Abstract

The increasing demands for interactive response time from the users makes query performance one of the central problems of Data warehouse systems today. Performance is an important quality aspect of Data warehouse systems. Predicting the performance of Data warehouse systems during early design stages of their development is significant. Software Performance Engineering (SPE) promotes the idea that the integration of performance analysis into the software development process, from the earliest stages to the end, can ensure that the system will meet its performance objectives. This paper describes the features and use of a prototype tool, DWPPT (Data Warehouse Performance Prediction Tool) which is designed to analyze the performance of the Data warehouse in different environmental conditions. The tool supports SPE process for Data warehouse systems. The tool is useful for Data warehouse managers in
identifying critical components, diagnosing problems and hence optimizing the overall design. Our objective is to investigate the impact of Data warehouse design factors on OLAP performance for different user populations and hardware configurations. An analytical and simulation modeling approach is used for the tool to predict performance of Data warehouse systems.

References

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Index Terms

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