

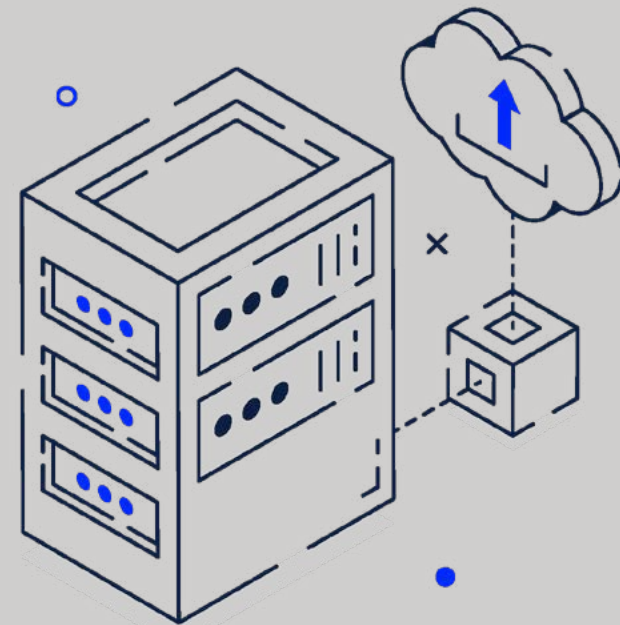
6 Microsoft Azure Use Cases for Everyone

Move to the cloud with six hybrid solutions that establish a strong technical foundation for more advanced solutions.



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start with the basics

By moving to Azure, you'll be able to innovate in new ways by adopting a cloud operations based model on infrastructure as a service (IaaS) technologies. Additionally, you'll be able to take advantage of further opportunities for innovation by modernizing with fully managed platform as a service (PaaS) offerings.

But, before you begin down a cloud adoption path, it's important to first establish a strong technical foundation to support your long-term cloud strategy. With that foundation in place, you can then build more advanced solutions onto that foundation and digitally transform your business.

To that end, this eBook covers six Microsoft Azure solutions that serve as a strong foundation to the cloud.



Use Case 1: Hybrid Identity

Almost every Azure solution you will build will connect to a cloud identity and networking baseline. Build a foundation for your cloud deployments by starting with Hybrid Identity, and Hybrid Networking (Use Case 2). Then, you're ready to add more solutions onto your foundation.

Creating and managing user identities can be complicated. Businesses need to give their users productive working environments, without sacrificing security. They also need to enable remote work scenarios where employees, vendors, and partners can access internal apps and those in the cloud. That's where Hybrid Identity can help.

Azure Hybrid Identity solutions give you all the tools you need to ensure your people can access internal or cloud apps and data—while you get a single, secure platform that's easy to manage.

- **Simplify access and identity management.** With Azure Active Directory, you can create and manage all user identities across your entire business securely from a single location. Your users get secure, single sign-on to all their resources, whether apps are on-premises or in the cloud.

- **Connect your workforce.** Hybrid Identity solutions make it easier for employees, partners, vendors and customers to use the apps and data they need from any location. It starts with single sign-on. Then you can extend the solution with VPN Gateway and Azure Networks to create truly hybrid solutions—like connecting to your existing data centers or linking together different offices.
- **Safeguard business information.** With Hybrid Identity solutions, you'll get the security you need with multi-factor authentication and role-based access. Perfect for hybrid environments, it's all based on Microsoft security best practices.

Hybrid Identity solutions position you for success.

Hybrid Identity solutions from Microsoft help solve the challenges of secure, seamless access to all your company resources—wherever employees are. It also lays the groundwork for an infrastructure that works across your office and the cloud. And if you're using Microsoft 365, you already have Azure Active Directory.

When you use Azure services for your identity management, here's what you'll get:

Azure Active Directory

Protect your business with a universal platform that manages and secures identities across platforms.

VPN Gateway

Connect your on-premises networks to Azure in a similar way that you set up and connect to a remote branch office.

Virtual Network

Securely connect across resources by enabling secure remote access to on-premises and cloud resources from almost anywhere.

- Single sign-on, including integrated cloud apps
- Multi-factor authentication
- Automated user provisioning
- Self-service password reset
- Site-to-site VPN to connect your data center to Azure
- Point-to-point VPN to connect from anywhere
- Hybrid solutions that run in the cloud, but can connect to on-premises data sources with ease
- Effortless scalability for when you need it
- Centralized control that reduces the cost and complexity of managing hardware/software
- More flexible options for networking routing structure and configuration

80% of data breaches can be traced back to weak passwords.

