

**NAME**

openssl-gendsa - generate a DSA private key from a set of parameters

**SYNOPSIS**

```
openssl gendsa [-help] [-out filename] [-passout arg] [-aes128] [-aes192] [-aes256] [-aria128]
[-aria192] [-aria256] [-camellia128] [-camellia192] [-camellia256] [-des] [-des3] [-idea] [-verbose]
[-rand files] [-writerand file] [-engine id] [-provider name] [-provider-path path] [-propquery propq]
[paramfile]
```

**DESCRIPTION**

This command generates a DSA private key from a DSA parameter file (which will be typically generated by the **openssl-dsaparam(1)** command).

**OPTIONS****-help**

Print out a usage message.

**-out *filename***

Output the key to the specified file. If this argument is not specified then standard output is used.

**-passout *arg***

The passphrase used for the output file. See **openssl-passphrase-options(1)**.

**-aes128, -aes192, -aes256, -aria128, -aria192, -aria256, -camellia128, -camellia192, -camellia256, -des, -des3, -idea**

These options encrypt the private key with specified cipher before outputting it. A pass phrase is prompted for. If none of these options is specified no encryption is used.

Note that all options must be given before the *paramfile* argument. Otherwise they are ignored.

**-verbose**

Print extra details about the operations being performed.

**-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.

*paramfile*

The DSA parameter file to use. The parameters in this file determine the size of the private key. DSA parameters can be generated and examined using the **openssl-dsaparam(1)** command.

**-provider** *name*

**-provider-path** *path*

**-propquery** *propq*

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

## NOTES

DSA key generation is little more than random number generation so it is much quicker than RSA key generation for example.

## SEE ALSO

**openssl(1)**, **openssl-genpkey(1)**, **openssl-dsaparam(1)**, **openssl-dsa(1)**, **openssl-genrsa(1)**, **openssl-rsa(1)**

## HISTORY

The **-engine** option was deprecated in OpenSSL 3.0.

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