

SECURE CODING

LAB 12

18bce7015

Ch. Sree Vital

MODIFICATIONS HISTORY

Version	Date	Author	Description
1.0	13-06-2021	Ch.Sree Vital	Initial Version

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GENERAL INFORMATION

SCOPE

SC_LAB has mandated us to perform security tests on the following scope:

ORGANISATION

The testing activities were performed between 10-06-2021 and 13-06-2021.

EXECUTIVE SUMMARY

VULNERABILITIES SUMMARY

Following vulnerabilities have been discovered:

Risk	ID	Vulnerability	Affected Scope
Medium	VULN-001	.NET Framework Denial of Service Vulnerability	<div><div>MSRC-2019-0001</div><div>CVSS (V3-2011-0411)</div><div>10 - HIGH</div><div>Title: .NET Framework Denial of Service Vulnerability</div><div>Affected product: Microsoft .NET Framework 4.8 on Windows 10 version 1803 for x64-based systems</div><div>Affected component: Isolated VM</div><div>Severity: High</div><div>Impact: Denial of Service</div><div>Default: N/A</div></div>
Medium	VULN-003	.NET Framework Denial of Service Vulnerability -2	<div><div>MSRC-2019-0001</div><div>CVSS (V3-2011-0411)</div><div>10 - HIGH</div><div>Title: .NET Framework Denial of Service Vulnerability</div><div>Affected product: Microsoft .NET Framework 4.8 on Windows 10 version 1803 for x64-based systems</div><div>Affected component: Isolated VM</div><div>Severity: High</div><div>Impact: Denial of Service</div><div>Default: N/A</div></div>

TECHNICAL DETAILS

.NET FRAMEWORK DENIAL OF SERVICE VULNERABILITY

CVSS SEVERITY	Medium	CVSSv3 SCORE	6.2
CVSSv3 CRITERIAS	Attack Vector : Network Attack Complexity : High Required Privileges : Low User Interaction : Required	Scope : Unchanged Confidentiality : Medium Integrity : Low Availability : High	
AFFECTED SCOPE			
DESCRIPTION	A denial-of-service vulnerability exists when .NET Core or .NET Framework improperly handles web requests. An attacker who successfully exploited this vulnerability could cause a denial of service against a .NET Core or .NET Framework web application. The vulnerability can be exploited remotely, without authentication		
OBSERVATION	The vulnerability exists when Microsoft .NET Framework hashes specially crafted requests and inserts that data into a hash table, causing a hash collision . When many of these collisions are chained together, the performance of the hash table is greatly degraded, leading to the denial-of-service condition.		
TEST DETAILS			
<div>Date: 20210216 CVE: CVE-2021-24111 KB: KB4601050 Title: .NET Framework Denial of Service Vulnerability Affected product: Microsoft .NET Framework 4.8 on Windows 10 Version 20H2 for x64-based Systems Affected component: Issuing CNA Severity: Important Impact: Denial of Service Exploit: n/a</div>			
REMEDIATION	Microsoft .NET Framework Denial of Service Vulnerability (KB4603002) (mageni.net)		
REFERENCES	https://hackerone.com/reports/485748		

.NET FRAMEWORK DENIAL OF SERVICE VULNERABILITY-2.NET FRAMEWORK DENIAL OF SERVICE VULNERABILITY

CVSS SEVERITY	Medium	CVSSv3 SCORE	4.5
CVSSv3 CRITERIAS	Attack Vector : Physical Attack Complexity : High Required Privileges : Low User Interaction : Required	Scope : Unchanged Confidentiality : None Integrity : Low Availability : High	
AFFECTED SCOPE			
DESCRIPTION	A denial-of-service vulnerability exists when .NET Core or .NET Framework improperly handles web requests. An attacker who successfully exploited this vulnerability could cause a denial of service against a .NET Core or .NET Framework web application. The vulnerability can be exploited remotely, without authentication		
OBSERVATION	The vulnerability exists when Microsoft .NET Framework hashes specially crafted requests and inserts that data into a hash table, causing a hash collision . When many of these collisions are chained together, the performance of the hash table is greatly degraded, leading to the denial-of-service condition.		
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Date: 20210216 CVE: CVE-2021-24111 KB: KB4601050 Title: .NET Framework Denial of Service Vulnerability Affected product: Microsoft .NET Framework 4.8 on Windows 10 Version 20H2 for x64-based Systems Affected component: Issuing CNA Severity: Important Impact: Denial of Service Exploit: n/a			
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