SYSTEM ADMINISTRATION

Leeds Professional Resources

JOB DESCRIPTION

About the job

Our client is looking for a System Administrator to join their growing IT team. This position will be responsible for maintaining, upgrading, and managing their software, hardware, and networks.

RESPONSIBLITIES

- Administer server infrastructure within data centers, VMware, and Azure virtual environments, managing setup, configuration, and operations to support organizational needs.
- Monitor system performance, troubleshoot issues, and execute necessary maintenance tasks to prevent downtime.
- Manage network and telecommunications infrastructure, server and storage infrastructure, personal computer systems, printers, and other peripherals to ensure seamless operation.
- Maintain Active Directory infrastructure, managing user accounts, groups, sites, links, Group Policy, and permissions to ensure secure and efficient access control.
- Manage the Office 365 ecosystem, including Exchange Online, One Drive for Business, and Intune.
- Implement and enforce system, network, security, equipment, and user policies to maintain compliance and protect organizational assets.

QUALIFICATIONS

- 4+ years experience.
- Professional certifications are a plus.
- Solid understanding of network infrastructure (LAN, WAN) and system security, including intrusion detection systems and data backup/recovery strategies.

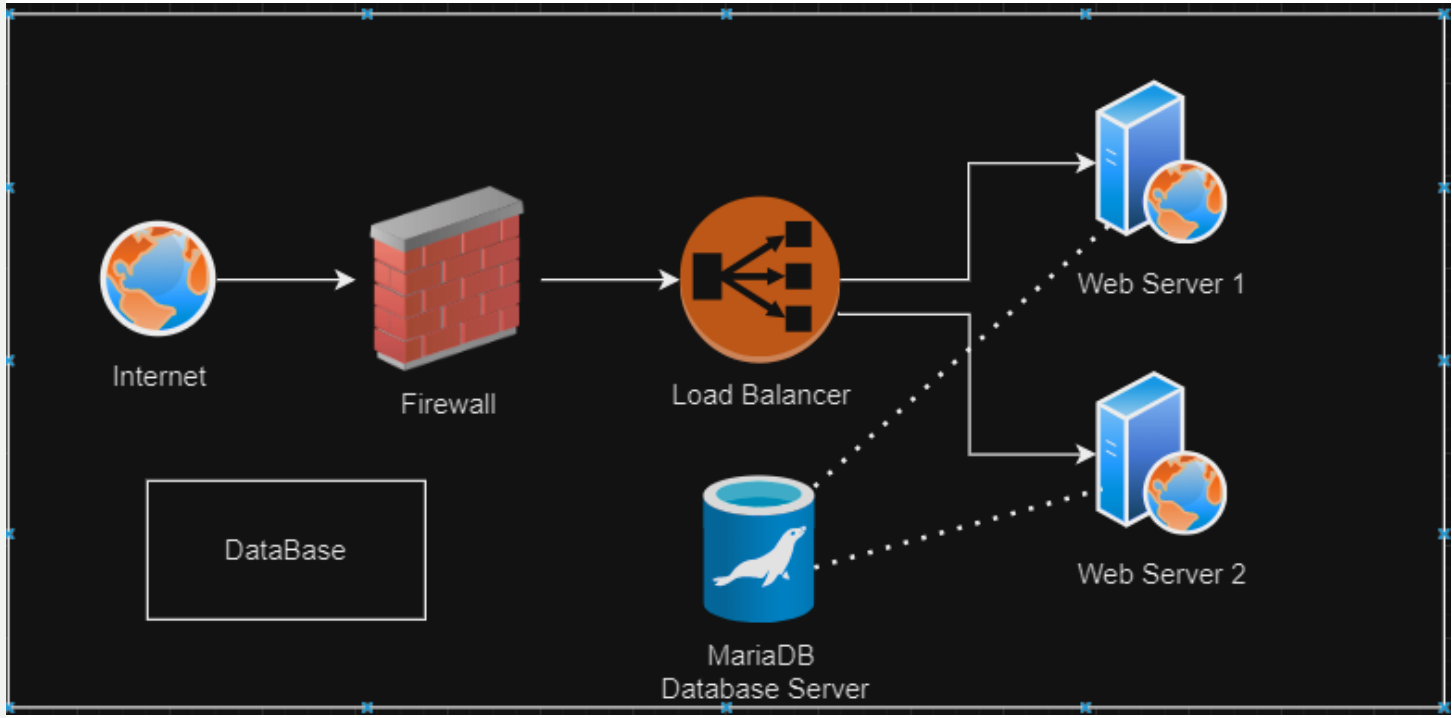
Scope

Mid-sized business

Small elite team

Investment estimates based on rough estimates

Database


Internet
Firewall
Load Balancer
Web Server 1
Web Server 2
DataBase
MariaDB
Database Server

