

Survey Coordination in Blaise 5: A Case Study

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1. Introduction

The National Agricultural Statistics Service (NASS) conducts two studies for agricultural producers involved in the bee and honey industry. The first is an annual survey that collects data on honey production, beehive inventory, and sales and economic data. After colony collapse disorder became an issue in the US, NASS started conducting a Quarterly Colony Loss survey collecting data on hive inventory, loss, and the reasons for loss.

The data collection efforts for these two studies overlap in January. The annual survey typically has a sample of approximately 9,000 beekeepers, and the quarterly survey has a sample of approximately 3,500. As many as 1,500 to 2,500 potential respondents are sampled for both surveys.

2. Background

To reduce the burden on respondents sampled for multiple surveys, NASS prefers to complete all surveys for a respondent in a single contact. Historically, this required having a field enumerator collect data for all surveys on paper. This process required a significant amount of time and money, and it prevented us from being able to effectively use our call center enumerators, as they exclusively call surveys in CATI. With Blaise 4, we could only call on one survey at a time, and switching from one survey to the other was an arduous task. We then began to consider options to simplify this process for our call center enumerators.

Efforts to coordinate this overlap have gone through a few iterations. First, we would call one survey in Blaise 4, then collect the other survey on paper immediately after. Our second approach was to use a Windows program to list respondents in such a way that matching respondents were listed together. See Figure 1.

Figure 1. Original Interface for Matched Surveys

Action	Record	Survey	Oper Name	Person Name	OPER Time Zone	Time Diff (Hrs)	Total # Calls
Get Dial Screen	6 300012080 1 1	BEEPDI	Sunny Acres	Ima Farmer	PTZ	1	
Get Dial Screen	6 300012080 1 1	BEECOLQ	Sunny Acres	Ima Farmer	PTZ	1	
Get Dial Screen	6 300017630 1 1	BEEPDI	Sunny Acres	Ima Farmer	PTZ	1	
Get Dial Screen	6 300030810 1 1	BEECOLQ	Sunny Acres	Ima Farmer	PTZ	1	
Get Dial Screen	6 300030810 1 1	BEEPDI	Sunny Acres	Ima Farmer	PTZ	1	
Get Dial Screen	6 300035890 1 1	BEEPDI	Sunny Acres	Ima Farmer	PTZ	1	
Get Dial Screen	6 300081580 1 1	BEEPDI	Sunny Acres	Ima Farmer	PTZ	1	
Get Dial Screen	6 300082760 1 1	BEECOLQ	Sunny Acres	Ima Farmer	PTZ	1	
Get Dial Screen	6 300082760 1 1	BEEPDI	Sunny Acres	Ima Farmer	PTZ	1	

An enumerator would click on one line to launch the first survey in Blaise 4. Upon completion, they would route back to the listing page, and they could click on the next line to launch the matched survey in Blaise 4. Color coding was used to distinguish between records that had been completed and records remaining eligible for contact. This created a fair amount of overhead between surveys, both in terms of interview time and programming.

The first several questions of an interview contain several administrative items. We ask who we're talking to, verify contact information and business status, and complete other administrative items. While this was the best option we knew about at the time, the interview flow in switching between surveys was a concern.

