



**State of Alaska Cyber Security &  
Critical Infrastructure  
Cyber Advisory**

**June 14, 2016**

*The following cyber advisory was issued by the State of Alaska and was intended for State government entities. The information may or may not be applicable to the general public and accordingly, the State does not warrant its use for any specific purposes.*

**ADVISORY NUMBER:**

SA2016-091

**DATE(S) ISSUED:**

06/14/2016

**SUBJECT:**

Cumulative Security Update for Microsoft Edge (MS16-068)

**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 currently no reports of this vulnerability being exploited in the wild.

**SYSTEMS AFFECTED:**

- Windows 10

**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 have been discovered in Microsoft Edge that could allow for remote code execution. These include:

- Four Scripting Engine Memory Corruption vulnerabilities exist in the way Chakra JavaScript engine renders when handling objects in memory (CVE-2016-3199, CVE-2016-3202, CVE-2016-3214, CVE-2016-3222)
- Two Windows PDF Information Disclosure Vulnerabilities exist when a user opens a specially-crafted .pdf file (CVE-2016-3201, CVE-2016-3215)
- One Windows PDF Remote Code Execution Vulnerability exists when a user opens a specially-crafted .pdf file (CVE-2016-3203)
- One Security Feature Bypass vulnerability exists when the Edge Content Security Policy fails to properly validate specially crafted documents (CVE-2016-3198)

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. Customers 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:**

We recommend the following actions 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/en-us/library/security/mt720684.aspx>

**CVE:**

<https://www.cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2016-3198>

<https://www.cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2016-3199>

<https://www.cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2016-3201>

<https://www.cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2016-3202>

<https://www.cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2016-3203>

<https://www.cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2016-3214>

<https://www.cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2016-3215>

<https://www.cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2016-3222>