

Google App Engine Overview



Eder Ignatowicz



@ederign

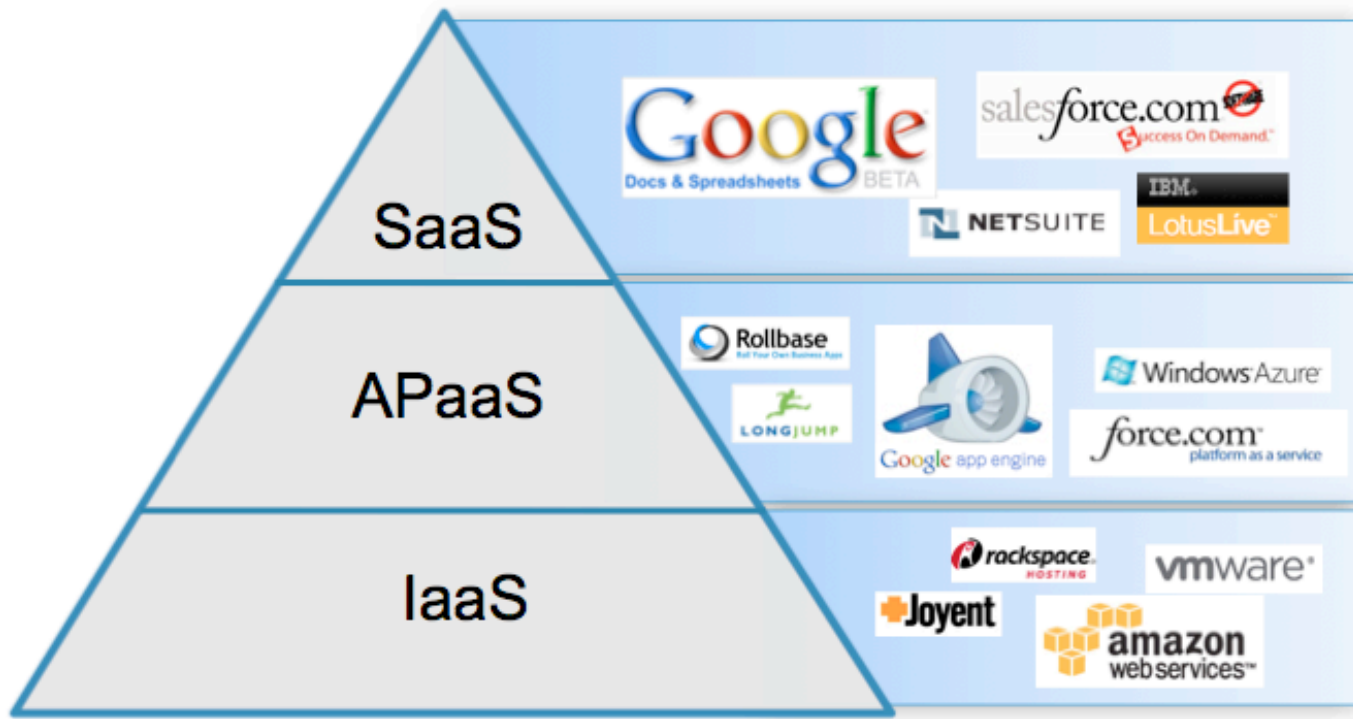
github



/ederig

**What is
cloud
computing?**





Google App Engine

- Fácil de construir;
- Fácil de manter;
- Fácil de “escalar”;



