Colossal Data Warehouse

by

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In the Name of Allah The Most Beneficent The Most Merciful

"In the creation of the heavens and the earth, and in the alteration of night and day, are surely signs to men of understanding, such as keep before their minds the laws of Allah, standing and sitting and reclining, and reflect on the creation of the heaven and earth saying our Rubb # Thou has not created this in vain".

(Al-Quran Al-Karim 3:189)

Dedication

To the life

Acknowledgements

First and foremost, I thank Allah for giving the talent and strength to do this and everything else in my life. All of my efforts on this project work and everything else are for his glory and not my own.

I want to thank Mr. Nadeem Mehmood (Project Supervisor) for putting up with me as I raced to get this project done. Without his support and guidance, it would be really difficult to achieve this task.

My indebtedness and gratitude to Mr. Siddique Khilji who have helped in shaping this project cannot adequately be conveyed in a few sentences.

Many thanks to all the respected teachers and well wishing friends who extended towards whatever the help was needed. I also want to thank my loving parents and real friends who encouraged and supported in studies and whole of our lives.

Project in Brief

Project Title:

Colossal Data Warehouse (CDW)

Objectives:

Develop a massive, cost-effective, reliable and portable Data Warehouse that has storage optimization on other medium than hard disks and the readiness retrieval of data from that medium

Undertaken By:

Azhar Anwar

Supervised By:

Mr. Nadeem Mehmood Khan

Tools Used:

Oracle 9i Database Management System Enterprise Edition, Oracle Developer Forms 6i and PL/SQL

Operating System:

Windows 2000

System Used:

Intel Pentium III, 600 MHz

Abstract

Data Warehouse is a subject-oriented, integrated, non-volatile, time variant collection of data in support of management's decision. Data Warehouse provides instant access to historical data, which is very useful to forecast the trend that is not possible in mainframes (because they don't have the ability to do real-time analysis). The application CDW is developed, providing sufficient data for allowing decisions to be made in a more timely fashion, enhancing the competitiveness and cost structure of the corporation.

Colossal Data Warehouse as its name depict possesses the ability to store enormous amount of data. The key strategy used for the development of CDW is its dual storage that can be made on both hard disk and compact discs. The potential database chosen and developed for CDW is ISP Billing System. This database is developed using Oracle 9i Database Management System. Features like portability, reliability, and reduced use of resources in terms of system, bandwidth, end-users and market enhance the vision of this application. A Distributed Database approach is a very major constituent of this application as two types of data retrieval can be expected in general. One is for query/transaction processing, which is fulfilled by the use of Production Database. The second approach for data retrieval can be for the purpose of analysis that is fulfilled from the Historical Database. CDW is a client/server application design i.e. based on two tiers.

The application Colossal Data Warehouse is completely a new idea and is designed in such a way as to facilitate end-user browsing and execution of queries, both from a performance perspective and ease of understanding. For this purpose the application's front end is designed using Developer Forms 6i. This Project report guides you through the path carved for achieving such an application that requires a lot more than just an effort.

Bahria Institute of Management & Computer Sciences, Islamabad

(Department of Computer Science)

Certificate

We accept the work contained in this report as a confirming to the required standard for the partial fulfillment of the degree of MCS (Majors in Communication Networks) in the subject of Computer Science.

Head of Department

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