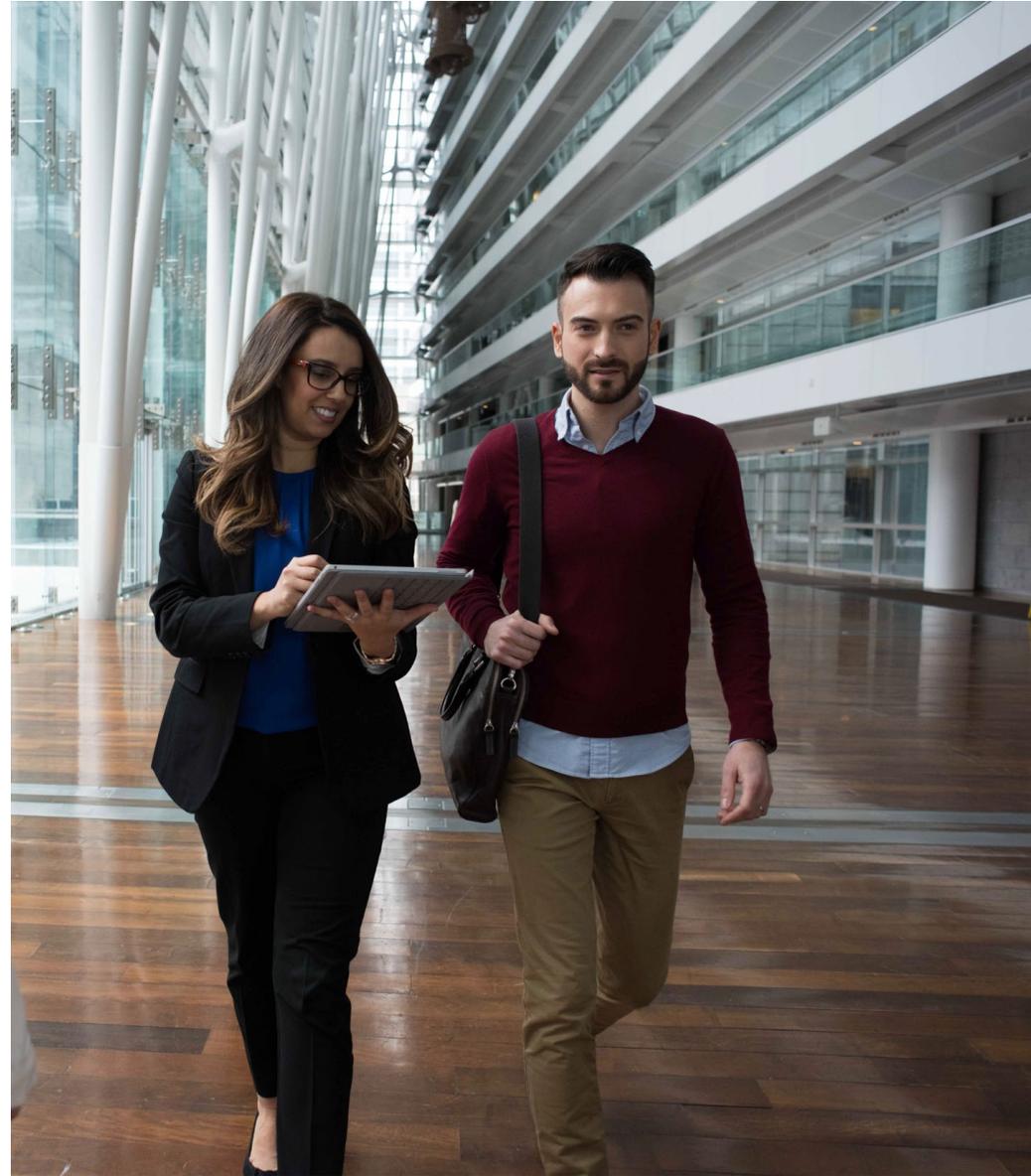




MS-900T01-A Learning Path: Describe cloud concepts

© Copyright Microsoft Corporation. All rights reserved.



