

(https://profile.intra.42.fr)

SCALE FOR PROJECT INIT (/PROJECTS/INIT)

You should evaluate 1 student in this team



Git repository

git@vogsphere-v2.hive.fi:vogsphere/intra-uuid-3c065ceb-b80f-4540-b07



Introduction

Please respect the following rules:

- Remain polite, courteous, respectful and constructive throughout the evaluation process. The well-being of the community depends on it.
- Identify with the person (or the group) graded the eventual dysfunctions of the work. Take the time to discuss and debate the problems you have identified.
- You must consider that there might be some difference in how your peers might have understood the project's instructions and the scope of its functionalities. Always keep an open mind and grade him/her as honestly as possible. The pedagogy is valid only if the peer-evaluation is conducted seriously.

Guidelines

- Only grade the work that is in the student or group's GiT repository.
- Double-check that the GiT repository belongs to the student or the group. Ensure that the work is for the relevant project and also check that "git clone" is used in an empty folder.
- Check carefully that no malicious aliases was used to fool you and make you evaluate something other than the content of the official repository.
- To avoid any surprises, carefully check that both the evaluator and the evaluated students have reviewed the possible scripts used to facilitate the grading.
- If the evaluated student has not completed that particular


project yet, it is mandatory for this student to read the entire subject prior to starting the defence.

- Use the flags available on this scale to signal an empty repository, non-functioning program, a norm error, cheating etc. In these cases, the grading is over and the final grade is 0 (or -42 in case of cheating). However, with the exception of cheating, you are encouraged to continue to discuss your work (even if you have not finished it) in order to identify any issues that may have caused this failure and avoid repeating the same mistake in the future.

Attachments

 **init - Présentation**

init - Présentation (https://cdn.intra.42.fr/video/video/517/_projet__init.mp4)

 Subject (<https://cdn.intra.42.fr/pdf/pdf/33534/init.en.pdf>)

Part 1 - Network

Question 1

Get the list of the network interfaces of the machine without displaying any detail for these interfaces. Only the list of names.

Check that the answer file contains the command which lists the names of the interfaces of the machine and no other information.

For instance:

```
$>`cat 01`  
lo0 gif0 stf0 en0 en1 en2 en3 p2p0 awdl0 bridge0  
$>
```

☒ Yes

☐ No

Question 2

Identify and display the Ethernet interface characteristics.

Check that the answer file contains the command which identifies and displays the broadcast address AND all IP addresses which are part of the same subnet.

☒ Yes

☐ No

Question 3

Identify the MAC address of the Wi-Fi card.

Check that the answer file contains the command which identifies and displays the MAC address of the wi-fi board.

For instance:

```
$>`cat 03`  
xxn: flags=XXXX  
ether 00:00:00:00:00:00  
$>
```

☒ Yes☐ No

Question 4**Identify the default gateway in the routing table.**

Check that the answer file contains the command which identifies and displays the default gateway in the routing table. For instance:

```
$>sh 04  
default 42.42.42.42 UGSc 19 16 en0  
$>
```

☒ Yes☐ No

Question 5**Identify the IP address of the DNS server which answers to who.int .**

Check that the answer file contains the command which identifies and displays the IP address of the DNS server.

For instance:

```
$>`cat 05`  
Server:          10.51.1.253  
Address:         10.51.1.253#53
```

Non-authoritative answer:

```
Name:   who.int  
Address: 104.17.113.188  
$>
```

☒ Yes☐ No

Question 6

Get the complete path of the file that contains the IP address of the DNS server you're using.

Check that the answer file contains the complete path of the file in which the IP address of the used DNS server is written.

```
$>cat 06
/etc/resolv.conf
$>
```

☒ Yes☐ No**Question 7**

Query an external DNS server on the same domain name (ex, google 8.8.8.8).

Check that the answer file contains the command which use another DNS server to solve the same domain name.

For instance:

```
$>`cat 07`
Server:      8.8.8.8
Address:     8.8.8.8#53
```

Non-authoritative answer:

```
Name:  who.int
Address: 104.17.113.188
$>
```

☒ Yes☐ No**Question 8**

Find the provider of who.int

Check that student's answer in the file is Cloudflare.

☒ Yes☐ No**Question 9**

Find the external IP of 42.fr

Ask the student to show you their approach and explain it.