Investment

Hosted Database

- $7,200 to $12,000 annually

Hardware

- $3,600-$7,200

Utility Costs

- $700 to $750

Rough Estimate

- $20,000 to $50,000 per year

Breakdown

Database Cost

- Based on the min/max limits available for mid-sized workloads

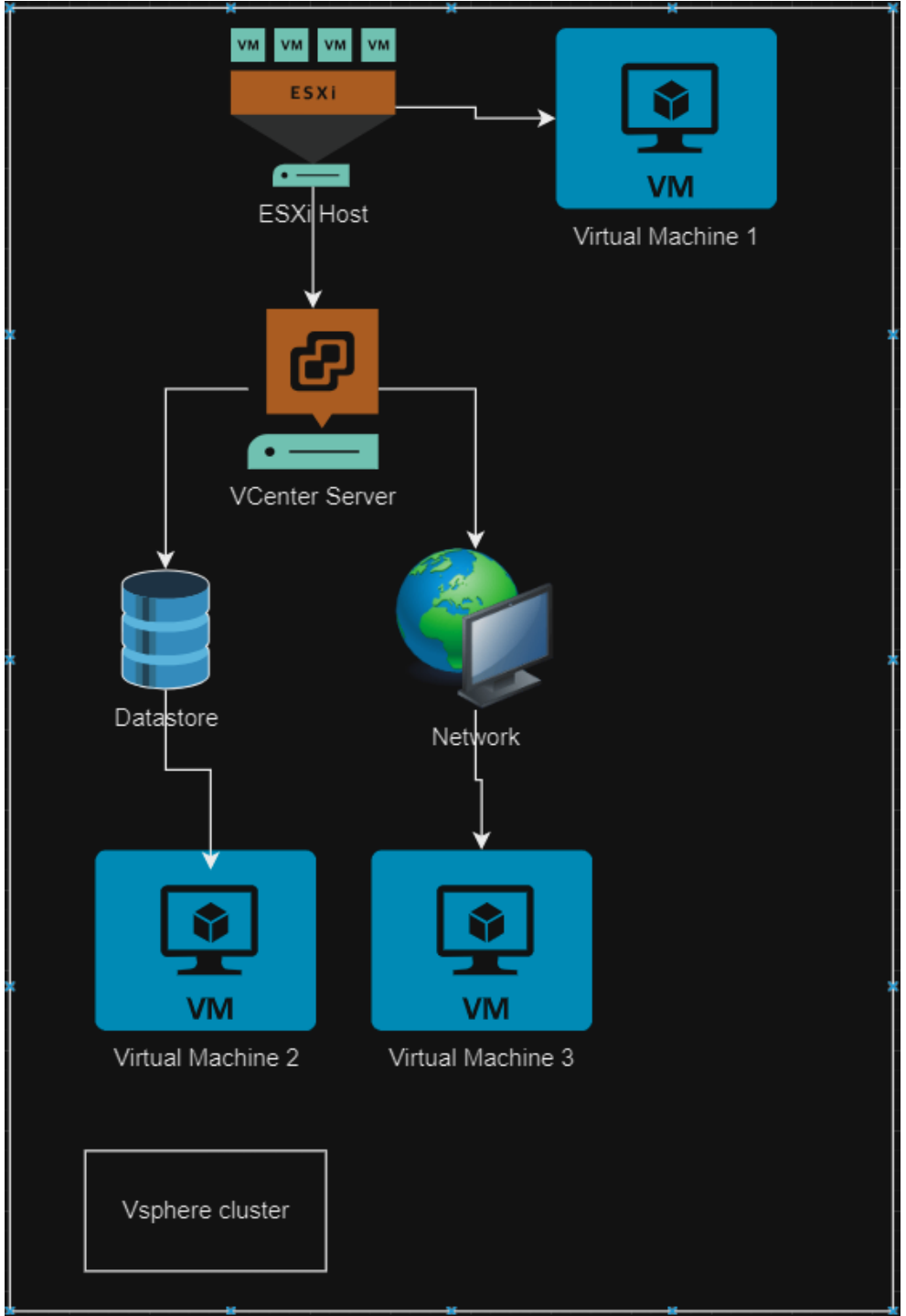
Hardware costs based off of the following configuration:

