

## System Administrator

Looking to develop your Microsoft Azure knowledge and skills? You're on the right path!



This Azure learning journey is designed for two different types of explorers:

- **Systems administrators** just beginning their careers in the cloud. These IT professionals manage the configuration, performance, and security of Windows Server environments on-premises or operate, protect, and monitor cloud workloads. This includes IT Managers looking to enhance their existing on-premises systems with the hybrid benefits of cloud capabilities.
- **Students** who are just getting started learning about Azure.

This guide maps out your itinerary for deepening your Azure knowledge, drawing on a wide array of Microsoft resources. You'll begin by diving into the fundamental concepts of cloud computing and Azure core infrastructure services, then move on to management, monitoring, security, and compliance. These modules are designed to be completed in order, step by step, as outlined in this guide.

Travel at your own pace—and then continue your Azure exploration with ongoing learning opportunities ranging from blog updates, videos, and events to connect with technical communities. Take the first step toward your Azure destination today.

# Learning topics

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## Start with the fundamentals of Microsoft Azure

In this section, you'll learn about the foundational concepts of cloud computing and gain an overview of Azure services.



### Azure fundamentals

In this free six-part series, you'll explore basic cloud concepts, gain an overview of many Azure services, and participate in hands-on exercises to deploy your very first services.

9 HRS.

[SELF-LEARNING](#)

Within this learning path, the self-learning modules that are most important for the **System Administrator** role include:

### Fundamental Azure concepts

Explore the advantages of using cloud computing services and the different types of cloud computing.

25 MINS.

[SELF-PACED LEARNING](#)

### Core Azure architectural components

Discover the core concepts, resources, and terminology that you need to work with Azure services.

30 MINS.

[SELF-PACED LEARNING](#)

### Azure cost management and service level agreements (SLAs)

Learn about the factors that influence cost, tools for estimating and managing your cloud spend, and how Azure's service level agreements can influence your design decisions.

70 MINS.

[INTERACTIVE LEARNING](#)

### Privacy, compliance, and data protection standards

Find out more about Microsoft's commitment to privacy and how Azure adheres to common regulatory and compliance standards.

30 MINS.

[SELF-PACED LEARNING](#)

### Microsoft Certified: Azure Fundamentals

Demonstrate your knowledge of cloud concepts and Azure services, workloads, security, privacy, pricing, and support.

[CERTIFICATION](#)

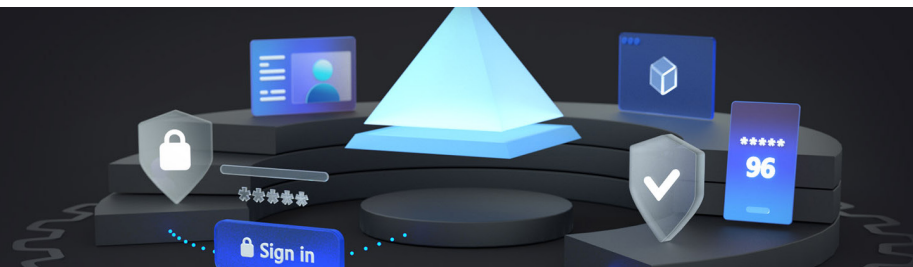


## Explore Azure core infrastructure services

Azure offers a variety of services, but most organizations use those related to identity, compute, networking, storage, and data. In this section, you'll learn more about each of these core infrastructure services.



<a href="#">Identity in Azure</a>	Expand your knowledge of why identity is important, and study examples of common identity scenarios.	20 MINS.	<a href="#">SELF-PACED LEARNING</a>
<a href="#">Azure identity services</a>	Learn how Azure Active Directory helps you manage identities and the benefits of features such as single sign-on, multifactor authentication, and Conditional Access.	20 MINS.	<a href="#">SELF-PACED LEARNING</a>
<a href="#">Azure Active Directory</a>	Gain an overview of Azure Active Directory, which manages access to Microsoft 365, Azure, and more.	10 MINS.	<a href="#">ARTICLE</a>
<a href="#">Azure compute services</a>	Find out about the most popular virtualization services in Azure, including Virtual Machines, Containers, and Azure Functions.	55 MINS.	<a href="#">SELF-PACED LEARNING</a>
<a href="#">Windows virtual machines in Azure</a>	Learn about design considerations for running Windows virtual machines in Azure, including availability, sizing, and data residency.	5 MINS.	<a href="#">ARTICLE</a>
<a href="#">Create a Windows virtual machine in Azure</a>	Create, manage, and connect to a Windows virtual machine in Azure with our interactive training environment.	50 MINS.	<a href="#">INTERACTIVE TRAINING</a>
<a href="#">Linux virtual machines in Azure</a>	Gain insight on what you need to consider for running Linux virtual machines in Azure, including managed disks, distributions, and cloud-init.	5 MINS.	<a href="#">ARTICLE</a>
<a href="#">Azure networking services</a>	Explore core networking services in Azure, including secure connectivity with Azure VPN Gateway and Azure ExpressRoute.	40 MINS.	<a href="#">SELF-PACED LEARNING</a>
<a href="#">Azure Storage services</a>	Become familiar with some of the storage options available in Azure and when to use them.	30 MINS.	<a href="#">SELF-PACED LEARNING</a>
<a href="#">Azure database and analytics services</a>	Learn about Azure's database services, and explore big data and analytics.	45 MINS.	<a href="#">SELF-PACED LEARNING</a>
<a href="#">Azure SQL fundamentals</a>	Study deployment options and services for SQL Server on Azure.	45 MINS.	<a href="#">SELF-PACED LEARNING</a>





## Manage and monitor your Azure environment

After deploying your new Azure resources, you need to be able to effectively manage and monitor them as well as analyze and control their costs. In this section, you'll learn about cost management principles, systems management and monitoring tools, and how you can use automation to streamline your operations.



