RESEARCH ARTICLE

Enhancing Interaction between Smartphones and Web Services on Cloud for Improved Bandwidth and Latency

Mandeep Singh[1], Kanwalvir Singh Dhindsa[2]
[1]Assistant Professor, Chandigarh Engineering College, Landran, India
[2]Associate Professor, Baba Banda Singh Bahadur Engineering College, India

[1] mandeepsingh22@yahoo.com; [2] kdhindsa@gmail.com

Abstract— As cellular network infrastructures are improving day by day; they are becoming the ideal clients to access the any Web resources, especially Internet Based Services. However, Smartphones have certain limitations in connecting smartphone based devices to existing Internet based Services. This paper mainly focuses on focuses on the following limitations: connection loss, bandwidth, latency, and limited resources. This paper implements a platform independent architecture for connecting smartphones to the existing Internet based Services. The architecture includes a cross platform design of smartphone based service client and a middleware for increasing the interaction between mobile clients and Internet based Web Services. The architecture can be deployed on Cloud Platforms, like CloudSim and Google App Engine to enhance the scalability and reliability.

Key Terms: - Smartphones; CloudSim; XML; PHP; Apache; Application Server; Recess PHP Platform; Representational State Transfer; RRJSON

Full Text: http://www.ijcsmc.com/docs/papers/April2013/V2I4201324.pdf