

# Boot stuck at "A start job is running for Create Volatile Files and Directories"

This message will appear when the /tmp directory is full or has too many files/directories inside it. Since it prevents a successful boot, we will need to modify the boot options to fix it

First, restart the affected system (Ctrl-Alt-Del or power cycle it) and upon reaching Grub, press the E key to begin editing the boot option

Scroll to the bottom and find the section including root=/\* and "ro". This is the area we will be editing. Server versions of Ubuntu normally mention "maybe-ubiquity" after this, whereas desktop versions normally include "quiet splash"

```
GNU GRUB  version 2.04

insmod part_gpt
insmod ext2
set root='hd0,gpt2'
if [ x$feature_platform_search_hint = xy ]; then
  search --no-floppy --fs-uuid --set=root --hint-bios=hd0,gpt2 -\
-hint-efi=hd0,gpt2 --hint-baremetal=ahci0,gpt2  86e82675-2f38-4dde-ab5f-\
8a3cb6d5e3ae
else
  search --no-floppy --fs-uuid --set=root 86e82675-2f38-4dde-ab5\
f-8a3cb6d5e3ae
fi
linux      /vmlinuz-5.4.0-153-generic root=/dev/mapper/ubuntu-\
-vg-ubuntu--lv ro_ maybe-ubiquity
initrd     /initrd.img-5.4.0-153-generic

Minimum Emacs-like screen editing is supported. TAB lists
completions. Press Ctrl-x or F10 to boot, Ctrl-c or F2 for a
command-line or ESC to discard edits and return to the GRUB
menu.
```

Change the "ro" (read-only) to "rw" (read-write) and add init=/bin/bash after it (ensuring there's a double space after rw)

```
GNU GRUB  version 2.04

insmod part_gpt
insmod ext2
set root='hd0,gpt2'
if [ x$feature_platform_search_hint = xy ]; then
  search --no-floppy --fs-uuid --set=root --hint-bios=hd0,gpt2 -\
-hint-efi=hd0,gpt2 --hint-baremetal=ahci0,gpt2  86e82675-2f38-4dde-ab5f-\
8a3cb6d5e3ae
else
  search --no-floppy --fs-uuid --set=root 86e82675-2f38-4dde-ab5\
f-8a3cb6d5e3ae
fi
linux      /vmlinuz-5.4.0-153-generic root=/dev/mapper/ubuntu-\
-vg-ubuntu--lv rw  init=/bin/bash_
initrd     /initrd.img-5.4.0-153-generic

Minimum Emacs-like screen editing is supported. TAB lists
completions. Press Ctrl-x or F10 to boot, Ctrl-c or F2 for a
command-line or ESC to discard edits and return to the GRUB
menu.
```

Now we're effectively running in single-user (root) mode. We can now run the commands needed to reset the /tmp directory:

Move the existing directory:

```
mv /tmp /old.tmp
```

Make a new directory:

```
mkdir /tmp
```

Set the correct permissions:

```
chmod 1777 /tmp
```

Now we can reboot. The normal "reboot" command doesn't work in this mode, so a Ctrl-Alt-Del is the easiest way!

---

Revision #3

Created 2024-11-22 14:59:07 UTC by Nicolas

Updated 2024-12-06 02:02:00 UTC by Nicolas