Implementation of teaching website with decentralized authentication mechanism

張偉政、林仁勇

E-mail: 322066@mail.dyu.edu.tw

ABSTRACT

Online teaching has been one of popular web applications in recent years. The more web applications, the more accounts and passwords need to be remembered. This thesis mainly discusses how to modify a single-LDAP authentication module into a multi-LDAP authentication module for open source teaching platform so as to distinguish different accesses to save expenditures such as costs of labor and system development. This thesis is embodied by modifying the LDAP authentication module of Moodle teaching platform. Firstly we keep the original LDAP module used by an LDAP host, then reproduce and modify LDAP authentication modules so as to add authentication modules LDAP2, LDAP3, LDAP4. Added authentication modules (LDAP2, LDAP3, LDAP4) only can be used after changing reference to variables such as access authentication, account data synchronization, language pack, etc. Modified LDAP authentication module provides multi-LDAP authentication options for Moodle teaching platform. Single-LDAP authentication module corresponds to single-LDAP host–based authentication, while multi-LDAP authentication module corresponds to multi-LDAP host–based authentication. This can improve the problem of authentication pending due to ou sequencing in case of multi–ou authentication by single-LDAP authentication module, and also shorten the LDAP authentication time.

Keywords: Free software, online learning, LDAP, Moodle, Decentralized Authentication