

# VEALC Server Documentation

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# **Chapter 1**

## **Project Overview**

VEALC Server - TCP server for client authentication and vector processing.



# Chapter 2

## Source Files Summary

### 2.1 Header Files

**auth.h** Client authentication class

**config.h** Server configuration structure

**logger.h** Logging class

**session.h** Client session handler

**server.h** Main server class

**types.h** Common data types

**vector\_processor.h** Vector calculations class

### 2.2 Source Files

**auth.cpp** Authentication implementation

**config.cpp** Configuration parsing

**logger.cpp** Logging implementation

**main.cpp** Program entry point

**session.cpp** Session handling

**server.cpp** Server implementation

**vector\_processor.cpp** Vector calculations



# Chapter 3

## Compilation and Usage

### 3.1 Compilation

```
g++ -std=c++11 -o server *.cpp -lssl -lcrypto
```

### 3.2 Running

```
./server -p 33333 -c clients.conf -l server.log
```