

# Distributed Backup Service

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## 1 Introduction

In the previous project, we develop a distributed backup service for a local area network (LAN) where each computer (peer) connected to it provided its free disk space allowing the other peers to store and recover data.

Due the amount of assumptions we had to make in order to develop the project in time, it became unrealistic. Therefore, this new project will be focusing on improvements that, we believe, will make the previous project more realistic. The improvements that will be made are described in the section 2.

## 2 Project description

As stated in the previous section, this project will focus on improving the previous one. We classified the improvements in 3 categories: Security, Fault tolerance and Communication. Each of them is described in the subsection 2.1. The application will still be running on a local network context.

### 2.1 Improvements

- Security: Peer authentication and chunk confidentiality;
- Fault tolerance: Peer's metadata survivability during crashes;
- Communication: Control flow improvement to assure chunks integrity in a highly active system.