Abstract

Synchronization LMS is the best solution to share course material compared to copy-dump-upload material procedure or using single LMS method which is accessed by many institutions. That is because updating synchronization is scheduled, personal information of students are secured and the problems caused by network bandwidth and communication channels is resolved. There have been many studies that discuss about this LMS synchronization, in order to utilize and update the material in specific courses that have been adopted to be shared by several institutions in several separate locations using local LMS.

Uni-directional synchronization system has been done before, the mechanisms is dump the entire contents of the required tables and distributed to the LMS is requested to synchronize. While the process to updating the learning materials is done by looking for differences and the differences are being distributed to the LMS that has synchronized. In the operating procedure this system is run manually through the terminal linux. Synchronization system has ever done is considered less effective, because not all institutions want to take the entire course are available. Some institutions just want to take some courses are required and to realize that requirement, the sql dump technique can not be implemented and replaced by XML method as a data transfer medium.

Manual operation from previous synchronization system causes complexity in implementation, therefore in this
discussed application the features will be designed in accordance with user needs which also provides ease of use with other meaning the application running via foreground. This application is designed based on Windows as Operating System this is different from previous system which is based on Linux, the reason is because implementation areas of this application is in Indonesia's universities that mostly use Windows. Performance of these applications depends on the type of network media and the availability of bandwidth used.

Key Words: Learning Management System, Uni-directional synchronization, Moodle.