Creating VDMK images from OIP 2.0 (usable for loading into Virtual box under Windows)

There are two ways that the VDMK image type could be generated from Hob tool or just with modifying the local.conf file and appending to variable *IMAGE_FSTYPES* the string "*vmdk*" :

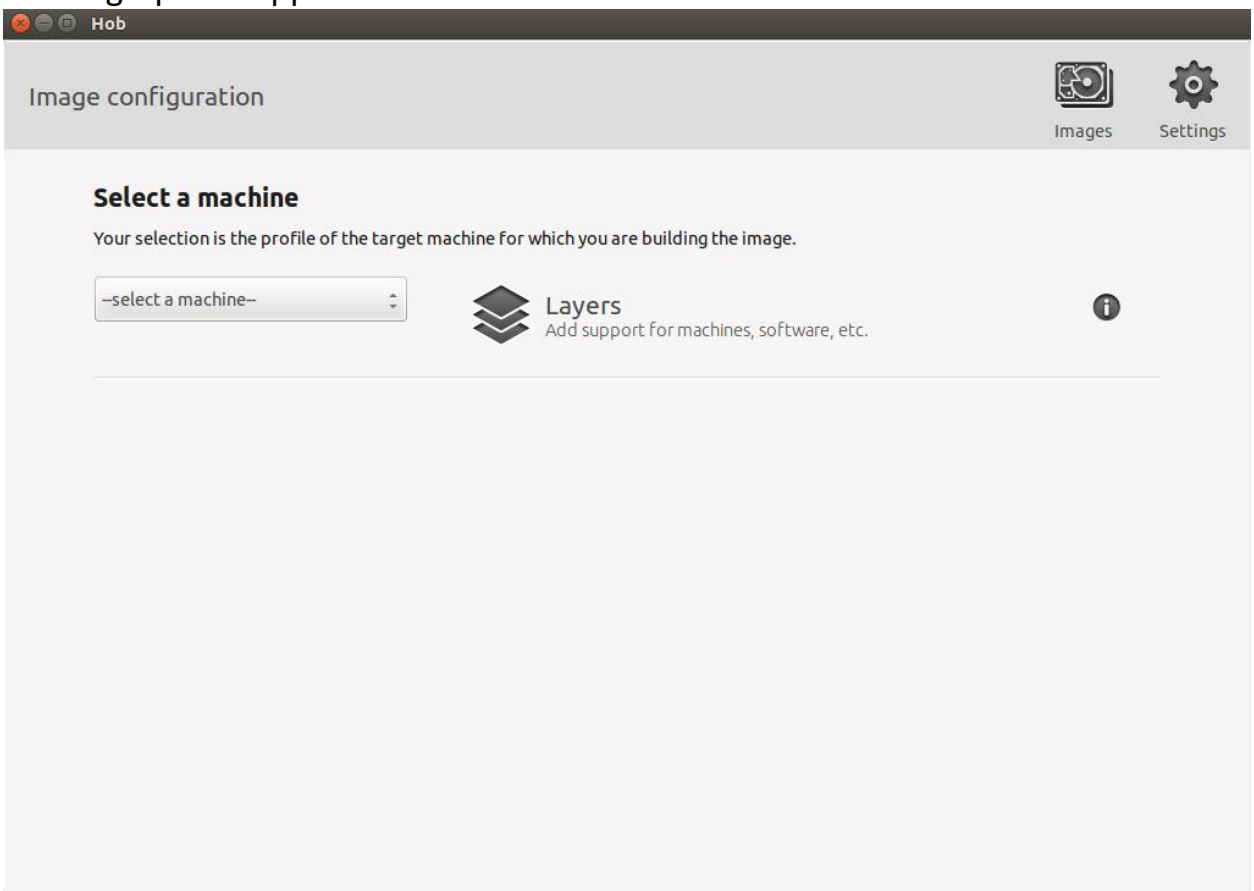
```
# CONF_VERSION is increased each time build/conf/ changes incompatibly and is used to
# track the version of this file when it was generated. This can safely be ignored if
# this doesn't mean anything to you.
CONF_VERSION = "1"

#
# local OIP configuration
#
MACHINE ?= "qemux86-64"

# to improve connection via proxy
FETCHCMD_wget = "/usr/bin/env wget -t 2 -T 230 -nv --passive-ftp --no-check-certificate"

require buildversion.conf
require mirror.conf
include oldDevKitStuff.conf

IMAGE_FSTYPES += "vmdk"
```

Then run the bitbake as usual (described in Building OIP 2.0) and you will get the necessary files - then the Hob part that follows in this manual, should be skipped and you could read how to set-up virtual box at the end of this page.

Second approach is to create VDMK format image from the output of OIP 2.0 Yocto project via graphical tool called Hob.
Standard bitbake process creates all the necessary files needed for running in QEMU emulator (which is included in Poky part of the Yocto project), but there is a also a way to create a VDMK image which could be loaded into virtualization software like VirtualBox.
Before creating such image it must be sure that we could build the ordinary OIP 2.0 image e.g. cpi-image. Full instruction for setting up the build environment and building cpi-image could be found at :
Building OIP 2.0
Once we have created the cpi-image we could create the VDMK image via tool called hob. Hob is started from command line at build directory (be sure that the scripts that setup the build environment are executed (*./build/scripts/setup-buildenv.sh -sw-platform-oip* and *source poky/oe-init-build-env*).

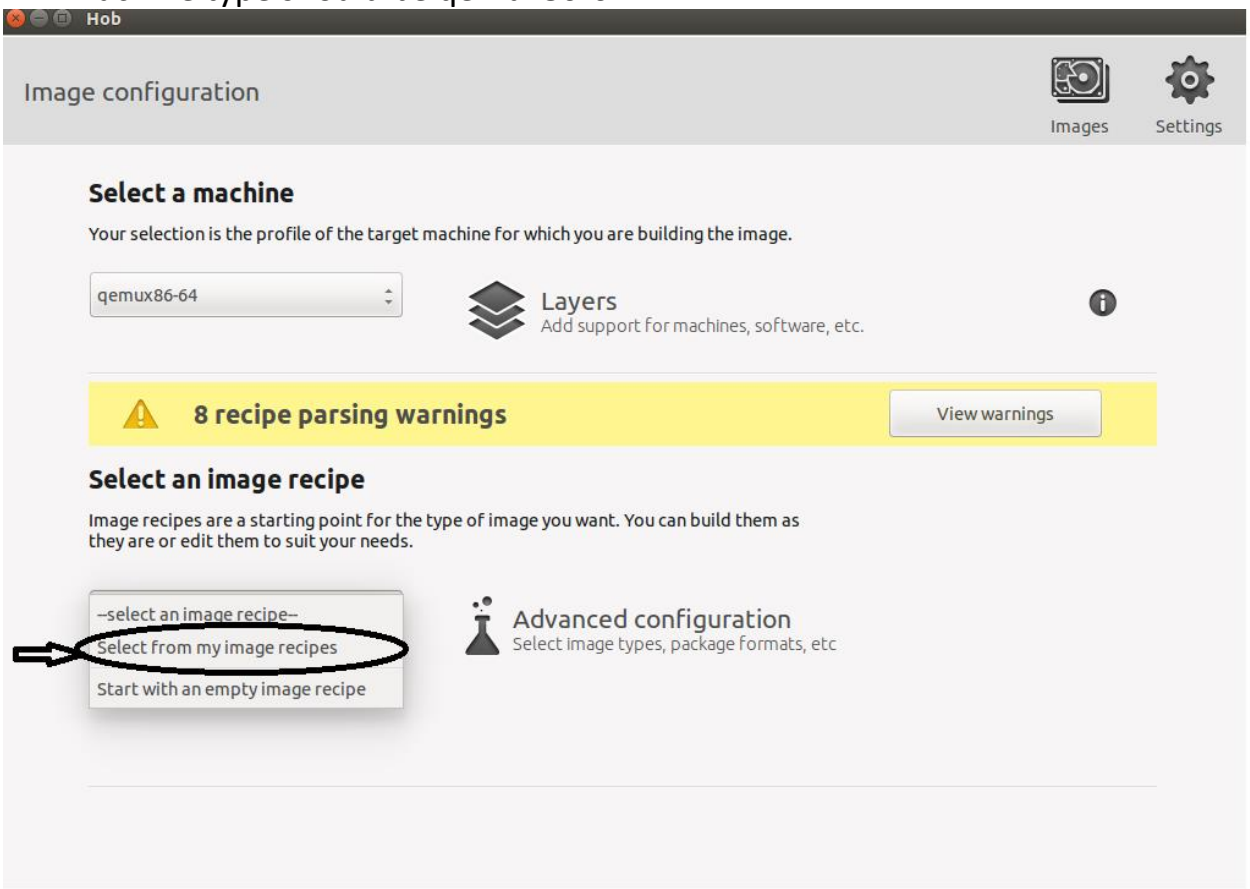
Start Hob
uidpXXXX@UidpXXXX-VirtualBox:~/OIP2/build$ hob

Hob is graphical application and looks like this :



Now we have to select the machine and some other settings:

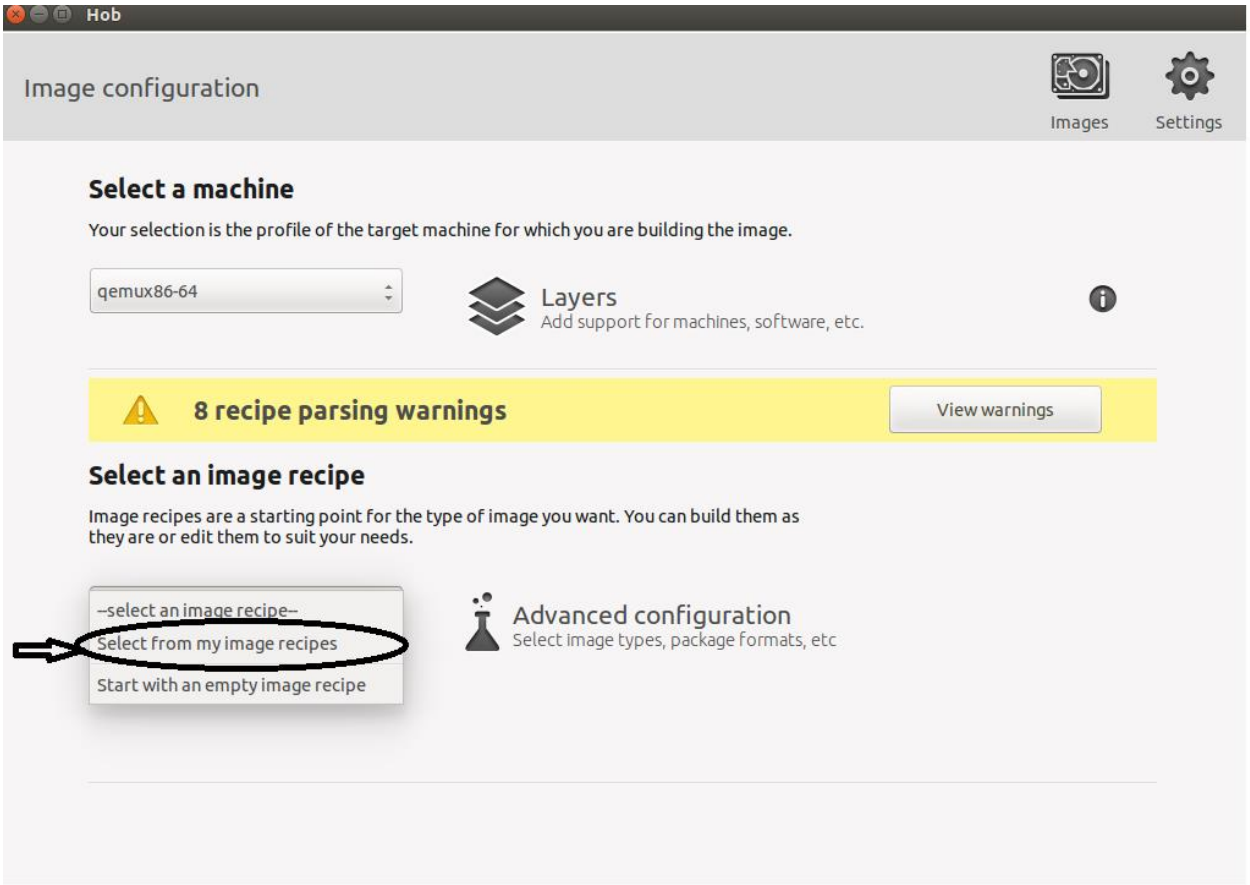
- Machine type should be qemux86-64 :



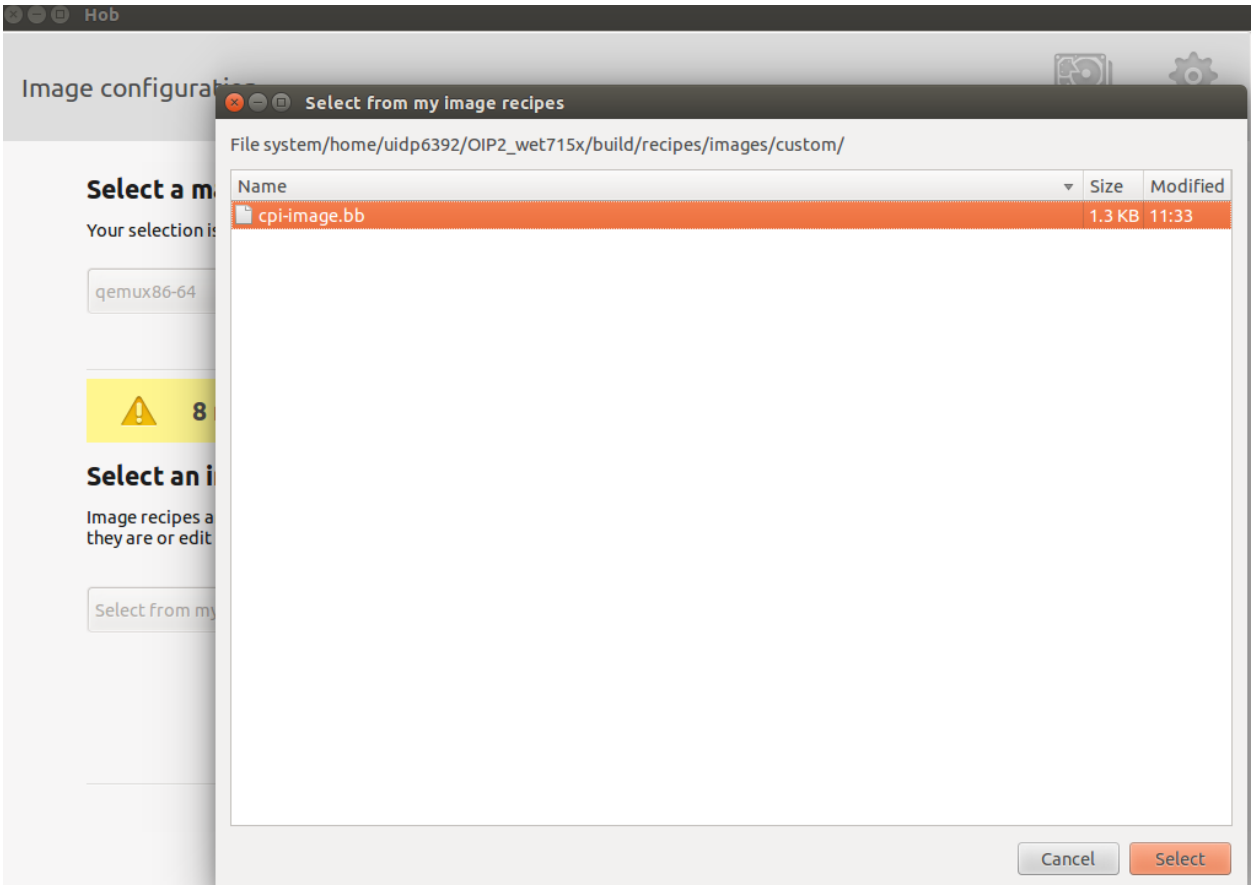
When you select the machine, hob tool will start parsing available recipes and next step would be to select the image recipe. For that reason open new console and copy the cpi-image recipe to the new directory that *recipes/images/custom* in project *build* dir:

copy cpi-image recipe to hob custom dir
uidpXXXX@uidpXXXX-VirtualBox:~$ cp OIP2/meta-sw-platform-oip/recipes-cpint/images/cpi-image.bb OIP2/build/recipes/images/custom/

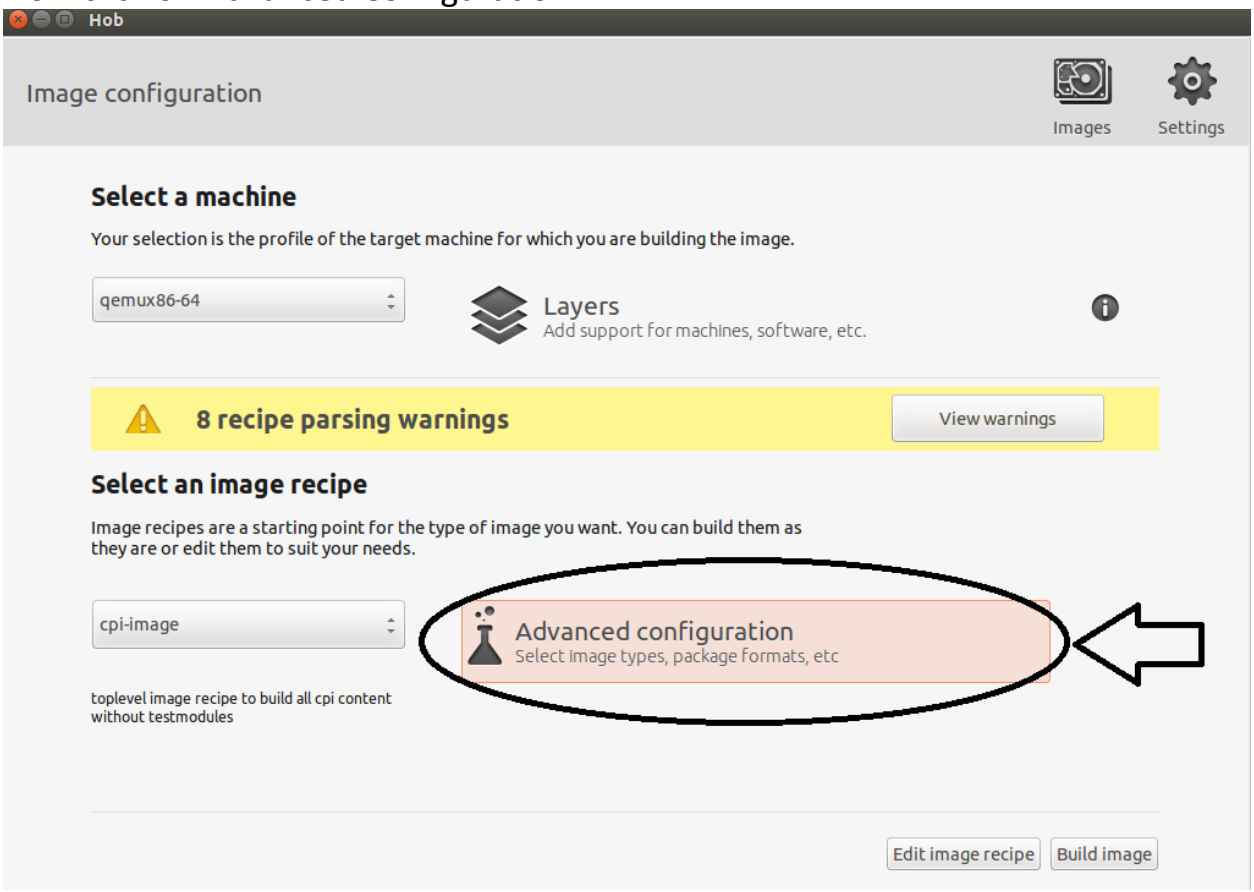
Now return to hob tool and choose the cpi-image as image recipe -choose "Select from my image recipes":



