Running the NAC ICPC Practice Image with VirtualBox on Windows

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The following procedure assumes that VirtualBox is installed on a 64-bit Intel/AMD computer with Windows 10 or Windows 11 installed. You can download VirtualBox from this link: https://www.virtualbox.org/wiki/Downloads The computer should have at least 70 GiB of free storage and at least 8 GiB of memory available for VirtualBox.

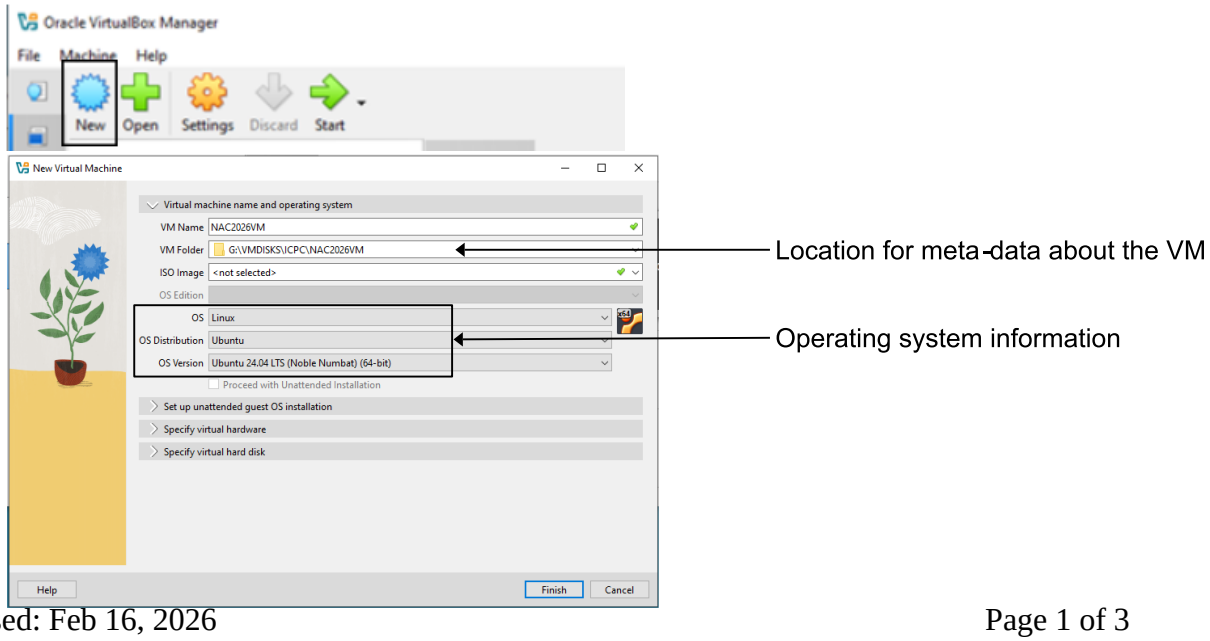
1) Download the bootable image file. The month and day in the file name are given in the download instructions.
   a) **nac2026-2026-*mm-dd*_image-amd64.img.gz**

2) Uncompress the GZIPped image file. In Windows 11, this can be done natively from Explorer by right-clicking on the file and selecting "Extract All". In Windows 10, there are third-party tools to uncompress GZIP files—7-Zip is one such tool.

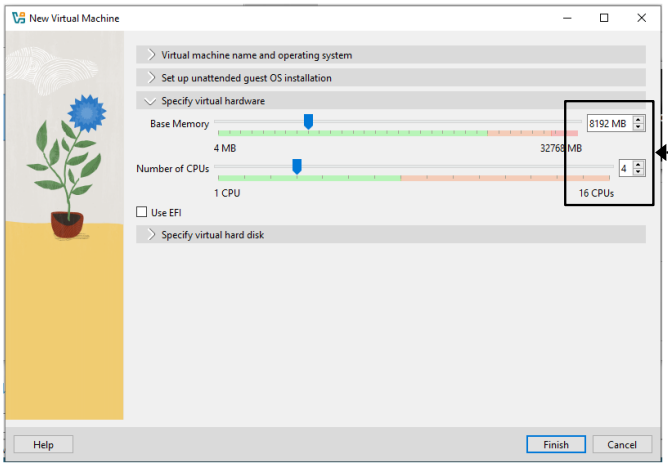
3) Copy the bootable image file to a VirtualBox disk image. VirtualBox includes a set of command line tools as part of the installation. Use the VBoxManage tool and the "convert from raw" function from a command line (either CMD or PowerShell). Note that this will create a second copy of the image in Virtual Disk Image (VDI) format. The VDI image will be slightly smaller than the uncompressed image file.

```
VBoxManage convertfromraw nac2026-2026-mm-dd_image-amd64.img
nac2026-2026-mm-dd_image-amd64.vdi --format VDI
```