- 384GB DDR4 RAM
- 2x1TB NVMe storage
- 10Gbps network (private and public)
- 15TB bandwidth
- DDoS protection

Utility Costs

- Based on 6,480-kilowatt usage

VSPHERE CLUSTER



Investment

Operational Costs

- $3,200 to $9,000 annually

Hardware

- $2,000-$5,000 annually

Electricity

- $420.76 annually

Rough Estimate

- $4,000 - $15,000 per year

Breakdown

Licensing Costs

- Based on core license
- VMware Certification

Hardware

- Server Unit: $1,000 to $4,000
- CPU: $900
- Hard Drive: $250
- RAM: $300 for 64GB
- Motherboard: $925
- Power supply: $100

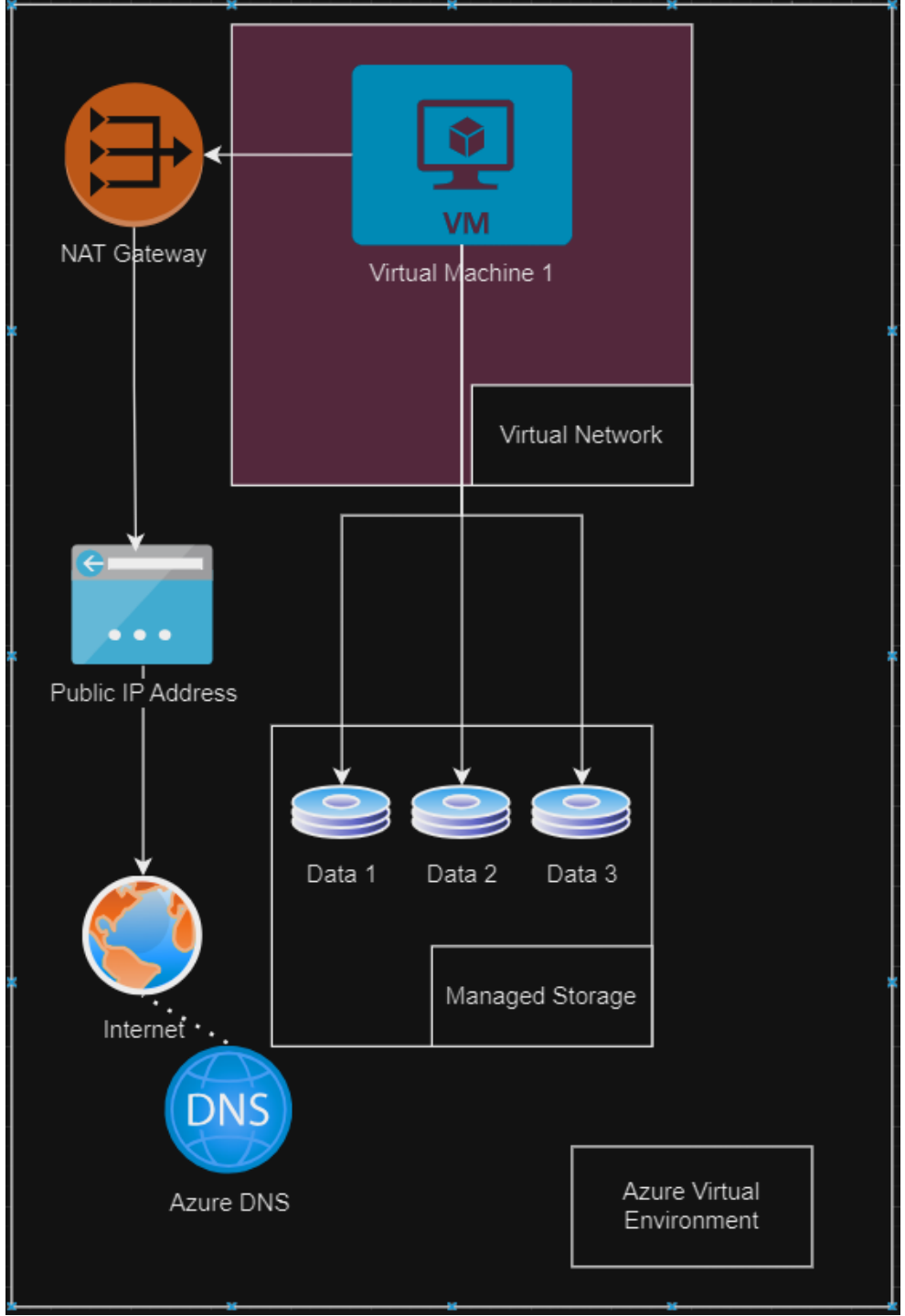
Electricity

- Dependent on scale. 4-server setup

Rough Estimate

- Rough estimate based on initial purchases and maintenance of hardware/license

Azure Virtual Environment