<a href="#">Cost management best practices</a>	Follow this methodical approach to cost management with tools and principles to optimize your Azure investment.	10 MINS.	<a href="#">ARTICLE</a>
<a href="#">How to track your costs in Azure</a>	See demonstrations of Azure's cost management and billing tools, including budgets and alert notifications, cost detail analysis and export, and Power BI for custom reports.	1 HOUR	<a href="#">VIDEO</a>
<a href="#">Cost savings and business benefits with Azure Cost Management and Billing</a>	Explore Forrester's Total Economic Impact™ study examining the potential return on investment (ROI) from Azure Cost Management and Billing.	30 MINS.	<a href="#">REPORT</a>
<a href="#">Manage and configure your Azure environment</a>	Become familiar with Azure management, administration, and reporting tools.	30 MINS.	<a href="#">SELF-PACED LEARNING</a>
<a href="#">Get started with Azure PowerShell</a>	Study the core PowerShell commands for Azure and try them in your own Azure environment.	5 MINS.	<a href="#">INTERACTIVE LEARNING</a>
<a href="#">Fundamentals of Bicep</a>	Learn Azure's Bicep language for deploying infrastructure-as-code, and practice in our free learning environment.	3 HRS.	<a href="#">INTERACTIVE LEARNING</a>
<a href="#">Monitoring services</a>	Find out more about Azure's tools for insights into the health and performance of your cloud resources and applications.	25 MINS.	<a href="#">SELF-PACED LEARNING</a>
<a href="#">Azure Monitor</a>	Explore Azure's comprehensive solution for collecting, analyzing, and acting on systems telemetry.	10 MINS.	<a href="#">ARTICLE</a>
<a href="#">Azure Automation</a>	Discover Azure's capabilities for process automation, configuration management, update management, and more.	10 MINS.	<a href="#">ARTICLE</a>

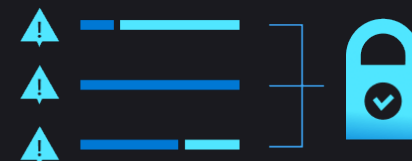


## Manage security and compliance

In this section, you'll learn about the security features and tools available in Azure, from dedicated host servers to secrets storage, security operational monitoring and response, and networking services security. You'll also explore Azure's tools for meeting governance and compliance requirements.



<a href="#">Protect against security threats</a>	Increase your knowledge about how Azure can help you protect systems that you run both in the cloud and in your on-premises datacenter.	25 MINS.	<a href="#">INTERACTIVE LEARNING</a>
<a href="#">Secure network connectivity on Azure</a>	Explore defense in depth and the Azure services that help ensure your network is safe, secure, and trusted.	35 MINS.	<a href="#">INTERACTIVE LEARNING</a>
<a href="#">Build a cloud governance strategy on Azure</a>	Learn how to make organizational decisions about your cloud environment's configuration and enforce them with Azure's governance features and services.	50 MINS.	<a href="#">INTERACTIVE LEARNING</a>
<a href="#">Azure Security Benchmark</a>	Become familiar with our Security Benchmark recommendations for quickly reducing your organization's security risks.	5 MINS.	<a href="#">ARTICLE</a>
<a href="#">Security best practices for Azure solutions</a>	Get to know security best practices for designing, deploying, and managing your Azure cloud resources.	50 MINS.	<a href="#">WHITE PAPER</a>



# Plan and deploy your Azure cloud environment

Now that you understand the core concepts of Azure, this section offers an overview of available migration tools as well as frameworks and templates to help you plan and deploy your own cloud environment.



<a href="#">Azure Cloud Adoption Framework</a>	Get guidance to help you plan and implement business and technology strategies in the cloud.	5 MINS.	<a href="#">ARTICLE</a>
<a href="#">Azure Well-Architected Framework</a>	Explore how to architect high quality, stable, and efficient cloud workloads.	40 MINS.	<a href="#">ARTICLE</a>
<a href="#">Azure landing zones</a>	Learn about Azure landing zone best practices and implementation options.	5 MINS.	<a href="#">ARTICLE</a>
<a href="#">Azure Quickstart Templates</a>	Deploy Azure resources quickly with community contributed templates.	5 MINS.	<a href="#">TEMPLATES</a>
<a href="#">Azure Migrate</a>	Learn about a centralized hub for assessing and migrating on-premises servers, infrastructure, applications, and data to Azure.	5 MINS.	<a href="#">ARTICLE</a>





### Free Azure trial



Get started with \$200 of Azure credit for 30 days, popular services free for 12 months, and more than 40 services that are always free.

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### Training



#### Microsoft Learn

The place to share your learning experiences and get the latest updates related to training and certification.

[INTERACTIVE LEARNING](#)

#### Instructor-led training courses

Prefer a classroom environment with an instructor? Browse the catalog of instructor-led training and find local learning partners.

[CLASSROOM TRAINING](#)

### Blogs



#### Microsoft Azure blog

The latest news and announcements direct from Azure product teams.

[BLOG](#)

#### ITOps Talk blog

Processes and solutions for operating your workloads efficiently in the cloud and on-premises, from Microsoft's Modern Infrastructure team.

[BLOG](#)

### Documentation



#### Azure documentation

Learn how to build and manage powerful infrastructure and applications using Microsoft Azure cloud services. Get documentation, example code, tutorials, and more.

[ARTICLES](#)

#### Azure updates

Stay informed on the latest product features.

[ROADMAP](#)

### Stay connected



#### Microsoft events

Special events and virtual training days to help you expand your expertise, learn new skills, and build community.

[EVENTS](#)

#### Azure community

Your community for best practices and the latest news on Azure.

[FORUMS](#)