



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

March 08, 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:

SA2016-039

DATE(S) ISSUED:

03/08/2016

SUBJECT:

Cumulative Security Update for Internet Explorer (MS16-023)

OVERVIEW:

Multiple vulnerabilities have been discovered in Microsoft Internet Explorer. These vulnerabilities could allow an attacker to execute code in the context of the browser if a user views a specially crafted web page. An attacker who successfully exploited these vulnerabilities could gain the same rights as the current user. Depending on the privileges associated with the user, an attacker could 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:

- Internet Explorer 9

- Internet Explorer 10
- Internet Explorer 11

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:

Thirteen remote code execution vulnerabilities exist when Internet Explorer improperly accesses objects in memory. These vulnerabilities could allow an attacker to execute remote code by luring a victim view a webpage containing malicious code. Successful exploitation of these vulnerabilities could result in an attacker gaining the same rights as the current user. If the current user is logged on with administrative user rights an attacker could then install programs; view, change, or delete data; or create new accounts with full user rights. (CVE-2016-0102, CVE-2016-0103, CVE-2016-0104, CVE-2016-0105, CVE-2016-0106, CVE-2016-0107, CVE-2016-0108, CVE-2016-0109, CVE-2016-0110, CVE-2016-0111, CVE-2016-0112, CVE-2016-0113, CVE-2016-0114)

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/ms16-023.aspx>

CVE:

<https://www.cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2016-0102>

<https://www.cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2016-0103>

<https://www.cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2016-0104>

<https://www.cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2016-0105>

<https://www.cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2016-0106>

<https://www.cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2016-0107>

<https://www.cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2016-0108>

<https://www.cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2016-0109>

<https://www.cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2016-0110>

<https://www.cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2016-0111>

<https://www.cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2016-0112>

<https://www.cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2016-0113>

<https://www.cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2016-0114>