Урок 8. Введение в Docker

1. Переустановить операционную систему, подключить репозиторий Docker.

```
The following additional packages will be installed:
containerd.io docker-ce-cli docker-ce-rootless-extras docker-scan-plugin pigz slirp4netns
suggested packages:
suggested packages:
suggested packages will be installed:
containerd.io docker-ce-cli docker-ce-cli docker-ce-rootless-extras docker-scan-plugin pigz slirp4netns
suggested packages:
suggested packages will be installed:
containerd.io docker-ce-cli docker-ce-cli docker-ce-rootless-extras docker-scan-plugin pigz slirp4netns
suggested packages
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set suggested packages
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```

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➢ lis@ubuntu: ~
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       Unpacking docker-ce-cli (5:20.10.8~3-0~ubuntu-bionic) ...

Selecting previously unselected package docker-ce.

Preparing to unpack .../3-docker-ce_5%3a20.10.8~3-0~ubuntu-bionic_amd64.deb ...

Unpacking docker-ce (5:20.10.8~3-0~ubuntu-bionic) ...

Selecting previously unselected package docker-ce-rootless-extras.

Preparing to unpack .../4-docker-ce-rootless-extras.

Unpacking docker-ce-rootless-extras (5:20.10.8~3-0~ubuntu-bionic) ...

Selecting previously unselected package docker-scan-plugin.

Preparing to unpack .../5-docker-scan-plugin @.8.0~ubuntu-bionic) ...

Selecting previously unselected package docker-scan-plugin.

Preparing to unpack .../5-docker-scan-plugin @.8.0~ubuntu-bionic] ...

Selecting previously unselected package sliprAnetns.

Preparing to unpack .../6-sliprAnetns.

Preparing to unpack .../6-sliprAnetns_0.4.3-1_amd64.deb ...

Unpacking sliprAnetns (0.4.3-1) ...

Setting up sliprAnetns (0.4.3-1) ...

Setting up docker-scan-plugin (0.8.0~ubuntu-bionic) ...

Setting up docker-scan-plugin (0.8.0~ubuntu-bionic) ...

Setting up docker-scan-plugin (0.8.0~ubuntu-bionic) ...

Setting up containerd.io (1.4.9-1) ...

Created symlink /etc/systemd/system/multi-user.target.wants/containerd.service → /lib/systemd/system/containerd.service
created symlink /etc/systemd/system/multi-user.target.wants/containerd.service + /lib/systemd/system/containerd.sec.
ce.
Setting up docker-ce-cli (5:20.10.8~3-0~ubuntu-bionic) ...
Setting up pigz (2.4-1) ...
Setting up docker-ce-rootless-extras (5:20.10.8~3-0~ubuntu-bionic) ...
Setting up docker-ce (5:20.10.8~3-0~ubuntu-bionic) ...
Setting up docker-ce-rootless-extras (5:20.10.8~3-0~ubuntu-bionic) ...
Setting up docker-ce-rootless-extras (5:20.10.8~3-0~ubuntu-bionic) ...
Setting up docker-systemd/system/sockets.target.wants/docker.service + /lib/systemd/system/docker.service.
Created symlink /etc/systemd/system/sockets.target.wants/docker.socket + /lib/systemd/system/docker.socket.
Processing triggers for man-db (2.9.1-1) ...
Processing triggers for systemd (245.4-4ubuntu3.11) ...
lis@ubuntu:~$ sudo usermod -a6 docker $(whoami)
lis@ubuntu:~$ sudo 
       Aug 30 09:50:45 ubuntu dockerd[2944]: time="2021-08-30T09:50:45.718150529Z" level=warning msg="Your kernel does not Aug 30 09:50:45 ubuntu dockerd[2944]: time="2021-08-30T09:50:45.71829889Z" level=warning msg="Your kernel does not Aug 30 09:50:45 ubuntu dockerd[2944]: time="2021-08-30T09:50:45.71829808Z" level=warning msg="Your kernel does not Aug 30 09:50:45 ubuntu dockerd[2944]: time="2021-08-30T09:50:45.720643906Z" level=info msg="Loading containers: star Aug 30 09:50:46 ubuntu dockerd[2944]: time="2021-08-30T09:50:46.091240300Z" level=info msg="Loading containers: star Aug 30 09:50:46 ubuntu dockerd[2944]: time="2021-08-30T09:50:46.091240300Z" level=info msg="Dockerdleg (dockerd) Aug 30 09:50:46 ubuntu dockerd[2944]: time="2021-08-30T09:50:46.257742594Z" level=info msg="Docker daemon" commit=73 Aug 30 09:50:46 ubuntu dockerd[2944]: time="2021-08-30T09:50:46.417961613Z" level=info msg="Docker daemon" commit=73 Aug 30 09:50:46 ubuntu dockerd[2944]: time="2021-08-30T09:50:46.41813141Z" level=info msg="Doemon has completed in Aug 30 09:50:46 ubuntu dockerd[2944]: time="2021-08-30T09:50:46.483370102Z" level=info msg="API listen on /run/dockerd[2944]: time="2021-08-30T09:50:46.483370102Z" level=info msg="API listen on /run/dockerd[2944]
                                             lis@ubuntu: -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   \Box
                                                            system
trust
volume
                                                                                                                                                                                                                                                       Manage Docker
Manage trust on Docker images
Manage volumes
                                                                                                                                                                                                                                                                  Attach local standard input, output, and error streams to a running container Build an image from a Dockerfile Create a new image from a container's changes Copy files/folders between a container and the local filesystem Create a new container
Inspect changes to files or directories on a container's filesystem Get real time events from the server Report and in a filesystem as a tar archive Show the history of an image List images
List port and a rarchive or STDIN
Log in to a Docker registry
Fetch the logs of a container
Pause all processes within one or more containers
List containers
Pull an image or a repository from a registry
Push an image or a repository from a registry
Rename a container
Restart one or more containers
Remove one or more containers
Save one or more images to a tar archive (streamed to STDOUT by default)
Search the Docker Hub for images
Start one or more stopped containers
Create a tag TARGET_IMAGE that refers to SOURCE_IMAGE
Listian List in the locker version information
Block until one or more information on a command.
                                                     ommands:
attach
build
commit
cp
create
diff
events
exec
export
history
inspect
kill
load
login
login
logo
login
logo
pause
port
push
rename
restart
rm
rmi
run
save
statt
stat
```

