

(<https://profile.intra.42.fr/searches>)

ebarra

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Remember that the quality of the defenses, hence the quality of the of the school on the labor market depends on you. The remote defences during the Covid crisis allows more flexibility so you can progress into your curriculum, but also brings more risks of cheat, injustice, laziness, that will harm everyone's skills development. We do count on your maturity and wisdom during these remote defenses for the benefits of the entire community.

## SCALE FOR PROJECT FT\_IRC ([HTTPS://PROJECTS.INTRA.42.FR/PROJECTS/FT\\_IRC](https://projects.intra.42.fr/projects/ft_irc))

You should evaluate 3 students in this team

Git repository

```
git@vogsphere.msk.21-school.ru:vogsphere/intra-uuid-acc1e025-c514-48t
```

### Introduction

- 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) evaluated 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 and only if 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 were 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 evaluating

and the evaluated students have reviewed the possible scripts used to facilitate the grading.

- If the evaluating student has not completed that particular project yet, it is mandatory for this student to read the entire subject before starting the defense.

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

- Remember that for the duration of the defense, no segfault, no other unexpected, premature, uncontrolled or unexpected termination of the program, else the final grade is 0. Use the appropriate flag.

You should never have to edit any file except the configuration file if it exists.

If you want to edit a file, take the time to explicit the reasons with the evaluated student and make sure both of you are okay with this.

- You must also verify the absence of memory leaks. Any memory allocated on the heap must be properly freed before the end of execution.

You are allowed to use any of the different tools available on the computer, such as leaks, valgrind, or e\_fence. In case of memory leaks, tick the appropriate flag.

## Attachments

subject.pdf (<https://cdn.intra.42.fr/pdf/pdf/24623/en.subject.pdf>)

bircd.tar.gz (<https://projects.intra.42.fr/uploads/document/document/3892/bircd.tar.gz>)

## Mandatory Part

### Verifications

- there is a Makefile, the project compiles correctly, is written in C++, the binary file is called ircserv.
- ask and check how many poll (or equivalent) are present in the code. There must be only one.
- verify that the poll (or equivalent) is called every time before each accept, read/recv, write/send . After these calls, errno should not be used to trigger specific action (like read again after errno == EAGAIN for ex.).
- verify that each call to fcntl is as follows:  
fcntl(fd, F\_SETFL, O\_NONBLOCK);  
Any other use of fcntl is forbidden.
- if those constraints are not fulfilled, stop here the evaluation, and the final mark is 0.

Yes

No

### Networking

Check the following items :

- server launches and is listening on all network interfaces, on the given port from the command line, and on the port.
- using the 'nc' tool, you can connect to the server, send commands, and the server is answering.
- ask the team for their reference IRC client.
- using this irc client, you can connect on the server
- the server can handle multiple connections at the same time. At any moment, the server should not block and be able to answer all demands. Try with irc clients, nc tool, at the same time.
- send the needed commands to join a channel. Control that all messages from one client on that channel are sent to all other clients of the channel.

Yes

No

### Networking Specials

Network communications can be disturbed by many strange situations.

- just like in the subject, using nc, try to send partial commands. Check that the server answers correctly. With a partial command sent, control that other connections are running fine.
- unexpectedly kill a client, and check that the server is still operational on other connections and for new incoming clients.
- unexpectedly kill a nc with just half of a command sent. Check again that the server is not in an odd state or blocked.
- stop a client (^-Z) connected on a channel, and then flood the channel using another client. The server should not hang. When the client is live again, all stored commands should be processed normally. Also control that there is no memory leak on the server during this operation.

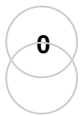
Yes

No

### Client Commands

- With both nc and a regular irc client, check that you can authenticate, set a nickname, a username, join a channel. This should be ok, you should have already used this above.
  - Control that private messages and notices are fully functional, with several parameters (PRIVMSG and NOTICE).
  - Check that a regular user does not have privileges to do operator actions, then test with an operator.
- All the channel operation commands should be tested.  
(remove one point for each not working feature)

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



### File transfer

file transfer works with the ref. client.

Yes

No

### A small bot

There's an IRC bot.

Yes

No

# Ratings

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

Ok

Outstanding project

Empty work

W Invalid compilation

Cheat

d Crash

Incomplete group

Leaks

I Forbidden function

# Conclusion

Leave a comment on this evaluation

Finish evaluation

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