Microsoft® SQL Server™ 2005

Accelerate Business Insight with SQL Server 2005 for Data Warehousing

Organizations today face several data warehouse challenges: the proliferation of data and systems across their enterprise; the need to provide consistent access to that data; and the desire to deliver meaningful information to drive informed decisions.

SQL Server™ 2005 is designed to help enterprises address these challenges by providing a robust, scalable Data Warehouse platform that enables organizations to build data warehouses quickly with the enterprise-ready ETL platform, manage their data with the scalable and manageable relational data platform and deliver business insight and information with the Microsoft® BI platform.

SQL Server 2005 and the integration with the Microsoft BI platform provides a comprehensive view of your business, by increasing the freshness of the data, incorporating all your systems, and validating the data while reducing the burden on your IT department.
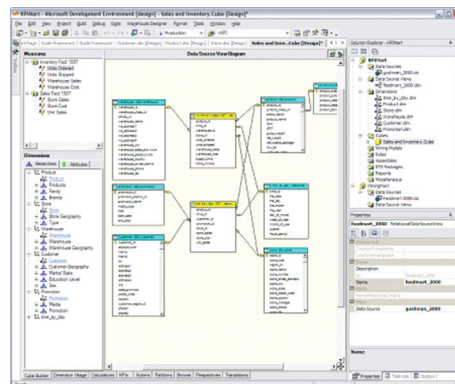
QUICKLY BUILD YOUR DATA WAREHOUSE
Organizations are faced with significant barriers in their quest to build a data warehouse, starting from the connectivity to legacy systems to cleaning dirty data from source systems. SQL Server 2005 provides significant enhancements that accelerate an organization's ability to build a data warehouse..

Microsoft SQL Server 2005 provides developers and IT professionals a visual development environment with Business Intelligence Development Studio and an enterprise data integration platform with SQL Server 2005 Integration Services.

IMPROVED VISUAL DEVELOPMENT
Business Intelligence Development Studio (BIDS) with tight integration with Visual Studio® 2005 provides development teams that are building data-centric applications with tools that enable a productive and collaborative environment for building solutions.
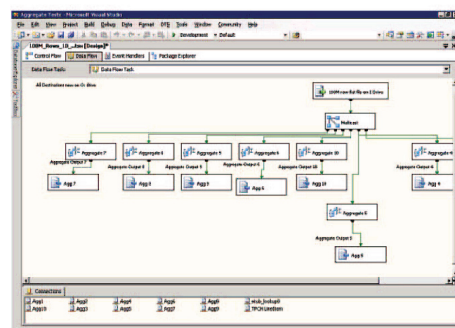

BI Development Studio

Developer productivity reaches new levels with visual debugging and integrated approach to building BI solutions. The Data Viewers allow developers to see the data pipeline at work, visualizing data during transformation in grids, graphs and charts, while breakpoints, variable watches and the call stack provide powerful debugging capabilities. BIDS also provides a single development environment to build your entire BI Solution from SSIS packages to Analysis Services cubes to Reporting Services reports.

ENHANCED DATA INTEGRATION
SQL Server 2005 Integration Services (SSIS), available as part of SQL Server 2005, provides the features and performance necessary to build enterprise-class data integration applications. Integration of diverse data sources and destinations is made easy.

Enterprise Data Integration

SSIS provides comprehensive set of features to build data warehouse

- Scalable Pipeline architecture that provides multi-threaded 64 bit platform to transform your growing data volumes in narrower batch windows
- Connectivity to non SQL Server RDBMS, Mainframe systems and ERP Systems.
- Large number of complex transformations to consolidate data from numerous systems.
- Advanced Data Cleansing transformation to reduce data duplication and dirty data.
- Data Warehouse Smarts by providing out of the box capability to manage slowly changing dimensions
- Seamless integration with SQL Server BI platform to directly build Analysis Services cubes. Extend and customize SQL Server Integration Services with the power of .NET by incorporating custom scripts & components directly into your data integration flow

EASILY MANAGE DATA
In today's connected world, data and the systems that manage that data must be available and accessible to your users. Companies are faced with burgeoning data volumes and as BI becomes more pervasive within an organization, growing number of users are beginning to use the data warehouse. Microsoft SQL Server 2005 provides an enterprise-ready Data Warehouse platform with increased scalability, manageability, and performance.

ENTERPRISE SCALABILITY
Scalability advancements such as partitioning, snapshot isolation, and 64-bit support will enable you to build and deploy your most demanding applications using SQL Server 2005. The partitioning of large tables and indexes significantly enhances query performance against very large databases.

