



# Introduction to Azure 2022

30<sup>th</sup> Mar 2022

Thank you for joining – we'll be starting soon



**the I.T. team**<sup>TM</sup>  
Maintaining the health of your I.T. system

IN PARTNERSHIP WITH  
**techsoup**

# WHAT WE WILL COVER TODAY?

- What is Microsoft Azure?
- How can Azure help my organisation?
- Will I still need a local server?
- Examples of how other NFPs have used Azure
- How much does Azure cost
- How do I access the Grant
- Ongoing management of Azure
- Build Examples and Case Study
- Implementation considerations such as network, and routers



# About the I.T. team

- Formed in 2011
- Office 365 since its inception
- Managed Services/IT support
- A wide range of IT services
- Major NFP base of customers
- Providing IT services to NZ & Australian organisations



**the I.T. team<sup>TM</sup>**

Maintaining the health of your I.T. system

# What is Microsoft Azure

Azure is a 'Cloud Computing Platform'

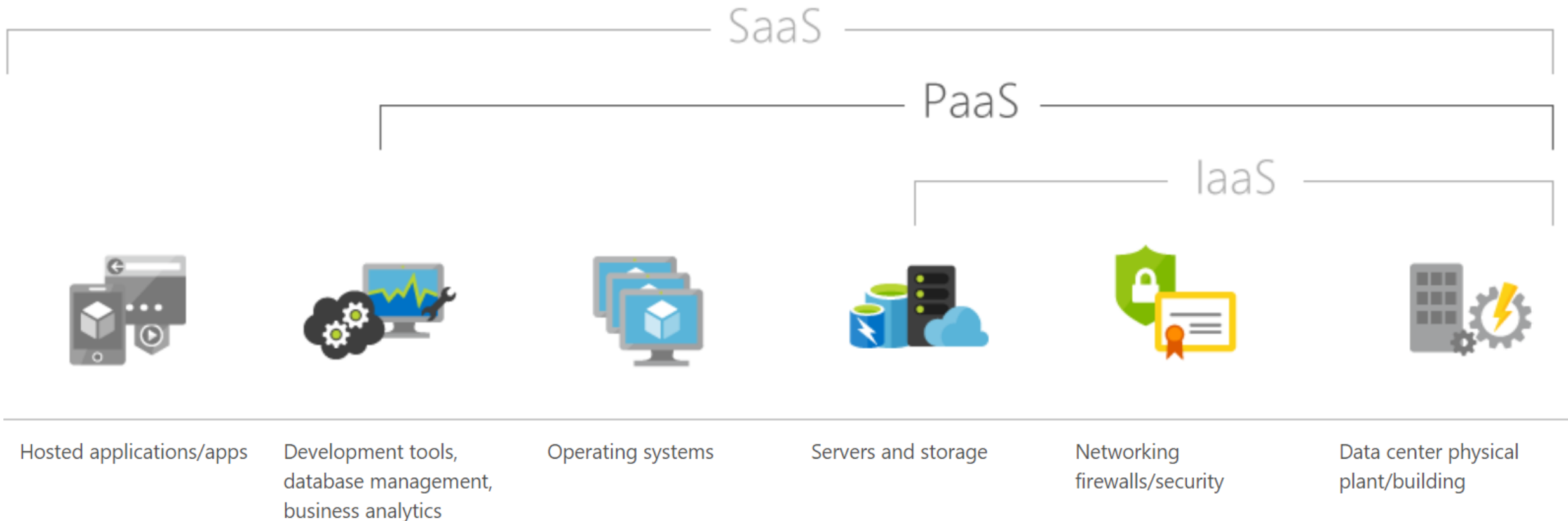
It is a collection of services that organisations can utilise to improve their IT strategy

It provides a range of services, including compute, storage and networking for every use case