Google App Engine

- Números
- 250+ mi page views;
- 100k+ desenvolvedores

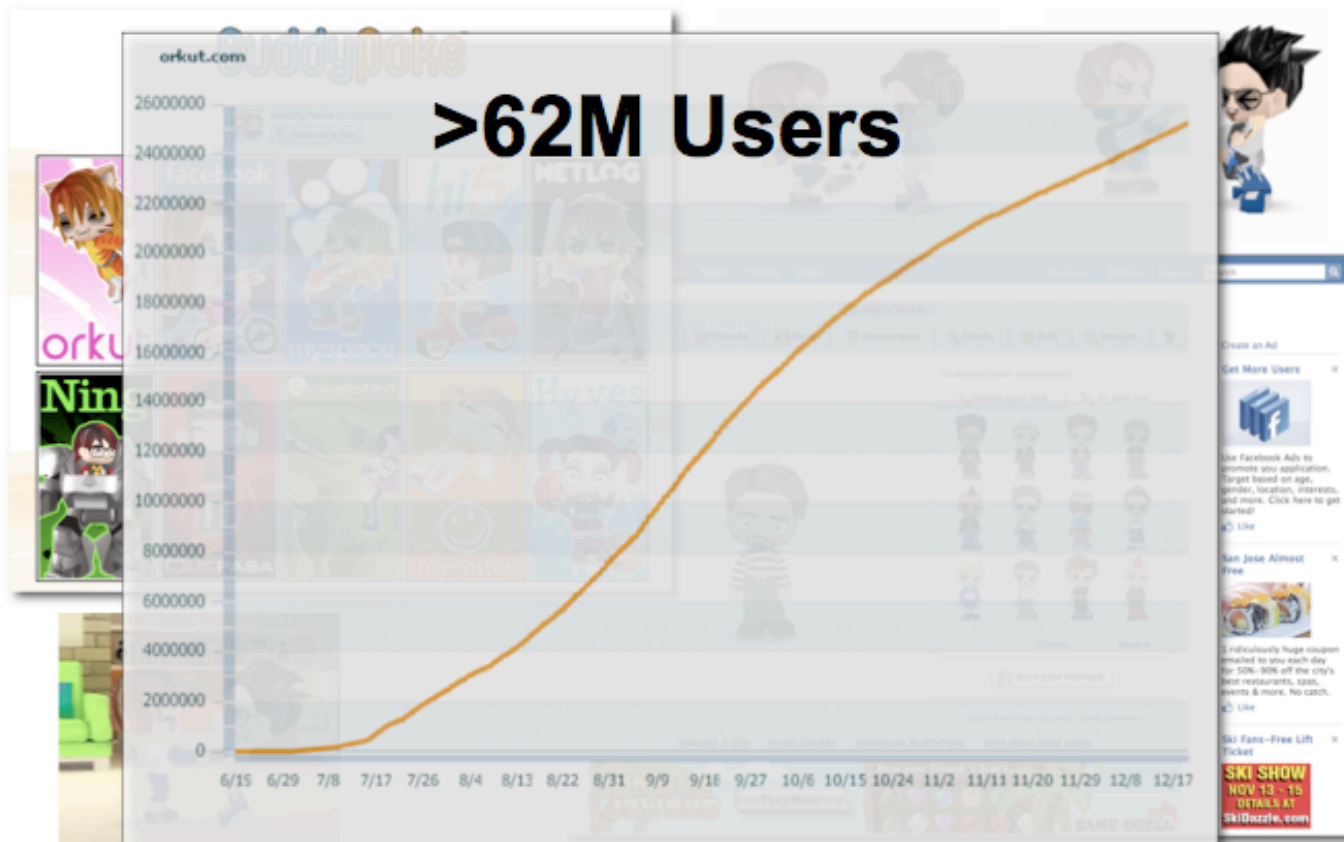




グリーン家電普及促進事業
エコポイント



Social networking at scale **Buddypoke™**



gigya Socialize



gigya Socialize

Flexible Scalability



"Although we typically host all our services in-house, on our own infrastructure, we felt that GAE would be a better fit for the live chat feature because of its unique traffic pattern, which is characterized by very low traffic most of the time with very high bursts during high profile events."

Raviv Pavel, Gigya VP of Research and Development

Porque App Engine GAE ?

Gerenciar tudo é difícil...



DIY implica em muitos gastos “escondidos”

- Idle capacity
- Software patches e upgrades
- Licenças
- Manutenção
- Tráfego
- Upgrades

