



fluffy puffy cloud pets



Behind the Scenes:
Porting to Google App Engine

Releases



PHP/MySQL

v1.0

completed Fri-Sun 2/20-2/22

(during WeekendApps:)

Python/GAE

v1.1

completed Mon-Wed 2/23-2/25

(and several more production updates since then)



PHP/MySQL Python/GAE

(before)

(after)



sky.php
 shop.php
 stars.php
 gifts.php
 header.php
 footer.php
 handleBuyItem.php
 handleFeed.php
 offerpalCallback.php

script.js
 sky.js
 shop.js
 gifts.js

styles.css



app.yaml
 config.py

 pages.py
 model.py
 actions.py
 common.py
 data.py

script.js
 sky.js
 shop.js
 gifts.js

canvas.html
 sky.html
 shop.html
 gifts.html
 stars.html



More files but less lines of better-structured code



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Why did we move to App Engine?

Scalability concerns

2k users at the time
App was unusable during peak periods

Avoid code conflicts

8-person team editing the same files

Better organization

Self-documenting Python code
Model-View-Controller arch



Minimize admin work

Google does scaling/load-balancing for us
We outgrew our shared hosting setup



What did we struggle with?

Mainly the learning curve

Can be tricky if you're not familiar with similar frameworks & tools

Hard to troubleshoot at first - teammates request better documentation

(I can give you more info about this offline)

Easy to accidentally update production server

Working with Datastore, GQL queries on live data



Moving to GAE Datastore

We ported early enough that exporting MySQL data was “optional”

i.e. we threw away the old data & created a new, different data model



(compensated early adopters with stars for the trouble. no complaints!)

Created models for User, Pet, Inventory, Gifts
Keyed on MySpace or Orkut uid



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★ ★ ★ Wish List ★ ★ ★

Read-only dev permissions

Wish self & teammates could view GAE admin interface without being able to accidentally push a new release to production.

A way to run a test app using prod data, fearlessly

Both from localhost and from a separate live test app on GAE servers

PIL support

Current Images API is biased toward photo apps.
Hoping for drawing, text, blitting image rects, and, to a lesser degree, more and/or custom transforms.
Pretty please?



Thank You

Bill Katz: for inviting us to talk

WeekendApps: for bringing our team together & “incubating” us

GAE team: for making a product that “knocks our socks off”

Audience: for your patience



Questions?

Ask us tonight or email
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or bess.ho@gmail.com