Run 'docker COMMAND --help' for more information on a command

To get more help with docker, check out our guides at https://docs.docker.com/go/guides/

∠ lis@ubuntu: ~	_		\times
K] orowu/ubuntu-desktop-1xde-vnc	Docker image to provide HTML5 VNC interface	561	
[OK]	bocker image to provide HTML5 VNC interface	201	
ebsphere-liberty	WebSphere Liberty multi-architecture images	280	
K] astasheep/ubuntu-sshd	Dockerized SSH service, built on top of offi	255	
[OK] onsol/ubuntu-xfce-vnc	Ubuntu container with "headless" VNC session	241	
[OK] buntu-upstart	DEPRECATED, as is Upstart (find other proces	113	
oK] onsible/ubuntu14.04-ansible	Ubuntu 14.04 LTS with ansible	98	
[OK] andlinternet/ubuntu-16-nginx-php-phpmyadmin-mysql-5	ubuntu-16-nginx-php-phpmyadmin-mysql-5	50	
[OK]	DEPRECATED: use "ubuntu" instead	44	
K] 386/ubuntu	Ubuntu is a Debian-based Linux operating sys	25	
olita/ubuntu-systemd [OK]	Ubuntu + systemd	24	
inndsc/ubuntu-python3 [OK]	A slim Ubuntu-based Python3 image	24	
uagebec/ubuntu FOK1	Simple always updated Ubuntu docker images w	24	
andlinternet/ubuntu-16-apache-php-5.6 [OK]	ubuntu-16-apache-php-5.6	14	
andlinternet/ubuntu-16-apache-php-7.0	ubuntu-16-apache-php-7.0	13	
[OK] clipse/ubuntu_jdk8	Ubuntu, JDK8, Maven 3, git, curl, nmap, mc,	13	
[OK] andlinternet/ubuntu-16-nginx-php-phpmyadmin-mariadb-10	ubuntu-16-nginx-php-phpmyadmin-mariadb-10	11	
[OK] andlinternet/ubuntu-16-nginx-php-5.6-wordpress-4	ubuntu-16-nginx-php-5.6-wordpress-4	9	
[OK] andlinternet/ubuntu-16-nginx-php-5.6	ubuntu-16-nginx-php-5.6	8	
[OK] andlinternet/ubuntu-16-apache-php-7.1	ubuntu-16-apache-php-7.1	7	
[OK] andlinternet/ubuntu-16-nginx-php-7.0	ubuntu-16-nginx-php-7.0	4	
[OK] andlinternet/ubuntu-16-sshd	ubuntu-16-sshd	1	
[OK] andlinternet/ubuntu-16-php-7.1	ubuntu-16-php-7.1	1	
[OK]			
martentry/ubuntu [OK]	ubuntu with smartentry	1	
andlinternet/ubuntu-16-rspec [OK] is@ubuntu:~\$	ubuntu-16-rspec	0	