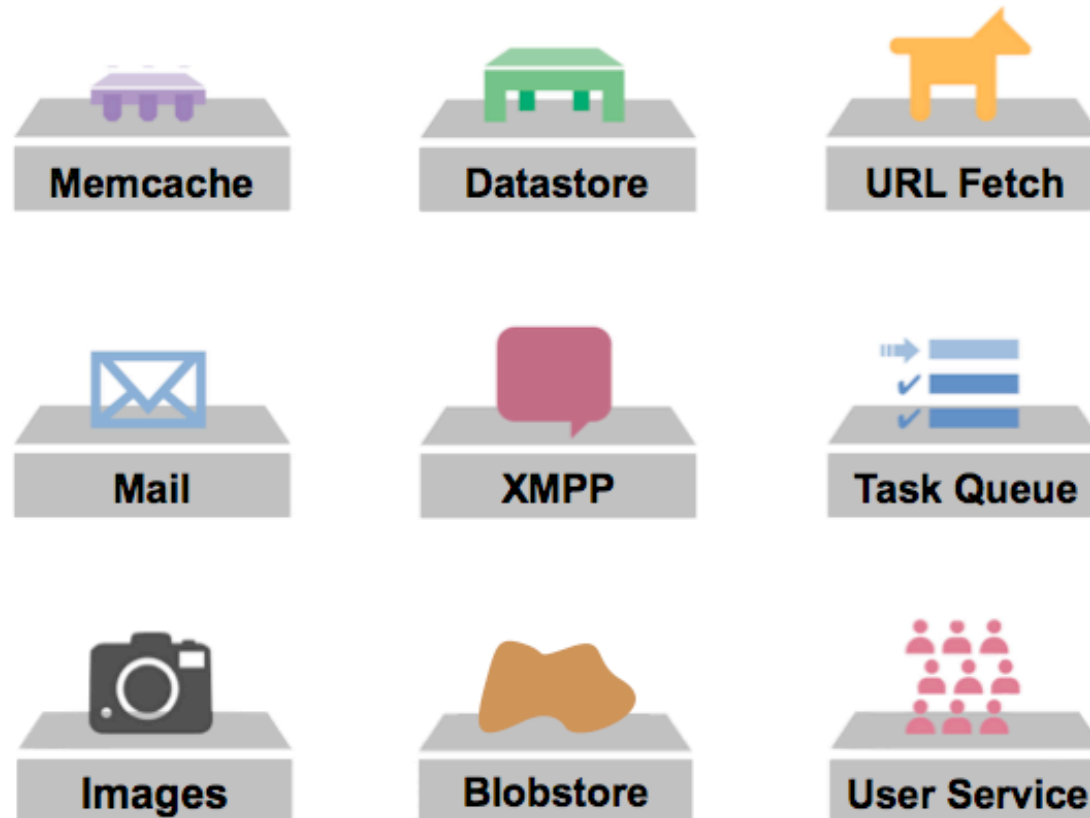
Desenvolva pra Cloud “in a box”

SDK & “The Cloud”
Hardware
Networking
Operating system
Application runtime
 Java, Python
Static file serving
Services
Fault tolerance
Load balancing



Detalhes...

