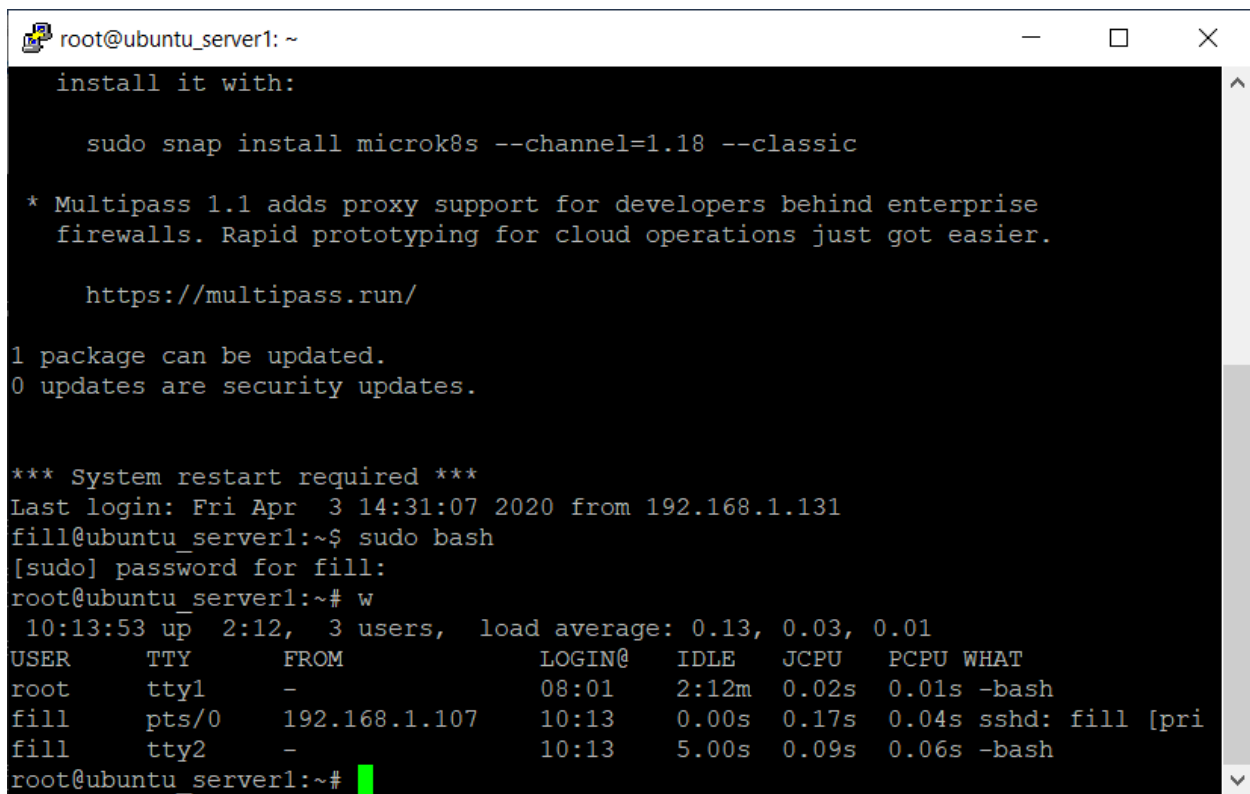EPAM University Programs
DevOps external course
Module 4 DevOps Introduction
TASK 4.2

1. Set up Linux Virtual Machine in VirtualBox.

Done

2. Familiarize yourself with the commands and utilities listed in the presentation (switching between **virtual terminals** (consoles);


```
root@ubuntu_server1: ~                                           —    □    ×
    install it with:

      sudo snap install microk8s --channel=1.18 --classic

  * Multipass 1.1 adds proxy support for developers behind enterprise
    firewalls. Rapid prototyping for cloud operations just got easier.

      https://multipass.run/

1 package can be updated.
0 updates are security updates.


*** System restart required ***
Last login: Fri Apr  3 14:31:07 2020 from 192.168.1.131
fill@ubuntu_server1:~$ sudo bash
[sudo] password for fill:
root@ubuntu_server1:~# w
 10:13:53 up  2:12,  3 users,  load average: 0.13, 0.03, 0.01
USER     TTY      FROM             LOGIN@   IDLE   JCPU   PCPU WHAT
root     tty1     -                08:01    2:12m  0.02s  0.01s -bash
fill     pts/0    192.168.1.107    10:13    0.00s  0.17s  0.04s sshd: fill [pri
fill     tty2     -                10:13    5.00s  0.09s  0.06s -bash
root@ubuntu_server1:~# █
```

