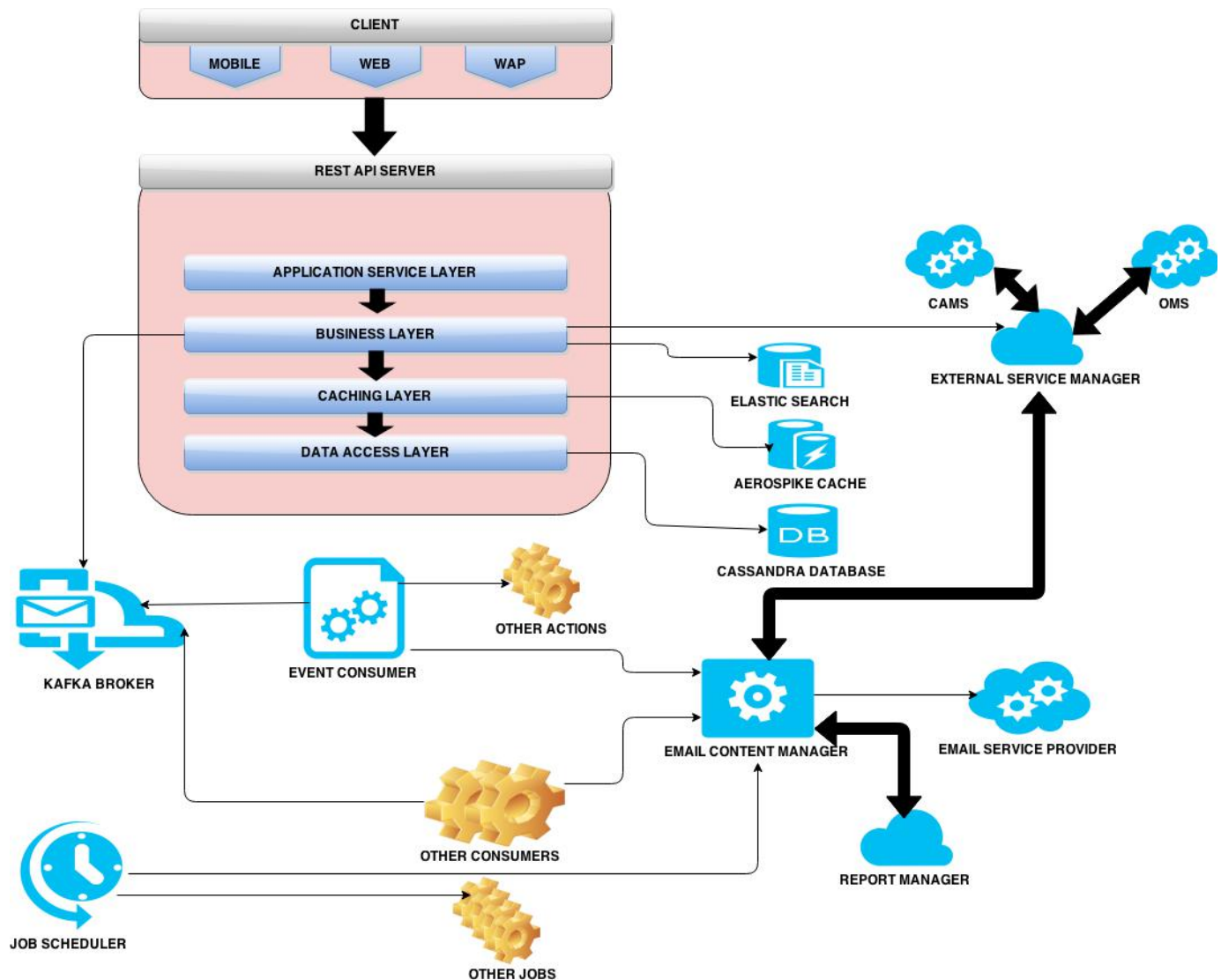


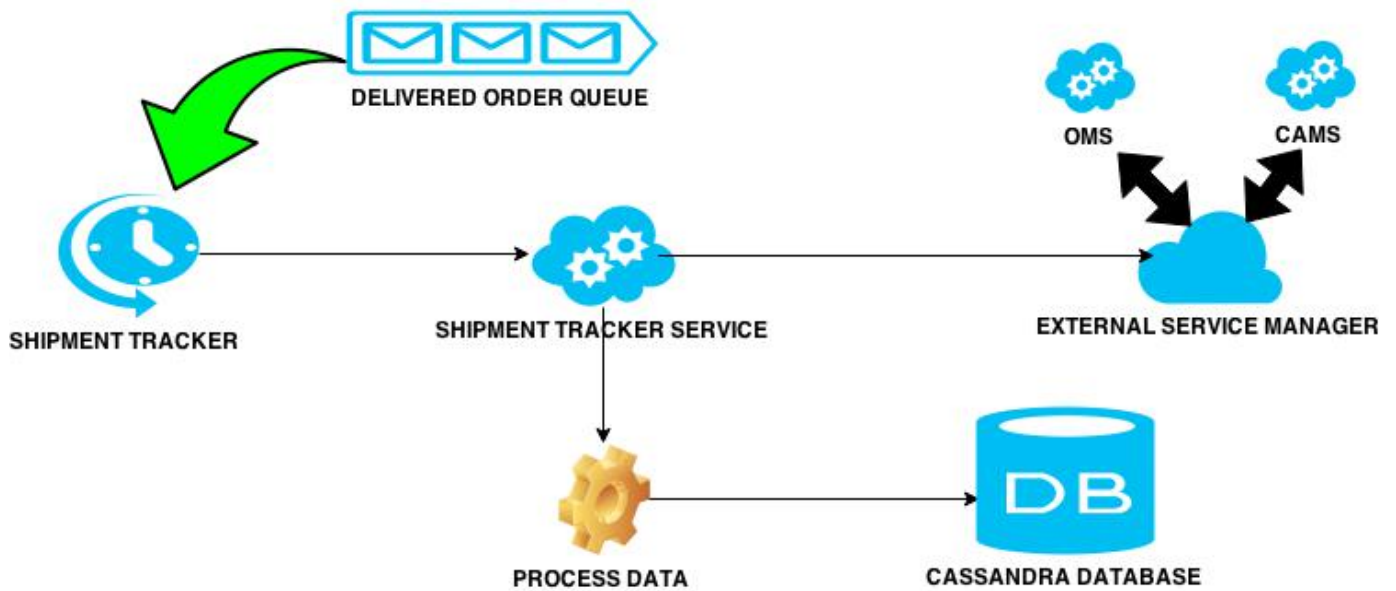
R&RService-Application Architecture

Application Architecture

The below image depicts the architecture of R&R services:



Shipment Tracker Module Architecture:



Basic workflow:

Web Layer

- Spring MVC is used to expose a REST service that clients can use to access the review system. We allow basic crud operations via this layer.
- Some of the operations that involve configurations or moderation are only available to admin users. Authentication and security for these roles is handled here

Service Layer

This layer has the core business logic for

- Tracking a review through its lifecycle (moderation cycle)
- Cumulation of reviews by user and products. This may be done asynchronously if write traffic is heavy
- Validation and configuration of dynamic review fields based on product or labels
- Processing user feedback on reviews, such as upvotes, downvotes, spam, and so on
- Asynchronous maintenance of the index and cache via the respective clients. Having these client interfaces lets us keep the service layer independent of the actual implementations.

Data Access layer

The service layer uses the data access layer as a persistent store for all review related data. In the current implementation of the DAO, we use the java driver from datastax.