

Private Dropbox

Calum O'Hare

Supervisor: David Eysers

Dropbox

- What is dropbox?
- What are the downsides to such a service?



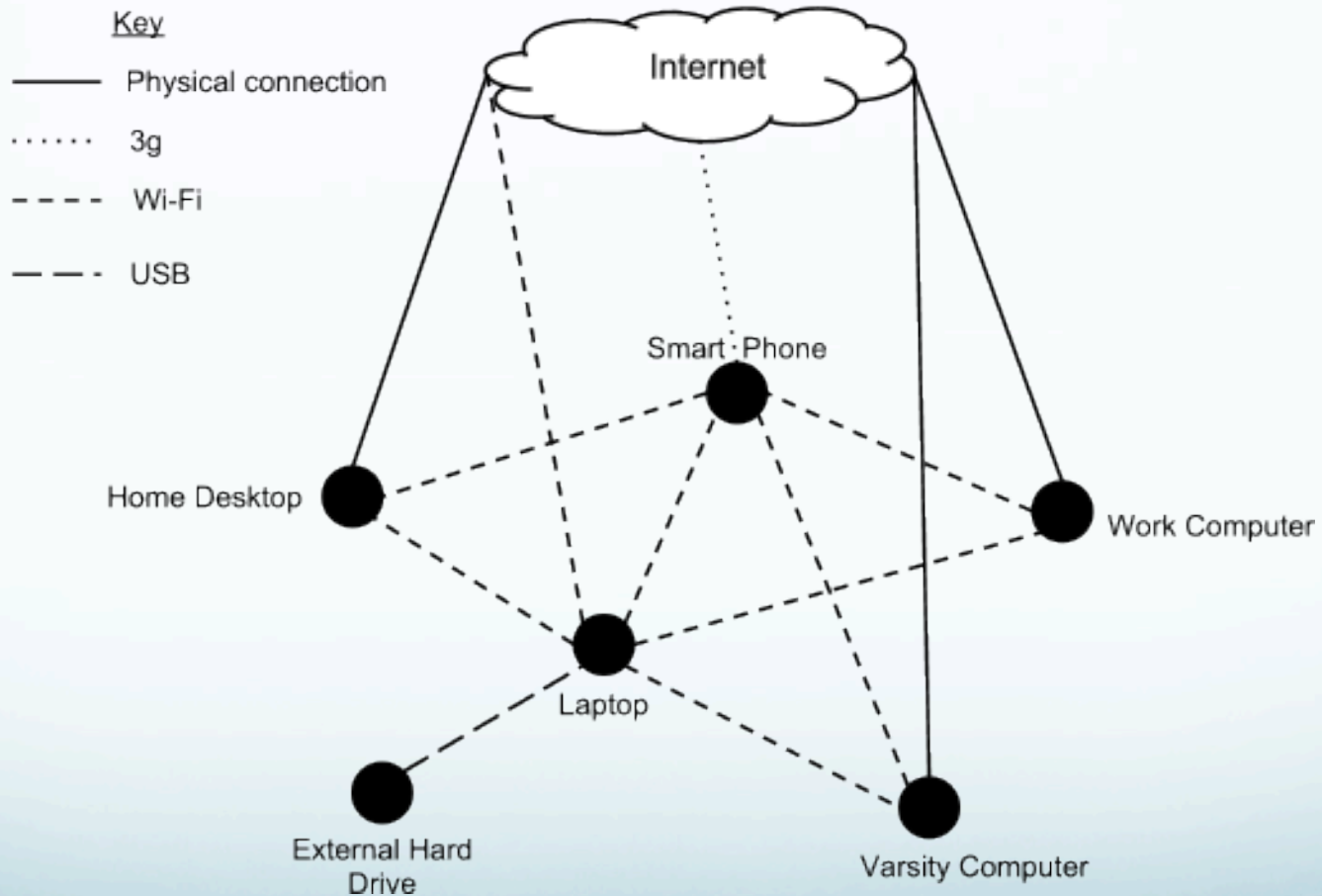
Private Dropbox

- A file synchronisation tool.
- Its main function should be to keep data synchronised between multiple devices.
- What makes 'private' dropbox?

