AppScale

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What is Google App Engine?

- GAE lets you run web application on Google's infrastructure
- No need to maintain servers
- Once you upload, you can serve from:
  - -your own domain
  - -free name on appspot.com domain
- Pay what you use
- Costs nothing to get started

What is AppScale?

- Implements GAE in open source
- Two deployment strategies
  - On-premise clusters
  - Private-public cloud systems

Google Compute Engine, Microsoft Azure, Amazon EC2, Alibaba Cloud, OpenStack, CloudStack, Eucalyptus, as well as KVM, Xen, VirtualBox, and VMWare.

- Automatically configures, deploy, scales

APPSCALE APIs

- Datastore – AppDB
- Memcache - memcached
- URL Fetch – urllib2
- Blobstore API - custom server built on Tornado
- XMPP – ejabberd
- Channel API - ejabberd and strophejs
- Mail – sendmail
- Images - Python Imaging Library (PIL)
- Task Queue - RabbitMQ
- Users - AppScale Dashboard

APPSCALE APIs

- MapReduce Streaming API
- EC2 API
- Supports applications written in Python, Java, PHP, and Go.

Benefits of using Appscale

- Hybrid cloud platform
  - Scalability
  - Cost efficiencies
  - Security

- Open source
- Platform as a service

- Typhoon - similar solution

Starting with AppScale

- Install VirtualBox
- Install Vagrant
- Install Appscale on local machine

Easy to set up and work with..

- appscale init cluster
- appscale up
- appscale deploy ~/sample-apps/python/guestbook
- appscale relocate guestbook 80 443
- appscale remove guestbook
- appscale status
- appscale ssh
- appscale down
- appscale clean

References

- AppScale Documentation, release 1
- https://github.com/AppScale/
- https://cloud.google.com/appengine/