Iis@ubuntu: ~	_		×
consol/ubuntu-xfce-vnc 「OKl	Ubuntu container with "headless" VNC session	241	
ubuntu-upstart	DEPRECATED, as is Upstart (find other proces	113	
ansible/ubuntu14.04-ansible	Ubuntu 14.04 LTS with ansible	98	
landlinternet/ubuntu-16-nginx-php-phpmyadmin-mysql-5	ubuntu-16-nginx-php-phpmyadmin-mysql-5	50	
ubuntu-debootstrap OK1	DEPRECATED; use "ubuntu" instead	44	
i386/ubuntu	Ubuntu is a Debian-based Linux operating sys	25	
solita/ubuntu-systemd [OK]	Ubuntu + systemd	24	
fnndsc/ubuntu-python3 FOK1	A slim Ubuntu-based Python3 image	24	
nuagebec/ubuntu FOK1	Simple always updated Ubuntu docker images w	24	
[OK] landlinternet/ubuntu-16-apache-php-5.6 [OK]	ubuntu-16-apache-php-5.6	14	
landlinternet/ubuntu-16-apache-php-7.0	ubuntu-16-apache-php-7.0	13	
[OK] eclipse/ubuntu_jdk8	Ubuntu, JDK8, Maven 3, git, curl, nmap, mc,	13	
[OK] landlinternet/ubuntu-16-nginx-php-phpmyadmin-mariadb-10	ubuntu-16-nginx-php-phpmyadmin-mariadb-10	11	
[OK] landlinternet/ubuntu-16-nginx-php-5.6-wordpress-4	ubuntu-16-nginx-php-5.6-wordpress-4	9	
[OK] landlinternet/ubuntu-16-nginx-php-5.6	ubuntu-16-nginx-php-5.6	8	
[OK] landlinternet/ubuntu-16-apache-php-7.1	ubuntu-16-apache-php-7.1	7	
[OK] landlinternet/ubuntu-16-nginx-php-7.0	ubuntu-16-nginx-php-7.0	4	
[OK] 1and1internet/ubuntu-16-sshd	ubuntu-16-sshd	1	
[OK] landlinternet/ubuntu-16-php-7.1	ubuntu-16-php-7.1	1	
[OK] smartentry/ubuntu	ubuntu with smartentry	1	
[OK] landlinternet/ubuntu-16-rspec	ubuntu-16-rspec	ø	
[OK] lis@ubuntu:-\$ docker pull ubuntu Using default tag: latest latest: Pulling from library/ubuntu laec32c2132b: Pull complete			
Digest: sha256:82becede498899ec668628e7cb0ad87b6e1c371cb Status: Downloaded newer image for ubuntu:latest docker.io/library/ubuntu:latest	8a1e597d83a47fac21d6af3		
lis@ubuntu:~\$			

	_		\times
ansible/ubuntu14.04-ansible	Ubuntu 14.04 LTS with ansible	98	
[OK] landlinternet/ubuntu-16-nginx-php-phpmyadmin-mysql-5 FOK1	ubuntu-16-nginx-php-phpmyadmin-mysql-5	50	
ubuntu-debootstrap	DEPRECATED; use "ubuntu" instead	44	
OK] i386/ubuntu	Ubuntu is a Debian-based Linux operating sys	25	
solita/ubuntu-systemd FOK1	Ubuntu + systemd	24	
fnndsc/ubuntu-python3 [OK]	A slim Ubuntu-based Python3 image	24	
nuagebec/ubuntu TOK1	Simple always updated Ubuntu docker images w	24	
landlinternet/ubuntu-16-apache-php-5.6 [OK]	ubuntu-16-apache-php-5.6	14	
landlinternet/ubuntu-16-apache-php-7.0	ubuntu-16-apache-php-7.0	13	
eclipse/ubuntu_jdk8 [OK]	Ubuntu, JDK8, Maven 3, git, curl, nmap, mc,	13	
landlinternet/ubuntu-16-nginx-php-phpmyadmin-mariadb-10 [OK]	ubuntu-16-nginx-php-phpmyadmin-mariadb-10	11	
landlinternet/ubuntu-16-nginx-php-5.6-wordpress-4	ubuntu-16-nginx-php-5.6-wordpress-4	9	
landlinternet/ubuntu-16-nginx-php-5.6	ubuntu-16-nginx-php-5.6	8	
[OK] 1and1internet/ubuntu-16-apache-php-7.1	ubuntu-16-apache-php-7.1	7	
[OK] 1and1internet/ubuntu-16-nginx-php-7.0	ubuntu-16-nginx-php-7.0	4	
[OK] 1and1internet/ubuntu-16-sshd	ubuntu-16-sshd	1	
[OK] landlinternet/ubuntu-16-php-7.1	ubuntu-16-php-7.1	1	
[OK] smartentry/ubuntu	ubuntu with smartentry	1	
[OK] landlinternet/ubuntu-16-rspec	ubuntu-16-rspec	0	
[OK] lis@ubuntu:~\$ docker pull ubuntu			
Using default tag: latest			
latest: Pulling from library/ubuntu 16ec32c2132b: Pull complete			
Digest: sha256:82becede498899ec668628e7cb0ad87b6e1c371cb	8a1e597d83a47fac21d6af3		
Status: Downloaded newer image for ubuntu:latest			
docker.io/library/ubuntu:latest			
lis@ubuntu:~\$ docker images			
REPOSITORY TAG IMAGE ID CREATED SI	ZE .8MB		
	.3kB		
lis@ubuntu:~\$.300		

