



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

August 9, 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:

SA2016-119

DATE(S) ISSUED:

08/09/2016

SUBJECT:

Security Update for Microsoft Office (MS16-099)

OVERVIEW:

Multiple vulnerabilities have been discovered in Microsoft Office, the most severe of which could result in remote code execution if the user opens a specifically crafted Microsoft Office file. 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. 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 no reports of these vulnerabilities being exploited in the wild.

SYSTEM AFFECTED:

- Microsoft Office 2007, 2010, 2013, 2013 RT, 2016
- Microsoft Office for Mac 2011
- Microsoft Office 2016 for Mac
- Microsoft Word Viewer

RISK:

Government:

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

Businesses:

- Large and medium business entities: **High**

- Small business entities: **Medium**

Home users: Low

TECHNICAL SUMMARY:

Multiple vulnerabilities have been discovered in Microsoft Office, the most severe of which could allow for remote code execution if a user opens a specially crafted Microsoft Office file. An attacker who successfully exploited these vulnerabilities could run arbitrary code in the context of the current user.

- Four memory corruption vulnerabilities exist when Microsoft Office fails to properly handle objects in memory. (CVE-2016-3313, CVE-2016-3316, CVE-2016-3317, CVE-2016-3318)
- One information disclosure vulnerability exists when Microsoft Office OneNote improperly discloses its memory contents. (CVE-2016-3315)

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. 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:

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 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 untrusted sources.
- Apply the principle of Least Privilege to all systems and services.

REFERENCES:

Microsoft:

<https://technet.microsoft.com/en-us/library/security/MS16-099>

CVE:

<http://www.cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2016-3313>

<http://www.cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2016-3315>

<http://www.cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2016-3316>

<http://www.cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2016-3317>

<http://www.cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2016-3318>