Learning Path Agenda



Describe cloud computing



Describe the benefits of using cloud services



Describe cloud service types

Module 1: Describe cloud computing



Module 1 Introduction

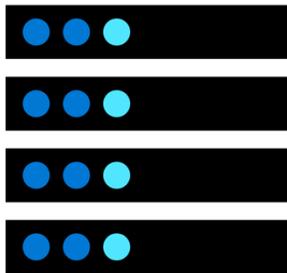
After completing this module, you'll be able to:

- Define cloud computing
- Describe the shared responsibility model
- Define cloud models, including public, private, and hybrid
- Identify appropriate use cases for each cloud model
- Describe the consumption-based model
- Compare cloud pricing models

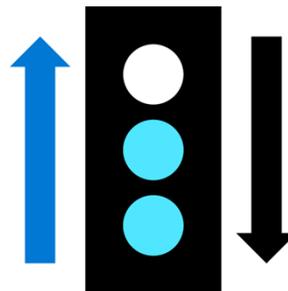
What is cloud computing?

Cloud Computing

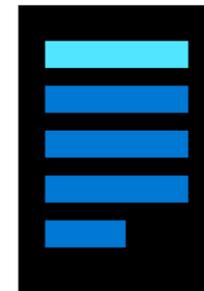
is the delivery of computing services over the internet, enabling faster innovation, flexible resources, and economies of scale.



Compute



Networking



Storage

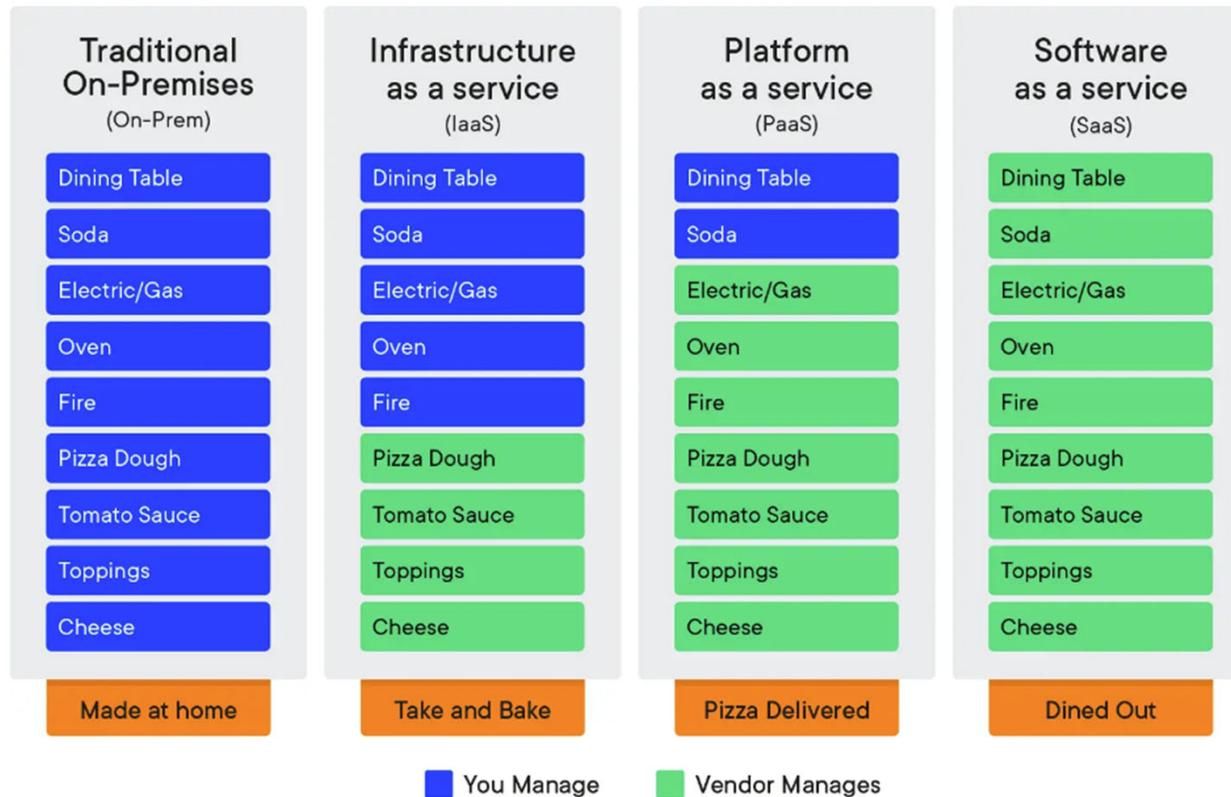
Shared responsibility model

Responsibility		SaaS	PaaS	IaaS	On-prem
Responsibility always retained by the customer	Information and data	Customer	Customer	Customer	Customer
	Devices (Mobile and PCs)	Customer	Customer	Customer	Customer
	Accounts and identities	Customer	Customer	Customer	Customer
Responsibility varies by type	Identity and directory infrastructure	Shared	Shared	Customer	Customer
	Applications	Microsoft	Shared	Customer	Customer
	Network controls	Microsoft	Shared	Customer	Customer
	Operating system	Microsoft	Microsoft	Customer	Customer
Responsibility transfers to cloud provider	Physical hosts	Microsoft	Microsoft	Microsoft	Customer
	Physical network	Microsoft	Microsoft	Microsoft	Customer
	Physical datacenter	Microsoft	Microsoft	Microsoft	Customer

