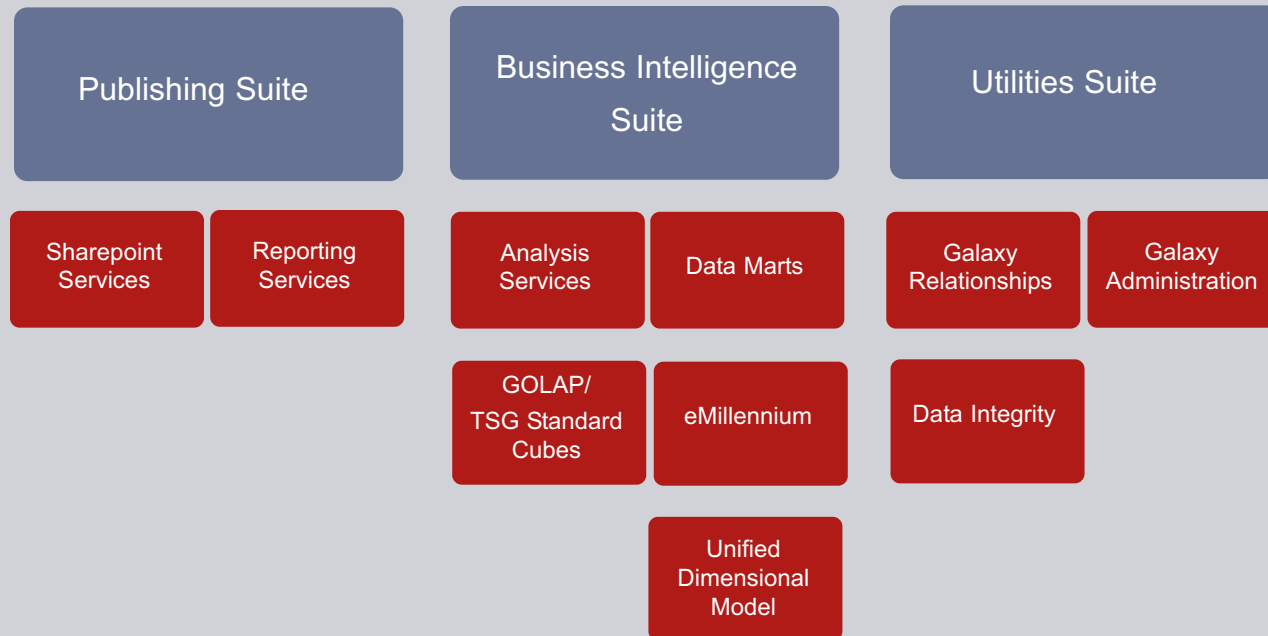


Galaxy Data Warehouse

Data Warehouse Physical Layer

Data Warehouse Logical Layer



THE GALAXY SERIES

Enterprise-wide Data Warehouse and Decision Support System for Business Intelligence, the Galaxy Series comprises data acquisition, transformation, presentation and administration components all rolled into one total warehousing and decision support solution. The Galaxy Series is a robust software solution, first implemented in 1996 for which TSG was elected as one of the Top 9 NT Innovators by Windows NT Magazine in 1997. The Galaxy Series comes with the following components: Analysis Services, Data Marts, GOLAP/TSG Standard Cubes, eMillennium, Unified Dimension Model, Data Integrity, Galaxy Relationships, Galaxy Administration, SharePoint Services, & Reporting Services.

GALAXY DATA WAREHOUSING Data Acquisition & Transformation

Galaxy Data Warehousing resides on a relational database management system (RDBMS) and contains data management and easy data access tools. It consists of the following enabling technologies: data warehouse loading, data transformation, data relationalization, Meta Data tools, data reporting engine and an intelligent file transfer tool to populate the warehouse.



BUSINESS INTELLIGENCE SUITE

Analysis Services

Microsoft SQL Server 2005 Analysis Services delivers online analytical processing (OLAP) and data mining functionality for business intelligence applications. Analysis Services supports OLAP by letting you design, create, and manage multidimensional structures that contain data aggregated from other data sources, such as relational databases. For data mining applications, Analysis Services lets you design, create, and visualize data mining models that are constructed from other data sources by using a wide variety of industry-standard data mining algorithms.

