Soundings is a survey application designed to make setting up and reporting on surveys as easy as possible. From a simple web-based administrator, business users can create, edit, and repot on any number or type of surveys. Security can be applied on case by case basis and surveys can be set to run during a certain date range.

Soundings was created by Raymond Camden (raymondcamden@gmail.com).

If you like the application, I ask that you consider purchasing something from my wishlist: http://www.amazon.com/o/registry/2TCL1D08EZEYE

Installation

To install Soundings, simply unzip the zip file to the root of your web directory. All files should be contained within a soundings folder immediately under your web root.

Soundings supports three databases: SQL Server, PostgresSQL, and mySQL. Follow the directions below to setup the initial database.

- **SQL Server:** Create a new database in your SQL Server. Load up Query Analyzer. Load the file, sqlserver.sql, from the install folder and execute the SQL.
- **PostgresSQL**: Create a new database and make use of the postgres.sql file.
- **MySQL:** Create a new database. Then use the mysql.sql file to generate the tables.

Once you have set up the database, go into your ColdFusion administrator and create a new DSN. The DSN should be called "soundings" and should point to the database you have just set up.

Both the DSN and mapping name can be configured via an XML file that controls settings for the application. This file is called settings.xml.cfm and can be found in the

mssql,msacces, postgres, and mysql.

- · **fromAddress:** When survey results are mailed, this is the From address used in the email.
- · **perpage:** This is used by Surveys. Each survey will show only 4 questions per page, 4 being the default setting in perpage. Surveys can override this setting.
- · **tableprefix:** If you need to install Soundings into a database that has tables with the same names as Soundings, you can use the tableprefix feature. Modify the SQL install files and prepend a prefix to each table name. So for example, you can rename surveys to soundings_surveys. Then set the value of tableprefix to soundings_. This tells Soundings to use soundings_ in front of each table name.
- · **attachmentdir:** This setting is used for the "Attachment" question type. It must be set to a valid directory or the application will not start up. You should set this to a directory outside of the web root.
- · **version**: The current version of Soundings. There is no need to configure this.

Normally you will only need to edit the fromAddress and dbType settings. Please note - whenever you change settings.ini, or any of the components in the application, you must tell Soundings to refresh the cache. Simply hit your Soundings install with ?reinit=1 in the URL.

Creating Surveys

To start using Soundings, you most likely want to begin in the administrator. This can be found by opening your browser to <the host where soundings is installed>/soundings/admin. You will be prompted to enter a username and password. Use "admin" for both. Once you have logged in, the first thing you want to do is click on the **Set Password** link in the left hand menu. Change the password to something new. You can also create new users. All users have the same rights within the administrator. Now let's talk about the main options for configuring surveys.

Survey Editing

The first link in the administrator is "Surveys." Clicking this gives you a list of surveys. You can add, edit, or delete surveys from here. Adding or editing a survey brings you to a simple form with the following fields:

- · **Name:** Obviously, this is the name of the survey.
- · **Description:** This is a short paragraph that describes the survey.
- · **Template:** This is the template that will be used to wrap the survey. If not selected, the default Soundings UI will be shown above and below the survey. If a survey is embedded, no template is used.
- · **Message Displayed at End:** This is the text displayed at the end of the survey. This is where you thank the user and tell them how important their feedback is.
- · **Active:** A survey can be marked inactive if you do not want it to show up on the

to the edit form to get the HTML.

- **Show in Public List**: The non-secured public side of Soundings contains a simple list of active surveys. You can use this setting to prevent a survey from showing up in this list.
- **Questions Per Page:** Used to specify how many questions should show up per page. In a survey that makes use of routing, this should be set to 0.
- **Date Survey Begins and Date Survey Ends:** These are date ranges for when the survey can be taken. You can supply any of these values, or none at all.
- **Mail Results To:** This is the email address to send results.
- **Survey Password:** A simple password option for surveys.
- **Email Restriction List:** Soundings lets you assign a list of email addresses that are allowed to take a survey. To use this option, create a text file with one email address per line. Use the form to upload the file. You can use a checkbox to remove this list of email addresses. Note that when a survey uses this security option, a unique email address can only take a survey one time. You cannot use both a survey password and an email restriction list. If you use both, the survey password will take precedence.
- **Duplicate:** A survey can be duplicated. This will copy the survey and all questions, but not the result data. The new survey will be named, "Copy of X," where X is the name of the survey. You can only copy an existing survey, not a new one.

