IS & Security block: Case study

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## **BACKGROUND**

## TechSys, a company specializing in software development and data management, has a robust information system (IS) that continues to evolve. As a System Administrator, your role will be to analyze and improve the architecture of the IS.

## An initial diagram of the IS has been drawn up. However, this diagram is basic and incomplete: it only includes a few workstations (PCs), an Internet connection and a main server. It is essential to correct this diagram and add all the missing elements to faithfully reflect the reality of the IS.

## **Information**

Detailed information on TechSys infrastructure

* + 50 PCs in various departments (Development, Administration, Technical Support).
  + Each department is connected to a VLAN
  + These include network printers, IP telephony, connected surveillance cameras and videoconferencing equipment.
  + Central router
  + Switches with VLANs
  + Firewall
* An AD
* A file server
* Application Server
* Web server
* Mail server
* Backup server
  + Public cloud: Used to store critical backups. The cloud enables rapid recovery in the event of data loss or a major incident.
  + Private cloud: Used to host certain sensitive internal applications.
* VPN

## **DIAGRAM**

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## **OPEN QUESTIONS**

**1 . Describe and draw a diagram of the IS architecture**

**2. What role do VLANs and network equipment (routers, switches) play in the IS structure?**

**3. How do the file server and cloud interact to manage data?**

**4. Which critical services must the company monitor closely to ensure business continuity?**