**BayeSniffer.com User Documentation**

*Table of Contents*

**Introduction**

Use of BayeSniffer.com involves two main sub-activities.

These are

1. Obtaining and maintaining access to information in BayeSniffer.com
2. Issuing queries

This document does not include the process of loading customized information on to the server, or the process of paying for your account.

**Obtaining and maintaining access**

To initially obtain access, you will need to register. Subsequently, you will log in to the system using the credentials that you had specified in the registration process. To access the registration screen, you will first go to the login screen, and then click the "Register" link. (See Figure 1). The registration screen will allow you to select a user name and a password. The password is required to be composed of both upper and lower case characters and be of minimum length 8. You are required to enter the password twice.



*Figure 1. The Login Screen*

An active email address should then be entered, which will be the primary mode of communication that will be used by the system when contacting you are to be contacted. For password retrieval

purposes, you will enter a question for which only you should know the answer. If the information entered is consistent with the security restrictions in effect, your account will be saved when you click the **Submit** button.



*Figure 2: The Registration Screen*

After your account is saved, you may return to the login screen and enter your credentials to gain access. If you ever forget your password, you may start the password retrieval process that involves entering the answer to the secret question associated with your account. If you forget your user name, you may request that it is sent to you, and it will be mailed to the email address associated with your account.

After logging in, you can manage your account by visiting the Profile screen, shown in Figure 3. The profile screen allows you to view and edit all the information that you had set up on the registration screen (except for the user name).



*Figure 3: The Profile Screen*

You will also see a list of tables that you will be allowed to query. The list will include a set of tables for which query access has been granted for demo purposes, as well as any other table for which you have been given access because you have made arrangements with the administrators.

**Maintaining access**

You will be allowed to execute queries on specific tables. These tables are organized in databases. The first step in issuing queries is the selection of the appropriate database. This is done by choosing the database from leftmost dropdown box on the query screen. In Figure 4, words "Select Database" are written in the box.



*Figure 4: Default view of the query screen*

All databases for which you have access will be shown in the drop-down box. After selecting the database, the second drop-down box from the left will be populated with the tables from the selected database. You can then select the table containing the data in which you are interested. After the selection, the right most box will then be populated with the list of columns in the table.
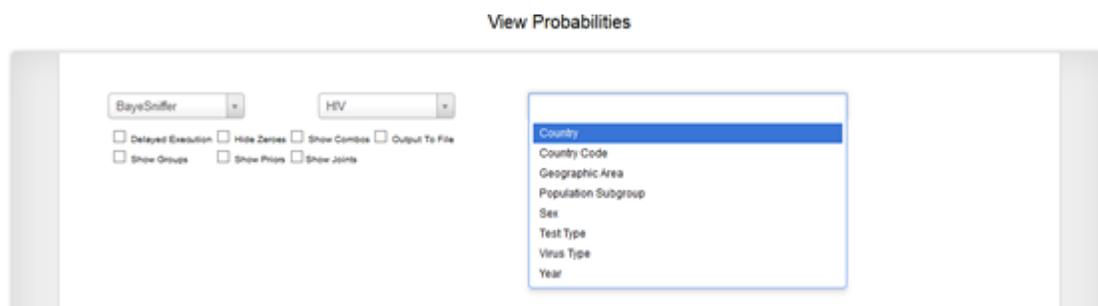


*Figure 5: Selecting query columns*

The columns that you have selected will be displayed in the right-most box, and a column can be removed from the set of selections by clicking the "x" beside the column name. After selecting the set of columns, you are able to either execute the query by clicking the "Execute" button, or by

resetting the screen by clicking the **Reset** button. After clicking the "Reset" button, the screen will revert the default state in which it was loaded, with drop-down boxes and combo boxes cleared out.

