Session V-STON

Stonefield Query: The Next Generation of Reporting

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Overview

Are you being inundated with requests from the users of your applications to create new reports or tweak existing ones? Let them do it themselves! Presenting Stonefield Query. Stonefield Query allows you to create a customized ad-hoc report writer for any application. It can query on any data, including VFP, SQL Server, Oracle, Access, and MySQL. In this session, Doug Hennig shows how Stonefield Query works from an end-user perspective, then goes through creating a customized version for your database.

Introduction

Stonefield Query is a true end-user query and report writing tool. Unlike generic report writers, Stonefield Query can be customized specifically for your own database. With its user-friendly design, Stonefield Query makes report writing a snap for even the most inexperienced user. Elegant and persuasive reports are easy to create with a simple point and click that converts your data into easy-to-read reports.

The Stonefield Query SDK allows you to create a version of Stonefield Query for any database. Simply use the Configuration Utility that comes with the SDK to create the data dictionary, configuration, and script files for your database, whether it's SQL Server, Oracle, Access, DB2, MySQL, Visual FoxPro, dBase, or any other ODBC or OLE DB-compliant database. Then deploy it to your users and let them start creating the ad-hoc reports they need in just six easy steps.

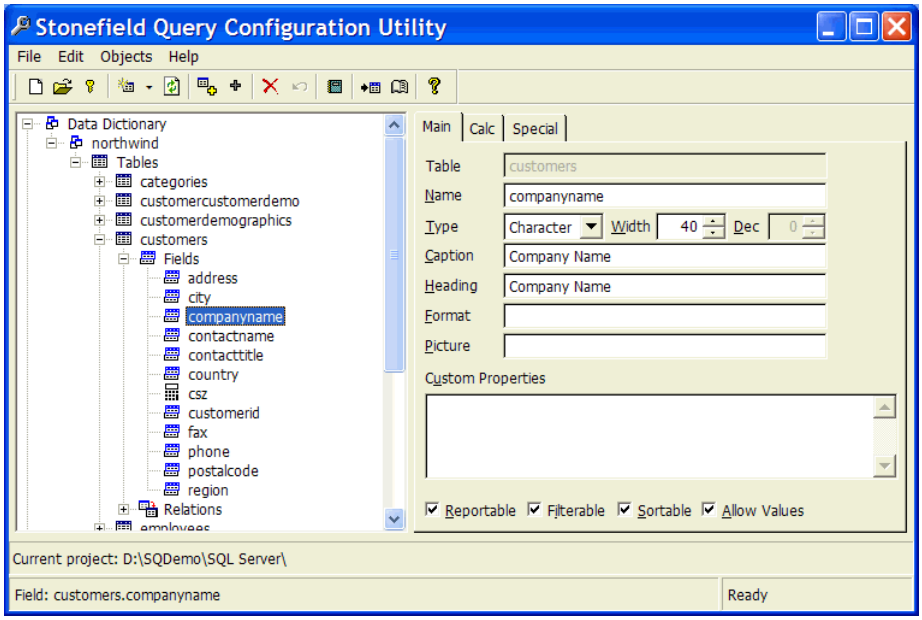
How it Works

There are two parts to the Stonefield Query SDK: the easy-to-use end-user reporting application (Stonefield Query) and the Configuration Utility that a technical person (developer, consultant, IT person, etc.) uses to customize Stonefield Query for the application's database.

You start by using the Configuration Utility to create a new Stonefield Query "project" (the set of data dictionary, configuration, and script files that make Stonefield Query specific for an application). Using the data dictionary "discovery" wizard, you can quickly load the data dictionary with the structures of your application's data. Stonefield Query can access pretty much any kind of database: SQL Server, Oracle, Access, DB2, MySQL, Visual FoxPro, dBase, Pervasive ... you name it. You then customize the data dictionary as necessary (for example, filling in descriptive captions for tables and fields).