Serviços Oferecidos

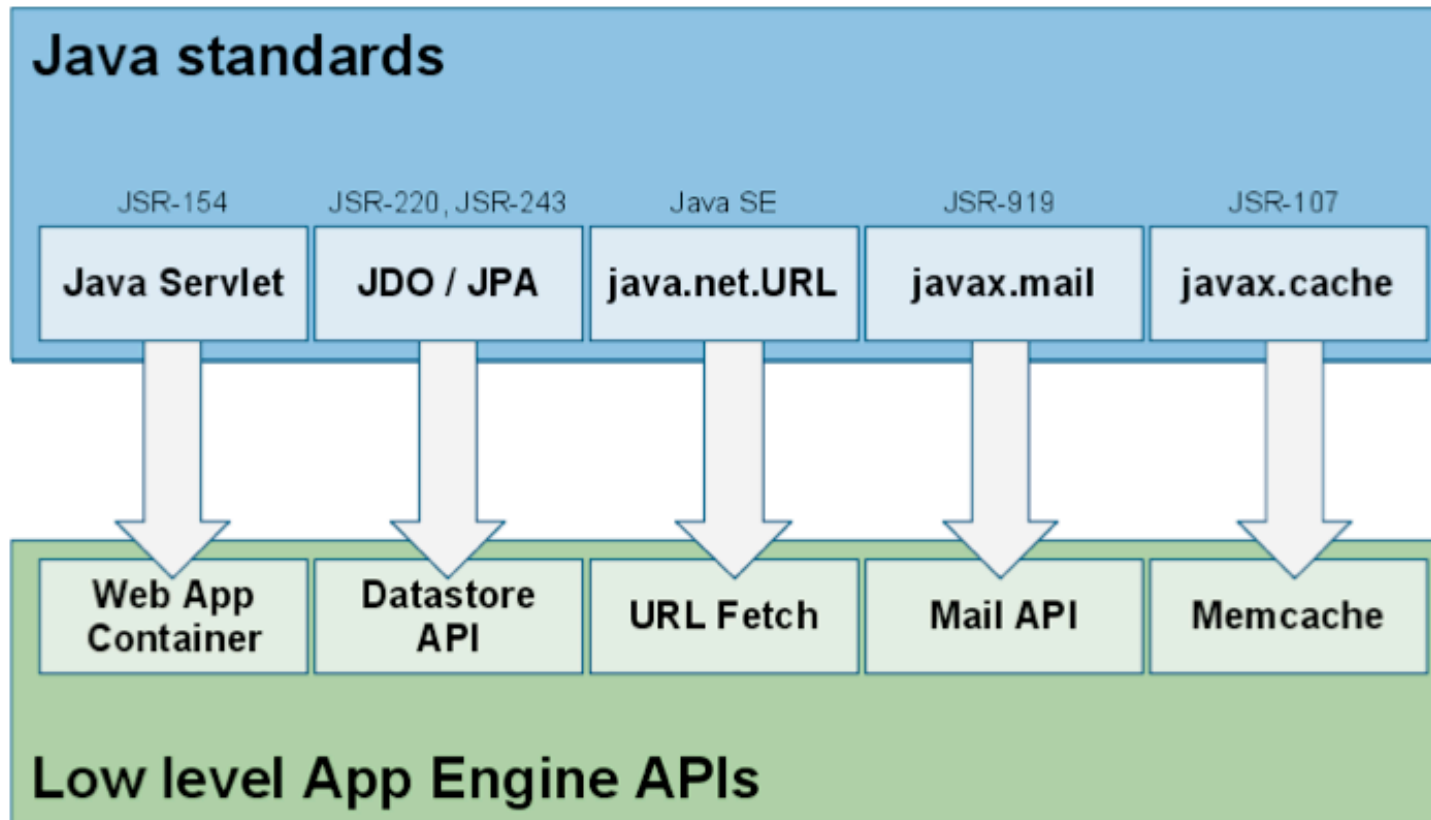


Linguagens



Duke, the Java mascot
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Portabilidade com APIs



Muitas Linguagens através da JVM

- Java
