

**NAME**

openssl-list - list algorithms and features

**SYNOPSIS**

```
openssl list [-help] [-verbose] [-select name] [-1] [-commands] [-standard-commands]
[-digest-algorithms] [-digest-commands] [-kdf-algorithms] [-mac-algorithms] [-random-instances]
[-random-generators] [-cipher-algorithms] [-cipher-commands] [-encoders] [-decoders]
[-key-managers] [-key-exchange-algorithms] [-kem-algorithms] [-signature-algorithms]
[-asymciphper-algorithms] [-public-key-algorithms] [-public-key-methods] [-store-loaders] [-providers]
[-engines] [-disabled] [-objects] [-options command] [-provider name] [-provider-path path]
[-propquery propq]
```

**DESCRIPTION**

This command is used to generate list of algorithms or disabled features.

**OPTIONS****-help**

Display a usage message.

**-verbose**

Displays extra information. The options below where verbosity applies say a bit more about what that means.

**-select *name***

Only list algorithms that match this name.

**-1** List the commands, digest-commands, or cipher-commands in a single column. If used, this option must be given first.

**-commands**

Display a list of standard commands.

**-standard-commands**

List of standard commands.

**-digest-commands**

This option is deprecated. Use **digest-algorithms** instead.

Display a list of message digest commands, which are typically used as input to the **openssl-dgst(1)** or **openssl-speed(1)** commands.

**-cipher-commands**

This option is deprecated. Use **cipher-algorithms** instead.

Display a list of cipher commands, which are typically used as input to the **openssl-enc(1)** or **openssl-speed(1)** commands.

**-cipher-algorithms, -digest-algorithms, -kdf-algorithms, -mac-algorithms,**

Display a list of symmetric cipher, digest, kdf and mac algorithms. See "Display of algorithm names" for a description of how names are displayed.

In verbose mode, the algorithms provided by a provider will get additional information on what parameters each implementation supports.

**-random-instances**

List the primary, public and private random number generator details.

**-random-generators**

Display a list of random number generators. See "Display of algorithm names" for a description of how names are displayed.

**-encoders**

Display a list of encoders. See "Display of algorithm names" for a description of how names are displayed.

In verbose mode, the algorithms provided by a provider will get additional information on what parameters each implementation supports.

**-decoders**

Display a list of decoders. See "Display of algorithm names" for a description of how names are displayed.

In verbose mode, the algorithms provided by a provider will get additional information on what parameters each implementation supports.

**-public-key-algorithms**

Display a list of public key algorithms, with each algorithm as a block of multiple lines, all but the first are indented. The options **key-exchange-algorithms**, **kem-algorithms**, **signature-algorithms**, and **asymcipher-algorithms** will display similar info.

**-public-key-methods**

Display a list of public key methods.

**-key-managers**

Display a list of key managers.

**-key-exchange-algorithms**

Display a list of key exchange algorithms.

**-kem-algorithms**

Display a list of key encapsulation algorithms.

**-signature-algorithms**

Display a list of signature algorithms.

**-asymciphper-algorithms**

Display a list of asymmetric cipher algorithms.

**-store-loaders**

Display a list of store loaders.

**-providers**

Display a list of all loaded providers with their names, version and status.

In verbose mode, the full version and all provider parameters will additionally be displayed.

**-engines**

This option is deprecated.

Display a list of loaded engines.

**-disabled**

Display a list of disabled features, those that were compiled out of the installation.

**-objects**

Display a list of built in objects, i.e. OIDs with names. They're listed in the format described in "ASN1 Object Configuration Module" in **config(5)**.

**-options** *command*

Output a two-column list of the options accepted by the specified *command*. The first is the option name, and the second is a one-character indication of what type of parameter it takes, if

any. This is an internal option, used for checking that the documentation is complete.

**-provider** *name*

**-provider-path** *path*

**-propquery** *propq*

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

### Display of algorithm names

Algorithm names may be displayed in one of two manners:

#### Legacy implementations

Legacy implementations will simply display the main name of the algorithm on a line of its own, or in the form "<foo " bar>>" to show that "foo" is an alias for the main name, "bar"

#### Provided implementations

Implementations from a provider are displayed like this if the implementation is labeled with a single name:

```
foo @ bar
```

or like this if it's labeled with multiple names:

```
{ foo1, foo2 } @bar
```

In both cases, "bar" is the name of the provider.

## HISTORY

The **-engines**, **-digest-commands**, and **-cipher-commands** options were deprecated in OpenSSL 3.0.

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