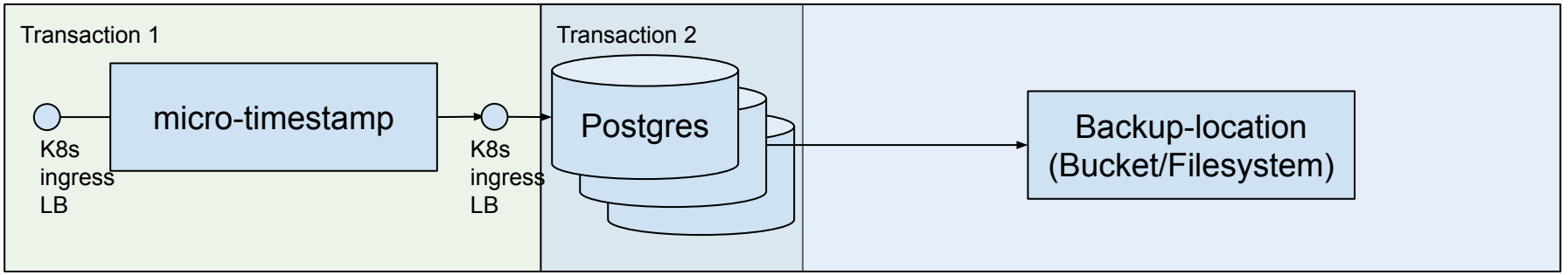
N-Tier Implementation



1) **Transaction 1**
   a) `micro-timestamp` will accept a HTTP request to write the timestamp to the DB
   b) The timestamp will be written to postgres using a generated UUID v4 for the PK
   c) The response will return the UUIDv4 PK for the message key back to the client to retrieve

1) **Transaction 2**
   a) A backup script will be installed on the postgres db
   b) A Cron entry to be created to run the script to backup to a remote location (s3/VM/etc)

Non-functional Requirements

- The processing of the timestamp request will be synchronous
- The backup will be hourly (configurable via cron)
- The postgres DB will be HA
- The backup location will likely be local filesystem for the demo, but should be extensible to support a remote bucket
- Where prudent, all services and supporting-services will be deployed as containers (A managed k8s i.e. GKE being the preference) and will likely run on minikube for the POC (thus no DNS)