Google Cloud : Serverless

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GAE

It is fully managed serverless platform for developing and running web applications at scale.

Application languages and frameworks supported as of now are listed below

Java, PHP, Node.js, Python, C#, .Net, Ruby, Go.

Features :

Application Versioning : It helps to create difference versions of application and environments like Dev, Stag, Prod

Monitoring : Provide default logging dashboard

Traffic Spliting : It helps to route traffic to different versions of app which can be helpful for blue/green deployments, Alpha/Beta testing etc.

Security : Access rules can defined with App engine firewall and also SSL/TLS certificates are provided by default on custom domain .

All the above features exists with no addition charges.

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Merits:

✓ No reservation for server space, no maintenance

✓ Easy scaling.

✓ Free up to a certain level of consumed resources.

✓ Easy and cheaper ,good option for start-ups/individuals.

✓ Suitable for apps that just store and retrieve data.

✓ Easy deployment of newer versions.

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De-Merits:

✓ **Limited functionality :** Execution of code is available only via http requests (except for scheduled background tasks).

✓ Not suitable for CPU intensive calculations. They are slower and expensive.

✓ **Graphing, logging limitations currently for GAE.**

✓ **Some modules may not be supported eg.** C and Pyrex modules are not supported.

✓ App Engine requires developers to use only its supported languages, APIs, and frameworks.

✓ A process started on the server to answer a request can't last more than 60 seconds (with the 1.4.0 release, this restriction does not apply to background jobs anymore).

✓ Does not support sticky sessions (a.k.a. session affinity), only replicated sessions are supported including limitation of the amount of data being serialized and time for session serialization.

✓ applications will not be portable from App Engine and fear being locked into the technology

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Note :

GAE Service also allows creating, configuring, and using relational databases with App Engine applications. Google Cloud SQL offers MySQL 5.5 and 5.6.

Usage Quotas :

Google App Engine requires a Google account to get started, and an account may allow the developer to register up to 25 free applications and an unlimited number of paid applications.