Introduction to Azure

22nd July 2021

Thank you for joining – we'll be starting soon

the I.T. team™
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 Microsoft Azure
· How much does Azure cost, how do I access the Grant
· Ongoing management of Microsoft Azure
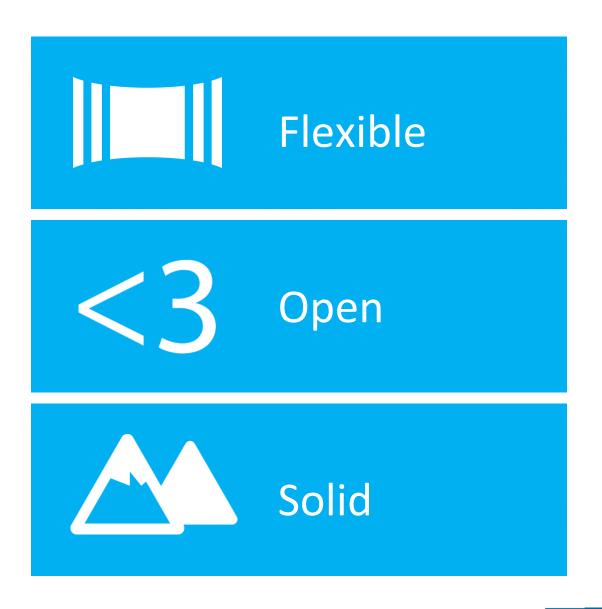· Build Examples and Case Studies

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™

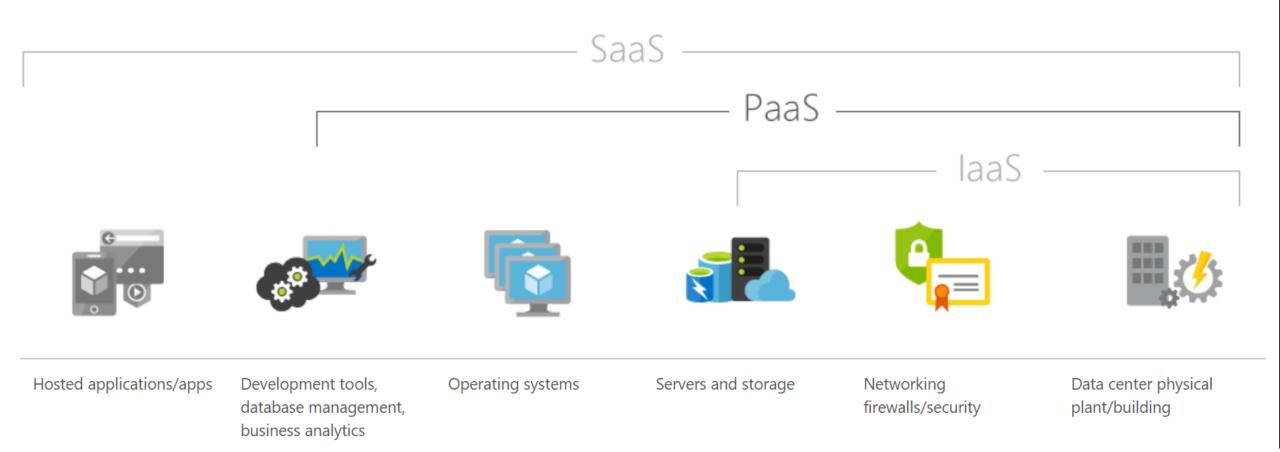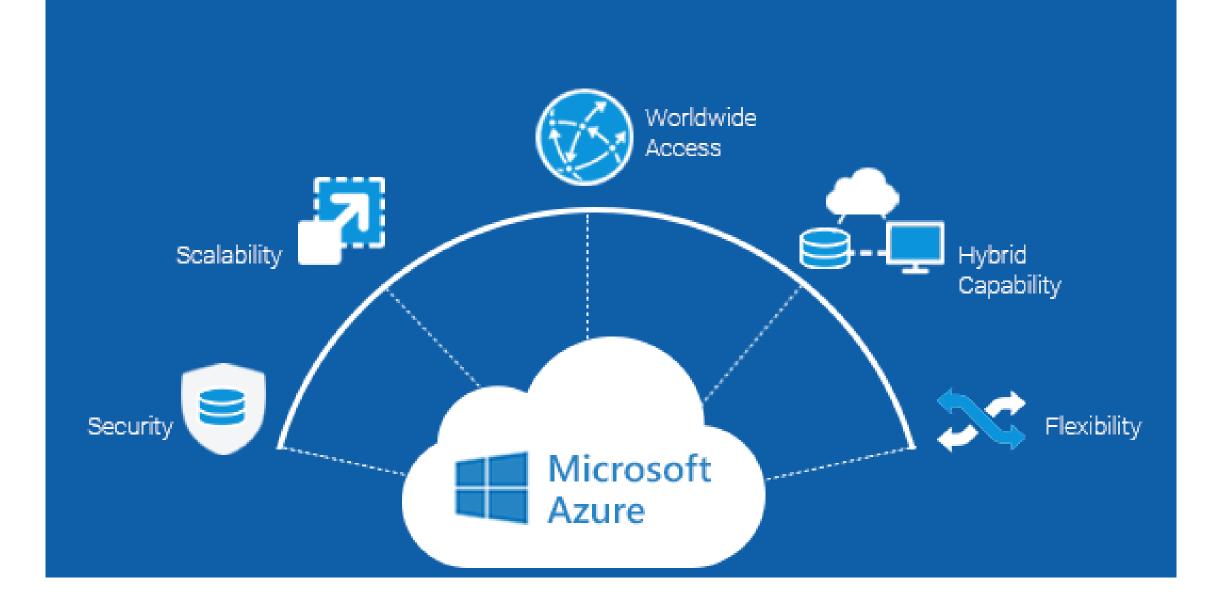Maintaining the health of your I.T. system