printenv;

```
.wmv=01;35:*.asf=01;35:*.rm=01;35:*.rmvb=01;35:*.flc=01;35:*.avi=01;35:*.fli=01;
35:*.flv=01;35:*.gl=01;35:*.dl=01;35:*.xcf=01;35:*.xwd=01;35:*.yuv=01;35:*.cgm=0
1;35:*.emf=01;35:*.ogv=01;35:*.ogx=01;35:*.aac=00;36:*.au=00;36:*.flac=00;36:*.m
4a=00;36:*.mid=00;36:*.midi=00;36:*.mka=00;36:*.mp3=00;36:*.mpc=00;36:*.ogg=00;3
6:*.ra=00;36:*.wav=00;36:*.oga=00;36:*.opus=00;36:*.spx=00;36:*.xspf=00;36:
LESSCLOSE=/usr/bin/lesspipe %s %s
LANG=C.UTF-8
SUDO_GID=1000
USERNAME=root
SUDO_COMMAND=/bin/bash
USER=root
PWD=/home/fill
HOME=/home/fill
SUDO_USER=fill
SUDO_UID=1000
MAIL=/var/mail/root
SHELL=/bin/bash
TERM=xterm
SHLVL=1
LOGNAME=root
PATH=/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/snap/bin
LESSOPEN=| /usr/bin/lesspipe %s
_=/usr/bin/printenv
root@ubuntu_server1:~#
```

content of **/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
~
(END)
```

and **~/.bash_profile**,

v

```
root@ubuntu_server1: ~                              —    □    ✕
sudo bash
passwd root
uname -a
apt install build-essential dkms linux-headers-$(uname -r)
su -m
apt install lxd
lxc launch fill
lxc image list
lxc init
lxc image info
lxc image info ubuntu:lts
lxc image list ubuntu:lts
lxc image list ubuntu:lts/b
lxc image list ubuntu:lts/i386
lxc image list ubuntu:lts/b
lxc image info ubuntu:lts:
lxc image info ubuntu:lts
lxc image info ubuntu:lts/b
lxc image info ubuntu:lts
lxc image list ubuntu:lts/b
lxc image list ubuntu:lts
lxc image list ubuntu
lxc image list ubuntu:
lxc image list ubuntu:18.04
lxc image list ubuntu:18.04:b:
lxc image list ubuntu:18.04
lxc launch ubuntu:18.04 fill
lxd  init
--More--(77%)
```

$echo $HISTFILE $HISTSIZE $HISTFILESIZE, who, w, whoami, id).

```
root@ubuntu_server1: ~                                        —    □    ✕

lxc image info ubuntu:lts
lxc image list ubuntu:lts/b
lxc image list ubuntu:lts
lxc image list ubuntu
lxc image list ubuntu:
lxc image list ubuntu:18.04
lxc image list ubuntu:18.04:b:
lxc image list ubuntu:18.04
lxc launch ubuntu:18.04 fill
lxd  init
root@ubuntu_server1:~# who
root     tty1         2020-04-13 08:01
fill     pts/0        2020-04-13 10:13 (192.168.1.107)
fill     tty2         2020-04-13 10:13
root@ubuntu_server1:~# w
 10:17:00 up  2:15,  3 users,  load average: 0.00, 0.01, 0.00
USER     TTY      FROM             LOGIN@   IDLE   JCPU   PCPU WHAT
root     tty1     -                08:01    2:15m  0.02s  0.01s -bash
fill     pts/0    192.168.1.107    10:13    0.00s  0.28s  0.04s sshd: fill [priv]
fill     tty2     -                10:13    2:12   0.09s  0.06s -bash
root@ubuntu_server1:~# whoami
root
root@ubuntu_server1:~# id
uid=0(root) gid=0(root) groups=0(root)
root@ubuntu_server1:~# echo  $HISTFILE
/home/fill/.bash_history
root@ubuntu_server1:~# echo  $HISTFILE $HISTSIZE $HISTFILESIZE
/home/fill/.bash_history 1000 2000
root@ubuntu_server1:~# █
```

Make 5 screenshots.

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

