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**DATE(S) ISSUED:**

04/12/2016

**SUBJECT:**

Cumulative Security Update for Microsoft Edge (MS16-038)

**OVERVIEW:**

Multiple vulnerabilities have been discovered in Microsoft Edge that could allow for remote code execution. Microsoft Edge replaced Internet Explorer as the default browser on Windows 10. Successful exploitation of these vulnerabilities could result in an attacker gaining the same privileges as the logged on user. 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.

**THREAT INTELLIGENCE:**

There are no reports of these vulnerabilities being exploited in the wild.

**SYSTEM AFFECTED:**

- Microsoft Edge

**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**

**TECHNICAL SUMMARY:**

Multiple vulnerabilities exist in Microsoft Edge that could allow for remote code execution. The vulnerabilities are as follows:

- Four memory corruption vulnerabilities exist that could allow an attacker to execute remote code (CVE-2016-0154, CVE-2016-0155, CVE-2016-0156, CVE-2016-0157).
- An elevation of privilege vulnerability exists when Microsoft Edge does not properly enforce cross-domain policies (CVE-2016-0158).
- An elevation of privilege vulnerability exists in Microsoft Edge when it improperly validates Javascript under certain conditions (CVE-2016-0161).

**RECOMMENDATIONS:**

The following actions should be taken:

- Apply appropriate patches provided by Microsoft 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 un-trusted sources.
- Inform and educate users regarding the threats posed by hypertext links contained in emails or attachments, especially those from un-trusted sources.

**REFERENCES:****Microsoft:**

<https://technet.microsoft.com/library/security/MS16-038>

**CVE:**

<https://www.cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2016-0154>

<https://www.cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2016-0155>

<https://www.cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2016-0156>

<https://www.cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2016-0157>

<https://www.cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2016-0158>

<https://www.cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2016-0161>

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