

# Main assignment

**Delivery method: Create a gitlab.com / github.com public repository into which you will push your changes and share with us upon completion**

In our department, we often have to provision test environments for our developers to bootstrap applications.

Please, create an automated way how to provision custom virtual machines either on vmware vsphere 7, openstack platform or any cloud provider and then automate its configuration. You can use any API, scripting language or tool to achieve this as long as running the automation is parametrized with the following parameters, that can be altered in the subsequent runs:

* 2 vCPUs
* 8 GB RAM
* 20 GB Disk storage
* single NIC with IP 10.0.0.4 in 10.0.0.0/24 subnet

The VM will run the latest Ubuntu LTS image and have openssh enabled at boot. After the script runs, it will be possible to log in the machine with user "thermo" using the id\_rsa key found in this email.

Please deliver the task by creating a merge request in this repository and include a README.md with instructions.

Before delivering, please tell us the estimated amount of work you expect to be working on the task so that we can schedule a followup.

# Optional assignments

We value your time. If you feel too busy, go ahead and skip the optional tasks, we will discuss possible approaches in the followups.

## Optional assignment #1

Since our developers use docker for their applications, please also automate docker installation on the VM and make sure the docker container with the latest postgresql is started on boot.

## Optional assignment #2

Automate installation of open metrics and make it reachable on <http://10.0.0.4:9182/>

# Evaluation

We will then together go over the output focusing on the following:

* ability to complete the instructions
* discuss the choice of tools
* review usage of versioning tools
* maturity, scalability and performance of the solution

# FAQ

Questions? Feel free to ask. Create an issue in the project and we will get it answered. Or send email to [boris.bondarenko@thermofisher.com](mailto:boris.bondarenko@thermofisher.com)