

A Web Based AppEngine IDE

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Motivation

Google Web Toolkit

Javascript Editor with JSNI

GIT SCM with JGit

AppEngine Integration

HTML5

Google Web Toolkit

- Built with Google Web Toolkit (GWT)
- Client-Server application
- Client Side text editor with offline ability
- Server Side file management on EC2 instance
- Communication with GWT RPC
- Files wrapped and serialized

JavaScript Text Editor

- Why reinvent the wheel?
- EditArea - JavaScript editor for source code
- GWT JavaScript integration with JSNI
- Access JavaScript functions from Java
 - Wrap JavaScript in Java methods
- Call Java methods from JavaScript
 - Assign Java method to public JavaScript variable

GIT SCM with JGit

- Distributed Version Control System
- Jgit GIT API (built for Eclipse EGIT plugin)
- Integration with GitHub or other central server
- Clone allows Project Templates to be built
- GIT run from Server Side
- Commit checkpoints locally and push to remote
- No GIT HTML5 FileSystem Implementation.. Yet

AppEngine Integration

- One click deploy of Python AppEngine Apps
- Deploy with Python Scripts on EC2 instance
- **Call python scripts from java:**

```
Runtime r = Runtime.getRuntime();  
Process p = r.exec("python2.5  
/AppEngine/appcfg.py update" +  
projectDirectory);  
p.waitFor();
```

HTML5

- Offline Development with HTML FileSystem
 - Create a sandboxed filesystem
 - Sync to Server when connectivity restored
 - GWT bindings created in “Gwt-fileSystem” library
- HTML5 Storage
 - Key-Value strings for GIT URLs and Project Roots
 - Supported since GWT2.3
- TODO!