```
lxd  init
root@ubuntu_server1:~# who
root     tty1         2020-04-13 08:01
fill     pts/0        2020-04-13 10:13 (192.168.1.107)
fill     tty2         2020-04-13 10:13
root@ubuntu_server1:~# w
 10:17:00 up  2:15,  3 users,  load average: 0.00, 0.01, 0.00
USER     TTY      FROM             LOGIN@   IDLE   JCPU   PCPU WHAT
root     tty1     -                08:01    2:15m  0.02s  0.01s -bash
fill     pts/0    192.168.1.107    10:13    0.00s  0.28s  0.04s sshd: fill [priv]
fill     tty2     -                10:13    2:12   0.09s  0.06s -bash
root@ubuntu_server1:~# whoami
root
root@ubuntu_server1:~# id
uid=0(root) gid=0(root) groups=0(root)
root@ubuntu_server1:~# echo  $HISTFILE
/home/fill/.bash_history
root@ubuntu_server1:~# echo  $HISTFILE $HISTSIZE $HISTFILESIZE
/home/fill/.bash_history 1000 2000
root@ubuntu_server1:~# uname -a
Linux ubuntu_server1 4.15.0-91-generic #92-Ubuntu SMP Fri Feb 28 11:09:48 UTC 2020 x
86_64 x86_64 x86_64 GNU/Linux
root@ubuntu_server1:~# hostname
ubuntu_server1
root@ubuntu_server1:~# uptime
 10:23:13 up  2:21,  3 users,  load average: 0.01, 0.02, 0.00
root@ubuntu_server1:~#
```

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

NAME
       man - an interface to the on-line reference manuals

SYNOPSIS
       man [-C file] [-d] [-D] [--warnings[=warnings]] [-R encoding] [-L
       locale] [-m system[,...]] [-M path] [-S list] [-e extension]   [-i|-I]
       [--regex|--wildcard]   [--names-only]   [-a]   [-u]   [--no-subpages]   [-P
       pager] [-r prompt] [-7] [-E encoding] [--no-hyphenation] [--no-justifi□
       cation] [-p string] [-t]   [-T[device]]   [-H[browser]] [-X[dpi]] [-Z]
       [[section] page[.section] ...] ...
       man -k [apropos options] regexp ...
       man -K [-w|-W] [-S list] [-i|-I] [--regex] [section] term ...
       man -f [whatis options] page ...
       man -l [-C file] [-d] [-D] [--warnings[=warnings]] [-R encoding] [-L
       locale] [-P pager] [-r prompt] [-7] [-E encoding] [-p string] [-t]
       [-T[device]] [-H[browser]] [-X[dpi]] [-Z] file ...
       man -w|-W [-C file] [-d] [-D] page ...
       man -c [-C file] [-d] [-D] page ...
       man [-?V]

DESCRIPTION
 Manual page man(1) line 1 (press h for help or q to quit)

-----Info: (*manpages*)man, 1011 lines --Top-----------------------------------
No menu item 'man' in node '(dir)Top'

```
/root/.config/htop/htoprc
/root/.config/mc
/root/.config/mc/ini
/root/.gnupg
/root/.gnupg/private-keys-v1.d
/root/.bashrc
/root/.ssh
/root/.ssh/authorized_keys
root@ubuntu_server1:/root# find /root/ -type f -name "1" -print
/root/1
root@ubuntu_server1:/root# find /root/ -type f -name "*" -print
/root/2
/root/3
/root/.profile
/root/1
/root/.bash_history
/root/.local/share/mc/history
/root/.cache/motd.legal-displayed
/root/.cache/mc/Tree
/root/.config/htop/htoprc
/root/.config/mc/ini
/root/.bashrc
/root/.ssh/authorized_keys
root@ubuntu_server1:/root#
```

```
/var/lib/dpkg/info/bash-completion.conffiles
/var/lib/dpkg/info/bash-completion.list
/var/lib/dpkg/info/bash-completion.md5sums
/var/lib/dpkg/info/bash-completion.postinst
/var/lib/dpkg/info/bash-completion.postrm
/var/lib/dpkg/info/bash-completion.preinst
/var/lib/dpkg/info/bash-completion.prerm
/var/lib/dpkg/info/bash.conffiles
/var/lib/dpkg/info/bash.list
/var/lib/dpkg/info/bash.md5sums
/var/lib/dpkg/info/bash.postinst
/var/lib/dpkg/info/bash.postrm
/var/lib/dpkg/info/bash.preinst
/var/lib/dpkg/info/bash.prerm
root@ubuntu_server1:/root# locate ifconfig
/sbin/ifconfig
/usr/share/man/de/man8/ifconfig.8.gz
/usr/share/man/fr/man8/ifconfig.8.gz
/usr/share/man/man8/ifconfig.8.gz
/usr/share/man/pt_BR/man8/ifconfig.8.gz
root@ubuntu_server1:/root# whereis bash
bash: /bin/bash /etc/bash.bashrc /usr/share/man/man1/bash.1.gz
root@ubuntu_server1:/root# whereis infconfig
infconfig:
root@ubuntu_server1:/root# whereis ifconfig
ifconfig: /sbin/ifconfig /usr/share/man/man8/ifconfig.8.gz
root@ubuntu_server1:/root#
```

