

Open Suse 12 Linux Virtual machine 32 bit goes to black screen on resuming from hibernation.

- Parallels Desktop
- Parallels Desktop for Mac Standard Edition
- Parallels Desktop for Mac Pro Edition
- Parallels Desktop for Mac Business Edition

Symptoms

32 bit Open SuSe Linux Virtual machines that use grub2 as a boot loader may fail to resume from hibernation. Virtual machine hangs in black screen.

Resolution

There are two possible workarounds:

1. Using different versions of grub2 and Linux kernel.
 - ◆ You can downgrade grub2 to version < 2.0.0-1.15.1, or
 - ◆ you can upgrade kernel to version >= 3.4.42-2.28.1.
2. Increasing the memory size of Linux Virtual Machine from 768Mb to 1Gb

to do it you need to go to Virtual machine menu > Configure > Hardware > CPU & Memory and change memory allocation to 1 Gb (1024 Mb)

Cause

The issue is caused by a combination of an indeterministic memory allocation in grub2 and a bug in Linux kernel.

If grub2 loads 'initrd' to the different physical memory location before and after hibernation, the NUMA node 0 memory area contents might be restored incorrectly which causes kernel panic during resume.
