

BitTorrent File Sharing Using qBittorrent – Transfer of Alchemist.pdf

1. Aim

To create and distribute a torrent file for **Alchemist.pdf** using qBittorrent and demonstrate peer-to-peer file sharing.

2. Objective

- To understand Peer-to-Peer (P2P) networking
- To create a torrent metadata file
- To perform seeding and downloading
- To verify file integrity after transfer

3. System Requirements

Hardware

- Computer with Internet connection

Software

- Operating System: Windows
- Torrent Client: qBittorrent
- File Used: Alchemist.pdf

4. BitTorrent Architecture

Seeder shares the file → Tracker helps peer discovery → Peers exchange file pieces directly
→ File reconstructed at receiver.

5. Torrent Creation

1. Open qBittorrent
2. Use Torrent Creator
3. Select Alchemist.pdf
4. Add public trackers
5. Create .torrent file

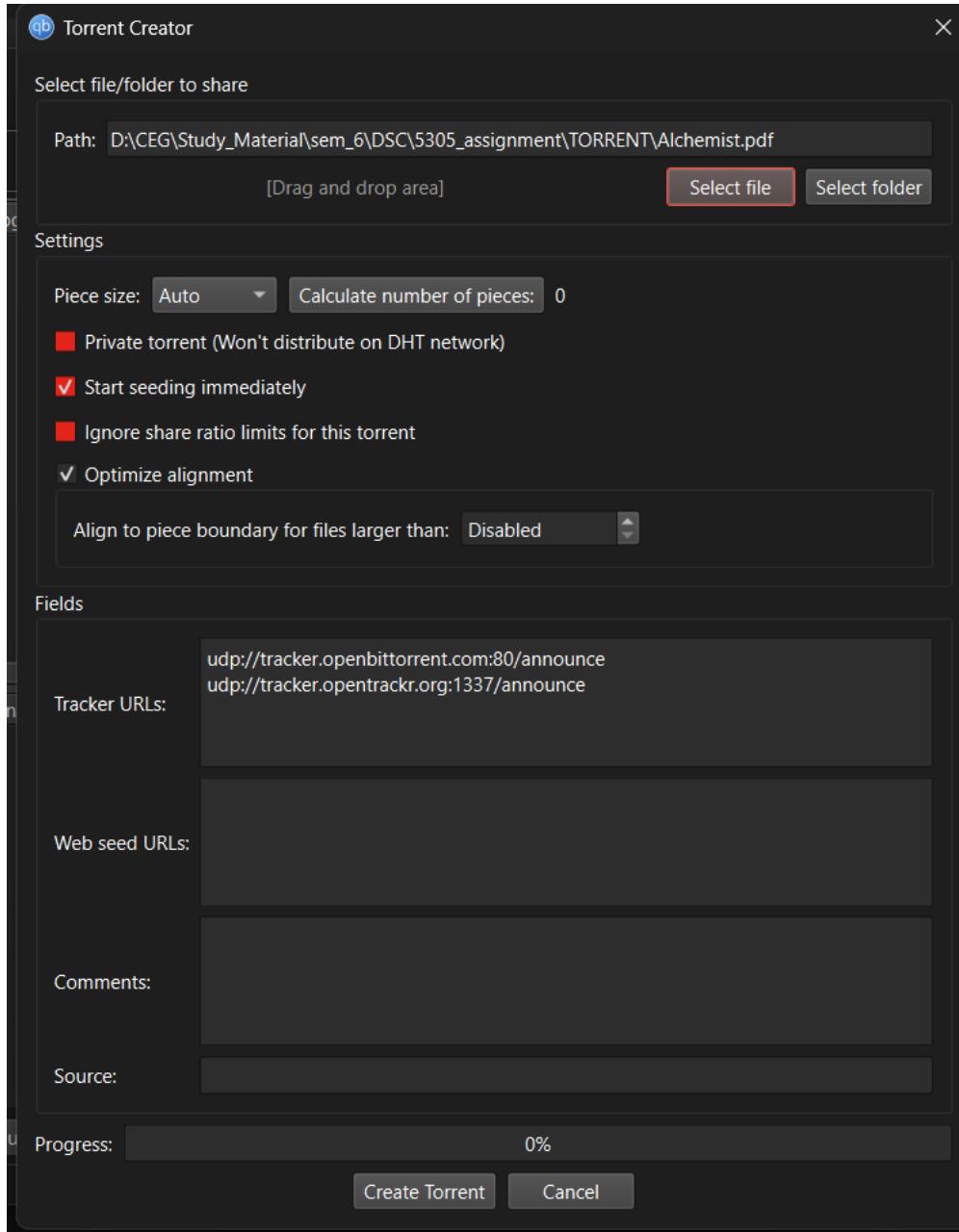
6. Seeding and Downloading

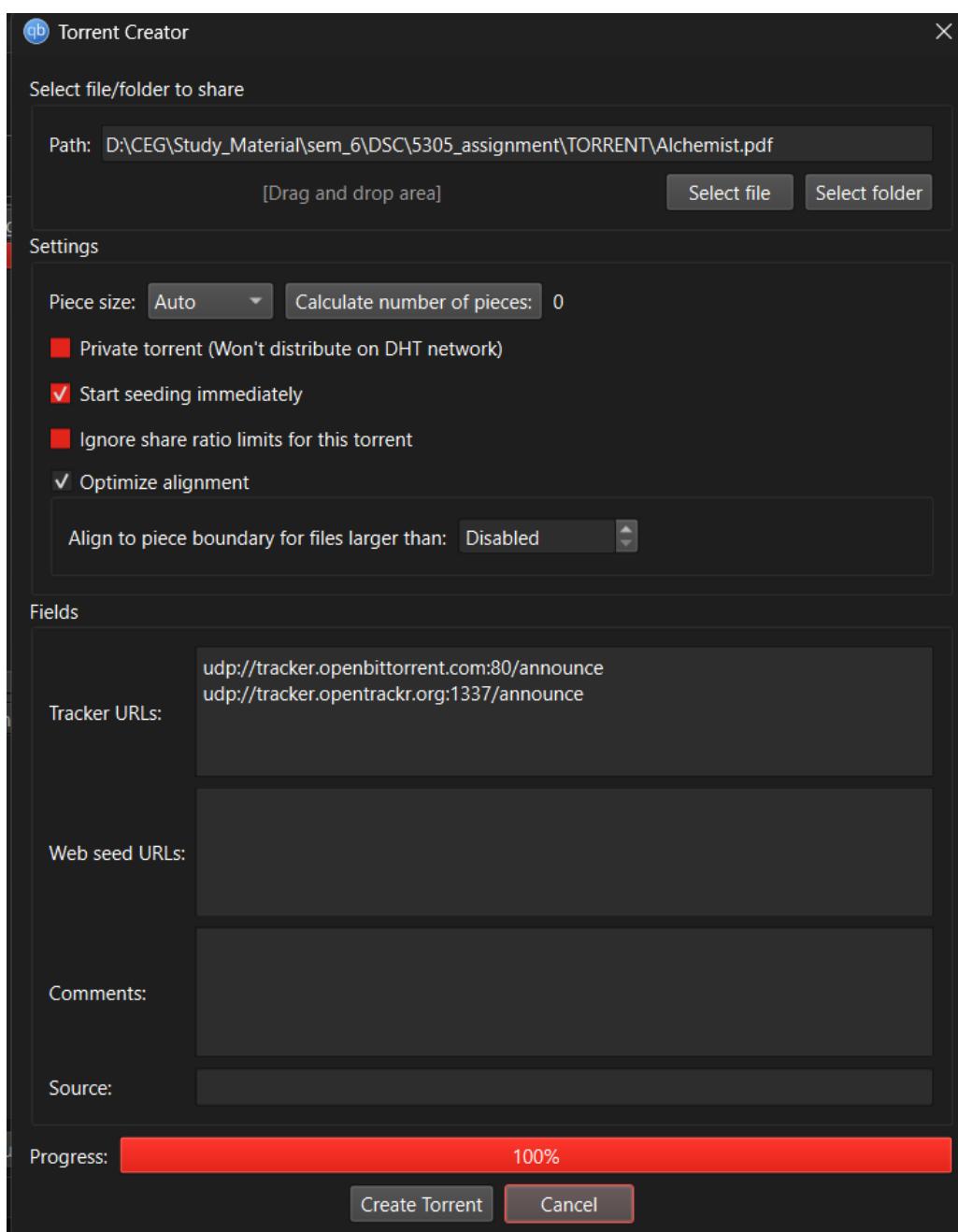
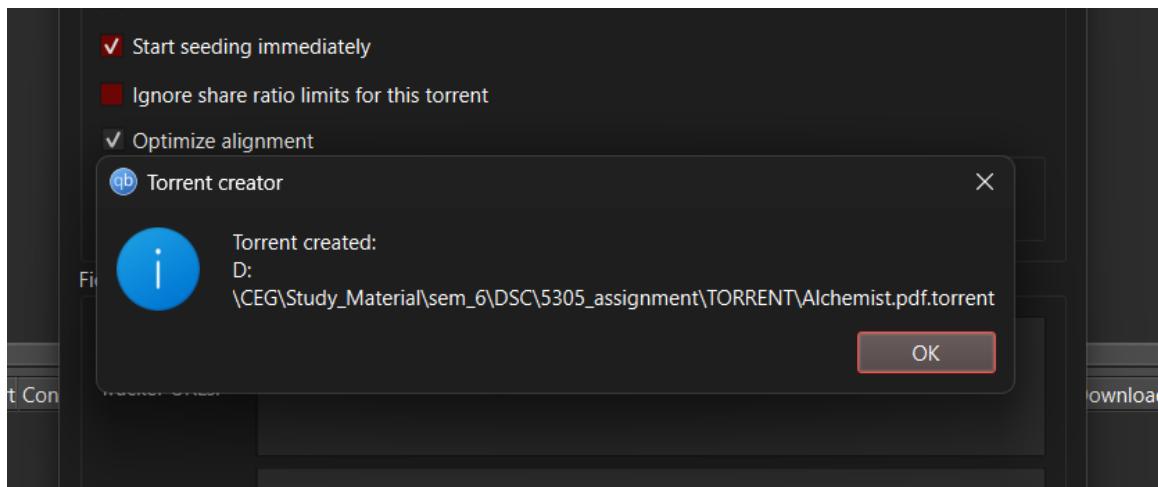
- Seeder loads torrent and starts sharing
- Downloader loads torrent file and receives file pieces
- Transfer occurs using P2P communication

