



## Android x86 Marshmallow not booting on Virtualbox and VMware Workstation

Asked 6 years, 9 months ago   Modified 4 years, 8 months ago   Viewed 179k times



44



I've downloaded the latest Android x86 (android-x86-6.0\_20160129.iso) from [here](#) and tried to install it to the HDD on a VM in VMware Workstation and in Virtualbox.

The installation seems to proceed properly (using EXT4, and EFI Grub) and i get a message that it has installed successfully. However when I reboot it passes GRUB, picks the correct Android installation, but it does not boot. I get the result seen in the screenshot below and then a *blank screen* with a *blinking cursor*.

```
[ 0.760882] Failed to find cpu0 device node
Detecting Android-x86... found at /dev/sda1

A N D R O I D /system/bin/sh: /system/etc/mkshrc[10]: getprop: not found
/system/bin/sh: /system/etc/mkshrc[16]: id: not found
@android:/ # _
```

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The .iso does boot up though all the way to the GUI in Live mode (LiveCD).

Any assistance would be greatly appreciated. I have a feeling that the solution might be something linked to the graphics settings but i'm not exactly sure.

boot

bootloader

android-x86

virtualbox

vmware

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edited Apr 13, 2017 at 12:18

asked May 10, 2016 at 14:49



Community Bot

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Irvin H.

1,053

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12

14

I share your feelings (same issue here). Due to some hints, I've even increased graphics memory to 32MB (no improvement). Some posts speak of the need for 2 partitions (1=primary 100MB for grub, 2=extended with the remaining space for Android), didn't help in my case. Another source suggested manually editing/creating the `grub.cfg` as `menu.lst` doesn't work (not tried that yet). My other try with Android 5.1 hung in the boot animation ("android" text), so I gave up after 15min. What OS setting is your install based on? I've used "other Linux", as that worked in the past. – [Izzy](#) ♦ May 10, 2016 at 16:44

I tried "Ubuntu" and "FreeBSD" so far ... let me mess around some others and see if that helps. – [Irvin H.](#) May 10, 2016 at 16:59

I saw a YouTube video where someone used Windows7, which really confused me. – [Izzy](#) ♦ May 10, 2016 at 18:49

BTW: I've just tried again, for me it doesn't even boot into live mode (ends up at the same place then). Related issue on our sister site which I already mentioned: [Android-x86 6.0 Marshmallow in VirtualBox: installation stuck on GRUB](#) – [Izzy](#) ♦ May 10, 2016 at 19:49

@Izzy : Actually from what I've read, the solution at the link in your previous post (and from a bit of experimentation) is not exactly correct, but it works. From my understanding it's actually the creation of the GPT boot sector that allows the Grub stuff to proceed, not the presence of 2 partitions. I read somewhere that the Android x86 partition formatting fails silently if the "Create/Modify partition is not done" first, leading to the grub installer hanging because the disk wasn't even formatted to begin with. (I'll add this "footnote" also to that link) – [Irvin H.](#) May 12, 2016 at 12:10

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3. enter `cd /mnt/grub`
4. enter `vi menu.lst`
5. press Shift+a
6. right under the first boot entry find the line starting with `kernel initrd=/in` (your line might look different; it depends on Android version; in general just find the line that starts with `kernel`)
7. at the end of the line type `vga=834 nomodeset xforcevesa`
8. press ESC then `:wq` - these commands will save the file and quit vi
9. enter `cd /`
10. enter `umount /mnt`
11. enter `reboot -f`

Now the system should reboot in the VESA mode of your choice.

This will enforces to use the VESA driver for X.

You can replace the `vga=xxx` by any number you want for your screen resolution. Also tested that 832 works fine (gives 800x600 resolution).

You can find all the VESA modes when you use the iso file and pick the boot option to boot in VESA mode - it will show the list with all modes (numbers are in hex and there is also a redundant letter in front of some modes - ignore it) and you can test them there immediately to see if it works and is good to use in this `menu.lst` fix, but you have to convert it from hex to dec first using any hex->dec converter.

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edited Sep 22, 2017 at 6:26



xavier\_fakerat

9,767 6 40 94

answered Feb 22, 2017 at 15:32



ajira

721 5 2

- 
- 2 +1, Confirmed to work for `android-x86-6.0-r3.iso` on VMware Workstation. – David Refoua Jan 14, 2018 at 1:48

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9 his assumption it is disposable fix and should be typed at each boot.