Check that student's answer in the file is 163.172.250.12 and/or 163.172.250.13 .

☒ Yes☐ No

Question 10

Identify the network devices between your computer and the who.int domain.

Check that the answer file contains the command which identifies and displays the different network devices between your computer and who.int.

For instance:

```
$>`cat 10`
traceroute to who.int (104.17.113.188), 64 hops max, 52 byte packets
 1  10.0.8.1 (10.0.8.1)  20.727 ms  21.284 ms  22.124 ms
 2  194.136.126.33 (194.136.126.33)  20.125 ms  20.058 ms  21.514 ms
 3  10.234.98.109 (10.234.98.109)  19.851 ms  21.436 ms  19.736 ms
 4  193.229.29.206 (193.229.29.206)  23.282 ms  24.986 ms  24.479 ms
 5  ae3.bbr1.hel2.fi.ip4.elisa.net (213.192.186.81)  20.628 ms  21.448 ms  19.1
 6  162.158.236.254 (162.158.236.254)  23.137 ms  28.850 ms  21.776 ms
 7  104.17.113.188 (104.17.113.188)  22.308 ms  20.568 ms  22.985 ms
$>
```

☒ Yes

☐ No
Question 11

Use the output of the previous command to find the name and the IP address of the device that makes the link between you (local network) and the outside world.

Check that student's answer in the file is the NAT server.

☒ Yes

☐ No
Question 12

Find the IP that was assigned to you by dhcp server.

Check that the answer file contains the command which display the student host's IP.

☒ Yes

☐ No
Question 13

Thanks previously answer and DNS sever find your hostname.

Check that student's answer in the file is student host name.

☒ Yes

☐ No

Question 14**What file contains the local DNS entries?**

Check that student's answer in the file is `/etc/hosts`.

☒ Yes☐ No**Question 15****Make the `intra.42.fr` address reroute to `46.19.122.85`**

Ask the student to show you their approach and explain it.

Check that student's answer in the file is `46.19.122.85 intra.42.fr`.

☒ Yes☐ No

Part 2 - System

Question 1**In what file can you find the installed version of your Debian?**

Check that student's answer in the file is `/etc/debian_version`.

☒ Yes☐ No**Question 2****What command can you use to rename your system?**

Check that the answer file contains the command which rename the system.

For instance:

```
$>`cat 02`  
machine.old.name.local  
$>
```

☒ Yes☐ No**Question 3****What file has to be modified to make it permanent?**

Check that student's answer in the file is `/etc/hostname`.

☒ Yes☐ No

Question 4**What command gives your system was last booted?**

Check that the answer file contains the command which gives the time since the last boot of the system. For instance:

```
$>`cat 04`  
17:44 up 1 day, 6:45, 4 users, load averages: 1.33 1.42 1.40  
$>
```

☒ Yes☐ No

Question 5**Name the command that determines the state of the SSH service?**

Check that the answer file contains the command which determines the state of the SSH service.

For instance with init.d :

```
$>`cat 05`  
openssh-daemon (pid 22405) is running...  
$>
```

Or with service:

```
$>`cat 05`  
● ssh.service – OpenBSD Secure Shell server  
Loaded: loaded (/lib/systemd/system/ssh.service; enabled)  
Active: active (running) since Fri 2016-12-02 18:42:05 CET; 1 months 0 days ago  
Main PID: 13106 (sshd)  
CGroup: /system.slice/ssh.service  
├─ 2461 ssh-agent -s  
├─13106 /usr/sbin/sshd -D  
├─27517 sshd: skyline [priv]  
├─27519 sshd: skyline@pts/0  
├─27520 -zsh  
├─27561 sudo su  
├─27562 su  
├─27563 zsh  
└─27589 systemctl status sshd.service  
$>
```

 Yes No

Question 6

Name the command that reboots the SSH service.

