

Remote Backup Utility

Software Requirement Specification (SRS) Document

Sprint 2 Implementation

Project Timeline: 12.10.2022 to 18.10.2022

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1. Introduction: -

Performing system backup is crucial when it comes to managing important files on a regular basis.

A backup client is the source computer or node within a backup process that contains the data to be backed up on a destination storage server. A backup client is generally the end user's computer or server in a network enabled backup environment.

1.1 Purpose: -The purpose of this document is to show the requirements for Remote Backup Utility, in which Program to be developed for file backup by establishing connection between client and server.

1.2 Intended Audience: -This document is intended to be read by, Client.

1.3 Intended Use: -

- Development Team
- Maintenance Team
- Clients

Since this a general-Purpose Program any one can access it.

1.4 Scope: -This project aims to Establish Connection between server and Client for remote backup of files and directories. Socket programming is a way of connecting two nodes on a network to communicate with each other. One socket(node) listens on a particular port at an IP, while the other socket reaches out to the other to form a connection. The server forms the listener socket while the client reaches out to the server.

2. Overall Description: -

A backup client is the source computer or node within a backup process that contains the data to be backed up on a destination storage server. A backup client is generally the end user's computer or server in a network enabled backup environment.

2.1 Assumptions and Dependency: -

- System should have Ubuntu Linux installed.
- System should have either 4GB or more RAM.
- The service is used preferably on a desktop or laptop.

3. System Features and Requirements: -

3.1 Functionality: -

3.1.1 Full backup (files) :-

A full backup is a complete copy of a business or organization's data assets in their entirety and this is a full backup for files.

3.1.2 Full backup (Directories) :-

A full backup is a complete copy of a business or organization's data assets in their entirety and this is a full backup for the folder.

3.1.3 Incremental Backup (files)

An incremental backup is a backup type that only copies data that has been changed or created since the previous backup activity was conducted and this is an incremental backup for files.

3.1.4 Incremental Backup (Directories)

An incremental backup is a backup type that only copies data that has been changed or created since the previous backup activity was conducted and this is an incremental backup for folders.

3.1.5 Versioned Backup (Files)

Backup Versioning is when a backup solution allows a computer file to exist with several archived versions and this is a versioned backup for files.

3.1.6 Versioned Backup (Directories)

Backup Versioning is when a backup solution allows a computer file to exist with several archived versions and this is a versioned backup for folders..

3.1.7 Scheduled Backup(Files)

The principal goal of backup scheduling is to establish time frames to back up an entire system, data and databases. This is a scheduled backup for files.

3.1.8 Scheduled Backup(Directories)

The principal goal of backup scheduling is to establish time frames to back up an entire system, data and databases. This is a scheduled backup for folders.

3.2 System Requirements: -

3.2.1. Tools to be used:

- Pthread Library
- C Unit Library
- C File Handling
- C Language
- System Programming
- Socket Programming

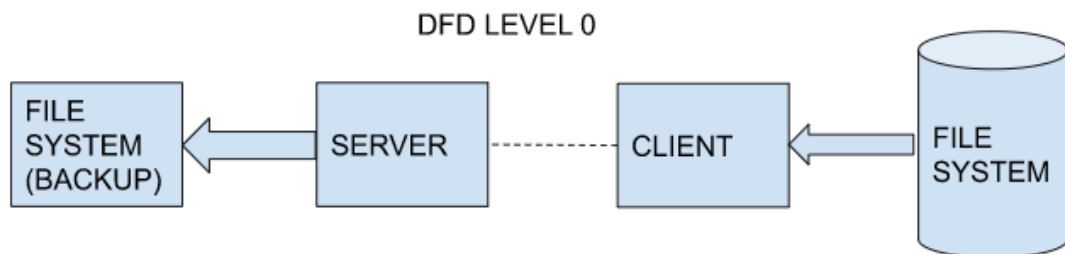
3.3 System Features: -

- Supportability: The system is easy to use.
- Design Constraints: The system is built using only C language.

- **Usability:** The Airline Reservation System application can be used to replace the old means. The system can be used by airlines and travel agents, the system will allocate the seats to the customers and will provide a report on allocated seats, unavailable seats and invalid entries.
- **Reliability & Availability:** The system is available 24/7 that is whenever the user would like to use the system, they can use it up to its functionalities.
- **Performance:** The system will work on the user's terminal.

4. DataFlow Diagram:

4.1 DFD Level 0 -



4.1 DFD Level 1 -