- Security Magazine



Use Case 2: Hybrid Networking

Azure Hybrid Networking is a great place to start to prepare your infrastructure for the cloud while securely connecting branch offices and remote users to on-premises resources.

There are three key reasons to embrace a hybrid networking model:

- Stronger safeguards. To work remotely with confidence, organizations require secure connections to cloud and on-premise resources.
- Better performance. Slow load times and network latency during peak usage can hinder SaaS application performance.
- Flexible infrastructure. Today's businesses need cloud services to work remotely, support growth, and keep up with fluctuating business needs.

Hybrid Networking with Azure connects on-premises, Azure, and multi-cloud resources, enabling you to manage your entire network using centralized access and routing policies. Organizations can:

- Build and control a hybrid infrastructure.
- Extend your data center to the cloud.
- Enhance security and isolation for applications.
- Ensure that traffic stays on a secure global network.

19.4% is the expected growth rate (CAGR) for global public cloud IaaS from 2024-2028.

- IDC

As you implement Hybrid Networking here's what you'll get:

Azure Virtual Network. Azure Virtual Network enables Azure resources, such as VMs, web apps and databases, to communicate with each other, with users on the internet and with your on-premises client computers. Think of an Azure Virtual Network as an extension of your on-premises network with resources that link other Azure resources.

Azure Virtual Network provides the following key networking capabilities:

- Isolation and segmentation
- Internet communications
- Communicate between Azure resources
- Route network traffic
- Filter network traffic
- Connect virtual networks

Azure VPN Gateway and Azure ExpressRoute. They are used to create secure communication tunnels between your company's different locations.

Azure VPN Gateway instances are deployed in a dedicated subnet of the virtual network and enable the following connectivity:

- Connect on-premises data centers to virtual networks through a site-to-site connection
- Connect individual devices to virtual networks through point-to-site connection
- Connect virtual networks to other virtual networks through a network-to-network connection

ExpressRoute extends your on-premises network into the Microsoft cloud over a private connection with the help of a connectivity provider. Connectivity can be from an any-to-any (IP VPN) network, a point-to-point Ethernet network or a virtual cross-connection through a connectivity provider at a colocation facility. ExpressRoute connections don't go over the public Internet, which allows brings more reliability, faster speeds, consistent latencies and higher security than typical connections over the Internet.

89% have a multi-cloud strategy, and most are taking a hybrid approach, combining the use of both public and private cloud.

- Flexera, 2024 State of the Cloud Report



Use Case 3: Azure Backup

Resilient Infrastructure with Azure backup is a compelling next workload. Reduce your on-premise footprint, cut costs and optimize IT resources by moving backup servers to Azure.

Keeping data backed up is critical for any business. So is being able to recover data in case of disaster, breach, or employee error. Today, many small- to medium-sized companies are still using on-premise backup solutions, which can be time-consuming to manage, costly to update—and still prone to error.

Azure Resilient Infrastructure solutions provide simple, secure back and restore capabilities for all your data—whether it's files, folders and disks or virtual machines and databases.

- **Improve resilience and security.** Resilient Infrastructure solutions help safeguard your data and workloads against unplanned downtime. Start with Azure Backup for one-click automatic backups to the cloud. Then add Azure Site Recovery and get the ability to restore all your data easily in case something happens.

- **Simplify backup and restore.** Resilient Infrastructure solutions can dramatically streamline how you protect your data, how you store it—and how you get it back. You'll get a single solution that works across all your workloads, simple ways to define backup and restore policies, and a more flexible infrastructure that reduces your physical footprint.
- **Control infrastructure costs.** When you move to Resilient Infrastructure solutions in the cloud, you can reduce your infrastructure costs. For instance, you can eliminate tape storage and redundant servers. You'll also be able to streamline your add-on disaster recovery solutions.

54% of organizations plan to change their primary backup solution in 2024.

- [Veeam 2024 Data Protection Report](#)

When you use Azure services for data backup and disaster recovery, here's what you'll get:

Azure Backup. Get a secure, one-click backup solution that is simple to set up and tailored to your particular storage needs.

- Backup for all structured and unstructured data: files, folders, disks, VMs, and databases
- Centralized monitoring and management
- Automated storage management, so you only pay for what you use

Azure Site Recovery. Help your business stay up and running—even during major outages or faced with threats.