It **can** be made persistent, and should be! And I show you how:)

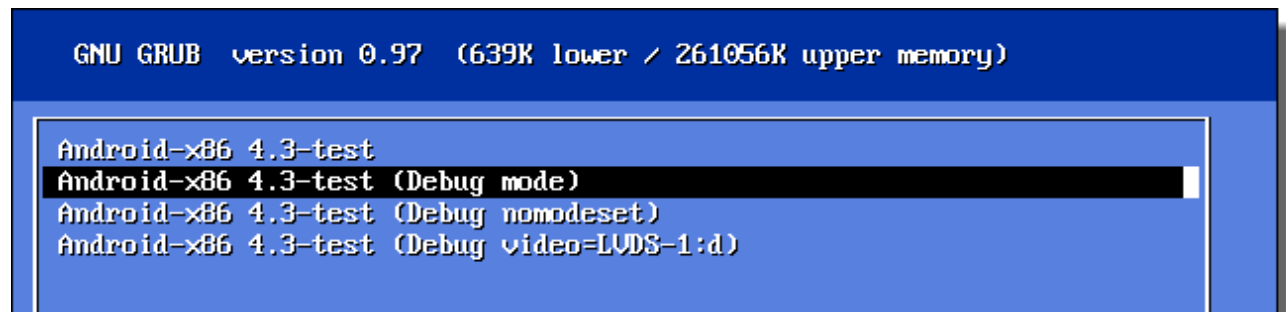
1. First of all, install the Android from iso image correctly through the wizard steps.
2. Do **not** use EFI GRUB during install.
3. Do **not** use immediate *Run Android\_x86* option, instead select *Reboot* and eject the iso. The error mentioned by @Jay Smith

The big drawback of this approach is that the next time you try to boot from the hard drive, GRUB will not be able to find the image

is **not** related to VGA issue and should be dealt separately. I also met this error and full reinstall helped, so I **assume** this error is somehow connected with the *Run* option, 'cause when I selected *Reboot* I didn't face the error.

4. After the install you will boot and will stuck into Android command prompt. Okay, go on then.
5. Now you should try to pick up your correct resolution. It won't necessarily be **788** or **794**, as they say [here](#), it all depends on your hardware setup. For me 796, 794 and 792 worked for KitKat, Lollipop and Marshmallow images correspondingly, however your values could be different. [Here is](#) the table for linking GRUB VGA values to resolutions. To check what match you use trial and error method

Then on boot to GRUB screen choose **e** key to edit the option



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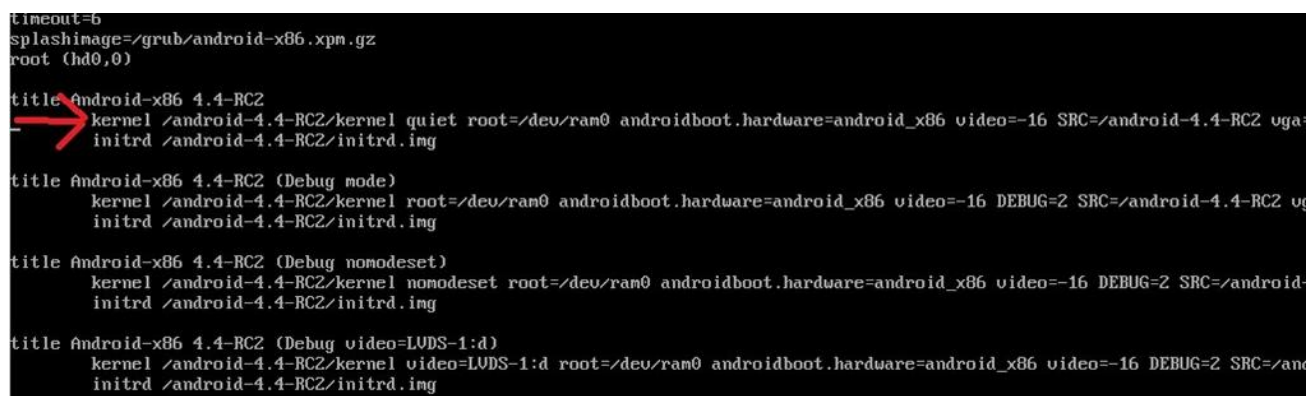
After editing press Enter and **b** to boot the desired bootrecord.

6. Iterate these steps N times to find proper resolution. You will recognize that by the booting of Android:)
7. O-la-la, excellent! We achieved the desired result and booted Android for one time. But this is only 50% of job. I guess you don't want to type this VGA crap each time? Okay, let's go on to persist our result.
8. Now we need to edit `GRUB config` to add our desired resolution. While there are ways that allow doing this within the GRUB itself (i.e. debug mode, `grub cmd`) I wasn't able to get it to work and propose another 100% solution.

We need working Linux installation (physical or virtual, doesn't matter). The problem here is that GRUB folder cannot be accessed from inside Android as it's protected, and it should be accessed externally. And not from Windows because it doesn't recognize `ext3/ext4` partitions, only from \*nix OSes. So add this disk (VHD, VDI, VMDK or whatever) to your Linux installation for it to have access to android filesystem

