Vulnerability Assessment Report

1st January 2023

System Description

The server hardware consists of a powerful CPU processor and 128GB of memory. It runs on the latest version of Linux operating system and hosts a MySQL database management system. It is configured with a stable network connection using IPv4 addresses and interacts with other servers on the network. Security measures include SSL/TLS encrypted connections.

Scope

The scope of this vulnerability assessment relates to the current access controls of the system. The assessment will cover a period of three months, from June 20XX to August 20XX. <u>NIST SP 800-30 Rev. 1</u> is used to guide the risk analysis of the information system.

Purpose

 The database is a really valuable asset to the company because it includes confidential information about the customers and if this information is to be breached the company will face a lot of issues.

Risk Assessment

Threat source	Threat event	Likelihood	Severity	Risk
Competitor	Obtain sensitive information via exfiltration	3	3	9
Employee	Leakage the data by mistake	2	3	6
Customer	Alter/Delete critical information	1	3	3

Approach

Risks that were measured considered the data storage and management procedures of the business. Potential threat sources and events were determined using the likelihood of a security incident given the open access permissions of the information system. The severity of potential incidents were weighed against the impact on day-to-day operational needs.

Remediation Strategy

Implementation of authentication, authorization, and auditing mechanisms to ensure that only authorized users access the database server. This includes using strong passwords, role-based access controls, and multi-factor authentication to limit user privileges. Encryption of data in motion using TLS instead of SSL. IP allow-listing to corporate offices to prevent random users from the internet from connecting to the database.