

Bradley Databases Improvements and New Features

Introduced in All Bradley Database Templates

(Including Changes Requiring Special Handling)

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➤ Improvements

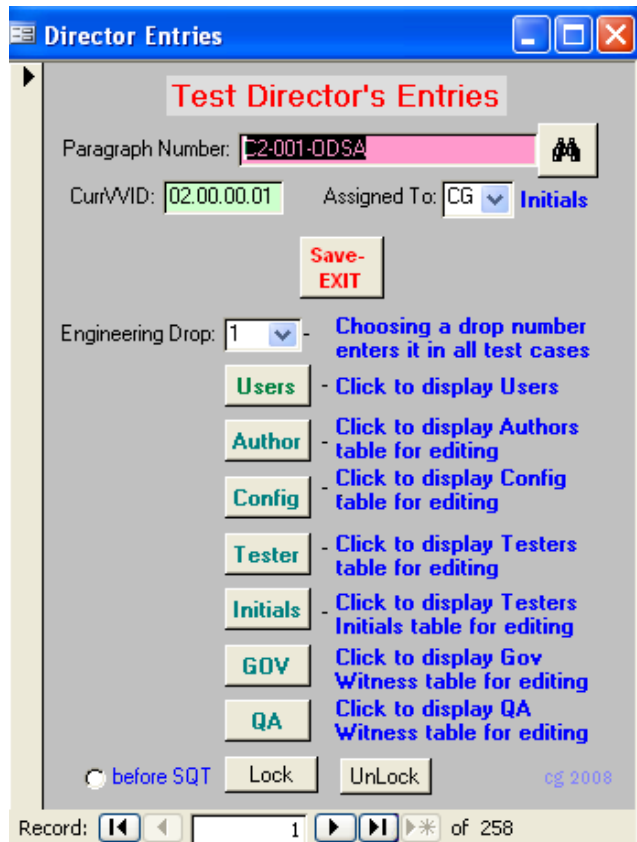
- ✓ VBA Code Added To Underlying Code For Most Welcome Screen Buttons and Utilities To Provide Extensive Error Checking To Aid In the Prevention of Database Corruption and Costly Mistakes
- ✓ Altered Utility Screens As Necessary to Achieve a Consistent Look and Feel
- ✓ Obsoleted the SQT Score Card Utility and Created the SQT ScoreCard Tab to Save Time and Preclude Loss Of Tester Focus During SQT:

Tester	<input type="text"/>	VEH / VTB	<input type="text"/>	Comments	<input type="text"/>
GOV	<input type="text"/>		<input type="text"/>	<input type="button" value="PASS"/>	
QA	<input type="text"/>		<input type="text"/>	<input type="button" value="FAIL"/>	
				<input type="button" value="Pending"/>	

- ✓ Debugged Utilities XML Parser and Import XML to Prevent “Crashing” Under Certain Conditions

➤ New Features

- ✓ Created a Director's Entries Screen allowing the DBA or Test Directors to Make Assignment, Table Changes, etc., for a Specific VVID:



The screenshot shows a software window titled "Director Entries". Inside, there is a section for "Test Director's Entries". The "Paragraph Number" is set to "C2-001-0DSA". The "CurVVID" is "02.00.00.01" and it is assigned to "CG" with "Initials" as the assigned user. A "Save-EXIT" button is present. Below this, there is an "Engineering Drop" dropdown set to "1", with a note: "Choosing a drop number enters it in all test cases". A vertical list of buttons includes "Users", "Author", "Config", "Tester", "Initials", "GOV", and "QA", each with a corresponding description of the table it opens for editing. At the bottom, there are "before SQT", "Lock", and "UnLock" buttons, and a record navigation bar showing "Record: 1 of 258".

New Features (continued)

- ✓ Created a Problem Report Tab to Trace and Record Problems For Later Review and Resolution:

Problem Report

Test Case PUI: DIAG-033-ODS Test Step: Tester: VTB: Phase: Status:

Description:

IPR:
PCR:

New Features (continued)

The information is stored in the Problems Table, it can be viewed as shown below, by selecting the **Problem Resolution** Button on the Welcome Screen

Problems

Date: 10/1/2008 **VTB:** SA 1
Time: 13:36 **Status:** Problem active
PUI: NAV-003d-ODSA **Phase:** Dvlopmnt
Step: 225 **IPR:** TBA
Tester: Charly Gundlach **PCR:**
ID: 3

Description: Vehicle LAT set to 89 50 00N, LONG 00 00 00w, VEH Bearing = 0. set vehicle in motion, when it reaches 90 deg, stopped briefly at 90 deg, but then turned around and started back to whence it came.

