Google App Engine demo

Bálint Pató

patobalint@gmail.com

Google App Engine

Google code

Overview

- **Few words on cloud computing**
- Google App Engine & Java
- Demo
- Problems I met
- Questions

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Cloud computing

- **Cloud computing** is a style of computing in which dynamically scalable and often virtualized resources are provided as a service over the Internet
- Users need not have knowledge, control over technology infrastructure

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Cloud computing
(source: http://en.wikipedia.org/wiki/Cloud_computing)
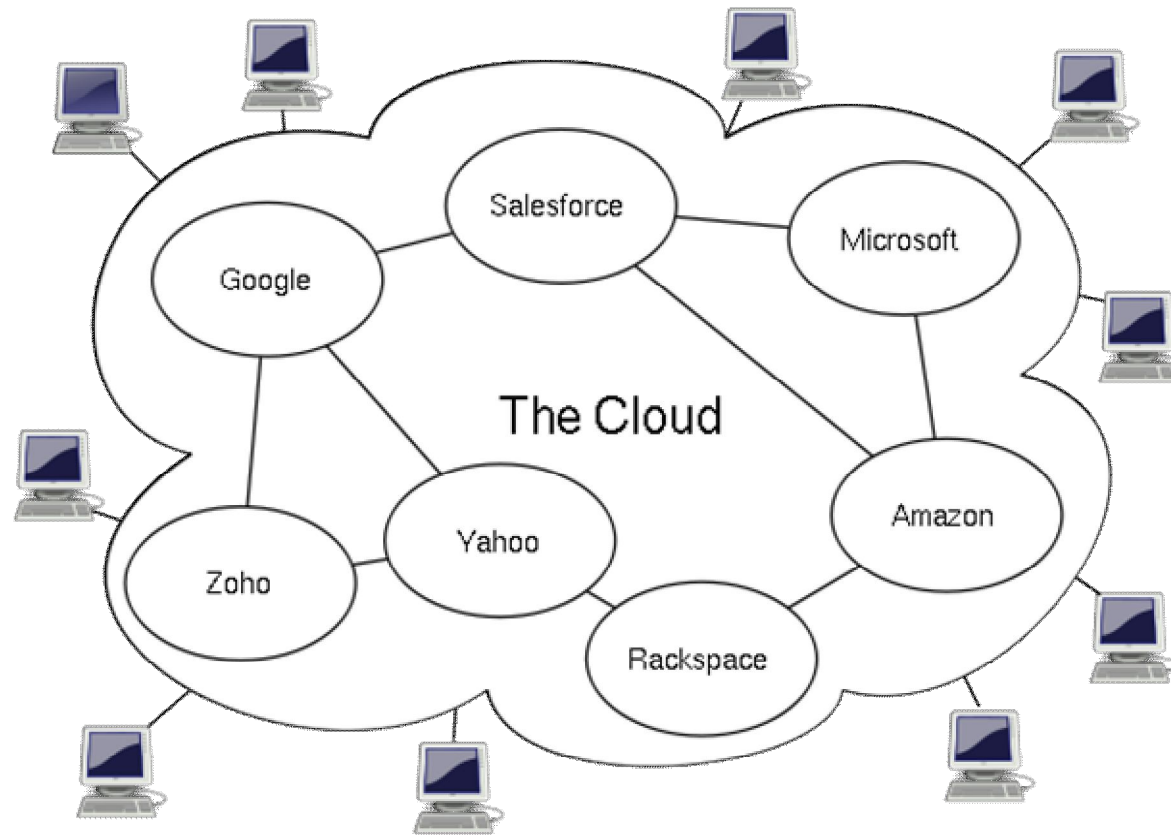
Cloud computing
(source: http://en.wikipedia.org/wiki/Cloud_computing)

- Cloud computing is a computing paradigm where the boundaries of computing will be determined by economic rationale rather than technical limits

  /Ramnath K. Chellappa/

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(source: http://en.wikipedia.org/wiki/Cloud_computing)

Cloud Computing Economics

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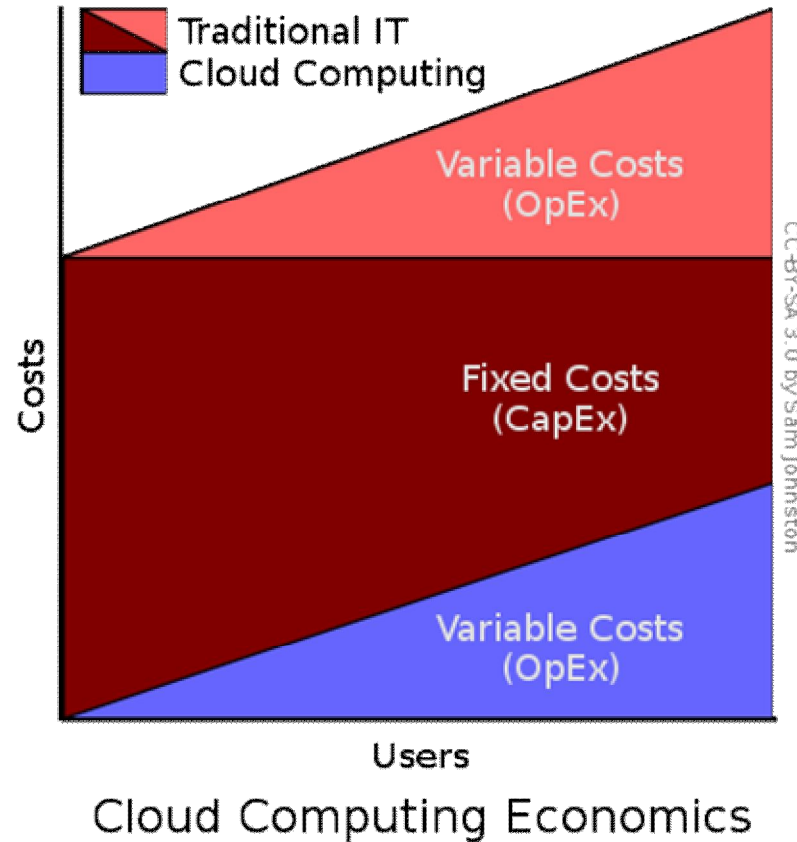
Cloud computing
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Criticism

- <u>Jonathan Weber</u>

    Back to the 50-60s: "dumb" terminals
    connecting to mainframe computers

- <u>Richard Stallman</u>

    „simply a trap aimed at forcing more people
    to buy into locked, proprietary systems that
    would cost them more and more over time."

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Google App Engine

- Cool:
  - Google's platform
  - Free until a certain quota
- Price:
  - „power of simplicity",
  - limitation of rights
  - content out of control
- First: Python, then Java

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Google App Engine & Java

- Since April 2009
- Java still has the „Early look" tag on it
- Release notes
- Roadmap

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Java support

- Servlet container: „sandbox VM"
- JDO/JPA annotation support + BigTable
- Eclipse plugin / command prompt
- Administration console

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Sandbox VM

- Java Servlet Runtime
  - White list
- Compatibility with Java Frameworks

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BigTable

- Like a BIG HASHMAP (key, properties, …)
- No schema
- Entity groups – strange transaction-handling
- Writes are really expensive
- Reads are really cheap

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JDO/JPA

- Works only with limitations
  - Using jdo
  - Using jpa
- Owned and unowned relationships

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Some thoughts

- GWT RPC can't serialize entities
- 1000 files limit solution – ZipServlet
- java.awt.Image – not on White list

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