

## **Integrating a Web-Based Self Interview with DataFax CRF Data in Risk Behavior Assessments**

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### **The Challenge**

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- Several new protocols have as Primary Objectives the analysis of “High Risk Behaviors”
- SCHARP needed a tool that would confidentially collect data directly from participants
- Searched for an ACASI (Audio computer-assisted self-interview) for collection of behavioral risk assessments

## **The Solution**

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- We found that Dat•Stat Illume can provide study sites with a web-based survey system that allows participants to privately answer sensitive questions via a laptop computer

## **Dat•Stat Illume**

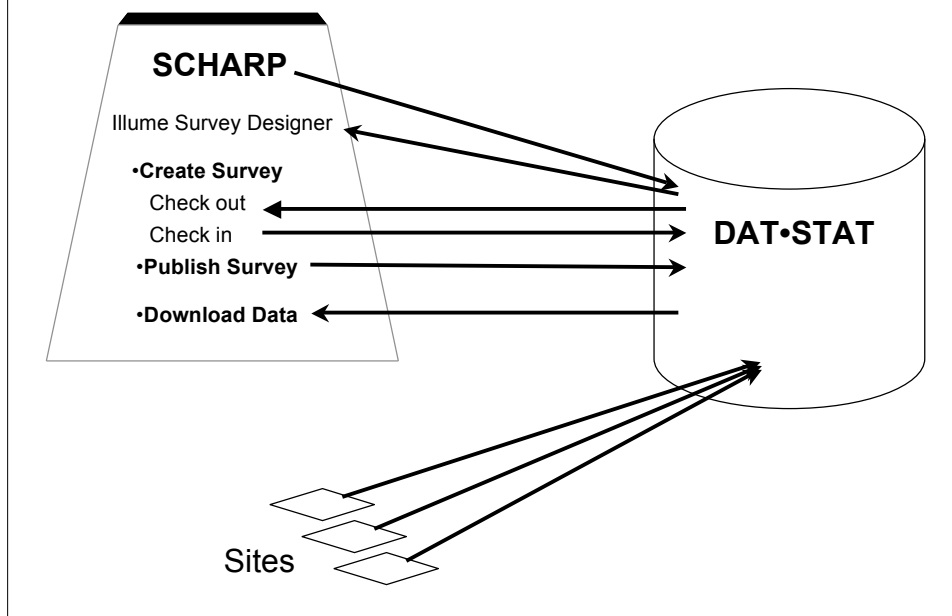
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- Software for creating web-based surveys
- Easy to use Survey Designer
- Organized into Collections
  - Questions can be randomized, required, skipped
- Options for
  - Internal variables (not saved in data set)
  - Calculated variables
  - Quality checks
  - Custom expressions ((IF **A** AND (**B** OR **C**))
- Text and audio can be provided in English and translated languages.

## Dat•Stat Illume – Details

- The native storage for Illume is Microsoft SQL
- The Illume Web Console will export data to a variety of formats, including Microsoft Excel, SAS, SPSS, HTML, text, and XML.
- Components available in Illume:
  - Dat Stat Server – houses the data and allows connection via the internet to use Illume software locally
  - Illume Clients used to create surveys, preview, create pdfs, and collect data from participant in disconnected mode
  - Web Console to add PTIDs, export data, etc.
  - SDK (Software Development Kit) can be used to develop virtually anything you want based on Illume

## Dat•Stat Illume & Clients



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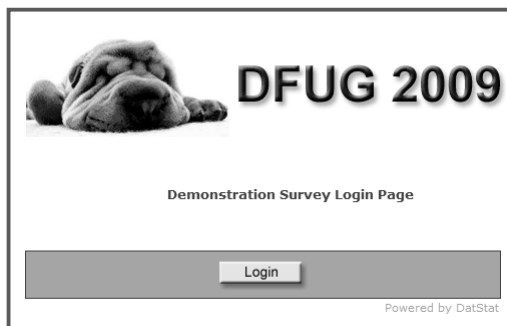
## Demo Survey

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Lets take a look at a Survey...