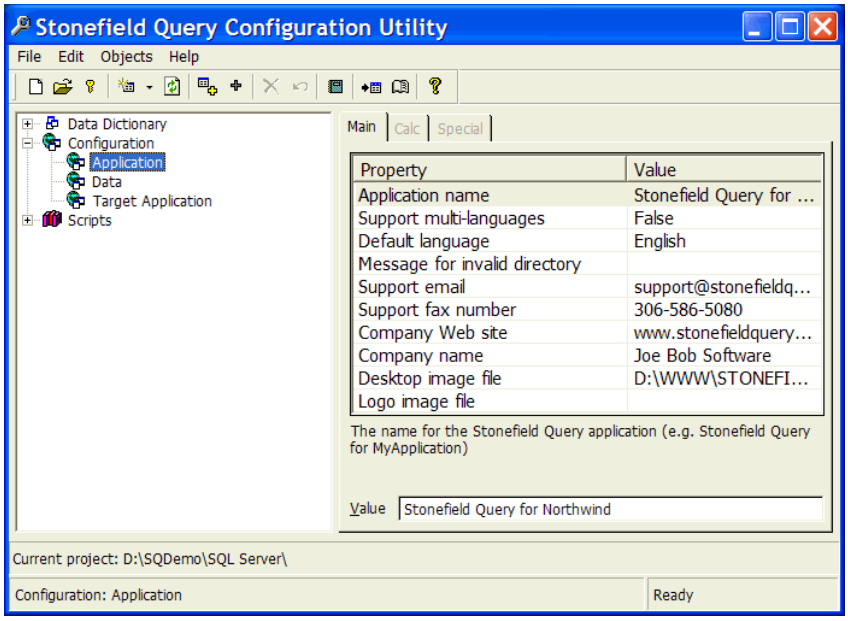
Customizing the Data Dictionary

You can define virtual (also known as calculated) fields. For example, most order entry systems don't store the extended price for a line item because that value can be derived (unit price multiplied by quantity). However, the user may want to show the extended price on a report or even do a query on all items with an extended price greater than $50.00. You simply add a field to the data dictionary and specify that the calculation expression is unit price multiplied by quantity. As far as the user knows, it's just another field they can report on. You can even define "enumerated" fields, where the range of values for the field is a predefined list, or that a field from a related table should be display when the user selects the linking (foreign key) field.



Make it Your Own

You can "private label" your Stonefield Query project so it's more closely associated with your company. You can change the name of the application to anything you wish (such as "The Northwind Company Report Writer"), specify what logo appears, what email, Web site, and fax number to use for support, etc. You can even create a customized help file so the documentation is consistent with the application.



Flexible Data Access

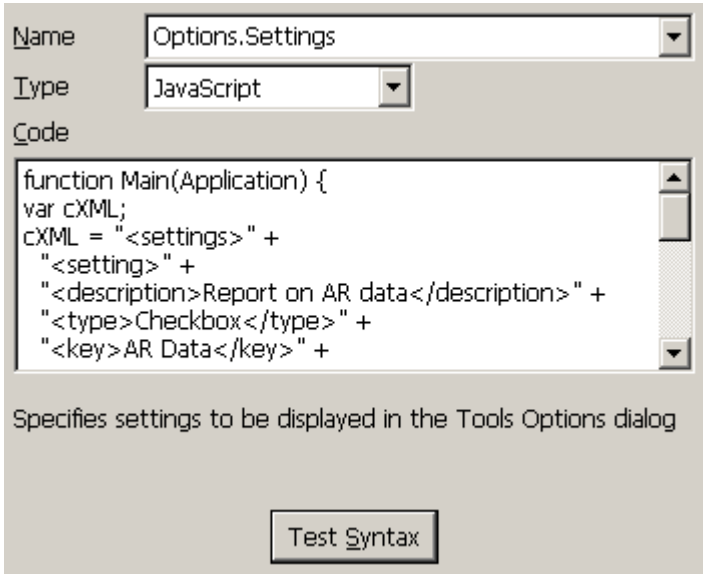
Stonefield Query supports accessing data any way you need it to. ODBC, OLE DB, Web Service, SQLXML, and native Visual FoxPro access are built in. However, you can also script your own data access to allow querying against non-traditional data stores such as APIs or even flat text files.

