**Internship report**

# Automated tests for the VGoip product


Submitted by

**Tisserand Thibault**
Intern
University of Lille

Under the guidance of

**Prat Maximilien**
Technical manager




Department of computer science
CS GROUP
22 Av. Galilée, 92350 Le Plessis-Robinson


Internship 2023

# Contents

# 1 Presentation of the company

CS GROUP is a leading global provider of innovative technology solutions and services in the field of information and communication systems.

## 1.1 Company Overview

Established in 1994, CS GROUP has grown to become a multinational company with a strong presence in several countries around the world. CS GROUP specializes in delivering end-to-end solutions that encompass consulting, system integration, software development, and managed services.

## 1.2 Clients

CS GROUP serves a diverse client base that includes prominent organizations and institutions across various sectors. This includes defense agencies, security organizations, aerospace companies, space agencies, transportation systems, energy sector, and utilities.

# 2 Before the internship

Before the internship I didn't do much, I knew my internship supervisor thanks to my internship last year in another department so I knew that this past was going well. I just said to myself that I was going to work as I usually do on personal projects.

# 3 Company expectations

The tasks planned for my internship were quite generalist since it involved writing automatic tests using an "house" tool. The automatic tests will be set up on equipment allowing voice and signaling to be converted from analogue to digital and vice versa using RTP (Real Time Protocol) and SIP (Session Initiation Protocol) protocols.

# 4 Tasks

The tasks foreseen for the internships are diverse and varied but they are all necessary for the realization of the internship subject from near or far.

First of all I took care of the installation of the project which consists in compiling the code, installing the architecture of the project on the system and starting the necessary services.

In a second step I have to write scripts, an export and an import which should allow to make a backup of the database as well as all the test scripts generated in an archive in .tar.gz format and therefore also able to import an archive to find these backups.

Subsequently I have to modify the application so that it generates test files in python instead of a Shell script file and consequently update the Shell utility function files in python.

I also have to create a configuration file generator for the machine on which I have to do the tests in order to generate unique configurations for each test.

Finally I have to complete the self-generated test files as well as the tests on the target machine with the right values and then optimize the tests and the software that generates them.

# 5 Conclusion

At present, I would say that I have completed 65% of my tasks to do, I will soon have fully automated and self-generated tests. The biggest difficulty I had was adapting to the already existing semi-functional application which was very complex when it could be much cleaner and less cumbersome. To conclude I will say that I am a little disappointed with my internship in the sense that I did not expect from something that already existed, I thought it was up to me to propose a technical solution from scratch. Despite this, the team is very friendly and always in a good mood, which makes you want to work on a daily basis.