to execute the test match and get the data only for a specific test case.

1. Go to menu bar and click Tools, Properties.
The Properties dialog opens.
2. Click the Variables tab.
The Variables dialog opens.
3. Click New Variable and specify the following:
 - **Name**
Specifies variable name. Enter TEST_NAME in this field. The variable name is case sensitive and to be entered in Upper Case only.
 - **Description**
Specifies the variable description. Enter the brief description that explains the variable.
 - **Default Value**
Specifies the default value to show when the flow is executed in TDoD. Enter a default value of the variable in this field.
4. Click **Save**.
The global variable TEST_NAME is added to the flow. When the Test Engineer executes this flow from CA TDM Self Service Catalog, the flow presents Test Name field under Global Variables. Tester can enter a specific test case name in this field to execute the test match and get the relevant results, only for the specified test case.

Save to Repository

- Go to the File menu, click **Save to repository**, select **CA Agile Requirements Designer Data Set**, and click **Save**.
For more information about how to create Flows, see the [CA Agile Requirements Designer documentation \(https://docops.ca.com/tco\)](https://docops.ca.com/tco).

Expose Flow to TDoD

Associate the Flow with TDoD. This action lets testers use the flow in the CA TDM Portal Self-Service Catalog to perform Set Criteria and Request Data actions.

Follow these steps:

1. Navigate to the project where Flow is saved.
2. Right-click the Flow and click **Expose to TDoD**.
The flow is now available in the CA TDM Portal Self-Service Catalog.