XTIVIA

HEALTHCARE INSURANCE
SₐₐS DATA WAREHOUSE

ORGANIZATION

Our Client is a top Insurance provider in a major metropolitan area in Midwest United States. It covers 32 counties in two Midwest States and offers 40 health insurance plans for individuals, families and employers.

The Client has a data warehouse built on a platform which was used for reporting and adhoc analysis needs. The process of updating the warehouse involves collecting patient, insurance data from different subject areas, sending data to third party for grouper processing, and updating the warehouse with the output coming from the grouper processing.

CHALLENGE

The current data warehouse platform could not support the growing adhoc and data mining needs and they do not have an automated ETL process that can consolidate all the required data for grouper processing. Our client envisioned and analytics (OLAP) solution where in other partners can use the warehouse in a SaaS model. The current Data warehouse platform would not be able to scale to the needs of future business and proposed SaaS solution. In addition to this the objective was also to save costs by reducing dependency on third party grouper processing vendors. This was proposed to be done by buying a groper product and fully integrating it with the SaaS solution to be used by prospective clients.

KEY COMPONENTS

TECHNOLOGIES USED

Teradata® Data Warehouse appliance 2650

Teradata Load / Unload utilities

Teradata Viewpoint

Linux shell scripting

CA Erwin

TERADATA.

SOLUTION

XTIVIA proposed a solution that entails the selection and deployment of enterprise class data warehouse platform, the creation of the logical and physical data models, the integration of industry standard healthcare groupers and custom methodologies and the creation of reports, dashboards and visualization. The proposed solution will position the company towards an analytical / retail based business model in order to not only survive but to thrive through the expected 2013 healthcare reform mandates.

As a part of the pre-established phase, XTIVIA has analyzed the business problem, storage needs, processing needs and recommended Teradata Data Warehouse Appliance 2650 for hosting the Analytics Warehouse.

The ETL solution entails extracting data from existing enterprise data warehouse platform to flat files. The flat files were loaded to landing area where the data goes through basic sanity checks. Data from landing area is loaded to staging area where the data cleansing and transformations are applied before loading the data into Grouper and Enterprise Analytics Databases. Files are extracted from Grouper database and fed to grouper processing and the output coming from grouper processing is loaded into landing area where sanity checks are applied. After the data passes through sanity checks, data is finally loaded to target Enterprise Analytics database. The ETL processes are fully automated and scheduled on Linux environment to run on a monthly basis.

The solution also includes a flexible data model to allow prospective SaaS clients. The ETL process includes restart capability, and audit logs. Teradata Viewpoint is used for monitoring the database activities and alerting different events related to resource usage.

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RESULTS

Scalable data warehouse platform. A centralized analytics platform for client and their partners (prospective SaaS tenants). Flexible and secure data model for multi-tenancy. Compatibility of data model with grouper processing leading to future cost reduction. Reduction of annual effort in sending grouper files for processing. Additional revenues to client with each tenant signing up for access. Single platform enabling sharing of best practices between partners.

XTIVIA OVERVIEW

Since 1992, XTIVIA has established a proven, global reputation as a company delivering cutting-edge professional solutions to our clients' specific requirements, regardless of the complexity of the projects. XTIVIA's success has stemmed from a proven ability to deliver quality professional services, allowing the client to leverage technology successfully, competitively, and profitably. XTIVIA has received additional awards this year from Liferay, CIO Review and Inc. 5000. XTIVIA has offices in Colorado, New York, New Jersey, Missouri and Texas.

Analytical Data Solution-Architectural Approach