

**Standalone combine on
CernVM**

Prerequisites

You should have access to CERN IT resources. If you are a CERN user you can use your account, otherwise you can request a lightweight account.

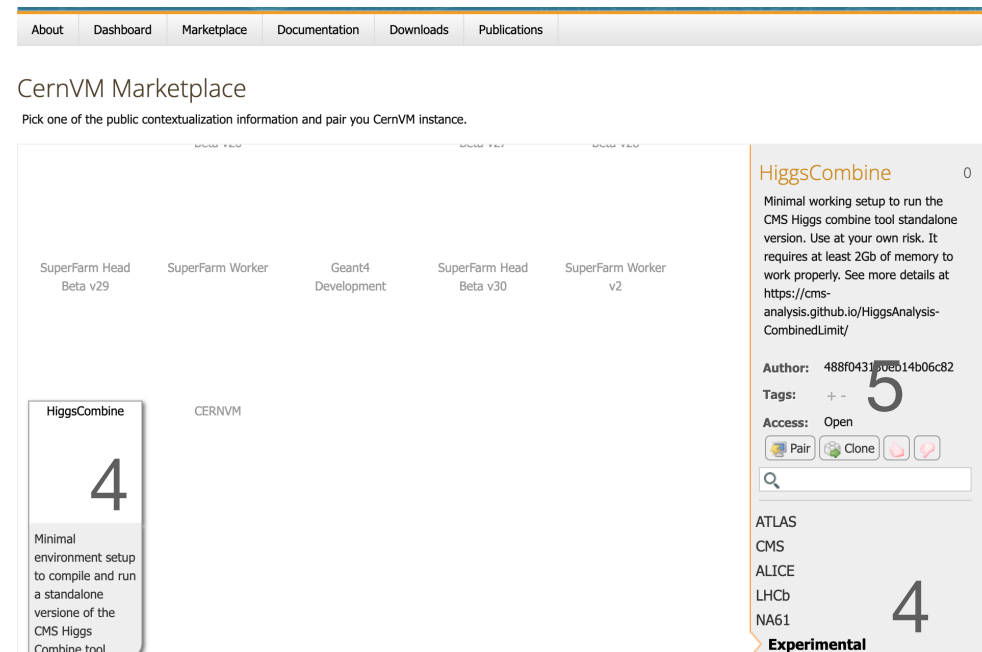
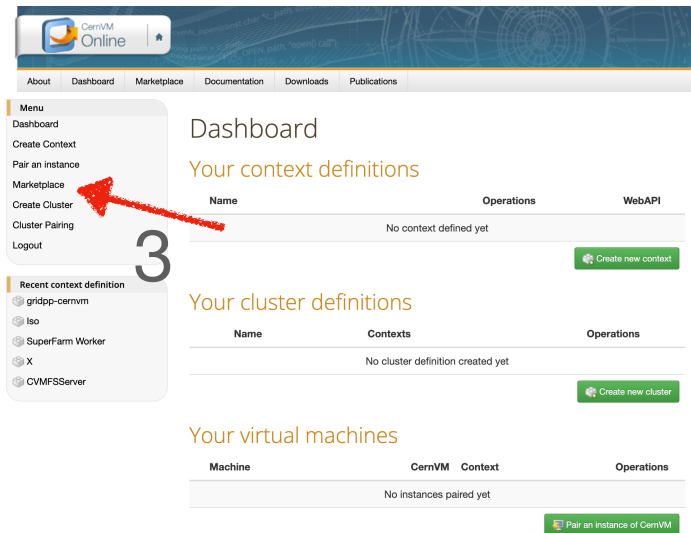
If you have a CERN account, we strongly suggest you simply run the standalone installation on lxplus, which is simpler and faster than using a VM

You should have a working VM on your local machine, compatible with CernVM

- The following example will be set up using CernVM with VirtualBox. All the required software can be downloaded here:
<https://cernvm.cern.ch/appliance/>

