

## ABSTRACTION

Operating software is divided into three categories, they are Microsoft Windows family, Unix (including FreeBSD and Linux) family, and Mac OS family. Each operating system has different network configuration system. Computer network configuration is commonly client/server-like and only consists of one similar operating system. Nowadays, the network of small or large organization or use more than one different operating system as server or/and desktop to make out the IT needs. The network of inter different operating system needs integration and interoperability, including user management controlling and network services as web server, ftp server, email server, etcetera.

In this final project, the design and the implementation of multi operating system network configuration use client/server concept which is realized into scenario of system physical development, system installation and configuration comprises network services and single sign on configuration at directory services (*Microsoft Active Directory*) along with multi operating network testing.

From testing result and network performance analysis, network quality and difference performance of each operating system in the multi operating system network is obtained. Hence, a computer network with many operating system be able to connect, each operating system can communicate both data communication and information therefore the work efficiency and optimization will be obtained.

**Key word: operating system, client/server, network services, single sign on, directory services.**