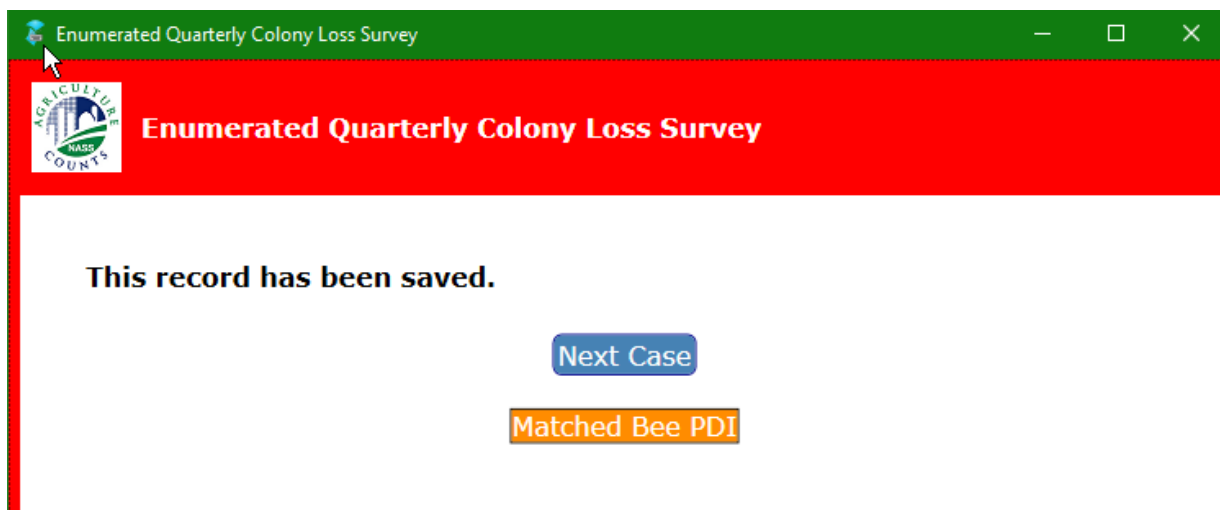
3. Where We Are Now

3.1 Interview Flow

Blaise 5 offers us the ability to launch another Blaise survey using controls in the Blaise Resource Database (blrd), or layout file. When we learned of this feature, we thought this would be a good option for us to improve the flow of a telephone interview when conducting multiple surveys.

We added a button to our receipt page at the end of an interview. See Figure 2. If the respondent was selected for both surveys, the button will be visible, and the enumerator will have the option to click into the matched Bee and Honey survey or select the next form in the current survey. Selecting “Matched Bee PDI” will start that interview at the dial screen.

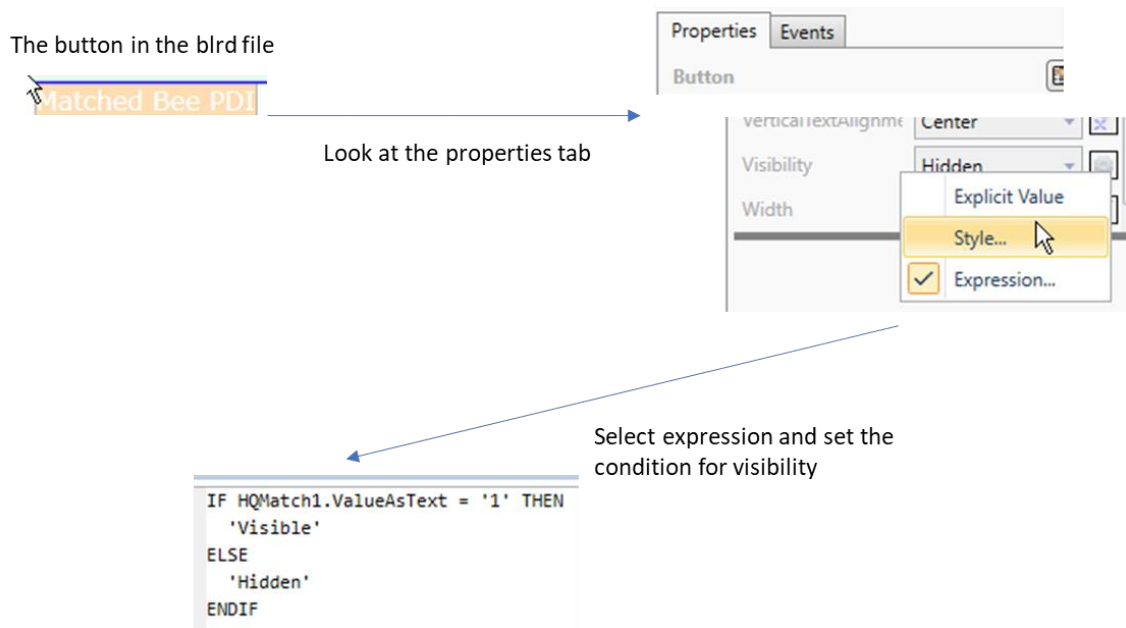
Figure 2. Receipt Page with a Matched Survey



3.2 Nuts and Bolts—How We Make it Happen

To implement this button, we start in the Resource Editor and add the button. Our first consideration is that we need to hide the button if there is not a match. To do this, we use Manipula prior to the survey to code an indicator field in the database when a match across surveys is identified. Then in the blrd file, we reference the value of that field in an expression for the visibility property of the button. See Figure 3.