4) Create a VM to run the image. Use the "New" option from the VirtualBox Manager interface. Configure the VM as a Linux Ubuntu 64-bit VM, Version 24.04.

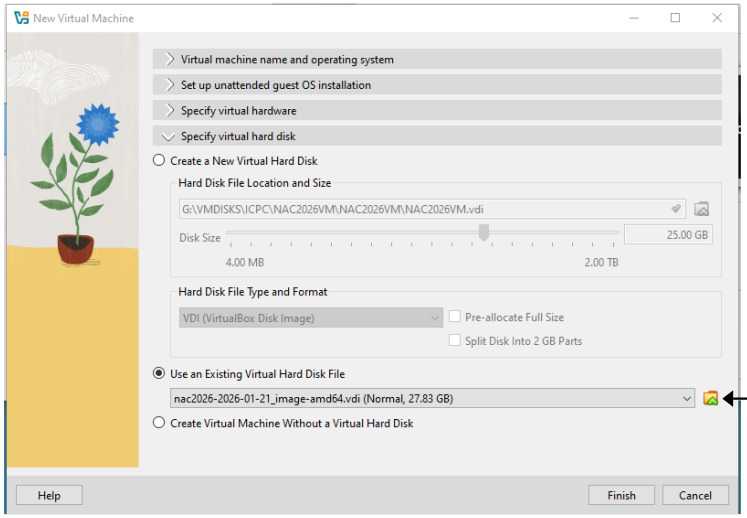


5) Under Hardware, set the memory (such as 8192 MB) and CPUs (such as 4).

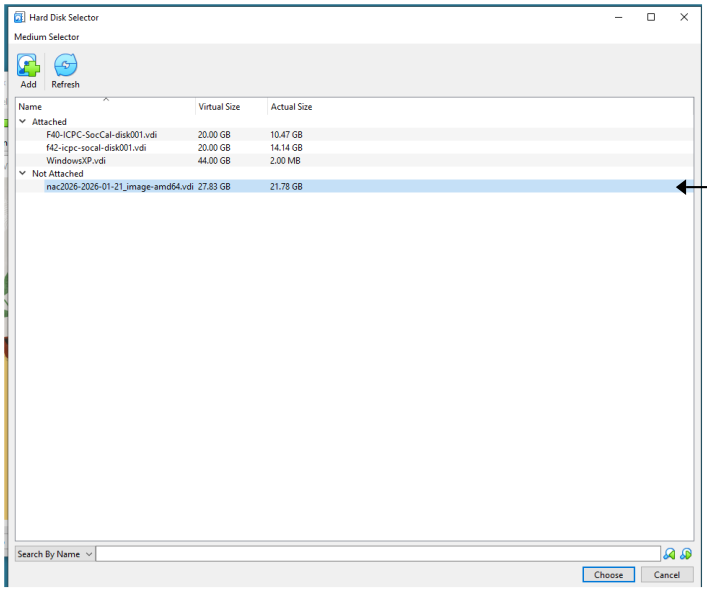


Memory and CPU to be used

6) Select “Use an Existing Virtual Hard Disk File”. Click on the right folder icon to select the file created in Step 3. You will need to add the VDI file in the Hard Disk Selector window in order to select it for the VM, and then “Choose” it. Select “Finish”.



Select VDI file here



Add VDI file to available “hard disks”

7) Highlight the new VM in Virtual Box Manager and click “Start”. The VM should start. The console window may not be large enough to hold the entire display; re-size the window so the entire display fits.

