

# The VirtualBox Guest Additions and Linux distributions

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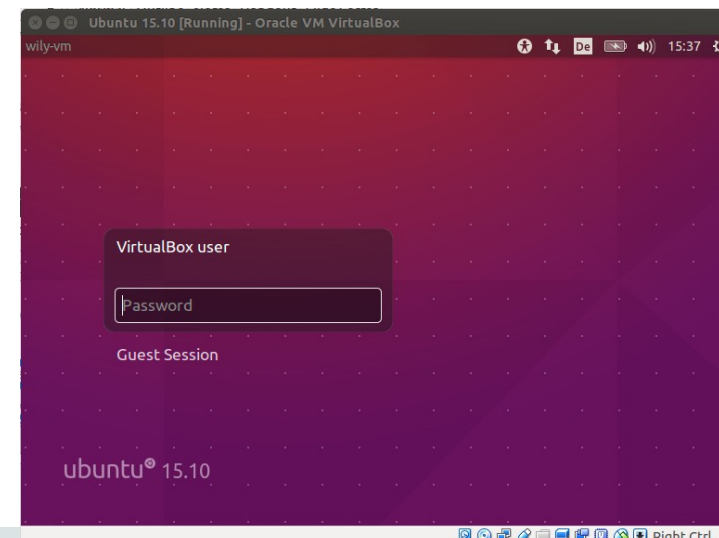
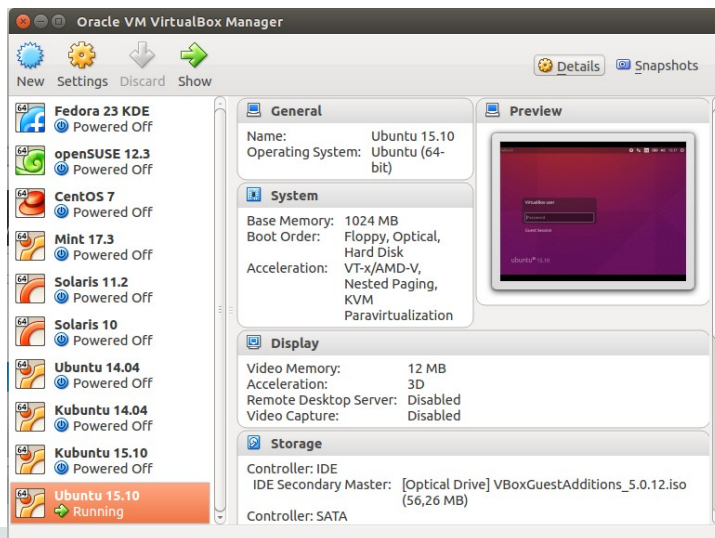


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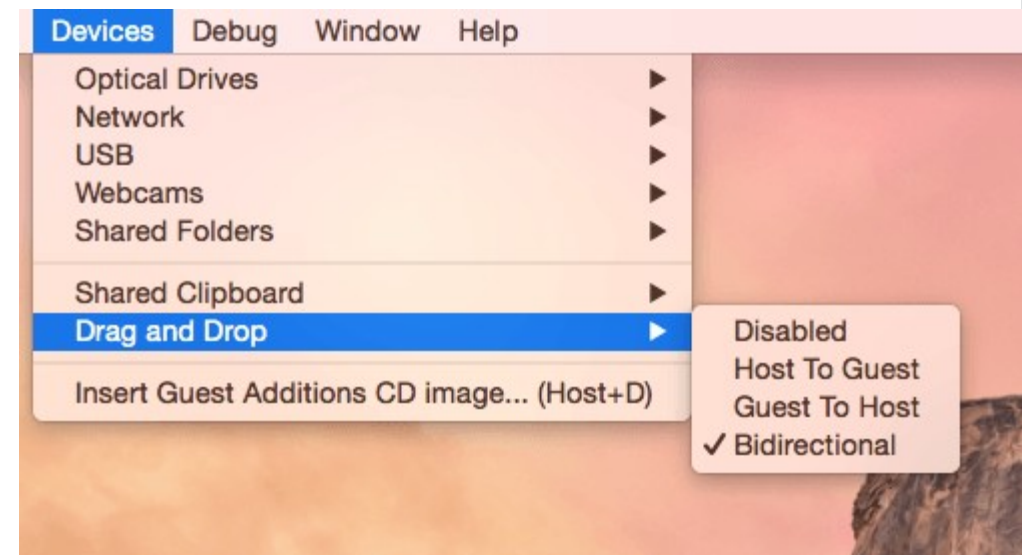
# What is VirtualBox?

- A “cross-platform virtualisation application” (VirtualBox User Manual) for x86 on x86
- Aims for easy-to-use virtualisation (oxymoron?)
- Mainly targets desktop users



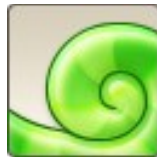
# What are the VirtualBox Guest Additions?

- Drivers and tools which run in virtual “guest” systems
- Make working with guests more convenient, and give access to host resources
- Example: synchronise guest and host pointers
- Example: script guest applications from host
- Example: accelerate 3D rendering in a guest



# Why do distributions want to package the Guest Additions?

- Having Guest Additions installed by default makes the distribution nice to use in a virtual machine.
- Distribution developers are virtual machine users.
- “Because we can”?



# Why should that cause difficulties?

- The Guest Additions are regularly updated to use new VirtualBox features.
- But distributions are not consistent about updating them if they do it at all, especially older distributions.
- Supporting older distributions is a key selling point.
- And installing “our” Guest Additions on top of distribution ones is (probably) a bad idea.

```
You appear to have a version of the VirtualBox Guest Additions software
on your system which was installed from a different source or using a
different type of installer. If you installed it from a package from your
Linux distribution or if it is a default part of the system then we strongly
recommend that you cancel this installation and remove it properly before
installing this version. If this is simply an older or a damaged
installation you may safely proceed.
```

```
Do you wish to continue anyway? [yes or no]
```

# What are the good sides for us?

- Having Guest Additions pre-installed really is a nice user experience.
- Distributions are better at packaging things than we are.
- Someone else can test that things work well.

# So what can we do to improve the situation?

- At the moment we do not have a master plan.
- So let's go through the ideas which come to mind...
- ... and see what a room-full of distribution experts can do with them!

# Solution 1: ask users to remove distribution Guest Additions first.

- Works now
- Pretty fool-proof
- But terrible user experience





# Solution 2: let it be the distributions' problem



- Also works now
- But may also not be as good an experience as we would like
- Especially not if the distribution provides a very old version of the Additions

# Solution 3: support multiple parallel installations

- Needs some sort of agreed selection mechanism
- I doubt distributions will like this much though
- Distributions like to put kernel modules into initrds and kernel packages (but they can be unloaded at service start)



# Solution 4: you tell me!



# **Hardware and Software Engineered to Work Together**