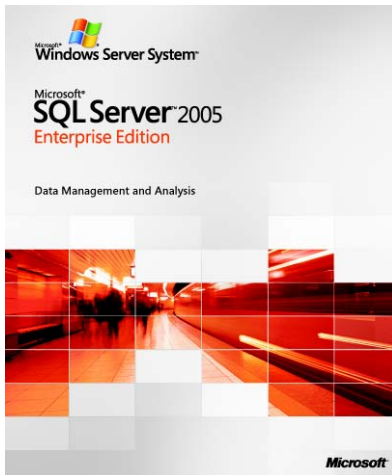


Microsoft® SQL Server™ 2005 Analysis Services



With SQL Server 2005, Analysis Services provides, for the first time, a unified and integrated view of all your business data as the foundation for all of your traditional reporting, OLAP analysis, Key Performance Indicator (KPI) scorecards and data mining.

By introducing a single Unified Dimensional Model (UDM), Analysis Services combines the flexibility and richness of the traditional relational reporting model with the user-friendly powerful analytics and the superb performance of the classic OLAP model.

With Proactive Caching and advanced business intelligence capabilities, Analysis Services moves into the realm of real-time analytics while maintaining MOLAP class performance.

Major enhancements in enterprise capabilities including scalability, manageability, and productivity, soundly position Analysis Services as the cornerstone of your Business Intelligence (BI) infrastructure and

with the deep integration with SQL Server 2005 Reporting Services and with Microsoft Office, Analysis Services 2005 will extend business intelligence to every level of your business.

Unified Dimensional Model

By combining the best aspects of traditional OLAP analysis and relational reporting, Analysis Services 2005 provides a metadata model that covers both sets of needs. A set of cubes and dimensions defined in Analysis Services 2005 is referred to as a Unified Dimensional Model, or UDM. The UDM is a central metadata repository defining business entities, business logic, calculations, and metrics that serves as the source for all reports, spreadsheets, OLAP browsers, KPIs and analytical applications.

Using the powerful new Data Source View feature, the UDM is mapped to a host of heterogeneous back-end data sources allowing a complete and integrated picture of the business regardless of the location of the data.

With the UDM's friendly descriptions of the business entities, navigation hierarchies, multiple perspectives, and even automatic translations to native languages the end-users will find it easy to explore the corporate business data.

Proactive Caching

Proactive Caching enables the combination of real-time updates with MOLAP class performance.

Analysis Services 2005 maintains a highly compressed and optimized data cache that gets automatically maintained as the data in the underlying source databases changes. The cache provides superb query performance and isolates the back-end source systems from the load of the analytical queries.

Advanced Business Intelligence

- **Key Performance Indicator (KPI).** The KPI framework provides a rich centralized repository defining key metrics and scorecards. The KPI framework in Analysis Services 2005 allows you to easily build balanced scorecard and other types of business performance management applications.
- **Translations.** Translations provide a simple, centrally-managed mechanism for storing and presenting analytic data to users in their preferred languages.
- **MDX Scripts.** MDX Scripts are the new mechanism for defining Calculated Members, Named Sets, and Cell Calculations.
- **Business Intelligence Wizards.** A set of easy to use wizards will help even the most novice user in modeling some of the more complex business intelligence problems.
- **Semi-Additive Measures.** New measure aggregation type for advance data modeling includes last-non-empty, last-child, first-child, average-of-children and even by-account-type.

Web Services

XML for Analysis (XML/A) is the native, standards-based protocol for communicating with the Analysis Services server. New kinds of applications are enabled and easy to develop – applications that integrate analytics with operations in real time that can access the data from any platform and any language.

- With XML/A as the native protocol, Analysis Services clients can be configured to have a zero footprint, and each server is automatically a web service.
- A light-footprint Win32 layer is available for backward compatibility with tools that work with Analysis Services 2000 on OLE DB for OLAP, ADOMD, and ADOMD.Net.

Enterprise Capabilities

Analysis Services 2005 sets a new standard for BI servers in enterprise scalability, manageability, and productivity:

- **Scalability.** Analysis Services 2005 scales to the most demanding analytical and reporting applications. With Analysis Services' new dimension architecture, UDM-enabled

applications allow users to quickly perform rich and intuitive adhoc analysis using hundreds of dimensions and hierarchies. Hierarchies, whether flat or multilevel, make it easier for the users to navigate and query UDMs with hundreds of millions of members. The new architecture also removes the limitations of memory resident dimensions and the number of children members per parent.

With XML/A-based communication protocol that is paired with greatly optimized role based security; Analysis Services 2005 allows a UDM to handle thousands of users, enabling enterprise scale BI applications using web/middle tier or client/server architectures. Additionally, with parallelized partition and dimension processing Analysis Services can handle more data faster.

- **Manageability.** By integrating the management tools for the relational engine and Analysis Services, the BI administrator benefits from having a single uniform environment for managing Analysis Services along with SQL Server. With SQL Management Studio, administrators can easily script Analysis Services objects and operations/tasks. Administrators can use a rich

editor for MDX and DMX queries. Profiler can be used to trace, capture, and replay Analysis Services queries and other commands. Multi-Instancing, enhanced backup and restore, synchronization of databases across servers, and improved fine-grained administrative permissions are some of the new manageability tools available.

- **Productivity.** Integrated with Visual Studio, Analysis Services intuitive wizards and editors provide a true application development environment supporting the full life cycle of the project. Source control, versioning, workstation isolation, embedded debugging, and configuration management are some of the benefit of the new BI Development Studio.

Additional Information

SQL Server is part of the Windows Server System -- a comprehensive and integrated server infrastructure that simplifies the development, deployment and operations of flexible business solution.

For more information on SQL Server 2005, including Analysis Services Data Mining functionality, visit <http://www.microsoft.com/sql/2005>.

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