- A disaster recovery as a service that helps ensure business continuity by keeping business apps and workloads running during outages
- One-click restore for all your Azure Backup data and workloads
- Dependable recovery, compliant with industry regulations

Get Started with Resilient Infrastructure

Resilient Infrastructure solutions are an ideal way to start using Azure—and they provide benefits you'll be able to see almost immediately. For instance, other companies have seen a 47% savings in the first year alone. (IDC)

Best yet, it's a straightforward process. Sign up for Azure Backup and try it out. Start as small as you want. As you get more comfortable, back up more of your information. And when you're ready, just sign up for Azure Site Recovery to get a complete solution.





Use Case 4: Azure IaaS

Once you have established a strong hybrid foundation, it may be time to look at some advanced workloads, like Azure Infrastructure-as-a-Service (IaaS).

Small and medium-sized companies are turning to the cloud to run key aspects of their businesses, like applications and databases. Moving these workloads into the cloud—or running them in hybrid environments—can take a real burden off managing them in-house. And Azure IaaS can help streamline the entire process.

Azure IaaS helps you modernize your infrastructure.

Azure solutions for infrastructure enable you to shift business operations to the cloud at your own pace, giving you the ability to transform how you approach computing, storage, networking, security, management, and virtual desktops.

- **Increase agility and IT efficiency.** A modern cloud-based infrastructure based on Azure can help you focus more on your business and less on managing your technology. You don't have to buy more hardware; instead, just add capacity when you need it. Azure also helps you run your apps where you wish and gives you access to new technologies, like advanced analytics and AI.

- **Save operational and energy costs.** Infrastructure solutions from Azure can help you save money. Just moving into the Azure cloud can help reduce costs on everything from hardware, software, energy, and maintenance. Shifting from a CapEx model to an OpEx one can remove budget constraints. Plus, you can free IT staff or vendors to focus on more important projects.
- **Get up and running smoothly.** When you use Azure, you can streamline the process of creating virtual machines to run any kind of application, web app or database. Then get guided help in moving those workloads to the cloud, without any interruption in service. And because Azure facilitates a phased approach by helping track your migration progress, it's a simpler, more flexible way to shift your business into the cloud.



When you start using Azure to start running your company's IT infrastructure in the cloud, here's what you'll get:

Azure Virtual Machines. Create Linux and Windows virtual machines (VMs) in seconds, while helping to reduce costs.

- Fast, simple creation of VMs— or virtual computers within computers--so you can add computing power when you need
- Ability to scale without adding expensive hardware
- Cost-effective pricing that is based on what you use
- Support for any Linux and Windows apps, SQL databases, and more

Azure Migrate. Discover, assess, right-size and migrate your on-premises VMs to Azure.

- A centralized hub that simplifies moving workloads into the cloud, at your pace
- Tools that help you assess workloads before migration, then streamline moving them
- Rich support and guidance for common workloads: servers, data, databases, web apps and virtual desktops

Getting started with Azure IaaS

It's no surprise so many are choosing IaaS when they don't have to buy or manage hardware and software and they can focus more on their businesses.

Azure solutions are specifically designed to streamline the process. For instance, you can get started with just one or two workloads to test the waters. Then add more as it makes sense. Through it all, you'll get detailed assessments, tools, and guidance.

478% the ROI achieved by companies that migrate on-premises operations to the clouds.

- Forrester TEI of Microsoft Azure IaaS Report



Use Case 5: Azure Virtual Desktop

Once you have established a strong hybrid foundation, it may be time to look at some advanced solutions, like Azure Virtual Desktop.

The pandemic dramatically redefined how and where people work. And there's no going back; remote work is here to stay. However, not every employee needs a company-issued laptop to be productive, yet those laptops can make a company's network less secure. And the more remote your employees are—or if you have seasonal workers—the harder it can be to balance productivity with cost and security.

Power your workforce with Azure Virtual Desktop

Azure Virtual Desktop, formerly known as Windows Virtual Desktop, gives remote employees the tools they need to do their jobs by securely delivering Windows 10 or Windows 11 virtual desktops and applications to any approved device.