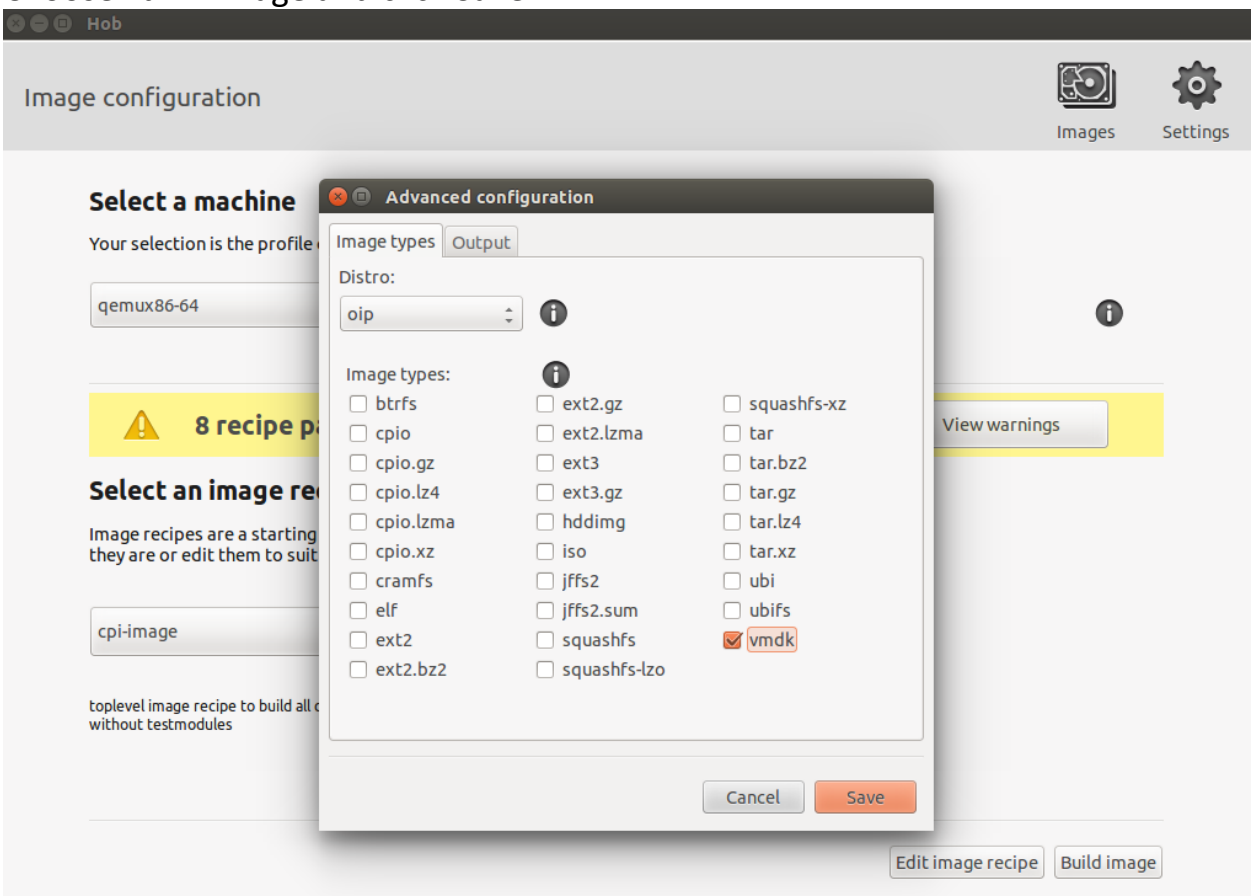
Select cpi-image.bb :


Hob
Image configurati
Select a m
Your selection is
qemux86-64
8
Select an i
Image recipes a
they are or edit
Select from my
Select from my image recipes
File system/home/uidp6392/OIP2_wet715x/build/recipes/images/custom/
Name
Size
Modified
cpi-image.bb
1.3 KB
11:33
Cancel
Select

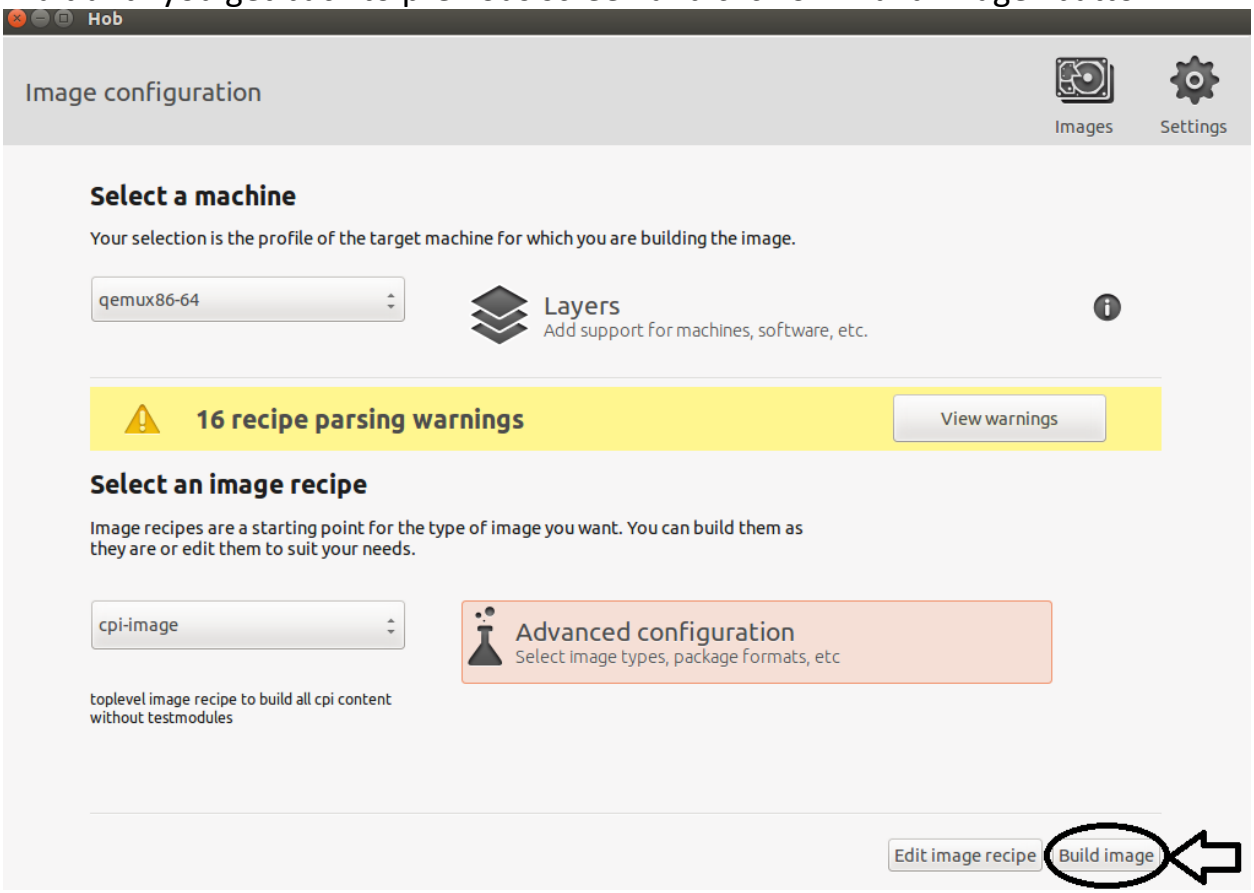
Now click on Advanced Configuration :