- Scala
- JRuby (Ruby)
- Groovy
- Quercus (PHP)
- Rhino (JavaScript)
- Jython (Python)



Duke, the Java mascot
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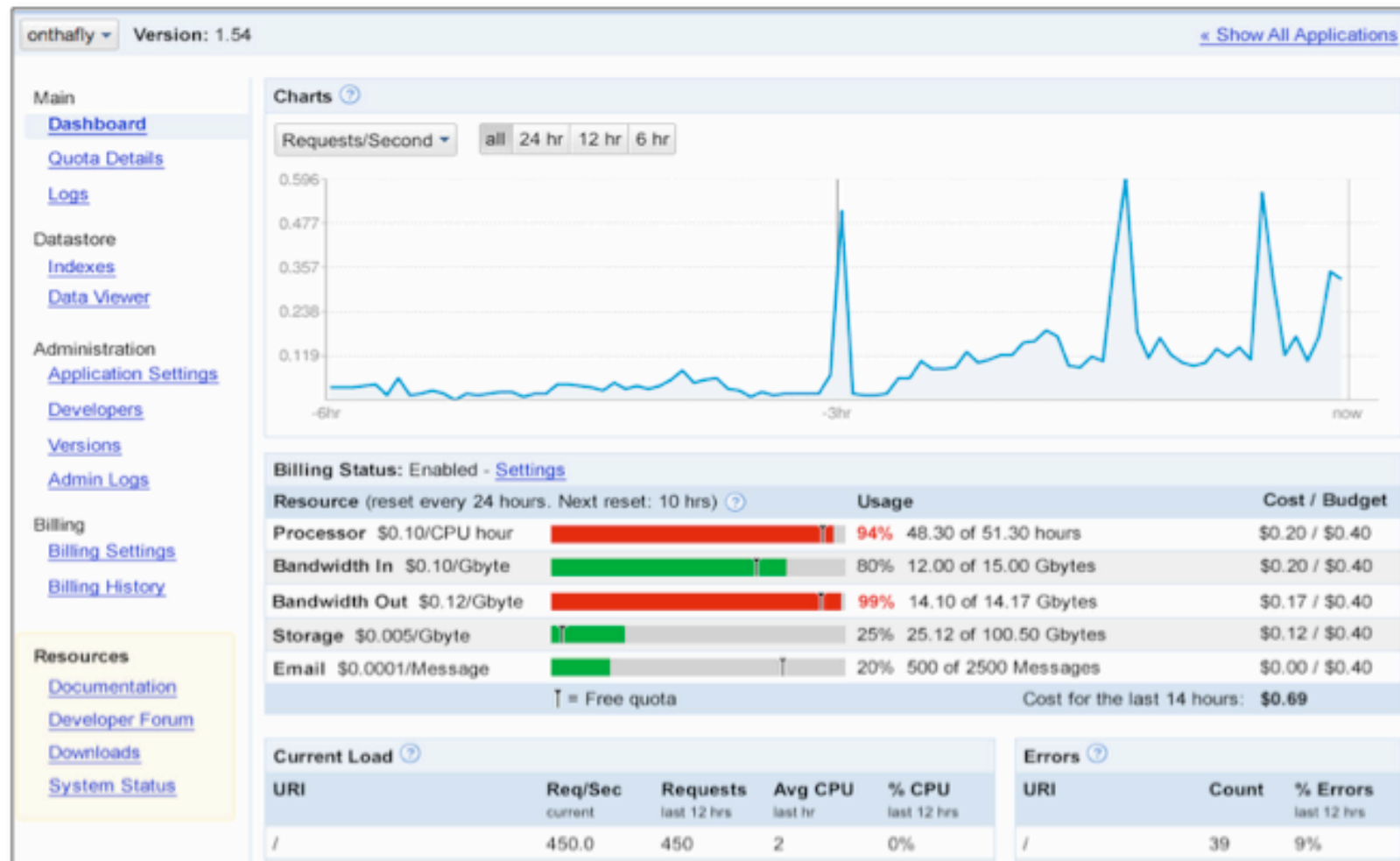
Grátis para começar

