

Question Logic in Surveys

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Data Sheet



LIVEPERSON

Introduction

Question Logic allows specified questions in surveys to be hidden or displayed to visitors or agents based on the answers given to previous questions on a survey. Question Logic is currently supported in all chat and voice surveys.

Question Logic is particularly useful when you need to provide your visitors or agents with a long list of options that would not be as user-friendly in a single list; or you wish to hide conditional or required questions which might not be relevant for all users completing the survey.

Note: *Question Logic is not supported in Legacy Chat windows.*

How Does Question Logic Work?

Administrators are able to configure logic for pre-defined answers in a survey. The logic attached to each answer dictates the behavior of the following questions in the survey, specifically to hide or display those relevant follow-up questions based on the defined answers from earlier questions.

Logic can be defined for all questions with closed answer-types only, (checkboxes, drop-downs and radio-buttons).

Terminology

For the ease of explaining concepts a number of terms have been added to this document. It should be noted that terms are used for this document and may not necessarily be found in other LivePerson documentation.

Question Type

Closed answer-types: Questions with answer-types of: checkbox, drop-down, and radio-button (both regular and side by side).

Open answer-types: Questions with answer-types of: text field and text area.

Stand-alone question: A standard, static question with no logic defined. The question is not dependant on another question and has no dependants of its own. For example, "Your name".

Start question: An opening question that is not a dependant on another question but has dependant questions. The start question is always displayed, but the logic defined for its answers will control the display of subsequent questions.



Mid-question: A question that is a dependant of another question and has dependant(s) of its own. Mid-questions will not always be displayed, and are subject to the answer given to the previous question. Logic is defined for answers of each mid-question, but this logic will be ignored (and its dependants will not be shown) if the mid-question is not displayed. There can be multiple mid-questions in a logic path.

End question: The last question in any logic path. Each end question is a dependant on another question and can have no dependants of its own (otherwise it would be a mid-question). Any answer-type can be used for an end question, but using an open answer-type, such as text field and text area will cause the question to become an end question, as these answer-types cannot trigger dependant questions.

Survey Structure

Question Flow: The grouping of a number of connected questions. The simplest flow contains one start question and one end question. The most complex flow can contain all questions in a survey.

Survey Logic: The collection of relations between answers and questions that define and control the display of survey questions in a specific survey.

Page Types

The Question Logic feature applies to all types of surveys for chat and voice. This section describes the generic terms used for the page types, as the pages are usually named after the type of survey selected.

Survey List Page: This page is only visible when used by accounts with Visitor Profiles. It lists all the surveys within a specified survey type. Accessed from the Admin Console:

Visitor Experience > Chat > Surveys (tab)

Survey Name	Default	Admin Profile	Delete
Default	Set as Default		
support	Set as Default		
Webmail	✓		

Figure 1-1: Survey List Page

Survey Editor Page: Lists all questions from a specified survey. Accessed by selecting one of the survey types from the menu on the page (if applicable). Clicking on a question in the Survey Questions list on this page opens the Question Editor page.

Order	Type	Logic	Question	Answers	Visible	Required	Delete
▼	Send Transcript	S	Would you like us to email you a transcript of this chat?	<input type="radio"/> yes <input type="radio"/> no	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▼	Email	S	If yes, please provide your email:	<input type="text"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▲	Phone Number	S	Phone Number	<input type="text"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

Figure 1-2: Survey Editor Page

Question Editor: This page enables you to define the appearance and behavior of a question. It is accessed by clicking the **New Question** button from the Survey Editor page, or by clicking an existing survey question.

Note: For some accounts, an Auto-Submit tab may also be seen in the Question Editor for Chat Operator surveys. For more information, refer to the Data Sheet, Auto-Submit Surveys for Non-Interactive Conversations.

Figure 1-3: *Question Editor*

Planning Question Logic in Surveys

When creating a survey that contains question logic, the Administrator needs to carefully plan the flow of the survey questions. It can often help to map out the questions and their relationships on paper first. Special attention should be given as to which questions should be shown initially, and then which question (or questions) will be shown to the visitor, should the visitor select specific answers. These follow-up questions (mid or end questions) will only be displayed if the visitor selects one of the relevant answers defined.