Microsoft Azure

Comprehensive set of services that enable you to quickly build, deploy and manage applications across a global network of Microsoft-managed datacenters

Flexible

Open

Solid

Microsoft

PARTNER PRACTICE
ENABLEMENT
BOOTCAMP

SaaS

PaaS

IaaS

| Hosted applications/apps | Development tools, database management, business analytics | Operating systems | Servers and storage | Networking firewalls/security | Data center physical plant/building |

54 Azure Regions across the globe

Azure footprint
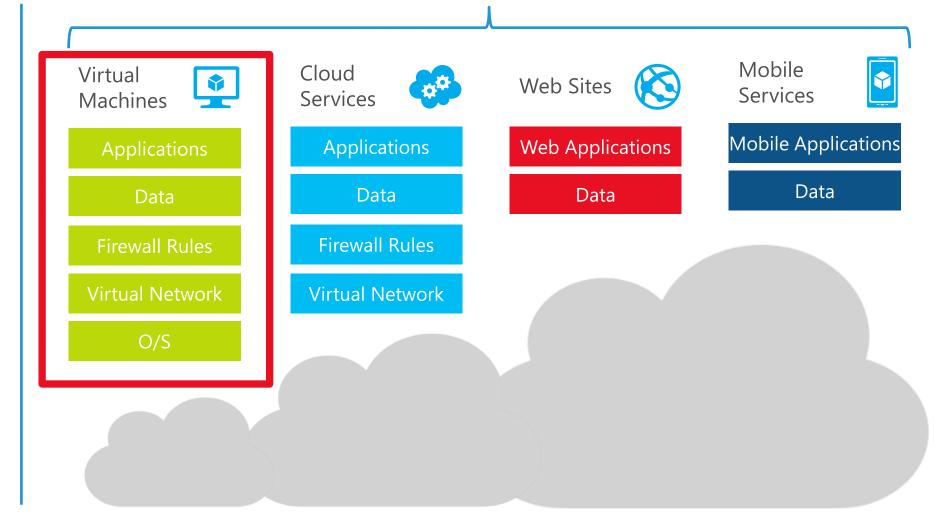
Common Uses for NGO/NFP's

Domain Controller

File Server

RDS Server (+ DC/File Server/s)

Azure Site Recovery – Backup Service

Azure Backup

Application Server

Phone Server

How much does it cost?

Consumption Based (minutes & hours)

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 Pro 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

Additional Considerations

Do consider Backups

Bandwidth costs

Networking Costs

Fluctuations can be painful

Evolving Technology

Licenses are required

Reserved Instances

Consumption Restrictions

Azure Virtual Machine

Most common Azure function

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

100's of different types of Plans

Very high performance options including for Graphic Design/CAD

Can choose many locations around the globe

Infrastructure as a Service; but still requires some Management

3CX basic (1-20 ext)	Pay as you go	1 year reserve	3 year
B1S Plan (1CPU, 1GB RAM)	$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

DC BASIC	Pay as you go	1 year reserve	3 year
B2S Plan (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
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
B2MS Plan (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
total monthly	*$259.25*	*$210.43*	*$186.14*

- 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
B2MS Plan (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
B4MS Plan (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			
total monthly	$380.54	$329.13	$300.66

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

SQL 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
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Azure VM basic backup (all disks)	$35.00	$35.00	$35.00
IP static	$3.97	$3.97	$3.97
SQL licence cost			
total monthly	$380.54	$329.13	$300.66

- Example doesn't include DC/File etc
- Requires full server
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SQL Server

Azure Site Recovery

Business Continuity

Replicates Physical and Virtual Servers

Fast Recovery to the Cloud

Sometimes used as a transition method

Very Reasonable pricing ($50 per server – example)

Azure Backup

Simple Data Backup

Image Based Backup (to Backup Azure Servers)

