

# Distributed Backup Service

## Internet version

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### Purpose of the Application

This application aims to extend the functionality of the previously developed Distributed Backup Service to work over the Internet with additional security and reliability features such as peer authentication, data confidentiality and crash recovery.

### Main Features

- Works over the internet (peer-to-peer) instead of just LAN
- Peers authentication using certificates
- Data confidentiality if it is so desired
- Crash recovery to keep metadata from being lost and guarantee all connected peers have the same information about the current service state (e.g replication degree of chunks)
- Use Multicast for messages only and send data through direct TCP connection between Peers (more reliable and doesn't clog up the Multicast groups if chunks are big)

### Target Platforms

- Java standalone application for PC/Mac
- Java Server Pages / Servlets

### Additional Improvements (if time permits)

- Manage different versions of the same file