# SaaS, PaaS, & IaaS

- Software as a Service
- Platform as a Service
- Infrastructure as a Service

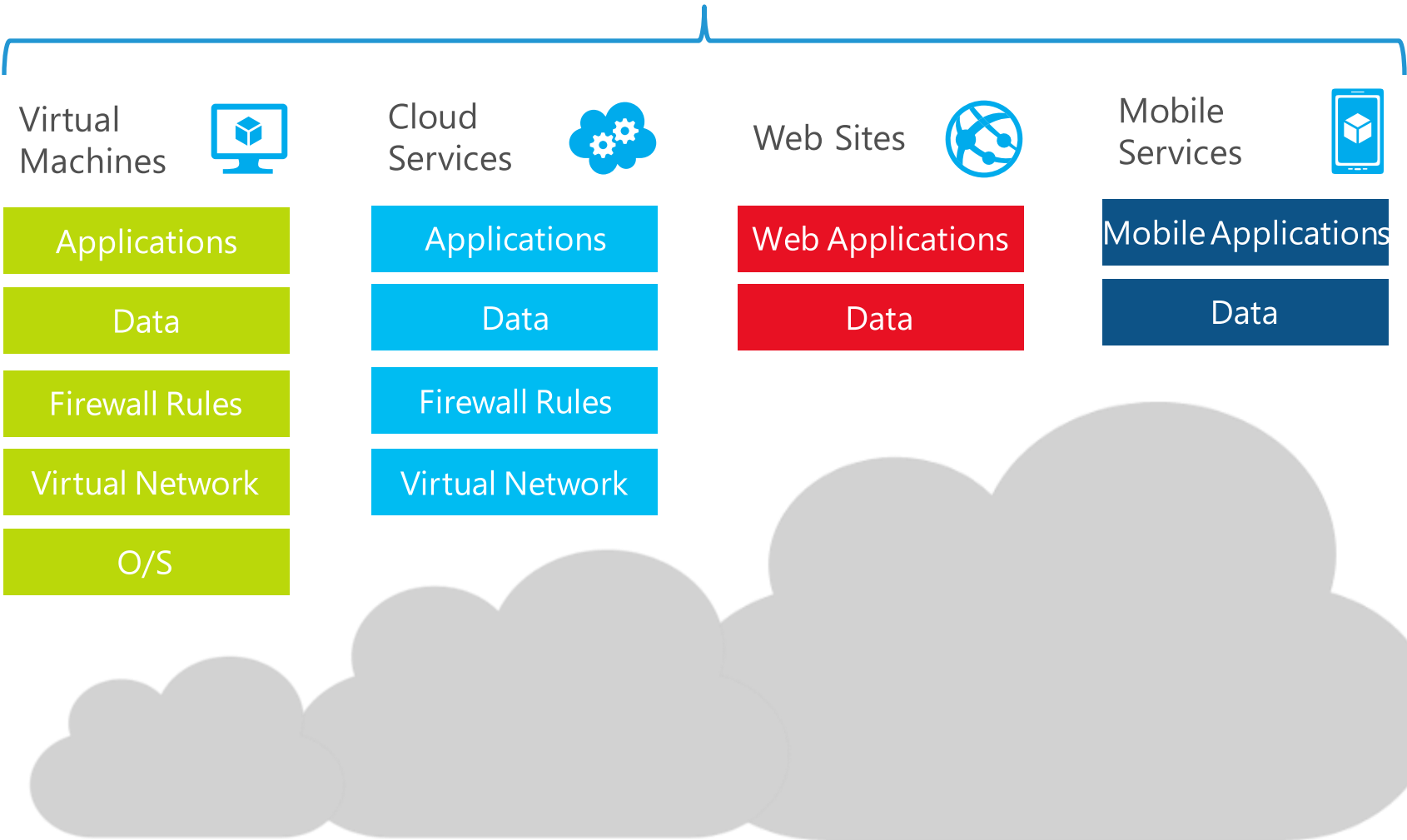


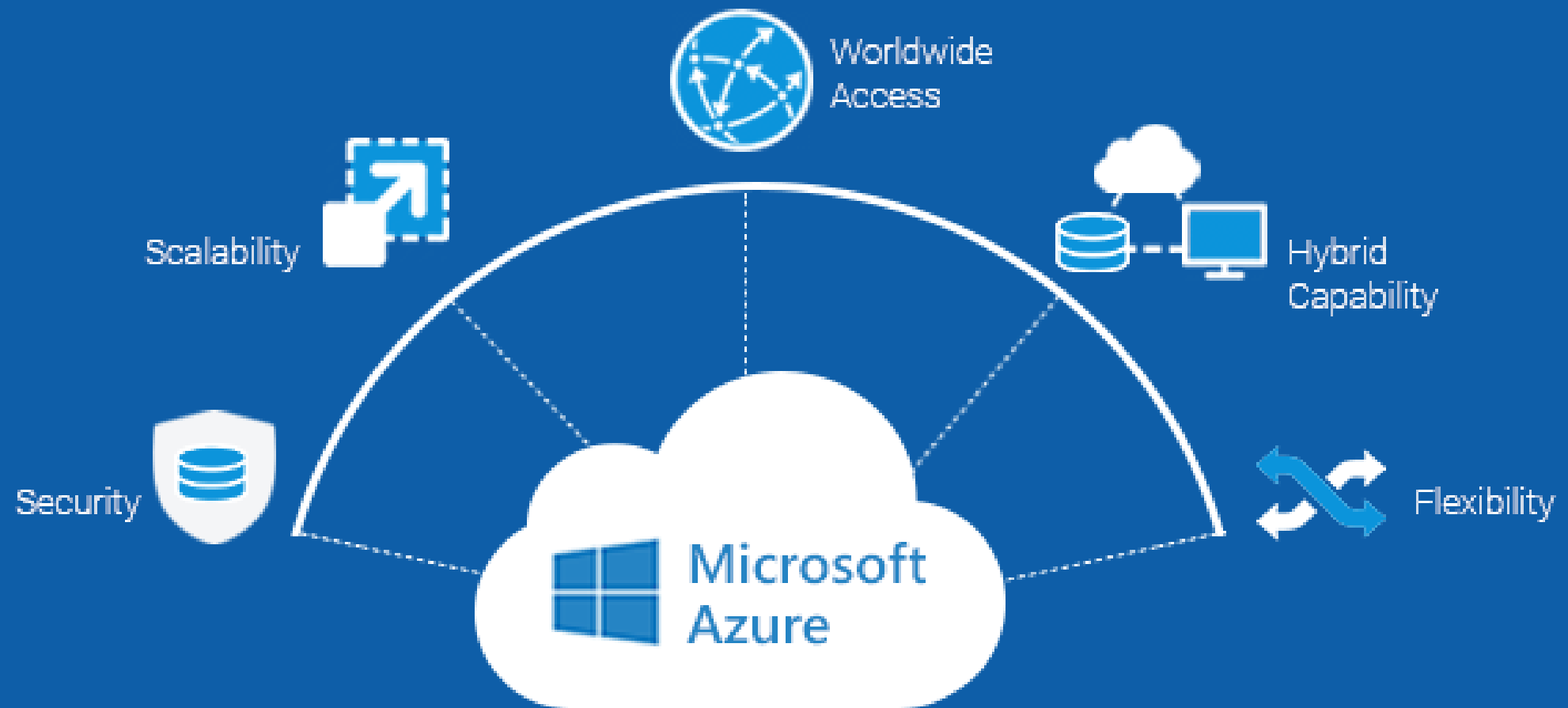
Traditional Onsite  
Server



- Applications
- Data
- Firewall
- Network
- O/S
- Virtualization
- Hardware

Microsoft Azure





# 60+ Azure Regions across the globe

Azure  
footprint





# Common Uses for NGO/NFP's

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Domain Controller

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File Server

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RDS Server (+ DC/File Server/s)

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Azure Site Recovery – Backup Service

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Azure Backup

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Application Server

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Phone Server

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Website hosting

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Azure Files

# How much does it cost?



Consumption Based  
(minute)



Predictable Billing  
monthly, but not  
fixed



Reserved Instances



Bandwidth, Network  
Costs need to be  
factored in



Generally cheaper  
than localized  
Datacentre providers



Often more  
economical than On  
Premise Hardware

# Why would I still need a Local Server?

- Hybrid Mode
- Comfort with Local
- Internet Performance
- Large local/centralised workforce
- Significant Storage Requirements
- Core Application Situation
- Designer/Architectural Firms
- Legacy Systems & Licensing Costs
- CAPEX Preference

