# Vulnerability Assessment Report

1<sup>st</sup> 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 is used to guide the risk analysis of the information system.

#### **Purpose**

The database server is a centralized computer system which stores and manages large amounts of data of customer, campaign, and analytical data. These data can later be analyzed to track performance and personalize marketing efforts. It is really important to secure the system because of its regular use for marketing operations.

#### **Risk Assessment**

Threat source	Threat event	Likelihoo d	Severity	Risk
Hacker	Obtain sensitive information via	3	3	9

	exfiltration			
Employee	Disrupt mission-critical operations	2	3	6
Customer	Alter/Delete critical information	1	3	3

## **Approach**

Risks that are 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 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.