Steps for Adding Question Logic to Surveys

To add question logic to your surveys, you need to work through the following steps:

- ◆ “Selecting the Survey Type” on page 5
- ◆ “Planning Questions and Logic Flow” on page 5
- ◆ “Creating a Question Flow Diagram” on page 9
- ◆ “Creating the Questions” on page 10
- ◆ “Creating the Survey Logic” on page 14

Selecting the Survey Type

Before creating conditional questions within a survey, it is important to know which survey best suits your needs. Below is a brief summary of the survey types that exist. For more information on surveys, refer to the *LivePerson User* manual.

Pre Chat / Pre Call Survey: Displayed every time a visitor requests a chat or call. The Pre Chat survey collects information about a visitor's needs prior to the interaction. This survey is optional.

Exit / Call Exit Survey: Optional. Displayed when a visitor ends a chat or call. The exit survey enables you to get useful feedback that may help to improve your visitor experience. This survey is optional.

Chat / Call Operator Survey: Optional. Enables an agent to give feedback during or after a chat or call session. This feedback can be used to assess the success of a session. When enabled, this survey is displayed in the Survey tab in the Agent Console.

Offline / Call Offline Survey: It appears when a visitor clicks on a chat or call button but there are no agents online. This survey is always enabled. This survey is optional.

Planning Questions and Logic Flow



Once you have decided on the type of survey you require, the next stage is to consider the type of questions you want to ask.

The rule of thumb is to maximize the quality of information you can gather with the minimum number of questions. Conditional questions help you to limit the number of questions asked, as only the relevant questions are displayed. Refer to the LivePerson Knowledgebase for our best practices on using surveys and survey questions.

Things to Consider...

When planning your question flow, you should adhere to the following guidelines:

- ◆ Using question logic in your survey means that not all the questions are displayed initially to the agent or visitor, so try and consider which are the most important questions and start with those.
- ◆ When mapping out your question flows, it is easiest to do so using a top-down linear structure. For an example of a Question Flow diagram showing its question logic, see ["Question Logic Diagram Showing Question Logic" on page 10](#).
- ◆ A conditional question does not need to directly follow the question that triggered it, but it is often easiest to plan, and to complete a survey that does work this way.
- ◆ For stand-alone questions, you can select any answer type (including open answer-types such as: Text Field and Text Area) from the Question Editor page. (See **(Q1)** in [Figure 1-9 on page 10](#)).
- ◆ If you do use an open answer-type, that question cannot have any dependant questions.
- ◆ Any question in your survey can be made "required" which will prevent the survey being submitted without an answer to that question. Required survey questions are fully supported by question logic and the "required" setting should be used in the normal way. A required question will only be considered as required if that question is displayed to the visitor or agent at the point that the survey is submitted. Likewise, questions and answers which are hidden at the point the survey is submitted, will be ignored.
- ◆ A question can have a combination of answers, with some answers that trigger subsequent questions and others that do not.
- ◆ When a survey is initially displayed, it will display the stand-alone and start questions only. These are the questions on your survey that are independent of any previous question or answer. In the ["Question Logic Diagram Showing Question Logic" on page 10](#), these are questions (Q1), (Q2) and (Q9). The survey when it opens in a chat window will look like this:





Figure 1-4: Chat Window with Initial Survey Display

Permitted Question Dependencies

"One-to-One"

Each mid or end question can only be triggered by a single preceding answer. Although this can result in the need to duplicate questions, this linear structure is enforced to simplify the survey results for reporting purposes, as every dependent question can then be more easily associated with the one answer that triggered it.

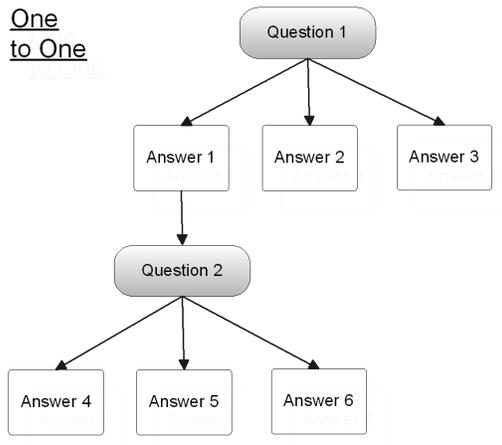


Figure 1-5: One to One Format

"One-to-Many"

A single answer can trigger multiple dependant questions to appear below it in the survey. In the example on [Figure 1-9 on page 10](#), this can be seen with (A13).

