

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](#) is used to guide the risk analysis of the information system.

Purpose

Consider the following questions to help you write:

- *How is the database server valuable to the business?*
- *Why is it important for the business to secure the data on the server?*
- *How might the server impact the business if it were disabled?*

The purpose of this vulnerability assessment is to reveal potential vulnerabilities and their effects on the business. Understanding and outlining the vulnerabilities allow us to ensure compliance with regulations and protect our data from unauthorized access. Breach of data can result in fines for non-compliance with regulations, loss of reputation from customers and business partners and loss of revenue.

Risk Assessment

Threat source	Threat event	Likelihood	Severity	Risk
Hacker	Obtain sensitive information via exfiltration	3	3	9
Employee	Disrupt mission-critical operations	2	3	6
Customer	Alter/Delete critical information	1	3	3

Approach

Risks considered 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.