

# Shopping Cart Architecture Review

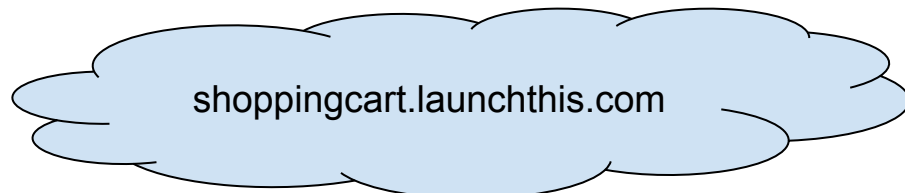
# Agenda

- Application rundown
- Current Architecture
- Future Architectures
- Q&A

# Application Rundown

- Ruby on Rails, Bootstrap, HAML, jQuery, Devise, CanCanCan
- Core system models: Project, Location Selection, Assets
- Locations are synced from NaturalInsights via XLS upload
- Conflict analysis by Assets, Categories
- Export of data in XLS for employees as well as PDF (HTML Webkit) for external sharing
- Current and Recent developments
  - 3P support
  - Article #'s
  - Activation Summaries

# Current Setup (1 App, 1 Host)



App Server

Apache Web Server

Passenger Web Container

Ruby App

CRON

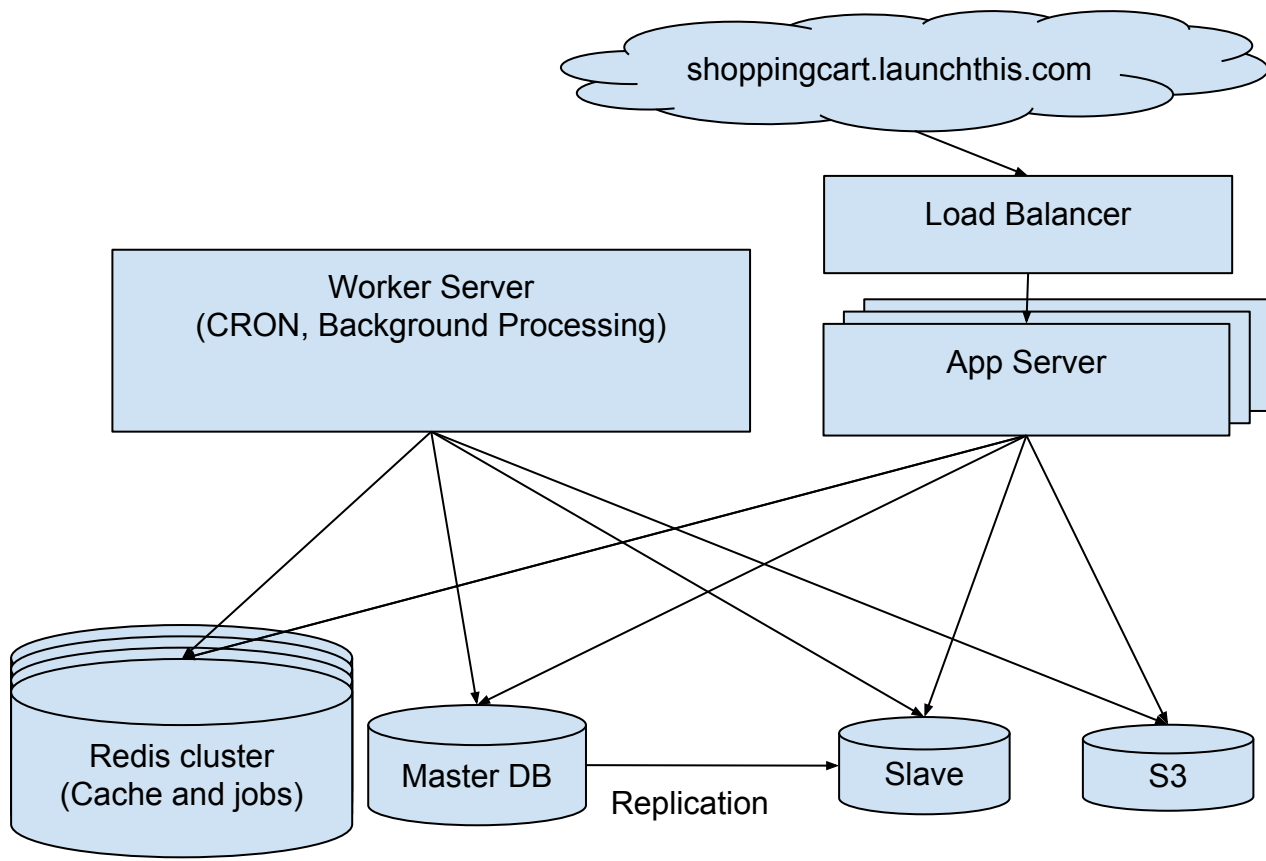
Memcached

MySQL Database

File Storage

- Easy deployments
- No redundancy
- Disaster Recovery via DB Backups and Filesystem snapshots