If you allow the user to query on multiple data sets (such as Test and Production data sets or Company A, Company B, and Company C data sets), different data sets can be stored in different database engines if necessary. For example, you may have a Test data set stored in Access but the Production data set is stored in SQL Server.

Stonefield Query supports joins across different data sources. For example, an accounting system's data might be stored in SQL Server but you want to link accounting data with customer relationship data stored in Oracle. All you have to do is define how the SQL Server and Oracle tables are related, and Stonefield Query will take care of the rest! The user doesn't have to know the data is stored in different systems; they just know they can select fields from the Accounts Receivable Customer table and the Contact History table and include information from both in the same report.

Scripting

Stonefield Query is highly scriptable. You can script how data should be accessed for a specific database or even a certain table. For example, you may want all access to SQL Server to be through stored procedures rather than SQL SELECT statements. You can also script Stonefield Query events, such as customizing its behavior at startup or shutdown, when the Options dialog is selected, and so forth. You can select which language to write scripts in—Visual FoxPro, VBScript, or JavaScript—depending on which you feel more comfortable using.



Stonefield Query Features

Stonefield Query is what gets deployed to end-users and customers. It's the tool they will use to create and run reports. These features make it easy for even the most novice user to create and run reports.

- Allows user to control font, color, alignment, heading, and column width for each field with a mouse click.
- Allows user to group and sort on any field with a mouse click.
- Automatically adjusts a field's column width to match the widest amount of data in the column. No time lost adjusting and aligning fields.
- Choose from four different report types: Quick Reports (row and column layout), Cross-Tabulation Reports (like pivot tables, for analysis), Charts/Graphs (pie, bar, etc.) and Labels (mailing, barcode, etc).
- Report Templates: Choose from one of the supplied templates or use the Template Editor to build your own.
- Live Links: This allows you to create reports that drill down to other reports (for example, clicking on a customer name to show the sales for that customer) or automatically bring up someone's email address in your email program or Web site in your browser.
- Report Sample: See a snapshot of what the report looked like the last time you ran it.
- Report Scheduler: Automate reports that need to go out on a regular basis.
- Report Preview: See what the report will look like at each step of the report building process. There's no need to save and exit before viewing.
- Role-based Security: Control access to a single report, group of reports, and/or specific modules by assigning users to groups. This allows you to restrict access to sensitive data.
- Create an unlimited number of reports.
- Favorites: Save frequently used reports into your user-specific Favorites folder for quick access.
- Output Options: Stonefield Query supports output to comma-delimited (CSV), Image Formats (.bmp, .gif, .jpeg, .png, .tiff), Microsoft Excel®, Microsoft Word®, Open Office Calc & Writer, PDF, Rich Text Format (RTF), DBF, Text, HTML, XML, and XPS.
- Email Reports: Use a SMTP or MAPI email client to quickly email reports through Stonefield Query.
- Label Wizard: Select any data in your system and choose from 87 different Avery label formats.
- Advanced Report Designer: Customize the report layout beyond the report wizard settings using the Advanced Report Designer. The Advanced Report Designer allows you to lay out the report exactly as you want, including company logos, lines, boxes, etc.
- Stonefield Query automatically generates a SQL Select statement for the report once fields have been selected. Advanced users have the option to customize the select statement if needed.
- Includes a detailed help file. Available online and in PDF format. Topics include Tutorials, Using Stonefield Query, Menu Functions, How To, and Frequently Asked Questions.

Benefits

Ease of Use

Unlike generic report writers, Stonefield Query has been customized specifically for the database it's querying against. You don't have to tell Stonefield Query how get the data; you simply tell it what you want and it will figure out how to get it. Everyone in the organization from the President to the receptionist can use the product. As a result, Stonefield Query saves technical staff time and alleviates the burden of creating every query and report an end-user could ever think of.

