

Amazon Address Book

read and write heavy



pair: {user, address}

Address Service

getAddresses

updateAddress

optional queue?

in-memory  
database - Redis

persist

address database

sharding by region first  
sharding by user id then

DB schema:

Address: {id, street1, street2, city, state, country, zipcode}

User: {id, a list of address ids}

Queue

Service to be  
notified

- 1. getAddresses(User) -> a list of addresses
- 2. updateAddress(User, Address old, Address new)

if multiple queue being used for a fan-out pattern, please make sure to use SQS along with SNS

Address Service

SNS

SQS

Service to be  
notified

SQS

Service to be  
notified