



Professional IVR Systems built in an hour

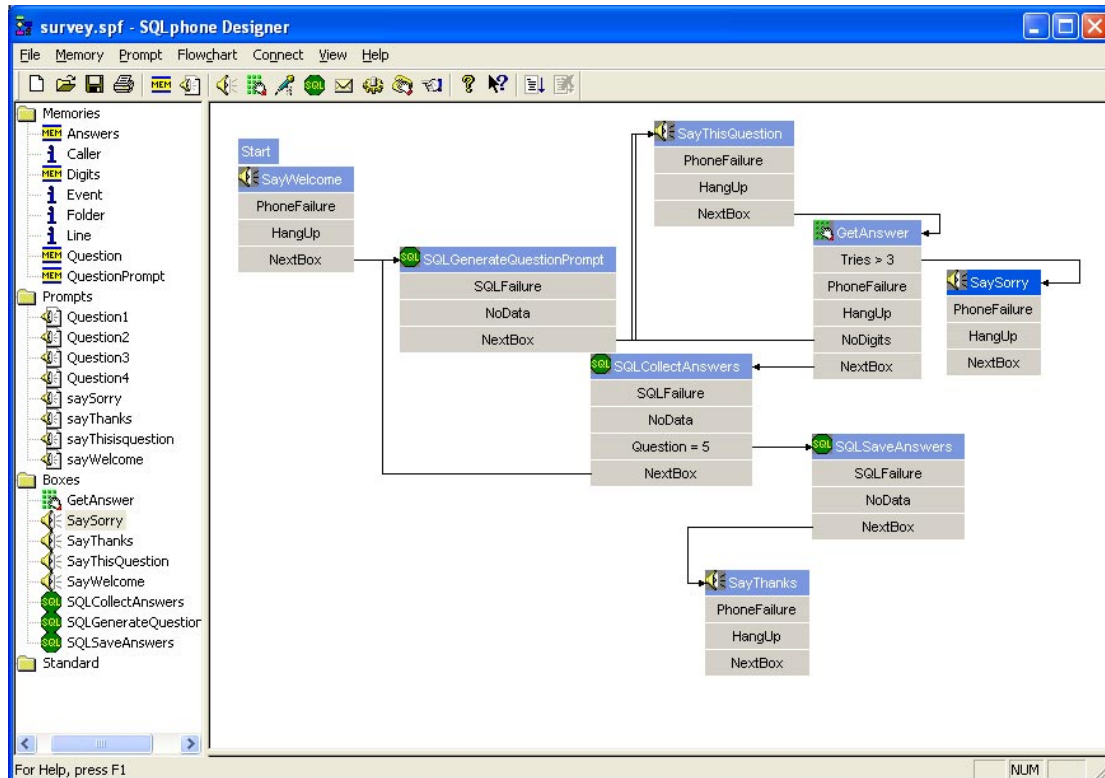
Introduction

This white paper shows our designer product with a simple 'product survey' application.

The designer is used to generate a graphical flowchart. The flowchart consists of a number of different 'boxes' that perform differing actions. These boxes are :

- Play Box - to play a voice prompt or series of prompts
- Digits Box - to accept touchtone digits from the caller and store them into a memory
- Record Box - to record a voice message from the caller into a .WAV file
- Dial Box - to initiate a dial-out call
- Transfer Box - to initiate a call transfer using PBX functions
- SQL Box - to run a database query, update or insert
- Email Box - to send an email
- DLL Box - to call an external function or run an external program

Overall View

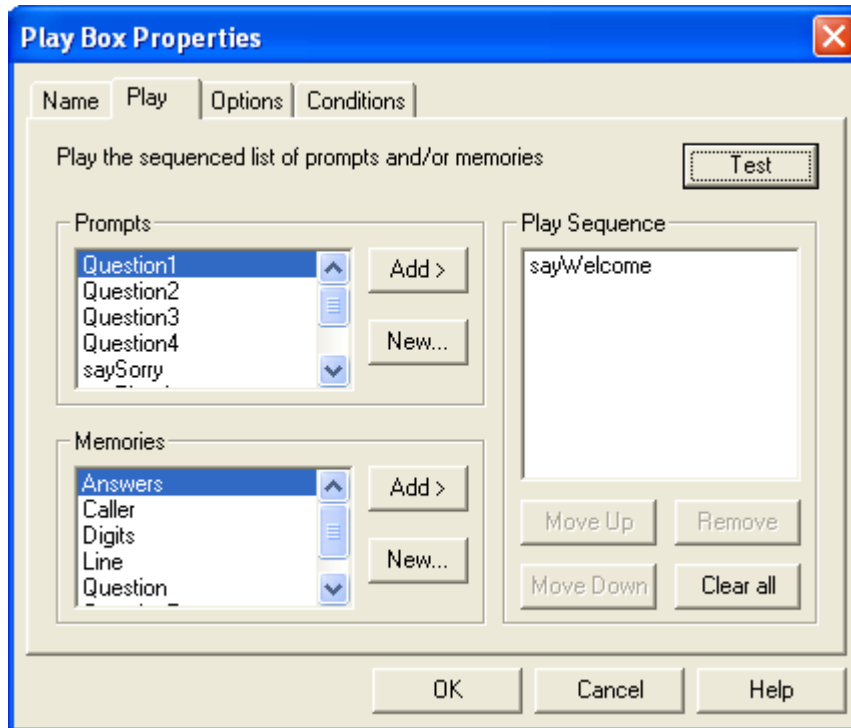


This example shows the power of the designer coupled with clever design - a complete working customer, product or staff survey application has been written in just eight boxes, using a question counter and a loop to prompt for the required information.

When the system is started for a fresh caller, all memories (variables) are set to their default values, so the 'Answers' memory is set to a blank string, whilst 'Question' is set to 1.

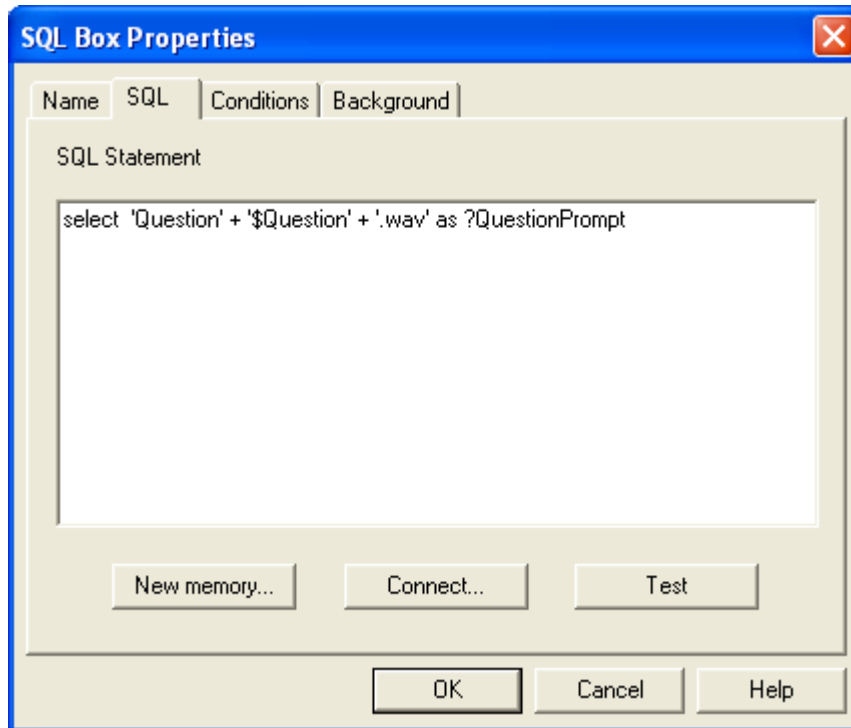
We will now explain the eight stages to create this system:

SayWelcome



The first box (sayWelcome) simply plays an introductory message.

