

Abstract

AUDITING IMPLEMENTATION IN AN ORACLE DATABASE WITH MONITORING APPLICATION

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This project focuses on the aspect of database security that deals with database auditing. An existing database application is examined, an auditing solution is developed for the database and an Audit Monitoring Application front end is developed to allow security officers to easily view the data that is being stored in the audit tables.

The audit is implemented using the Oracle built-in audit facility and the audit data is stored in the Oracle audit table in the Oracle database. The monitoring application is developed using Oracle forms and reports.

The implementation also involves the use of a text messaging solution that allows for the sending of e-mails to specified personnel when mission critical tables are being tampered with in an unauthorized manner.

In developing the auditing solution consideration was given to available resources and company policy. These limitations direct how some aspects of the audit implementation are designed and implemented.

Since this project deals with the very sensitive issue of database security the name of the company to which the examined database belongs was omitted. The database references were also changed so as not to expose the company's database, however, the changes were done in a way that still allowed the message to be communicated clearly.

Keywords: Johanne Joachim-Bowen; Johanne Bowen; Auditing; Oracle Auditing; Database Security