2. Запустить контейнер с Ubuntu.

```
root@bb3b443fa774: /
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                                                                                                                                                                 landlinternet/ubuntu-16-nginx-php-5.6-wordpress-4
                                                                                        ubuntu-16-nginx-php-5.6-wordpress-4
                                                                                                                                                                 9
               [OK]
 landlinternet/ubuntu-16-nginx-php-5.6
                                                                                        ubuntu-16-nginx-php-5.6
               [OK]
 landlinternet/ubuntu-16-apache-php-7.1
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               [OK]
 landlinternet/ubuntu-16-nginx-php-7.0
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                                                                                                                                                                 4
               [OK]
 landlinternet/ubuntu-16-sshd
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landlinternet/ubuntu-16-php-7.1
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               [OK]
 smartentry/ubuntu
                                                                                       ubuntu with smartentry
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[OK]
landlinternet/ubuntu-16-rspec
                                                                                       ubuntu-16-rspec
               [OK]
lis@ubuntu:~$ docker pull ubuntu
Using default tag: latest
latest: Pulling from library/ubuntu
16ec32c2132b: Pull complete
Digest: sha256:82becede498899ec668628e7cb0ad87b6e1c371cb8a1e597d83a47fac21d6af3
Status: Downloaded newer image for ubuntu:latest
docker.io/library/ubuntu:latest
lis@ubuntu:~$ docker images

REPOSITORY TAG IMAGE ID CREATED SIZE
ubuntu latest 1318b700e415 4 weeks ago 72.8MB
hello-world latest d1165f221234 5 months ago 13.3kB
lis@ubuntu:~$ docker run -it ubuntu
  root@bb3b443fa774:/# apt-get update
 Get:1 http://archive.ubuntu.com/ubuntu focal InRelease [265 kB]
Get:2 http://security.ubuntu.com/ubuntu focal-security InRelease [114 kB]
Get:3 http://archive.ubuntu.com/ubuntu focal-updates InRelease [114 kB]
 Get:4 http://archive.ubuntu.com/ubuntu focal-backports InRelease [101 kB]
Get:5 http://archive.ubuntu.com/ubuntu focal/main amd64 Packages [1275 kB]
 Get:6 http://archive.ubuntu.com/ubuntu focal/restricted amd64 Packages [33.4 kB]
 Get:7 http://archive.ubuntu.com/ubuntu focal/multiverse amd64 Packages [177 kB]
Get:8 http://archive.ubuntu.com/ubuntu focal/universe amd64 Packages [11.3 MB]
Get:9 http://security.ubuntu.com/ubuntu focal-security/multiverse amd64 Packages [30.1 kB]
 Get:10 http://security.ubuntu.com/ubuntu focal-security/universe amd64 Packages [789 kB]
Get:11 http://security.ubuntu.com/ubuntu focal-security/restricted amd64 Packages [488 kB]
Get:12 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 Packages [1476 kB]
 Get:13 http://archive.ubuntu.com/ubuntu focal-updates/multiverse amd64 Packages [33.4 kB]
 Get:14 http://archive.ubuntu.com/ubuntu focal-updates/restricted amd64 Packages [535 kB]
Get:15 http://archive.ubuntu.com/ubuntu focal-updates/universe amd64 Packages [1063 kB]
 Get:16 http://security.ubuntu.com/ubuntu focal-security/main amd64 Packages [1034 kB]
 Get:17 http://archive.ubuntu.com/ubuntu focal-backports/main amd64 Packages [2668 B]
Get:18 http://archive.ubuntu.com/ubuntu focal-backports/universe amd64 Packages [6324 B]
  etched 18.9 MB in 4s (4237 kB/s)
 Reading package lists... Done
root@bb3b443fa774:/# apt-get install -y dialog
```

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| Second by the state of the st
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