Figure 3. Setting Visibility Condition



Now that we know the button will only appear when there is a match, the next task is to figure out how to launch the new survey when the enumerator clicks the button. In Blaise 5, this is fairly simple. In the blrd, we navigate to go to the events tab, go to the OnClick event, and select StartSurvey. See Figure 4.

Figure 4. Starting a Survey from Event Settings

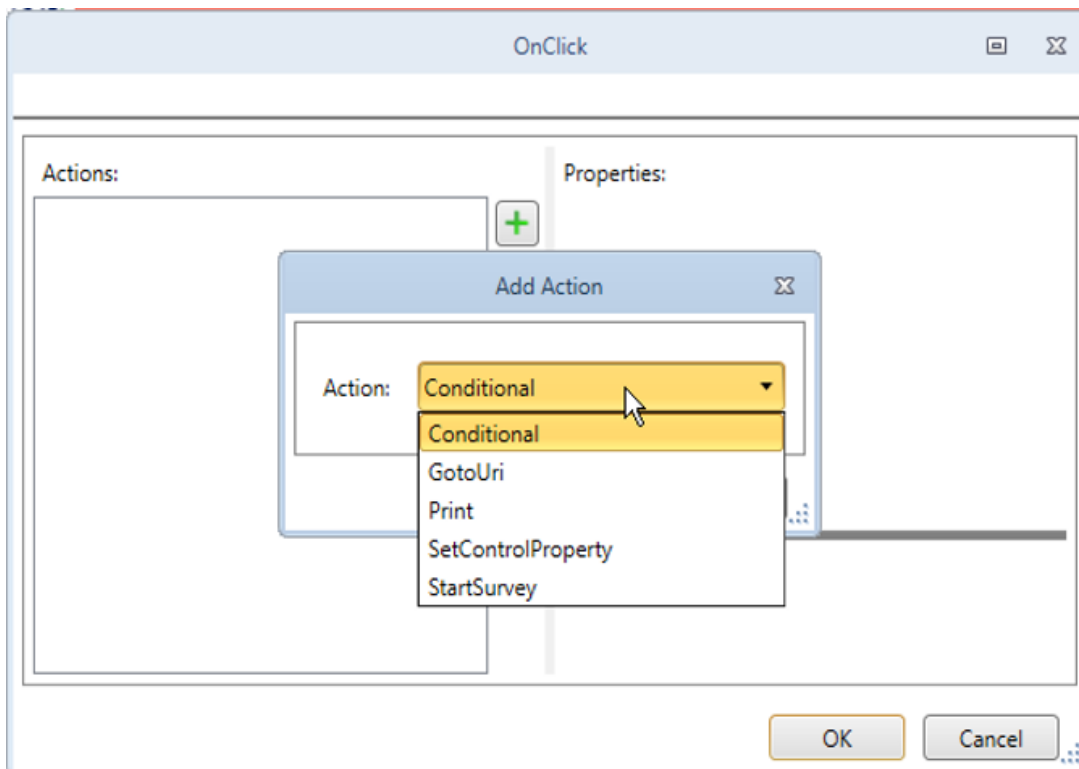
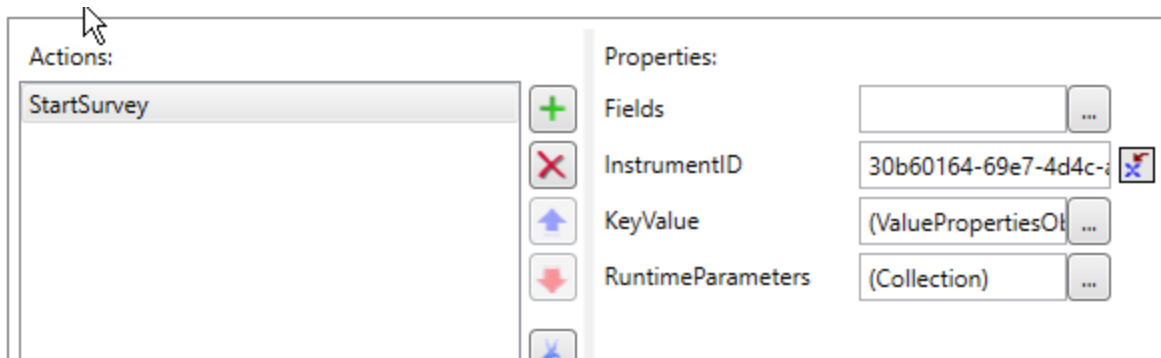


