



## **Red Hat Enterprise Linux Release 9.2 Manual Pages on 'systemd-firstboot.1' command**

### **\$ man systemd-firstboot.1**

SYSTEMD-FIRSTBOOT(1)      systemd-firstboot      SYSTEMD-FIRSTBOOT(1)

#### NAME

systemd-firstboot, systemd-firstboot.service - Initialize basic system  
settings on or before the first boot-up of a system

#### SYNOPSIS

systemd-firstboot [OPTIONS...]  
systemd-firstboot.service

#### DESCRIPTION

systemd-firstboot initializes the most basic system settings  
interactively on the first boot, or optionally non-interactively when a  
system image is created. The service is started if  
ConditionFirstBoot=yes is satisfied. This essentially means that /etc/  
is empty, see systemd.unit(5) for details.

The following settings may be set up:

- ? The system locale, more specifically the two locale variables LANG=  
and LC\_MESSAGES
- ? The system keyboard map
- ? The system time zone
- ? The system hostname
- ? The machine ID of the system
- ? The root user's password

Each of the fields may either be queried interactively by users, set  
non-interactively on the tool's command line, or be copied from a host

system that is used to set up the system image.

If a setting is already initialized, it will not be overwritten and the user will not be prompted for the setting.

Note that this tool operates directly on the file system and does not involve any running system services, unlike `localectl(1)`, `timedatectl(1)` or `hostnamectl(1)`. This allows `systemd-firstboot` to operate on mounted but not booted disk images and in early boot. It is not recommended to use `systemd-firstboot` on the running system while it is up.

## OPTIONS

The following options are understood:

`--root=root`

Takes a directory path as an argument. All paths will be prefixed with the given alternate root path, including config search paths.

This is useful to operate on a system image mounted to the specified directory instead of the host system itself.

`--image=path`

Takes a path to a disk image file or block device node. If specified all operations are applied to file system in the indicated disk image. This is similar to `--root=` but operates on file systems stored in disk images or block devices. The disk image should either contain just a file system or a set of file systems within a GPT partition table, following the Discoverable Partitions Specification[1]. For further information on supported disk images, see `systemd-nspawn(1)`'s switch of the same name.

`--locale=LOCALE, --locale-messages=LOCALE`

Sets the system locale, more specifically the `LANG=` and `LC_MESSAGES` settings. The argument should be a valid locale identifier, such as `"de_DE.UTF-8"`. This controls the `locale.conf(5)` configuration file.

`--keymap=KEYMAP`

Sets the system keyboard layout. The argument should be a valid keyboard map, such as `"de-latin1"`. This controls the `"KEYMAP"` entry in the `vconsole.conf(5)` configuration file.

`--timezone=TIMEZONE`

Sets the system time zone. The argument should be a valid time zone identifier, such as "Europe/Berlin". This controls the `localtime(5)` symlink.

`--hostname=HOSTNAME`

Sets the system hostname. The argument should be a hostname, compatible with DNS. This controls the `hostname(5)` configuration file.

`--machine-id=ID`

Sets the system's machine ID. This controls the `machine-id(5)` file.

`--root-password=PASSWORD`, `--root-password-file=PATH`,

`--root-password-hashed=HASHED_PASSWORD`

Sets the password of the system's root user. This creates/modifies the `passwd(5)` and `shadow(5)` files. This setting exists in three forms: `--root-password=` accepts the password to set directly on the command line, `--root-password-file=` reads it from a file and `--root-password-hashed=` accepts an already hashed password on the command line. See `shadow(5)` for more information on the format of the hashed password. Note that it is not recommended to specify plaintext passwords on the command line, as other users might be able to see them simply by invoking `ps(1)`.

`--root-shell=SHELL`

Sets the shell of the system's root user. This creates/modifies the `passwd(5)` file.

`--kernel-command-line=CMDLINE`

Sets the system's kernel command line. This controls the `/etc/kernel/cmdline` file which is used by `kernel-install(8)`.