■ Microsoft
 ■ Customer
 ▬ Shared

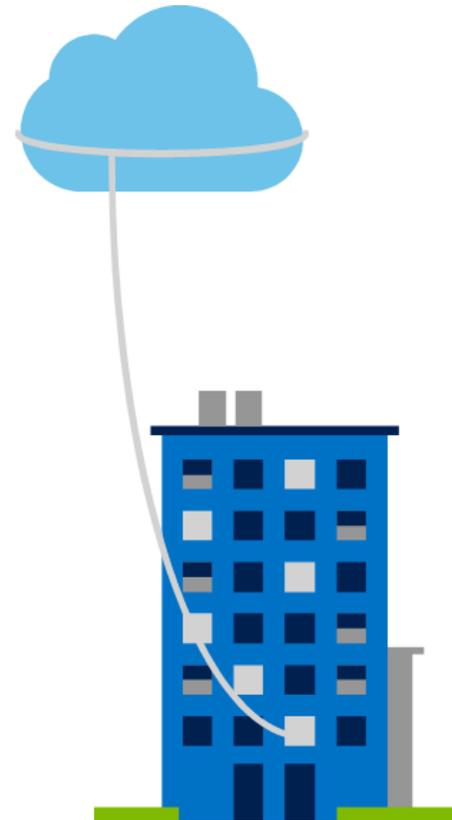
Pizza as a Service

Pizza as a service



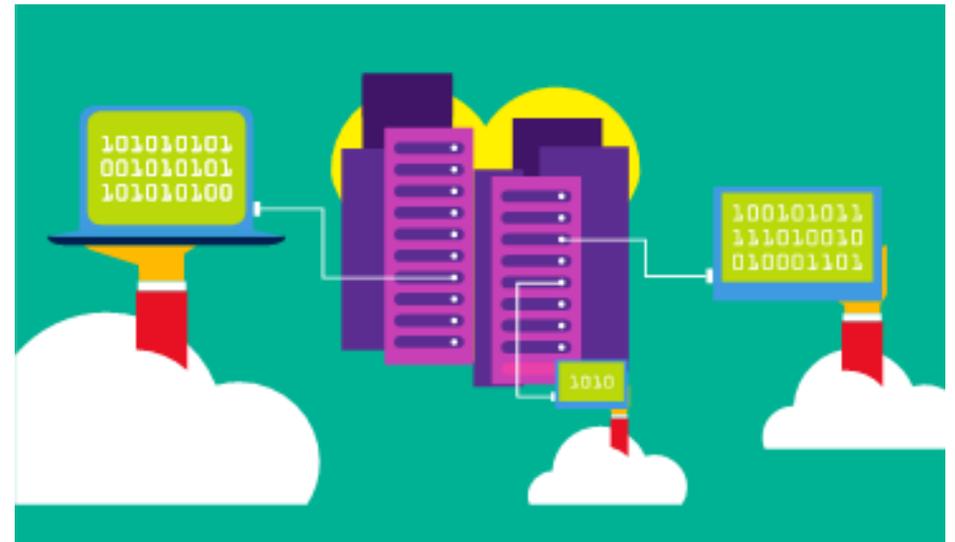
Private cloud

- Organizations create a cloud environment in their datacenter.
- Organization is responsible for operating the services they provide.
- Does not provide access to users outside of the organization.



Public cloud

- Owned by cloud services or hosting provider.
- Provides resources and services to multiple organizations and users.
- Accessed via secure network connection (typically over the internet).



Hybrid cloud

Combines **Public** and **Private** clouds to allow applications to run in the most appropriate location.



Cloud model comparison

Public Cloud

- No capital expenditures to scale up.
- Applications can be quickly provisioned and deprovisioned.
- Organizations pay only for what they use.

Private Cloud

- Hardware must be purchased for start-up and maintenance.
- Organizations have complete control over resources and security.
- Organizations are responsible for hardware maintenance and updates.

