

What can I do if my virtual server does not boot after the kernel update?

Issue

Upgrading kernel(s) inside Linux guests to the following versions will break them. Updated guest(s) won't ever boot and will crash on startup.

Environment

CentOS 6.x kernel version \geq 2.6.32-754.2.1.el6.x86_64

Debian 9.x kernel version \geq 4.9.0-7-amd64

Resolution

The issue can be fixed in one of the following ways:

1. Skip the recent kernel while updating guest's packages:

- Update CentOS 6.x with:

```
# yum update --exclude=kernel*2.6.32-754.2.1*
```

- Update Debian 9.x with:

```
# apt-mark hold linux-image-amd64 linux-headers-amd64
# apt-get update
# apt-get dist-upgrade
```

2. After the kernel was updated, add the following kernel options to the GRUB boot loader configuration file:
 - For CentOS 6.x, add *eagerfpu=off* option to *edit /boot/grub/grub.conf* file
 - For Debian 9.x, add *elevator=noop* and *pti=off* options to *edit /boot/grub/menu.lst* file.