# Ongoing Management



Requires IT assistance ongoing



No physical maintenance



Servers/Services require monitoring & maintenance



Backups need to be monitored/tested periodically



Admin & finance need to monitor costs



New opportunities will arise

# Infrastructure as a Service (IaaS)



Most common Azure function



Preset plans to choose from (can't set exactly the resources you require)



100's of different types of Plans



High performance options including for Graphic Design/CAD



'Infrastructure as a Service' (IaaS)

<b>3CX basic (1-20 ext)</b>	<b>Pay as you go</b>	<b>1 year reserve</b>	<b>3 year</b>
<b>B1S Plan (1CPU, 1GB RAM)</b>	\$14.57	\$8.56	\$5.50
HDD standard SSD 32gb	\$4.93	\$4.93	\$4.93
IP static	\$3.97	\$3.97	\$3.97
backup	\$8.50	\$8.50	\$8.50
total monthly	\$31.97	\$25.96	\$22.90

- Basic Server – Running Linux
- Almost as low spec as possible

# Phone Server – 3CX

<b>DC BASIC</b>	<b>Pay as you go</b>	<b>1 year reserve</b>	<b>3 year</b>
<b>B2S Plan (2CPU, 4GB RAM)</b>	\$67.11	\$42.85	\$30.79
HDD standard SSD 64gb for OS(e6)	\$9.87	\$9.87	\$9.87
HDD standard SSD 8gb for AD(e2)	\$1.23	\$1.23	\$1.23
Traffic Out	\$1.00	\$1.00	\$1.00
Backup	\$8.50	\$8.50	\$8.50
Total monthly	\$87.71	\$63.45	\$51.39

- Simple Domain Controller only
- Can probably run a basic app, integration or some file hosting if required

# Domain Controller

DC Basic + File Server	Pay as you go	1 year reserve	3 year
<b>B2MS Plan</b> (2CPU, 8GB RAM)	\$125.82	\$77.00	\$52.71
HDD standard SSD 64gb for OS(e6)	\$9.87	\$9.87	\$9.87
HDD standard SSD 8gb for AD(e2)	\$1.23	\$1.23	\$1.23
HDD standard HDD 512GB (data)	\$52.64	\$52.64	\$52.64
Snapshots of OS SSD (up to 80GB)	\$15.97	\$15.97	\$15.97
Traffic Out	\$20.00	\$20.00	\$20.00
backup (for all disks)	\$33.72	\$33.72	\$33.72
<i>total monthly</i>	<i>\$259.25</i>	<i>\$210.43</i>	<i>\$186.14</i>

- Basic DC Server + File Server (high performance disks).
- Haven't separated Domain Controller + File Server functions (technically not recommended by Migration).

## Domain Controller + File Server



DC basic + File Server	Pay as you go	1 year reserve	3 year
<b>B2MS Plan</b> (2CPU, 8GB RAM)	\$125.82	\$77.00	\$52.71
HDD standard SSD 64gb for OS(e6)	\$9.87	\$9.87	\$9.87
HDD standard SSD 8gb for AD(e2)	\$1.23	\$1.23	\$1.23
HDD standard HDD 512GB (data)	\$52.64	\$52.64	\$52.64
Snapshots of OS SSD (up to 80GB)	\$15.97	\$15.97	\$15.97
<b>B4MS Plan</b> (4CPU, 16GB RAM)	\$250.54	\$154.11	\$105.44
HDD premium SSD 64gb for OS(p6)	\$15.43	\$9.87	\$9.87
HDD standard SSD 256gb for data	\$39.48	\$39.48	\$39.48
Snapshots of OS SSD (up to 80GB)	\$15.97	\$15.97	\$15.97
Traffic Out	\$20.00	\$20.00	\$20.00
Backup (for all disks)	\$45.00	\$45.00	\$45.00
RDS licence per 1 user	\$8.58	\$8.58	\$7.31
IP static	\$3.97	\$3.97	\$3.97
total monthly	\$602.92	\$453.11	\$380.15

- Remote Desktop Server added (aka Terminal Server).
- Best for varied quality connections or BYOD situations.