SQLgenerateQuestionPrompt

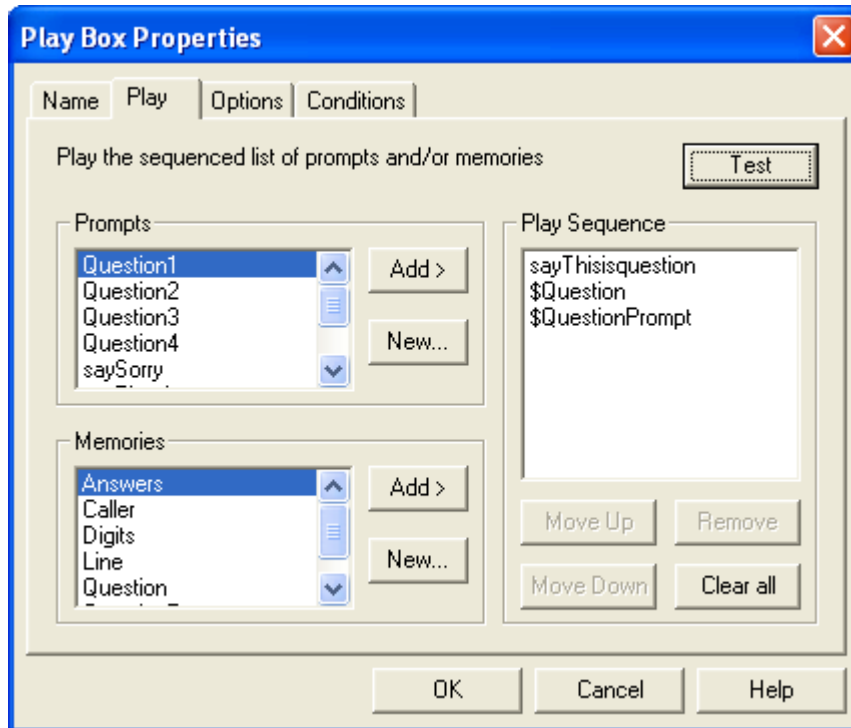


The second box (SQLgenerateQuestionPrompt) runs a SQL command to take the current question number and generate the filename of the voice file to be played. The code inside looks like this :

```
select 'Question' + '$Question' + '.wav' as ?QuestionPrompt
```

So in the first iteration when Question = 1, the filename is ="Question1.wav"

sayThisQuestion



The third box (sayThisQuestion) chains together some fixed speech, the contents of a variable, and a voice file determined by the contents of a variable to produce a natural phrase.

It reads:

```
"This is question "  
then the question number (one)  
then the first question as recorded in the filename previously  
generated (question1.wav)
```

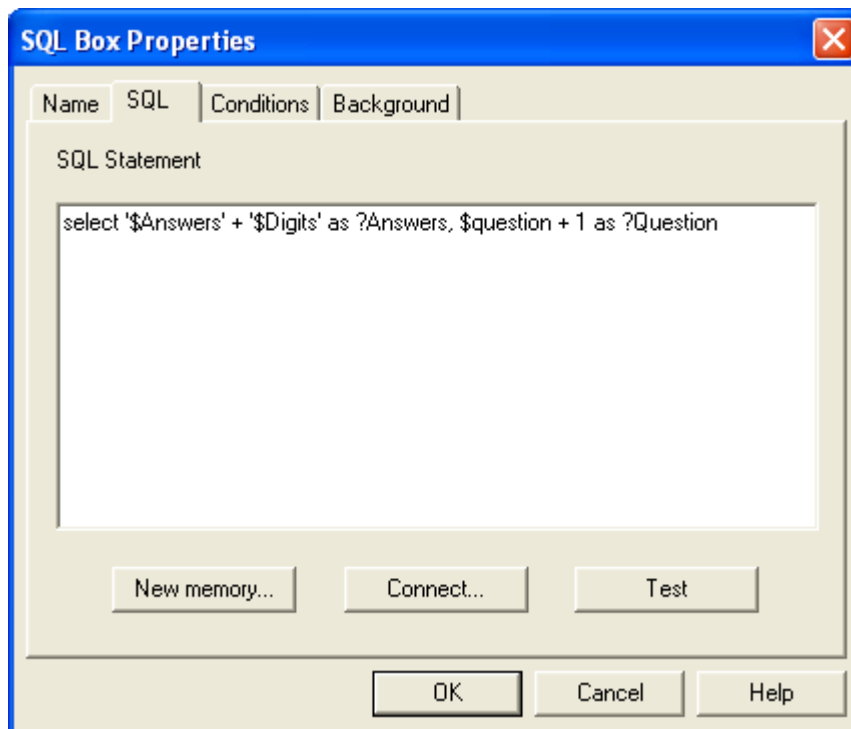
GetAnswers

The screenshot shows a dialog box titled "Digits Box Properties" with three tabs: "Name", "Digits", and "Conditions". The "Digits" tab is selected. The dialog contains the following fields and controls:

- Play voice prompt:** A dropdown menu set to "<none>" with a "New prompt..." button to its right.
- Store digits in memory:** A dropdown menu set to "Digits" with a "New memory..." button to its right.
- Allowed digits:** A text input field containing "12345#".
- Maximum digits:** A spinner control set to "1".
- Inter-digit timeout:** A spinner control set to "4" followed by the text "seconds".
- Stop when # pressed:** An unchecked checkbox.
- Stop when * pressed:** An unchecked checkbox.
- Buttons:** "OK", "Cancel", and "Help" buttons are located at the bottom of the dialog.

The fourth box (GetAnswers) accepts any of the permissible digits (one to five, plus the hash key for 'not applicable') and stores the input in a memory. If no answer is given, it loops back to the third box. If more than three tries have been made to input the same answer, it jumps to box eight (say sorry)

SQLCollectAnswers

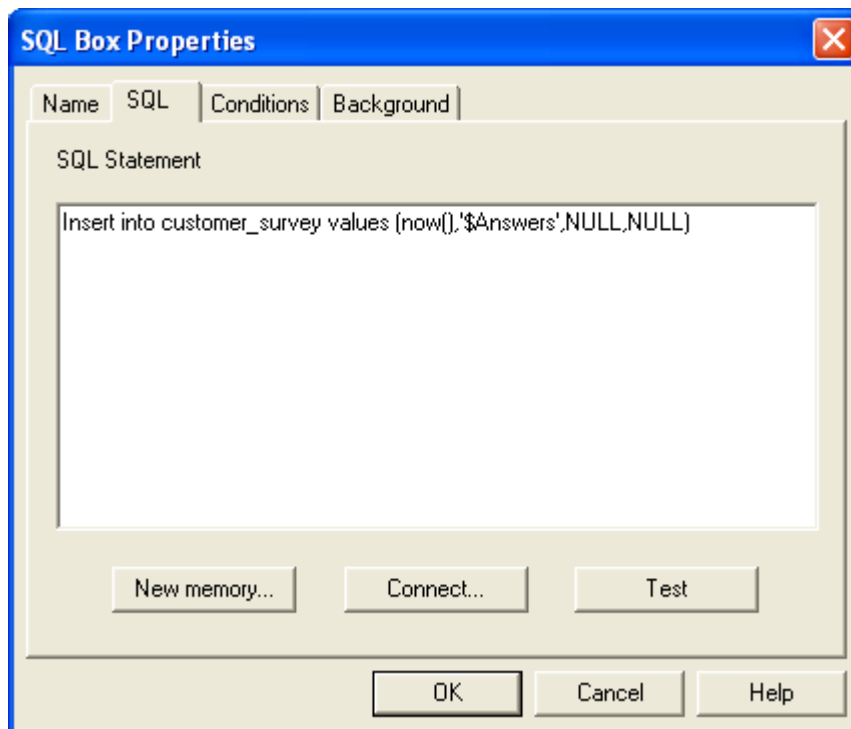


The fifth box (SQLCollectAnswers) adds the digit collected in the previous box to the string of answers, and increments the question count by one. The SQL is :

```
select '$Answers' + '$Digits' as ?Answers, $question + 1 as ?Question
```

If question = 5 (so we have answered the four questions defined in the survey) then we go to save the data (box six) , otherwise we loop back to box two.

