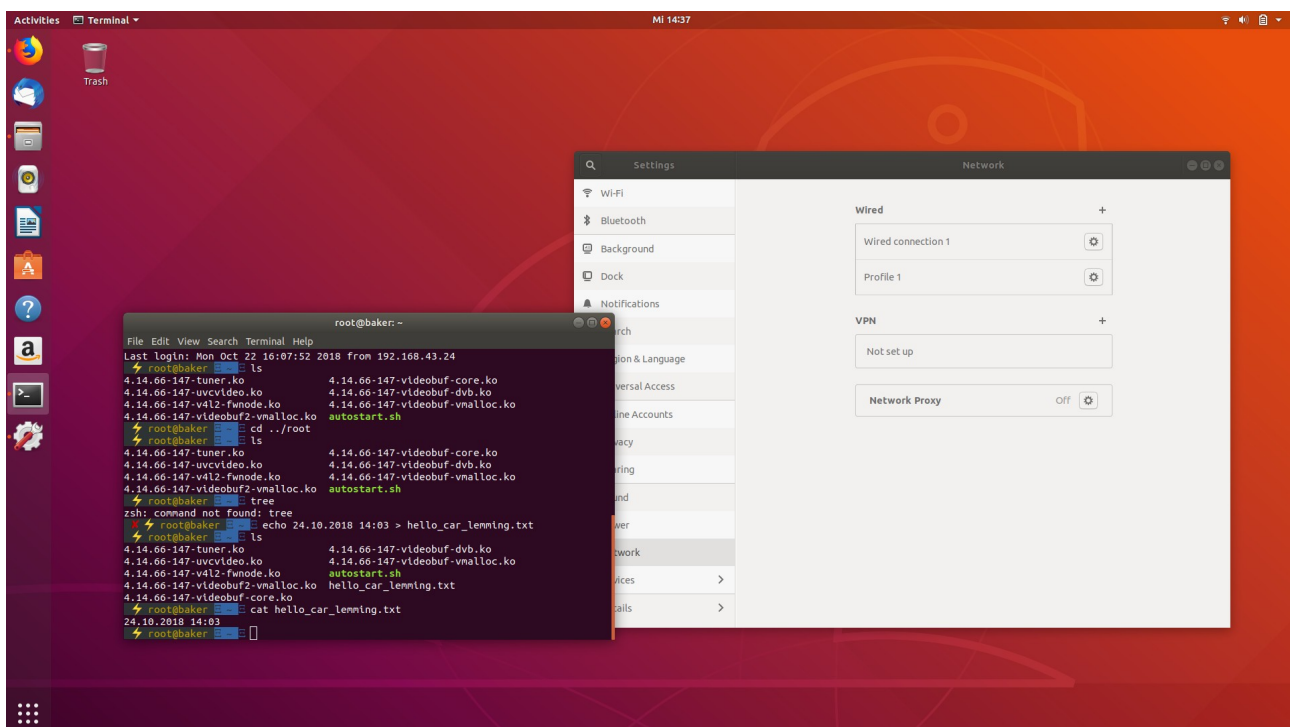
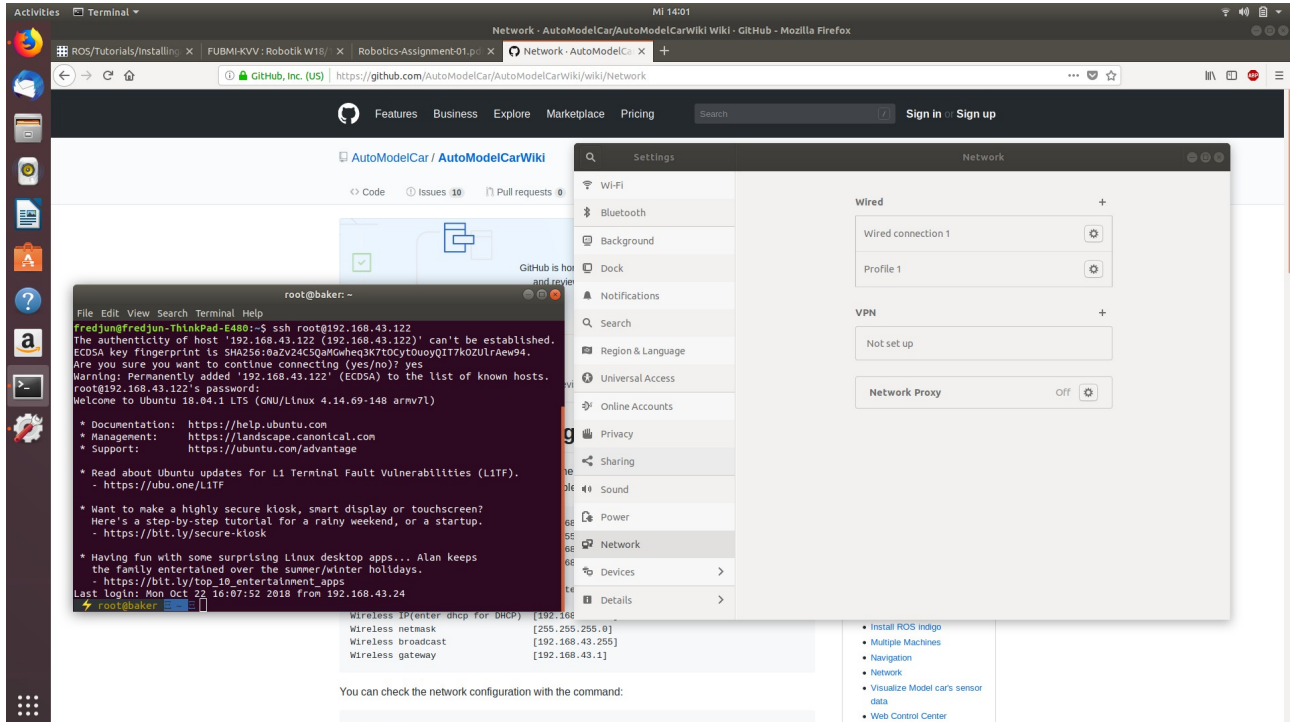