Check that the answer file contains the command which reboot the SSH service. For instance with init.d:

```
$>`cat 06`  
Stopping sshd: [ OK ]  
Starting sshd: [ OK ]  
$>
```

Or with service:


```
$>`cat 06`
$> service sshd status
● ssh.service – OpenBSD Secure Shell server
Loaded: loaded (/lib/systemd/system/ssh.service; enabled)
Active: active (running) since Fri 2016-12-02 18:42:05 CET; 10s ago
Main PID: 13106 (sshd)
CGroup: /system.slice/ssh.service
├─ 2461 ssh-agent -s
├─13106 /usr/sbin/sshd -D
├─27517 sshd: skyline [priv]
├─27519 sshd: skyline@pts/0
├─27520 -zsh
├─27561 sudo su
├─27562 su
├─27563 zsh
└─27589 systemctl status sshd.service
$>
```

The displayed time in Active has to be in seconds because of the reboot of sshd.

☒ Yes

☐ No

Question 7

Figure out the PID of the SSHD service.

Check that the answer file contains the command which figure out the PID of the ssh service. For instance:

```
$>`cat 07`
root 22405 0.0 0.0 66224 1184 ? Ss 17:46 0:00 /usr/sbin/sshd
$>
```

☒ Yes

☐ No

Question 8

What file contains the RSA keys authorized to connect via SSH?

Check that student's answer in the file is `.ssh/authorized_keys`

☒ Yes

☐ No

Question 9

What command lets you know who is connected to the System?

Check that the answer file contains the command which
lets you know who is connected to the system. For instance:

```
$>`cat 09`  
skyline console Mar 23 10:59  
skyline ttys000 Mar 24 17:04  
$>
```

☒ Yes☐ No

Question 10**Name the command that lists the partition tables of drives?**

Check that the answer file contains the command which
lists the partition tables of drives. For instance:

```
$>`cat 10`  
Disk /dev/sdb: 2000.4 GB, 2000398934016 bytes  
255 heads, 63 sectors/track, 243201 cylinders  
Units = cylinders of 16065 * 512 = 8225280 bytes  
Sector size (logical/physical): 512 bytes / 512 bytes  
I/O size (minimum/optimal): 512 bytes / 512 bytes  
Disk identifier: 0x00000000  
$>
```

☒ Yes☐ No

Question 11**Name the command that displays the available the space left and used on the system in an humanly understandable way.**

Check that the answer file contains the command which
displays the available space left and used on the system in an humanly understandable way.
For instance:

```
$>`cat 11`  
Filesystem Size Used Avail Use% Mounted on  
/dev/xvda2 7.8G 1.2G 6.3G 16% /  
udev 10M 0 10M 0% /dev  
tmpfs 200M 4.2M 196M 3% /run  
tmpfs 500M 0 500M 0% /dev/shm  
tmpfs 5.0M 0 5.0M 0% /run/lock  
tmpfs 500M 0 500M 0% /sys/fs/cgroup  
$>
```

☒ Yes☐ No

Question 12

Figure out the exact size of each folder of /var in a humanly understandable way followed by the path of it.

Check that the answer file contains the command which displays the exact size of each folders of /var in a humanly understandable way followed by the path of it.

For instance:

```
$>`cat 12`  
4.0K /var/opt  
864K /var/spool  
1.3M /var/log  
111M /var/lib  
124M /var/cache  
4.0K /var/local  
8.0K /var/mail  
1.1M /var/backups  
4.0K /var/tmp  
238M /var  
$>
```

☒ Yes☐ No

Question 13

Name the command that find, in real time, currently running processes.

Check that the answer file contains the command which displays running processes in real time.

For instance:

```
$>`cat 13`
Tasks: 58 total, 1 running, 57 sleeping, 0 stopped, 0 zombie
%Cpu(s): 0.0 us, 0.0 sy, 0.0 ni,100.0 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
KiB Mem: 1022952 total, 359176 used, 663776 free, 168200 buffers
KiB Swap: 0 total, 0 used, 0 free. 86924 cached Mem
```

```
PID USER PR NI VIRT RES SHR S %CPU %MEM TIME+ COMMAND
1 root 20 0 28740 4760 3064 S 0.0 0.5 0:03.28 systemd
2 root 20 0 0 0 0 S 0.0 0.0 0:00.00 kthreadd
3 root 20 0 0 0 0 S 0.0 0.0 0:00.02 ksoftirqd/0
5 root 0 -20 0 0 0 S 0.0 0.0 0:00.00 kworker/0:0H
$>
```

☒ Yes

☐ No

Question 14

Run the `tail -f /var/log/syslog` command in background.

