CloudSync Design

# Capabilities of Amazon S3 Storage

In addition to properties of regular file and folder storage used as a repository to sync against, Amazon S3 defines other capabilities:

## Repository

Amazon S3 repositories are contained in *buckets*. Buckets can have the following attributes:

* Region
* Storage class, one of:
  + Standard
  + Standard IA (infrequent access)
  + One zone IA
  + Glacier
* Versioning used (yes/no)

## Storage Operations

In addition to operations permitted when syncing or copying to a standard filesystem folder or file, Amazon S3 adds these capabilities:

* If bucket versioning used:
  + Create new version or overwrite
  + Purge old versions
* If deleting file(s) or folder(s):
  + If bucket versioning used:
    - Whether to permanently delete or “mark” for delete