

NAME

ntp.keys — NTP symmetric key file format

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SYNOPSIS

ntp.keys [**--option-name**] [**--option-name** *value*]

All arguments must be options.

DESCRIPTION

This document describes the format of an NTP symmetric key file. For a description of the use of this type of file, see the "Authentication Support" section of the `ntp.conf(5)` page.

`ntpd(8)` reads its keys from a file specified using the **-k** command line option or the **keys** statement in the configuration file. While key number 0 is fixed by the NTP standard (as 56 zero bits) and may not be changed, one or more keys numbered between 1 and 65535 may be arbitrarily set in the keys file.

The key file uses the same comment conventions as the configuration file. Key entries use a fixed format of the form

```
keyno type key opt_IP_list
```

where *keyno* is a positive integer (between 1 and 65535), *type* is the message digest algorithm, *key* is the key itself, and *opt_IP_list* is an optional comma-separated list of IPs where the *keyno* should be trusted, that are allowed to serve time. Each IP in *opt_IP_list* may contain an optional **/subnetbits** specification which identifies the number of bits for the desired subnet of trust. If *opt_IP_list* is empty, any properly-authenticated message will be accepted.

The *key* may be given in a format controlled by the *type* field. The *type* MD5 is always supported. If `ntpd` was built with the OpenSSL library then any digest library supported by that library may be specified. However, if compliance with FIPS 140-2 is required the *type* must be either SHA or SHA1.

What follows are some key types, and corresponding formats:

MD5 The key is 1 to 16 printable characters terminated by an EOL, whitespace, or a # (which is the "start of comment" character).

SHA

SHA1

RMD160 The key is a hex-encoded ASCII string of 40 characters, which is truncated as necessary.

Note that the keys used by the `ntpq(8)` and `ntpd(8)` programs are checked against passwords requested by the programs and entered by hand, so it is generally appropriate to specify these keys in ASCII format.

OPTIONS**--help**

Display usage information and exit.

--more-help

Pass the extended usage information through a pager.

--version [*v|c|n*]

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.

OPTION PRESETS

Any option that is not marked as *not presettable* may be preset by loading values from environment variables named:

NTP_KEYS_<option-name> or **NTP_KEYS**

ENVIRONMENT

See **OPTION PRESETS** for configuration environment variables.

FILES

`/etc/ntp.keys` the default name of the configuration file

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.

70 (EX_SOFTWARE)

libopts had an internal operational error. Please report it to autogen-users@lists.sourceforge.net. Thank you.

SEE ALSO

`ntp.conf(5)`, `ntpd(8)`, `ntpdate(8)`, `ntpd(1)`, `sntp(1)`

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BUGS

Please send bug reports to: <http://bugs.ntp.org>, bugs@ntp.org

NOTES

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This manual page was *AutoGen*-erated from the **ntp.keys** option definitions.