Investment

Licensing Costs

- $840 to $3,364 annually

Hardware

- $5,000 to $6,000 Annually

Rough Estimate

- $12,000 to $100,000 or more per year

Breakdown

Licensing costs

- Based on the Pay-as-You-Go Model for Azure solutions

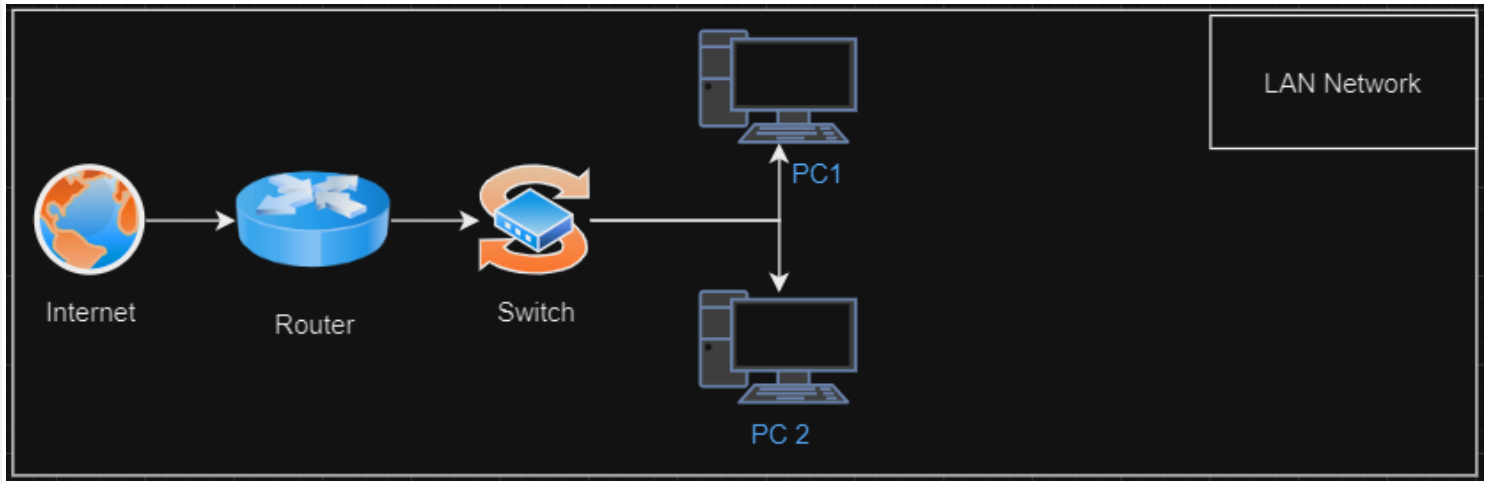
Hardware

- Based on the initial investment
- PCs: $3,000 to $5,000
- Router: $100
- Switch:$100 to $1,000

Rough Estimate

- Estimate based on 5 to 20 VMs in Azure Cloud

LAN NETWORK



Investment

License Costs

- $500-1,200 annually

Hardware

- $4,000 to $10,000 annually

Rough Estimate

- $20,000 to $100,000 or more per year

Breakdown

License Costs

- Based on the licensing costs for Microsoft 365 Suite. Most Network monitoring tools like Lansweeper and Nmap are free.

