

**NAME**

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

**SYNOPSIS**

```
openssl gensda [-help] [-out filename] [-aes128] [-aes192] [-aes256] [-aria128] [-aria192]
[-aria256] [-camellia128] [-camellia192] [-camellia256] [-des] [-des3] [-idea] [-rand file...]
[-writerand file] [-engine id] [paramfile]
```

**DESCRIPTION**

The **gensda** command generates a DSA private key from a DSA parameter file (which will be typically generated by the **openssl dsaparam** 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.

**-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.

**-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-Windows, , 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.

**-engine id**

Specifying an engine (by its unique **id** string) will cause **gensda** 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.

**paramfile**

This option specifies 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** command.

**NOTES**

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

**SEE ALSO**

**dsaparam** (1), **dsa** (1), **genrsa** (1), **rsa** (1)

**COPYRIGHT**

Copyright 2000–2018 The OpenSSL Project Authors. All Rights Reserved.

Licensed under the OpenSSL license (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>](https://www.openssl.org/source/license.html).