



CARI Component Application In Michigan

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Introduction

- CARI Recorder Component is a new function offered by Blaise in version 4.8.4
- It can be utilized when the built-in audio capabilities are inadequate



Background

1. CARI in Blaise 4.8.2 – Output Audio and Image files
 - U-M decided not use the function. In Michigan, we would like to see interview process in video files for variety of reasons
2. DRI (Digital Recorded Interview) – U-M in house system produces video files. It has some limitations.



CARI Recorder Component

1. Blaise started to Offer the component in Blaise 4.8.4. due to early input from U-M and other organizations
2. Michigan helped to test, debug and stabilize the system.
3. U-M Launched a major study with this new feature in 2013



CARI Recorder Component (Cont.)

1. Blaise COM-interface

- Defines a set of methods in which your own recorder object can support without dictating anything about the implementation.
- COM is a language-neutral way of implementing objects.
- It can be used with almost any programming languages including all .NET languages through .NET COM Interop.



Michigan CARI Recorder Component

1. Start/Stop Camtasia in Sample Management System

- Launch Comtasia Recording
- Handle video file renaming
- Detect rendering process
- Copy video files to their final location.
- Implement different algorithms to select cases to be recorded
- Update its database status upon exiting Blaise DEP



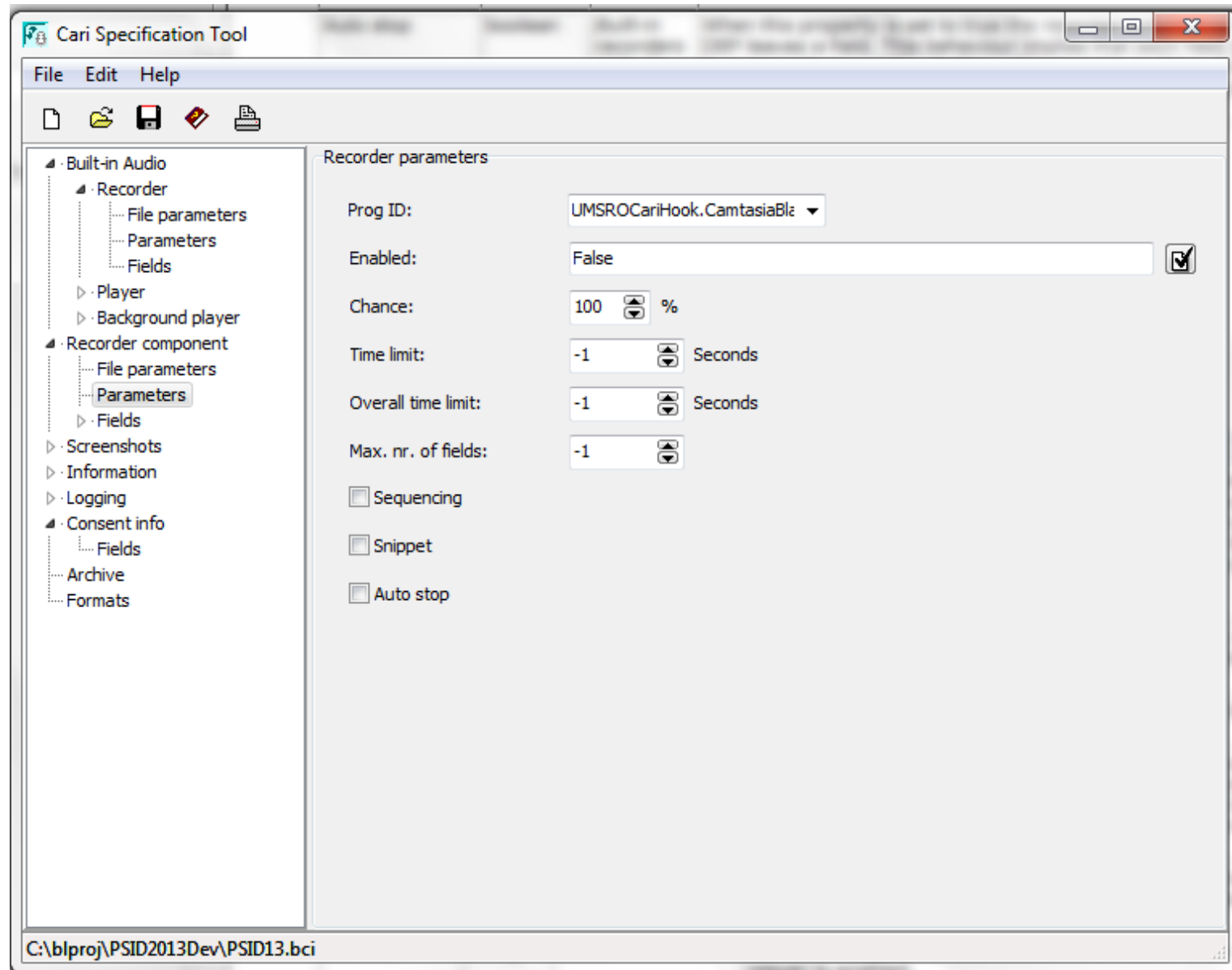
Michigan CARI Recorder Component

2. Create an ActiveX Library (DLL)

- It is called by .BCI (Blaise CARI Setting Interface) file
- Eight methods were provided by Blaise
- We only need to implement three method because most of Camtasia Recording programming is handled outside of Blaise
 - Start() to start or resume Camtasia recording,
 - Stop() to pause Camtasia recording,
 - ExitRecorder () to stop Camtasia recording when the DEP exits.