Resolution Notes:

Criticality **ChngOKd** **CmplDate** **By:**

EXIT

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Record: 1 of 2

Problems

Date: 10/2/2008 **VTB:** SA 1
Time: 14:05 **Status:** Problem active
PUI: DIAG-002-ODSA **Phase:** Dvlopmnt
Step: 70 **IPR:** TBD
Tester: Charly Gundlach **PCR:**
ID: 4

Description: No MALFUNCTION ADVISORY LIST comes up

Resolution Notes:

Criticality **ChngOKd** **CmplDate** **By:**

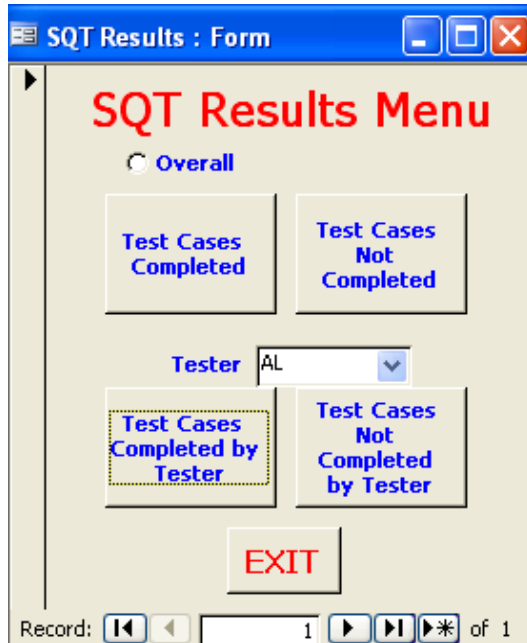
EXIT

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Record: 2 of 2

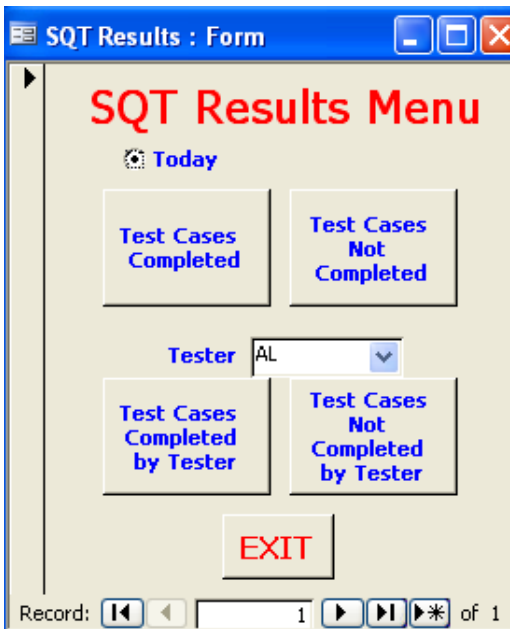
New Features (continued)

✓ Created two SQT Forms and Reports. When the **SQT Results** Button, on the **UTILITIES** form, is selected, the SQT Results Form is displayed. Two versions of the form are shown below:



The screenshot shows a window titled "SQT Results : Form". The main heading is "SQT Results Menu". Below the heading, there is a radio button labeled "Overall" which is selected. There are two buttons: "Test Cases Completed" and "Test Cases Not Completed". Below these is a "Tester" dropdown menu with "AL" selected. There are two more buttons: "Test Cases Completed by Tester" (which is highlighted with a dashed border) and "Test Cases Not Completed by Tester". At the bottom, there is an "EXIT" button. The record navigation bar at the bottom shows "Record: 1 of 1".