One
to Many

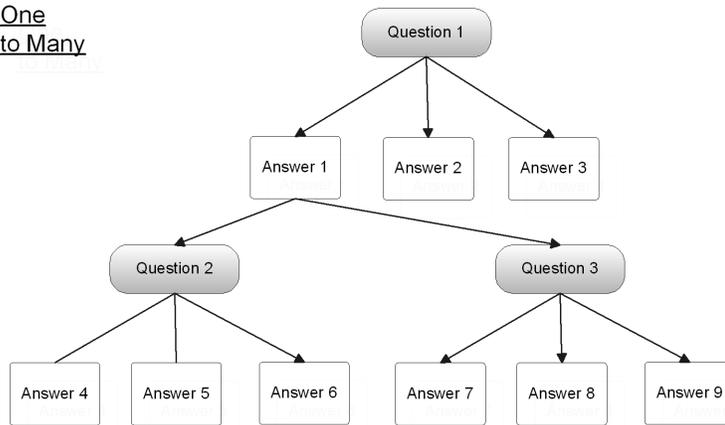


Figure 1-6: *One to Many Format*

Non-Permitted Question Dependencies

The following scenarios are **not** supported by the Question Logic feature:

"Many-to-One"

Multiple answers from the same question are **not** able to trigger the same subsequent question.

Many
to One

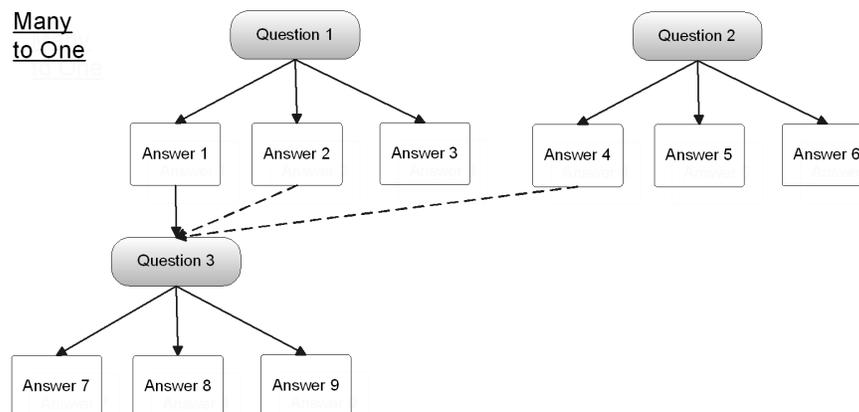


Figure 1-7: *Many to One Format*



"Many-to-Many"

Multiple answers from multiple questions are **not** able to trigger the same subsequent question

Many
to Many

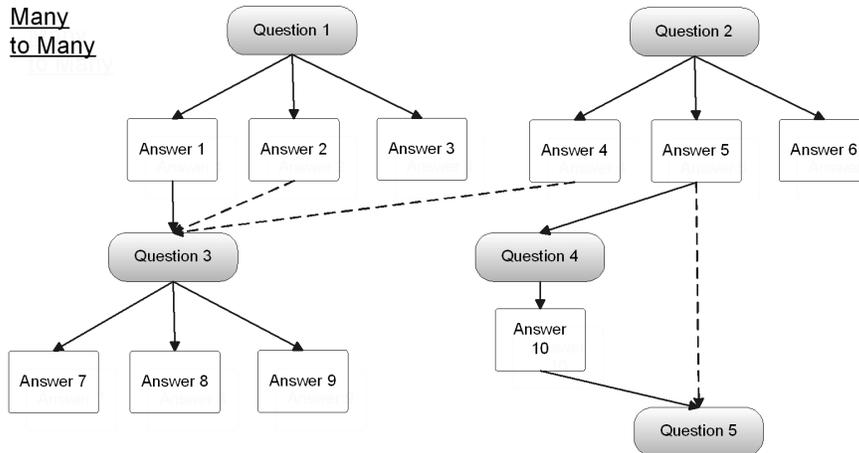


Figure 1-8: *Many to Many Format*

Creating a Question Flow Diagram

Below is an example of a Question Flow diagram. It can be very helpful to create a diagram like this on paper before starting to build your own complex question flows.

This example contains a number of One-to-One questions, a One-to-Many question (Q9) and a stand-alone question (Q1). The content of the diagram is the example used throughout this document, which demonstrates how to add your own Question Logic to surveys.

