**Vulnerability Assessment Report**

# 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. [NIST SP 800-30 Rev. 1](https://docs.google.com/document/d/1pRpdpQMEWskxSkwqEMv8W7A7x8GXQlcn0hEcDzWet3Y/template/preview?usp=sharing&resourcekey=0-3GRRWAd8HryVgof-Jc33yA) is used to guide the risk analysis of the information system.

# Purpose

*The database is a very valuable asset because it contains all the information. That includes data about customers. It is important to secure the data so no unauthorized users can access it. Also, the database stores information about customers so it is even more important to keep it safe. Disabled servers would be a big problem because there would be no place to store data and employees wouldn’t be able to get information about customers. Employees would not be able to continue with their work.*

# Risk Assessment

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Threat source** | **Threat event** | **Likelihood** | **Severity** | **Risk** |
| *Competitor* | *Obtain sensitive information via exfiltration* | *2* | *3* | *6* |
| *Hacker* | *Obfuscate future attacks.* | *3* | *3* | *9* |
| *Supplier* | *Alter/Delete critical information* | *1* | *3* | *3* |

# 

# Approach

Risks considered are the data storage and management methods of the business. The likelihood of a threat occurrence and the impact of these potential events were weighed against the risks to 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.