



*Full credit is given to the above companies including the OS that this PDF file was generated!*

## **Red Hat Enterprise Linux Release 9.2 Manual Pages on 'openssl-speed.1ossl' command**

**\$ man openssl-speed.1ossl**

OPENSSL-SPEED(1ossl)          OpenSSL          OPENSSL-SPEED(1ossl)

### NAME

openssl-speed - test library performance

### SYNOPSIS

openssl speed [-help] [-elapsed] [-evp algo] [-hmac algo] [-cmac algo]  
[-mb] [-aead] [-multi num] [-async\_jobs num] [-misalign num] [-decrypt]  
[-primes num] [-seconds num] [-bytes num] [-mr] [-rand files]  
[-writerand file] [-engine id] [-provider name] [-provider-path path]  
[-propquery propq] [algorithm ...]

### DESCRIPTION

This command is used to test the performance of cryptographic algorithms.

### OPTIONS

-help

Print out a usage message.

-elapsed

When calculating operations- or bytes-per-second, use wall-clock time instead of CPU user time as divisor. It can be useful when testing speed of hardware engines.

-evp algo

Use the specified cipher or message digest algorithm via the EVP interface. If algo is an AEAD cipher, then you can pass -aead to benchmark a TLS-like sequence. And if algo is a multi-buffer

capable cipher, e.g. aes-128-cbc-hmac-sha1, then -mb will time multi-buffer operation.

To see the algorithms supported with this option, use "openssl list -digest-algorithms" or "openssl list -cipher-algorithms" command.

-multi num

Run multiple operations in parallel.

-async\_jobs num

Enable async mode and start specified number of jobs.

-misalign num

Misalign the buffers by the specified number of bytes.

-hmac digest

Time the HMAC algorithm using the specified message digest.

-cmac cipher

Time the CMAC algorithm using the specified cipher e.g. "openssl speed -cmac aes128".

-decrypt

Time the decryption instead of encryption. Affects only the EVP testing.

-mb Enable multi-block mode on EVP-named cipher.

-aead

Benchmark EVP-named AEAD cipher in TLS-like sequence.

-primes num

Generate a num-prime RSA key and use it to run the benchmarks. This option is only effective if RSA algorithm is specified to test.

-seconds num

Run benchmarks for num seconds.

-bytes num

Run benchmarks on num-byte buffers. Affects ciphers, digests and the CSPRNG. The limit on the size of the buffer is INT\_MAX - 64 bytes, which for a 32-bit int would be 2147483583 bytes.

-mr Produce the summary in a mechanical, machine-readable, format.

-rand files, -writerand file

See "Random State Options" in openssl(1) for details.

-engine id

See "Engine Options" in openssl(1). This option is deprecated.

-provider name

-provider-path path

-propquery propq

See "Provider Options" in openssl(1), provider(7), and property(7).

algorithm ...

If any algorithm is given, then those algorithms are tested,

otherwise a pre-compiled grand selection is tested.

## BUGS

The algorithm can be selected only from a pre-compiled subset of things that the "openssl speed" command knows about. To test any additional digest or cipher algorithm supported by OpenSSL use the "-evp" option.

There is no way to test the speed of any additional public key algorithms supported by third party providers with the "openssl speed" command.

## HISTORY

The -engine option was deprecated in OpenSSL 3.0.

## COPYRIGHT

Copyright 2000-2022 The OpenSSL Project Authors. All Rights Reserved.  
Licensed under the Apache License 2.0 (the "License"). You may not use this file except in compliance with the License. You can obtain a copy in the file LICENSE in the source distribution or at  
<<https://www.openssl.org/source/license.html>>.

3.0.7                    2023-07-13            OPENSSL-SPEED(1ossl)