

Virtual image manual

Login data

- username: **sui**
- password: **Internet1**

Turning off the virtual machine

- Menu Machine → "ACPI Shutdown"

Command line navigation

- Up and down arrows are used to navigate command history
- The Tab key is used to auto-complete commands

Network data for the virtual machine

- Network interface data (lo, eth0, eth1)
\$ ip addr
\$ ip a
- Routing table
\$ ip route
\$ ip r

Data exchange with the machine using SCP:

- Used to exchange data with the virtual machine
- Host - interface eth1 IP address (default is 192.168.56.231)
- Username and password - same as login data
- SCP client - WinSCP:
<http://winscp.net/eng/download.php>
- Virtual machine has NAT port forwarding enabled so the machine is accessible through localhost:2202 or 127.0.0.1:2202.

Connect to the virtual machine using SSH:

- Used to execute commands in the virtual machine
- The same settings as SCP
- SSH client - Putty:
<http://www.chiark.greenend.org.uk/~sgtatham/putty/>
- Vrijedi isto *NAT port-forwarding* pravilo kao i za SCP

Change the current directory:

```
$ cd zadatak1  
$ cd ..
```

Create/remove the directory:

```
$ mkdir test  
$ rmdir test  
$ rm -r test
```

View the directory:

```
$ ls  
$ ls -al  
$ ls -alh
```

Create a text file:

```
$ nano file  
$ echo "Ivo Čop, 0036123456" > file
```

Additional information about a command:

```
$ man gpg  
$ gpg -h  
$ gpg --help
```

Fetch data from the Internet:

```
$ wget optimus.tel.fer.hr/test
```

Check the file type:

```
$ file test
```

View file data:

```
$ cat test  
$ nano test  
$ more test  
$ less test
```

Create an archive:

```
$ tar czvf ime_arhive.tar.gz f1 f2  
$ zip ime_arhive.zip f1 f2
```

View an archive:

```
$ tar tvf ime_arhive.tar.gz  
$ unzip -l ime_arhive.zip
```

Extract an archive:

```
$ tar xvf ime_arhive.tar.gz
$ unzip ime_arhive.zip
$ unrar x ime_arhive.rar
```

View running applications:

```
$ ps ax
$ top
$ htop
```

Overview of active sockets:

```
$ netstat -an
```

- TCP:
\$ netstat -ant
- UDP:
\$ netstat -anu

Check network connectivity:

```
$ ping google.com
$ traceroute google.com
```

Perform as a superuser:

```
$ sudo su
$ sudo service apache2 start
```

Start/stop services:

```
# service apache2 start
# service mysql stop
# service ssh restart
```