



# CVE-2016-2181

[MITRE](#)[NVD](#)[CVE.ORG](#)[Print: PDF !\[\]\(e3f8612927870f2e0f9f5989e6dd3064\_img.jpg\)](#)

## Summary

<b>CVE</b>	CVE-2016-2181
<b>State</b>	PUBLIC
<b>Assigner</b>	secalert@redhat.com
<b>Source Priority</b>	CVE Program / NVD first with legacy fallback
<b>Published</b>	2016-09-16 05:59:00 UTC
<b>Updated</b>	2023-11-07 02:31:00 UTC
<b>Description</b>	The Anti-Replay feature in the DTLS implementation in OpenSSL before 1.1.0 mishandles early use of a new epoch number

## Risk And Classification

**Problem Types:** CWE-189

## NVD Known Affected Configurations (CPE 2.3)

Type	Vendor	Product	Version	Update	Edition	Language
Application	Openssl	Openssl	1.0.1	All	All	All
Application	Openssl	Openssl	1.0.1a	All	All	All
Application	Openssl	Openssl	1.0.1b	All	All	All
Application	Openssl	Openssl	1.0.1c	All	All	All
Application	Openssl	Openssl	1.0.1d	All	All	All
Application	Openssl	Openssl	1.0.1e	All	All	All
Application	Openssl	Openssl	1.0.1f	All	All	All
Application	Openssl	Openssl	1.0.1g	All	All	All
Application	Openssl	Openssl	1.0.1h	All	All	All
Application	Openssl	Openssl	1.0.1i	All	All	All
Application	Openssl	Openssl	1.0.1j	All	All	All
Application	Openssl	Openssl	1.0.1k	All	All	All
Application	Openssl	Openssl	1.0.1l	All	All	All
Application	Openssl	Openssl	1.0.1m	All	All	All
Application	Openssl	Openssl	1.0.1n	All	All	All
Application	Openssl	Openssl	1.0.1o	All	All	All
Application	Openssl	Openssl	1.0.1p	All	All	All

Application	Openssl	Openssl	1.0.1q	All	All	All
Application	Openssl	Openssl	1.0.1r	All	All	All
Application	Openssl	Openssl	1.0.1s	All	All	All
Application	Openssl	Openssl	1.0.1t	All	All	All
Application	Openssl	Openssl	1.0.2	All	All	All
Application	Openssl	Openssl	1.0.2a	All	All	All
Application	Openssl	Openssl	1.0.2b	All	All	All
Application	Openssl	Openssl	1.0.2c	All	All	All
Application	Openssl	Openssl	1.0.2d	All	All	All
Application	Openssl	Openssl	1.0.2e	All	All	All
Application	Openssl	Openssl	1.0.2f	All	All	All
Application	Openssl	Openssl	1.0.2g	All	All	All
Application	Openssl	Openssl	1.0.2h	All	All	All
Application	Openssl	Openssl	1.0.1	All	All	All
Application	Openssl	Openssl	1.0.1a	All	All	All
Application	Openssl	Openssl	1.0.1b	All	All	All
Application	Openssl	Openssl	1.0.1c	All	All	All
Application	Openssl	Openssl	1.0.1d	All	All	All
Application	Openssl	Openssl	1.0.1e	All	All	All
Application	Openssl	Openssl	1.0.1f	All	All	All
Application	Openssl	Openssl	1.0.1g	All	All	All
Application	Openssl	Openssl	1.0.1h	All	All	All
Application	Openssl	Openssl	1.0.1i	All	All	All
Application	Openssl	Openssl	1.0.1j	All	All	All
Application	Openssl	Openssl	1.0.1k	All	All	All
Application	Openssl	Openssl	1.0.1l	All	All	All
Application	Openssl	Openssl	1.0.1m	All	All	All
Application	Openssl	Openssl	1.0.1n	All	All	All
Application	Openssl	Openssl	1.0.1o	All	All	All
Application	Openssl	Openssl	1.0.1p	All	All	All
Application	Openssl	Openssl	1.0.1q	All	All	All
Application	Openssl	Openssl	1.0.1r	All	All	All
Application	Openssl	Openssl	1.0.1s	All	All	All
Application	Openssl	Openssl	1.0.1t	All	All	All
Application	Openssl	Openssl	1.0.2	All	All	All

