

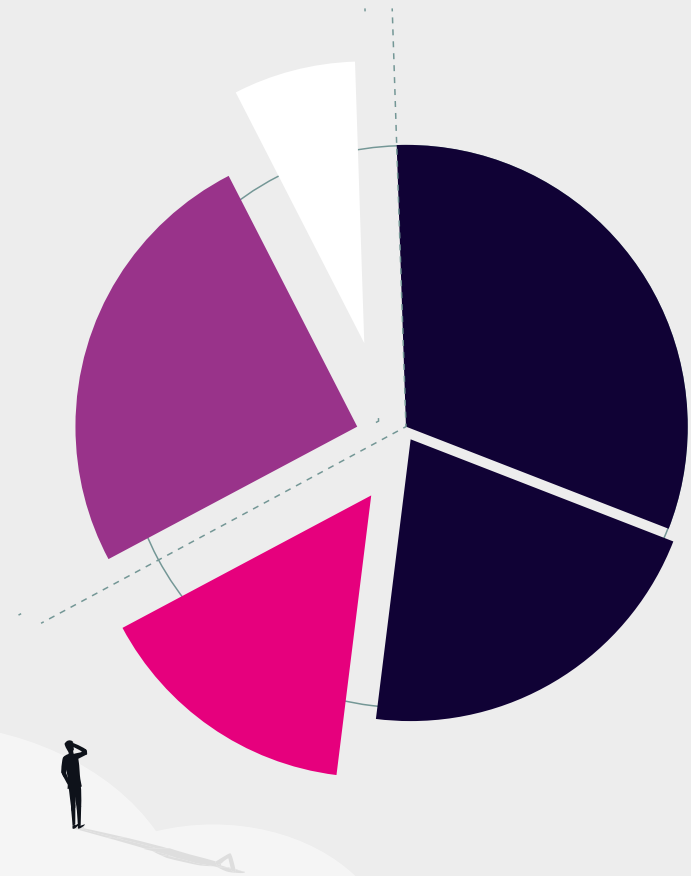
Azure Practice

Your **Guide** to Microsoft Azure



GIACOM. +  Microsoft

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Microsoft Azure overview

As the leading cloud platform on the market, Microsoft Azure is a global network of data centres providing cloud services to businesses across the world.

It's used by 90% of Fortune 500 companies, has the most comprehensive compliance coverage of any provider, and is available in 40+ regions worldwide. In comparison to AWS, Azure has the most regions, unmatched hybrid capabilities and the strongest intelligence in the world.

Capability	Detail
Trusted Platform	<ul style="list-style-type: none">• 20+ years providing datacenters for organisations large and small• 47+ security and compliance certificates and accreditations
Global	<ul style="list-style-type: none">• 40+ regions to allow customers to place data to...• minimise latency• maximise redundancy
Hybrid	<p>Customers can make the most of their current investments and make sure the right tools are available as they are needed.</p> <ul style="list-style-type: none">• Cloud-based identity to complement AD Domain Services• Increased capacity and backup to facilitate expansion from on-premises• Azure services available in premises with Azure Stack
Billing	<ul style="list-style-type: none">• Per minute billing for Computer instances• Pre-paid subscriptions & discounts

Azure AD has
200m
active users

Azure is trusted
by the **MoD**

47+
security &
compliance
certificates

Azure is used
by **90%**
of fortune
500 companies

Identity management in the cloud

Manage your end users at the drop of a hat with Azure Active Directory (AD).

Help your customers control which employees get access to sensitive documents with multi-factor authentication and simplify access for them to cloud applications such as Office 365. From self-service password changes to protecting sensitive data, Azure AD is a great starting point for any reseller wanting to make the move to a managed service provider.

Capability	Detail
Azure Active Directory	<ol style="list-style-type: none">1. Microsoft has decades of experience in delivering Directory Services2. Fully fledged identity solution for customers large and small<ul style="list-style-type: none">- Free, Basic and Premium3. Rich support for on-premises AD Domain Services4. Provides identity management for Office 3655. Connect to Cloud services using single sign on

Configuration tips

1. Sign in to <http://portal.azure.com> with your subscription account
2. Navigate to Azure Active Directory in the sidebar to see your default directory
3. Use quick tasks to add new users/groups
4. Use AD Connect to connect your on-prem AD Domain Services where appropriate
5. Office 365 customers will see their Active Directory
6. Additional license options can be trialled/bought from within the Azure AD menu

Virtual Machines and storage

Deploy an application in seconds instead of weeks with a Virtual Machine.

In Azure, there's support for Linux, Windows Server, SQL Server, Oracle, IBM and SAP to give you the flexibility your customers need. And if you're not ready to push everything into the cloud, there's always the hybrid option.

For storage, your customers may need to tap into a range of solutions. Azure's scalable platform means your customers will never outgrow their storage capacity. Choose from file, disk, blob, queue or table storage and offload the heavy lifting of data management straight into the cloud.

Capability	Detail
Virtual Machines	<ol style="list-style-type: none">1. Run Windows and Linux workloads2. Scale out and scale up as needed3. Choose the type of storage you need - hot or cold4. Pay only for what you use5. Single instance SLA6. Create and manage using PowerShell, CLI, JSON etc7. Utilise existing Windows Server licenses - AHUB
Storage	<ol style="list-style-type: none">1. Quickly add storage for different types of data2. Standard and Premium tiers3. Manage 'hot' and 'cold' data costs4. Scale up and down on demand5. Manage using Storage Explorer (Windows, Mac, Linux)

Default limit is
20 VMS
per region

1 block blob
= **4.7TB**
storage

99.9% SLA



Configuration tips

Virtual Machines

1. Sign in to <http://portal.azure.com> with your subscription account
2. Click 'New' to access the Marketplace
3. Search for required VM
4. Select server type to start the creation wizard
5. Click 'Connect' to access the VM via RDP
6. A VM is chargeable while allocated - choose 'Stop' to de-allocate Storage

Storage

1. Choose 'Storage Account' from the Marketplace
2. Follow the steps in the wizard
3. Create a container to share content

Backup and Site Recovery

The simple and cost-effective backup and recovery service for on-premises and cloud data.