## Demo Survey

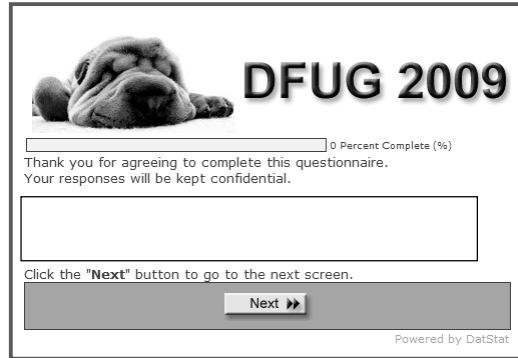
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## Intro Text

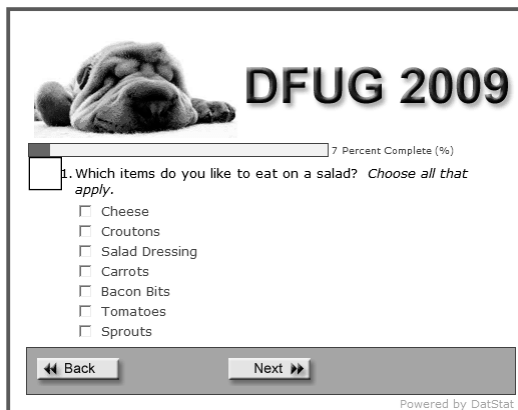
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The intro screen features a grey bulldog image on the left and the text "DFUG 2009" on the right. Below the image is a progress bar showing "0 Percent Complete (%)". The text reads: "Thank you for agreeing to complete this questionnaire. Your responses will be kept confidential." There is a large empty rectangular box for a message. Below this is the instruction "Click the 'Next' button to go to the next screen." and a "Next >>" button. The footer says "Powered by DatStat".

## Mark All That Apply

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The survey question screen features a grey bulldog image on the left and the text "DFUG 2009" on the right. Below the image is a progress bar showing "7 Percent Complete (%)". The question is: "1. Which items do you like to eat on a salad? Choose all that apply." The list of items includes: Cheese, Croutons, Salad Dressing, Carrots, Bacon Bits, Tomatoes, and Sprouts. At the bottom, there are "Back <<" and "Next >>" buttons. The footer says "Powered by DatStat".

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## Select One

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**DFUG 2099**

14 Percent Complete (%)

2. Do you like Summer?

Yes

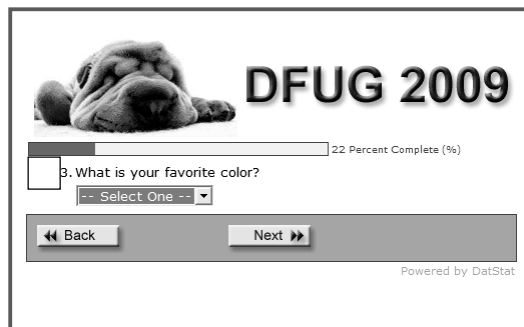
No

« Back      Next »

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## Select One – Pop List

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**DFUG 2099**

22 Percent Complete (%)

3. What is your favorite color?

-- Select One --

« Back      Next »

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\*\*INSERT YOUR TITLE HERE\*\*

## Select One – Pop List

DFUG 2099

22 Percent Complete (%)

3. What is your favorite color?

-- Select One --

-- Select One --

Red

Blue

Green

Yellow

Purple

Next

Powered by DatStat

## Question Table

DFUG 2099

42 Percent Complete (%)

5. Which of these types of Winter transportation have you used?

	Have Used	Have Not Used
(a) Skis	<input checked="" type="radio"/>	<input type="radio"/>
(b) Snowboard	<input type="radio"/>	<input checked="" type="radio"/>
(c) Sled / Toboggan	<input type="radio"/>	<input type="radio"/>
(d) Hockey Skates	<input checked="" type="radio"/>	<input type="radio"/>
(e) Snowshoes	<input type="radio"/>	<input type="radio"/>