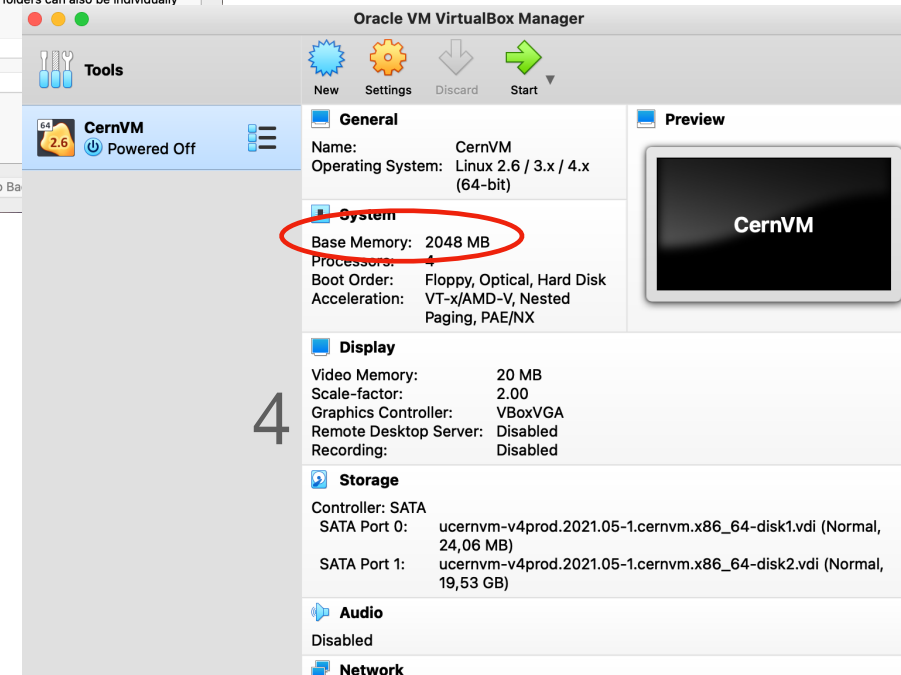
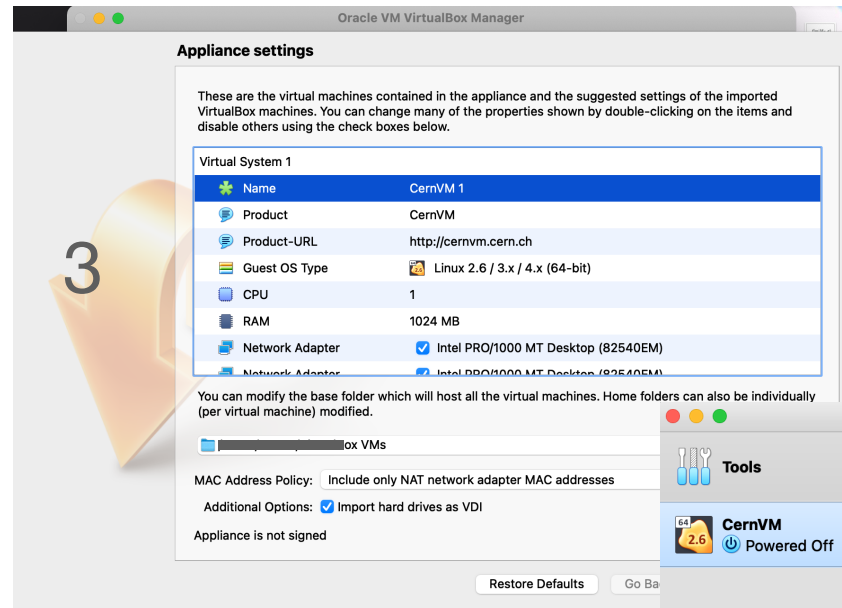
Step 1. Load context

1. Go to <https://cernvm-online.cern.ch/dashboard/>
2. Access with your CERN credentials
3. Click on “Marketplace”
4. Select Experimental
->HiggsCombine
5. Then “Clone” and go back to the dashboard
6. You can create you own context if needed with “Create Context”



