Rebuilding NIMBUS' IT Infrastructure

Presented by:

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Project Background

Nimbus is an emerging startup headquartered in Green Bay, Wisconsin that specializes in IoT manufacturing.

Business model focuses on serving both Business and Consumer Markets (B2C and B2B). Our customer base has been steadily growing directly fostering business growth that has been supported using our Technology platform.

Nimbus traditionally ran its infrastructure out of an On-Premise Data Center until a most recent incident.

Project Background
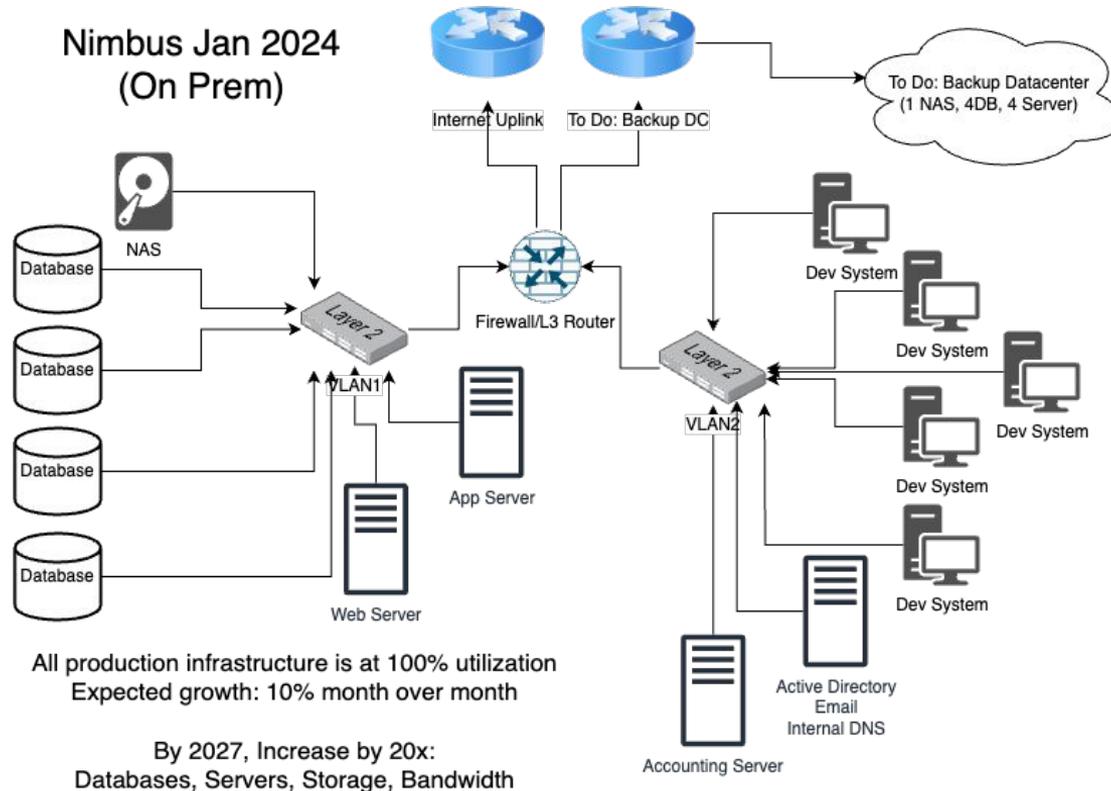
Project Background

As a startup with limited resources, the company deprioritized building a disaster recovery site.

Unfortunately, what this means is that:

- Business operations have grinded to a halt i.e. significant loss of revenue

- Investors are unhappy because growth plans are stalled

- Loss of customer confidence

- IT team is in a time crunch to rebuild the IT infrastructure in the shortest possible time
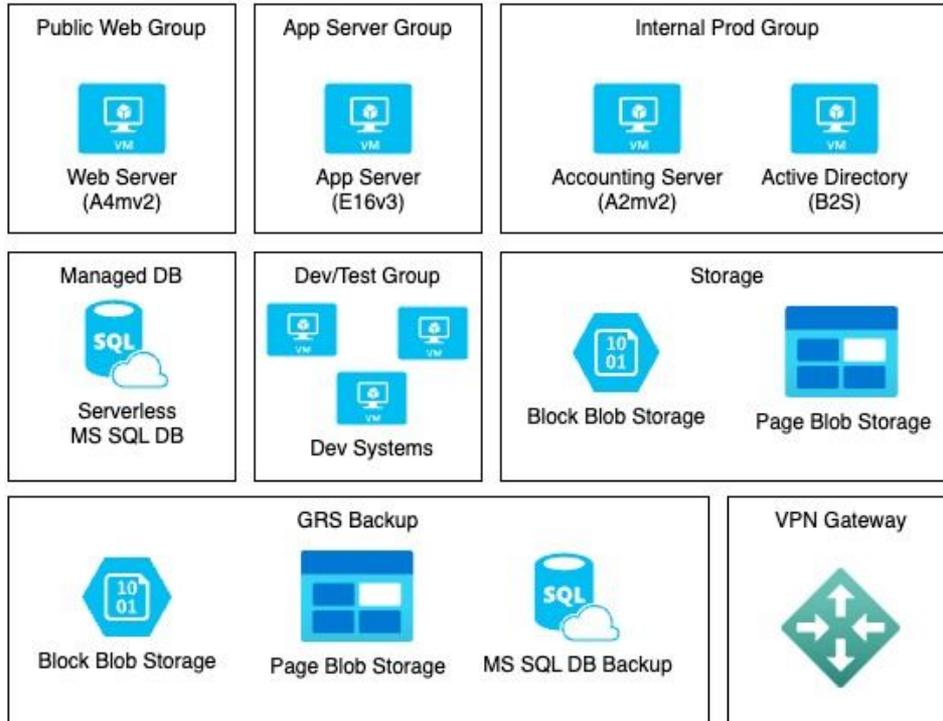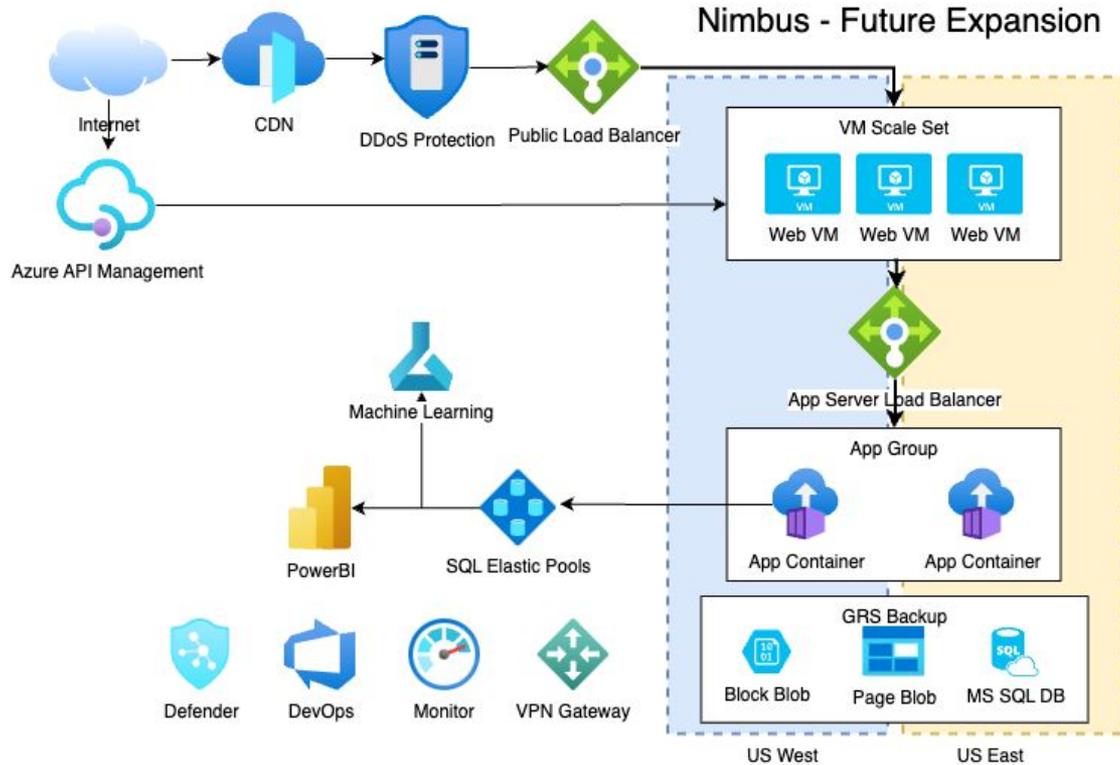
Previous NIMBUS Architecture