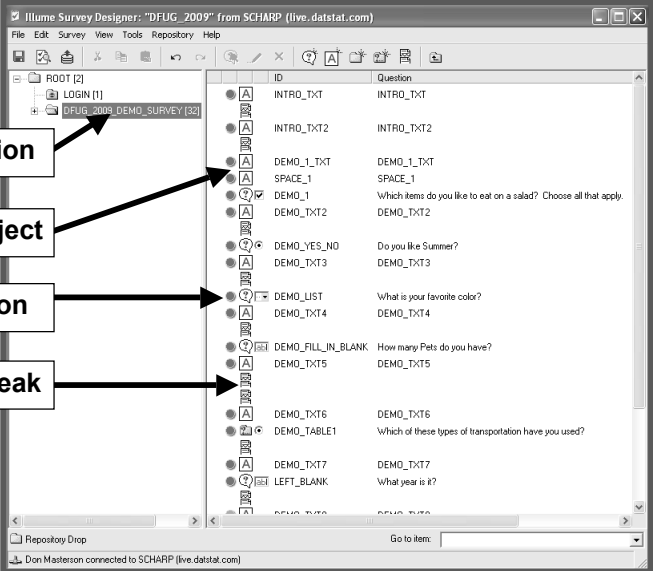
Back

Next

Powered by DatStat

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## Illume Survey Designer

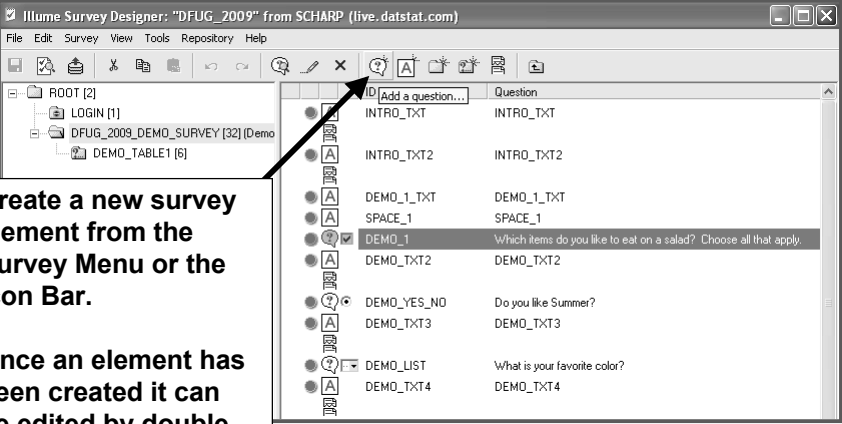


The screenshot shows the Illume Survey Designer interface. On the left, a tree view shows a hierarchy: ROOT [2], LOGIN [1], and DFUG\_2009\_DEMO\_SURVEY [32]. On the right, a table lists survey elements with columns for ID and Question. Annotations with arrows point to specific elements:

- Collection** points to the DFUG\_2009\_DEMO\_SURVEY [32] folder in the tree.
- Text Object** points to the DEMO\_1\_TXT element in the table.
- Question** points to the DEMO\_1 element in the table.
- Page break** points to the DEMO\_TXT5 element in the table.

ID	Question
INTRO_TXT	INTRO_TXT
INTRO_TXT2	INTRO_TXT2
DEMO_1_TXT	DEMO_1_TXT
SPACE_1	SPACE_1
DEMO_1	Which items do you like to eat on a salad? Choose all that apply.
DEMO_TXT2	DEMO_TXT2
DEMO_YES_NO	Do you like Summer?
DEMO_TXT3	DEMO_TXT3
DEMO_LIST	What is your favorite color?
DEMO_TXT4	DEMO_TXT4
DEMO_FILL_IN_BLANK	How many Pets do you have?
DEMO_TXT5	DEMO_TXT5
DEMO_TXT6	DEMO_TXT6
DEMO_TABLE1	Which of these types of transportation have you used?
DEMO_TXT7	DEMO_TXT7
LEFT_BLANK	What year is it?

## Illume Survey Designer



The screenshot shows the Illume Survey Designer interface. On the left, a tree view shows a hierarchy: ROOT [2], LOGIN [1], and DFUG\_2009\_DEMO\_SURVEY [32] (Demo). On the right, a table lists survey elements with columns for ID and Question. Annotations with arrows point to the 'Add a question...' icon in the toolbar and the DEMO\_1 element in the table:

- Create a new survey element from the Survey Menu or the Icon Bar.** points to the 'Add a question...' icon in the toolbar.
- Once an element has been created it can be edited by double clicking.** points to the DEMO\_1 element in the table.