Hybrid Cloud

- Provides the most flexibility.
- Organizations determine where to run their applications.
- Organizations control security, compliance, or legal requirements.

Compare CapEx vs. OpEx

Capital Expenditure (CapEx)

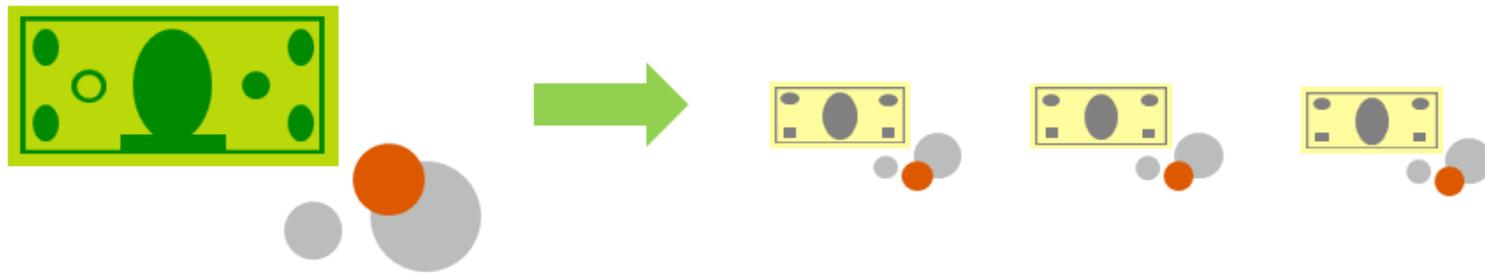
The up-front spending of money on physical infrastructure.

Costs from CapEx have a value that reduces over time.

Operational Expenditure (OpEx)

Spend on products and services as needed, pay-as-you-go

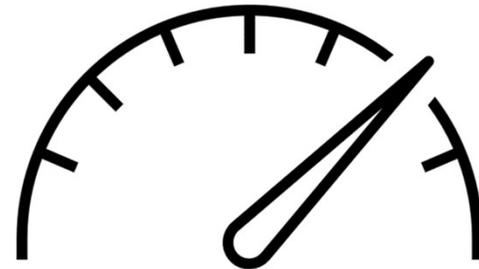
Get billed immediately



Consumption-based model

Cloud service providers operate on a consumption-based model, which means that end users only pay for the resources that they use. Whatever they use is what they pay for.

- Better cost prediction
- Prices for individual resources and services are provided
- Billing is based on actual usage



Module 2: Describe the benefits of using cloud services



Module 2 Introduction

After completing this module, you'll be able to:

- Describe the benefits of high availability and scalability in the cloud
- Describe the benefits of reliability and predictability in the cloud
- Describe the benefits of security and governance in the cloud
- Describe the benefits of manageability in the cloud

