

Coursera

**Google IT Support Professional Certificate  
MINOR Cert (IV)  
System Administration and IT Infrastructure Services**

Google Career Certificates (Hong Kong), HKFYG scholarships

**Assignment**

**System Administration Consultation**

Receive grade

To Pass 80% or higher

Question 2	Easy (Most)
Question 3	Easy
Question 1	Hard

Name : © AN HUNG SHUN, Nelson

### **Assignment:**

For this writing project, you'll be presented with three scenarios for different companies. You'll be doing the systems administration for each company's IT infrastructure. For each scenario, present improvements to processes based on the company's needs and current restrictions. There's no right or wrong answer to your consultation, but your responses should explain the problem, the improvement, and the rationale behind them. Please write a 200-400 word process review for each company presented to you.

### **Learning Goals:**

1. Use the systems administration concepts you learned in the course to provide technical improvements to current processes.
2. Implement solutions based on an organization's restrictions, like financial resources, number of users, etc.

**Overview:** You'll take what you learned in the System Administration and IT Infrastructure Services course and apply that knowledge to real-world situations.

## Condition Suffers from

2.

Question 2

(Con. X)

### Scenario 2:

You're doing systems administration work for W.D. Widgets. Evaluate their current IT infrastructure needs and limitations, then provide at least five process improvements and rationale behind those improvements. Please write a 200-400 word process review for this consultation. Remember, there's no right or wrong answer, but make sure to provide your reasoning.

#### Sales Company:

W.D. Widgets is a small company that sells widgets. They're mostly made up of salespeople who work with lots of clients. You've taken over as the sole IT person for this company of 80-100 people.

Con. 1 Lack of IT support team

When HR tells you to provision a machine for a new employee, you order the hardware directly from a business vendor. You keep one or two machines in stock, in case of emergency. The users receive a username that you generate for them. You then give them an orientation on how to login when they start. You currently manage all of your machines using Windows Active Directory. The company uses only Windows computers. When a new computer is provisioned, you have to install lots of sales-specific applications manually onto every machine. This takes a few hours of your time for each machine. When someone has an IT-related request, they email you directly to help them.

Con. 2 Server based software is unreliable

↑ Align w/ company need. ↑ Staff shortage Con. 3 IT Iteration Time

Almost all software is kept in-house, meaning that you're responsible for the email server, local machine software, and instant messenger. None of the company's services are kept on the cloud. Not a must, mandatory improvement, but partial update shall be consider.

Con. 3 Backup

Customer data is stored on a single file server. When a new salesperson starts, you also map this file server onto their local machine, so that they can access it like a directory. Whoever creates a folder on this server owns that folder and everything in it. There are no backups to this critical customer data. If a user deletes something, it may be lost for everyone.

The company generates a lot of revenue and is rapidly growing. They're expecting to hire hundreds of new employees in the next year or so, and you may not be able to scale your operations at the pace you're working.

Con. 4 + 3

Permissions and Backup

Con. 1

\* Ticket System for 17 person In Company

\* Ticket system shall be consider

team

## Cognition 2

Note

P.I.

Condition 1 — Lack of IT Support Team

\* Sole person in 80-100 people company, and expect to expand hundred more people.

Solution // Ticket system to fix problems is highly consider.

- (1) • Prioritize every problem and settle down issue with auto-kaban board (eg GitHub service is good approach.) with IT backgrounds and assign to IT team.

Software // No Hire 5-8 peoples + team is basic, when hundred more employees will add to company.

Condition 2 — Bulk installation software on multiple machine for choose to

Solutions // There should be some kind of server side sale-specific application software.

(3) // let the company to install a server version of software, then use the active directory to deploy software on multiple machines.

Limitation // However, make sure the software is not too large and consume lot of server resources to run, retrieval data may cost time.

Condition 3 A - Backup

Storage item in single DB server is very unstable, and dangerous. Any disasters or human being may let data lost forever.

diskbay backup

A clone, auto-clone, RAID-5/cloud or NAS is consider to implement into file system. Mirroring data from single server, to backup server in case of data damage or lost. You can recover from / roll back from mirror image.

- RAID-5 (NAS for tight company culture, everything in-house)
- cloud for more open company culture. (partially in-house)

Solve

(4)

(5)

Cont' Question 2

### Condition ③ B - Permission and Backup

→ Read, write, execute permission should be tightly config.  
to prevent

1 In case user ~~acc~~ accidentally delete Items.

After setting up activity directly, user can be assigned into different user group. For each user group have different file permission. Permissions should be tightly control in IT team.

↑ This also initially preventing user ~~installing malicious software system~~ ~~attacking network~~ have appropriate network access.

Domain Control should also be implement,

Further is also a good way to supervised the security authenticating process and request within a network, safeguarding credential access or deny.

### Optional ④ Inhouse Software

Inhouse software is depend on company culture, it gives software dev. Iteration <sup>changes</sup> more faster, and make sure designed function is aligned w/ company need.

However, have some shortage if the developer team left the company, the skill of these software may become shortage, and they are vulnerable to threat ~~too late~~, because lack of security update when have poor management.