- ~5M pageviews/month
- 6.5 CPU hrs/day
- 1 GB storage
- 650K URL Fetch calls/day
- 2,000 recipients emailed
- 1 GB/day bandwidth
- 100,000 tasks enqueued
- 650K XMPP messages/day

Plataforma de gerenciamento



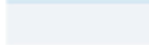


App Engine Dashboard



App Engine Health History

Google App Engine [Help](#) | [Admin Console](#)

System Status

Current Availability: **100%** Uptime (last 7 days):  Read latency (today):  Write latency (today): 

	03/20/09	03/21/09	03/22/09	03/23/09	03/24/09	03/25/09	03/26/09	03/27/09	Now
Datstore	✓	✓	✓	✓	✓	✓	✓	✓	Normal
Images	✓	✓	✓	✓	✓	✓	✓	✓	Normal
Mail	✓	✓	✓	✓	✓	✓	✓	✓	Normal
Memcache	✓	✓	✓	✓	✓	✓	✓	✓	Normal
Serving	✓	✓	✓	✓	✓	✓	✓	✓	Normal
Urlfetch	✓	✓	✓	✓	✓	✓	✓	✓	Normal
Users	✓	✓	✓	✓	✓	✓	✓	✓	Normal

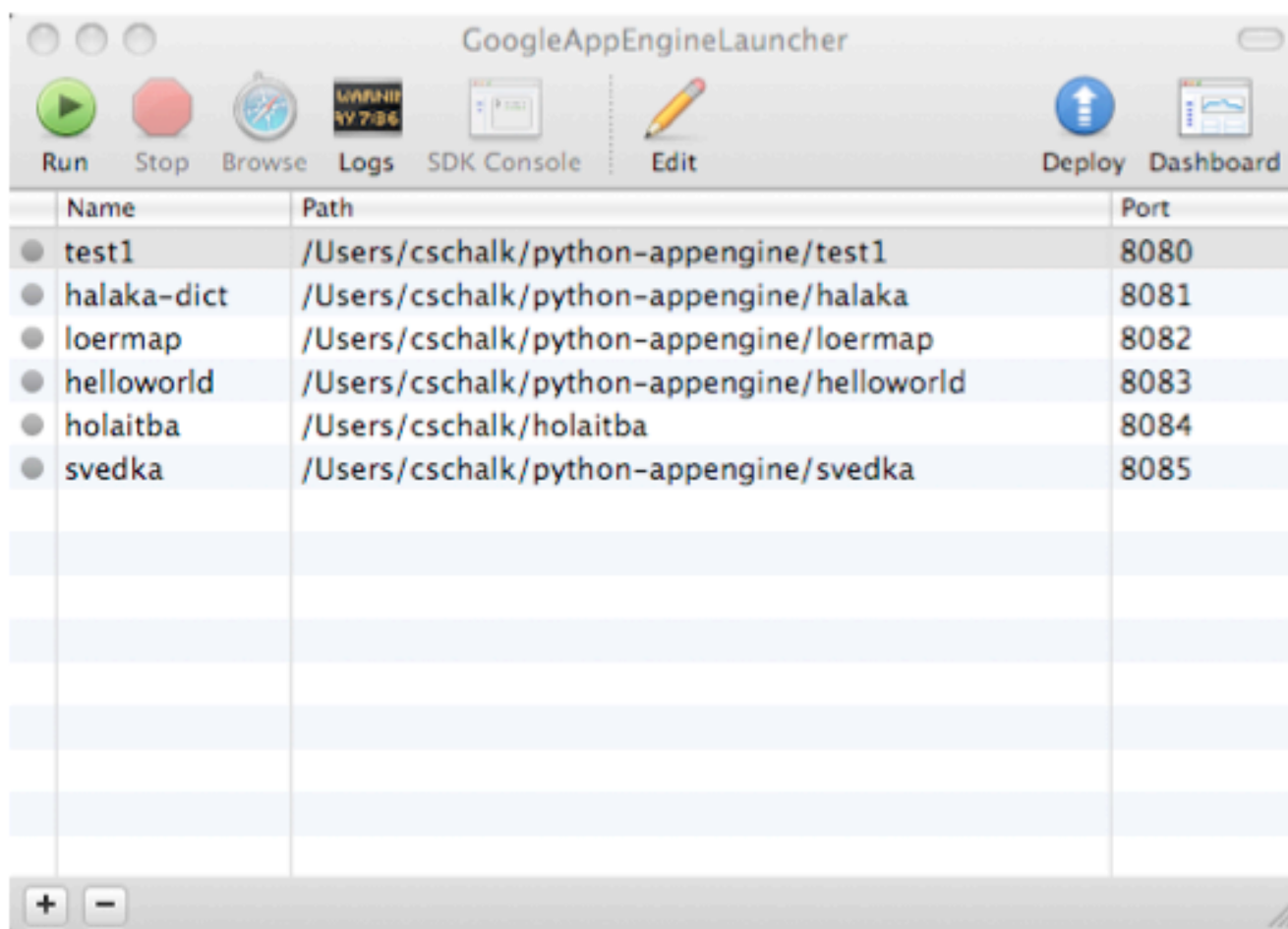
The following symbols signify the most severe issue (if any) encountered during that day. Click a symbol in the table above to view a day's performance graphs.

!8 ✓ No issues or minor performance issues ? Investigating ⚠ Service disruption ? Unknown