Check that the answer file contains the command which runs the command `tail -f /var/log/syslog` in background
For instance:

```
$>`cat 14`
[1] 2660
Mar 25 06:25:03 rsyslogd: [origin software="rsyslogd" swVersion="8.4.2" x-pid=
Mar 25 07:17:01 CRON[2601]: (root) CMD ( cd / && run-parts --report /etc/cron.
Mar 25 08:17:01 CRON[2656]: (root) CMD ( cd / && run-parts --report /etc/cron.
$>
```

☒ Yes

☐ No

Question 15

Find the command that kills the background command's process.

Check that the answer file contains the command which kills the process of the `tail -f /var/log/syslog` command.
For instance:

```
$>`cat 15`
[1]+ Terminated tail -f /var/log/syslog
$>
```

☒ Yes

☐ No

Question 16

Find the service which makes it possible to run specific tasks following a regular schedule.

Check that student's answer in the file is cron.

☒ Yes☐ No**Question 17**

Find the command that allows you to connect via ssh on the VM.

Check that the answer file contains the command which allows you to connect via ssh on the VM.

☒ Yes☐ No**Question 18**

Find the command that kills ssh service.

Check that the answer file contains the command which kill ssh service.

☒ Yes☐ No**Question 19**

List all services which are started at boot time and name this kind of services.

Check that the answer file contains the List all services which are started at boot time and name this kind of services (daemon)

For instance:

```
abrt-ccpp 0:off 1:off 2:off 3:on 4:off 5:on 6:off
abrt-oops 0:off 1:off 2:off 3:on 4:off 5:on 6:off
...
```

☒ Yes☐ No**Question 20**

List all existing users on the VM.

Check that the answer file contains the list all existing users on the VM.

☒ Yes☐ No**Question 21**

List all real users on the VM.

Check that the answer file contains the list all real users on the VM and not system users.

☒ Yes☐ No

Question 22**Find the command that add a new local user.**

Check that the answer file contains the command that add a new local user.

☒ Yes☐ No

Question 23**Explain how connect yourself as new user.**

Check that the answer file containe contain how to connect yourself as new user on the VM on ssh session (command etc.) *AND* on graphic session.

☒ Yes☐ No

Question 24**Find the command that list all packages.**

Check that the answer file contain the command that list all installed packages.

☒ Yes☐ No

Part 3 - Scripting

Question 1**Write a script which displays only the login, UID and Path of each entry of the `/etc/passwd` file.**

Check that the script displays only the login, UID and Path of each entry of the `/etc/passwd` file.
For instance:

```
$>sh 1
root:0:/bin/bash
daemon:1:/usr/sbin/nologin
bin:2:/usr/sbin/nologin
sys:3:/usr/sbin/nologin
sync:4:/bin/sync
games:5:/usr/sbin/nologin
man:6:/usr/sbin/nologin
lp:7:/usr/sbin/nologin
mail:8:/usr/sbin/nologin
news:9:/usr/sbin/nologin
uucp:10:/usr/sbin/nologin
proxy:13:/usr/sbin/nologin
www-data:33:/usr/sbin/nologin
backup:34:/usr/sbin/nologin
list:38:/usr/sbin/nologin
irc:39:/usr/sbin/nologin
gnats:41:/usr/sbin/nologin
nobody:65534:/usr/sbin/nologin
systemd-timesync:100:/bin/false
systemd-network:101:/bin/false
systemd-resolve:102:/bin/false
systemd-bus-proxy:103:/bin/false
sshd:104:/usr/sbin/nologin
Debian-exim:105:/bin/false
postfix:106:/bin/false
skyline:1000:/bin/bash
$>
```

☒ Yes☐ No

Question 2

Write a script which delete an ACTIVE user on the VM.

Check that the script delete an ACTIVE user on the VM.

For instance:

Create an user.

Connect you at the VM.

Launch your script.

List all existing users. (New user should not appear)

☒ Yes☐ No

Question 3

Three's a Charm. Write a script of you choice.

Check script's utility and complexity.



Rate it from 0 (failed) through 5 (excellent)

Ratings

Don't forget to check the flag corresponding to the defense



Ok



Outstanding project



Empty work



Incomplete work



Cheat



Crash



Forbidden function

Conclusion

Leave a comment on this evaluation

Finish evaluation

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