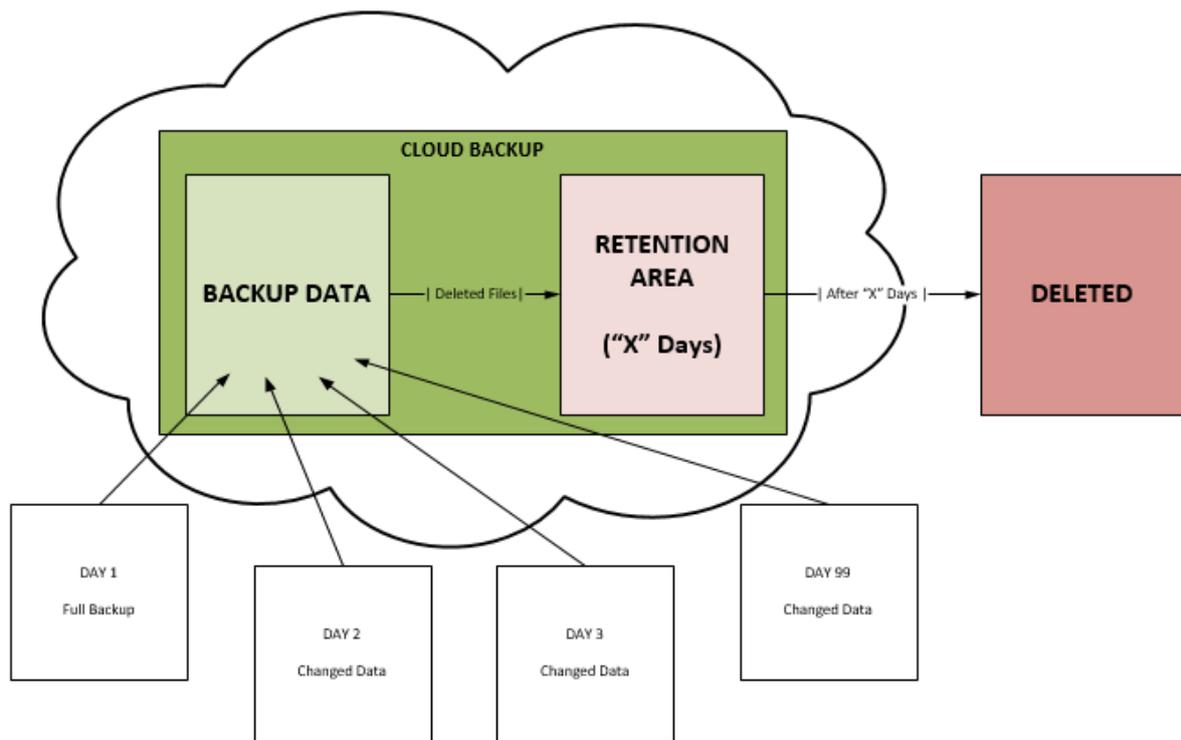


## How does it work – quick overview

Firstly to give a visual concept this is the process adopted for backup and retention.



### Next, let's look at Incremental vs Differential

The backup only ever uploads the changes or new files but how does this actually work?

#### In-File Delta

The first backup is always a full backup. Then as long as that file is larger than 25MB it will use the In-File-Delta technology. So by default everyday other than Friday it will perform incremental delta files, these are changes from the last backup. Then once a week on a Friday we perform a Differential delta, these are changes from the full backup. So the incrementals will be small changes since the last backup then each Friday the differential delta will get larger each week. Once the Differential delta gets to 50% of the full file by default the software will request a full backup again.

## Differential Delta

The main reason we do a differential delta is to facilitate restoring. For example if you only ever did incremental delta files, it would cause a massive chain & the software needs to merge all these small incrementals to create a full backup. So if any of these got corrupted you could not restore from a point in time.

What happens on Friday is that a Differential delta gets created. This will place all the incrementals & differential deltas into retention. So after Friday you are left with a full backup & a differential delta file. So this process will have much less to merge & in turn restore the file much quicker.

There is no need for files to be overwritten because this technology works great in dealing with large files but you can change the settings to may be do a full backup once a month