Set up BCI File (Parameters)



Set up BCI File (Fields)

The screenshot shows the 'Cari Specification Tool' window. The left sidebar contains a tree view with the following structure:

- Built-in Audio
 - Recorder
 - File parameters
 - Parameters
 - Fields
 - Player
 - Background player
- Recorder component
 - File parameters
 - Parameters
 - Fields
- Screenshots
- Information
- Logging
- Consent info
 - Fields
- Archive
- Formats

The main area is titled 'Fields parameters (Recorder component)' and contains a table with the following data:

Name	Enabled	Chance	Time limit	Snippet	Auto stop
RecordedIW_Consent	True	100%	-1	False	False
RecordedIW_Consent	false	100%	-1	False	False
VolStmt	RecordedIW_Consent	100%	-1	False	False
Section_A.A40Spec	False	100%	-1	False	False
EmployEHC1.BCDE1	RecordedIW_Consent	100%	-1	False	False
EmployEHC1.ConfirmS	False	100%	-1	False	False
Section_BC.BCJobs[1]	RecordedIW_Consent	100%	-1	False	False
Section_BC.BCJobs[1]	False	100%	-1	False	False
Section_DE.DEJobs[1]	RecordedIW_Consent	100%	-1	False	False
Section_DE.DEJobs[1]	False	100%	-1	False	False
Section_F.F2	RecordedIW_Consent	100%	-1	False	False
Section_F.F77Per	False	100%	-1	False	False
Section_G.G12	RecordedIW_Consent	100%	-1	False	False
Section_G.G1731	False	100%	-1	False	False
Section_H.H6142	RecordedIW_Consent	100%	-1	False	False

Below the table, there is a section for 'Current datamodel' with a dropdown menu showing 'PSID13.bmi' and a 'Field order' section with three radio buttons:

- Alphabetical
- As defined in the current datamodel
- According the rules of the current datamodel

At the bottom of the window, the file path is displayed: C:\blproj\PSID2013Dev\PSID13.bci

Set up BCI File

3. Logging

The Recorder can keep track of all its actions in two different log files - A *Main* log file and a *Case* log file. We used the extent main log. The logging is very useful :

- It can be used to verify the CARI recording system to make sure the recording files contain the fields we defined in the .BCI file and vice versa.
- The timestamps and other start/stop information can be used for later quality control purpose, i.e., we use them to jump to recorded field locations.



Developing a Quality Control System for CARI

OLIVE(3.0.12.0) Question Navigation

Filter: All Questions with QC Obs
 Audio/Image Playback Only

Sec	Tag	Name	Vst #	Time	Audio	Image	QC Cou
1	RC...	RConfirm	1	3.863	<input type="checkbox"/>	<input type="checkbox"/>	0
2	Rec...	Record...	1	30.670	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1
3	IWT...	IWTYPE	1	1.755	<input type="checkbox"/>	<input type="checkbox"/>	0
4	VOL...	VOLST...	1	8.026	<input type="checkbox"/>	<input type="checkbox"/>	0
5	RB...	RBDay	1	9.664	<input type="checkbox"/>	<input type="checkbox"/>	0
6	A1	SCTAB...	1	13.090	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0
7	A_1c	AYADLT	1	6.476	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0
8	A_1d	ASEX	1	3.597	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0
9	A_1e	ADLT	1	2.728	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0

Navigation: < Previous, Next >, |<< First, Last >>|

Search: Direction: Down Up Find

Stored Value: 1. Agrees to be recorded
 Keystrokes and Mouse Movement: Key: 1[ENTR]

Americans' Changing Lives Wave 5

Forms Answer Navigate Options Help

Hello, this is [Interviewer Name] from the University of Michigan Survey Research Operations calling Study.

We mailed you 2 letters; one with a \$2 bill and magnet and the other with a \$25 check.

The interview will take about 60 minutes to complete.

I'm interested in learning more about your life and how it has changed since we last spoke with you. I financial and family situations.

This interview may be recorded

◆ Press 1 or 5 as appropriate

1. Agrees to be recorded
 5. Does not agree to be recorded

QC Eval

QC Observation for question RecordedIW_Consent

Observation					Comments
Reading	Probe	Entry	Feedback	Other	
Major	Major	Major	Major	Major	
Minor	Minor	Minor	Minor	Minor	
Positive	Positive	Positive	Positive	Positive	

Buttons: Save, Cancel, Edit, Delete

iObsID	Category	Type	Sub-Type	FieldName	Comment
138	Reading	Positive		RecordedIW_Co...	This good intervi...

R Confirm
 Consent and audio record interview
 Type proxy interview

Conclusion

U-M launched several projects using this new CARI Component. We have already seen many advantages.

- DLL is simple to program.
- There is no need to change any Blaise source code
- The output result is accurate – All fields in the BCI's field list are in the video file
- The log files can be used in various ways
- The component can be easily adapted into different sample management system



Summary

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Thank you!

