



InfrasoftTech deployed SQL Server 2005, Analysis Services 2005, and Reporting Services 2005 to enhance OLAP, reporting, and their .net application functionality.

Overview

Country or Region: India

Industry: Banking and financial industry IT solutions

Customer Profile

InfrasoftTech is an integrated financial software solutions enterprise. It delivers ready to deploy software products, framework-based solutions, and specialized services.

Business Situation

InfrasoftTech wanted a product that had an incrementally updating database for storing historical data for financial trend analysis and reporting. This product also needed to support web based reporting capability.

Solution

InfrasoftTech deployed SQL Server 2005, Analysis Services 2005, and Reporting Services 2005.

Benefits

- Reduced dependency on applications
- Reuse of existing .NET web services
- Ability to create, build, and deploy web based reports using SQL Server 2005 Reporting Services without application coding
- Faster deployment of new reports
- Better value for their customers who can now create their own reports independently of InfraSoft Tech

InfrasoftTech is a specialist banking and financial industry IT solutions company with over a decade of experience, and high product and process quality accreditations - **SEI CMM level 5, ISO 9001-2000, ISO 27001**. InfrasoftTech is focused on providing software solutions exclusively to banking and financial institutions. InfrasoftTech is an integrated financial software solutions enterprise. It delivers ready-to-deploy software products, framework-based solutions, and specialized services.



Microsoft

Business Situation

InfrasoftTech was using a SQL Server 2000 database for financial trend analysis and reporting. They were using a Visual Basic 6 application to perform all analyses. Due to limits in their existing database architecture, incremental data loading was not possible. When they needed to create a report for a particular date, they had to drop the existing database, re-create it, and load the data for the specific date, then generate reports through the Visual Basic application. The process, from dropping the existing database to report generation, was tedious and overly time-consuming, some of the reports taking more than 12 hours to generate. In their existing architecture, application dependency was high, putting the entire system load on the application side. In their database server architecture, SQL Server was used only to store data. The SQL Server database and features were sorely under-used and untapped.

In their existing application architecture, there were more than 500 DLLs which were built on .NET Framework 1.1, using DELPHI and Visual Basic 6. These DLLs play a vital role in performing various tasks such as: complex calculations, "on the fly" complex calculations and manipulation of calculation results, and .net application based reports.

InfrasoftTech wanted a product that had an incrementally updating database for storing historical data for financial trend analysis and reporting. This product needed to include web based reporting capability. There should be little or no application dependency to create, build, and deploy the web based reports. InfrasoftTech was not using any reporting tool within their entire application architecture—all reports were created and generated using Visual Basic 6, which was a time-consuming and burdensome task for the InfrasoftTech technical staff. Any request for a new or modified report meant time spent coding in Visual Basic 6.

Business Solution

Scalability Experts, a Microsoft Gold Certified Partner, helped InfrasoftTech build a solution using Microsoft SQL Server 2005 database engine, Analysis Services 2005, and Reporting Services 2005. An OLAP database was built for modules such as insurance, investment, budget, and security to store the historical data.

Microsoft SQL Server 2005 features used to build this product

Microsoft SQL Server 2005 Analysis Services

Microsoft SQL Server 2005 has been used as a database server to build the OLAP database and the OLAP cube for financial trend analysis. This OLAP database holds the historical data for analysis, and the OLAP cube holds the data for the reporting.

Microsoft SQL server 2005 CLR Integration Feature

CLR Integration feature has been used to re-use their existing .net application code, written in .net 1.1 Framework using DELPHI and Visual Basic 6. Without rewriting their existing .net code and business logic, and by using the SQL Server 2005 CLR Integration feature, their existing .net code and business logic has been re-used in SQL Server 2005. This feature has saved InfrasoftTech developers from having to rewrite entire applications and business logic. This feature has also provided a quick solution that is ready to use their existing DLLs. Earlier these DLLs were used at the application level; now, by using the CLR Integration feature, all the DLLs are used at the database level. It not only reduces the load at the application level, but also gives them improved performance without re-writing their entire .net application code and business logic.