Application	<a href="#">Openssl</a>	<a href="#">Openssl</a>	1.0.2a	All	All	All
Application	<a href="#">Openssl</a>	<a href="#">Openssl</a>	1.0.2b	All	All	All
Application	<a href="#">Openssl</a>	<a href="#">Openssl</a>	1.0.2c	All	All	All
Application	<a href="#">Openssl</a>	<a href="#">Openssl</a>	1.0.2d	All	All	All
Application	<a href="#">Openssl</a>	<a href="#">Openssl</a>	1.0.2e	All	All	All
Application	<a href="#">Openssl</a>	<a href="#">Openssl</a>	1.0.2f	All	All	All
Application	<a href="#">Openssl</a>	<a href="#">Openssl</a>	1.0.2g	All	All	All
Application	<a href="#">Openssl</a>	<a href="#">Openssl</a>	1.0.2h	All	All	All
Operating System	<a href="#">Oracle</a>	<a href="#">Linux</a>	6	All	All	All
Operating System	<a href="#">Oracle</a>	<a href="#">Linux</a>	7	All	All	All
Operating System	<a href="#">Oracle</a>	<a href="#">Linux</a>	6	All	All	All
Operating System	<a href="#">Oracle</a>	<a href="#">Linux</a>	7	All	All	All

## References

### Reference

[security-announce] [openSUSE-SU-2016:2537-1](#): important: Security update for compat-openssl098 - openSUSE Security Announce - openS

[security-announce] [SUSE-SU-2016:2394-1](#): important: Security update for

[OpenSSL CVE-2016-2181 Denial of Service Vulnerability](#)

[security-announce] [SUSE-SU-2016:2458-1](#): important: Security update for

[security-announce] [SUSE-SU-2016:2468-1](#): important: Security update for

[/news/vulnerabilities.html](#)

[Oracle Critical Patch Update - January 2018](#)

[Oracle Critical Patch Update - April 2018](#)

[USN-3087-1: OpenSSL vulnerabilities | Ubuntu](#)

[Splunk Enterprise 6.4.5 addresses multiple vulnerabilities | Splunk](#)

[Oracle Linux Bulletin - October 2016](#)

[Oracle Critical Patch Update - October 2016](#)

[security-announce] [openSUSE-SU-2018:0458-1](#): important: Security update

[git.openssl.org Git - openssl.git/commit](#)

[Debian -- Security Information -- DSA-3673-1 openssl](#)

[Public KB - SA40312 - September 22 2016 OpenSSL Security Advisory](#)

[security-announce] [openSUSE-SU-2016:2407-1](#): important: Security update

[security-announce] [SUSE-SU-2016:2469-1](#): important: Security update for

[OpenSSL DTLS Replace Protection Sequence Number Processing Errors Let Remote Users Deny Service - SecurityTracker](#)

[security-announce] [openSUSE-SU-2016:2391-1](#): important: Security update

[Knowledge Center](#)

Security Advisory 0024 - Arista

Red Hat Customer Portal

[R5] Nessus 6.9 Fixes Multiple Vulnerabilities - Security Advisory | Tenable Network Security

[security-announce] SUSE-SU-2017:2700-1: important: Security update for SLES 12-SP1 Docker image - openSUSE Security Announce - openSUSE

USN-3087-2: OpenSSL regression | Ubuntu

SA132 : OpenSSL Vulnerabilities 22-Sep-2016 and 26-Sep-2016

cert-portal.siemens.com/productcert/pdf/ssa-412672.pdf

Splunk Enterprise 6.5.1 addresses multiple OpenSSL vulnerabilities | Splunk

Oracle VM Server for x86 Bulletin - October 2016

git.openssl.org Git - openssl.git/commit

[R2] PVS 5.2.0 Fixes Multiple Third-party Library Vulnerabilities - Security Advisory | Tenable Network Security

Full Disclosure: Orion Elite Hidden IP Browser Pro - All Versions - Multiple Known Vulnerabilities

Juniper Networks - 2016-10 Security Bulletin: OpenSSL security updates

[security-announce] SUSE-SU-2017:2699-1: important: Security update for

Security Advisory - Sixteen OpenSSL Vulnerabilities on Some Huawei products

[security-announce] SUSE-SU-2016:2387-1: important: Security update for

IBM Security Bulletin: Vulnerabilities in OpenSSL, OpenVPN and GNU glibc affect IBM Security Virtual Server Protection for VMware - United States

support.f5.com/csp/article/K59298921

Oracle Critical Patch Update - July 2017

[R1] LCE 4.8.2 Fixes Multiple Third-party Library Vulnerabilities - Security Advisory | Tenable Network Security

Oracle Critical Patch Update - October 2017

FreeBSD-SA-16:26

CVE Program record

NVD vulnerability detail



No vendor comments have been submitted for this CVE.

### Legacy QID Mappings

[390226](#) Oracle Managed Virtualization (VM) Server for x86 Security Update for Open Secure Sockets Layer (OpenSSL) (OVMSA-2021-0011)

[390284](#) Oracle Managed Virtualization (VM) Server for x86 Security Update for Open Secure Sockets Layer (OpenSSL) (OVMSA-2023-0013)

[591280](#) Siemens SCALANCE X-200RNA Switch Devices Denial of Service (DoS) Multiple Vulnerabilities (ICSA-22-349-21, SSA-412672)

[671073](#) EulerOS Security Update for Open Secure Sockets Layer098e (OpenSSL098e) (EulerOS-SA-2019-2643)

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