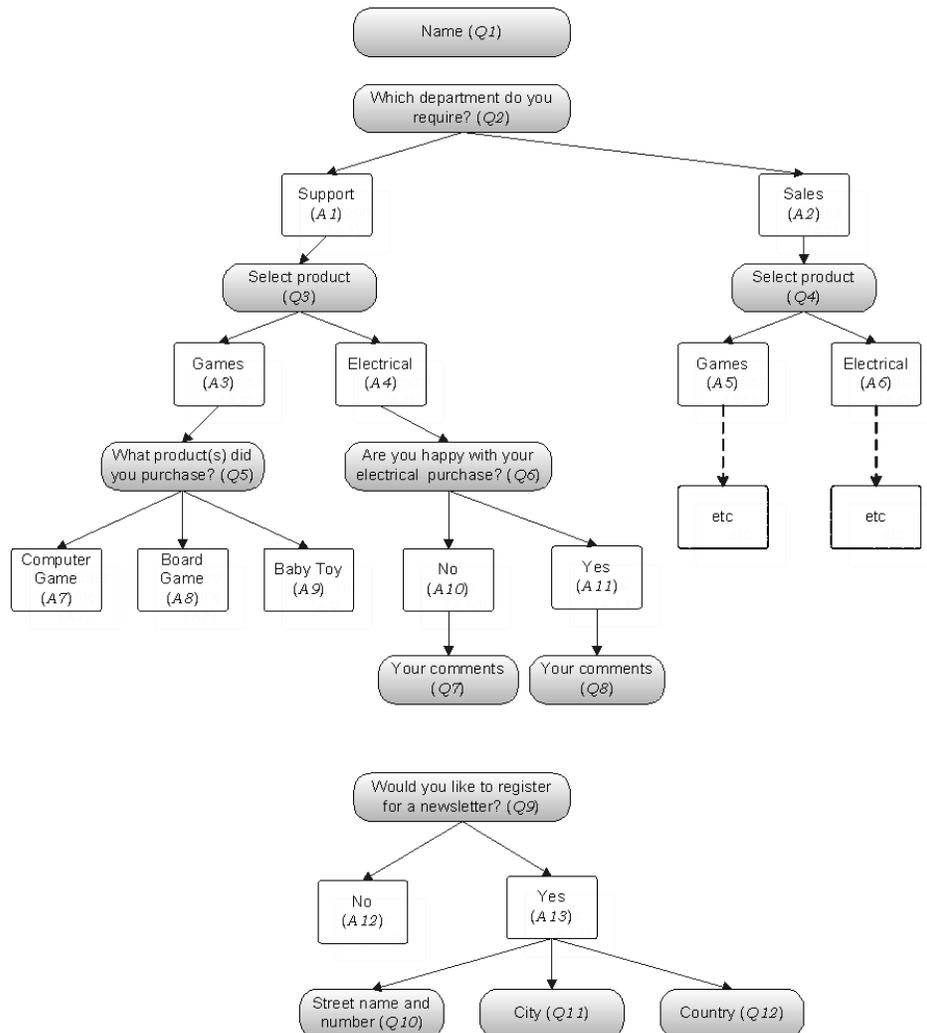


Figure 1-9: Question Logic Diagram Showing Question Logic

Creating the Questions

Once you have completed your design of the survey and its logic flow (or flows), it is recommended to add each of the questions to the survey and arrange them in the top-down order in which they should appear. Once this has been completed, you will go on to define the logic, and how the questions interact with each other, as explained in the section [“Creating the Survey Logic”](#) on page 14.

👉 To define a question for a survey:

- 1 From the Admin Console menu, select **Visitor Experience > Chat > Surveys (tab)**, to display Survey Editor page.

Note: For those with the Visitor Profile feature enabled the Survey Editor page is displayed first. Select the survey type and then select a survey.

- 2 From the Select a Survey Type drop down list, select a survey type, to display the Survey Editor page for the selected survey. The figure below is the Survey Editor page for A Pre Chat survey.

The questions listed in the Pre Chat Survey, below, correspond to the Question Flow diagram on [page 10](#).

PRE CHAT

Survey Heading

To help us serve you better, please provide some information before we begin your chat.

