



SUSE

##µ#####

openSUSE #####
 ## Linux, ##
 ## Laptop # ##.
 ##
 ##
 ##
 ##
 ##.

```
: #####, #####, #####, #####, #####-
#####, ## #####
#μ##μ### ##μ##### 2026-02-27 , 84.87.20260110.3014fbe
```

#####μ#####

- ```
1 ##### 2
2 ##### 3
3 ##### ##### ### ##### 5
```

## #µ##### ##### ## ##### #####. ## # µ##### ##### ## #####-  
## #µ#####, ##### ## ##### ##### ## https://doc.opensuse.org/release-notes ↗. ## #-  
##### #µ##### ##### #µ##### ##### #####. ## µ#####µ#### ##### µ#####  
##### ## ##### #####.

To report bugs against this release, use the openSUSE Bugzilla. For more information, see [https://en.opensuse.org/openSUSE:Submitting\\_bug\\_reports](https://en.opensuse.org/openSUSE:Submitting_bug_reports) ↗.

# 1 #####

## 1.1 UEFI—Unified Extensible Firmware Interface

#### ## ##### openSUSE ## #####µ# ## ##### µ# ## ##### UEFI (Unified Extensible  
Firmware Interface) ##### ##### ## ##### ## #####µ#### #µ##### firmware  
## ## ##### ##, ## ##### #####µ##, ## ## #####. ## ##-#####-  
##µ### #####µ# µ# Windows 8 ##### µ## ##### ##### ## ## #####µ# ## ##### µ# #####  
UEFI.

#####: ##### UEFI firmware ##### #µ### ## µ##### ## ##### ##### ## #-  
##### ##### #µ### ## #####µ### UEFI. ## #####, ##### ## ##### ##### µ#####  
##### ## "#####". ## openSUSE ##### ## µ# ## ##### ##  
##### #µ### ## ## ##### ## #####. ## ##### #µ##### #µ#####  
## UEFI firmware ##### µ# ## ##### ## ##### ## openSUSE. Upstream  
##### ## ##### Linux ## #####µ##### ## ##### µ### UEFI ## #####  
##### ##### (pstore), ##### ##### ## #####. ##'  
## ## ##### ## ##### ## #µ##### firmware ## ##### # #µ##### #-  
###.

## 1.2 #####µ##### UEFI, GPT, ## MS-DOS

#### µ# ## #####µ##### ## EFI/UEFI, ##### ## ## #####µ####: ## GPT (GUID  
Partition Table). ##### ## ## #µ# #####µ##### ##### µ##### (## #µ## 128-bit  
#µ##### ## 32 #####) ## ## ##### ## ##### µ#####.

Additionally, the UEFI specification also allows legacy MBR (MS-DOS) partitions. The Linux boot loaders (ELILO or GRUB2) try to automatically generate a GUID for those legacy partitions, and write them to the firmware. Such a GUID can change frequently, causing a rewrite in the firmware. A rewrite consists of two different operations: removing the old entry and creating a new entry that replaces the first one.

```
firmware #### ##### #####µ#### ### ##### #####µµ#### #####
#####µµ### µ##µ# ### ### ##### #####. ##### #####µ#
#####µ##### firmware ### ##### ### ##### #####. ##### µ##### ##
µ# #####µ# #####µ#.
```

```
#####µ##### ##### #: µ##### ### #####µ### legacy MBR ## ### GPT ### ##
#####µ#.
```

## 2 #####

### 2.1 ## #####µ# µ# #####µ### ###µ#####µ# LUKS ### µ##### ## #####

In some cases, Plymouth does not display the passphrase prompt properly. To fix this, add `plymouth.enable=0` to the kernel command line. See also [https://bugzilla.opensuse.org/show\\_bug.cgi?id=966255](https://bugzilla.opensuse.org/show_bug.cgi?id=966255).

### 2.2 # **systemctl stop apparmor** ### #####

In the past, there could be confusion over the difference between how the very similarly named **systemctl** subcommands `reload` and `restart` worked for AppArmor:

- **systemctl reload apparmor** properly reloaded all AppArmor profiles. (It was and continues to be the recommended way of reloading AppArmor profiles.)
- **systemctl restart apparmor** meant that AppArmor would stop, thereby unloading all AppArmor profiles and then restart which left all existing processes unconfined. Only newly started processes would then be confined again.





Unfortunately, `systemd` does not provide a solution within its unit file format for the issue posed by the `restart` scenario.

```
µ# ## AppArmor 2.12, # ##### systemctl stop apparmor ### ## #####.
#####, # systemctl restart apparmor ## ##### ##### ## ##### AppArmor.
```



To unload all AppArmor profiles, use the new command aa-teardown instead which matches the previous behavior of systemctl stop apparmor.

For more information, see [https://bugzilla.opensuse.org/show\\_bug.cgi?id=996520](https://bugzilla.opensuse.org/show_bug.cgi?id=996520) and [https://bugzilla.opensuse.org/show\\_bug.cgi?id=853019](https://bugzilla.opensuse.org/show_bug.cgi?id=853019).

## 2.3 No Default Compose Key Combination

```
#####µ#### ##### ## openSUSE, # #####µ## ##### ##### ##### ## #####-
µ#### ## ##### ##### #####. ## #####µ#,
«â», µ##### ## ##### ## ##
µ#### ## ##### ## - # Ctrl
µ#### ## ##### ## .
```

In openSUSE Tumbleweed, there is no longer a predefined compose key combination because

- does not work as expected anymore.

- ### ## ##### ## #####µ# ##### ##### ## ##### ## #####µ#, #####µ#####  
## ##### /etc/X11/Xmodmap ### ##### ## ##### µµ##:

```
[...]
!! ##### µ#: ##### ## ##### ##### Control ### #####.
!! ## ## ##### µ# ## ##### #####, ##### ## ## ##### ##
##
!! ##### (#.#. `a' ## `^' ## ## ##### 342).
!remove Control = Control_R
!keysym Control_R = Multi_key
!add Control = Control_R
[...]
```

```
#####µ####, ##### ## !
µµ#. ####, ##µ##### ## # µµ### ## ## Xmodmap ## #####
#####µ##### ## ##### setxkbmap.
```

- ### ## ##### ## #####µ# ##### #####µ####, #####µ#####  
## ##### µµ#### ##### # ## ##### µµ## ##### setxkbmap:

```
setxkbmap [...] -option compose:COMPOSE_KEY
```

### ## μ##### COMPOSE\_KEY, #####μ##### ### #####μμ### ##### ###, ### ##-  
#####μ# ralt, lwin, rwin, menu, rctl, # caps.

- #####, #####μ##### μ## μ##### ##### IBus ### ##### ### #####  
### ##### ### ##### ### #####.

### 3 #####

- ##### ## ##### README ### μ### #####.
- ##### #####μ### ##### ### ##### ##### ##### μ# ## #####μ### ##-  
#### ## RPM:

```
rpm --changelog -qp FILENAME.rpm
```

##### ## FILENAME μ# ## μ## RPM.

- ##### ## ##### ChangeLog ### ##### ##### μ### ##### μ## ##-  
##### ##### ### ##### ### ##### μ### #####.
- ##### ##### ##### ##### docu ### μ### #####.
- ### ##### # μ###μ### μ#####, ##### <https://doc.opensuse.org/> ↗.
- ### ## #####, ### ## openSUSE, ##### <https://www.opensuse.org> ↗.

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