

# Hands-on sessions prerequisites

and other IT related topics

# Hands on tutorials

- Monte Carlo Event Generators
  - Docker container (requires Docker)
- Machine Learning
  - Google Colab (requires google account)
- xFitter
  - Docker container (requires Docker), or Virtual Box Image (requires Virtual Box)

# Network

Hotel Network (internet access):

- SSID: Idingshof
- Password: idingshof

Local Network for the tutorials (no internet access, only lecture hall)

Here you can find:

- Nextcloud
- Local Docker registry
  - MC tutorials
  - xFitter

Access by:

- SSID: CTEQ School Tutorials 6GHz  
(if you're device can see this)  
otherwise: CTEQ School Tutorials 2.4/5GHz
- Password: cteqschool2024

Backup 5G router (low bandwidth internet access, only lecture hall)

- Will be made available if need be

# Nextcloud

Here you can find:

- Files for the tutorials
- Docker Desktop installers
- VirtualBox image
- (Slides)

And you can also use for file sharing

- directory `Students`

Access by entering in your browser:

`http://cteqschool.lan`

(exactly like this)

(or `http://192.168.0.2` )

Login:

Username: `student`

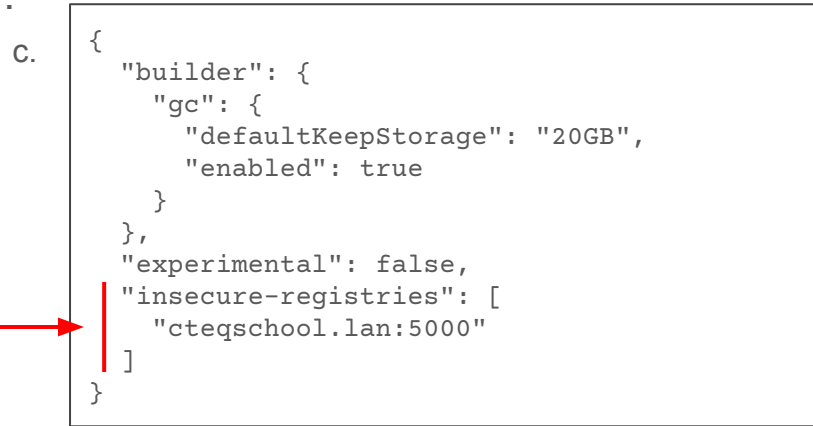
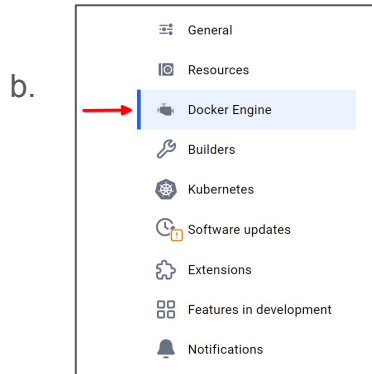
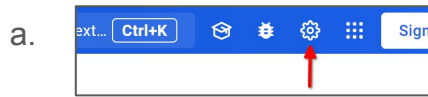
Password: `cteqschool2024-student`

# Docker installation and setup instructions

# Docker Desktop – Windows

Installation:

1. From Nextcloud download:  
Tutorials/Installers/Docker Desktop/Windows .../Docker Desktop Installer.exe
2. Execute Installer
3. Add our local Docker repository:



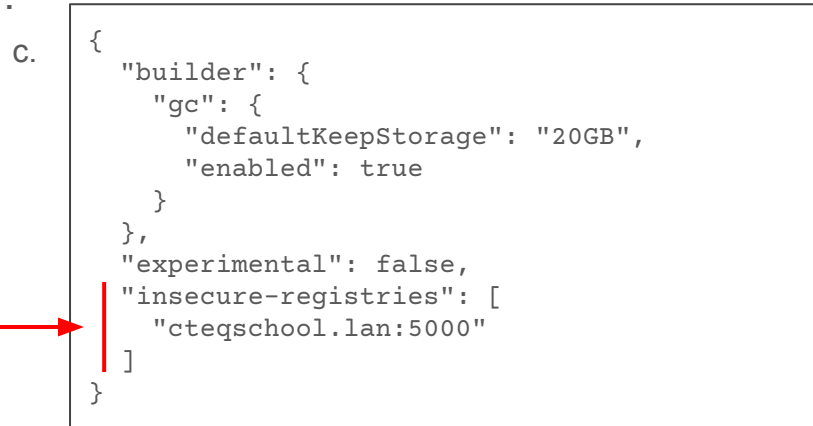
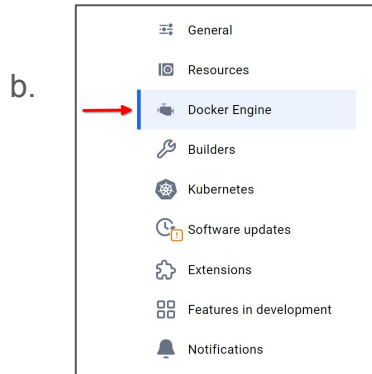
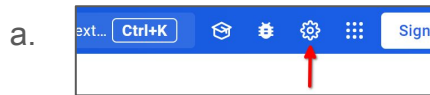
d. Apply & restart

4. In Powershell prompt: `docker pull cteqschool.lan:5000/...`

# Docker Desktop – Mac

Installation:

1. From Nextcloud download:  
Tutorials/Installers/Docker Desktop/Mac .../Docker.dmg
2. Execute Installer
3. Add our local Docker repository:



d. Apply & restart

4. Pull with: `docker pull cteqschool.lan:5000/...`

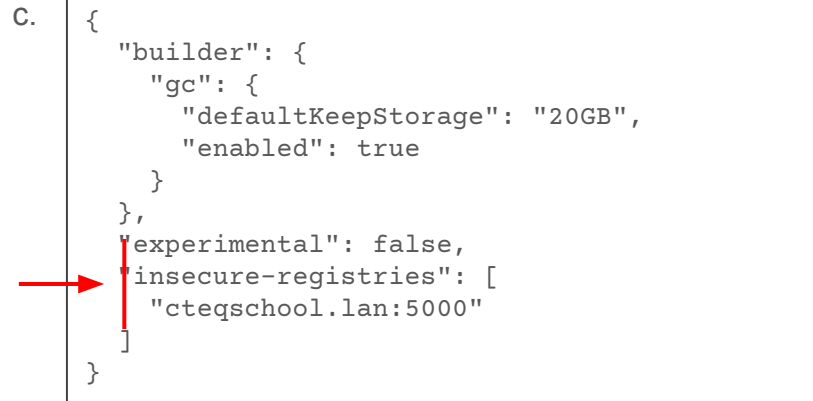
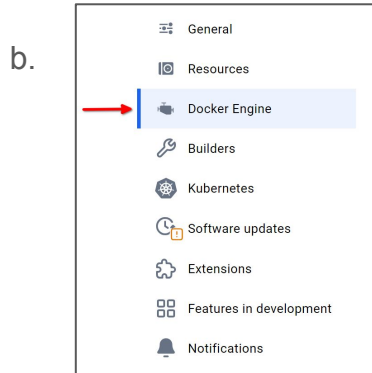
# Docker Desktop – Linux [alternative 1]

Installation:

1. Follow <https://docs.docker.com/desktop/install/linux-install/>

But download packages from Nextcloud: Tutorials/Installers/Docker Desktop/Linux/...

2. Add our local Docker repository:



d. Apply & restart

3. Pull with: `docker pull cteqschool.lan:5000/...`



# Docker Engine – Linux [alternative 2]

1. Install Docker Engine: <https://docs.docker.com/engine/install/>
2. Add our local Docker repository:
  - a. Add to `/etc/docker/daemon.json`:

```
{ "insecure-repositories": "cteqschool.lan:5000" }
```
3. Restart Docker with `sudo systemctl restart docker`
4. Pull with `docker pull cteqschool.lan:5000/...`