After you have created and defined your survey, you can now begin adding questions to it.

Question Editing

To add questions to your survey, begin by clicking on the Questions link in the left hand navigation. This will bring you to a prompt to select a survey. Once you select a survey, you will see a list of all the questions assigned to it. The questions are sorted in the order they appear in the survey. You can add, edit, or delete new questions from here. When you create a new question, you will first be prompted to select a question type. Question types will be discussed in the next section. Every type of question will have different options for editing. Every question, however, will have the following items:

- **Question:** This is the question text itself.
- **Rank:** This is the order in which the question is presented. This will default to the current number of questions in the survey plus one. So if your survey already have five questions, when you click to add a new question, the rank will default to 6.
- **Required:** All questions can be marked as either being required or not being required.

As I said above, the rest of the form will depend on the type of question you are working with. Let's now take a look at question types.

Soundings supports multiple types of questions, and even lets you add your own question types. The types of questions Soundings supports out of the box are:

- **True/False and Yes/No:** This is a True/False or Yes/No question. Both types act the same way. The only difference is in the answers presented for the question.
- **Multiple Choice:** There are actually four kinds of multiple choice questions. You can have either a single or multiple style question. The "single" style only lets the user chose one answer. The "multiple" style allows the user to pick any number of answers. Both styles have a "with other" option. This allows the user to select Other and then enter a unique answer.
- **Text Box:** This is a free form question that allows you to enter any response. The "single" style allows for a shorter answer while "multi" is a textarea that will handle a larger result.
- **Matrix:** Matrix style questions allow you to get a value for multiple items. An example may be, "Please rate the following items from 1 to 5, with 1 being the worst, and 5 being the best."

Every time you add a question, you will be presented with the option to select from one of these types. Soundings also allows you to define your own types. The API for this is beyond the scope of this document, but here is a quick overview.

Each question type has a handler folder. This is located under the handlers folder. Soundings will expect to find four files here: display.cfm, edit.cfm, save.cfm, and stats.cfm. The display.cfm handler is used to render the survey question. Edit.cfm is used by the administrator to allow for editing of question instances. Save.cfm handles taking survey data and storing it to the database. Stats.cfm handles returning result data for the stats portion of the Administrator. Take a look at these for examples on how to add new question types.

Routing

Questions in Soundings can support basic routing rules. You can define that a user will go to another question based on the answer given to the current question. You can define multiple rules per question. They will be checked in order, and as soon as one is matched, it is executed. The default logic is to simply go to the next question.

Templates

Templates are a simple way to add a unique look and feel to your surveys. Each template consists of a name, header, and footer. You are allowed to use any HTML, but ColdFusion code will not be rendered.

Reporting

As soon as someone has taken a survey, you can begin reporting on it. The Reporting link in the Soundings Administrator allows you to view three different reports. The first

browse the responses. The second and third report options are Excel and PDF. Note that you can also filter out questions. This is useful when some questions contain biographical information and are not needed for aggregate reports.

Users and Security

Users in Soundings are divided between Admins and Survey Creators. Any user that is not an Admin will only see surveys and templates they have personally created. This is a useful feature as it lets Admins create users who can then make their own surveys. Only admins are allowed to edit question types and users.

Taking Surveys

Surveys can be taken by going to the Soundings home page, located at <the host where soundings is installed>/soundings. You will see a lovely blue frame and a list of (any) active surveys. The front end of Soundings is not pretty. However, it is very easy to modify and can be integrated into your sites existing look and feel. The front end of Soundings has two pages. The home page lists all the active surveys. Surveys with "protection" (either password or email list) will be marked as being restricted. Once a survey is selected, the second page, survey.cfm, is loaded. This page runs a custom tag called surveyDisplay. This one tag handles the entire rendering of the survey. Again, you can easily take the logic from this page and integrate it into your existing site.