Configuration -1



The screenshot shows a window titled "SQT Results : Form". The main heading is "SQT Results Menu". Below the heading, there is a radio button labeled "Today" which is selected. There are two buttons: "Test Cases Completed" and "Test Cases Not Completed". Below these is a "Tester" dropdown menu with "AL" selected. There are two more buttons: "Test Cases Completed by Tester" and "Test Cases Not Completed by Tester". At the bottom, there is an "EXIT" button. The record navigation bar at the bottom shows "Record: 1 of 1".

Configuration -2

New Features (continued)

Its purpose is to provide the test Director complete visibility of all test cases and tester activity during SQT. It is intended only for the use of the Test Director or DBA. In order for the data to be correct, when a test case is completed in SQT, the Status: in the Test Case Info Tab must be set to “Finished” and all the information in the SQT ScoreCard Tab must be entered and either the PASS, FAIL, or Pending button selected. Also, the Test Director must use the Director Entries form to enter the initials of the tester that actually ran the test if the assignment has been changed during SQT.

Selecting the **Test Cases Completed** button – Outputs a report, the format of which depends on the setting of the radio button. If it is set to **Overall** as shown above, in **Configuration-1**, the report appears as shown in the example on the next slide. If it is set to **Today** as shown above, in **Configuration-2**, the report appears as shown in the example on the second of the next two slides.

New Features (continued)

SQT Status Report (Overall) : A3 BFIST VVID 8.11.04-06 EPLRS SQT

tcTotal = 122

tcFinished = 98

%Finished = 80.33

<i>PUI</i>	<i>Test Name</i>	<i>Status</i>	<i>QA</i>	<i>GOV</i>	<i>Engineer</i>	<i>VTB</i>	<i>Date</i>	<i>Comments</i>
C2-001a-BDT0	FBCB2 Startup Main Path (with DVDB)	PASS		Pam Neale	Eric Haan	VTB 1	6/14/08	
C2-001a-BDT1	FBCB2 Startup Main Path (with DVDB)	PASS		Pam Neale	Alan Lin	VTB 1	6/11/08	
C2-001a-BHT0	FBCB2 Startup Main Path (with HPU)	PASS		Pam Neale	Alan Lin	VTB 1	6/11/08	
C2-002a-BDT1	FBCB2 Startup Service Request (with DVDB)	PASS		Pam Neale	Alan Lin	VTB 1	6/11/08	
C2-003a-BDT1	FBCB2 Startup Service Request Less Than 5 Min NACKs (with DVDB)	PASS		Pam Neale	Alan Lin	VTB 1	6/11/08	
C2-004a-BDT0	FBCB2 SHUTDOWN Main Path (with DVDB)	PASS		Pam Neale	Alan Lin	VTB 1	6/11/08	
C2-004a-BDT1	FBCB2 SHUTDOWN Main Path (with DVDB)	PASS		Pam Neale	Alan Lin	VTB 1	6/11/08	
C2-004a-BHT0	FBCB2 SHUTDOWN Main Path (with HPU)	PASS		Pam Neale	Alan Lin	VTB 1	6/11/08	

New Features (continued)

SQT Status Report (Today) : A3 BFIST VVID 8.11.04-06 EPLRS SQT

*tcTotal** = 75

tcFinished = 45

%Finished = 60.00

* as of today

<i>PUI</i>	<i>Test Name</i>	<i>Status</i>	<i>QA</i>	<i>GOV</i>	<i>Engineer</i>	<i>VTB</i>	<i>Date</i>	<i>Comments</i>
C2-004a-BHT0	FBCB2 SHUTDOWN Main Path (with HPLU)	PASS		Pam Neale	Alan Lin	VTB 1	6/11/08	
FFLTR-021-BHT0	Fault Filtering - PCM3 CH6 faults	PASS		Rick Kendall	Tom Stephens	VTB 1	6/11/08	Redlines to screen files (Change "Power" to be "Pwr") TR-5 6/11/08
FHL-012-BDT0	DVDB Failure Handling In Silent Watch Bus A and B Not Communicating	PASS	Becky Schmitt		Joe Skapik	VTB 5	6/11/08	
FHL-014-BDT0	System in Combat: DVDB Transition to Zeroize	PASS	Becky Schmitt		Joe Skapik	VTB 5	6/11/08	
FHL-015-BDT1	System in Combat: DVDB Transition to Reprogramming	PASS	Becky Schmitt		Joe Skapik	VTB 5	6/11/08	
FHL-016-BDT1	System in Silent Watch: DVDB Transition to Zeroize	PASS	Becky Schmitt		Joe Skapik	VTB 5	6/11/08	
FHL-017-BDT0	System in Silent Watch: DVDB Transition to Reprogramming	PASS	Becky Schmitt		Joe Skapik	VTB 5	6/11/08	
FFLTR-022-BHT0	Fault Filtering - 1W156 cable faults	PASS		Rick Kendall	Tom Stephens	VTB 1	6/11/08	