Productivity

With generic report writers you are responsible for laying out fields, adjusting sizes and headings manually. Stonefield Query automatically places fields and headings on the report and sizes them appropriately. You can create a report in Stonefield Query in just seconds with only a few mouse clicks. Grouping, sorting, totaling fields, and filtering are as simple as selecting the desired option from a list.

Performance

Stonefield Query uses SQL SELECT statements to retrieve records from the database, so only those records that match the filter are accessed. This can have an enormous impact on the performance of the query. For example, one Stonefield Query user told us that a report they created in Crystal Reports takes over 25 minutes to run, but the same report in Stonefield Query takes just 15 seconds. That's 100 times faster.

Flexibility

Stonefield Query can access nearly any kind of database, including SQL Server, Oracle, Access, Visual FoxPro, Pervasive, DB2, MySQL and even non-database formats like comma delimited text files. Stonefield Query also supports querying on multiple data sets. For example, you may have an accounting system's data stored in SQL Server and customer data stored in ORACLE. All you have to do is define how the SQL and Oracle tables are related, and Stonefield Query will take care of the rest.

Security

Stonefield Query supports role-based security at the field, table and report level. This means you can control access to any information stored in your system.

Value

Stonefield Query fulfills a valuable need every organization has: the access to information. More importantly, it allows the people who need the information the most, the ability to get it themselves.

Licensing

Stonefield Query is licensed on a per-user basis. Each user who wants to create and/or run reports in Stonefield Query requires a license. Licensing is based on named users; you can only define as many user names as there are licenses.

There are three types of licenses. The SDK includes the Configuration Utility and is intended for someone who plans to build a customized version of Stonefield Query. The End-User Professional license has a complete set of reporting features, while the End-User Runtime license is a less expensive license that allows users to run reports but not create them.

Free Trial Version

A free trial version of Stonefield Query is available for download at http://www.stonefieldquery.com. This version is a time-limited, full-working copy of Stonefield Query, so you can use it to create a demo version of Stonefield Query for your application's database. Show your clients how easily they can create their own reports in just minutes, and you'll be a hero!

Contact Us

For more information about Stonefield Query, please visit our Web site at http://www.stonefieldquery.com or email sales@stonefieldquery.com for sales and licensing questions. We also have a support forum available on our Web site and our blog is at Blog.StonefieldQuery.com.

Biography

Doug Hennig is a partner with Stonefield Systems Group Inc. and Stonefield Software Inc. He is the author of the award-winning Stonefield Database Toolkit (SDT); the award-winning Stonefield Query; the MemberData Editor, Anchor Editor, and CursorAdapter and DataEnvironment builders that come with Microsoft Visual FoxPro; and the My namespace and updated Upsizing Wizard in Sedna. Doug is co-author of the "What's New in Visual FoxPro" series, "The Hacker's Guide to Visual FoxPro 7.0," and the soon-to-be-released "Making Sense of Sedna and VFP 9 SP2." He was the technical editor of "The Hacker's Guide to Visual FoxPro 6.0" and "The Fundamentals." Most of these books are from Hentzenwerke Publishing (http://www.hentzenwerke.com). Doug wrote over 100 articles in 10 years for FoxTalk and has written numerous articles in FoxPro Advisor and Advisor Guide. He currently writes for FoxRockX (http://www.foxrockx.com). He spoke at every Microsoft FoxPro Developers Conference (DevCon) since 1997 and at user groups and developer conferences all over the world. He is one of the organizers of the annual Southwest Fox conference (http://www.swfox.net). He is one of the administrators for the VFPX VFP community extensions Web site (http://www.codeplex.com/VFPX). He has been a Microsoft Most Valuable Professional (MVP) since 1996. Doug was awarded the 2006 FoxPro Community Lifetime Achievement Award

(http://fox.wikis.com/wc.dll?Wiki~FoxProCommunityLifetimeAchievementAward).