9. Access `/grub/menu.lst`. Usually it is located in root folder.

10. There you'll find smth like



```

timeout=6
splashimage=/grub/android-x86.xpm.gz
root (hd0,0)

title Android-x86 4.4-RC2
kernel /android-4.4-RC2/kernel quiet root=/dev/ram0 androidboot.hardware=android_x86 video=-16 SRC=/android-4.4-RC2 uga
initrd /android-4.4-RC2/initrd.img

title Android-x86 4.4-RC2 (Debug mode)
kernel /android-4.4-RC2/kernel root=/dev/ram0 androidboot.hardware=android_x86 video=-16 DEBUG=2 SRC=/android-4.4-RC2 uga
initrd /android-4.4-RC2/initrd.img

title Android-x86 4.4-RC2 (Debug nomodeset)
kernel /android-4.4-RC2/kernel nomodeset root=/dev/ram0 androidboot.hardware=android_x86 video=-16 DEBUG=2 SRC=/android-4.4-RC2 uga
initrd /android-4.4-RC2/initrd.img

title Android-x86 4.4-RC2 (Debug video=LUDS-1:d)
kernel /android-4.4-RC2/kernel video=LUDS-1:d root=/dev/ram0 androidboot.hardware=android_x86 video=-16 DEBUG=2 SRC=/android-4.4-RC2 uga
initrd /android-4.4-RC2/initrd.img

```

Append the desired VGA option to the bootrecord as we did earlier and that's it!

11. Save the file.

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thanks for suggestion – [Suncatcher](#) Sep 11, 2020 at 4:02



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I also had problems with Android x86 virtual box on a Windows 7 Pro x64 AMD machine. I suppose we are all going to have slightly different issues depending on our architecture/hardware but they all seem to be similar root causes. I think more emphasis should be on the architecture/hardware then the host OS. Try 32bit without/with EFI set in System, leave hardware acceleration at default, make sure virtualisation is enabled in your bios. Don't enable 3D Graphics acceleration, you should get a warning if you enable 2D acceleration so don't enable that, if you get a black screen during initial setup try increasing the video memory up to 64mb. Finally you can download pre-built VM images here:

<http://www.osboxes.org/android-x86/>

All these little tweaks helped me successfully install Android x86 4.4 on a Windows 7 x64 Pro machine.

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answered Oct 31, 2016 at 20:06



[PassingGuest](#)

41 1 2



4



Some progress here, but not the real thing. The following allowed me to boot Android x86 6.0 under VirtualBox correctly - but only once:

1) When booting the installation image, the initial screen gives you four options. Move the cursor to the last one: Installation - Install Android-x86 to harddisk".

2) Press the [Tab] key for edit options.

3) Immediately after `INSTALL=1 DEBUG= type vga=788`

(Make sure there is a space between `DEBUG=` and `vga=788`.)

4) Press [Enter]

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edited Apr 17, 2017 at 12:19

answered Aug 29, 2016 at 20:07



xavier\_fakerat

9,767

6

40

94



Jay Smith

41

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1 Unfortunately it's one-time workaround :(... – [Suncatcher](#) Feb 18, 2017 at 18:19

Here is a YouTube video showing how to set VESA mode in Grub.

1 <https://www.youtube.com/watch?v=JoMs-4bsygs>

My other post was deleted for some reason, but if you want to find out if VESA/VIDEO is the reason your gui isn't coming up after install, then boot from the Android x86 ISO and select VESA mode (Live boot) and if you get a gui, then check out that youtube video. It explains perfectly how to setup your grub to boot the correct VESA mode.

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answered Aug 13, 2016 at 19:52



Android Helper

11

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Pressing [esc] is not supported – [Micha93](#) Aug 18, 2019 at 18:15

My problem is in booting from the ISO. – [Quidam](#) Jun 12, 2020 at 14:12

Select "**Yes**" when it asks "Do you want to **install boot loader GRUB**".

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Now you can boot into Android. (Works even rebooted)

Reference: <https://shellzero.wordpress.com/2015/10/27/how-to-install-android-on-vmware-fusion-mac-os-x/>

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answered Oct 1, 2017 at 14:56



Ivan Chau

464 5 12



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Completely new to this but I just tried installing Android 6.0 on Workstation 12 Pro and on boot just stuck at command prompt occasionally flashing. Tried a couple of the suggestions from above to no avail. Finally went into VM settings and ticked on 3D Graphics at which it warned that it was not supported. This then allowed me to select 32mb of graphic memory. Rebooted and it worked. Tried booting several more times just to prove it and it is still working. Hope this helps.

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answered Oct 16, 2016 at 14:19



Spider5445

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I tried the solution given by Spider5445 and it worked for Nougat as well...thanks a ton mate! :)  
– [Kapil Vyas](#) Mar 18, 2017 at 10:01



0



While in the grub bootloader, press tab and change androidboot.hardware=android\_x86 to androidboot.hardware=x86.

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answered Dec 29, 2016 at 0:13



Alec Petridis

1 1

Your ISO is corrupt, please try redownloading it from [The official Android website link](#)

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I had the same problem with the installation on my hard-disk and for me the following steps helped:

- Like Jay mentioned above: On the installation medium I pressed the [Tab] key.
- I wrote down exactly all the arguments like `androidboot.hardware=android_x86_64` and `DEBUG=2` etc. which are shown now for the installation medium boot menu entry.
- I added all these arguments in my custom grub configuration and updated grub.
- When booting I have to enter twice "exit" in the prompt of the console.

Doing this Android booted and started the window manager.

P.S.: Very uncool if an reviewer messes up the format of an answer and than even votes you down without getting the content.

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edited Oct 14, 2017 at 14:08

answered Oct 9, 2016 at 14:19



goofy

99 2



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