# DC/File + RDS Server

SQL Server	Pay as you go	1 year reserve	3 year
D2s V3 (2CPU, 8GB RAM)	\$239.51	\$188.10	\$159.63
HDD Premium SSD 128GB OS	\$29.80	\$29.80	\$29.80
HDD Premium SSD 64GB SQL	\$15.43	\$15.43	\$15.43
HDD Premium SSD 64GB SQL	\$15.43	\$15.43	\$15.43
HDD Premium SSD 64GB SQL	\$15.43	\$15.43	\$15.43
Snapshots of OS SSD (up to 80GB)	\$15.97	\$15.97	\$15.97
Traffic Out	\$10.00	\$10.00	\$10.00
Azure VM basic backup (all disks)	\$35.00	\$35.00	\$35.00
IP static	\$3.97	\$3.97	\$3.97
SQL licence cost			
<b>total monthly</b>	<b>\$380.54</b>	<b>\$329.13</b>	<b>\$300.66</b>

- Example doesn't include DC/File etc.
- Requires full server.
- SQL licenses can be expensive.

## SQL Server

# Azure Site Recovery

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Business Continuity

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Replicates Physical and Virtual Servers

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Fast Recovery to the Cloud

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Sometimes used as a transition method

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Very Reasonable pricing (\$50 per server – example)

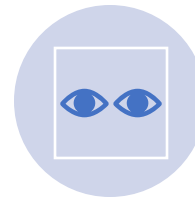
# Azure Backup



Simple Data  
Backup



Image Based Backup  
(to Backup Azure  
Servers)



Extensive Retention  
Options

# Pricing calculator

Configure and estimate the costs for Azure products



Products

Example Scenarios

Saved Estimates

FAQ

Select a product to include it in your estimate.

Search products

Featured

Compute



## Virtual Machines

Provision Windows and Linux virtual machines in seconds



## Storage Accounts

Durable, highly available, and massively scalable cloud storage



## Azure SQL Database

Managed, intelligent SQL in the cloud

Pricing Calculator

- <https://azure.microsoft.com/en-us/pricing/calculator/>

A pair of black-rimmed glasses with round lenses is resting on a stack of papers. A red ribbon bookmark is visible on the left side of the papers. The background is blurred, showing more papers and a wooden surface.