```
# This file is managed by man:systemd-resolved(8). Do not edit.
#
# This is a dynamic resolv.conf file for connecting local clients to the
# internal DNS stub resolver of systemd-resolved. This file lists all
# configured search domains.
#
# Run "systemd-resolve --status" to see details about the uplink DNS servers
# currently in use.
#
# Third party programs must not access this file directly, but only through the
# symlink at /etc/resolv.conf. To manage man:resolv.conf(5) in a different way,
# replace this symlink by a static file or a different symlink.
#
# See man:systemd-resolved.service(8) for details about the supported modes of
# operation for /etc/resolv.conf.

nameserver 127.0.0.53
options edns0
/etc/resolv.conf (END)
```

```
apt/                     dpkg.log             lxd/                    vboxadd-setup.log.2
auth.log                 faillog              syslog                  vboxadd-setup.log.3
bootstrap.log            installer/           tallylog                vboxadd-setup.log.4
btmp                     journal/             unattended-upgrades/    wtmp
cloud-init-output.log    kern.log             vboxadd-install.log
cloud-init.log           landscape/           vboxadd-setup.log
root@ubuntu_server1:/root# tail -f /var/log/kern.log
Apr 13 10:39:36 ubuntu_server1 kernel: [   30.868642] 10:39:36.892298 main      Package type: LI
NUX_64BITS_GENERIC
Apr 13 10:39:36 ubuntu_server1 kernel: [   30.870859] 10:39:36.894503 main      6.1.4 r136177 st
arted. Verbose level = 0
Apr 13 10:39:36 ubuntu_server1 kernel: [   30.885228] 10:39:36.908867 main      vbglR3GuestCtrlD
etectPeekGetCancelSupport: Supported (#1)
Apr 13 10:39:36 ubuntu_server1 kernel: [   30.904398] vboxsf: g_fHostFeatures=0x8000000f g_fSfF
eatures=0x1 g_uSfLastFunction=29
Apr 13 10:39:36 ubuntu_server1 kernel: [   30.904482] vboxsf: Successfully loaded version 6.1.4
Apr 13 10:39:36 ubuntu_server1 kernel: [   30.904512] vboxsf: Successfully loaded version 6.1.4
 on 4.15.0-96-generic SMP mod_unload  (LINUX_VERSION_CODE=0x40f12)
Apr 13 10:39:36 ubuntu_server1 kernel: [   30.908077] 10:39:36.931683 automount vbsvcAutomounte
rMountIt: Successfully mounted 'DevOPS' on '/media/sf_DevOPS'
Apr 13 10:39:49 ubuntu_server1 kernel: [   43.407375] BTRFS: device label default devid 1 trans
id 1134 /dev/loop2
Apr 13 10:39:49 ubuntu_server1 kernel: [   43.411102] BTRFS info (device loop2): disk space cac
hing is enabled
Apr 13 10:39:49 ubuntu_server1 kernel: [   43.411105] BTRFS info (device loop2): has skinny ext
ents
```

accountsservice (0.6.45-1ubuntu1) bionic; urgency=medium

  * Merge with Debian, remaining Ubuntu changes:
  * debian/libaccountsservice0.symbols:
    - Add symbols added from patches.
  * debian/patches/0001-formats-locale-property.patch:
    - Addition of FormatsLocale property and SetFormatsLocale method.
  * debian/patches/0001-Move-cache-cleanup-out-into-a-common-function-and-cl.patch:
    - Move cache cleanup out into a common function and clean up icon too.
  * debian/patches/0002-On-startup-clean-out-the-data-of-removed-users.patch:
    - On startup, clean out the data of removed users.
  * debian/patches/0005-gdm_config_file_path.patch:
    - We use custom.conf, not daemon.conf
  * debian/patches/0008-nopasswdlogin-group.patch:
    - When setting a user to have no password, also add them to the
      'nopasswdlogin' group.
  * debian/patches/0009-language-tools.patch:
    - Modified from Debian version.
  * debian/patches/0010-set-language.patch:
    - Save user language and regional formats settings to ~/.pam_environment.
  * debian/patches/0011-add-background-file-support.patch:
    - Add support for a BackgroundFile property, similar to IconFile.
  * debian/patches/0012-add-keyboard-layout-support.patch:
    - Add XKeyboardLayouts property to report a user's keyboard layouts.
  * debian/patches/0013-add-has-message-support.patch:
    - Add XHasMessages property to report if a user had unread messages.
  * debian/patches/0016-add-input-sources-support.patch:
    - Store input sources in the user object.
  * debian/patches/0020-support-login.defs.patch:
    - Revert upstream patch that dropped support for using login.defs
      to determine min and max UID for system users. We still want
      that support in at least Ubuntu Touch.
  * debian/patches/0021-support-extrausers.patch:
    - In addition to watching /etc/{passwd,shadow,group}, also watch those
      same files in /var/lib/extrausers/, if they exist.

 -- Robert Ancell <robert.ancell@canonical.com> Mon, 18 Dec 2017 15:42:18 +1300

changelog.Debian.gz