System Administrator - is an IT expert who manages an organization's network.

- Operating systems
- Application software
- Software troubleshooting
- Network management
- Hardware

- Database Administrator
- Network Administrator
- Security Administrator

- Microsoft Certified Professional (MCP)
- Red Hat Certification Programs (RHCP)
- Cisco Certified Network Associate (CCNA)
- Sun Certified Network Administrator (SCNA)
- A+ (CompTIA)
- N+ (CompTIA)

Windows Server - is a line of operating systems that Microsoft specifically creates for use on a server.
Servers - are extremely powerful machines that are designed to run constantly and provide resources for other computers.

Active Directory - user management service that allows a server to act as a domain controller.
Dynamic Host Configuration Protocol(DHCP) - protocol that lets a server automatically assign IP addresses to all devices on the network.
File and Storage - Having a file server for your company is another common use. This allows you to keep important data in a central location and set permissions to control who can access which files.
Print Service - Setting up a print server allows you to easily map printers to computers and reduce redundant work.
Windows Update Services - you can route all workstation updates through that server and configure specific rules for how they should work.

Linux server is a variant of the Linux operating system that is designed to handle more intense storage and operational needs of larger organizations and their software.

LESSON 2

RAID (Redundant Array of Independent Disks) - is a data storage virtualization technology

RAID 0 – Striping system data are split up into blocks that get written across all the drives in the array.

RAID 1 – Mirroring Data are stored twice by writing them to both the data drive (or set of data drives) and a mirror drive (or set of drives).

RAID 5 – Striping with parity The most common secure RAID level. It requires at least 3 drives but can work with up to 16. Data blocks are striped across the drives and on one drive a parity checksum of all the block data is written.

RAID 6 – Stripping with double parity good all-round system that combines efficient storage with excellent security and decent performance.

RAID level 10 – combining RAID 1 & RAID 0 This is a nested or hybrid RAID configuration.

RAID levels 2, 3, 4 and 7 These levels do exist but are not that common (RAID 4 is essentially like RAID 5 but with the parity data always written to the same drive).

Types of RAID

Hardware-based - drives connect to a special RAID controller inserted in a fast PCI-Express (PCI-e) slot in a motherboard
Software-based - configuration is managed by utility software in the operating system, and thus referred to as a software RAID setup

LESSON 3

Two types of IP addresses
Static - Is a number that is assigned to a computer by an Internet service provider (ISP) to be its permanent address on the Internet

Dynamic - The temporary IP address is called a dynamic IP address

Next Lesson will be the next ppt in gclass (Madami eh katamad mag copy paste hehe)