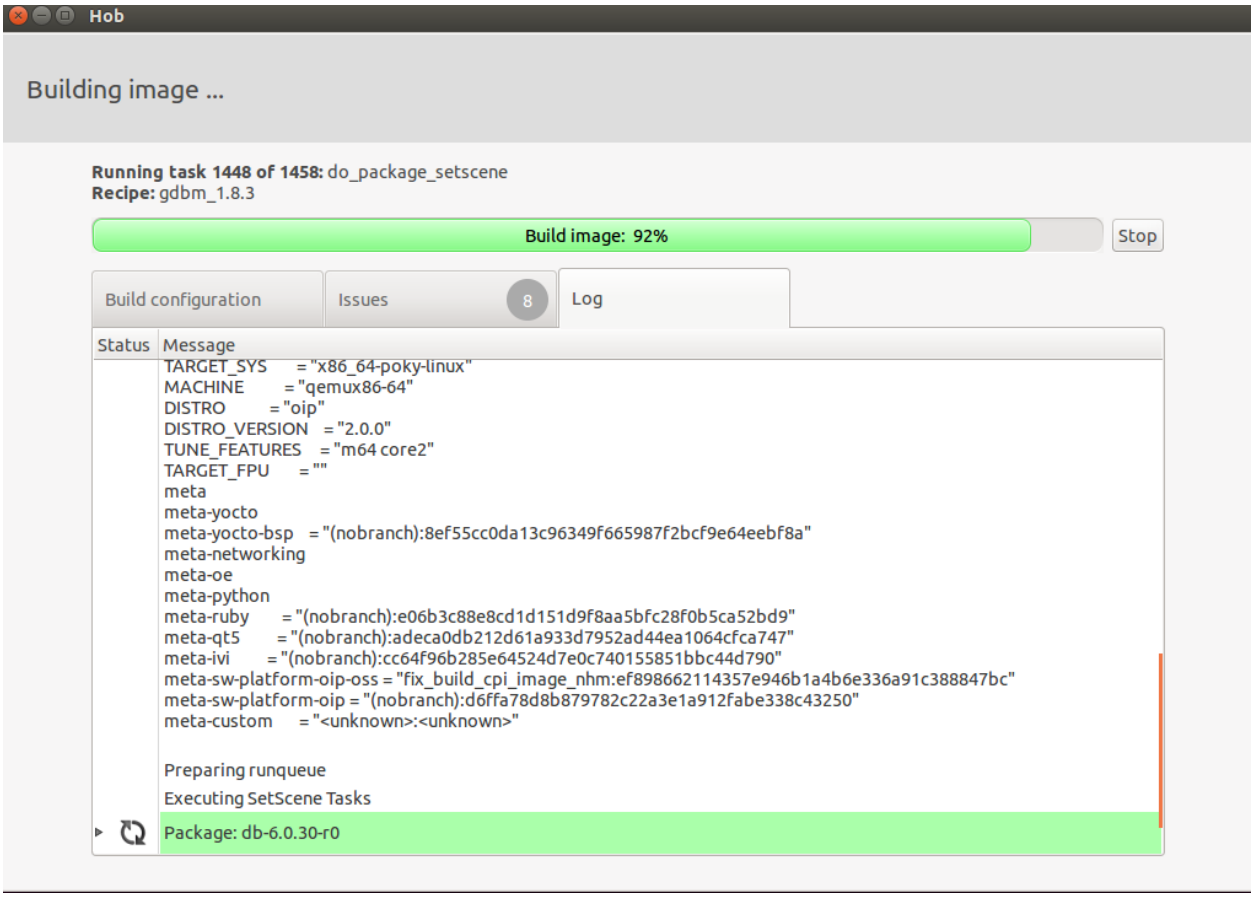
Choose vdmk image and click Save:



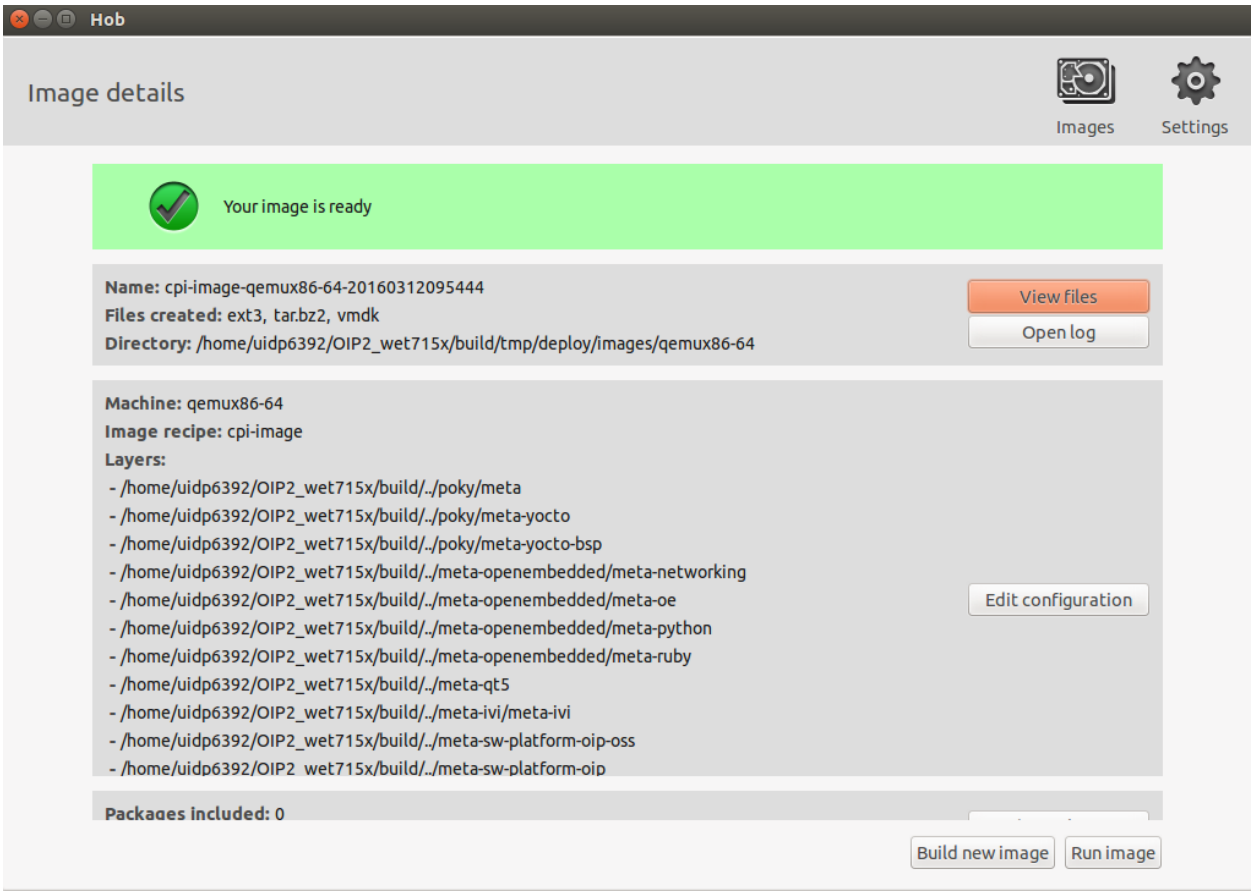
Wait until you get back to previous screen and click on "Build image" button :



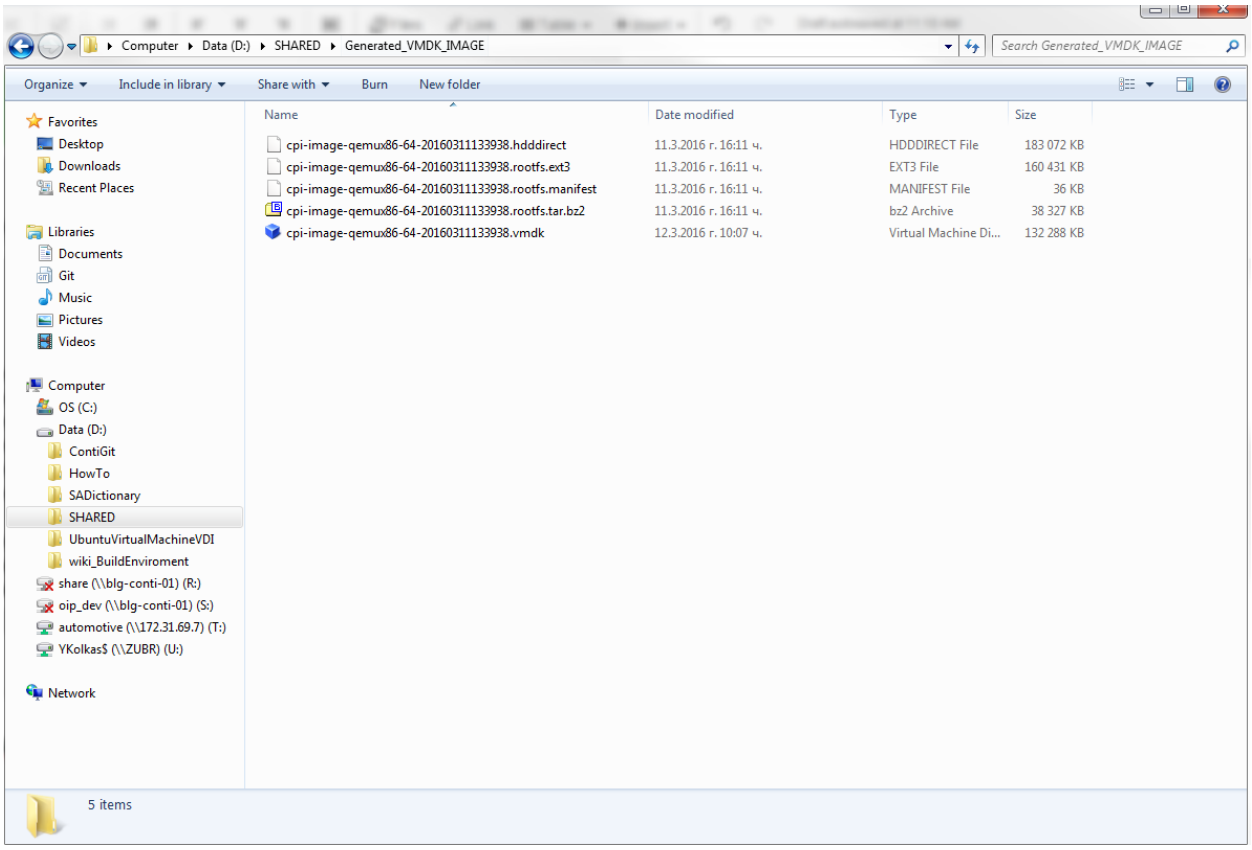
Now : "KEEP CALM AND BITBAKE":