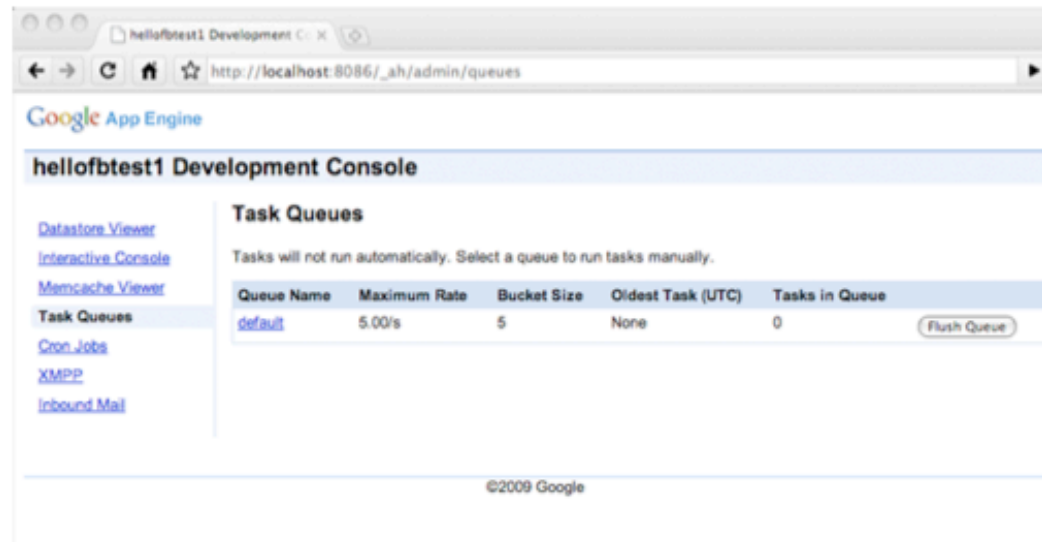
Ferramentas de Desenvolvimento



Google App Engine Launcher



SDK Console



The screenshot shows a web browser window with the URL `http://localhost:8086/_ah/admin/queues`. The page title is "hellofbtest1 Development Console". On the left, there is a navigation menu with links for "Datastore Viewer", "Interactive Console", "Memcache Viewer", "Task Queues" (which is selected), "Cron Jobs", "XMPP", and "Inbound Mail". The main content area is titled "Task Queues" and contains the text "Tasks will not run automatically. Select a queue to run tasks manually." Below this is a table with the following columns: "Queue Name", "Maximum Rate", "Bucket Size", "Oldest Task (UTC)", and "Tasks in Queue". There is one row in the table for the "default" queue, showing a maximum rate of "5.00/s", a bucket size of "5", no oldest task, and 0 tasks in the queue. A "Flush Queue" button is located to the right of the table. At the bottom of the page, there is a copyright notice: "©2009 Google".

hellofbtest1 Development Console

[Datastore Viewer](#)
[Interactive Console](#)
[Memcache Viewer](#)
Task Queues
[Cron Jobs](#)
[XMPP](#)
[Inbound Mail](#)

Task Queues

Tasks will not run automatically. Select a queue to run tasks manually.

Queue Name	Maximum Rate	Bucket Size	Oldest Task (UTC)	Tasks in Queue
default	5.00/s	5	None	0

[Flush Queue](#)

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Google Plugin for Eclipse



```
private static native void jsniMethod(boolean sayHi)/*- {  
    // Display a pop-up  
    if (sayHi) {  
        var name = this.@com.example.myapplication.MyApp:name;  
        window.alert('Hello, ' + name);  
    }  
}/*-;
```

Package Explorer context menu: Run As, Run Configurations..., Organize Favorites...

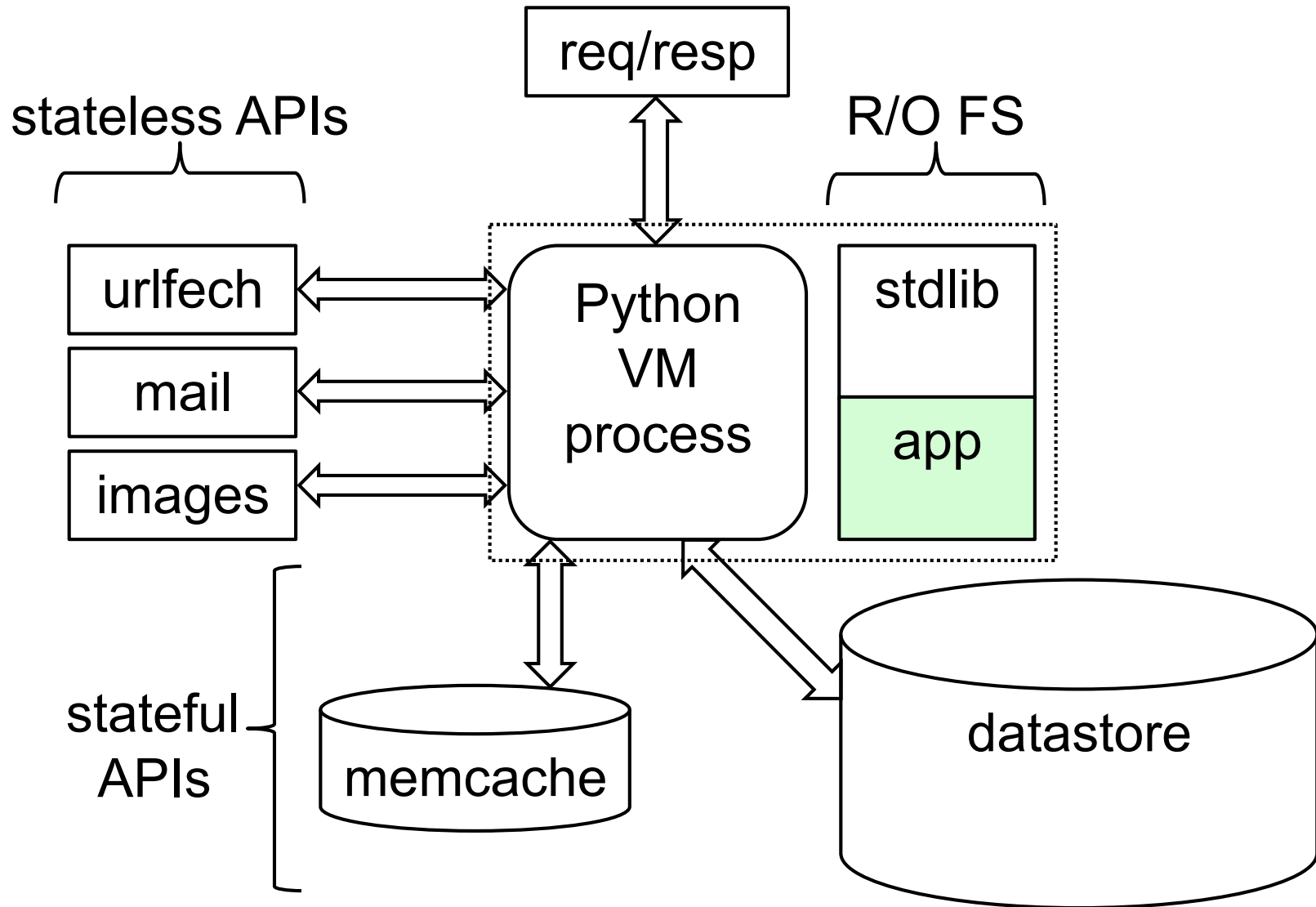
New Web Application Project dialog: Create a Web Application project in the workspace or in an external location. Project name: ExampleWebApp. Package: com.example.myapplication. Location: [Browse].

