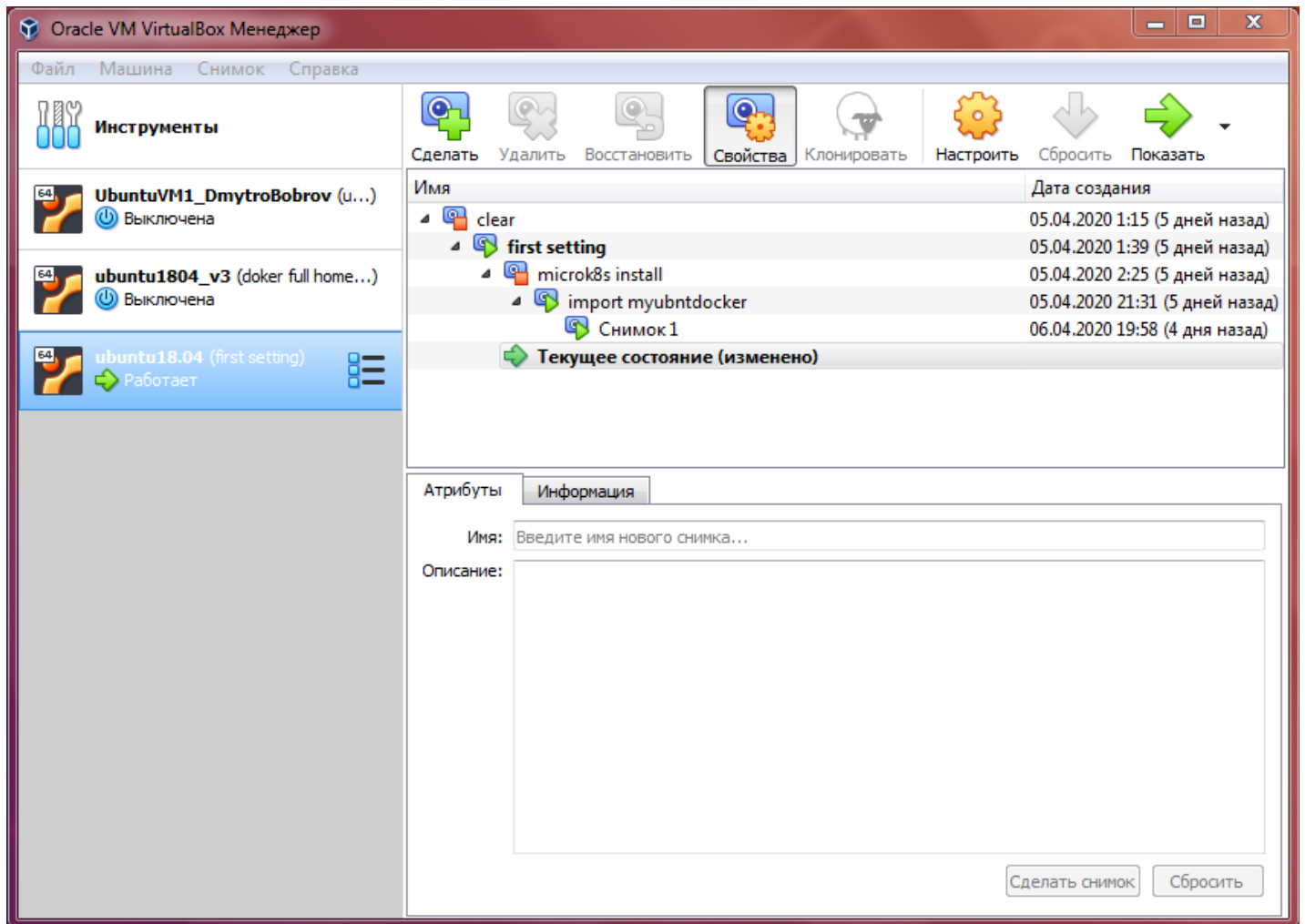


EPAM University Programs
DevOps external course
Module 4 DevOps Introduction
TASK 4.2

1. Set up Linux Virtual Machine in VirtualBox.



2. Familiarize yourself with the commands and utilities listed in the presentation (switching between **virtual terminals** (consoles); **printenv**; content of **/etc/profile** and **~/.bash_profile**, **\$echo \$HISTFILE \$HISTSIZE \$HISTFILESIZE**, **who**, **w**, **whoami**, **id**). Make 5 screenshots.

```
bobrov@bobrov-VirtualBox:~$ printenv SHELL
/bin/bash
bobrov@bobrov-VirtualBox:~$ printenv SHELL HOME
/bin/bash
/home/bobrov
bobrov@bobrov-VirtualBox:~$
```