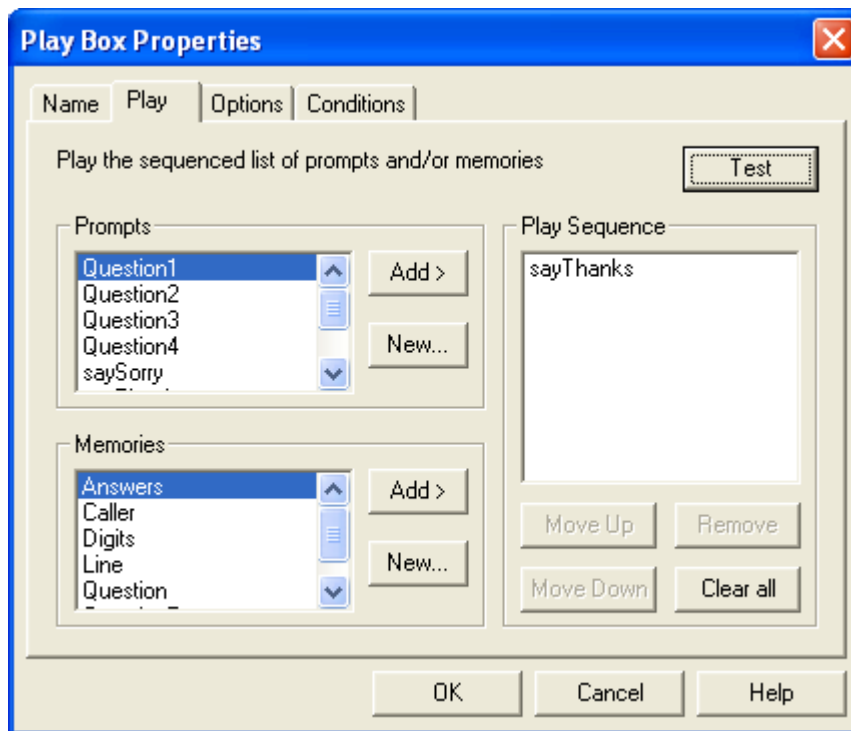
SQLSaveAnswers



The sixth box (SQLSaveAnswers) saves the string containing the answers into the database.

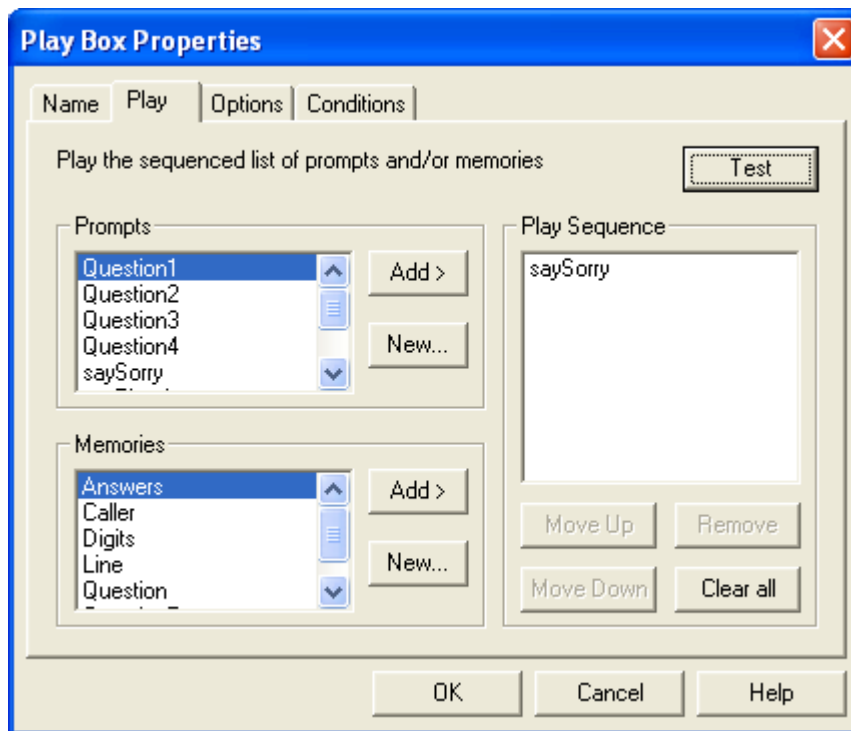
```
Insert into customer_survey values (now(), '$Answers', NULL, NULL)
```

sayThanks



The seventh box (sayThanks) says 'thank you and goodbye'.

SaySorry



The eight box (SaySorry) is triggered when no valid information has been supplied. It apologises and hangs up.

Conclusion

In this white paper we have shown you how easily it is to set up a fully operational IVR System, within an hour.

For more information, please email us at sales@ivr-solutions.co.uk, or call us on +44 (0) 1277 231 532.

Many thanks for your time.

www.ivr-solutions.co.uk