Extensive Retention Options

Costs are very low

Pricing Calculator

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

Example Setup – Case Study

Customer A

Physical Servers – x3

Domain Controller
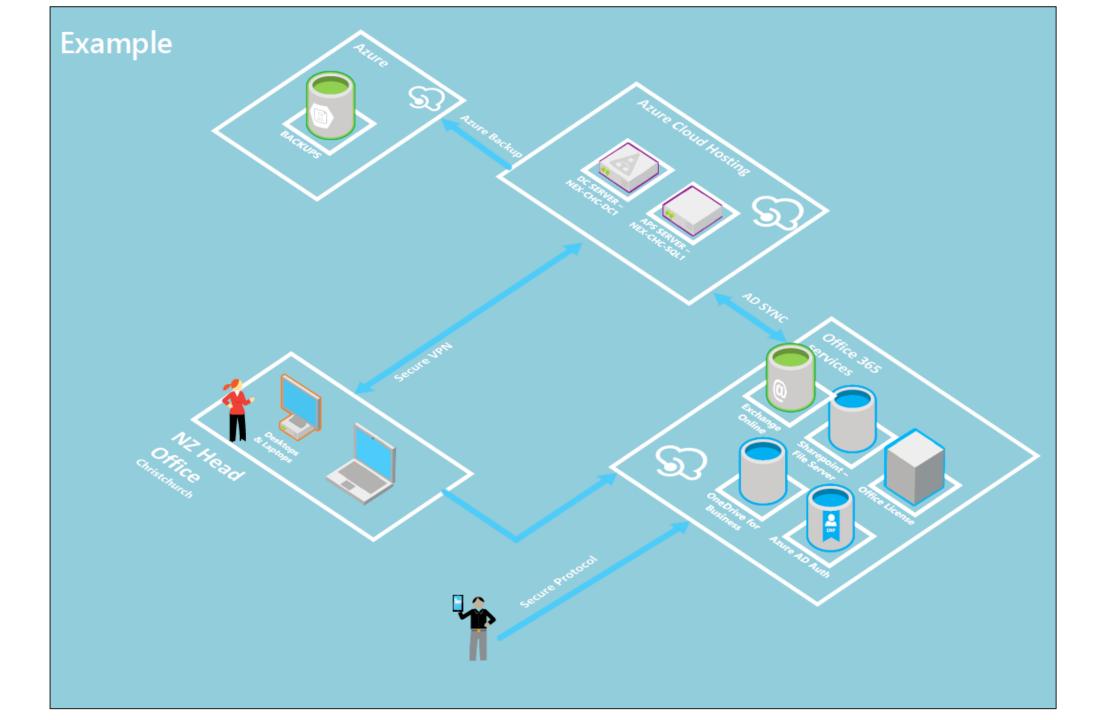
File Server

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

DC + File & App Server	Pay as you go	1 year reserve	3 year
B2S Plan (2CPU, 4GB RAM)	$67.11	$42.85	$30.79
HDD standard SSD 64gb for OS(e6)	$9.87	$9.87	$9.87
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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 by Migration
- 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?

$3500 USD per year

Requires Credit Card to be loaded

Once $3500USD is consumed, charges commence

How to Access the Azure Grant

- Register at Techsoup

- Need Microsoft Tenancy

- Go to 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 non-profit.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:

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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.
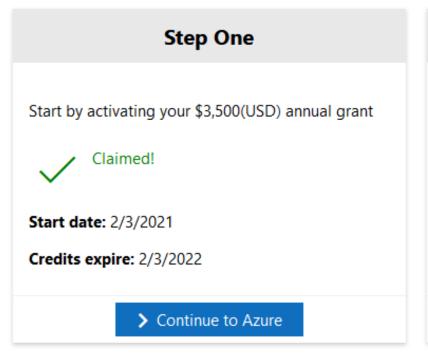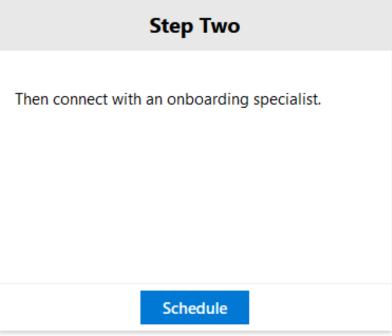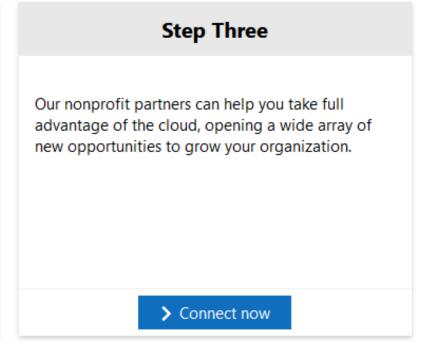

Azure Grant

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	Step Two	Step Three
Start by activating your $3,500(USD) annual grant ✓ Claimed! **Start date:** 2/3/2021 **Credits expire:** 2/3/2022	Then connect with an onboarding specialist.	Our nonprofit partners can help you take full advantage of the cloud, opening a wide array of new opportunities to grow your organization.
> Continue to Azure	Schedule	> Connect now

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

QUESTION TIME

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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.

the **I.T.** team™
Maintaining the health of your I.T. system

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