

New Barista Features Sate Appetites



B BASIS has been continually enhancing the Barista® Application Framework since its initial release in 2007. The version 11.x releases continue that track record, including more exciting features demonstrating BASIS' ongoing commitment to providing leading-edge cross-platform rapid application development tools.

Query Definition System

The new [Query Definition System](#) leverages enhancements made to the BASIS SQL engine and dramatically harnesses its power to remove single table limitations of the existing Barista query capabilities. In previous releases, creating a table definition automatically generated single table queries, supplying an immediate query with no additional work. The new query system shown in **Figure 1** provides a multitude of features for developers wanting more control over their data presentation.

One of the most important new features is the ability to join information from multiple tables into a single query. Developers can include columns from an unlimited number of tables related by primary or foreign keys. They can also sort data concurrently on one or more table-based columns in a specific case or case-neutral sequence.



By Sam Vulopas
Senior Software Developer

The query system also allows customized SQL SELECT statements. Barista creates the initial SQL statement based on the defined columns and allows developers to manually modify and fine-tune the query, including nested SQL select statements and stored procedure calls to generate a result set. A new option – specify custom filtering and data manipulation programs – allows users to produce finely detailed queries. >>

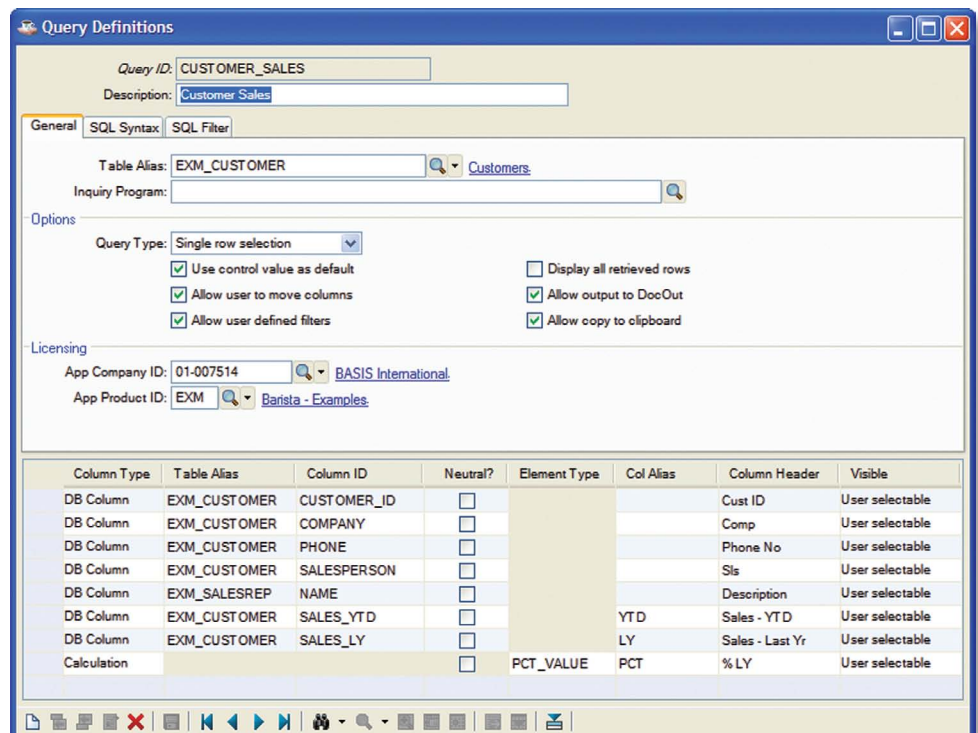


Figure 1. Query Definition Maintenance

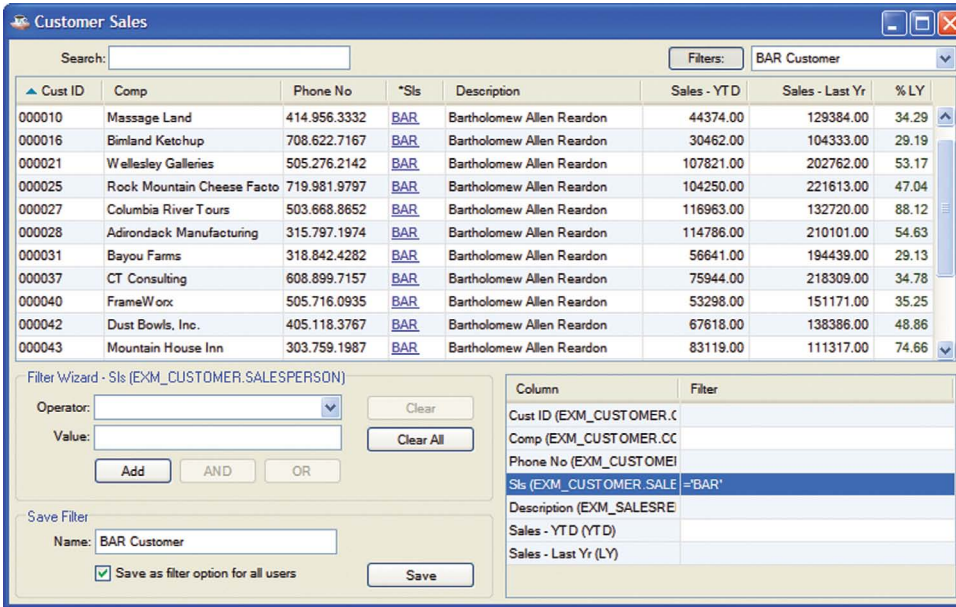


Figure 2. Defined query with inline filtering, hyperlinks, and a calculated %LY column

Version 11.10 also contains the ability to create new columns derived from calculations based on column data returned from the original query, and to total columns. With just a few clicks, this powerful feature creates displays containing detailed drilldown information with derived columns and totals.