Cloud Benefits

High availability

Scalability

Predictability

Governance

Elasticity

Reliability

Security

Manageability

Module 3: Describe cloud service types



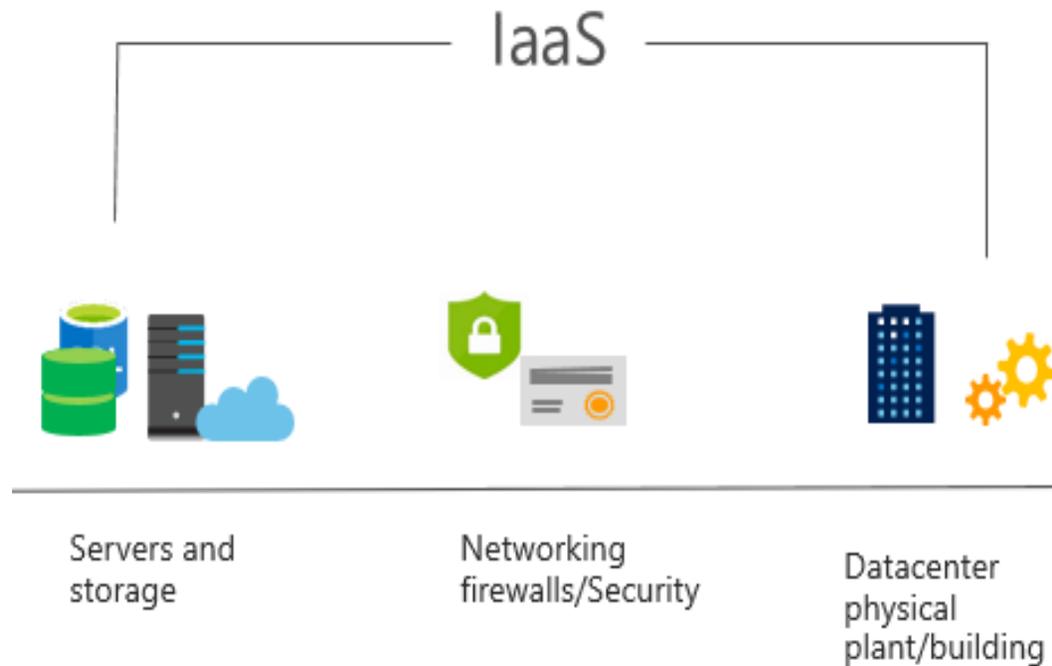
Module 3 Introduction

After completing this module, you'll be able to:

- Describe Infrastructure as a Service (IaaS)
- Describe Platform as a Service (PaaS)
- Describe Software as a Service (SaaS)
- Identify appropriate use cases for each cloud service (IaaS, PaaS, SaaS)

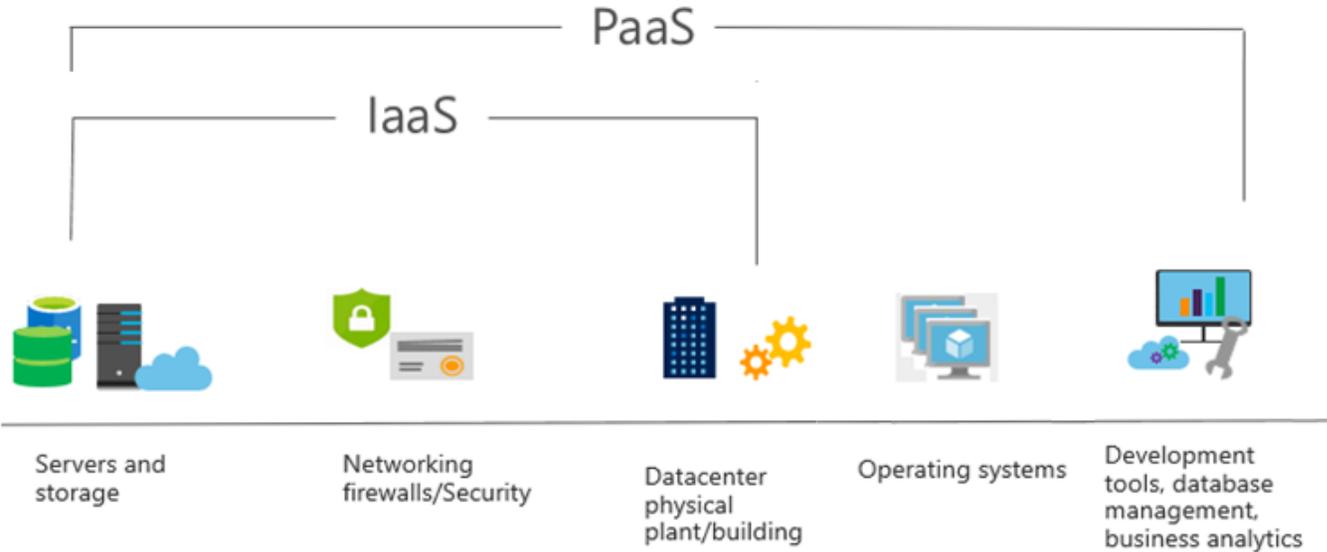
Infrastructure as a Service (IaaS)

Build pay-as-you-go IT infrastructure by renting servers, virtual machines, storage, networks, and operating systems from a cloud provider.



