

Case Scenario Library for Testing Large Blaise Applications

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Why Jason is not here...
Evelyn was born 9/14/07





What is HRS?

- Health and Retirement Study
 - Longitudinal Survey
 - Complex Multi-Sectional Survey
 - Over one hour long interview per participant
 - 22,000 participants / every two years
 - More than 400 variables from previous wave data as preload
 - Seven interview types and language combination



What is a “Scenario”?

- A specific flow through the application
- A scenario entry is
 - Preload environment (XML or SQL)
 - Scenario specifics
 - (section, purpose, testing needs)
 - Keystroke (ADK or ADT)



Why a Scenario Library?

- Preload management
- Tracking what had been tested
- Needed ability to re-test quickly
- Enable running of a test in another types
- Recalling scenarios from previous waves
- Create test data quickly

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Utilities for the System

- Preload/Case Manager Utility
 - Save and re-use
 - Develop delimited string and XML files
 - Save in a SQL database
 - Allow recall
 - Allow easy alteration



Utilities for the System

- Keystroke Restore Utility
 - Recreating environment
 - Read ADT/ADK files and apply keystrokes into Blaise Dep
- Scenario Utilities
- Record and recall major flows
 - Save ADT and Preload
 - Record scenario details
 - ID in library fashion



Preload Lifecycle

- Stored in a SQL server
 - Allowing faster access
 - Less size restrictions
- Allow alteration, saving and retrieval
 - Preload can be reused
- Each case includes 400+ variables.
- Allow sharing across testers

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Scenario Utilities

- Finder
 - Find a scenario with a certain field
- Restore
 - Inserts keystrokes without watching
- Replayer
 - Allows pauses and alterations
- Save options
 - Can save after the fact
- Scenario description
 - A description of the scenario purpose and flow is stored

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Scenario Description

- Allow view of descriptions and preload criteria that had been saved.
- Selection restores ADK and preload into tester's own work space.

A screenshot of a software window titled "Form2". The window contains the following text:

ScenarioID : 98
SectionLetter : M2
SID : 0400020011
HHID : 0400020

Description : 2006 Sec M2-35 Used to test 3rd condition at M527 Branchpoint Self lw, under 70, married, retired, had worked more than a few months before, have temp condition that keeps from working, Impairment Affected Activities Info asked (never worked regularly), Application for Disability

At the bottom of the window, there are two buttons: "Select Case" and "Close".

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Replayer Utility

- Quick application of saved keystrokes
- Play to a point, stop and alter keystrokes

The screenshot shows a window titled "HRS Questionnaire" with a menu bar containing "Forms", "Answer", "Language", "Help", "Prospective Memory", and "Hide Watch Window". The main content area is yellow and contains two bullet points:

- You should be interviewing **NEW R**, or **doing a proxy for him**.
- If you have the wrong R, suspend this case and select the correct line.

Below the text, it says "C 1. Correct R - go on".

Overlaid on the bottom right is a "Keystroke Replayer Window" with a menu bar "File Action Options Help". It has a "Keystroke Queue" section with a text input field containing "1[ENTR]". Below the input are several navigation buttons: a play button, a stop button, a back button, a forward button, and a help button. Below the queue is a "DEP:" section with a dropdown menu showing "ADK:SecA.StarInterview.A006_" and "SecK.EMPHISTORY.K018_".

At the bottom of the main window is a table of variables:

A006_	<input type="checkbox"/>	A104SCurrPrxy	<input type="checkbox"/>	A122_DaDeath
A007TRAlive_A	<input type="checkbox"/>	A105_PrxyNam	<input type="checkbox"/>	A123_YrDeath
A002_lwBegin	<input type="checkbox"/>	A164_A011_Rat	<input type="checkbox"/>	A124_PlaceDie
A008ASex_A	<input type="checkbox"/>	A012_LangSwit	<input type="checkbox"/>	A125S



Uses of System

- Tester can use last wave to check any changes (additions, deletions, or modifications)
- Programmer will run tests on changes
- Language Specialists will re-run to ensure language accuracy
- Design Coordinator can use all as final quality control check.



Outcomes

- Preload process lifecycle
 - Reduced time needed to generate case load
 - Ensure more coverage of HRS population in testing
- Scenario process lifecycle
 - Finder – Finding a scenario that quickly fills needs
 - Recall - reach a point in application without stopping
 - Replayer – can stop and change flow
 - Save options – can save post – test
 - Scenario description - catalog purpose of scenario



Progress Outcome

- The “Old Way”
 - Excel spreadsheets – out of date, hard to find, not sharable across sections
- The “New Way”
 - Easy to re-test
 - Sharing across section
 - Re-testing made easy
 - Time save

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Conclusion

- More comprehensive testing
- Shorter testing time
- Less testing staff hours
- Fewer field problems reported
- Reusable test data across waves and across sections

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Thank You

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Questions