Gen2Epi V0.1 GUI Setup

- Check if you have Oracle VirtualBox installed on your machine or not. If you are using a Windows machine, then see the menu under the Start button. In that menu click on All Programs. You will see Oracle VM VirtualBox if it is installed.
- Alternatively, download the VirtualBox platform package from <u>https://www.virtualbox.org/wiki/Downloads</u> appropriate for your host machine. <u>Note</u>: To download the VirtualBox 5.2.14 version, please visit <u>https://www.virtualbox.org/wiki/Download_Old_Builds_5_2</u> and download one of the 5.2.14 versions shown below:
 - VirtualBox 5.2.14 (released July 02 2018)

 - OS X hosts ⇒Intel Macs
 - Solaris and OpenSolaris hosts

 AMD64
 - Linux Hosts:
 - Ubuntu 18.04 / 18.10 / Debian 10 ⇒AMD64
 - Ubuntu 17.04 / 17.10 ⇒i386 | ⇒AMD64
 - Ubuntu 16.10 ⇒i386 | ⇒AMD64
 - Ubuntu 16.04 ⇔i386 | ⇔AMD64
 - Ubuntu 14.04 / 14.10 / 15.04 ⇒i386 | ⇒AMD64
 - Debian 9 ⇒i386 | ⇒AMD64
 - Debian 8 ⇒i386 | ⇒AMD64
 - Debian 7 ⇒i386 | ⇒AMD64
 - openSUSE 13.2 / Leap 42 ⇒i386 | ⇒AMD64
 - Fedora 26 / 27 / 28 ⇒i386 | ⇒AMD64
 - Fedora 25 ⇒i386 | ⇒AMD64
 - Oracle Linux 7 / Red Hat Enterprise Linux 7 / CentOS 7
 AMD64
 - Oracle Linux 6 / Red Hat Enterprise Linux 6 / CentOS 6 ⇒i386 | ⇒AMD64
 - Oracle Linux 5 / Red Hat Enterprise Linux 5 / CentOS 5 ⇒i386 | ⇒AMD64
 - All distributions ⇒i386 ⇒AMD64
 - Extension Pack ⇒ All Platforms
 - G→Sources
 - MD5 checksums, SHA256 checksums

<u>Note</u>: The Gen2EpiGUI VM image works fine with the VirtualBox 6.0. However, if you encounter any problems then use VirtualBox 5.2.14 from the old build as shown above.

3) Download '*Gen2Epi_GUI_V0.1.rar*' from <u>ftp://www.cs.usask.ca/pub/combi</u>. The downloaded file should be 14 GB in size. On MS Windows, you will see the following file icon:



4) To extract the VM on a Windows computer, right-click on the 'Gen2Epi_GUI_V0.1.rar' file. In the resultant pop-up window, click on Extract Files. In the resultant pop-up window check that the pathname for the destination file is appropriate, and then click OK as shown below:



Extract the VM on a Linux machine by using "*unrar e Gen2Epi_GUI_V0.1.rar*". The following message indicates that extraction is successful on a Linux machine:

```
Extracting from Gen2Epi_GUI_V0.1.rar
Extracting Gen2Epi.vdi
All OK
```

The extracted 'Gen2Epi.vdi' file is 29 GB in size.

5) On Windows, after the extraction you will see the following file in your extraction folder:



Virtual Disk Image

OK

6) To start VirtualBox on a computer with Windows, click on the Start button. In the ensuing menus, select in succession All Programs -> Oracle VM VirtualBox. Then click on the Oracle VM VirtualBox icon.

On Linux (e.g. on CentOS) start VirtualBox by clicking on Applications -> System Tools -> Oracle VM VirtualBox icon.

7) Now you will see the **Oracle VM VirtualBox Manager** as shown below



8) To import the Gen2Epi pipeline click on **New** highlighted with the red box in the picture below:



9) Type the name ("Gen2Epi") of the machine in the prompt box as shown below in the red box. Please make sure to select Type -> Linux and Version -> Red Hat (64-bit). Click on Next.

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10) In the next step, allocate memory (2 GB) using the scroll bar as shown below and click Next.

11) Click on "Use an existing virtual hard disk file" under the **Hard Disk** tab and click on **browse folder** icon as shown in red arrow in the figure below:

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Once you click on the **browse folder** icon, you will get a pop-up window as shown below. Click on the **Add** button (point out with red arrow).

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Now the program will ask you to open your '*Gen2Epi.vdi*' file that you have downloaded and extract in steps 3-5.

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Now click select the '*Gen2Epi.vdi*' file and click on **Choose**

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Click on the **create** button.

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12) Now you will see a new Gen2Epi VM image in your VirtualBox Manager window. Once everything is done start the imported VirtualBox image by clicking on the **Start** button as shown below:

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13) Click on Start. If everything goes well. You will see the following screen



14) Click on Gen2Epi (as the user), enter the password "Gen2Epi", and click on Sign In. Superuser has the same password (Gen2Epi).



15. After login, if you see the following screen that congratulations you on successful setup of Gen2Epi on your machine. <u>Please Note</u>: VirtualBox Guest Additions have already been installed in the VM image and all the supported features will automatically continue to work. However, if you would like to reinstall the Guest Additions then follow the instructions given at <u>https://www.virtualbox.org/manual/ch04.html</u>.



16) Start the program by clicking on the "Gen2EpiGUI" icon at the desktop.



- 17) To use the program please follow the instruction as given in Introductory Demo under the Help menu on the top right-hand side. For detailed usage please see the description below:
 - a. Introductory demo: A quick tutorial on "how to use Gen2Epi GUI on test dataset".
 - b. User manual: A step-by-step guide on "how can users analyze their data using Gen2Epi GUI".
 - c. Reference Guide: This document describes the complete command line usage of Gen2Epi v0.1
- 18) To transfer between Gen2EpiGUI VM and the Window host, users can use a shared folder.
 - a. To create a shared folder between host OS and the VM, click on Settings -> Shared folders in the Oracle VM VirtualBox Manager.
 - b. Now select Machine folders under Shared folders in Settings and click on the Add Shared folder button highlighted with the red box in the below-given picture.
 - c. Now choose the folder path (location of your shared folder in the host machine) and select "auto-mount" and "make permanent" boxes. Click **OK**.

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	Shared Folders			
:	User Interface			

	General	Shared Folders					
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VM Help

1. Failure to open a session for the virtual machine Gen2Epi.



Answer: Please follow the solutions given at

https://www.thewindowsclub.com/virtualbox-failed-to-open-session-for-the-virtualmachine