**Vulnerability Assessment Report**

**1st January 20XX**

# 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

A database is the central hub where a business stores its critical data. It’s important to keep the database server secure, as a security breach can lead to loss of trust, legal issues, and financial damage. Disabled database can cripple business operations.

# Risk Assessment

| **Threat source** | **Threat event** | **Likelihood** | **Severity** | **Risk** |
| --- | --- | --- | --- | --- |
| *Employee* | *Disrupt mission-critical operations* | *2* | *3* | *6* |
| *Customer* | *Alter/Delete critical information* | *2* | *3* | *6* |
| *Hacker* | *Obtain sensitive information via ex*  *ltration* | *3* | *3* | *9* |

# Approach

Risks are considered in 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.