One of three outcomes can be expected when the **Execute** button is clicked, depending on the number of results returned by the query. Factors affecting the number of results include the number of columns selected and the number of distinct values in each selected column.
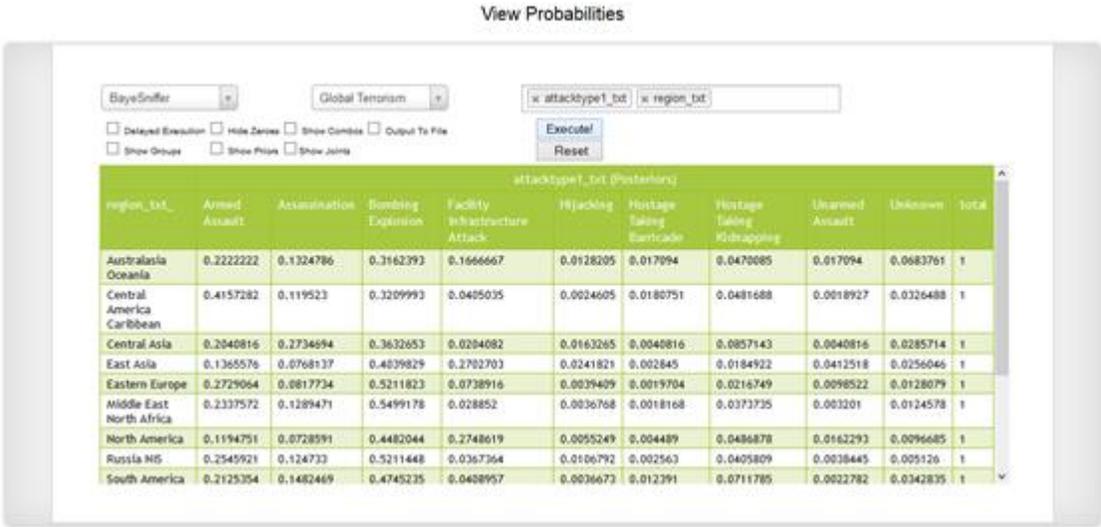


*Figure 6:The results of a query*

If the number of rows can easily be rendered on the screen, the information is presented in a table format, with the values in the primary column (the first column in the set of columns) displayed as column headers. Each permutation of the values in other columns is then used to generate a row, for which posterior probabilities will be calculated.

If the size of the data is too large to be quickly rendered on screen (up to a system specified limit), the query is executed offline. The result of the query is saved in comma separated variable format then sent to you using the email address recorded on your profile.

*Figure 7: The query screen giving a notification that query results will be sent via mail*

Extremely large queries that will generate an extremely large amount of data are not executed automatically, but are forwarded to support staff for manual execution.  The support staff will send the results of the query to you via email.
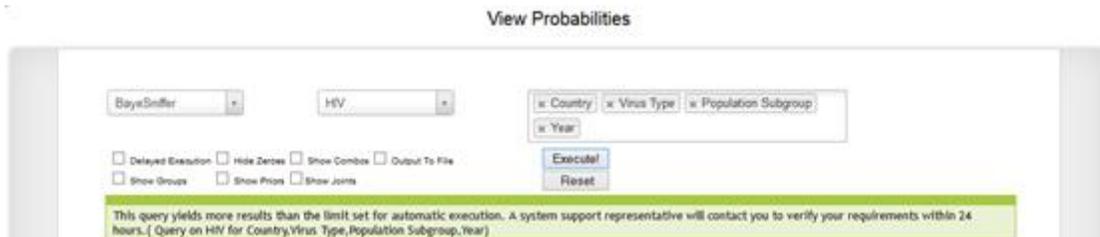


*Figure 8: The query screen giving a notification that a query will be run manually*

The check boxes present on the screen also provide useful options, which are detailed below:

The Delayed Execution check box allows any query that you issue to be sent to you via email. It is useful when the system is currently be occupied executing a query for you, as the system is currently set up to allow each user to run only one query at a time.

The Hide Zeroes check box instructs the query engine to suppress rows that have no activity.

The Show Combos text box displays all permutations of data for which posterior probabilities will be calculated.

The "Output to file" checkbox executes your query immediately, but sends the output to a file rather than the screen. The file will be mailed to you.

The "Show Groups" button allows the intermediate calculation that groups the data in the table to be seen.

The "Show Priors" button allows the intermediate calculation of prior data to be viewed table.

The "Show Joints" button allows the intermediate calculation of joints probabilities to be viewed.