

Problem Statement:

NFS Infinity

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October 10, 2017

1. Background

Network File System is a concept that has been implemented over a variety of platforms. Generally, it is a service available to a client system that allows that client access to the server's file system. It is typically designed such that the client can access the network's files as though they were stored locally. Read and write access to network resources is commonly restricted using a user permission system.

2. Project Description

NFS Infinity is intended to be a simple network file system application created to provide software development experience in software engineering processes. It will be written in a Python/Django environment, coded in such a way that will be concise and easily read and understood by others without excessive comments.

3. Goals

- Basic security provided by client login and password for access to network files
- Simple file transfer between server and client
- Available over standard TCP/IP network

4. Project Objectives

- Project deadlines should be met
- Working software completed on schedule
- Software documentation will elaborate on project development and testing processes as well as offer some instruction on use of the client and server packages

5. Deliverables

- Methods and procedures documenting NFS Infinity development process
- Training materials and documentation for end user
- Working client and server applications

6. Assumptions

- Client and server software will be installed on internet-compatible systems
- Ongoing mentor review of project progress will be provided by Dr. Michael Bartz and peer review and software testing will be provided by other students in EECE 4081
- Documentation will be created throughout the development process
- Users will be familiar with fundamental understanding of file systems and file transfer
- Final delivery will be expected by end of fall semester—approximately December 5, 2017
- Project will be managed in an agile software development manner

7. **Constraints**

- Only basic security will be implemented; this software will not be intended for sharing of sensitive data
- Phases of development and testing will be limited to fall, 2017