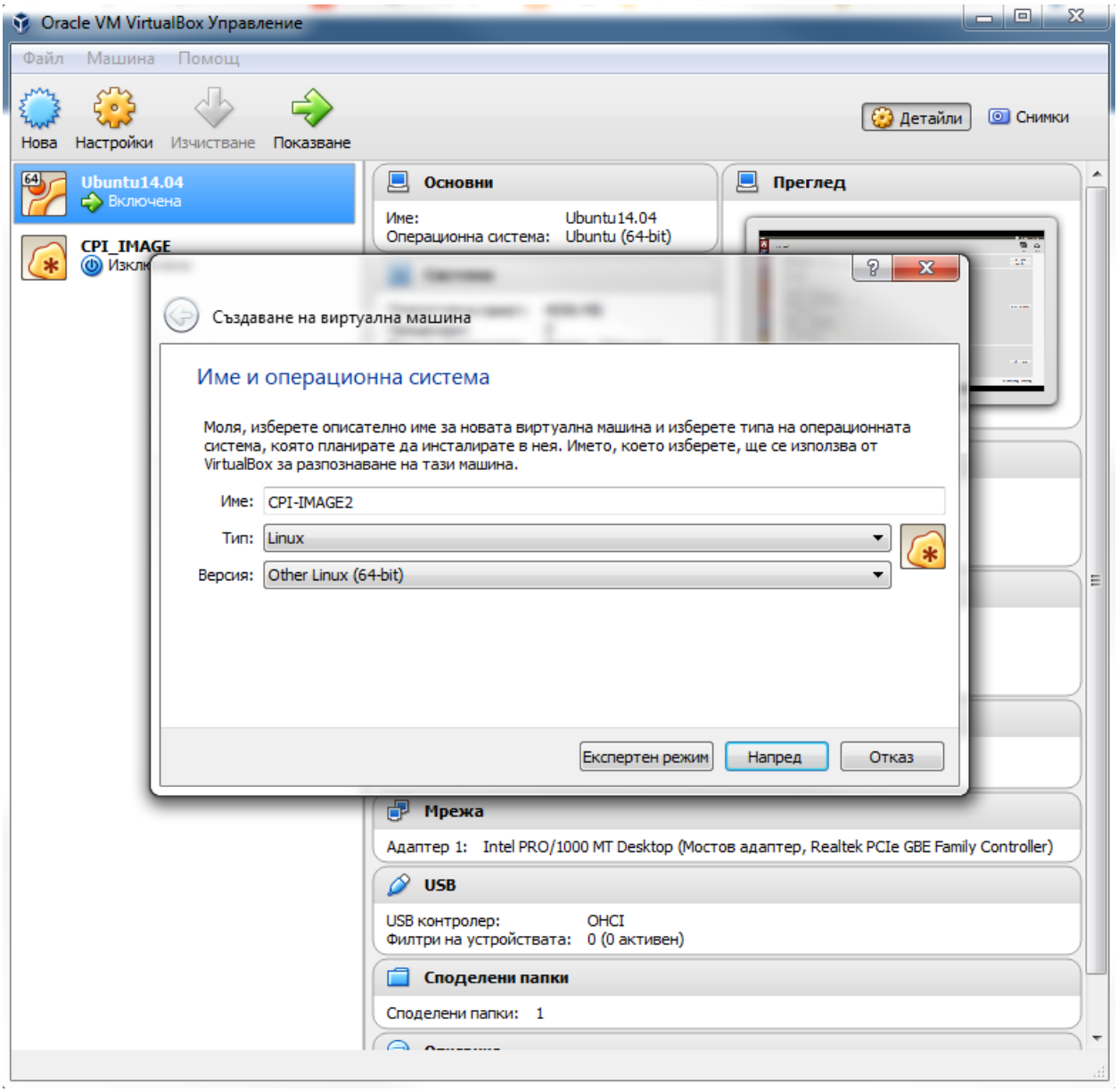
Once the btibake process is completed successfully - we have now our VDMK image available in the *~/OIP2/build/tmp/deploy/images/qemux86-64* :



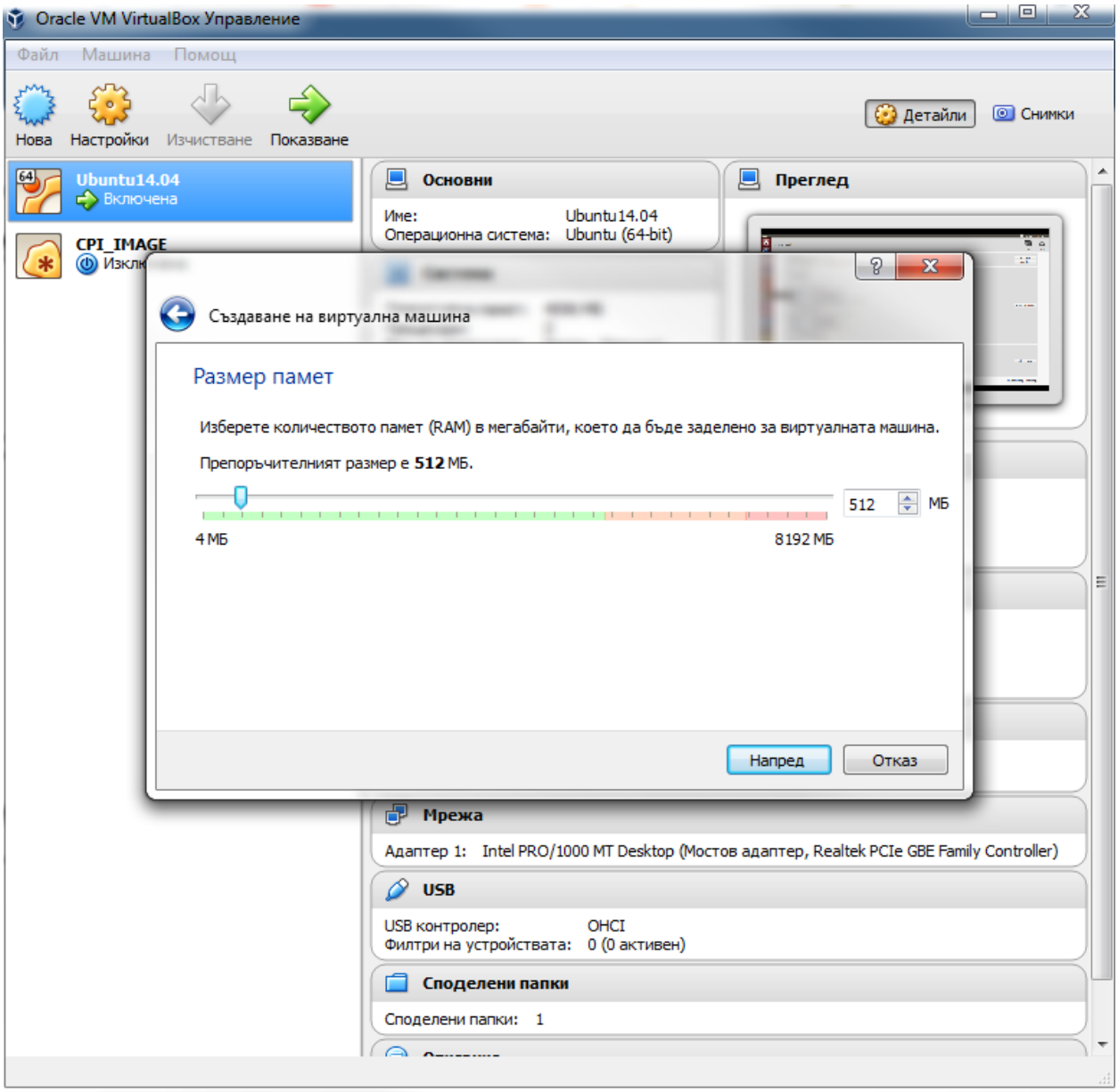
Next steps are to load the image into virtualbox:
We have to copy the newly generated files into the Windows and then setup the new VirtualBox machine:



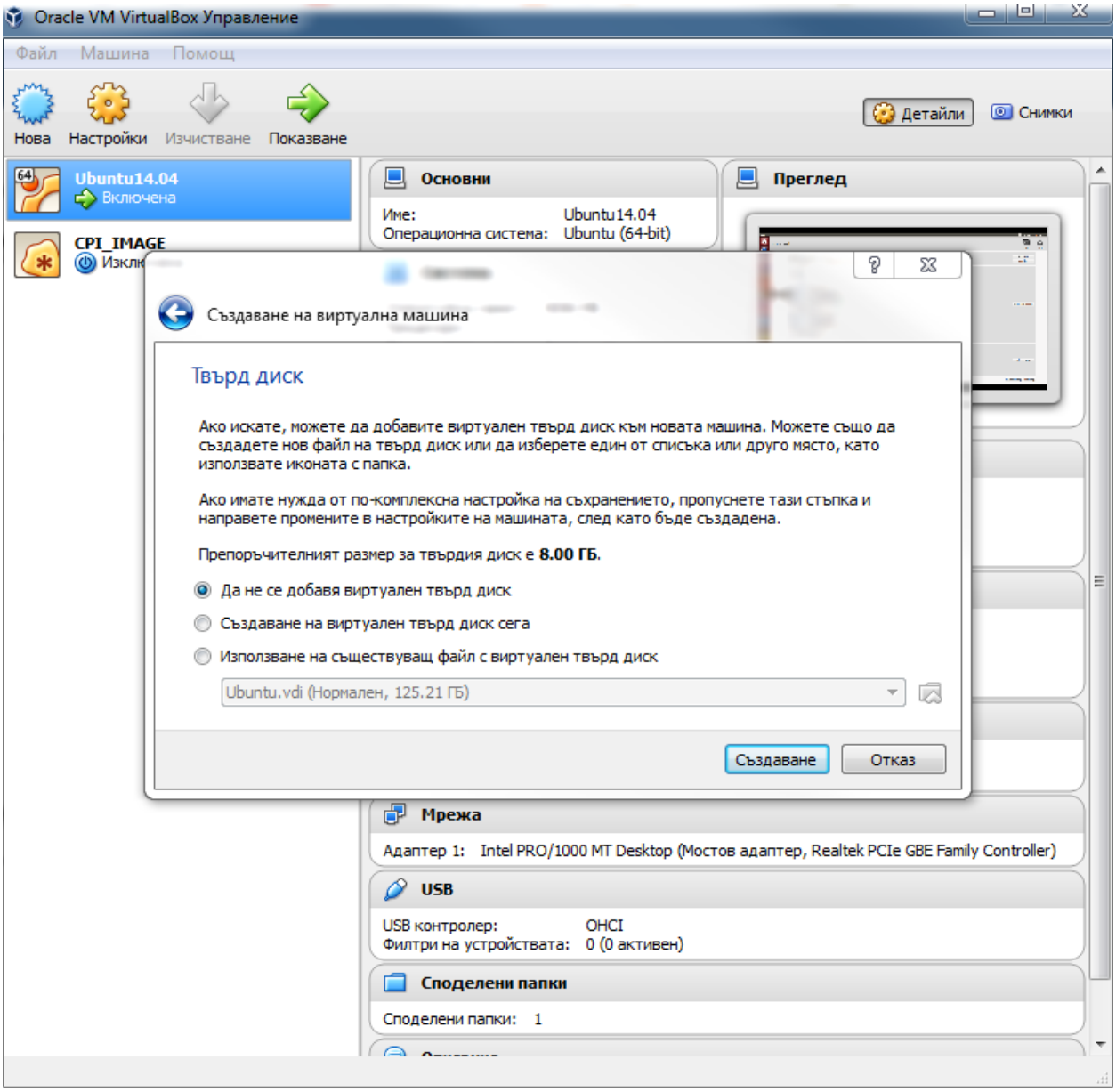
Now start The virtual box and create a new Virtual Machine:
It should be Linux type and version "Other Linux (64-bit)":



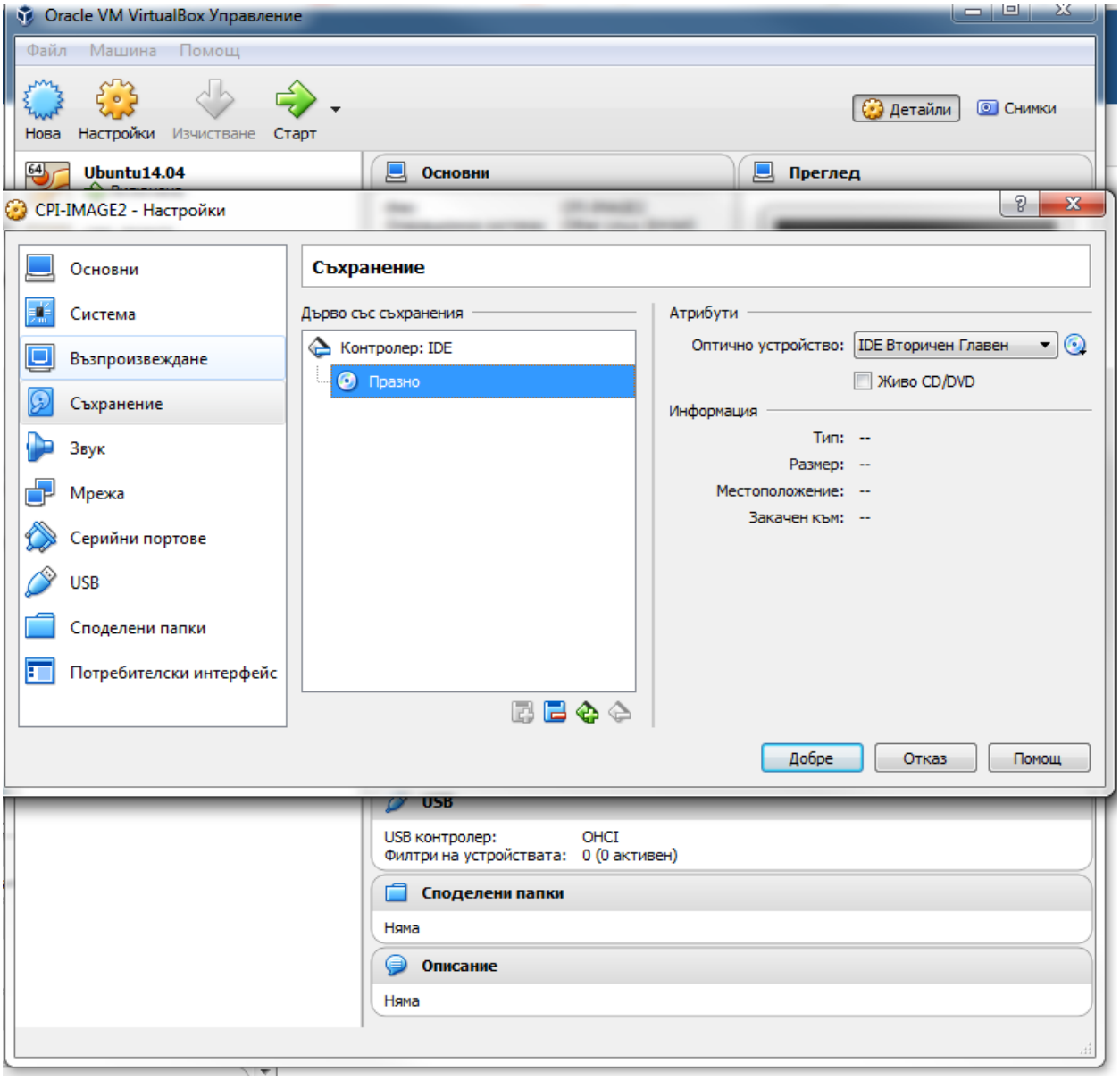
Then click Next (Напред). Choose RAM memory allocated for the machine (512MB should be OK):