Azure Virtual Desktop is a great way to provide a consistent and secure desktop experience for remote workers across their Windows, Mac, iOS, or Android devices. You can also use it in a wide variety of other scenarios, such as onboarding seasonal workers and temp hires, or giving employees that share desks the ability to use the same device. Across it all, you'll be able to deliver:

- A familiar Windows environment
- Seamless integration with Office apps
- Built-in intelligent security
- Simplified deployment directly from the Azure portal



Azure Virtual Desktop: the perfect balance of productivity, security, and cost.

- **Enable secure remote work.** Azure Virtual Desktop is a great way to meet the demands of a remote or changing workforce because it helps protect your business and data, while giving employees secure access to consistent working environments over a wide variety of devices. It's fast and simple to set up and includes a wide variety of security controls.
- **Manage work environments cost-effectively.** When you use Azure Virtual Desktop, you can enable productive work environments for employees without sacrificing control or budget. With just a few clicks, you can provide and manage custom desktop environments that run in the cloud. That means you can eliminate the hardware costs of purchasing individual laptops and the labor costs associated with customizing them.
- **Empower people with a great user experience.** One of the beauties of Azure Virtual Desktop is that it gives people the same experience they get on a local device, only in a virtualized one. That means your users have the same Windows experience, the same Microsoft Office experience—and even the same Microsoft Teams experience.

Get Started with Azure Virtual Desktop

Azure Virtual Desktop is a great solution for businesses that need to quickly, cost-effectively, and securely deploy productive working environments for employees.

It's also easy to get started. In fact, if you're using Microsoft 365, you already have the licenses you need.





Use Case 6: Azure Security

Once you have established a strong hybrid foundation, it may be time to look at some advanced solutions, like Azure Virtual Desktop.

Small- and medium-sized companies are increasingly concerned about security. It's no surprise: the past year has seen a dramatic rise in remote work, which gives attackers more opportunities to damage data, networks, and identities.

Advanced protection begins with Azure Security Solutions

When you choose Azure Security Solutions, you can start protecting your cloud and hybrid environments immediately, while setting the foundation for a solution that can be easily expanded.

- **Improve security and compliance.** Azure Security Solutions offer robust protection that helps secure your cloud and on-premises resources against malware, viruses, and DDoS attacks. You'll get the ability to continually assess how secure and compliant your business is—along with the ability to easily make adjustments and fix issues.
- **Get protection across your business.** With Azure Security Solutions, you can help safeguard all resources, whether they're servers, storage, databases, networks, applications, or firewalls. These solutions are all backed by Microsoft threat intelligence, so they work together seamlessly. And because they're Azure-native and highly scalable, you can easily extend services as you need them.
- **Simplify security management.** Azure Security Solutions make it simpler to manage security across your organization. You'll get a single portal, where you can centralize security policies and easily extend security to connected cloud resources. And advanced AI and automation are built in, so you can more quickly identify threats.

\$9.36 million is the average cost of a data breach in the United States in 2024.

- statista.com

Azure Security Solutions deliver next-generation security, here's how to get started:

Microsoft Defender for Cloud. Understand your current security situation and get recommendations to improve it.

- A single portal to view and manage security and compliance
- A generated Secure Score to understand the security and health of your systems
- Detailed recommendations on how to improve your security

Azure Firewall. A cloud-native, next generation firewall to protect your Azure Virtual Network resources.

- A scalable and highly available firewall-as-a-service
- Threat intelligence-based filtering with near real-time alerts
- Intrusion detection and prevention to continuously monitor and block malicious activities

Azure DDoS Protection. Protect your applications from Distributed Denial of Service (DDoS) attacks.

- Turnkey defense for always-on traffic monitoring and automatic mitigation
- Adaptive tuning to learn application traffic patterns over time
- Multi-layered protection and detailed attack analytic reporting

Put strong security foundations in place today

Security in the cloud requires security that's built for the cloud. That's where Azure Security Solutions can really help. Backed by Microsoft threat intelligence, you'll get robust protection that works across your entire infrastructure.

Getting started is simple. We recommend you begin with Defender for Cloud and go from there.





Microsoft
Partner

Choose the Right Azure Migration Partner

Migrating to the cloud can be complex. Which workloads should you migrate first? What infrastructure should remain on-premises? And what additional tools can help you gain a competitive edge?

Even highly skilled IT teams often struggle to find the answers—or simply lack the time to research and implement the right solutions.

US Signal is here to help. With hands-on Microsoft expertise, we're the Cloud Service Provider (CSP) with practical solutions to your toughest cloud migration questions.

Contact us today to simplify your Azure migration and ensure a seamless transition.

www.ussignal.com

