Threat Modeling Report

Created on 2/12/2022 10:06:44 PM

Threat Model Name:

Owner:

Reviewer:

Contributors:

Description:

Assumptions:

External Dependencies:

Threat Model Summary:

Not Started2Not Applicable2Needs Investigation5Mitigation Implemented3Total12Total Migrated0

Diagram: Diagram 1

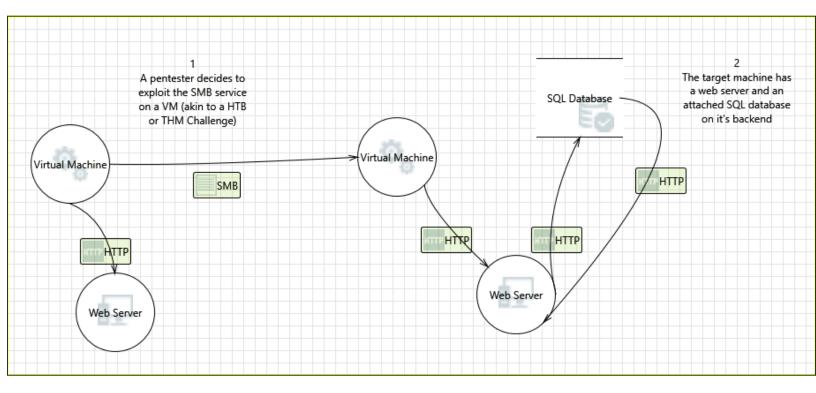
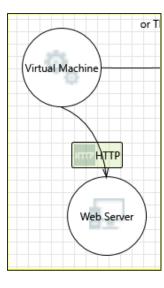


Diagram 1 Diagram Summary:

Not Applicable 2
Needs Investigation 5
Mitigation Implemented 3
Total 12
Total Migrated 0

Interaction: HTTP



1. Cross Site Scripting [State: Not Applicable] [Priority: High]

Category: Abuse

Description: The web server 'Web Server' could be a subject to a cross-site scripting attack because it does

not sanitize untrusted input.

Justification: Web server belongs to attacker's own VM

2. Elevation Using Impersonation [State: Not Applicable] [Priority: High]

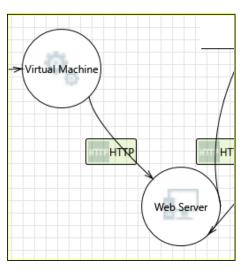
Category: Elevation Of Privilege

Description: Web Server may be able to impersonate the context of Virtual Machine in order to gain

additional privilege.

Justification: Web server belongs to attacker's own VM

Interaction: HTTP



3. Cross Site Scripting [State: Not Started] [Priority: High]

Category: Tampering

Description: The web server 'Web Server' could be a subject to a cross-site scripting attack because it does

not sanitize untrusted input.

Justification: Vulnerable attack vector

4. Elevation Using Impersonation [State: Needs Investigation] [Priority: High]

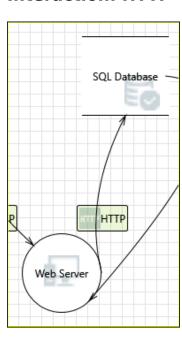
Category: Elevation Of Privilege

Description: Web Server may be able to impersonate the context of Virtual Machine in order to gain

additional privilege.

Justification: Gain additional privileges on target machine

Interaction: HTTP



5. Spoofing of Destination Data Store SQL Database [State: Not Started] [Priority: High]

Category: Spoofing

Description: SQL Database may be spoofed by an attacker and this may lead to data being written to the

attacker's target instead of SQL Database. Consider using a standard authentication mechanism

to identify the destination data store.

Justification: Possible attack vector

6. Potential SQL Injection Vulnerability for SQL Database [State: Needs Investigation] [Priority: High]

Category: Tampering

Description: SQL injection is an attack in which malicious code is inserted into strings that are later passed to

an instance of SQL Server for parsing and execution. Any procedure that constructs SQL

statements should be reviewed for injection vulnerabilities because SQL Server will execute all syntactically valid queries that it receives. Even parameterized data can be manipulated by a

skilled and determined attacker.

Justification: Vulnerable attack vector

7. Potential Excessive Resource Consumption for Web Server or SQL Database [State: Mitigation Implemented] [Priority: High]

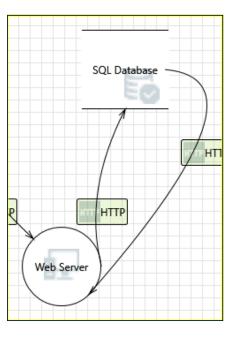
Category: Denial Of Service

Description: Does Web Server or SQL Database take explicit steps to control resource consumption? Resource consumption attacks can be hard to deal with, and there are times that it makes sense to let the

OS do the job. Be careful that your resource requests don't deadlock, and that they do timeout.

Justification: Not possible, unless the server or database are under a DDOS attack

Interaction: HTTP



8. Spoofing of Source Data Store SQL Database [State: Needs Investigation] [Priority: High]

Category: Spoofing

Description: SQL Database may be spoofed by an attacker and this may lead to incorrect data delivered to

Web Server. Consider using a standard authentication mechanism to identify the source data

store.

Justification: <no mitigation provided>

9. Cross Site Scripting [State: Mitigation Implemented] [Priority: High]

Category: Tampering

Description: The web server 'Web Server' could be a subject to a cross-site scripting attack because it does

not sanitize untrusted input.

Justification: XSS is not a possible attack vector that can be used to exfiltrate data from a database

10. Persistent Cross Site Scripting [State: Mitigation Implemented] [Priority: High]

Category: Tampering

Description: The web server 'Web Server' could be a subject to a persistent cross-site scripting attack

because it does not sanitize data store 'SQL Database' inputs and output.

Justification: XSS is not a possible attack vector that can be used to exfiltrate data from a database

11. Weak Access Control for a Resource [State: Needs Investigation] [Priority: High]

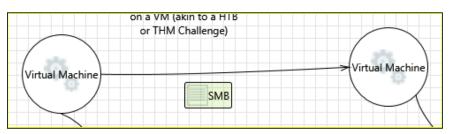
Category: Information Disclosure

Description: Improper data protection of SQL Database can allow an attacker to read information not

intended for disclosure. Review authorization settings.

Justification: Database can possibly be exploited, resulting in a breach

Interaction: SMB



12. Elevation Using Impersonation [State: Needs Investigation] [Priority: High]

Category: Elevation Of Privilege

Description: Virtual Machine may be able to impersonate the context of Virtual Machine in order to gain

additional privilege.

Justification: Attack vector exploitation to gain access into a foreign host