ID	Question
INTRO_TXT	INTRO_TXT
INTRO_TXT2	INTRO_TXT2
DEMO_1_TXT	DEMO_1_TXT
SPACE_1	SPACE_1
DEMO_1	Which items do you like to eat on a salad? Choose all that apply.
DEMO_TXT2	DEMO_TXT2
DEMO_YES_NO	Do you like Summer?
DEMO_TXT3	DEMO_TXT3
DEMO_LIST	What is your favorite color?
DEMO_TXT4	DEMO_TXT4

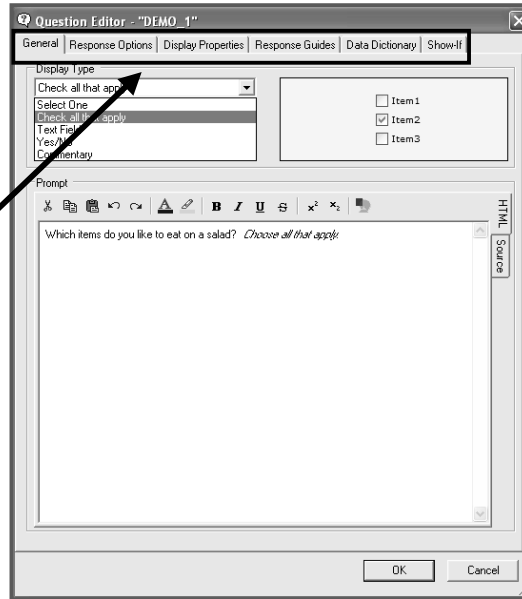


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## Illume Survey Designer

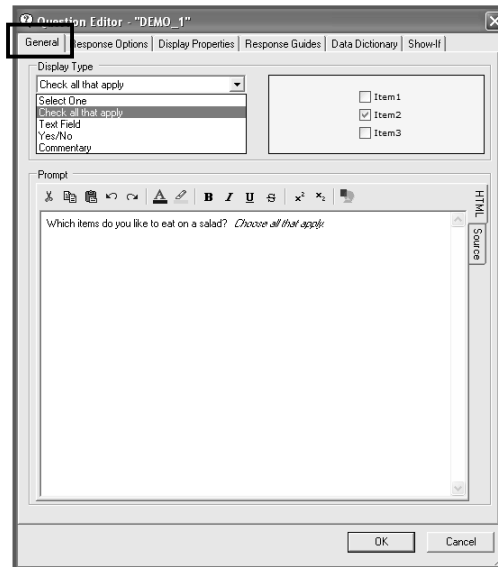
Once a survey item is created or opened to edit, the Question Editor window opens.

Tabs in the editor window present various design features.



## General Tab

The General Tab is where the question is written and the display type is selected.



**\*\*INSERT YOUR TITLE HERE\*\***

## Response Options Tab

**Response Options is where the data type & checkboxes are set up. Specify text boxes can be added and responses can be randomized.**

The screenshot shows the 'Response Options' tab of the 'Question Editor - "DEMO\_1"' dialog. The 'Data' section has 'Type' set to 'Yes/No'. The 'Add/Edit Checkbox' section has 'Name' set to 'CHEESE' and a text area containing 'Cheese'. Below this is a table of response options:

Text Field	Anchored	Exclusive	Full Name	Display Text
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DEMO_1.CHEESE	Cheese
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DEMO_1.CROUTONS	Croutons
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DEMO_1.DRESSING	Salad Dressing
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DEMO_1.CARROTS	Carrots

At the bottom, there are checkboxes for 'Attach text field', 'Anchored', and 'Exclusive', and a 'Randomize all options' dropdown menu.

## Display Properties Tab

**Display Properties like item labels, text width, and checkbox style can be selected**

**Labels can be anchored if the items have been randomized**

The screenshot shows the 'Display Properties' tab of the 'Question Editor - "DEMO\_FILL\_IN\_BLANK"' dialog. The 'General' section has 'Label (e.g. \$:)' set to 'Pets' and 'Show label after' checked. The 'Text' section has 'Display width' set to '3 characters' and 'Display height' set to '1 lines'. The 'Select One / Checkbox' section has 'Columns' set to '1' and 'Select-one style' set to a dropdown menu.

**\*\*INSERT YOUR TITLE HERE\*\***

## Display Properties Tab

**Display Properties like item labels, text width, and checkbox style can be selected**

**Labels can be anchored if the items have been Randomized**

**The checkbox style can be selected**

Question Editor - "DEMO\_LIST"

General | Response Options | **Display Properties** | Response Guides | Data Dictionary | Show-If

General

Label (e.g. \$):   Show label after

Anchor this item when randomized

Text

Display width:  characters  Hide Text (Password Style)

Display height:  lines

Select One / Checkbox

Columns:

Select-one style:  (dropdown menu open showing: Radio button, Likert scale, Semantic differential, Poplist)

## Response Guides Tab

**Response Guides: Required vs. Not Required, Text & Numeric Bounds, and Custom Error Messages**

Question Editor - "DEMO\_FILL\_IN\_BLANK"

General | Response Options | Display Properties | **Response Guides** | Data Dictionary | Show-If

Response Required

Use preferences setting (Not Required)

Always use the following setting for this item:

Required  Not required

Automatically answer and hide question if there is only one possible way for participant to answer

Text Bounds

Minimum length (chars):  Maximum length (chars):

Format (Meta-type):  (dropdown menu)

Custom expression:

Numeric/Date/Time Bounds

Lower Bound:

Upper Bound:

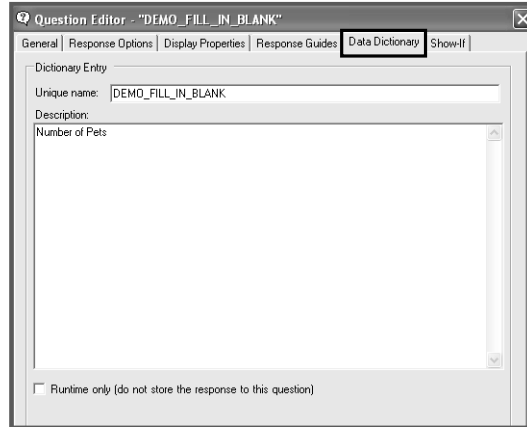
Custom Error Message

OK Cancel

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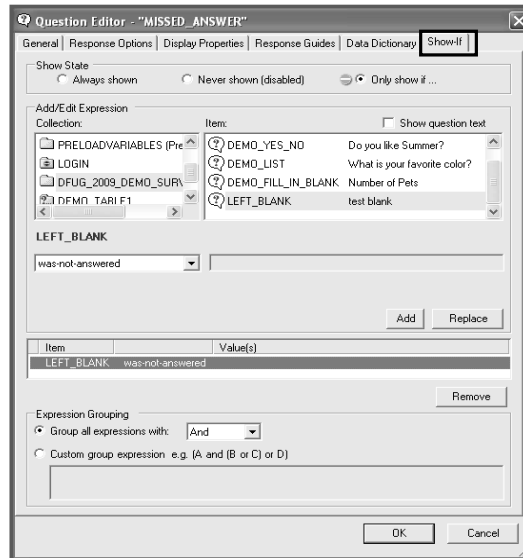
## Data Dictionary Tab

**Data Dictionary is where a Unique Name is given to the item**



## Show-If Logic – Simple

**Show-If Logic can be set to require items & collections based on previous responses**



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## Show-If Logic – Skipped Question



**DFUG 2009**

80 Percent Complete (%)

7. You didn't answer question # 6.

Please go back or click "I prefer not to answer".

I prefer not to answer the question.

◀ Back

Next ▶

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## Show-if Logic – Complex

**Show-If Logic can be set to 'skip' items and collections based on previous responses**

Text / HTML Editor - "DEMO\_TXT19"

Text / HTML | General | Show-If

Show State  
 Always shown  Never shown (disabled)  Only show if ...

Add/Edit Expression

Collection	Item	Show question text
PRELOADVARIABLES (Pre)	DEMO_LIST	What is your favorite color?
LOGIN	DEMO_FILL_IN_BLANK	Number of Pets
DFUG_2009_DEMO_SURV	LEFT_BLANK	test blank
DFUG_2009_DEMO_SURV	MISSED_ANSWER	You didn't answer question

LEFT\_BLANK

was-not-answered

Add Replace

Label	Item	Value(s)
A	DEMO_YES_NO	was-answered
B	DEMO_FILL_IN_BLANK	>= 1
C	DEMO_LIST	was-answered
D	DEMO_LIST	= [Purple]
E	LEFT_BLANK	was-not-answered

Remove

Expression Grouping

Group all expressions with: And

Custom group expression e.g. (A and (B or C) or D)

A and ((B or C) or (D or E))

OK Cancel

## Conclusions

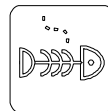
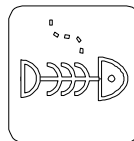
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- Dat Stat Illume software has allowed SCHARP to create a web-based survey to capture sensitive behavioral data
- The flexibility and design features make it easy to use for both SCHARP and study sites
- We have been able to integrate the Illume data with that received from DataFax CRFs

## Questions?

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**Thank You.**



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