Microsoft®

- Sophisticated Indexing functionality to query large amounts of data.
- Star Join Optimizations to provide Data Warehouse Smarts to the query optimizer.
- Parallel Query Execution to allow large number of concurrent users.
- Indexed Views to increase query performance by reducing query aggregation and calculation time.

INCREASED MANAGEABILITY

The SQL Server 2005 simplifies management by providing an integrated management environment to monitor, manage, and tune all of the databases and associated services across your enterprise. SQL Server 2005 provides an extensible management infrastructure that can be easily programmed using SQL Management Objects (SMO), enabling users to customize and extend their management environment and build additional tools and functionality to further extend the capabilities that come out of the box. Improvements to the management of enterprise database applications include enhanced support for large databases and more flexible management of distributed databases.

- Partition your large data sets into manageable chunks using SQL Server 2005 partitioning.
- Online Index Management to reduce Index complexity and downtime on maintenance.

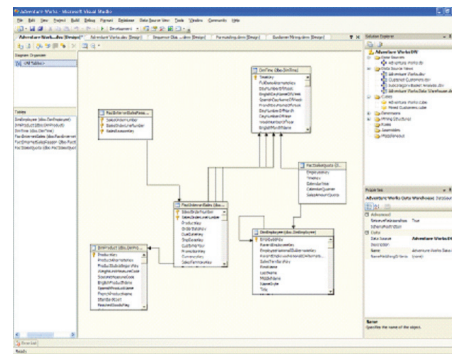## DELIVER BETTER BUSINESS INSIGHT

The challenge and promise of business intelligence revolves around providing employees with the right information, at the right time. Accomplishing this vision demands a business intelligence solution that is comprehensive, secure, integrated with operational systems, and available all day, every day providing real-time insight into business changes.

SQL Server 2005 delivers a comprehensive BI solution including deep integration with Microsoft Office System 2007 providing deep analytical capabilities, rich visualization and collaboration, and enterprise reporting.

DEEP ANALYTICAL CAPABILITIES

SQL Server 2005 Analysis Services provides a unified and integrated view of all your business data as the foundation for traditional reporting, OLAP analysis, Key Performance Indicators (KPI), scorecards, and data mining. By introducing a single Unified Dimensional Model, SQL Server 2005 Analysis Services combines the flexibility and richness of the traditional relational reporting model with the powerful, user-friendly analytics and scaleable performance providing a rich set of features that exposes the underlying relational data to your end users.
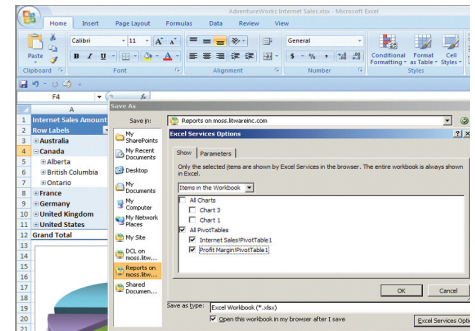
- UDM for all your entities and measures of your data warehouse.
- Expose the analytical data to end user tools with industry standard MDX.
- KPI engine for all your BI end user tools.

Unified Dimensional Model

RICH VISUALIZATION AND COLLABORATION

ProClarity enables decision makers to go beyond simply monitoring data in other applications. ProClarity integrates seamlessly with the other Microsoft business intelligence products including the 2007 Microsoft Office System, SQL Server 2005 Reporting Services, and Office SharePoint® Server providing analytics within the applications decision makers use daily. Simple interfaces and powerful advanced visualizations help reduce the amount of time decision makers spend sorting through large quantities of data.

Publish from Excel

- Integrated with Microsoft Office to expose all the analytical and reporting capabilities directly in Microsoft Office.
- Rich Visualization of your data using Proclarity.

ENTERPRISE REPORTING

SQL Server 2005 Reporting Services extends the Data Warehouse platform to reach the information worker who needs access to business data. Reporting Services is a server-based enterprise reporting environment, which is managed via Web services. Reports can be delivered in a variety of formats, with a range of interactivity and printing options. Complex analyses can reach a broad audience through the distribution of reports as a data source for downstream business intelligence.

In addition, Report Builder allows business users to create their own reports by using a user-friendly model of their data. Report Builder leverages the Reporting Services platform to bring ad hoc reporting to all end users.

- Start building reports off your data in the UDM and relational data immediately.
- Expose reports to all your information workers via Sharepoint.
- Provide adhoc reporting capability via Report Builder for all your power users.

ADDITIONAL INFORMATION

For more information on SQL Server 2005 and the Data Warehouse platform please visit:

http://www.microsoft.com/sql
http://www.microsoft.com/sql/solutions/dw

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