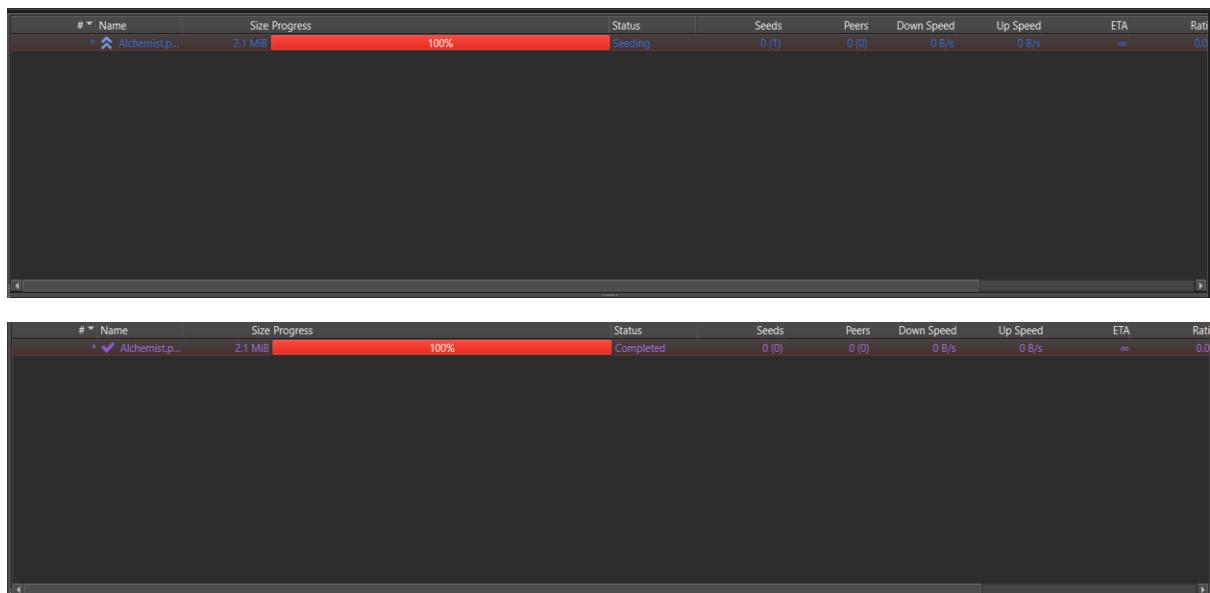
7. File Integrity Verification

BitTorrent verifies each piece using hash values. Downloaded Alchemist.pdf matches the original file.

8. Output







9. Result

The torrent file was successfully distributed and the file was downloaded with integrity verification.

10. Conclusion

This experiment demonstrated decentralized file sharing using BitTorrent and qBittorrent.