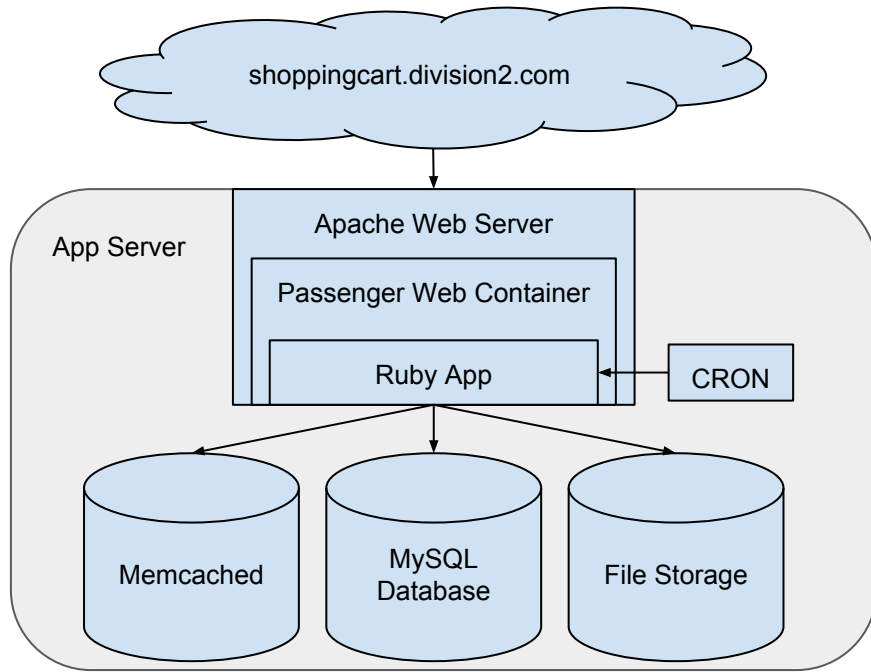
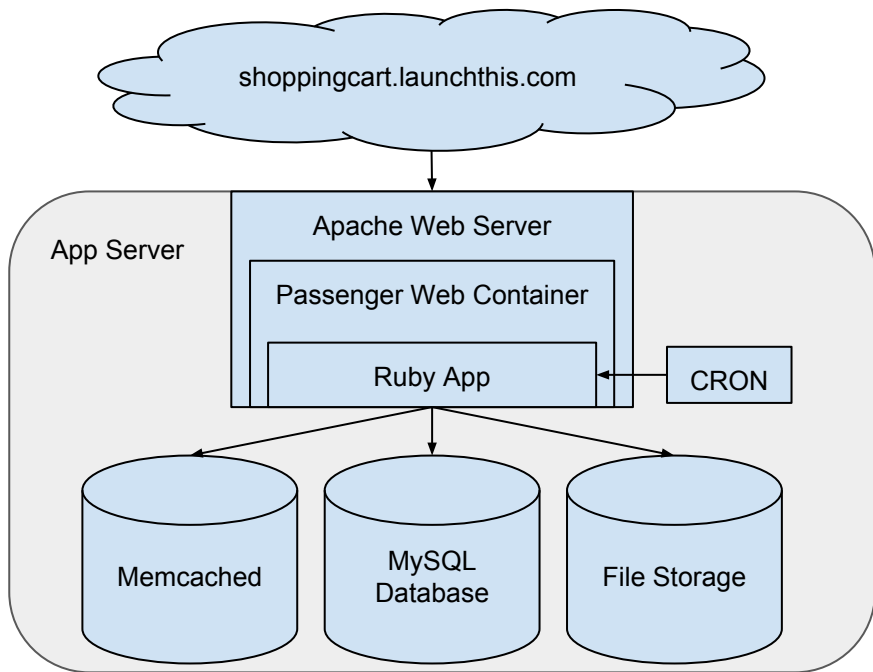
# Application Scaling (1 App, N Hosts)



- Easy deployments
- As much redundancy as desired
- Instant Recovery via Server failover
- Can scale a model like this VERY far

# Scale Applications (n Apps, 1 Host/app)

- Deployment complexity (what apps get what code)
- Data Integrity (no data shared between apps)
- Can apply the earlier scaling model above to individual apps as needed/desired



# Scale Applications (n Apps, n Hosts, 1 DB)

- Deployment simplification (all apps get all code)
- Data Integrity and isolation via Code (Shared Tenancy model)
- Can apply the earlier scaling model to the system as a whole