Survey Questions

Order	Type	Logic	Question	Answers	Visible	Required	Delete
▼	Identifier		What is your name?	<input type="text"/>	●	●	
▼ ▲	Email		Email Address	<input type="text"/>	●	●	
▼ ▲	Phone Number		Phone Number	<input type="text"/>	●	●	
▼ ▲	Ticket Code		Issue ID:	<input type="text"/>	●	●	
▼ ▲			Name	<input type="text"/>	●	●	🗑️
▼ ▲		🔗	Which department do you require?	<input type="radio"/> Support <input type="radio"/> Sales	●	●	🗑️
▼ ▲		🔗	Select Product	Games ▼	●	●	🗑️
▼ ▲		🔗	Select Product	Games ▼	●	●	🗑️
▼ ▲		🔗	What product(s) did you purchase?	<input type="checkbox"/> Computer game <input type="checkbox"/> Board game <input type="checkbox"/> Baby toy	●	●	🗑️
▼ ▲		🔗	Are you happy with your electrical purchase?	<input type="radio"/> Yes <input type="radio"/> No	●	●	🗑️
▼ ▲		🔗	Your comments	<input type="text"/>	●	●	🗑️
▼ ▲		🔗	Your comments	<input type="text"/>	●	●	🗑️
▼ ▲		🔗	Would you like us to mail you a newsletter?	Yes <input type="radio"/> No <input type="radio"/>	●	●	🗑️
▼ ▲		🔗	Street name and number	<input type="text"/>	●	●	🗑️
▼ ▲		🔗	City	<input type="text"/>	●	●	🗑️
▼ ▲		🔗	Country	<input type="text"/>	●	●	🗑️
▲	Skill		With whom would you like to chat?	▼	●	●	

Figure 1-10: Survey Editor Page for Pre Chat Survey

The Survey Editor page, as shown in [Figure 1-10](#), lists all questions, their respective answers, and their logic status from the selected survey. Below is explanation of each of the columns, and how they are used within a Question Logic.

- ❖ **Order:** Click the arrows to change the order that the questions appear in the survey.

Note: *The system will not allow you to change the order of questions if they affect the logic flow.*

- ❖ **Type:** The Type names are predefined by the system. For manually created questions a Type name is not defined.
- ❖ **Logic:** Defines how the question participates in a logic path:
 - **None:** Stand-alone question. Contains no question logic.
 - : Initial question in logic path.
 - : Question within a logic path.
 - : Final question in logic path.
- ❖ **Question:** The name of the question. Click on the question to open the Question Editor page.
- ❖ **Answers:** The answer type, as defined in the Question Editor page.
- ❖ **Visible:** Select to make the question visible or not. This option can also be defined in the Question Editor page.
- ❖ **Required:** Select to make the question required or not. This option can also be defined in the Question Editor page.

Note: *Any question can be set to be required, but it will only be required if the question is actually marked as visible.*

- ❖ **Delete:** Click on the icon to remove the question. Only questions that are manually added can be deleted from the list of displayed questions.

Note: *When deleting a question within a question logic, as all the answers for that question, together with their dependants are deleted as well. Questions which were previously controlled by the deleted answers automatically become visible questions after the deletion.*

- 3 Click the **New Question** button to open the Question Editor page.



Figure 1-11: Question Editor Page

- 4 Specify the question in the Question text box.
- 5 Select the Answer type from the list provided. Choose one of the following:
 - ❖ **Dropdown Box:** A drop-down list of choices, from which the customer can select one choice.
 - ❖ **Checkbox:** A list of choices allowing the customer to make multiple selections.
 - ❖ **Radio Button:** A list of choices, from which the customer can select only one choice.
 - ❖ **Radio Button (side by side):** A list of choices (presented horizontally), from which the customer can select only one choice.
 - ❖ **Text Field:** A single-line box into which text can be typed. Any information added to the Answers tab will not be saved, as this is a free text area.
 - ❖ **Text Area:** A multiple-line box into which free text can be typed. Any information added to the Answers tab will not be saved, as this is a free text area.
- 6 Select either:
 - ❖ **Required:** To specify that the agent *must* enter information in this field. The selection is indicated in the Survey Editor page. An asterisk is displayed by the question, indicating that it is required.
 - ❖ **Visible:** To specify that this question should be displayed on the form. This selection is indicated in the Survey Editor page.

