

Technical Tip: [Critical vulnerability] Protect against heap-based buffer overflow in sslvpnd

Description

Staff

This article describes how a critical heap-based buffer overflow vulnerability [CWE-122] in FortiOS SSL-VPN may allow a remote, unauthenticated attacker to execute arbitrary code or commands with specifically crafted requests. See the FortiGuard page on the vulnerability for more details: https://www.fortiguard.com/psirt/FG-IR-22-398

Scope

FortiGate.

Solution

Fortinet recommends taking immediate action to mitigate this vulnerability (by <u>disabling SSL VPN</u>) before upgrading to the latest release, as documented in the advisory.

If a FortiGate is managed by a FortiManager, ensure that the FortiManager is upgraded to a compatible version before upgrading the FortiGate. For more information, see the <u>FortiManager Compatibility Chart</u>.

To search for the Crash Log indicators of compromise documented in the advisory, search the Event Logs either on the FortiGate or the FortiAnalyzer for multiple System level log events containing the following information:

```
Logdesc="Application crashed" and msg="[...] application: sslvpnd,[...], Signal 11 received, Backtrace: [...]"
```

Alternatively, execute the following command on the FortiGate CLI:

diagnose debug crashlog read

Search for multiple examples of the following:

```
xxxx: [ Date & Time ] <.....> firmware [ Firmware version ]
xxxx: [ Date & Time ] <.....> application sslvpnd
xxxx: [ Date & Time ] <.....> *** signal 11 (Segmentation fault) received ***
```

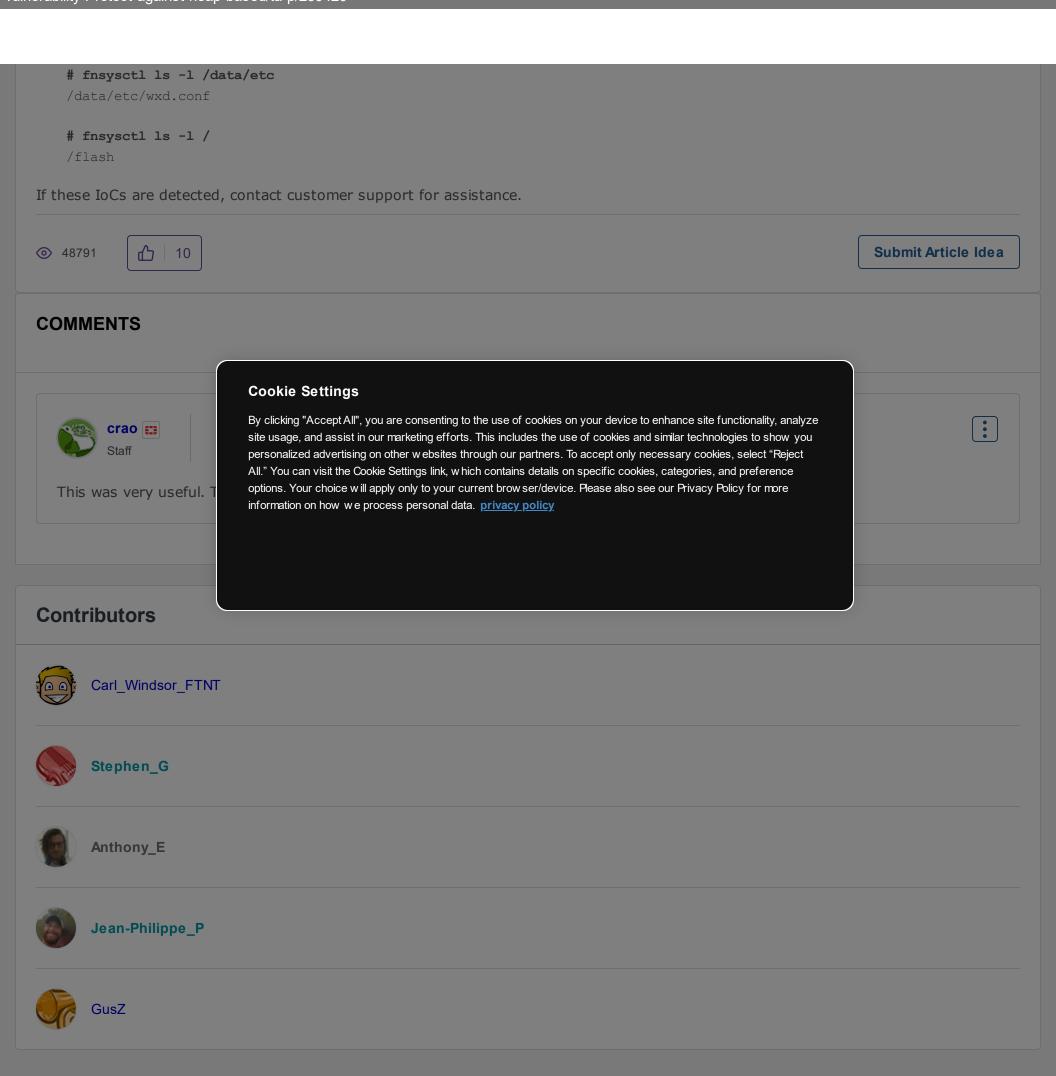
Additionally, search for the presence of the IoC artifacts in the filesystem with the fnsysctl command:

fnsysctl ls -l /data/lib

```
/data/lib/libips.bak
/data/lib/libiptcp.so
/data/lib/libipudp.so
/data/lib/libjepg.so
```

fnsysctl ls -la /var

/var/.sslvpnconfigbk



FERTINET Community

Broad. Integrated. Automated.

The Fortinet Security Fabric brings together the concepts of convergence and consolidation to provide comprehensive cybersecurity protection for all users, devices, and applications and across all network edges.

Social Media













SECURITY RESEARCH

COMPANY

NEWS & ARTICLES

Threat Research

About Us

News Releases

FortiGuard Labs

Security Fabric

News Articles

Exec. Mgmt Threat Map Trademarks **Threat Briefs** Careers **CONTACT US** Certifications Ransomware Corporate Getting Started Resources **Events** Community Industry Awards Social Responsibility Copyright 202 ie Settings

Cookie Settings

By clicking "Accept All", you are consenting to the use of cookies on your device to enhance site functionality, analyze site usage, and assist in our marketing efforts. This includes the use of cookies and similar technologies to show you personalized advertising on other w ebsites through our partners. To accept only necessary cookies, select "Reject All." You can visit the Cookie Settings link, w hich contains details on specific cookies, categories, and preference options. Your choice will apply only to your current browser/device. Please also see our Privacy Policy for more information on how we process personal data. privacy-policy