New Features (continued)

✓ Added Utility SQT Metrics:

SQT Matrix

SQT Metrics

Instructions:

- 1.) Select your initials from the "Tester Initials" drop down list, -OR- leave blank.
- 2.) Press the "Display Personal Metrics Button (below).
A table will be displayed.

Displayed Table FAQs

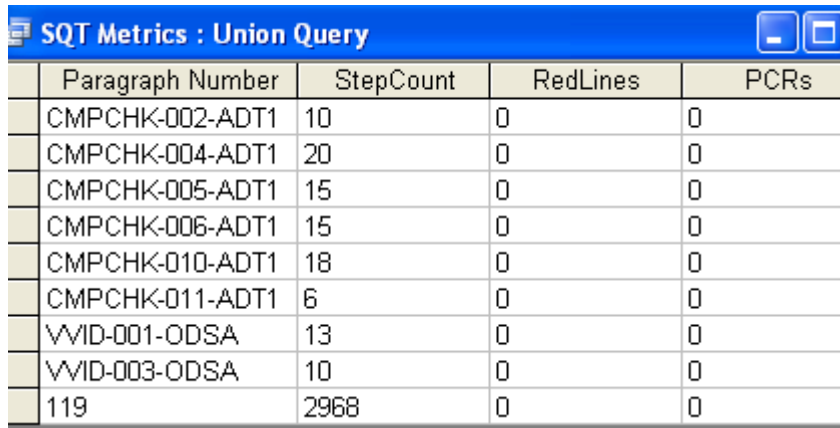
- 1.) Table Content will be as follows...
 - a.) If your initials were selected from "Tester Initials" ONLY records for your test cases will appear.
 - b.) If your initials were NOT selected from "Tester Initials" (left blank) records for ALL test cases will appear
- 2.) The bottom row of the table displays (left to right):
 - a.) The number of test cases run.
 - b.) The total steps for all the test cases.
 - c.) The total redlines for all the test cases.
 - d.) The total of new PCRs for all the test cases.

Tester Initials:

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New Features (continued)

Selecting the [Display Metrics](#) Button displays a table, a partial example of which appears below:



Paragraph Number	StepCount	RedLines	PCRs
CMPCHK-002-ADT1	10	0	0
CMPCHK-004-ADT1	20	0	0
CMPCHK-005-ADT1	15	0	0
CMPCHK-006-ADT1	15	0	0
CMPCHK-010-ADT1	18	0	0
CMPCHK-011-ADT1	6	0	0
VVID-001-ODSA	13	0	0
VVID-003-ODSA	10	0	0
119	2968	0	0

Future plans call for this table to become a report, grouped by Test Case type with totals for each group.

New Features (continued)

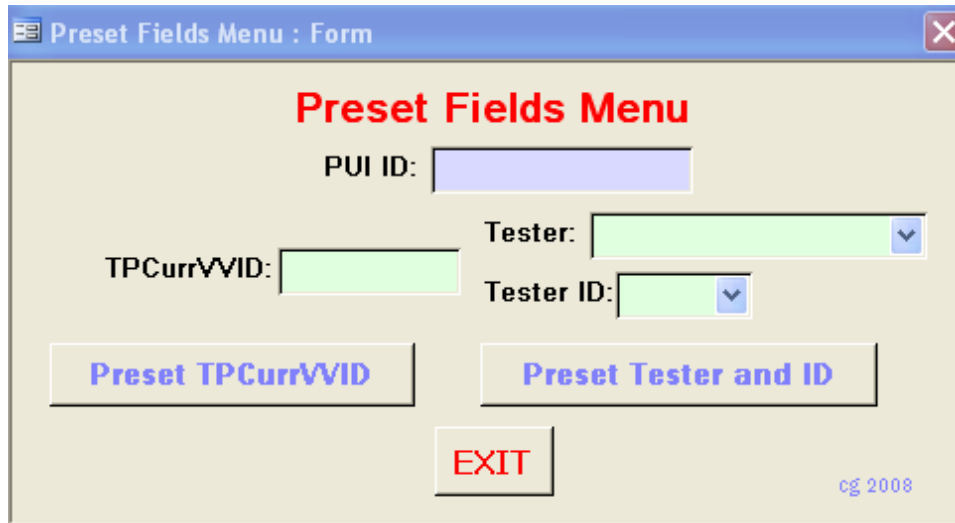
- ✓ **Print Problem Report Table** button on the **UTILITIES** Form facilitates printing the Problems Table. Selecting the button will display a request that the table be printed in Landscape before printing.
- ✓ Added Options Button to the XMP Parser Screen to Facilitate Exporting All Test Cases:



New Features (continued)

✓ Preset Fields Menu

Selecting the above named button on the **UTILITIES** Form will display the form shown below:



The screenshot shows a dialog box titled "Preset Fields Menu : Form". The main heading is "Preset Fields Menu" in red. Below the heading are four input fields: "PUI ID:" (a light blue text box), "TPCurrVVID:" (a light green text box), "Tester:" (a light green dropdown menu), and "Tester ID:" (a light green dropdown menu). At the bottom, there are three buttons: "Preset TPCurrVVID" (light blue), "Preset Tester and ID" (light blue), and "EXIT" (red text on a light blue background). The copyright notice "cg 2008" is located in the bottom right corner.

New Features (continued)

PUI ID Field – the PUI of the test case(s) whose values will be preset This can be all test cases by entering an * or a group of test cases by entering for example FC *

TPCurrVVID Field – the TPCurrVVID that will be set for the selected test case(s)

Tester Name – the Tester's name that will be set for the selected test case(s)

Tester ID – the Tester's Initials that will be set for the selected test case(s)

Preset TPCurrVVID Button – clicking the button applies the TPCurrVVID data into the test case(s) selected by the entered PUI ID

Preset Tester and ID Button – clicking the button applies the Tester and Tester ID data into the selected test case(s).

➤ New Features Known Problems

✓ Import XML

This utility is erratic as to the number of files it can import at one time. This fact may make it necessary to do the import in “chunks”. The procedures to accomplish this are explained in the “USER's Manual for the Bradley Family CSIL SW Test Databases”. It is located in folder:

<O:\BFVA3\PUBLIC\SWTEST\!!!! Databases - Templates SW Test\!Access Database Manuals>

➤ Changes Requiring Special Handling

Early in September, I was instructed to remove the leading “t” from all the test case names in ODS SA.

The main design feature of the database was all frameworks began with the letter “f” and all test cases began with the letter “t”. Changing that major design is akin to changing the kernel of an Operating System and still expecting everything else to work.

As soon as I had had changed the names many functions stopped working. These same functions were in all of the Bradley databases where this came test case name had been made earlier. To work around the problem, the concept of a “fictitious” TPCurrVVID entry of “f” in the Test Procedure table for identifying frameworks was introduced. This worked fine for initially bringing up the database, but all the VBA code that had come from ODS SA, and the same code within ODS SA were affected. To get everything working again, and the task of finding and modifying them all the affected queries and VBA code was begun on 9/05/08. It became a high priority and time consuming process. It required frequent changes to all active databases and templates. It was (hopefully) completed on 9/20/08.

Changes Requiring Special Handling (continued)

Because of this major convention change, the following must always be adhered to:

- ✓ **The Configuration Parameters Table must be set up and populated, in any new database, *before* test cases are imported!**
- ✓ **The “f” in the Release column’s bottom row is now necessary to distinguish frameworks from test cases. “Workaround” changes/additions to queries and VBA code were/are required to minimize the effects of the convention change.**
- ✓ In addition, in the Test Procedure Table, an “f” must be placed in the TPCurrVVID column in each row defining a Framework Procedure. It is especially important to keep this in mind when importing framework procedures, as if not, they will seemingly disappear.
- ✓ **New queries and VBA code that depend on distinguishing test cases from framework procedures must be written with these limitations in mind.**