Data Marts

Data marts are multidimensional data schemas designed to address the analytical information needs of particular business processes. This de-normalized data view promotes high performance analysis. Utilizing conformed dimensions and a dependent warehouse, data marts can be integrated, enabling enterprise analysis through a definition. Although data marts support traditional reporting and analysis, they are a prerequisite to any worthwhile OLAP analysis.

GOLAP/TSG Standard Cubes

Galaxy On-Line Analytical Processing (GOLAP) is a data-mining/analysis tool that introduces powerful flexibility to the presentation of information. TSG recognizes that for data to become information, it must be intuitively presented. Therefore, GOLAP allows users to visualize data in a format that reflects how they think. GOLAP also allows for multidimensional data analysis, which means users can get a personal perspective on their data. Furthermore, GOLAP presents a worksheet style view of your query that can be manipulated to discover anomalies and monitor trends.

eMillennium

eMillennium is a point-and-click analytical application created with executives and upper management in mind. This tool enables all users of a hospital to immediately retrieve information from many critical sources for better decision-making. It is designed for the users to intuitively navigate through specific data sets. Millennium extends the typical analytical capabilities to a whole new level with extensive reports that allow for tailored analysis.

Unified Dimensional Model

UDM blurs the line between relational, OLAP databases and various other heterogeneous data sources. It is essentially a bridge between the user and their data. TSG adds value to an enterprise's Business Intelligence via the UDM by applying business rules to the isolated data, thereby providing high performance interactive analysis. Consumers of this "one version of the truth" can issue queries against the UDM using one of a variety of client tools, such as Microsoft Excel, Reporting Services and Analysis Services, etc.

UTILITIES SUITE

Data Integrity

Information workers demand that their data be reliable. TSG realizes that "having no data is better than having incorrect data" and offers a tool-set and methodology to reconcile the data between feeder system and the Galaxy Warehouse. By using a lightweight data extraction tool known as T-mex, a user can compare incoming data-set with the related data which resides in the warehouse. T-mex uses an entirely different download mechanism to ASTRO (the tool used to pump data into the warehouse) and can thus be considered a disparate download process. Any discrepancies can be analyzed via Analysis Services Data Integrity cubes published via a page on your Business Intelligence Portal.

Galaxy Relationships

TSG realizes that to obtain meaningful results from your warehouse, analysts need to not only be proficient with an analytical tool, but must also have a thorough understanding of Meta Data. Therefore, the Galaxy Relationship applet was introduced into the Galaxy series to assist data analysts and developers in understanding the Meta Data that they are analyzing.

Galaxy Administration

TSG has identified components of data warehousing that significantly affect the confidence users have in the data that they are analyzing. These components have been wrapped together with several unique features into a browser-based, intuitive administrative suite. Utilizing Galaxy Administration, users can stay informed as to how current their data are and DBAs can effectively monitor downloads. Documentation can be centrally located.

PUBLISHING SUITE

Sharepoint Services

Windows SharePoint Services is a component of the Windows Server information worker infrastructure and provides team services and sites to Microsoft Office System and other desktop programs. WSS serves as a platform for application development including such IT resources as portals, team workspaces, e-mail, presence awareness, and Web-based conferencing.

Windows SharePoint Services can scale to thousands of sites within an organization. It fully supports load-balanced Web farm and clustered database deployments. In addition to the Web Part infrastructure, Windows SharePoint Services servers, sites, and site contents are exposed by a comprehensive Windows .NET-based object model and industry-standard Web services.

Reporting Services

SQL Server Reporting Services is a comprehensive, server-based solution that enables the creation, management, and delivery of both traditional, paper-oriented reports and interactive, Web-based reports. An integrated part of the Microsoft Business Intelligence framework, Reporting Services combines the data management capabilities of SQL Server and Microsoft Windows Server with familiar and powerful Microsoft Office System applications to deliver real-time information to support daily operations and drive decisions. Reporting Services supports the full reporting life cycle, including: Report authoring, Report management, Report delivery and Report security.