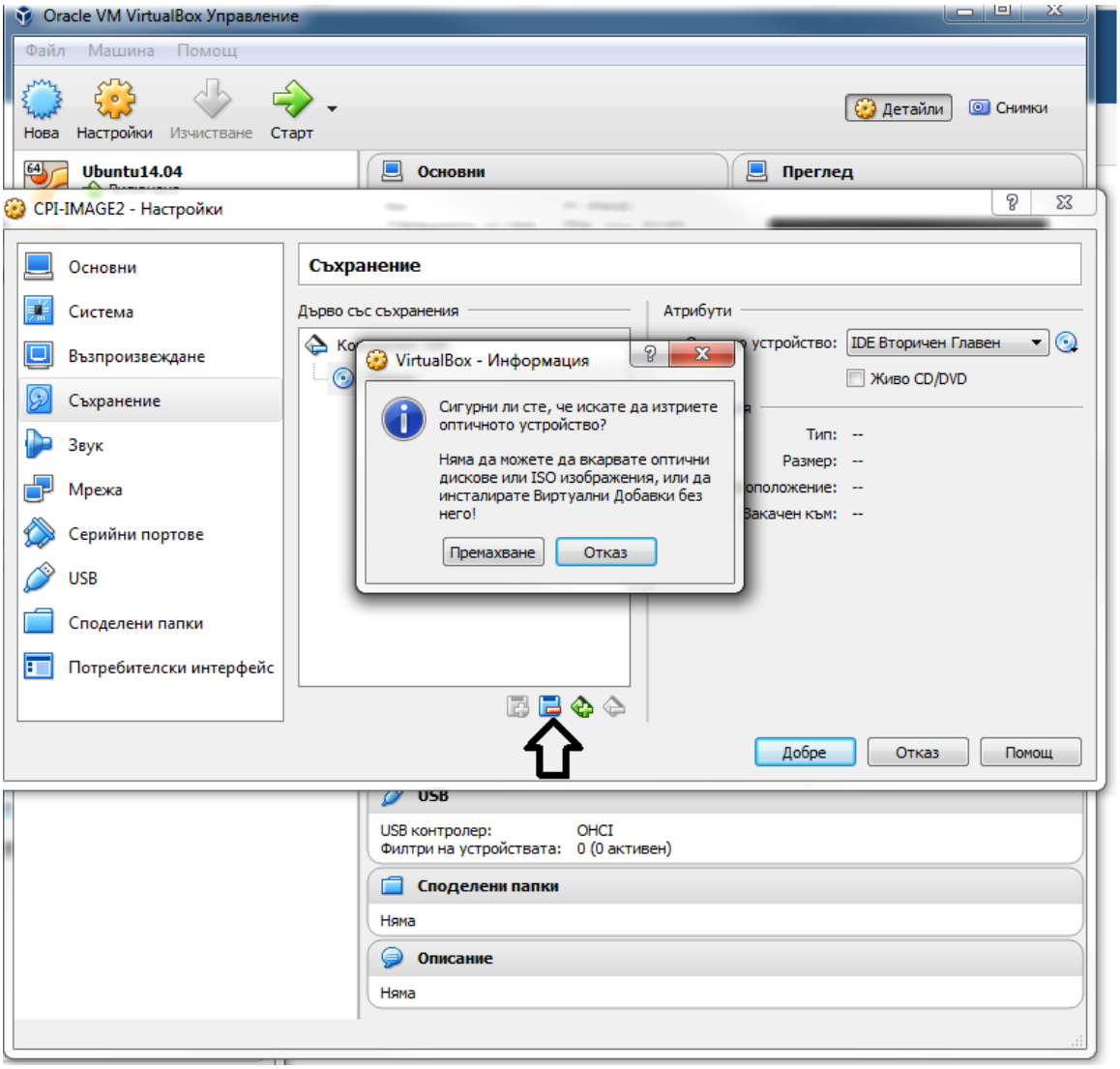
Next - choose virtual hard drive -for now skip this step and mark "Do not add virtual disk now":



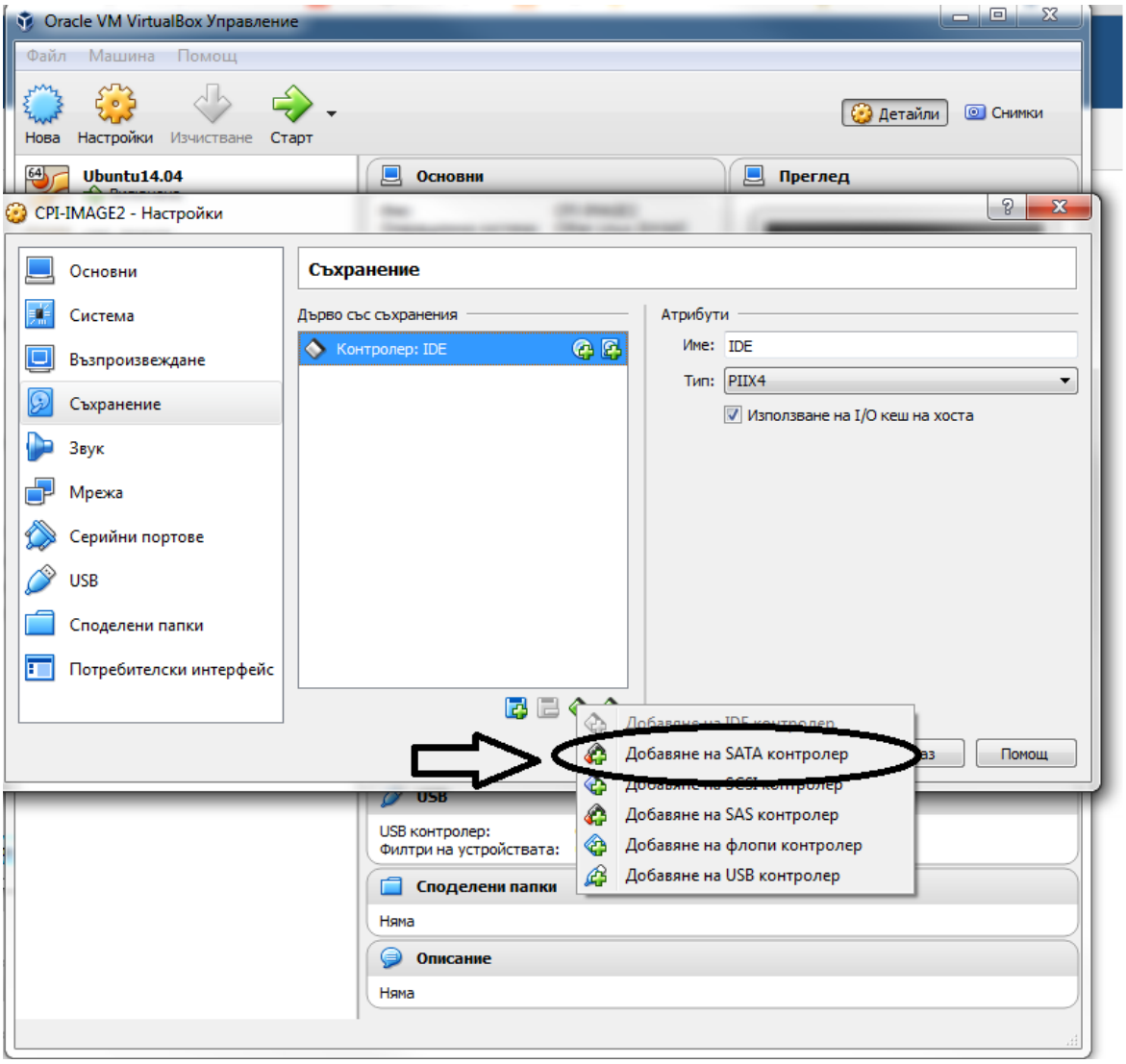
Confirm that your machine would not have virtual disk and from the main screen of virtual box choose Settings (Настройки) and then on Storage:



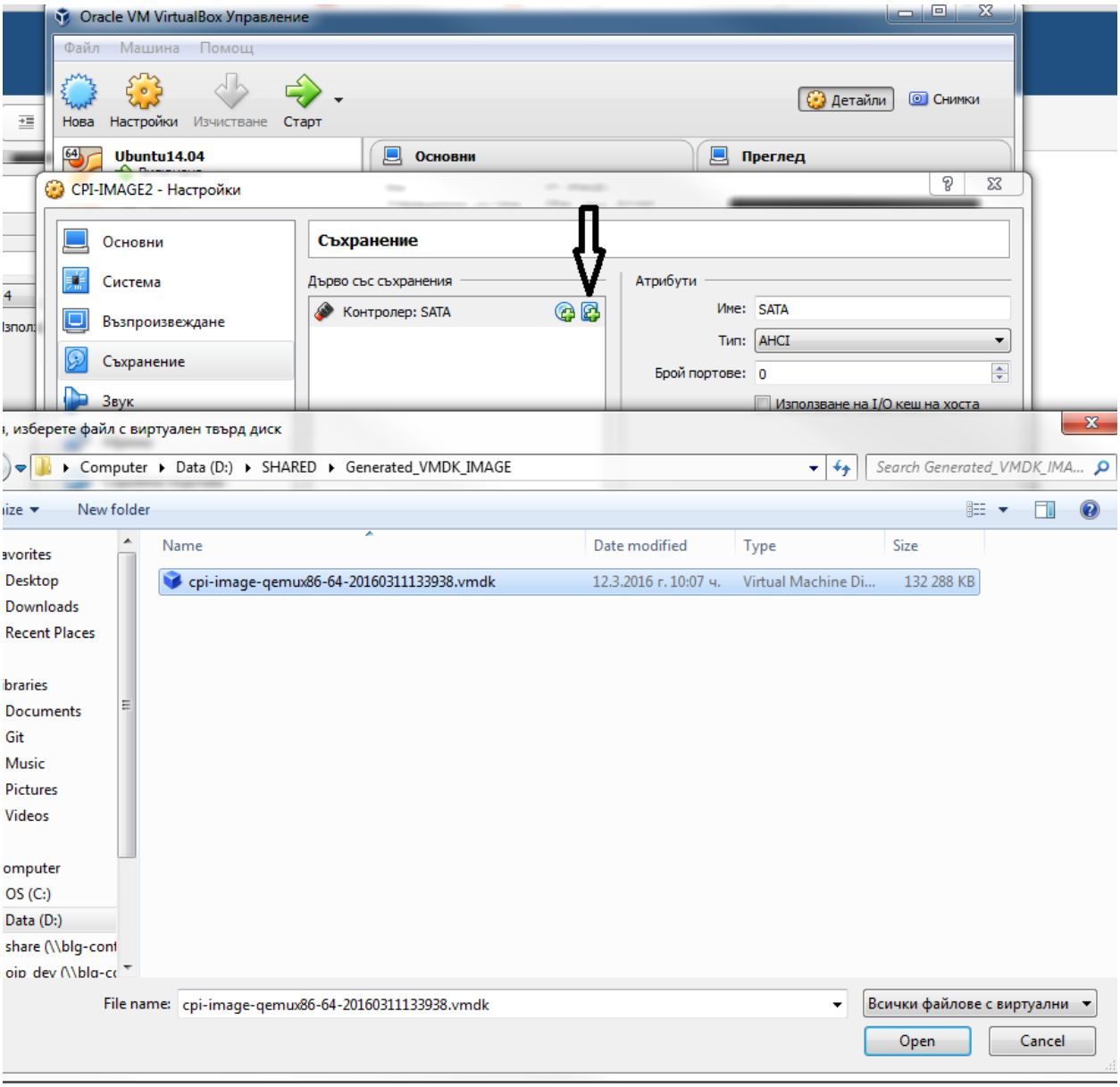
Delete the current IDE controller:



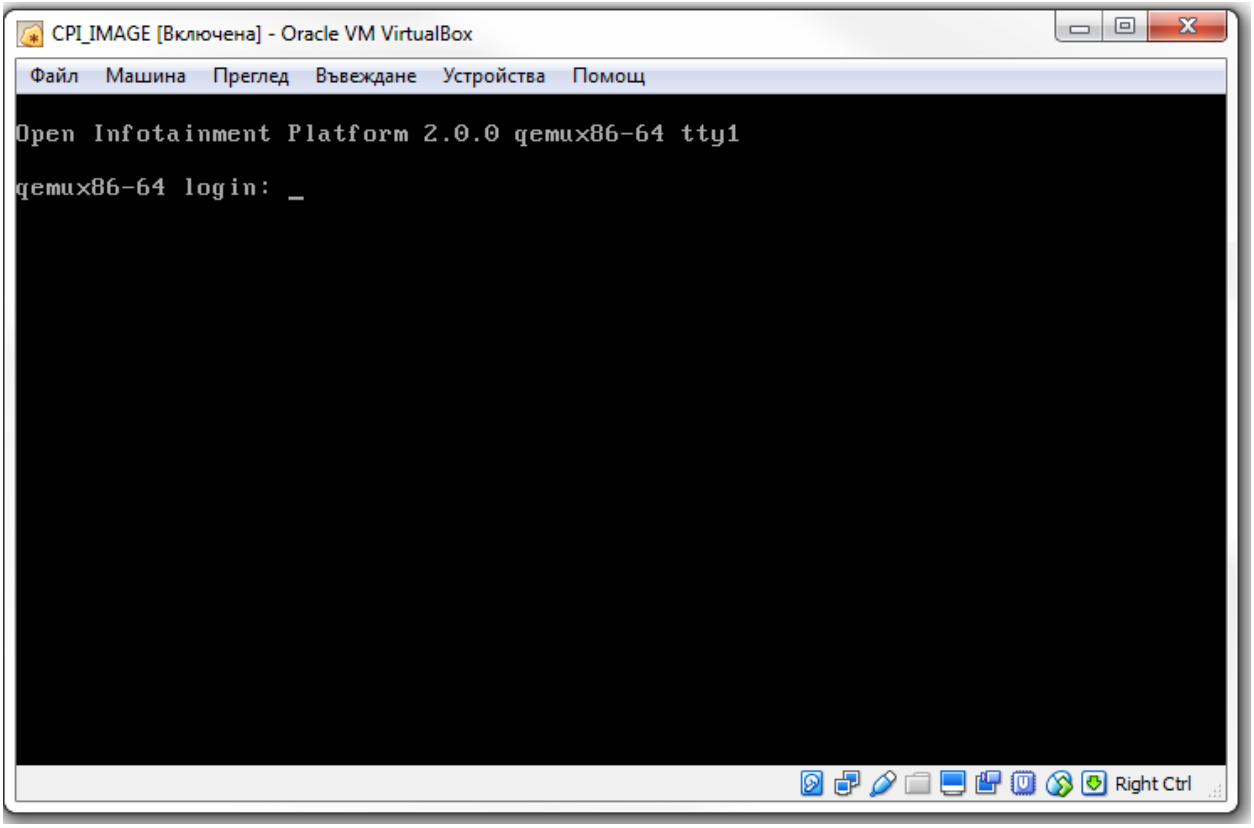
And add a SATA controller :



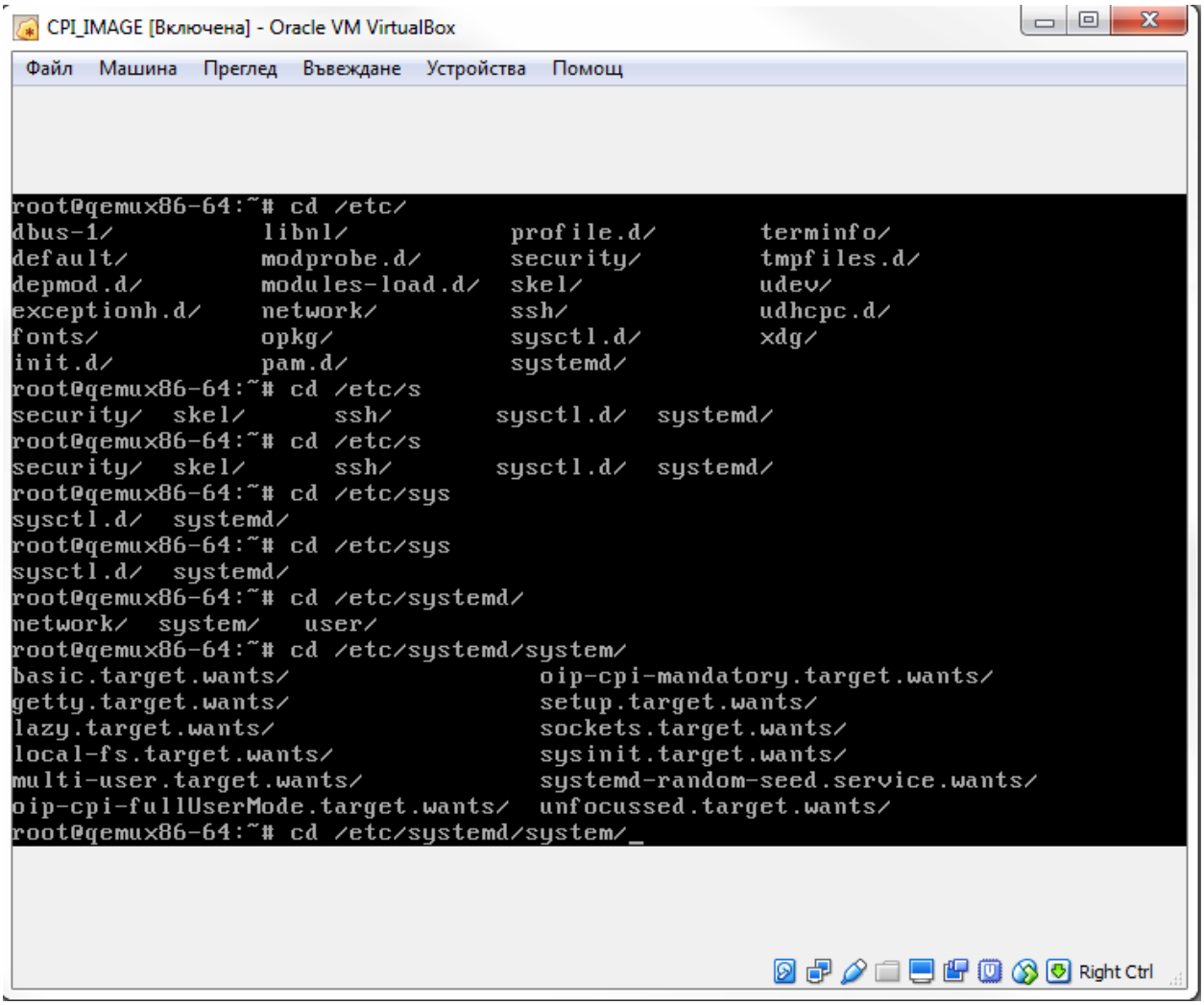
Now add new virtual hard drive to the new SATA controller - choose generated VMDK files from Hob tool:



Now you are ready to start the cpi-image inside VirtualBox :



Log as root and have fun :



Important !!! Important !!! Important !!! Important !!! Important !!!
Hob tool makes modifications in build/conf directory and also changes conf files in poky directory. After Running the Hob tool, please restore all changes introduced by hob. Restoring is possible via git, for example in poky dir you could do *"git-reset --hard"* and *"checkout"* in order to restore the poky conf files.