NAME

systemd-fstab-generator − Unit generator for /etc/fstab

SYNOPSIS

/lib/systemd/system−generators/systemd−fstab−generator

DESCRIPTION

systemd−fstab−generator is a generator that translates /etc/fstab (see **fstab**(5) for details) into native systemd units early at boot and when configuration of the system manager is reloaded. This will instantiate mount and swap units as necessary.

The *passno* field is treated like a simple boolean, and the ordering information is discarded. However, if the root file system is checked, it is checked before all the other file systems.

See **systemd.mount**(5) and **systemd.swap**(5) for more information about special /etc/fstab mount options this generator understands.

One special topic is handling of symbolic links. Historical init implementations supported symlinks in /etc/fstab. Because mount units will refuse mounts where the target is a symbolic link, this generator will resolve any symlinks as far as possible when processing /etc/fstab in order to enhance backwards compatibility. If a symlink target does not exist at the time that this generator runs, it is assumed that the symlink target is the final target of the mount.

systemd−fstab−generator implements **systemd.generator**(7).

KERNEL COMMAND LINE

systemd−fstab−generator understands the following kernel command line parameters:

fstab=, *rd.fstab*=
: Takes a boolean argument. Defaults to "yes". If "no", causes the generator to ignore any mounts or swap devices configured in /etc/fstab. *rd.fstab*= is honored only by the initial RAM disk (initrd) while *fstab*= is honored by both the main system and the initrd.

root=
: Takes the root filesystem to mount in the initrd. *root*= is honored by the initrd.

rootfstype=
: Takes the root filesystem type that will be passed to the mount command. *rootfstype*= is honored by the initrd.

rootflags=
: Takes the root filesystem mount options to use. *rootflags*= is honored by the initrd.

  Note that unlike most kernel command line options this setting does not override settings made in configuration files (specifically: the mount option string in /etc/fstab). See **systemd-remount-fs.service**(8).

mount.usr=
: Takes the /usr filesystem to be mounted by the initrd. If *mount.usrfstype*= or *mount.usrflags*= is set, then *mount.usr*= will default to the value set in *root*=.

  Otherwise, this parameter defaults to the /usr entry found in /etc/fstab on the root filesystem.

  mount.usr= is honored by the initrd.

mount.usrfstype=
: Takes the /usr filesystem type that will be passed to the mount command. If *mount.usr*= or *mount.usrflags*= is set, then *mount.usrfstype*= will default to the value set in *rootfstype*=.

  Otherwise, this value will be read from the /usr entry in /etc/fstab on the root filesystem.

  mount.usrfstype= is honored by the initrd.

mount.usrflags=
: Takes the /usr filesystem mount options to use. If *mount.usr=* or *mount.usrfstype=* is set, then *mount.usrflags=* will default to the value set in *rootflags=*.

  Otherwise, this value will be read from the /usr entry in /etc/fstab on the root filesystem.

  mount.usrflags= is honored by the initrd.

systemd.volatile=
: Controls whether the system shall boot up in volatile mode. Takes a boolean argument or the special value **state**.

  If false (the default), this generator makes no changes to the mount tree and the system is booted up in normal mode.

  If true the generator ensures **systemd-volatile-root.service**(8) is run as part of the initial RAM disk ("initrd"). This service changes the mount table before transitioning to the host system, so that a volatile memory file system ("tmpfs") is used as root directory, with only /usr mounted into it from the configured root file system, in read−only mode. This way the system operates in fully stateless mode, with all configuration and state reset at boot and lost at shutdown, as /etc and /var will be served from the (initially unpopulated) volatile memory file system.

  If set to **state** the generator will leave the root directory mount point unaltered, however will mount a "tmpfs" file system to /var. In this mode the normal system configuration (i.e. the contents of "/etc") is in effect (and may be modified during system runtime), however the system state (i.e. the contents of "/var") is reset at boot and lost at shutdown.

  If this setting is set to "overlay" the root file system is set up as "overlayfs" mount combining the read−only root directory with a writable "tmpfs", so that no modifications are made to disk, but the file system may be modified nonetheless with all changes being lost at reboot.

  Note that in none of these modes the root directory, /etc, /var or any other resources stored in the root file system are physically removed. It's thus safe to boot a system that is normally operated in non−volatile mode temporarily into volatile mode, without losing data.

  Note that with the exception of "overlay" mode, enabling this setting will only work correctly on operating systems that can boot up with only /usr mounted, and are able to automatically populate /etc, and also /var in case of "systemd.volatile=yes".

SEE ALSO

systemd(1), **fstab**(5), **systemd.mount**(5), **systemd.swap**(5), **systemd-cryptsetup-generator**(8), **kernel-command-line**(7)