



TRƯỜNG ĐẠI HỌC CÔNG NGHỆ THÔNG TIN - ĐHQG-HCM  
**KHOA MẠNG MÁY TÍNH VÀ TRUYỀN THÔNG**

# LINUX SERVER

**QUẢN TRỊ MẠNG VÀ HỆ THỐNG**  
Networks and Systems Administration

MSc. Trần Thị Dung



# Content

- Linux Server overview
- Project

# Linux Server overview

- Ubuntu Server
- Centos
- Kali Linux (Optional for Information Security student)

# Project

- Webserver and DNS
- NAT and DHCP
- File service
- Monitoring Server – Nagios/Zabbix
- Proxy Server - Squid
- Remote access service - OpenVPN



Objective	Basic requirement	Advanced requirement
Student can host a web application and configure the domain name for the Website.	Student can deploy the web application into a Server and configure the DNS for the Website.	Student can deploy more than one web application into one Server and configure the DNS for the Website.



Objective	Basic requirement	Advanced requirement
Server can provide the IP for the client and the client can access the Internet with NAT.	Server can provide the IP for the client and client can access the Internet.	Server can provide the IP for the client and client can access the Internet.

Objective	Basic requirement	Advanced requirement
File server stores and manages the data files so that other computers on the network can access the files. (NFS, SMB, FTP)	The computer's user on the network can access the files.	Server configures the permission to access the files

# Monitoring server – Nagios/Zabbix



Objective	Basic requirement	Advanced requirement
The server can monitor the performance of Windows/Linux machine and the network service	The server can monitor the performance of Windows/Linux machine	The server can monitor the performance of Windows/Linux machine and the network service





Objective	Basic requirement	Advanced requirement
<p>The server can apply the access policy on client:</p> <ul style="list-style-type: none"><li>- Deny the access on some websites</li><li>- Deny the downloading of some file types.</li><li>- Allow the access at the period of time</li></ul>	<p>The client needs to configure the proxy in the system</p>	<p>Squid proxy works as a router, the traffic can redirect to proxy (no need to configure on the client)</p>



Objective	Basic requirement	Advanced requirement
The server provides remote access for remote clients.	Remote users can access network resources (access file server) when they connected to the VPN server.	Remote users can access network resources: <ul style="list-style-type: none"><li>- File</li><li>- Remote access to the other computer in the local network using SSH or remote desktop</li></ul>