Annotation

The purpose of this work is to design and organize comprehensive protection of the Oracle database for the Bank.

The focus of this work was on DBMS protection, using Oracle tools, i.e. everything that is the responsibility of a DB security administrator. Since the goal of this work is comprehensive database protection, the task is also to organize security at the network level and at the application level. At the application level, the task was to develop an application that was protected from database attacks.

The input data of the work is an unsecured training relational database of the Bank designed by me (the source database).

The results of the work will be:

a) SQL script with its own functions, procedures, triggers, views, and DBMS configuration, aimed at protecting the source database with all its features;

b) bash scripts for automated backup of the source database, configuration of the DBMS server firewall and automation settings for Oracle Linux;

c) web-based application for secure database management, focused on protection against SQL injection and XSS attacks.