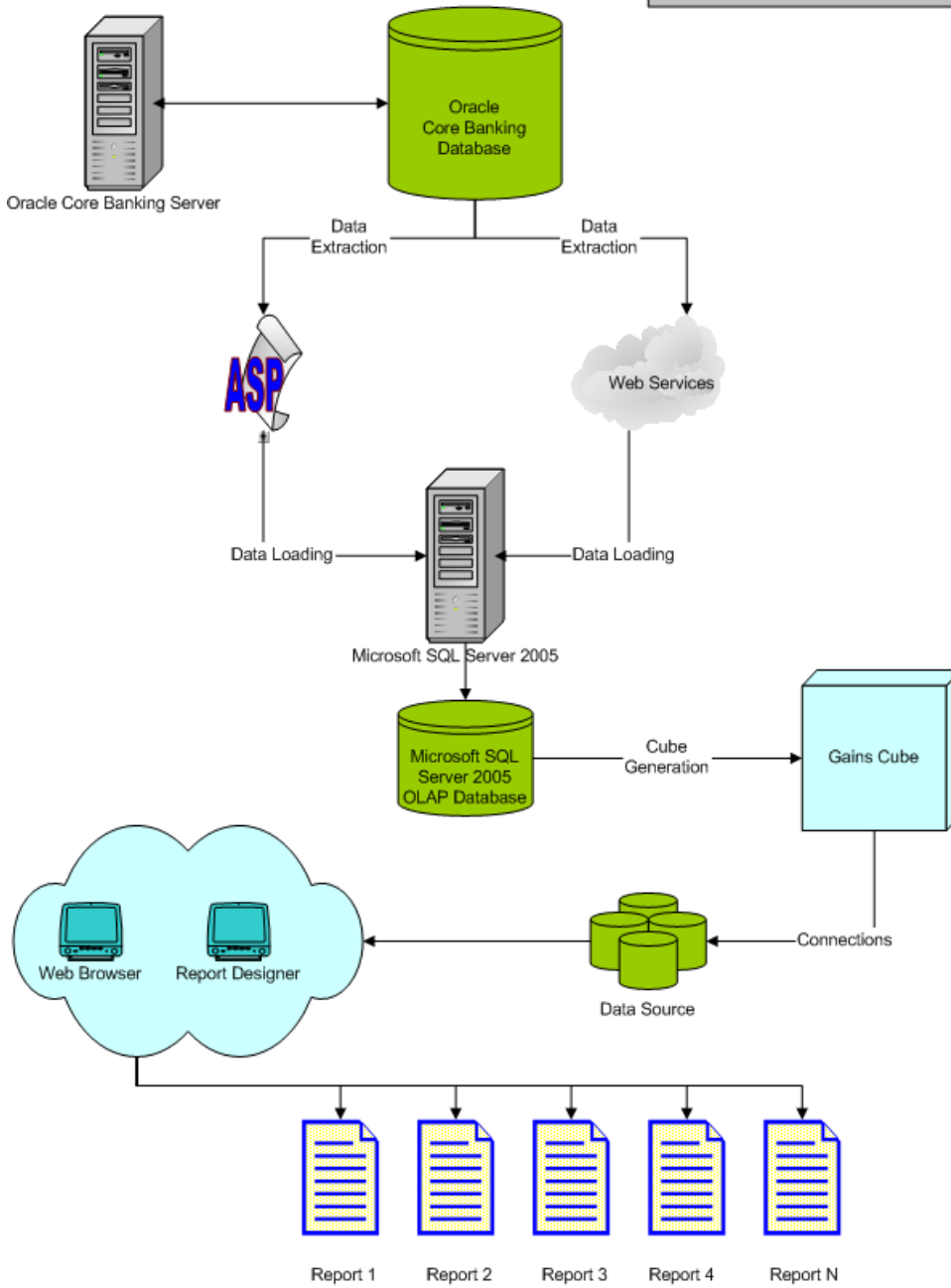
Microsoft SQL Server 2005 Reporting Services

Microsoft Reporting Service 2005 was used to create the web based reporting capability. End users can create any number of reports and deploy them on the server with a single click. No more coding on the application side in Visual Basic 6.

InfrasoftTech could reuse their existing .net web services or DLLs to feed data to their new relational reports, bringing database platform independence and transparency to the report users.

InfrasoftTech's new System Architecture Diagram

InfraSoft Tech.



Benefits

- **Reduced application dependency**

There is far less load on the application side. The database dropping and re-creating process is eliminated and replaced with the new OLAP database. This database holds the historical data for analysis and reporting purposes, and, the OLAP database allows incremental data loading.

All the reports are created using Reporting Services 2005 and their existing .net DLLs. Web Services is used at the database level using the CLR integration feature. To create, build, and deploy the new reports, coding is no longer required on the application side.

- **Reuse of existing .net web services**

Without re-writing entire code, the existing .net applications and DLLs have been re-used via the SQL Server 2005 CLR integration feature. Ability to reuse existing code enabled InfracoreTech to quickly start developing reports and bring the product to market in a record time. Complex financial calculations and cryptic database schemas were well hidden from the users using Reporting Services and Analysis Services cubes. Users worked with the friendly Unified Dimensional Model (UDM) to create reports instantly.

- **Ability to create, build and deploy the web based reports using SQL Server 2005 Reporting Services without any coding**

SQL Server 2005 Reporting Services provided InfracoreTech with a solution that could quickly deliver reports to their users. It reduced dependency on developers, and allowed power-users to create new reports without writing any code.



About Scalability Experts

Scalability Experts is a consulting, training, and software development company focused solely on Microsoft SQL Server. Recognized as a world leading practitioner in advanced SQL Server technologies, Scalability Experts has garnered Microsoft's Global Excellence Award for Advanced Infrastructure, Data Management, for two consecutive terms.

Scalability Experts has unique insight into SQL Server 2005 because they worked with the product long before any of its public beta releases.

Their consulting team solves scalability, performance, and availability problems for Fortune 500 and mid-sized businesses with business critical SQL Server systems.

To learn more, visit ScalabilityExperts.com or call (866) 304-8221.