

Министерство науки и высшего образования Российской Федерации  
НАЦИОНАЛЬНЫЙ ИССЛЕДОВАТЕЛЬСКИЙ  
ТОМСКИЙ ГОСУДАРСТВЕННЫЙ УНИВЕРСИТЕТ (НИ ТГУ)  
Институт прикладной математики и компьютерных наук

РЕФЕРАТ

«Лабораторная работа №2»

по дисциплине «Devops инженерия»

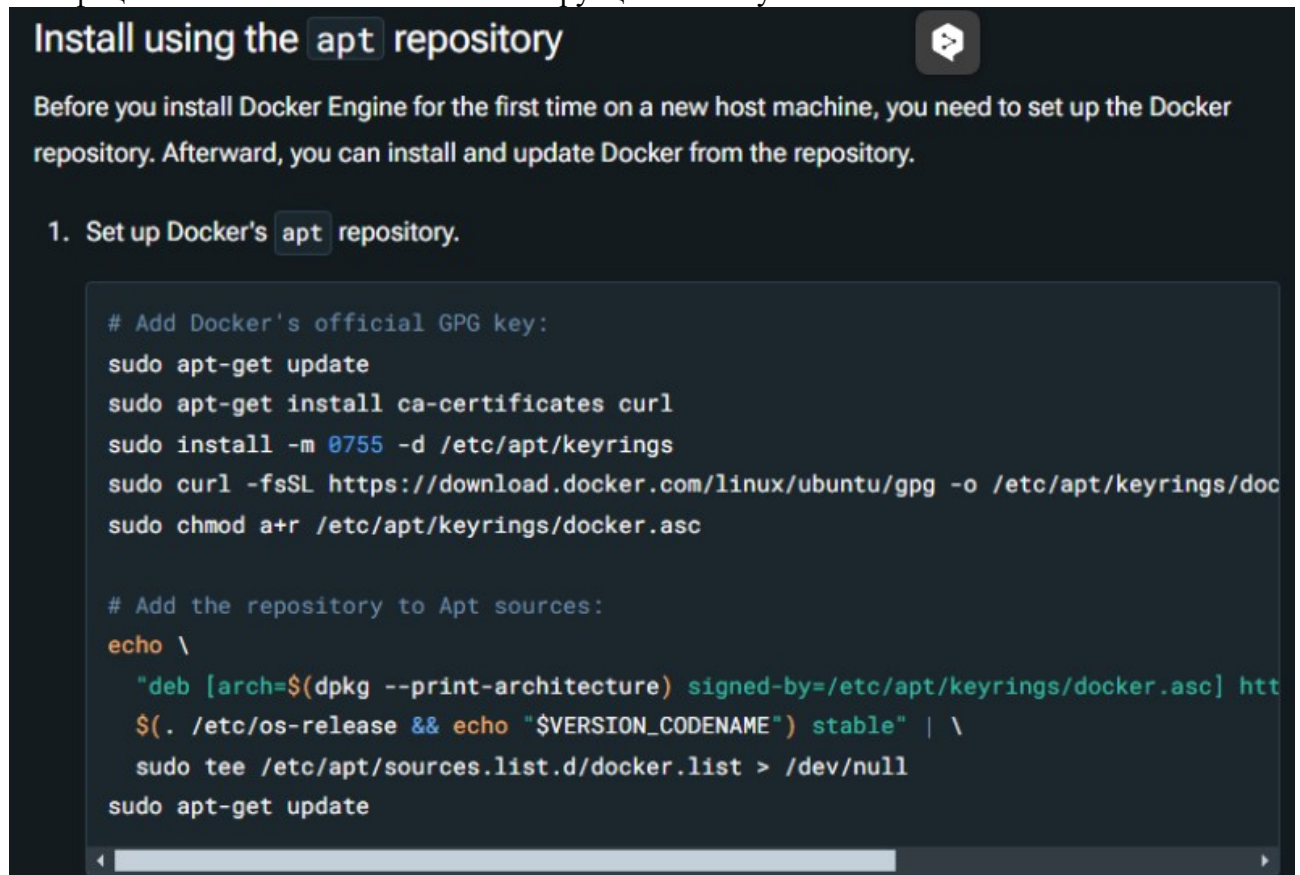
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Проверил:  
Преподаватель

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## Установка Docker репозитория

На официальном сайте Docker есть инструкция по его установке:



**Install using the apt repository**

Before you install Docker Engine for the first time on a new host machine, you need to set up the Docker repository. Afterward, you can install and update Docker from the repository.

