#### **NAME**

**ssh-add** — adds private key identities to the authentication agent

#### **SYNOPSIS**

```
ssh-add [-cDdkLlqvXx] [-E fingerprint_hash] [-t life] [file ...]
ssh-add -s pkcs11
ssh-add -e pkcs11
ssh-add -T pubkey ...
```

#### **DESCRIPTION**

**ssh-add** adds private key identities to the authentication agent, ssh-agent(1). When run without arguments, it adds the files ~/.ssh/id\_rsa, ~/.ssh/id\_dsa, ~/.ssh/id\_ecdsa, and ~/.ssh/id\_ed25519. After loading a private key, **ssh-add** will try to load corresponding certificate information from the filename obtained by appending -cert.pub to the name of the private key file. Alternative file names can be given on the command line.

If any file requires a passphrase, **ssh-add** asks for the passphrase from the user. The passphrase is read from the user's tty. **ssh-add** retries the last passphrase if multiple identity files are given.

The authentication agent must be running and the SSH\_AUTH\_SOCK environment variable must contain the name of its socket for **ssh-add** to work.

The options are as follows:

- -c Indicates that added identities should be subject to confirmation before being used for authentication. Confirmation is performed by ssh-askpass(1). Successful confirmation is signaled by a zero exit status from ssh-askpass(1), rather than text entered into the requester.
- **-D** Deletes all identities from the agent.
- -d Instead of adding identities, removes identities from the agent. If ssh-add has been run without arguments, the keys for the default identities and their corresponding certificates will be removed. Otherwise, the argument list will be interpreted as a list of paths to public key files to specify keys and certificates to be removed from the agent. If no public key is found at a given path, ssh-add will append .pub and retry.
- -E fingerprint\_hash

Specifies the hash algorithm used when displaying key fingerprints. Valid options are: "md5" and "sha256". The default is "sha256".

**-e** *pkcs11* 

Remove keys provided by the PKCS#11 shared library pkcs11.

- **-k** When loading keys into or deleting keys from the agent, process plain private keys only and skip certificates.
- **-L** Lists public key parameters of all identities currently represented by the agent.
- -1 Lists fingerprints of all identities currently represented by the agent.
- **-q** Be quiet after a successful operation.
- **-s** pkcs11

Add keys provided by the PKCS#11 shared library pkcs11.

**-T** pubkey ...

Tests whether the private keys that correspond to the specified *pubkey* files are usable by performing sign and verify operations on each.

-t life

Set a maximum lifetime when adding identities to an agent. The lifetime may be specified in seconds or in a time format specified in sshd\_config(5).

- -v Verbose mode. Causes **ssh-add** to print debugging messages about its progress. This is helpful in debugging problems. Multiple -v options increase the verbosity. The maximum is 3.
- **-x** Unlock the agent.
- **-x** Lock the agent with a password.

#### **ENVIRONMENT**

DISPLAY and SSH\_ASKPASS

If **ssh-add** needs a passphrase, it will read the passphrase from the current terminal if it was run from a terminal. If **ssh-add** does not have a terminal associated with it but DISPLAY and SSH\_ASKPASS are set, it will execute the program specified by SSH\_ASKPASS (by default "ssh-askpass") and open an X11 window to read the passphrase. This is particularly useful when calling **ssh-add** from a .xsession or related script. (Note that on some machines it may be necessary to redirect the input from /dev/null to make this work.)

SSH\_AUTH\_SOCK

Identifies the path of a UNIX-domain socket used to communicate with the agent.

## **FILES**

~/.ssh/id\_dsa

Contains the DSA authentication identity of the user.

~/.ssh/id\_ecdsa

Contains the ECDSA authentication identity of the user.

~/.ssh/id\_ed25519

Contains the Ed25519 authentication identity of the user.

~/.ssh/id\_rsa

Contains the RSA authentication identity of the user.

Identity files should not be readable by anyone but the user. Note that **ssh-add** ignores identity files if they are accessible by others.

# **EXIT STATUS**

Exit status is 0 on success, 1 if the specified command fails, and 2 if **ssh-add** is unable to contact the authentication agent.

### SEE ALSO

```
ssh(1), ssh-agent(1), ssh-askpass(1), ssh-keygen(1), sshd(8)
```

#### **AUTHORS**

OpenSSH is a derivative of the original and free ssh 1.2.12 release by Tatu Ylonen. Aaron Campbell, Bob Beck, Markus Friedl, Niels Provos, Theo de Raadt and Dug Song removed many bugs, re-added newer features and created OpenSSH. Markus Friedl contributed the support for SSH protocol versions 1.5 and 2.0.