

## THE WIZARDS

1. Design Project 12
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3. Resources Needed for SaaS company:

- a. Cited Sources
- b. Required Network services (Jamel D)

### Windows Server

- i. Active Directory
  1. AD Domain Services Role
  2. AD User accounts
  3. Managing Workstations.
- ii. DNS Server
  1. DNS Server Role
  2. Domain name resolution.
- iii. DHCP Server
  1. DHCP Server Role
- iv. Print server
  1. Print and Document Services Role
- v. Web server
  1. Web Server (IIS) Role
  2. Website
- vi. Database
  1. Transaction Data
  2. Customer Information
- vii. PBX Server
  1. VOIP Phone controller
- viii. Windows Subsystem for Linux
  1. Used to run any services that don't run natively in windows
- ix. Email
  1. Microsoft hosted exchange server.
- x. Ticketing System
  1. Customers submit help tickets on the website.
  2. This system distributes the tickets among the technical support personnel.

- c. Required hardware: (Andrew Vargas)

- i. Router- Cisco Firewall Cisco Firepower 2100 Series
- ii. Switches- Cisco Catalyst 9200 Series
- iii. WAP wireless access point - Cisco Catalyst 9105AX series Access points controlled by the Cisco Catalyst 9800-L Wireless Controller
- iv. Workstations- Dell Inspiron Desktops

- v. VoIP phones (priority)- Cisco IP Phone 7861 Series
- vi. Headsets Cisco Headset Wireless 500 Series
- vii. Windows server hardware- PowerEdge R540 Rack Server
- viii. To-Buy List (Cisco Router- \$1,105, Switches- Cisco Catalyst 9200 Series- \$4,235, WAP wireless access point - Cisco Catalyst 9105AX series Access points controlled by the Cisco Catalyst 9800-L Wireless Controller- \$1,364, Workstations- Dell Inspiron Desktops 1099.00 )
- d. Required Software (alex b.)
  - i. Virus protection
    - 1. Norton
  - ii. Microsoft Enterprise Package
    - 1. Office 365
    - 2. Windows Server 2019
    - 3. MS SQL Server 2019
  - iii. Pbx(phone) software
    - 1. Fusion PBX
  - iv. Technical support/ Call Center
    - 1. Zendesk
  - v. Data protection
    - 1. BitLocker
  - vi. Brain Tree & Paypal for payment processing
- e. To-Buy List ( Norton - \$99.99/year, Microsoft Enterprise package - \$20.00/Month, Pbx software- \$1000/per employee, Zendesk - 199/Year, Bitlocker Professional - \$100 )

#### 4. Notes

- a. Most staff are telephone product support specialists.
- b. Instruction room
  - i. 24 student workstations
  - ii. 2 instructor workstations
- c. 8 technical support
- d. 6 sales staff
- e. 4 staff for multiple functions

**Deliverables** The final paper and presentation will consist of the following:

- I. Restatement and summarization of the business problem addressed
- II. A logical diagram of your designed network, including subnets and servers – with narrative
- III. A physical diagram of your designed network, including routers, switches, firewalls, and servers
- IV. A detail diagram of your server room(s) – with narrative
- V. A manifest of components needed to build the system you designed