Abstract

Generally, software projects’ outcomes will give us various aspects of quality parameters. In such cases, empirical studies with prototyping exercises are well suited to analyze/understand the system. ETL (Extraction-Transformation-Loading) is the software responsible for extracting data, cleaning, transforming and loading the data into a data warehouse. ETL is a large software system. The performance of the decision support system depends on the data warehouse that it uses. ETL tools play a major role in building the data warehouse; these tools need to have good performance in order to improve the performance of the whole system. An experimental study is conducted to analyze the performance of the ETL tool. Two ETL tools are considered; one with integrated security and another without integrated security. The time for data extraction in different environments is recorded. Further, regression analysis is done on the experimental data and observed the behavior of the tools and developed the empirical models. Both tools have shown the same behavior in performance for different extraction data sizes.

Refer
Empirical Models for the Performance of ETL Processes


**Index Terms**

- Computer Science
- Software Engineering

**Keywords**

- Regression Analysis
- Integrated Security
- Secure ETL
- Performance Analysis
- Experimental Study.