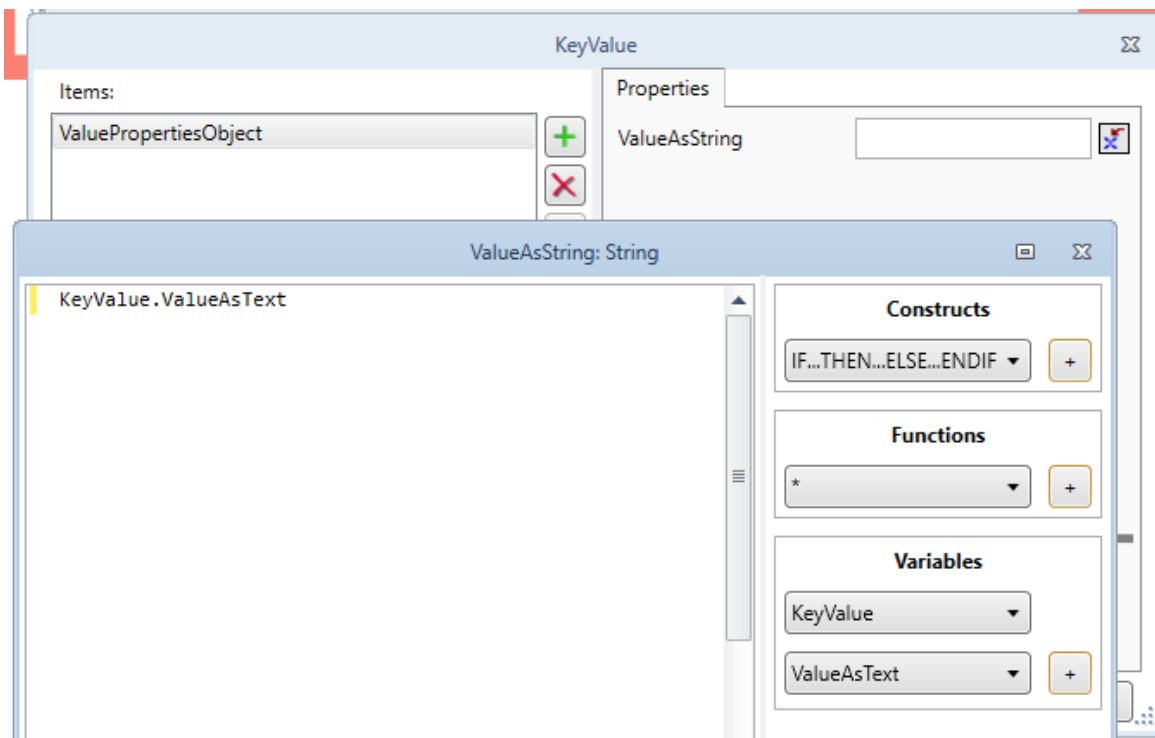
Figure 5. Event Options



Once you have selected the StartSurvey action, several options will appear in the properties window. The most straightforward is the instrument ID. You can use an explicit value or an expression. For now, we use an explicit value and copy the GUID right into the field. See Figure 5. While this approach is easy to set up, it lacks the versatility required for ready use in other coordination efforts.

