### **Archiving: Flat File**

Functional Requirements:

Description: The system should compress flat file logs that are at least thirty days old into a compressed file on the first of every month at 00:00:000 UTC.

Preconditions:

* Application has flat file logs that are at least thirty days old.
* The date is the first of the month 00:00:000 UTC.
* There is storage separate from the web service to save the archive.

Required Input:

* 30 day or older flat file log entries.

Successful Postconditions:

* All flat files from the input are compressed.
* Compressed file is saved in the designated storage.
* Compressed file should be in .7z format.
* Naming convention, example: YYYYMMDD.7z (DD = 01).
* The archive should be saved in a different file from other archive files.
* Compressed files shouldn’t be editable.

Failure Postconditions:

* Any of the successful postconditions failing.
  + Notify the system administrator.
  + Log only once.
* Archived on incorrect date / incorrect time.

Non-Functional Requirements:

* Should be accurate (timestamps should fall within the correct time constraints).
* Archive file should be sortable by date.
  + Sorting in ascending/descending order is accurate based on the date.

Diagram for Data Archive design:

