Abstract

This paperwork proposes the implementation of a new cloud service IDEaaS (Integrated Development Environment as a Service) to become part of the existing core services. The development of an IDE environment fully supporting Google Cloud Python SDK (Software Development Kit) on the cloud infrastructure is the primary focus of this work. The objective is in fulfilling the need to have a development environment totally independent from personal desktop environments as part of the cloud core services. The paper work also addresses how this migration could become part of the rest of cloud infrastructures provided from Microsoft, Amazon and any other cloud investors in the market. This may be part of the services and business models adopted from the major existing Cloud providers as well as new entries in this important emerging technology. Two new and important cloud application business models derive from the IDEaaS: PaygoC (Pay as you go Coding) and ODC (On Demand Coding). This paper work is going to demonstrate their feasibility as well as unfold their benefits.
3. Amazon Web Services: https://en.wikipedia.org/wiki/Amazon_Web_Services
5. CA. Codeanywhere https://codeanywhere.net/
7. CLOUDFORGE. CloudForge http://cloudforge.com/
8. CODERUN. CodeRun: http://www.coderun.com/ide/
9. CODEPLEX. CodePlex https://www.codeplex.com/
10. COMPILR. Compilr http://compilr.com/
11. Condevy: https://codenvy.com/
12. CREATELY. Creately http://creately.com
16. GAE Launcher as PaaS Application: http://gaelauncher.appspot.com/
17. GIT. Git https://git-scm.com
18. GITLAB. GitLab https://about.gitlab.com
22. JAVAWISE: http://www.javawide.org
24. JSFIDDLE. jsFiddle https://jsfiddle.net
27. OAuth2 Python API: https://developers.google.com/api-client-library/python/auth/web-app
31. STACKDRIVER. StackDriver: https://cloud.google.com/debugger/

**Index Terms**

Computer Science Distributed Systems

**Keywords**

IDE as a Service, Cloud SDK, Cloud providers, Pay as you go Coding, On Demand Coding.