

App Engine of Grand Cloud

http://ae.grandcloud.cn

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Overview

- The project was kicked off on June 2012
- Launched on September
 <u>http://ae.grandcloud.cn</u>
- Deployed on our laaS platform
- Leverage open-source software



Current status

- Still in Beta
- Totally free!
- Hosted apps > 300

 http://yourapp.sdapp.cn
- A cluster of 30 VMs



Features

- Multiple programming languages
 Java, PHP, Python, Ruby
- User interface
 - Web console & app dashboard
 - Cmd-line tool
- Multiple backend data services
 - Relational DBs
 - Filesystem
 - Key-value store



Python Support

- Just launched this week^(C)
- Still premature currently
 - Django only
 - Lack of sample apps



Software Stack

- Nginx as load balancer
- Our own CloudFoundry branch
 - Various optimizations & twists
- OpenTSDB/HBase as monitoring metrics store
- Java based frontend console and dashboard
- HTTP servers
 - Apache for PHP
 - Webrick for Ruby
 - Tomcat for Java
 - Gunicorn for Python



Architecture

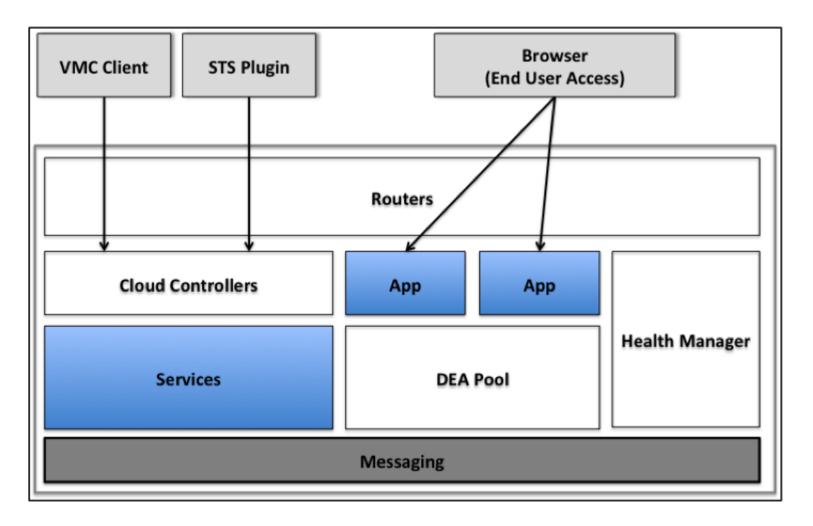


Figure source – http://cloudstory.in



Backend Services

- Relational databases
 - MySQL, Postgres
 - Elastic block storage for data persistence
- Filesystem service
 - Multi-tenant sharing on a cluster filesystem
 - Isolation & access control
- Key-value storage service
 - Memcached protocol compatible
 - Multi-tenant, scale-out, replicated and persistent



App Market

- "Platform as a community"
- Quick deployment by clicks
- Developers are rewarded to share apps

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Roadmap

- Stability improvement
- Performance profiling
- Developer tools
 - git/svn integration
 - DB admin console
- App management
 - Single-tenant DEA
 - Better resource isolation via Linux Containers



Thank You

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