

ABSTRACT

This paper discusses the academic data migration project from the Telkom Surabaya Institute of Technology (ITTS) to the central database at Telkom University Bandung. This project is part of the Telkom University National Campus (TUNC) project which aims to consolidate several campuses into one integrated system. This migration involves several stages, including data extraction (extract), transformation (transform), and data loading (ETL) to ensure data integration and consistency between campuses. The migration process begins with collecting data from the source database at ITTS. The extracted data is then changed in the staging database to match the existing data structure in the destination database before being loaded into the destination database at Telkom University Bandung. During the migration, various tools were used such as Oracle Database as the DBMS, DBeaver to manage operations in the database, WireGuard for secure network connections, and Pentaho Data Integration as an ETL tool. The results of this project show that academic data was successfully transferred while remaining integrated with the destination database structure. The use of the selected tools has proven to be effective in managing the transformation and data loading stages. The integration of new data with existing records was carried out without causing significant problems, supporting an integrated academic system on various Telkom University campuses. This project also provides insight into the importance of careful planning and use of appropriate technology in large-scale data migration projects.

Keyword: data migration, TUNC, ETL, pentaho, oracle