Stored securely in transit and at rest, all backup data is stored with a choice of either local¹ or geo² storage facilities. With minimal maintenance required and an uptime SLA of 99.9%, it's easy to see why businesses use Azure to secure their data.

¹ Locally redundant storage (LRS) replicates your data three times (it creates three copies of your data) in a paired datacenter in the same region. LRS is a low-cost option for protecting your data from local hardware failures.

² Geo-redundant storage (GRS) replicates your data to a secondary region (hundreds of miles away from the primary location of the source data). GRS costs more than LRS, but GRS provides a higher level of durability for your data, even if there is a regional outage.

Capability	Detail
Backup	<ol style="list-style-type: none">1. Use existing on-premises infrastructure2. Target on-premises and Azure workloads3. Backup:<ol style="list-style-type: none">a. Backup from the Cloud or on-premisesb. Target VMs, files, folders. SQL, SharePoint, Exchange and Linux VMs4. Site Recovery:<ol style="list-style-type: none">a. Move data from on-premises to cloud or on-premb. Migrate infrastructure to Azure - VMWare, Hyper-V, AWS

Configuration tips

1. Sign in to <http://portal.azure.com> with your subscription account
2. Choose 'Backup and Site Recovery' from the Marketplace
3. Choose Backup to protect Azure and on-premises workloads
4. Choose Site Recovery to replicate on-premises or Azure based VMs

Thinking outside the box

Innovation is what creates tomorrow.

Artificial Intelligence (AI) empowers us to change the world and challenges us into creating a better vision for our future generations. Microsoft Azure AI encourages tech professionals to think outside the box and develop a service that you could only dream possible. It's about challenging the norm and turning the impossible into a reality.

Create intelligent, simulated conversation with Bot Services which can interact with users on a website or app. Or tackle Azure Machine Learning and custom build an environment with customer data that enables them to understand their business patterns. If you prefer to use a pre-installed, configured and tested approach, try your hand at DSVMs which offer on-demand scalability for larger projects.

The 3-step process

- 1 Prepare Data**
 - Understand what data you need from the customer and outline the key deliverables or objectives they would like to achieve.
 - Connect to various sources in the Azure platform and give the AI time to digest the data.
- 2 Build and train**
 - Leverage pre-built tools such as Cognitive Services for Enterprise-grade, off-the-shelf technology.
 - Choose the preferred model for your customer.
 - Understand how AI will depend on the data and train alongside it.
- 3 Deploy**
 - Once the AI is fit for purpose, it can then be deployed into your customer's chosen application or website.
 - Ensure the data is continuously monitored and track the performance.
 - Convert the performance into visual patterns so the customer understands the overall impact to their business.

How is Azure AI currently used worldwide? Azure AI is helping to recreate history

A Parisian company is recreating history by building 3D digital models of historic landmarks threatened by war, conflict and time. Using drones, Iconem has surveyed sites in more than 20 countries to capture thousands of images that can be quickly stitched together via advanced algorithms and the computing power of Azure AI. These images offer a view so detailed that many believe they are the real thing, bringing to life what once was and enabling war-torn countries to remember where landmarks they walked past every day once stood.

“It feels magical, because it has become possible to recreate the world”

FRENCH ARCHITECT YVES UBELMANN SAYS OF ARTIFICIAL INTELLIGENCE.



Useful links

Capability	Detail
https://azure.microsoft.com/en-us/	Microsoft Azure homepage
https://docs.microsoft.com/en-gb/azure/	Microsoft's central information hub
https://www.microsoft.com/en-us/cloud-platform/roadmap	Cloud Platform Roadmap
https://azure.microsoft.com/en-us/blog/	The Azure Blog
https://azure.microsoft.com/en-gb/overview/trusted-cloud/	Azure Statistical Overview
https://azure.microsoft.com/en-gb/overview/datacenters/	Azure Datacentre Overview
https://www.microsoft.com/en-us/cloud-platform/hybrid-cloud?wt.mc_id=AID601064_QSG_BNR_156079	Azure Hybrid Cloud Overview
https://azure.microsoft.com/en-gb/pricing/	Azure Pricing
https://docs.microsoft.com/en-us/azure/active-directory/active-directory-what-is	Azure Active Directory Information
https://docs.microsoft.com/en-us/azure/virtual-machines/windows/	Creating a VM
https://azure.microsoft.com/en-us/services/storage/?v=16.50	Azure Storage Information
https://docs.microsoft.com/en-in/azure/backup/backup-try-azure-backup-in-10-mins	Azure Backup Information
https://azure.microsoft.com/en-in/documentation/learning-paths/site-recovery/	Azure Site Recovery Information
https://docs.microsoft.com/en-gb/azure/app-service/	Azure Web Apps Information
https://docs.microsoft.com/en-gb/azure/logic-apps/logic-apps-what-are-logic-apps	Azure Cloud Services Information

Want to know **more?** Get in touch.

Our Azure Team are ready and waiting to support you.
Reach out to us direct on azurepractice@giacom.com
or call **0330 8221 302**