Nimbus Jan 2024
(On Prem)

Internet Uplink

To Do: Backup DC

To Do: Backup Datacenter
(1 NAS, 4DB, 4 Server)

NAS

Database

Database

Database

Database

Layer 2

VLAN1

Firewall/L3 Router

Layer 2

VLAN2

App Server

Web Server

Dev System

Dev System

Dev System

Dev System

Dev System

Active Directory
Email
Internal DNS

Accounting Server

All production infrastructure is at 100% utilization
Expected growth: 10% month over month

By 2027, Increase by 20x:
Databases, Servers, Storage, Bandwidth

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Proposed Solution - Immediate

Nimbus Azure Migration

Public Web Group
Web Server (A4mv2)

App Server Group
App Server (E16v3)

Internal Prod Group
Accounting Server (A2mv2)
Active Directory (B2S)

Managed DB
Serverless MS SQL DB

Dev/Test Group
Dev Systems

Storage
Block Blob Storage
Page Blob Storage

GRS Backup
Block Blob Storage
Page Blob Storage
MS SQL DB Backup

VPN Gateway

Proposed Solution - Future

Financial Analysis

Projected 5-year spend for Azure Infrastructure

Category	Cost
Compute (Inclusive hardware, software, electricity and database)	$1,660,207.20
Data Center	$0.00
Networking	$92,160.00
Storage and Backup	$1,749,597.00
IT Labor	$80,500.00
Total	**$3,582,464.20**

This cost comparison results in a calculated savings of approximately 62.72% ((1 - (Cost of Azure solution / Cost of on-premises solution)) × 100%) when choosing Azure over maintaining and expanding an on-premises data center.

Projected 5-year spend for on-premises infrastructure

Category	Cost
Hardware	$961,136.00
Software	$938,136.00
Electricity	$178,570.00
Database Licenses	$5,117,760.00
Data Center	$933,731.70
Networking	$1,064,990.92
Storage, Backup	$133,760.00
IT Labor	$280,600.00
Total	**$9,608,684.62**

Expected Benefits

- **Accelerated Recovery**
  - Concurrent setup of primary & DR sites in 4 weeks
  - Minimizes downtime, further revenue loss & customer erosion

- **Cost Optimization**
  - Leverage existing Windows & SQL Server licenses
  - Pay-as-you-go model, no upfront costs
  - Resource optimization tools to reduce operational costs

- **Seamless Scalability**
  - Accommodate projected 20x growth over 3 years
  - Eliminate capacity constraints & bottlenecks

- **Disaster Recovery & Business Continuity**
  - Robust security, compliance & availability guarantees
  - Best-in-class backup, recovery & failover services

- **Enhanced Architecture**
  - DDoS protection, service monitoring, load balancing
  - Improved security, reliability, high availability, fault tolerance
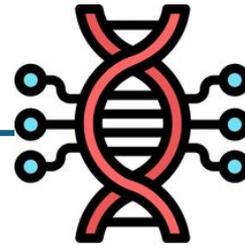
Request for Funds

Our proposed approach eliminates the need for an upfront capital expenditure of up to $35,000 and prevents a further delay that would be caused by hardware procurement and shipping.

Considering that the business is experiencing difficulties with cash flow, this solution also provides the cost flexibility required to solve this critical problem.

To this end, we request your consideration and approval of **a first year budget of $104,937.84**, paid out **monthly at $8,744.82**, to establish and scale our cloud infrastructure on Azure.

Time is of the essence and a speedy approval will mean immediate commencement of recovery efforts.

Thanks for listening!

Questions?