- 7 The Custom Variable field is a read-only field. A custom variable stores the answer value of its associated question, and can be used in HTML code to pass information to other parts of the system. Each question in a survey is associated with a custom variable in the LivePerson system. The associated custom variable in this is example is "survey6021012".
- 8 Select the **Prepopulate answer with visitor's last choice** check box, in order to have an answer automatically filled with the visitor's most recent response to this question.
- 9 Click the **Answers** tab.
- 10 Enter answer(s) appropriate to the Answer Type selected.
- 11 Either click:
 - ❖ **Add:** To add answers individually.
 - ❖ **Add Many:** To add multiple answers.

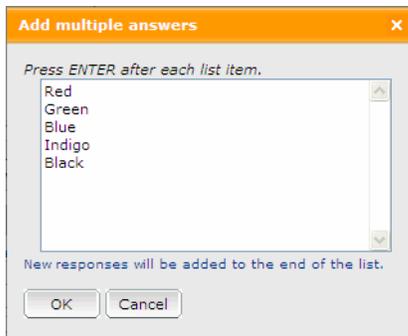


Figure 1-12: Add Multiple Answers Screen

- 12 Edit and prioritize answers, as required.
- 13 Click the **Update Done** button. The Survey Editor page is displayed with the updated information.
- 14 Repeat the procedure from [Step 3](#). Until you have added all your questions and answers.
- 15 After adding all the questions and answers to your survey, enter a **Survey Heading** that relates to the set of survey questions, in the Survey Editor page.
- 16 Depending on the type of survey selected (Exit and Offline), you have the option to complete the email setup for the survey.
- 17 To enable the survey, click **Click here to enable**.

Creating the Survey Logic

Once all the questions have been defined you can add the survey logic in the Survey Logic tab of the Question Editor screen. The survey logic consists of collection of relations, between answers and questions, known as the question flow.

The Survey Logic tab is available only once a question has been submitted and is not available for questions that require an answer in a text field or text area.

The Process

This section describes the process of creating the survey logic, using the existing example from the Question Logic diagram in [Figure 1-9 on page 10](#). You will need to repeat this procedure each time you map an answer to a question.

Note: *Although you can open a specific question in order to view its flow and what logic controls it – that controlling logic is not defined within the question itself, but actually within the flow of the preceding question.*

Step 1:

From the Survey Editor Page click on a question that requires mapping. This is normally the first question in the flow you wish to define. The Question Editor is displayed, with the question and its corresponding answers. In the example, we already have some existing logic, so we will start with (Q6), the question "Are you happy with your electrical purchase?".

The screenshot shows the 'PRE CHAT SURVEY' interface. The main section is titled 'EDIT SURVEY QUESTION'. It contains the following fields and options:

- Question:*** (marked as a required field): A text input field containing 'Are you happy with your electrical purchase?'.
- Answer Type:***: A dropdown menu set to 'Radio Button'.
- Required** (checkbox): Unchecked.
- Visible** (checkbox): Checked.
- Associated Custom Variable:** 'survey6021016'.
- Prepopulate answer with visitor's last choice.** (checkbox): Unchecked.

Below these fields are two tabs: 'Answers' and 'Survey Logic'. The 'Answers' tab is active, showing an 'Answers List' section. It includes a header 'Click on an answer to edit or drag arrows to reorder.' and a list of two answers: 'Yes' and 'No', each with a drag handle and a delete icon. Below the list are 'Add' and 'Add Many...' buttons. At the bottom of the editor are 'Updates Done' and 'Cancel' buttons.

Figure 1-13: Question and Answers in the Question Editor

Step 2

Select the Survey Logic tab to display the Logic Path Navigator and the answers that are dependant on the selected question.

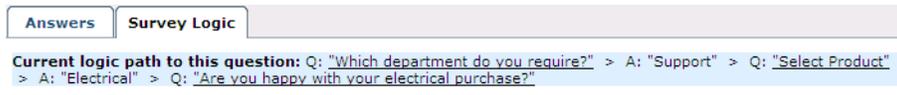


Figure 1-14: Logic Path Navigator

The Logic Path Navigation displays the path of previous questions and answers, leading up to this selected question.

Click on any question in the Logic Navigation Path to display the recently-selected question and its answers in the question editor.

