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DATE(S) ISSUED:

03/07/2022

SUBJECT:

Multiple Vulnerabilities in Mozilla Firefox and Could Allow for Remote Code Execution

OVERVIEW:

Multiple vulnerabilities have been discovered in Mozilla Firefox and Firefox Extended Support Release (ESR), the most severe of which could allow for remote code execution.

- Mozilla Firefox is a web browser used to access the Internet.
- Mozilla Firefox ESR is a version of the web browser intended to be deployed in large organizations.

Successful exploitation of the most severe of these vulnerabilities could allow for remote code execution. Depending on the privileges associated with the user an attacker could then install programs; view, change, or delete data; or create new accounts with full user rights. Users whose accounts are configured to have fewer user rights on the system could be less impacted than those who operate with administrative user rights.

THREAT INTELLIGENCE:

There are currently reports of these vulnerabilities being exploited in the wild.

SYSTEMS AFFECTED:

- Mozilla Firefox versions prior to 97.0.2
- Firefox ESR versions prior to 91.6.1

RISK:

Government:

- Large and medium government entities: High
- Small government entities: Medium

Businesses:

Large and medium business entities: High

• Small business entities: Medium

Home users: Low

LOW

TECHNICAL SUMMARY:

Multiple vulnerabilities have been discovered in Mozilla Firefox and Firefox Extended Support Release (ESR), the most severe of which could allow for remote code execution. Details of these vulnerabilities are as follows:

- Use-after-free in XSLT parameter processing (CVE-2022-26485)
- Use-after-free in WebGPU IPC Framework (CVE-2022-26486)

Successful exploitation of the most severe of these vulnerabilities could allow for remote code execution. Depending on the privileges associated with the user an attacker could then install programs; view, change, or delete data; or create new accounts with full user rights. Users whose accounts are configured to have fewer user rights on the system could be less impacted than those who operate with administrative user rights.

RECOMMENDATIONS:

The following actions should be taken:

- Apply appropriate updates provided by Mozilla to vulnerable systems immediately after appropriate testing.
- Run all software as a non-privileged user (one without administrative privileges) to diminish the effects of a successful attack.
- Remind users not to visit un-trusted websites or follow links provided by unknown or untrusted sources.
- Inform and educate users regarding the threats posed by hypertext links contained in emails or attachments especially from un-trusted sources.
- Apply the Principle of Least Privilege to all systems and services.

REFERENCES:

Mozilla:

https://www.mozilla.org/en-US/security/advisories/mfsa2022-09/

CVE:

https://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2022-26485 https://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2022-26486