Google App Engine

Cloud Computing Platform

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T.E.Comp

Topics of Discussion

- What is App Engine?
- Google App Engine
- Why App Engine?
- Componets
- Architectures
- Computing Environment
- Comparitive Study with other service
- What next?
- Conclusion

WHAT IS APP ENGINE?

- Google's Platform to Bulid Web Application on Cloud
- Dynamic Web server with full support for common web techonologies
- Automatic Scaling & Load balancing
- Transctional Datastore model

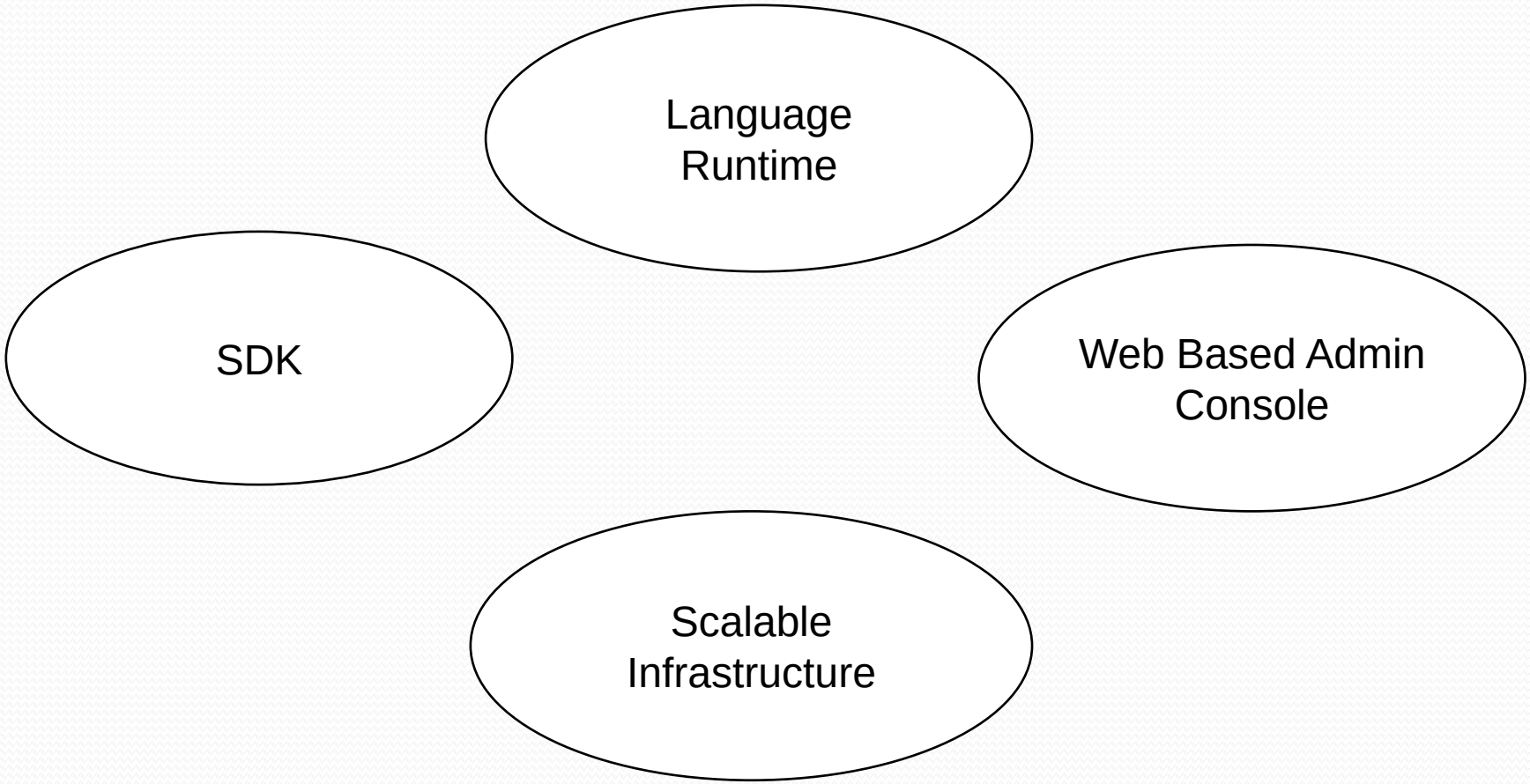
GOOGLE APP ENGINE

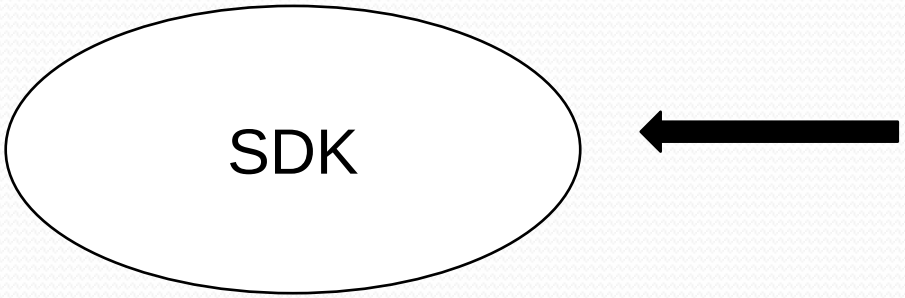
Google App Engine (often referred to as GAE or simply App Engine) is a platform as a service (PaaS) cloud computing platform for developing and hosting web applications in Google-managed data centers. Applications are sandboxed and run across multiple servers. App Engine offers automatic scaling for web applications—as the number of requests increases for an application, App Engine automatically allocates more resources for the web application to handle the additional demand. Google App Engine is free up to a certain level of consumed resources. Fees are charged for additional storage, bandwidth, or instance hours required by the application. It was first released as a preview version in April 2008, and came out of preview in September 2011.

WHY APP ENGINE?

- Lower total cost of ownership
- Rich set of APIs
- Fully featured SDK for Local development
- Ease of Deployment

