### Group Presentation Guide- Network and Security Option



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Requirements for the Network Design

## Network and Security Option Requirements

- 1. The **design** of the basic network to support the different departments and their customers.
- 2. Explain clearly why the network is required
- 3. Why Network security is needed?
- 4. The benefits for the organisation

# Points to Consider from the Case Study

- •Structure and Organization:
  - The Elite Group operates in a wide range of communication-related sectors
  - EPS structure will be typical of a Printing company:
    - Purchasing and Supply Chain, Design, Production, Marketing and HRM, Financial Accounting and Reporting
- •Type of Customers:
  - mainly creative publishers, supplying retailers

# So what do they need?- Enterprise Network

• WAN- to connect all companies of The Elite Group

#### • Data Center at HQ with:

- Application Servers
- Web Server
- Storage Servers
- Database Servers
- WAN Router



- Connecting each department
- LAN Infrastructure to include:
  - Servers
  - Workstations
  - Switches
  - Routers
  - etc



# LAN's connected to the WAN





Presentation Content and Structure

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### • Title Slide

- Module name
- Presentation Title e.g. Network Design and Security for EPS
- Group Name:
- Group Members: Student Number | First name | Last name
- Artwork

#### Introduction

- Outline purpose of the presentation
- State what will be covered

#### Networking Basics

- Define
- Types of networks- WAN, LAN
- Could include diagrams showing both, could be a generic

### Benefits of using an Enterprise Network to The Elite Group

- List and discuss 5-7 benefits
- <u>https://www.cisco.com/c/en/us/solutions/enterprise-networks/what-is-an-enterprise-network.html#~faqs</u>

#### • Requirements Analysis for EPS Enterprise Network

- List and discuss the key considerations
- Example: to connect EPS to The Elite Group of companies , to provide access to all applications, to facilitate data exchange and file sharing among, connectivity between departments, etc.

#### • Architecture and Topology

- Discuss the use of a Client/Server architecture- multi-tiered
  - Include diagram of an example, could be a generic
- Discuss the use of a Star Topology for LAN
  - Include diagram of an example, could be a generic
- Discuss the use of an Enterprise Networking Architecture, which includes:
  - WAN, LAN's and Data Center for EPS

#### • Design of EPS's Enterprise Network

- State that a WAN is need to connect all companies in The Elite Group
  - Include a diagram showing the design of a WAN
- State that LAN's will be implemented at EPS
  - Include a diagram showing the typical LAN design for EPS

Note: The LAN diagram should be specific to EPS, i.e. should be drawn, not downloaded from the web.

#### IT Infrastructure and Components

- State the hardware and software needed for the WAN and LAN
  - Example: Application Servers, Web Servers, File/Storage server, Workstations, Switches, Routers, Cables, etc.

### Network Security

- List the measures that will be implemented to secure the network against threats
  - Example: firewalls, IPS, Anti-Virus, Access Control, Wireless Security, Web Security

#### Conclusion

• Give an appropriate summary