by Friedrich Müller, Pascal Müller, Fabian Casares

(Screenshots can also be found in the repo)

Task 1



The image shows a desktop environment with a terminal window and a web browser. The terminal window displays a series of commands and their outputs, including attempts to connect to a remote host via SSH, file transfer attempts using SCP, and local file operations like creating and editing a text file. The web browser shows a page titled "1. Assignment, Introduction to Robotics WS18/19 - Ver. 1.00" with instructions for the assignment, including a deadline and submission requirements.

Terminal Output:

```
fredjun@fredjun-ThinkPad-E480: ~$ ssh: Could not resolve hostname baker: Name or service not known
fredjun@fredjun-ThinkPad-E480:~$ scp root@baker:/root/hello_car_lemming.txt Desktop/
ssh: Could not resolve hostname baker: Name or service not known
fredjun@fredjun-ThinkPad-E480:~$ scp root@baker:/root/hello_car_lemming.txt Desktop/
cp: cannot stat 'root@baker:/root/hello_car_lemming.txt': No such file or directory
fredjun@fredjun-ThinkPad-E480:~$ scp root@baker:/root/hello_car_lemming.txt Desktop/
ssh: Could not resolve hostname baker: Name or service not known
fredjun@fredjun-ThinkPad-E480:~$ scp root@192.168.43.122:/root/hello_car_lemming.txt Desktop/
root@192.168.43.122's password:
Permission denied, please try again.
root@192.168.43.122's password:
scp: root/hello_car_lemming.txt: No such file or directory
fredjun@fredjun-ThinkPad-E480:~$ scp root@192.168.43.122:/root/hello_car_lemming.txt Desktop/
root@192.168.43.122's password:
hello_car_lemming.txt 100% 17 0.9KB/s 00:00
fredjun@fredjun-ThinkPad-E480:~$ ls
4.14.66-147-tuner.ko 4.14.66-147-videobuf-core.ko
4.14.66-147-uvccvideo.ko 4.14.66-147-videobuf-dvb.ko
4.14.66-147-v4l2-fanode.ko 4.14.66-147-videobuf-vmalloc.ko
4.14.66-147-videobuf2-vmalloc.ko autostart.sh
root@baker:~$ tree
zsh: command not found: tree
root@baker:~$ ls
4.14.66-147-tuner.ko 4.14.66-147-videobuf-dvb.ko
4.14.66-147-uvccvideo.ko 4.14.66-147-videobuf-vmalloc.ko
4.14.66-147-v4l2-fanode.ko autostart.sh
4.14.66-147-videobuf2-vmalloc.ko hello_car_lemming.txt
4.14.66-147-videobuf-core.ko
root@baker:~$ cat hello_car_lemming.txt
24.10.2018 14:03
.: not enough arguments
root@baker:~$ .
.: not enough arguments
root@baker:~$ pwd
/root
root@baker:~$
```

Web Browser Content:

1. Assignment, Introduction to Robotics WS18/19 - Ver. 1.00

Prof. Daniel Göhring
Institut für Informatik, Freie Universität Berlin
Submission: online until Friday, 26 Oct 2018, 10:00 a.m.

Please summarize your results (images and descriptions) in a pdf-document and name it, e.g., "RO-01-<surnames of the students - group name>.pdf".
Only one member of the group must submit the necessary files.
Do not copy solutions to other groups.
Every group shall contain three people but groups of two are also allowed.
Only submissions via KVV will be accepted.

1. Connect to the model car via SSH (4 Points)

Connect an ethernet cable between your computer and the model car. Read the relevant Wiki pages for connecting to the Odroid and Network configurations:
<https://github.com/AutoModelCar/AutoModelCar/wiki/wiki>

Then create an SSH connection to the model car, 1. via ethernet as well as 2. via WLAN. If you don't have an SSH client application installed on your machine, now is a good time to install it.

Create a text file 'hello_car_XY.txt' in the model car's /root/ folder, where XY is the name of your group. Open the file with a terminal text editor like nano or vim, write the current date and time into the file and save the file. After that, from a new local terminal view (not from an ssh-terminal on the car), copy the file to your machine using the scp command.