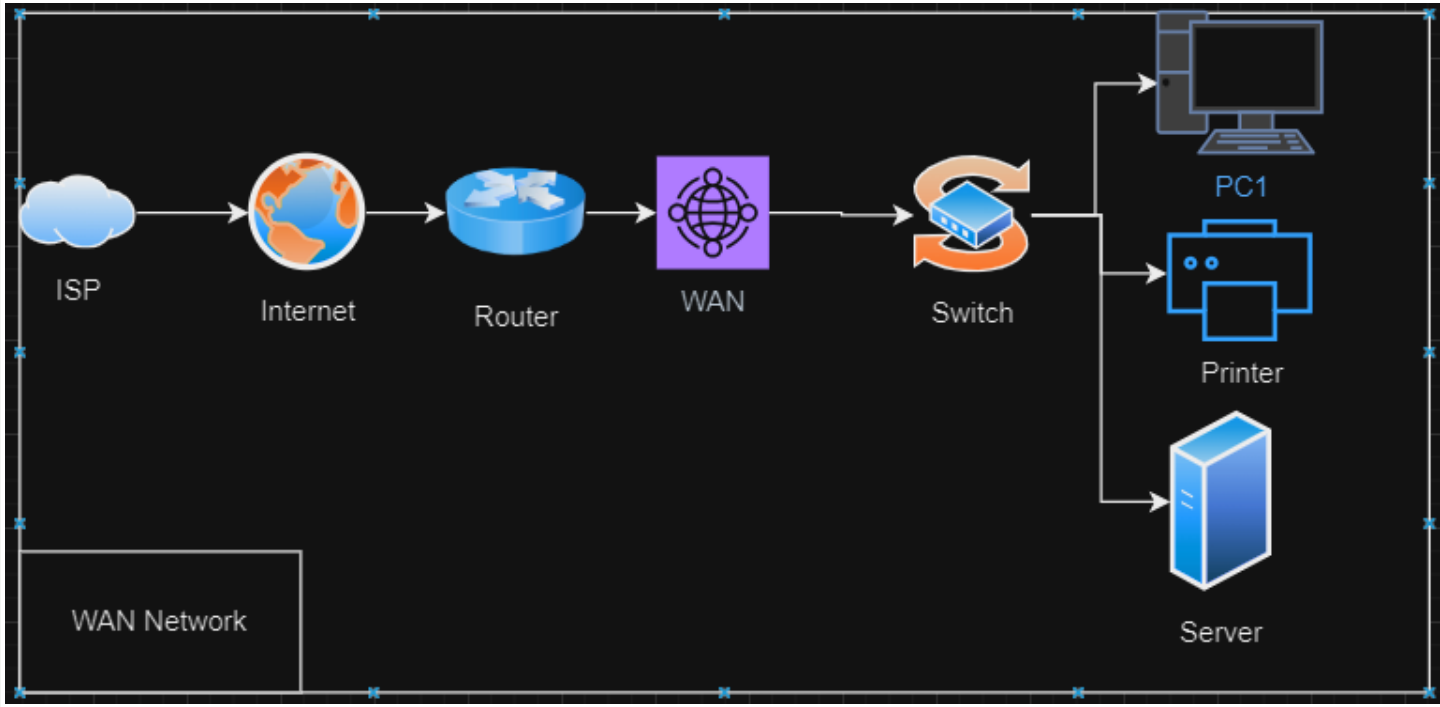
Hardware

- Based on the cost of PCs, routers, Switches, and Internet Service Providers

Rough Estimate

- Security and Compliance Audits

WAN NETWORK


ISP
Internet
Router
WAN
Switch
PC1
Printer
Server
WAN Network

Investment

Network Infrastructure Costs

- $14,380 to $100,000 or more annually

Operational Costs

- $1,414,000 or more annually

Breakdown

Network Infrastructure Costs

- Based on AWS Cloud WAN Models.
- Prices vary by location size and geographical location
- Based on traditional MPLS-based WAN

Operational Costs

- Based on the software licensing, renewals, and Data security and compliance audits

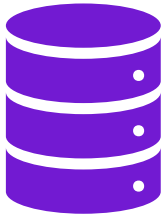
Challenges

RISING SECURITY THREATS

CONTINUOUS FLOW OF NEW AND BETTER TECHNOLOGIES

OBTAINING PROPER CERTIFICATION.

Potential Solutions



Upgrading the Virtual Environment and database to the AWS suite

Employing better monitoring tools

Utilizing security policies for better security