`--prompt-locale`, `--prompt-keymap`, `--prompt-timezone`, `--prompt-hostname`,

`--prompt-root-password`, `--prompt-root-shell`

Prompt the user interactively for a specific basic setting. Note that any explicit configuration settings specified on the command line take precedence, and the user is not prompted for it.

`--prompt`

Query the user for locale, keymap, timezone, hostname, root's password, and root's shell. This is equivalent to specifying --prompt-locale, --prompt-keymap, --prompt-timezone, --prompt-hostname, --prompt-root-password, --prompt-root-shell in combination.

--copy-locale, --copy-keymap, --copy-timezone, --copy-root-password, --copy-root-shell

Copy a specific basic setting from the host. This only works in combination with --root= (see above).

--copy

Copy locale, keymap, time zone, root password and shell from the host. This is equivalent to specifying --copy-locale, --copy-keymap, --copy-timezone, --copy-root-password, --copy-root-shell in combination.

--setup-machine-id

Initialize the system's machine ID to a random ID. This only works in combination with --root=.

--force

systemd-firstboot doesn't modify existing files unless --force is specified. For modifications to /etc/passwd and /etc/shadow, systemd-firstboot only modifies the entry of the "root" user instead of overwriting the entire file.

--delete-root-password

Removes the password of the system's root user, enabling login as root without a password unless the root account is locked. Note that this is extremely insecure and hence this option should not be used lightly.

--welcome=

Takes a boolean argument. By default when prompting the user for configuration options a brief welcome text is shown before the first question is asked. Pass false to this option to turn off the welcome text.

-h, --help

Print a short help text and exit.

--version

Print a short version string and exit.

## CREDENTIALS

systemd-firstboot supports the service credentials logic as implemented by `LoadCredential=`/`SetCredential=` (see `systemd.exec(1)` for details).

The following credentials are used when passed in:

"passwd.hashed-password.root", "passwd.plaintext-password.root"

A hashed or plaintext version of the root password to use, in place of prompting the user. These credentials are equivalent to the same ones defined for the `systemd-sysusers.service(8)` service.

"passwd.shell.root"

Specifies the shell binary to use for the specified account.

Equivalent to the credential of the same name defined for the `systemd-sysusers.service(8)` service.

"firstboot.locale", "firstboot.locale-messages"

These credentials specify the locale settings to set during first boot, in place of prompting the user.

"firstboot.keymap"

This credential specifies the keyboard setting to set during first boot, in place of prompting the user.

"firstboot.timezone"

This credential specifies the system timezone setting to set during first boot, in place of prompting the user.

Note that by default the `systemd-firstboot.service` unit file is set up to inherit the listed credentials from the service manager. Thus, when invoking a container with an unpopulated `/etc/` for the first time it is possible to configure the root user's password to be "systemd" like this:

```
# systemd-nspawn --image=... --set-credential=firstboot.locale:de_DE.UTF-8 ...
```

Note that these credentials are only read and applied during the first boot process. Once they are applied they remain applied for subsequent boots, and the credentials are not considered anymore.

## EXIT STATUS

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

## KERNEL COMMAND LINE

`systemd.firstboot=`

Takes a boolean argument, defaults to on. If off, `systemd-firstboot.service` won't interactively query the user for basic settings at first boot, even if those settings are not initialized yet.

## SEE ALSO

`systemd(1)`, `locale.conf(5)`, `vconsole.conf(5)`, `localtime(5)`,  
`hostname(5)`, `machine-id(5)`, `shadow(5)`, `systemd-machine-id-setup(1)`,  
`localectl(1)`, `timedatectl(1)`, `hostnamectl(1)`

## NOTES

1. Discoverable Partitions Specification

[https://systemd.io/DISCOVERABLE\\_PARTITIONS](https://systemd.io/DISCOVERABLE_PARTITIONS)

`systemd` 252

`SYSTEMD-FIRSTBOOT(1)`