



Rocky Enterprise Linux 9.2 Manual Pages on command 'tpmtool.1'

\$ man tpmtool.1

tpmtool(1) User Commands tpmtool(1)

NAME

tpmtool - GnuTLS TPM tool

SYNOPSIS

tpmtool [-flags] [-flag [value]] [--option-name[|=]]value]]

All arguments must be options.

DESCRIPTION

Program that allows handling cryptographic data from the TPM chip.

OPTIONS

-d num, --debug=num

Enable debugging. This option takes an integer number as its argument. The value of num is constrained to being:

in the range 0 through 9999

Specifies the debug level.

--infile=file

Input file.

--outfile=str

Output file.

`--generate-rsa`

Generate an RSA private-public key pair.

Generates an RSA private-public key pair in the TPM chip. The key may be stored in file system and protected by a PIN, or stored (registered) in the TPM chip flash.

`--register`

Any generated key will be registered in the TPM. This option must appear in combination with the following options: `generate-rsa`.

`--signing`

Any generated key will be a signing key. This option must not appear in combination with any of the following options: `legacy`. This option must appear in combination with the following options: `generate-rsa`.

`--legacy`

Any generated key will be a legacy key. This option must not appear in combination with any of the following options: `signing`. This option must appear in combination with the following options: `generate-rsa`.

`--user` Any registered key will be a user key. This option must not appear in combination with any of the following options: `system`. This option must appear in combination with the following options: `register`.

The generated key will be stored in a user specific persistent storage.

`--system`

Any registered key will be a system key. This option must not appear in combination with any of the following options: `user`. This option must appear in combination with the following options: `register`.

The generated key will be stored in system persistent storage.

`--pubkey=url`

Prints the public key of the provided key.

--list Lists all stored keys in the TPM.

--delete=url

Delete the key identified by the given URL (UUID).

--test-sign=url

Tests the signature operation of the provided object.

It can be used to test the correct operation of the signature operation. This operation will sign and verify the signed data.

--sec-param=security parameter

Specify the security level [low, legacy, medium, high, ultra].

This is alternative to the bits option. Note however that the values allowed by the TPM chip are quantized and given values may be rounded up.

--bits=num

Specify the number of bits for key generate. This option takes an integer number as its argument.

--inder, --no-inder

Use the DER format for keys. The no-inder form will disable the option.

The input files will be assumed to be in the portable DER format of TPM. The default format is a custom format used by various TPM tools

--outder, --no-outder

Use DER format for output keys. The no-outder form will disable the option.

The output will be in the TPM portable DER format.

--srk-well-known

SRK has well known password (20 bytes of zeros).

-v arg, --version=arg

Output version of program and exit. The default mode is `v`, a simple version. The `c` mode will print copyright information and `n` will print the full copyright notice.

-h, --help

Display usage information and exit.

-, --more-help

Pass the extended usage information through a pager.

EXAMPLES

To generate a key that is to be stored in file system use:

```
$ tpmtool --generate-rsa --bits 2048 --outfile tpmkey.pem
```

To generate a key that is to be stored in TPM's flash use:

```
$ tpmtool --generate-rsa --bits 2048 --register --user
```

To get the public key of a TPM key use:

```
$ tpmtool --pubkey tpmkey:uuid=58ad734b-bde6-45c7-89d8-756a55ad1891;storage=user --outfile pubkey.pem
```

or if the key is stored in the file system:

```
$ tpmtool --pubkey tpmkey:file=tpmkey.pem --outfile pubkey.pem
```

To list all keys stored in TPM use:

```
$ tpmtool --list
```

EXIT STATUS

One of the following exit values will be returned:

0 (EXIT_SUCCESS)

Successful program execution.

1 (EXIT_FAILURE)

The operation failed or the command syntax was not valid.

SEE ALSO

p11tool (1), certtool (1)

AUTHORS

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BUGS

Please send bug reports to: bugs@gnutls.org

3.7.6 27 May 2022 tpmtool(1)