

Raytheon Blackbird Technologies

**20150828-270-Dell SecureWorks
Sakula**

**For
SIRIUS Task Order PIQUE**

**Submitted to:
U.S. Government**

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1.0 (U) Analysis Summary

(S//NF) The following report details a Remote Access Tool named Sakula also known as Sakurel and VIPER. This RAT has been in use since 2012.

(S//NF) Sakula has been observed being delivered in a strategic web compromise that used the CVE-2014-0322 vulnerability when it was still a zero-day in Internet Explorer. Some variants have also been digitally appearing as legitimate software.

(S//NF) This RAT either sets a registry key or installs itself as a service to maintain persistence. The report states that UAC bypass is achieved via running a dll however no further details are provided. Sakula uses HTTP GET and POST communications for command and control (C&C). Network communications are obfuscated using single-byte XOR encoding. This same technique is also used to obfuscate strings and files in the malware.

(S//NF) In conclusion, Sakula is a very simplistic RAT that hides its traffic by XOR encoding the data. No new techniques worthy of a PoC were presented.

2.0 (U) Description of the Technique

(S//NF) No techniques are recommended for PoC development.

3.0 (U) Identification of Affected Applications

(U) Windows, Internet Explorer

4.0 (U) Related Techniques

(S//NF) RAT

5.0 (U) Configurable Parameters

(U) None

6.0 (U) Exploitation Method and Vectors

(S//NF) Sakula is delivered using a strategic web compromise leveraging CVE-2014-0322, an Internet Explorer vulnerability.

7.0 (U) Caveats

(U) None.

8.0 (U) Risks

(S//NF) Not applicable because we do not recommend any techniques for PoC development.

9.0 (U) Recommendations

(S//NF) No PoCs recommended.