

LESSON NOTES 14

Year/Level: 12      Subjects: Computer Studies

<b>Strand:</b>	Computer and Applications
<b>Sub-strand:</b>	CE 12.1.5 Communications and Networks
<b>Content Learning Outcome:</b>	❖ Organizational network ❖ Network security

Lesson Notes

Organizational Networks

**Internet**

- ❖ Is a global system of interconnected computer network
- ❖ It is not regulated by any authority
- ❖ Thus content in the network is accessible to everyone connected
- ❖ Users - anyone

**Intranet**

- ❖ Is the name given to a private network specific to an organization
- ❖ It is regulated by an organization
- ❖ Thus the content in the network is accessible only to members of organization
- ❖ Users – Employees and managers

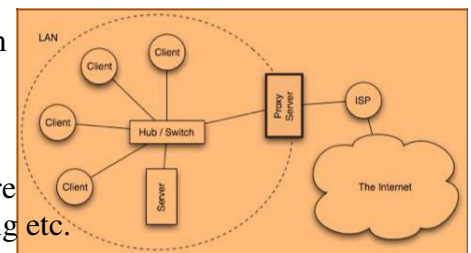
**Extranet**

- ❖ Is a private network that connects more than one organization
- ❖ It is regulated by multiple organization
- ❖ The content in the network is accessible to members of organization and external members with access to network.
- ❖ Users – Business partners

Network Security

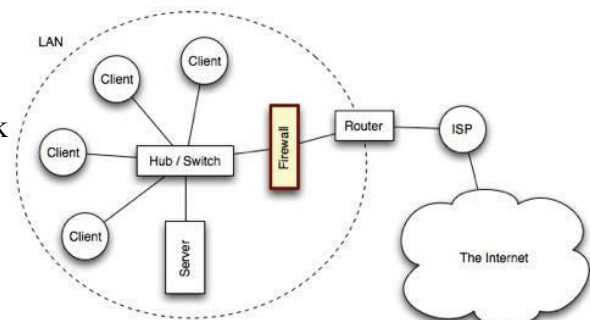
**Proxy server**

- ❖ Is a computer setup to share a resource, usually an Internet connection
- ❖ Other computers can request a web page via the proxy server
- ❖ The proxy server will then get the page using its internet connection, and pass it back to the computer who asked for it.
- ❖ Proxy servers are often used instead of router since additional software can be easily installed on the computer such as anti-virus, web filtering etc.



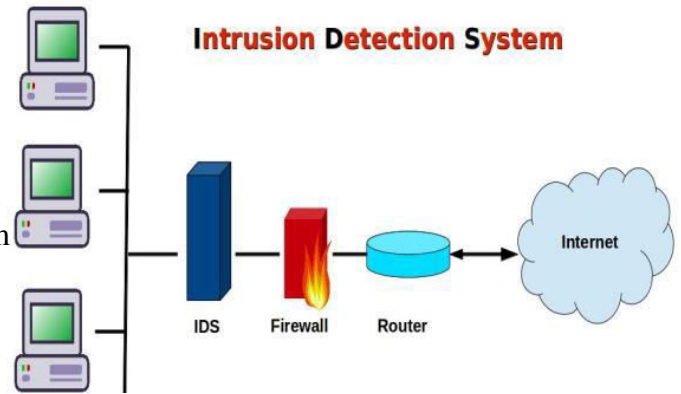
**Firewall**

- ❖ Is a device, or a piece of software that is placed between your computer and the rest of the network (where the hackers are!)



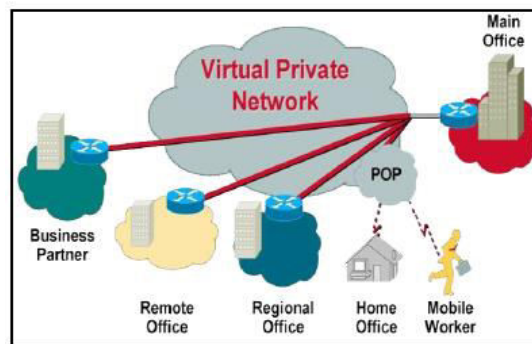
### Intrusion detection systems (IDS)

- ❖ Work with firewalls to inspect all incoming and outgoing network traffic and identifies suspicious patterns that may indicate a network or system attack from someone attempting to break into or compromise a system



### Virtual private networks (VPN)

- ❖ creates a secure private connection between a remote user and an organization's internal network
- ❖ It enables a computer to send and receive data across shared or public networks as if it is directly connected to the private network, while benefiting from the functionality, security and management policies of the private network



### Questions

- 1) Differentiate between **Internet** and **Intranet**?
- 2) What is the purpose of firewall?
- 3) State the long form of VPN and IDS?
- 4) Explain what the diagram illustrate?