COMPONENTS


Language Runtime
SDK
Web Based Admin Console
Scalable Infrastructure



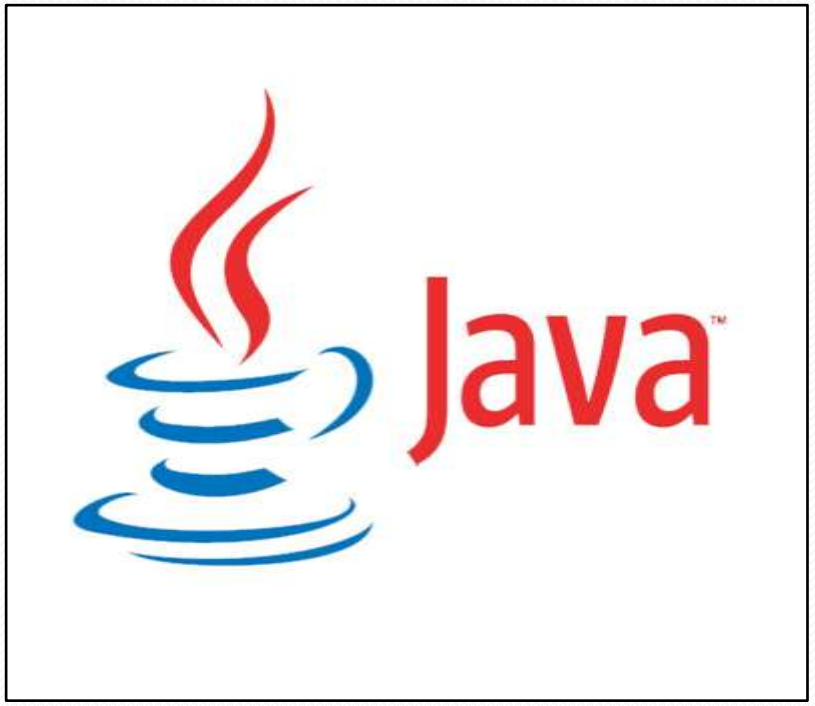
Run
Locally

Easy
Deploy

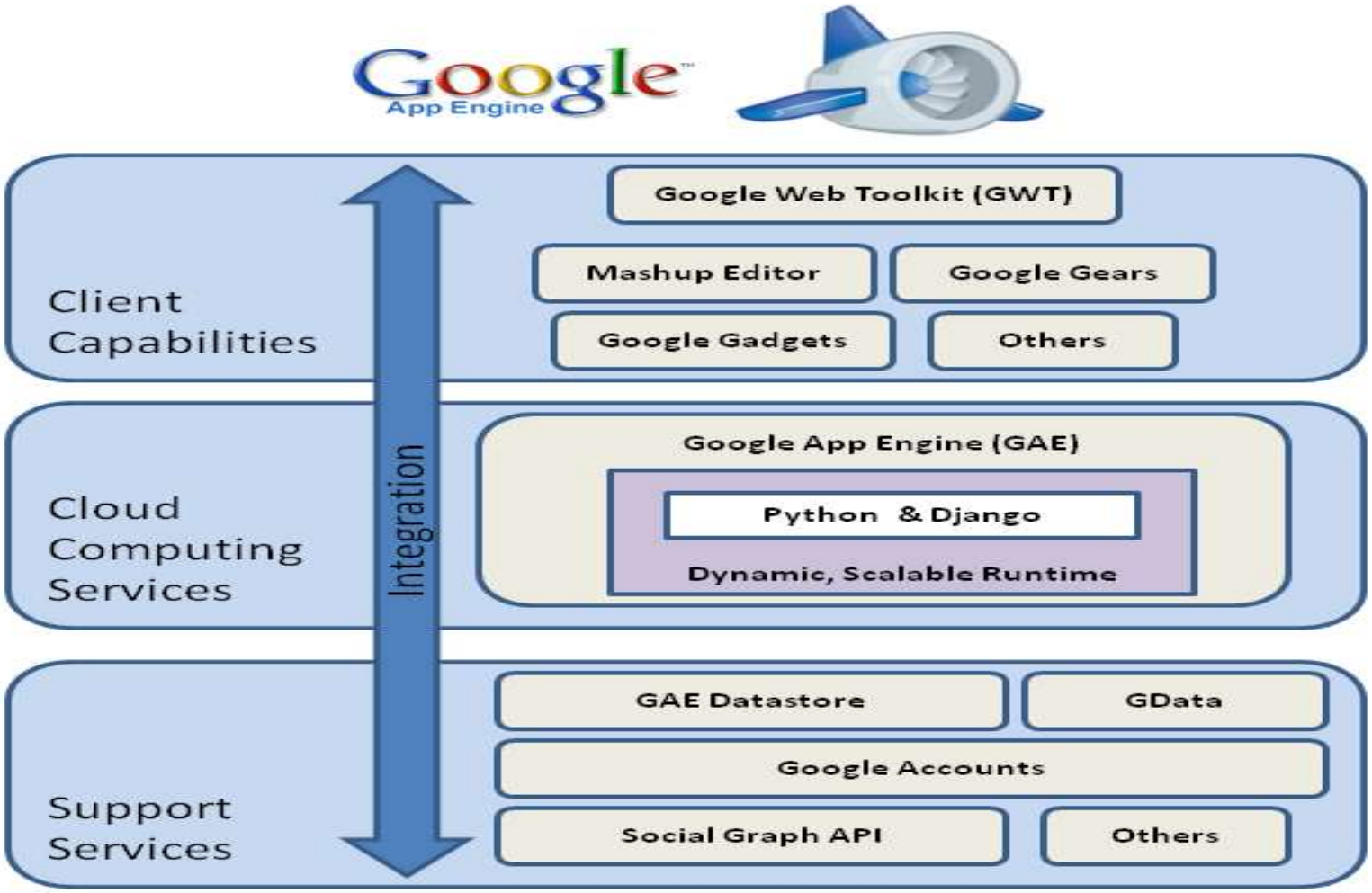
Manage
Versions

APIs

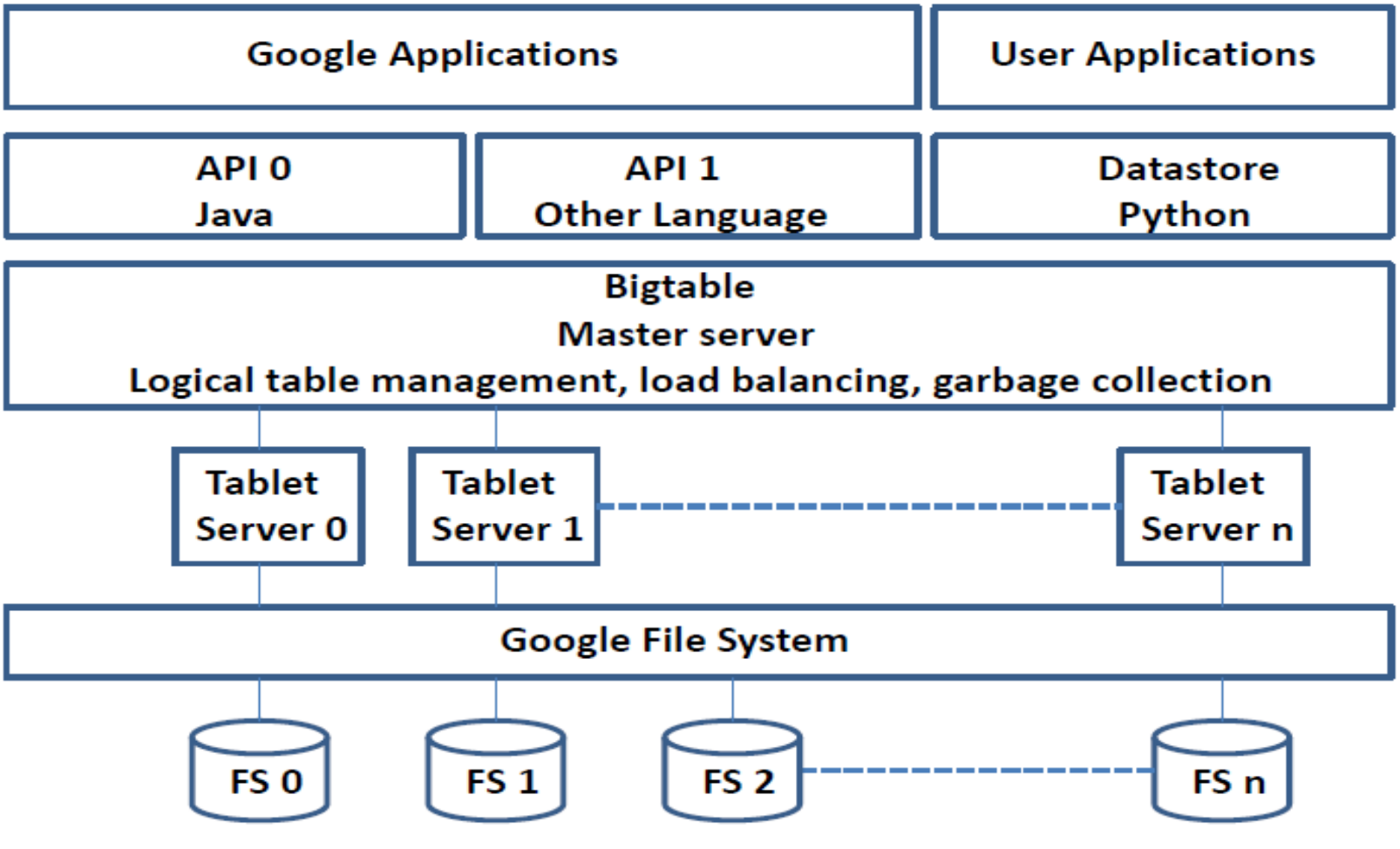
Language Runtime

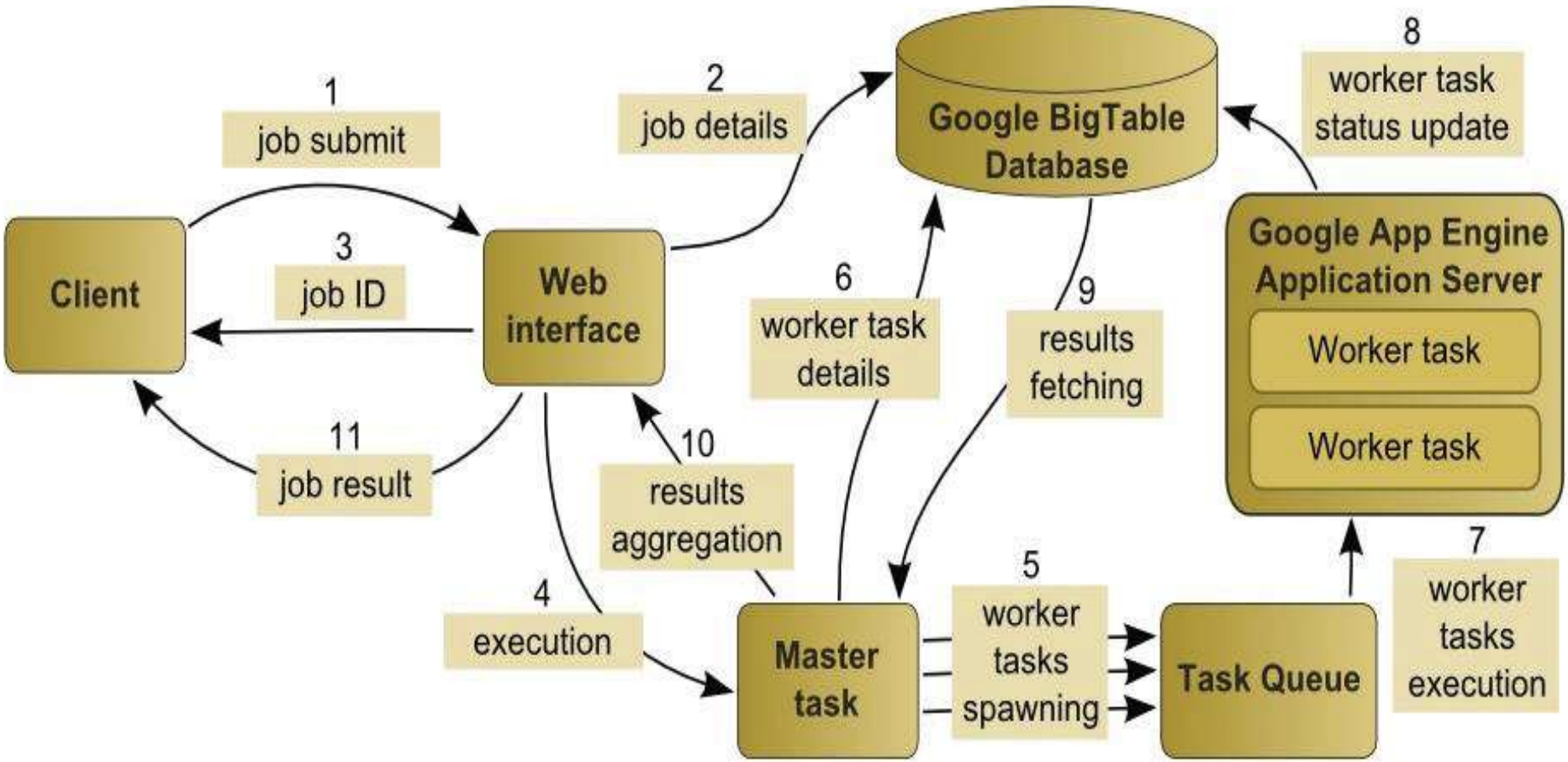


ARCHITECTURE OF GOOGLE APP ENGINE



GOOGLE DATASTORE ARCHITECTURE





The computing environment based on App Engine

COMPARISION BETWEEN VARIOUS CLOUD COMPUTING PLATFORMS

Google App Engine

	Google App Engine	Amazon Web Services
Cloud Services	PaaS	PaaS, IaaS
Platforms Supported	Linux,Windows Server 2008	Linux,Open Solaris, Windows Server 2003
Virtualization Platform	Application Container	OS level running on a Xen Hypervisor
Storage	BigTable and MegaStore	Amazon Simple Storage and SimpleDB
Control Interface	API	API Command Line
Languages Supported	Java Python	Java,PHP,PythonRuby
Load Balancing	Auto	Round Robin
Data after termination	Google will not take any action for 90 days after the effective date of termination	Amazon will not take any action for a period of 30 days after the effective date of termination

App Engine Developers/Apps

What's next?

- More Languages on App Engine
- Scheduted jobs
- Large download/upload support
- Purchasing additional capacity

CONCLUSION

- Flexibility: Java or Python APIs, no 'lock-in‘
- Security: sandbox environment, rich APIs
- Easy to Start: generous free quota
- Easy to Scale: uses Google infrastructure
- FUTURE: better performance, new features

Thank You!

Questions?

Code.google.com/appengine
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