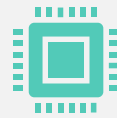
# Example Setup – Case Study

# Customer A



Physical Servers – x3

Domain Controller  
File Server  
Application Server



Importantly, Application needs to be running on a Server

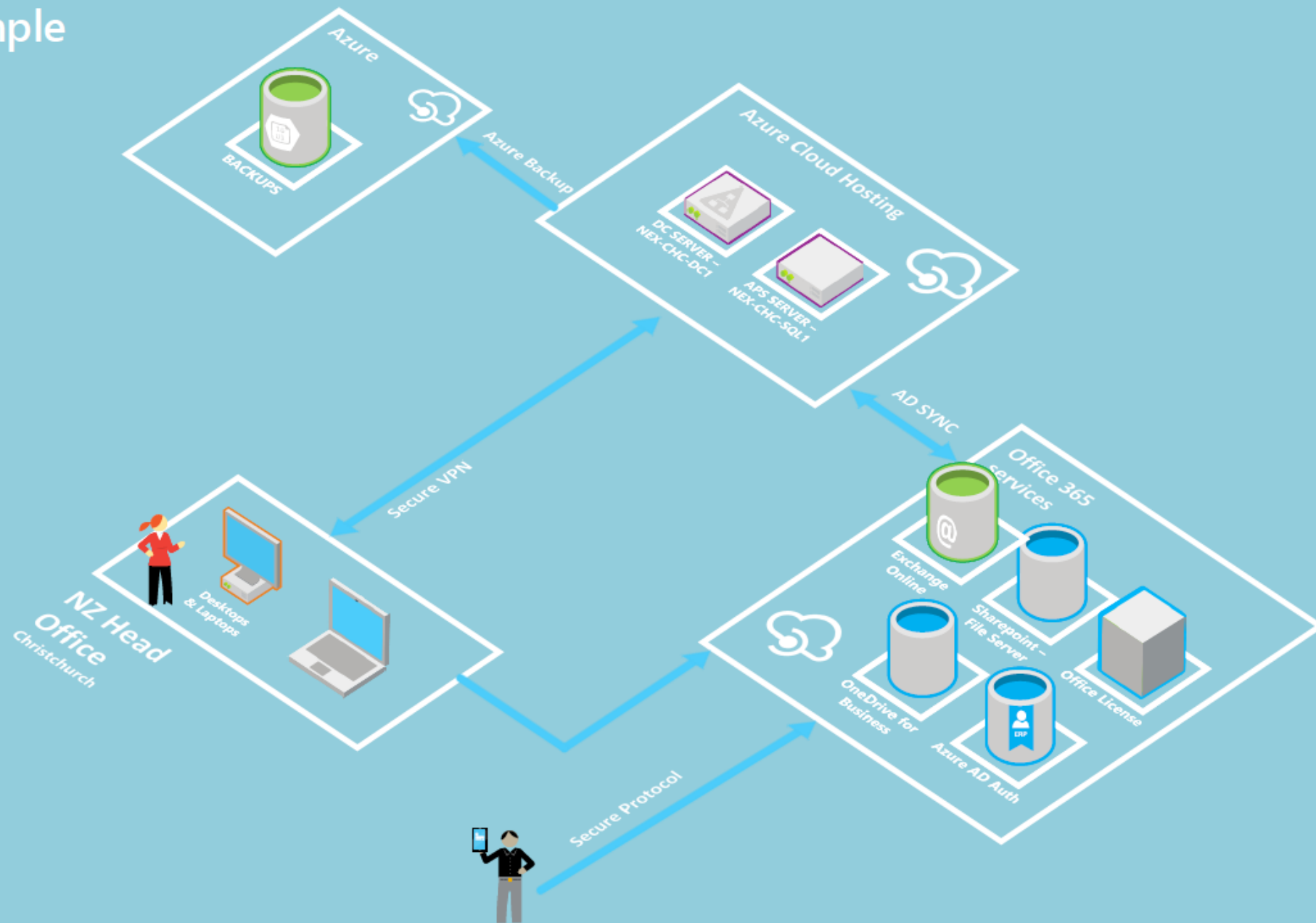


Customer is not yet ready to move all files to Sharepoint



Considering Replacing Servers or Going to Azure

# Example





DC+ File & App Server	Pay as you go	1 year reserve	3 year
<b>B2S Plan</b> (2CPU, 4GB RAM)	\$67.11	\$42.85	\$30.79
HDD standard SSD 64gb for OS(e6)	\$9.87	\$9.87	\$9.87
HDD standard SSD 8gb for AD(e2)	\$1.23	\$1.23	\$1.23
<b>B2MS Plan</b> (2CPU, 8GB RAM)	\$125.82	\$77.00	\$52.71
HDD standard SSD 64gb for OS(e6)	\$9.87	\$9.87	\$9.87
HDD standard SSD 8gb for AD(e2)	\$1.23	\$1.23	\$1.23
HDD standard HDD 512GB (data)	\$52.64	\$52.64	\$52.64
Snapshots of OS SSD (up to 80GB)	\$15.97	\$15.97	\$15.97
Traffic Out	\$27.00	\$27.00	\$27.00
Backup (for all disks)	\$45.00	\$45.00	\$45.00
total monthly	\$277.53	\$228.71	\$204.42

- Basic DC Server + App Server (high performance disks).
- Haven't separated Domain Controller + File Server functions (technically not recommended).
- May require more resource for App Server, also may require SQL.
- Could elect to have 3 servers for approx. 30% cost increase.

