Metadata servers

Metadata also includes basicin formation about files, including file names and types, that helps support features like version history, recovery, and sync.

* Block servers will work with the clients to upload/download files from cloud storage.
* Metadata servers will keep metadata of files updated in a SQL or NoSQL database.
* Synchronization servers will handle the workflow of notifying all clients about different changes for synchronization.

## How do we handle file transfer efficiently?

we can break each file into smaller chunks to transfer only those modified chunks and not the whole file. so divide each file into a fixed size of 4MB chunks.

Our chunking algorithm will detect the parts of the files that have been modified by the user and only transfer those parts to Cloud Storage

SHA-256 is a patented cryptographic hash function that outputs a value that is 256 bits long.