1. Set up Docker's apt repository.

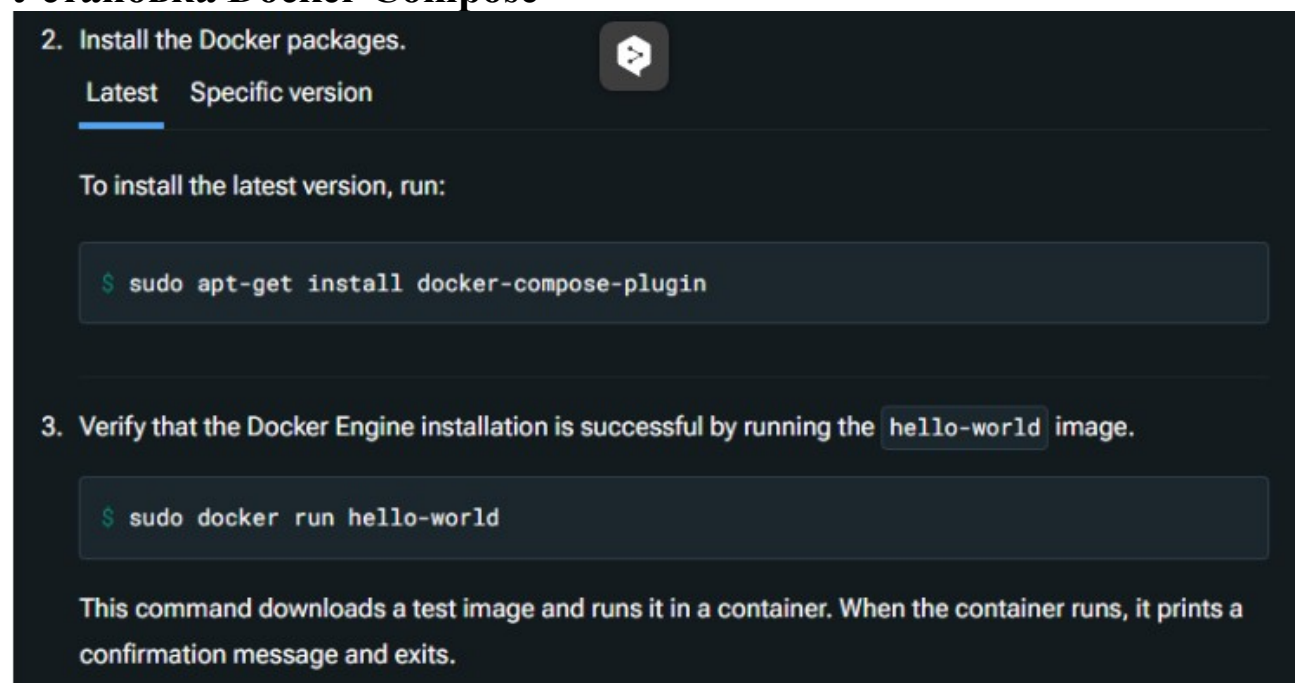
```
# Add Docker's official GPG key:
sudo apt-get update
sudo apt-get install ca-certificates curl
sudo install -m 0755 -d /etc/apt/keyrings
sudo curl -fsSL https://download.docker.com/linux/ubuntu/gpg -o /etc/apt/keyrings/docker.asc
sudo chmod a+r /etc/apt/keyrings/docker.asc

# Add the repository to Apt sources:
echo \
  "deb [arch=$(dpkg --print-architecture) signed-by=/etc/apt/keyrings/docker.asc] https://download.docker.com/linux/ubuntu $(. /etc/os-release && echo "$VERSION_CODENAME") stable" | \
  sudo tee /etc/apt/sources.list.d/docker.list > /dev/null
sudo apt-get update
```

Рисунок 1. — Установка Docker репозитория

Во время установки Ubuntu server был выбран дополнительный пункт для установки Docker, поэтому его устанавливать его не потребовалось.

## Установка Docker Compose



**2. Install the Docker packages.**

Latest Specific version

To install the latest version, run:

```
$ sudo apt-get install docker-compose-plugin
```

**3. Verify that the Docker Engine installation is successful by running the hello-world image.**

```
$ sudo docker run hello-world
```

This command downloads a test image and runs it in a container. When the container runs, it prints a confirmation message and exits.

Рисунок 2. — Команды для установки Docker

# Запуск Docker Контейнера



```
To generate this message, Docker took the following steps:
1. The Docker client contacted the Docker daemon.
2. The Docker daemon pulled the "hello-world" image from the Docker Hub.
   (amd64)
3. The Docker daemon created a new container from that image which runs the
   executable that produces the output you are currently reading.
4. The Docker daemon streamed that output to the Docker client, which sent it
   to your terminal.

To try something more ambitious, you can run an Ubuntu container with:
$ docker run -it ubuntu bash

Share images, automate workflows, and more with a free Docker ID:
https://hub.docker.com/

For more examples and ideas, visit:
https://docs.docker.com/get-started/

mihadn@hds:~$ sudo docker run hello-world

hello from Docker!
This message shows that your installation appears to be working correctly.

To generate this message, Docker took the following steps:
1. The Docker client contacted the Docker daemon.
2. The Docker daemon pulled the "hello-world" image from the Docker Hub.
   (amd64)
3. The Docker daemon created a new container from that image which runs the
   executable that produces the output you are currently reading.
4. The Docker daemon streamed that output to the Docker client, which sent it
   to your terminal.

To try something more ambitious, you can run an Ubuntu container with:
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For more examples and ideas, visit:
https://docs.docker.com/get-started/

mihadn@hds:~$ docker ps -a
permission denied while trying to connect to the Docker daemon socket at unix:///var/run/docker.sock: Get "http://xpcvanc2fmuio2fdocker.sock/v1.47/containers/?all=1": dial unix /var/run/docker.sock: connect: permission denied
mihadn@hds:~$ sudo docker ps -a
CONTAINER ID   IMAGE     COMMAND   CREATED   STATUS    PORTS   NAMES
c74e460c04     hello-world  "/hello"   About a minute ago   Exited (0)   About a minute ago   greet_cjphen
17031ff6c2fa   hello-world  "/hello"   About a minute ago   Exited (0)   About a minute ago   amazing_wendel

mihadn@hds:~$
```

Рисунок 3. — Запущенный контейнер  
На Рисунке 3. Можно увидеть версии Docker и плагина Docker-compose.