Create some screenshots showing that you performed these steps.

2. Create a repository (2 Points)

Fork the repository https://github.com/AutoModelCar/catkin_ws_user.
It would be nice, if some of your results may be merged into the AutoModelCar repository at the end of the course.

Write the url of your repository as a solution of this task.

3. ROS Installation (4 Points)

Task 2

https://github.com/frimuell/catkin_ws_user

Task 3

The image shows a terminal window with the following output:

```
fredjun@fredjun-ThinkPad-E480:~$ ssh: Could not resolve hostname baker: Name or service not known
fredjun@fredjun-ThinkPad-E480:~$ scp root@baker:/root/hello_car_lemming Desktop/
ssh: Could not resolve hostname baker: Name or service not known
fredjun@fredjun-ThinkPad-E480:~$ scp root@baker:/root/hello_car_lemming.txt Desktop/
ssh: Could not resolve hostname baker: Name or service not known
fredjun@fredjun-ThinkPad-E480:~$ scp root@baker:/root/hello_car_lemming.txt Desktop/
cp: cannot stat 'root@baker:/root/hello_car_lemming.txt': No such file or directory
fredjun@fredjun-ThinkPad-E480:~$ scp root@baker:/root/hello_car_lemming.txt Desktop/
ssh: Could not resolve hostname baker: Name or service not known
fredjun@fredjun-ThinkPad-E480:~$ scp root@192.168.43.122:/root/hello_car_lemming.txt Desktop/
root@192.168.43.122's password:
Permission denied, please try again.
root@192.168.43.122's password:
scp: root/hello_car_lemming.txt: No such file or directory
fredjun@fredjun-ThinkPad-E480:~$ scp root@192.168.43.122:/root/hello_car_lemming.txt Desktop/
root@192.168.43.122's password:
hello_car_lemming.txt 100% 17 0.9KB/s 00:00
fredjun@fredjun-ThinkPad-E480:~$ cat Desktop/hello_car_lemming.txt
24.10.2018 14:03
fredjun@fredjun-ThinkPad-E480:~$ roscore
... logging to /home/fredjun/.ros/log/e399cd80-d78b-11e8-9e60-SceaIdb65187/roslaunch-fredjun-ThinkPad-E480-3290.log
Checking log directory for disk usage. This may take awhile.
Press Ctrl-C to interrupt
Done checking log file disk usage. Usage is <1GB.

started roslaunch server http://fredjun-ThinkPad-E480:37083/
ros_comm version 1.14.3

SUMMARY
*****
PARAMETERS
 * /rostdistro: melodic
 * /rosversion: 1.14.3
NODES
auto-starting new master
process[master]: started with pid [3301]
ROS_MASTER_URI=http://fredjun-ThinkPad-E480:11311/

setting /run_id to e399cd80-d78b-11e8-9e60-SceaIdb65187
process[roscout-1]: started with pid [3312]
started core service [/roscout]
[]
```

```
Activities Terminal * MI 14:55
fredjun@fredjun-ThinkPad-E480: ~
File Edit View Search Terminal Help

# If this is an xterm set the title to user@host:dir
case "$TERM" in
xterm*|rxvt*)
PS1="\[\e]0:${debian_chroot:+($debian_chroot)}\u@h: \w\a\]\$PS1"
;;
*)
;;
esac

# enable color support of ls and also add handy aliases
if [ -x /usr/bin/dircolors ]; then
test -r ~/.dircolors && eval "$(dircolors -b ~/.dircolors)" || eval "$(dircolors -b)"
alias ls='ls --color=auto'
#alias dir='dir --color=auto'
#alias vdir='vdir --color=auto'

alias grep='grep --color=auto'
alias fgrep='fgrep --color=auto'
alias egrep='egrep --color=auto'
fi

# colored GCC warnings and errors
export GCC_COLORS='error=01;31:warning=01;35:note=01;36:caret=01;32:locus=01:quote=01'

# some more ls aliases
alias ll='ls -alF'
alias la='ls -A'
alias l='ls -CF'

# Add an "alert" alias for long running commands. Use like so:
# sleep 10; alert
alias alert='notify-send --urgency=low -l "${[ $? = 0 ]} && echo terminal || echo error)" "${history|tail -n1|sed -e '\''s/^s*[0-9]\+\s*//;s/[[:&]]\s*alert$/'\''}"'

# Alias definitions.
# You may want to put all your additions into a separate file like
# ~/.bash_aliases, instead of adding them here directly.
# See /usr/share/doc/bash-doc/examples in the bash-doc package.

if [ -f ~/.bash_aliases ]; then
. ~/.bash_aliases
fi

# enable programmable completion features (you don't need to enable
# this, if it's already enabled in /etc/bash.bashrc and /etc/profile
# sources /etc/bash.bashrc).
if ! shopt -oq posix; then
if [ -f /usr/share/bash-completion/bash_completion ]; then
. /usr/share/bash-completion/bash_completion
elif [ -f /etc/bash_completion ]; then
. /etc/bash_completion
fi
fi

source /opt/ros/melodic/setup.bash
fredjun@fredjun-ThinkPad-E480:~$
```