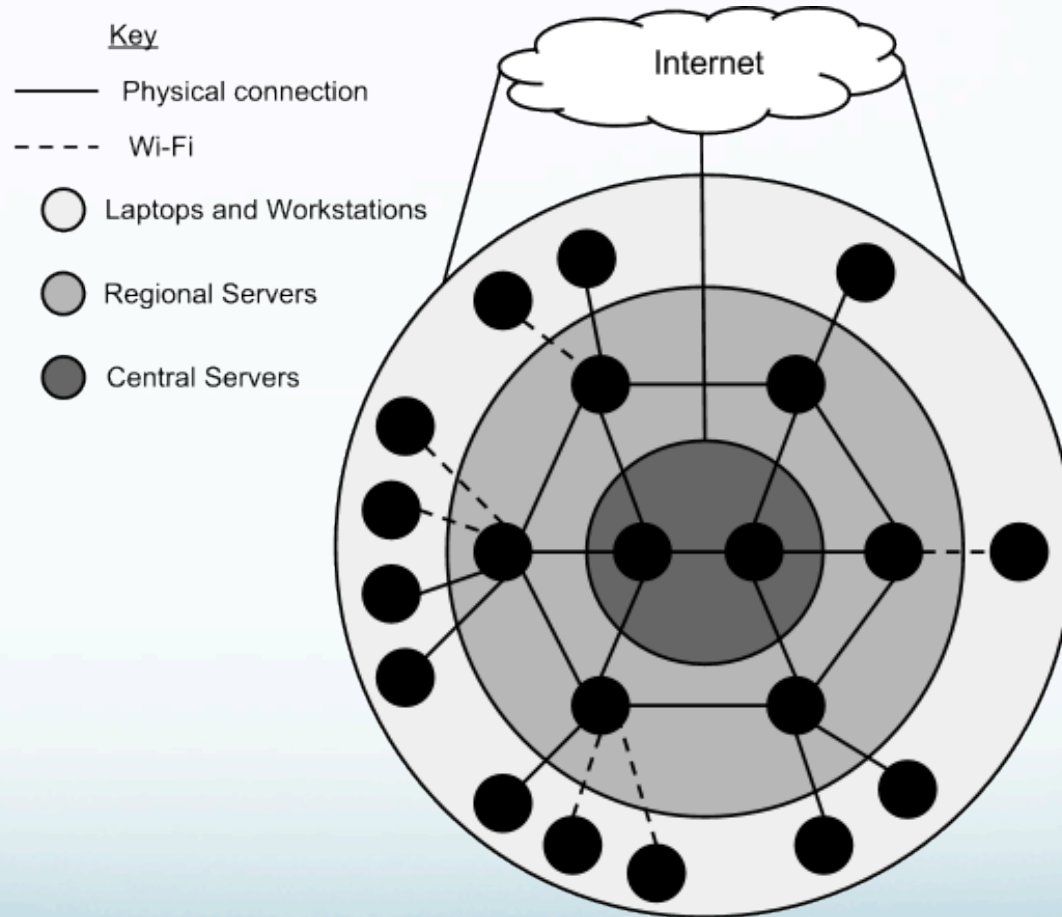
Important features

- **Decentralised.** It will not necessarily need to be run in “the cloud”, there should be no centralised server, just many cooperating client nodes.
- **File synchronisation** between multiple clients—not just point-to-point between two clients. Clients may be running different operating systems. Clients may run on different networks, with different costs of access (including being disconnected from the Internet at times).
- **Fine-grained user control** for the majority of the program’s functions, e.g., how often, and what, to replicate within different sets of files. ‘What’ could be filename, filetype, filesize etc.
- **Statistics** about which files are being replicated, efficiency, cost (bandwidth, disk space). These statistics could also possible lead to a heuristic for when to sync a given file.

Use case 1



Use case 2



Progress so far

- Virtual machines
- Network topologys
- Performance measures
- Point to point synchronisation
- Detecting filesystem changes