

NAME

openssl-speed, speed – test library performance

SYNOPSIS

openssl speed [**-help**] [**-engine id**] [**-elapsed**] [**-evp algo**] [**-decrypt**] [**-rand file...**] [**-writerand file**] [**-primes num**] [**-seconds num**] [**-bytes num**] [**algorithm...**]

DESCRIPTION

This command is used to test the performance of cryptographic algorithms. To see the list of supported algorithms, use the *list --digest-commands* or *list --cipher-commands* command. The global CSPRNG is denoted by the *rand* algorithm name.

OPTIONS**-help**

Print out a usage message.

-engine id

Specifying an engine (by its unique **id** string) will cause **speed** to attempt to obtain a functional reference to the specified engine, thus initialising it if needed. The engine will then be set as the default for all available algorithms.

-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.

-decrypt

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

-rand file...

A file or files containing random data used to seed the random number generator. Multiple files can be specified separated by an OS-dependent character. The separator is **;** for MS-W indows, **,** for OpenVMS, and **:** for all others.

[-writerand file]

Writes random data to the specified *file* upon exit. This can be used with a subsequent **-rand** flag.

-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.

[zero or more test algorithms]

If any options are given, **speed** tests those algorithms, otherwise a pre-compiled grand selection is tested.

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