Software Updates and Add-ons window: Available Software list includes Google Update Site for Eclipse 3.4, Google Plugin for Eclipse 3.4, Google App Engine Java SDK 1.2.0, Google Web Toolkit SDK 1.6.4.

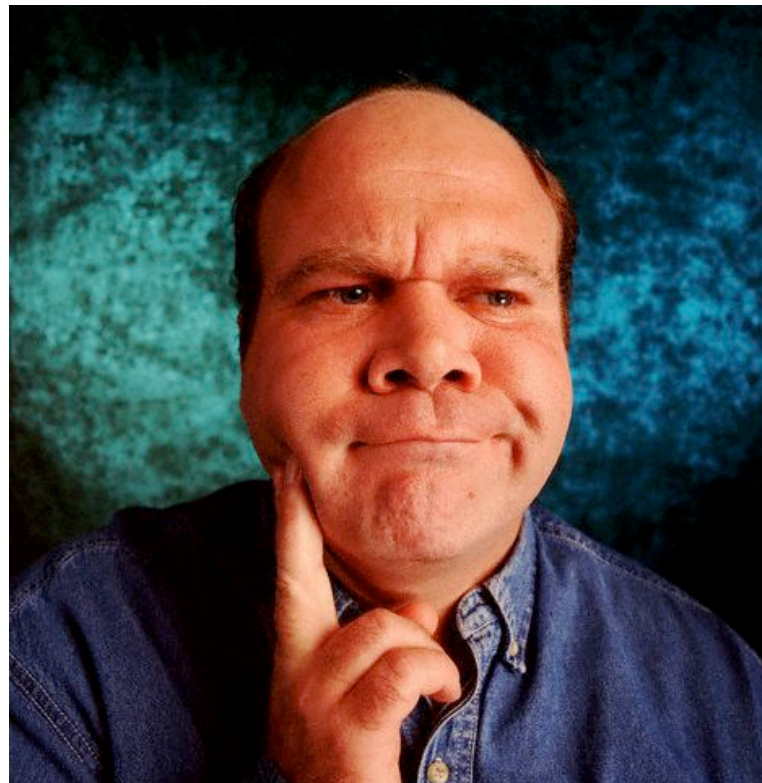
Run Configurations dialog (Web Application): Name: MyApp. URL: MyApp.html. Compiler & Shell: JUnit. Output style: Deflated.

Run Configurations dialog (Web Application): Name: MyApp. Available Modules: MyApp : com.example.myapplication.

Arquitetura



Dúvidas ?



Hello World ?

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