printenv SHELL

printenv HOME

nano /etc/profile

```
# /etc/profile: system-wide .profile file for the Bourne shell (sh(1))
# and Bourne compatible shells (bash(1), ksh(1), ash(1), ...).

if [ "${PS1-}" ]; then
  if [ "${BASH-}" ] && [ "$BASH" != "/bin/sh" ]; then
    # The file bash.bashrc already sets the default PS1.
    # PS1='\h:\w\$ '
    if [ -f /etc/bash.bashrc ]; then
      . /etc/bash.bashrc
    fi
  else
    if [ "`id -u`" -eq 0 ]; then
      PS1='# '
    else
      PS1='$ '
    fi
  fi
fi

if [ -d /etc/profile.d ]; then
  for i in /etc/profile.d/*.sh; do
    if [ -r $i ]; then
      . $i
    fi
  done
  unset i
fi
```

echo

```
bobrov@bobrov-VirtualBox:~$ echo -e "Бобров \nДмитрий \nАлександрович"
Бобров
Дмитрий
Александрович
bobrov@bobrov-VirtualBox:~$ echo -e "Бобров \vДмитрий \vАлександрович"
Бобров
    Дмитрий
        Александрович
bobrov@bobrov-VirtualBox:~$ echo "Бобров Дмитрий Александрович" > name
bobrov@bobrov-VirtualBox:~$ cat name
Бобров Дмитрий Александрович
bobrov@bobrov-VirtualBox:~$
```

echo \$HISTFILE \$HISTSIZE \$HISTFILESIZE

```
root@bobrov-VirtualBox:~# echo $HISTFILE $HISTSIZE $HISTFILESIZE
/root/.bash_history 1000 2000
```

(who-a) (w) (whoami) (id)

```

bobrov@bobrov-VirtualBox:~$ who -a
      system boot  2020-04-12 00:07
      run-level 5   2020-04-12 00:07
bobrov - pts/0      2020-04-12 00:08 13:47          1264 (10.0.1.3)
bobrov ? :0         2020-04-12 13:45 ?             1748 (:0)
bobrov - pts/3      2020-04-12 13:45 .             2589 (10.0.1.3)
bobrov@bobrov-VirtualBox:~$ w
 14:38:28 up 1:45, 3 users, load average: 0,00, 0,01, 0,00
USER      TTY      FROM            LOGIN@   IDLE   JCPU   PCPU   WHAT
bobrov    pts/0    10.0.1.3        00:08    13:47m 0.15s  0.15s  -bash
bobrov    :0       :0              13:45    ?xdm?  34.40s 0.00s  /usr/lib/gdm3/gdm-x-ses
bobrov    pts/3    10.0.1.3        13:45    2.00s  0.06s  0.00s  w
bobrov@bobrov-VirtualBox:~$ whoami
bobrov
bobrov@bobrov-VirtualBox:~$ id
uid=1000(bobrov) gid=1000(bobrov) groups=1000(bobrov),4(adm),24(cdrom),27(sudo),30(dip),
46(plugdev),116(lpadmin),126(sambashare)

```

3. Familiarize yourself with the commands (*uname*, *hostname*, *uptime*, *shutdown*, *halt*, *reboot*, *init...*). Make 5 screenshots.

uname

```

bobrov@bobrov-VirtualBox:~$ uname
Linux
bobrov@bobrov-VirtualBox:~$ uname -a
Linux bobrov-VirtualBox 5.3.0-45-generic #37~18.04.1-Ubuntu SMP Fri Mar 27 15:58:10 UTC
2020 x86_64 x86_64 x86_64 GNU/Linux
bobrov@bobrov-VirtualBox:~$ uname -n
bobrov-VirtualBox
bobrov@bobrov-VirtualBox:~$ uname -r
5.3.0-45-generic
bobrov@bobrov-VirtualBox:~$ uname -v
#37~18.04.1-Ubuntu SMP Fri Mar 27 15:58:10 UTC 2020
bobrov@bobrov-VirtualBox:~$ uname -m
x86_64

```

hostname

```

bobrov@bobrov-VirtualBox:~$ hostname
bobrov-VirtualBox
bobrov@bobrov-VirtualBox:~$ hostname -i
127.0.1.1
bobrov@bobrov-VirtualBox:~$ hostname -I
10.0.1.4
bobrov@bobrov-VirtualBox:~$ hostname -V
hostname 3.20

```

uptime

```
bobrov@bobrov-VirtualBox:~$ uptime
 15:20:05 up  2:27,  3 users,  load average: 0,03, 0,03, 0,00
bobrov@bobrov-VirtualBox:~$ uptime -p
up 2 hours, 27 minutes
bobrov@bobrov-VirtualBox:~$ uptime -s
2020-04-12 12:52:29
bobrov@bobrov-VirtualBox:~$ uptime -V
uptime from procs-ng 3.3.12
```

shutdown

```
root@bobrov-VirtualBox:~# shutdown 5
Shutdown scheduled for Sun 2020-04-12 16:19:34 EEST, use 'shutdown -c' to cancel.
root@bobrov-VirtualBox:~# shutdown -c
```

reboot after 5 minutes via (shutdown -r +5)

```
root@bobrov-VirtualBox:~# shutdown -r +5
Shutdown scheduled for Sun 2020-04-12 16:26:25 EEST, use 'shutdown -c' to cancel.
```