Step 2. Launch the local machine

1. Launch the local instance of the VM (with VirtualBox or other software you are used to)
2. It can be downloaded here: <http://cernvm.cern.ch/releases/production/cernvm4-micro-2020.07-1.ova> (please check for newer versions)
3. Leave the default settings and click “Import”. If you need to reduce the local memory usage, please notice that combine will need **at least 2Gb of base memory** to run properly, and we suggest using 20Gb of local memory
4. If everything went fine, you should see your CernVM, configured and powered off



Step 3. Launch the remote machine

1. Click on Pair an instance on your dashboard
2. In the following step, it asks you which context to use. Select the HiggsCombine context

Dashboard


Your context definitions

Name	Operations	WebAPI
 HiggsCombine (copy)	 Clone  Publish  	 Launch now
 Create new context		

Your cluster definitions

Name	Contexts	Operations
No cluster definition created yet		
 Create new cluster		

Your virtual machines

Machine	CernVM	Context	Operations
No instances paired yet			
 Pair an instance of CernVM			

1

Pair instance - Step 1

Please select the contextualization template you want to use for your VM:

Name	Operations
 HiggsCombine (copy) Minimal environment setup to compile and run a standalone version of the Higgs Combine tool	 Pair with this context

2

Step 4. Pair the instances

1. After selecting the context, the website will show you a 6 digits PIN
2. Start the local machine (from VirtualBox, click “Start”)
3. once prompted for a username, enter <#PIN>
4. This will pair the VM. The system will now boot
5. Once prompted for username and password again, use the following:
username: *user*
password: *hcomb*

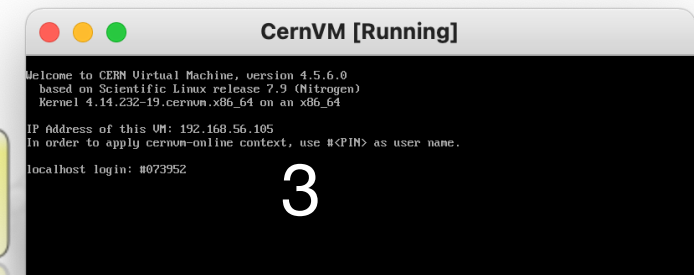
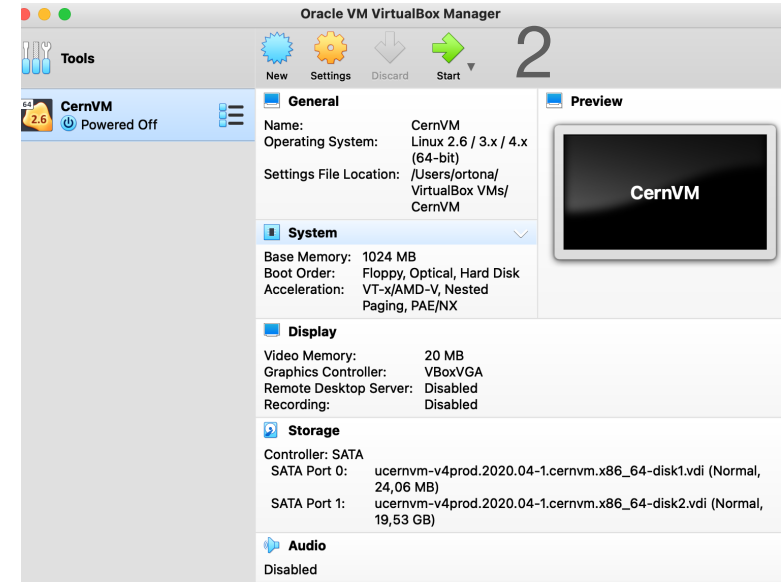
Pair instance - Step 2

Wait your virtual machine to boot and put the following key in your virtual machine contextualization screen. You will have the option to contextualize it right after.



Pair instance - Step 2

Wait your virtual machine to boot and put the following key in your virtual machine contextualization screen. You will have the option to contextualize it right after.



you can now proceed with the standalone combine installation