#### **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] [-asymcipher-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.

## -asymcipher-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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