# DC + File/App Server

# Azure Grant for NFP's and how does it work?

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\$3500 USD per year

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Requires Credit Card to be loaded

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Once \$3500USD is consumed, charges commence



# How to Access the Azure Grant

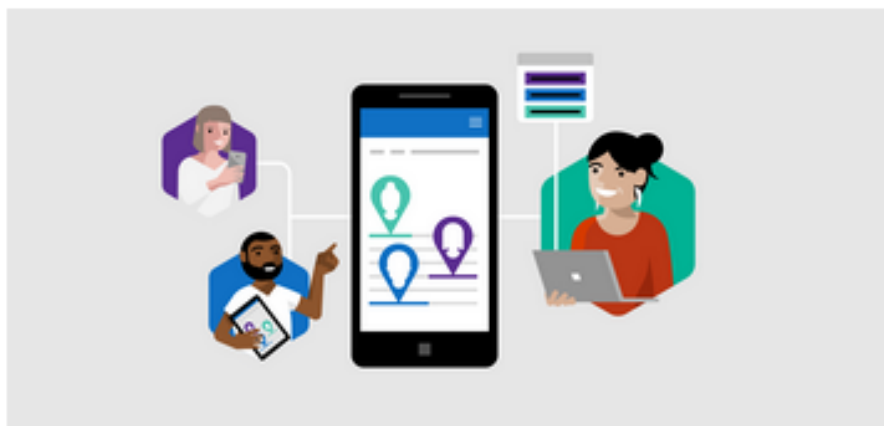
- Register at Techsoup
- Need Microsoft Tenancy
- Go to [nonprofit.microsoft.com](https://nonprofit.microsoft.com) & Sign in
- Will need to fill in several answers to questions; submit.
- 2-3 days, generally will be approved
- If already this is already done, apply for the Azure Credits within the [nonprofit.microsoft.com](https://nonprofit.microsoft.com)
- Application for Azure Credits. Fill in and generally approved within a few days.

# Status: Approved

You are eligible for nonprofit offers from Microsoft. Click on an offer below for more information.

## New! Introducing Microsoft Cloud for Nonprofit

Microsoft Cloud for Nonprofit connects the intelligent and integrated cloud capabilities of the Microsoft stack to the including constituent engagement and fundraising, staff collaboration and volunteer management, and program des Nonprofit, see a demo of the new capabilities in Fundraising and Engagement, and hear from nonprofits using Micro. [Register now](#)



### Microsoft 365

Empower your employees with tools for better collaboration. Get started today with Microsoft 365 Business Premium, Office Apps, and Power BI to help increase productivity and creativity in your organization.



### Azure Grant

Offset IT costs with integrated services. Access analytics, computing, networking, storage, and more with Microsoft Azure cloud services.

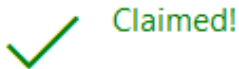
# Azure Grant

Offset IT costs with integrated services. Access analytics, computing, networking, storage, and more with Microsoft Azure cloud services.

By claiming the Azure grant, I confirm that I am a representative for the nonprofit organization listed above. Further, I understand that Microsoft may use the verification data that I have submitted, in conjunction with data provided by other representatives of the nonprofit organization, in order to confirm my affiliation with the nonprofit organization. To learn more about how Microsoft uses personal data, please see the Microsoft Privacy Statement. I also agree to receive communications from Microsoft about the grant and Azure resources available to me.

## Step One

Start by activating your \$3,500(USD) annual grant



**Start date:** 2/3/2021

**Credits expire:** 2/3/2022

[Continue to Azure](#)

## Step Two

Then connect with an onboarding specialist.

[Schedule](#)

## Step Three

Our nonprofit partners can help you take full advantage of the cloud, opening a wide array of new opportunities to grow your organization.

[Connect now](#)

# Implementation considerations



Internet Connection



Network Hardware

# Resources

- Azure for NFP's page  
<https://www.microsoft.com/en-us/nonprofits/azure>
- Pricing Calculator  
<https://azure.microsoft.com/en-us/pricing/calculator/>
- TechSoup Azure Credit  
<https://www.techsoup.net.nz/blog/microsoft-azure-credits-now-available-eligible-not-profit-organisations>



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**QUESTION TIME**

[webinar@theitteam.co.nz](mailto:webinar@theitteam.co.nz)





# THANK YOU

the I.T. team has been in business since 2004 .

Our focus has always been on offering a fresh range of I.T. related services and support designed to help client organisations maximise productivity and protect themselves from all kinds of data related risks.

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