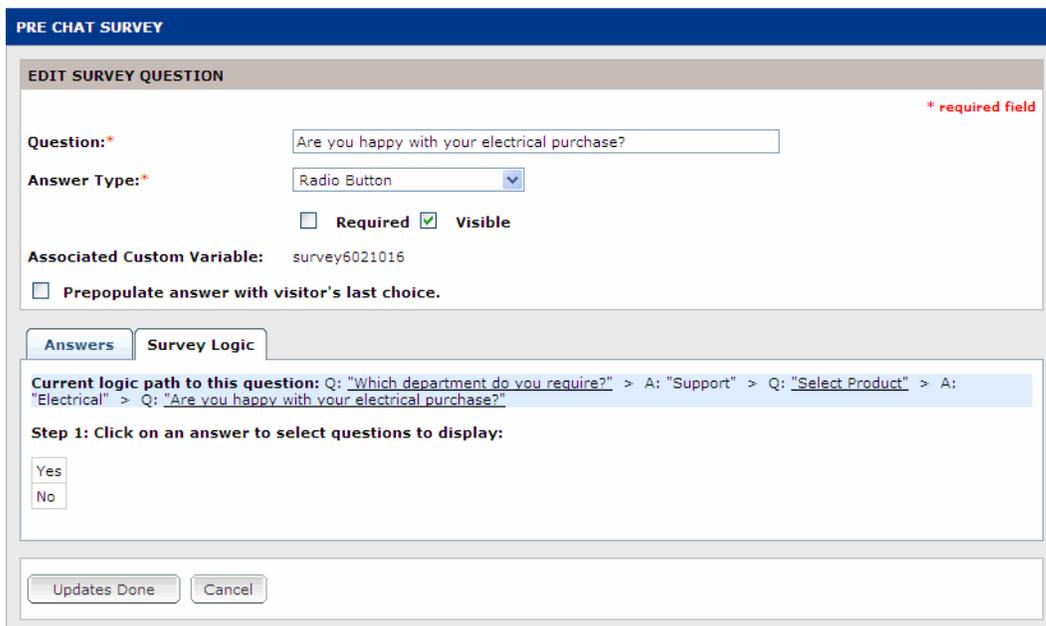


Figure 1-15: Survey Logic Tab

Step 3

Select an answer from the answer list. A list of survey questions are displayed in the section below it. This list shows the survey questions that are associated with the selected answer. Survey questions that have already been associated with answers are displayed with a strikethrough line, as they cannot be used again. It is not possible to associate an answer with a question that precedes it in the survey question list, so it is helpful to ensure that your questions are in the correct order before starting this step.

Select the question (or questions) that you want to be displayed should the selected answer be given.

In the example below, if the answer "Yes" is selected by the visitor in response to the question "Are you happy with your electrical purchase?", then the follow-on question "Your comments" will be displayed.

The screenshot shows the 'Survey Logic' tab in a software interface. At the top, there are two tabs: 'Answers' and 'Survey Logic'. Below the tabs, a blue box displays the 'Current logic path to this question: Q: "Which department do you require?" > A: "Support" > Q: "Select Product" > A: "Electrical" > Q: "Are you happy with your electrical purchase?".

Below the path, there are two steps:

- Step 1: Click on an answer to select questions to display:** This section has two radio buttons: 'Yes' (which is selected) and 'No'.
- Step 2: Select the questions to display from the answer 'Yes':** This section contains a list of questions with checkboxes:
 - Your comments
 - ~~Your comments~~
 - Would you like us to mail you a newsletter?
 - ~~Street name and number~~
 - City
 - Country
 - With whom would you like to chat?

At the bottom of the form, there are two buttons: a green checkmark button and a red 'X' button.

Figure 1-16: *Selecting a Dependant Question*

To finalize the changes, click the confirm button and then click the **Updates Done** button. The Survey Editor page is displayed with the changes.

Previewing Results

The Survey Editor page, as shown in [Figure 1-10](#), lists all questions, their respective answers, and their status from a selected survey. Click the **Preview** button, to open a window containing a preview of the survey.

The initial questions displayed when the preview window opens will be the visible stand-alone and starting questions shown in your Survey Editor Page. These will be the same questions that will be displayed to your visitors or agents when presented with the survey.

To help us serve you better, please provide some information before we begin your chat.

Required items indicated with *.

Name *

Which department do you require? *

Support

Sales

Would you like to register for a newsletter? *

Yes No

Figure 1-17: Preview Survey Window

To confirm the survey, click **Submit All Changes** to update the system with changes you made to the survey settings.

Note: Do not forget to update your survey, if you have not already done so.

Related Documents

- ◆ Auto-Submit Surveys for Non-Interactive Conversations Data Sheet



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