

NAME

systemd-ask-password – Query the user for a system password

SYNOPSIS

systemd-ask-password [**OPTIONS...**] [**MESSAGE**]

DESCRIPTION

systemd-ask-password may be used to query a system password or passphrase from the user, using a question message specified on the command line. When run from a TTY it will query a password on the TTY and print it to standard output. When run with no TTY or with **--no-tty** it will use the system-wide query mechanism, which allows active users to respond via several agents, listed below.

The purpose of this tool is to query system-wide passwords — that is passwords not attached to a specific user account. Examples include: unlocking encrypted hard disks when they are plugged in or at boot, entering an SSL certificate passphrase for web and VPN servers.

Existing agents are:

- A boot-time password agent asking the user for passwords using **plymouth**(8),
- A boot-time password agent querying the user directly on the console — **systemd-ask-password-console.service**(8),
- An agent requesting password input via a **wall**(1) message — **systemd-ask-password-wall.service**(8),
- A TTY agent that is temporarily spawned during **systemctl**(1) invocations,
- A command line agent which can be started temporarily to process queued password requests — **systemd-tty-ask-password-agent --query**.

Answering system-wide password queries is a privileged operation, hence all the agents listed above (except for the last one), run as privileged system services. The last one also needs elevated privileges, so should be run through **sudo**(8) or similar.

Additional password agents may be implemented according to the [systemd Password Agent Specification](#)^[1].

If a password is queried on a TTY, the user may press TAB to hide the asterisks normally shown for each character typed. Pressing Backspace as first key achieves the same effect.

OPTIONS

The following options are understood:

--icon=

Specify an icon name alongside the password query, which may be used in all agents supporting graphical display. The icon name should follow the [XDG Icon Naming Specification](#)^[2].

--id=

Specify an identifier for this password query. This identifier is freely choosable and allows recognition of queries by involved agents. It should include the subsystem doing the query and the specific object the query is done for. Example: "**--id=cryptsetup:/dev/sda5**".

--keyname=

Configure a kernel keyring key name to use as cache for the password. If set, then the tool will try to push any collected passwords into the kernel keyring of the root user, as a key of the specified name. If combined with **--accept-cached**, it will also try to retrieve such cached passwords from the key in the kernel keyring instead of querying the user right away. By using this option, the kernel keyring may be used as effective cache to avoid repeatedly asking users for passwords, if there are multiple objects that may be unlocked with the same password. The cached key will have a timeout of 2.5min set, after which it will be purged from the kernel keyring. Note that it is possible to cache multiple passwords under the same keyname, in which case they will be stored as NUL-separated list of passwords. Use **keyctl**(1) to access the cached key via the kernel keyring directly. Example: "**--keyname=cryptsetup**".

--timeout=

Specify the query timeout in seconds. Defaults to 90s. A timeout of 0 waits indefinitely.

--echo

Echo the user input instead of masking it. This is useful when using `systemd-ask-password` to query for usernames.

--no-tty

Never ask for password on current TTY even if one is available. Always use agent system.

--accept-cached

If passed, accept cached passwords, i.e. passwords previously entered.

--multiple

When used in conjunction with **--accept-cached** accept multiple passwords. This will output one password per line.

--no-output

Do not print passwords to standard output. This is useful if you want to store a password in kernel keyring with **--keyname** but do not want it to show up on screen or in logs.

-h, --help

Print a short help text and exit.

EXIT STATUS

On success, 0 is returned, a non-zero failure code otherwise.

SEE ALSO

`systemd(1)`, `systemd-ask-password-console.service(8)`, `systemd-tty-ask-password-agent(1)`, `keyctl(1)`, `plymouth(8)`, `wall(1)`

NOTES

1. systemd Password Agent Specification
<https://www.freedesktop.org/wiki/Software/systemd/PasswordAgents>
2. XDG Icon Naming Specification
<http://standards.freedesktop.org/icon-naming-spec/icon-naming-spec-latest.html>