

Modality of this Tutorial

- The slides will contain most commands typed on the terminal
- Following along with your computer is **strongly encouraged!**
- Your options to do so:
 - It's possible/easiest to follow on LXPLUS/NAF via a CVMFS installation
 - Alternatively, we provide a Virtual Machine with an Allpix Squared installation
 - You can also follow with a local installation, but we cannot debug local Geant4/ROOT6 installations during this session
- Please download the tutorial materials [here](#)

CVMFS – CernVM File System

- Using project space of CLICdp at [/cvmfs/clicdp.cern.ch/software/allpix-squared/](https://cvmfs.clicdp.cern.ch/software/allpix-squared/)
- All versions since v1.1 available
 - Nightly build of master in “latest”
- Each version built for CentOS7 or Red Hat Enterprise Linux 9 (gcc/clang)
- Load all dependencies, C++ libraries & set up \$PATH using setup.sh file:

drwxr-xr-x.	6	cvmfs	cvmfs	137	Jan	28	2022	2.1.0
drwxr-xr-x.	6	cvmfs	cvmfs	137	Feb	28	2022	2.2.0
drwxr-xr-x.	6	cvmfs	cvmfs	137	Mar	22	2022	2.2.1
drwxr-xr-x.	6	cvmfs	cvmfs	137	Apr	1	2022	2.2.2
drwxr-xr-x.	6	cvmfs	cvmfs	137	May	16	2022	2.3.0
drwxr-xr-x.	6	cvmfs	cvmfs	137	Jul	18	2022	2.3.1
drwxr-xr-x.	6	cvmfs	cvmfs	137	Sep	27	2022	2.3.2
drwxr-xr-x.	6	cvmfs	cvmfs	137	Nov	23	2022	2.3.3
drwxr-xr-x.	6	cvmfs	cvmfs	137	Jan	13	2023	2.4.0
drwxr-xr-x.	6	cvmfs	cvmfs	137	Mar	15	2023	2.4.1
drwxr-xr-x.	6	cvmfs	cvmfs	137	May	4	2023	3.0.0
drwxr-xr-x.	6	cvmfs	cvmfs	137	Jun	20	2023	3.0.1
drwxr-xr-x.	6	cvmfs	cvmfs	137	Sep	28	2023	3.0.2
drwxr-xr-x.	6	cvmfs	cvmfs	129	Dec	14	2023	3.0.3
drwxr-xr-x.	5	cvmfs	cvmfs	96	May	17	2024	3.1.0
drwxr-xr-x.	5	cvmfs	cvmfs	96	Sep	9	2024	3.1.1
drwxr-xr-x.	5	cvmfs	cvmfs	96	Feb	27	2025	3.1.2
drwxr-xr-x.	5	cvmfs	cvmfs	96	Apr	11	2025	3.1.3
drwxr-xr-x.	5	cvmfs	cvmfs	96	Apr	30	2025	3.2.0
drwxr-xr-x.	5	cvmfs	cvmfs	96	Oct	13 06:23	latest	

[/cvmfs/clicdp.cern.ch/software/allpix-squared](https://cvmfs/clicdp.cern.ch/software/allpix-squared)

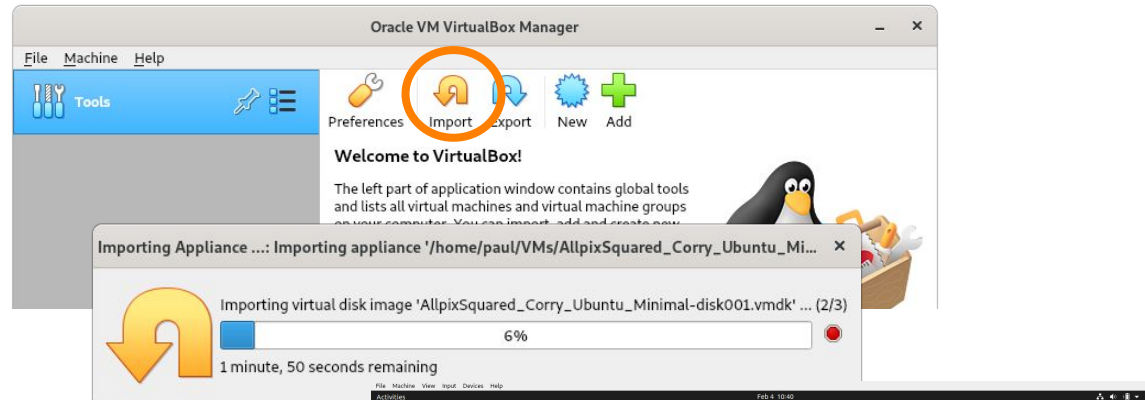
```
$ source /cvmfs/clicdp.cern.ch/software/allpix-squared/3.2.0/x86_64-el9-gcc12-opt/setup.sh
$ allpix --version
Allpix Squared version v3.2.0
...
```

VirtualBox

- If you **don't** have access to CVMFS, [we created a VirtualBox](#) (apsq_lubuntu.ova)
 - User: apsq
 - Password: apsq
- Virtualisation software: Virtualises a physical machine and lets you run a PC on a PC
- Example:
 - Run a Linux machine as an application within your Windows PC
 - Host allocates configurable amount of memory/CPU/disk space to virtual machine
 - VirtualBox:
 - Free of charge
 - Plenty of useful features

VirtualBox

- Install VirtualBox (via package manager or <https://www.virtualbox.org/wiki/Downloads>)
- Import the downloaded virtual machine
 - Default options are typically fine – adjust if necessary
- Go! (double click on the new virtual box)



Other Methods

- Building from source, Docker, etc.

See documentation: https://allpix-squared.docs.cern.ch/docs/02_installation/

[Documentation](#) / Installation

Installation

Instructions on how to build and install Allpix Squared.

This chapter aims to provide details and instructions on how to build and install Allpix Squared. An overview of possible build configurations is given. After installing and loading the required dependencies, there are various options to customize the installation of Allpix Squared. This chapter contains details on the standard installation process and information about custom build configurations.

Alternatively, Allpix Squared can be installed without building via a Docker image (see [Section 2.7](#)) or via CVMFS (see [Section 2.8](#)).

Still not working?

Please contact the event organisation so we can find other solutions

Resources



Website

<https://cern.ch/allpix-squared>



Repository

<https://gitlab.cern.ch/allpix-squared/allpix-squared>



Docker Images

https://gitlab.cern.ch/allpix-squared/allpix-squared/container_registry

User Forum:



<https://cern.ch/allpix-squared-forum/>

Mailing Lists:



allpix-squared-users <https://e-groups.cern.ch/e-groups/Egroup.do?egroupId=10262858>

allpix-squared-developers

<https://e-groups.cern.ch/e-groups/Egroup.do?egroupId=10273730>



User Manual:

<https://cern.ch/allpix-squared/usermanual/allpix-manual.pdf>