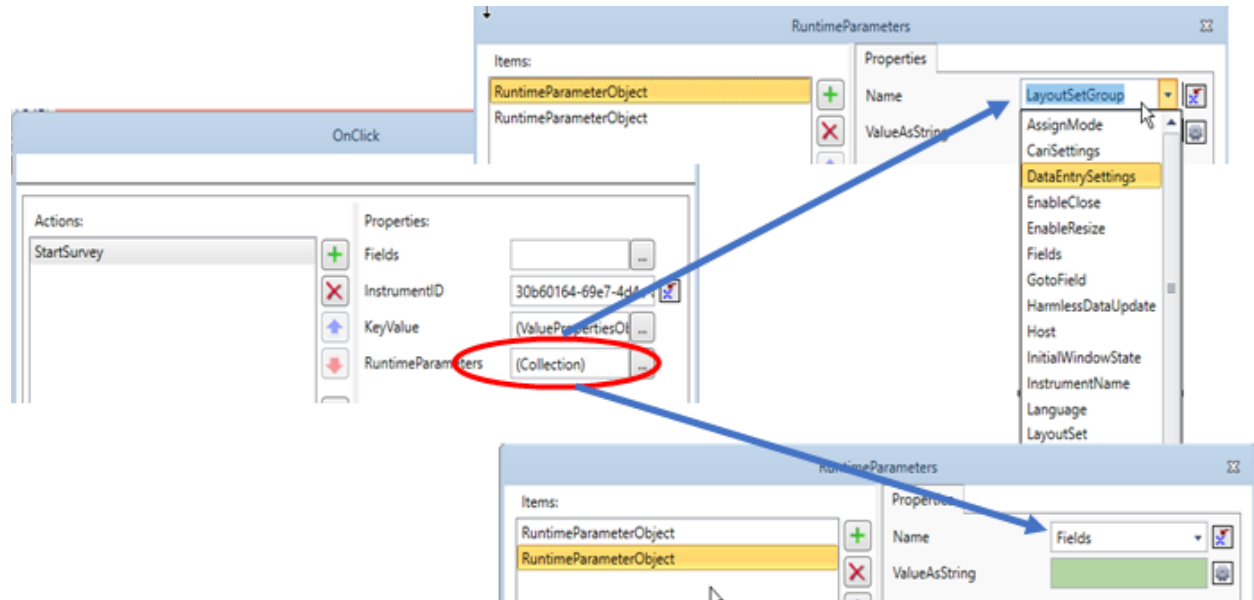
Next, we want to make sure that the record we're bringing up in the destination survey is the same person as in this survey. NASS uses the same four field primary key in all our surveys, so we know the key value of a record in this survey will be the same as the key value in the destination survey. So, we can click on KeyValue. Then click the green plus to add ValuePropertiesObject. This gives us a properties window, where we choose an expression. In the variables drop-down menu, we select KeyValue. In the option box below, we select ValueAsText. Click the plus button to generate the expression. See Figure 6.

Figure 6. Setting the Key Value



Then we can use the RunTimeParameters field to set some parameters for the new form we're launching. Click the green plus to add a RuntimeParameterObject, then select what you need from the drop-down menu. In our case, we define a layout set and several field values. We then use an expression to define those values. See Figure 7.

Figure 7. Setting Runtime Parameters



In the end, we have a system that allows an enumerator collecting data on the Colony Loss Survey to jump right into the annual Bee and Honey survey in cases where there is a match. While this is an upgrade from what we had in Blaise 4, we're still working on improvements.

4. Where We Want to Go

There are several features we are trying to figure out for future iterations of these surveys. One possibility would be trying to build a component that will allow us to determine the GUID of the target survey at run time. At NASS, we like to have all surveys share a blrd file so that we have a consistent flow between surveys. This means all surveys have the same receipt page, which means that we can only coordinate one way since we are hardcoding the GUID in the layout window. When we figure out how to calculate that at run time, we'll be able to coordinate both ways.

The next feature we're considering is how to jump into the second survey where we want to. Currently, the second survey opens to the dial menu, and the enumerator is forced to complete several introductory/administrative questions, including verifying respondent names and contact information, before getting into the main content of the study. Since the first survey has already asked those administrative/introductory questions, ideally, we'd like to copy that data forward to the second survey and open that instrument to the first survey-specific question. We think this can be done using session data, but we haven't yet figured out how to implement it.

We've also recently become aware that Blaise 5 offers a feature known as launcher and topic instruments. When time permits, we will investigate this tool as an alternative option to handle toggling between surveys.

Ultimately, what we hope to achieve is an experience where an enumerator can collect data for more than one study, but to make it easy for the enumerators to have respondents feel like they are going through only one survey. While we have demonstrated we can add some functionality in this direction in a specific case, our goal is to make the process more generic so we can readily apply it to other combinations of studies.