V-Synch: Rendering Distance a No-issue with the New Feature of Video Synchronization in Existing Multimedia Platforms

Rashmi Tiwari (tiwarirashmi042@gmail.com)¹, Subarna Shakya²

Abstract

Social media are computer mediated technologies that allow creating and sharing of information idea, career interests and other forms of expression via communities and networks. They introduce substantial and pervasive changes to communication between businesses, organizations, communities and individuals. Various features are being introduced in this field with the objective to make it more attractive to users.

"V-Synch" is aimed at introducing features like video and sketch pad synchronization to develop a full- fledged app that also has the current popular features like internet call and chat. We intend to make an android application in which users can always stay connected through multiple platform synchronization (watch the video and use sketch pad in synchronized way in real time) although they are distance apart. All the devices connected to the group can take control of video playback. When any user of that group starts, pauses, or performs specific action on a video, the state of that video is synchronized to all other connected devices in real time. The elements drawn on sketch pad are also shown live in real time to everyone connected to the group. NTP algorithm is used to synchronize all participating devices to within a few milliseconds of Coordinated Universal Time (UTC). The synchronization is correct when both the incoming and outgoing routes between the client and the server have symmetrical nominal delay. V-Synch could be very much beneficial to students for group study, long distance friends to hang out together and Serve a great deal in case of tele-education.

Keywords: Android app, NTP algorithm, Symmetrical Nominal delay

¹ Advanced College of Engineering and Management, Nepal.

² Department of Electronics and Computer, Pulchowk Campus, IOE, Tribhuvan University, Nepal.