4. Familiarize yourself with the help commands (*man, info, find, locate, whereis, less/zless in /usr/share/doc*). Make 5 screenshots.

find / -name .bashrc

```
root@bobrov-VirtualBox:~# find / -name .bashrc
/home/bobrov/.bashrc
/etc/skel/.bashrc
/root/.bashrc
/snap/core/8935/etc/skel/.bashrc
/snap/core/8935/root/.bashrc
/snap/core/8268/etc/skel/.bashrc
/snap/core/8268/root/.bashrc
/snap/core18/1668/etc/skel/.bashrc
/snap/core18/1668/root/.bashrc
/snap/core18/1705/etc/skel/.bashrc
/snap/core18/1705/root/.bashrc
```

locate .bashrc

```
root@bobrov-VirtualBox:~# locate .bashrc
/etc/bash.bashrc
/etc/skel/.bashrc
/home/bobrov/.bashrc
/root/.bashrc
/snap/core/8268/etc/bash.bashrc
/snap/core/8268/etc/skel/.bashrc
/snap/core/8268/root/.bashrc
/snap/core/8268/usr/share/base-files/dot.bashrc
/snap/core/8935/etc/bash.bashrc
/snap/core/8935/etc/skel/.bashrc
/snap/core/8935/root/.bashrc
/snap/core/8935/usr/share/base-files/dot.bashrc
/snap/core18/1668/etc/bash.bashrc
/snap/core18/1668/etc/skel/.bashrc
/snap/core18/1668/root/.bashrc
/snap/core18/1668/usr/share/base-files/dot.bashrc
/snap/core18/1705/etc/bash.bashrc
/snap/core18/1705/etc/skel/.bashrc
/snap/core18/1705/root/.bashrc
/snap/core18/1705/usr/share/base-files/dot.bashrc
/usr/share/base-files/dot.bashrc
/usr/share/doc/adduser/examples/adduser.local.conf.examples/bash.bashrc
/usr/share/doc/adduser/examples/adduser.local.conf.examples/skel/dot.bashrc
```

whereis

```
root@bobrov-VirtualBox:~# whereis profile
profile: /etc/profile.d /etc/profile
```

```
less -N /etc/profile
```

```
1 # /etc/profile: system-wide .profile file for the Bourne shell (sh(1))
2 # and Bourne compatible shells (bash(1), ksh(1), ash(1), ...).
3
4 if [ "${PS1-}" ]; then
5     if [ "${BASH-}" ] && [ "$BASH" != "/bin/sh" ]; then
6         # The file bash.bashrc already sets the default PS1.
7         # PS1='\h:\w\$ '
8         if [ -f /etc/bash.bashrc ]; then
9             . /etc/bash.bashrc
10        fi
11    else
12        if [ "`id -u`" -eq 0 ]; then
13            PS1='# '
14        else
15            PS1='$ '
16        fi
17    fi
18 fi
19
20 if [ -d /etc/profile.d ]; then
21     for i in /etc/profile.d/*.sh; do
22         if [ -r $i ]; then
23             . $i
24         fi
25     done
26     unset i
27 fi
```

```
zless -N /usr/share/doc/libsnmp30/AGENT.txt.gz
```

```

1 Note, this is based on the text from a web page, which can be found in
2 the documentation section of the http://www.net-snmp.org web page.
3
4 Extending the UCD-SNMP agent
5 =====
6
7 This document describes the procedure for writing code to extend
8 the functionality of the v4 UCD-SNMP network management agent.
9 Modules written using this procedure should also work with the v5
10 Net-SNMP agent, though such modules would not take advantage of the
11 new handler-based helper mechanism. See the on-line documentation
12 for more information and examples of the newer approach.
13 We would be very interested in comment and feedback about how useful
14 (or otherwise) you find this description, and ways in which it could
15 be improved.
16
17 The information is designed to be read in order - the structure being:
18
19 1. Overview & Introduction
20 2. MIB files, and how they relate to the agent implementation
21 3. Header files
22 4. The basic structure of module implementation code
23 5. The details of non-table based implementations
24 6. The details of simple table based implementations
25 7. The details of more general table based implementations
26 8. How to implement SET-able variables
27
28 While the document is intended to be generally self-contained,
29 it does occasionally refer to code files shipped with the main UCD
30 distribution (in particular the example module), and it may prove
31 useful to have these files available for reference.
32
33 1. How to write a Mib module
34 =====
35
```

```
/usr/share/doc/libsnmp30/AGENT.txt.gz
```

```
man hier
```

```
/usr/share/doc
```

```
Documentation about installed programs (optional).
```