The new query display maintains a consistent look and feel with the current Barista inquiry system, but contains enhancements that greatly improve filtering and data linking. Filtering is now accomplished "inline" via the Filter Wizard for beginning users, or for experienced users, through direct entry of filter criteria. The result set is immediately filtered and redisplayed, providing instant feedback. Columns linked to other tables via foreign keys are now hyperlinked to provide easy single-click access to master record data. See an example of these features in **Figure 2**.

Query Document Output

The second major set of enhancements also involves all Barista query systems and their ability to send a result set to the Barista Document Output System (DocOut). After refining the query via filtering and sorting, users can launch the "Additional Options" menu and

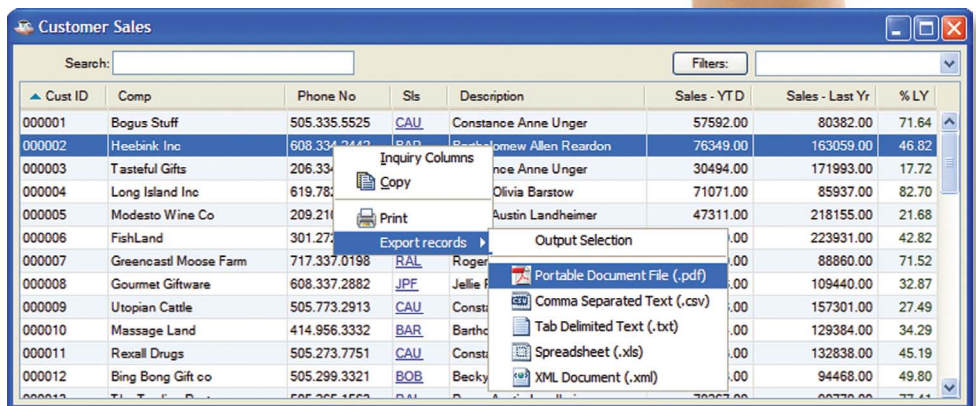


Figure 3. Query display with available "Export records" selections

select one of many options for exporting the data in the exact sequence as currently displayed. Options include the DocOut viewer and its various selections – printing, email, fax – and a number of supported file types (.pdf, .csv, .txt, .xml, and native .xls spreadsheet). In addition, five one-step export options immediately create and launch the requested file type in its associated application (see **Figure 3**).

Summary

Queries are an extremely important part of any graphical application. These recent product enhancements provide the tools and options to give developers greater control over the design of their applications. Perhaps most important are the huge time savings and productivity improvements these enhancements bring to the application developer. The never-ending and seemingly insatiable appetite that users have for seeing their data presented with different filters and in different formats can now be satisfied immediately by the developer or power user with little time and therefore extremely low cost, leading to satisfied customers and happy productive developers! ■



Read the white paper [Query Definition System](#)