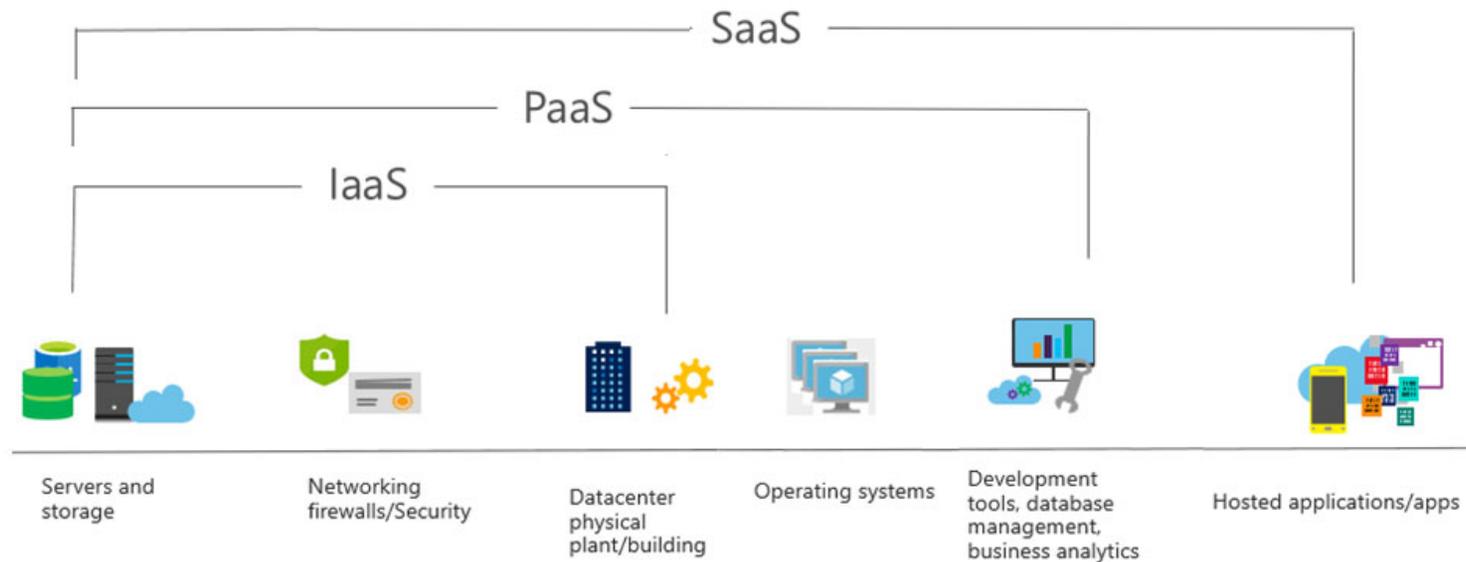
Platform as a Service (PaaS)

Provides environment for building, testing, and deploying software applications; without focusing on managing underlying infrastructure.



Software as a Service (SaaS)

Users connect to and use cloud-based apps over the internet: for example, Microsoft Office 365, email, and calendars.



Cloud service comparison

IaaS

The most flexible cloud service.

You configure and manage the hardware for your application.

PaaS

Focus on application development.

Platform management is handled by the cloud provider.

SaaS

Pay-as-you-go pricing model.

Users pay for the software they use on a subscription model.

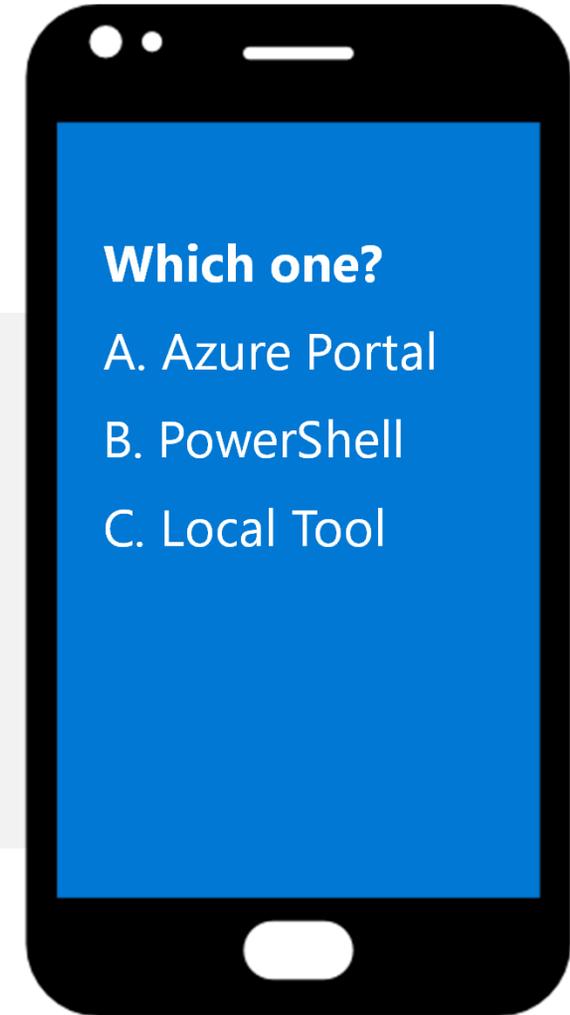
Knowledge Check

Populate with instructions to use the polling tool of your choice

Module 1:

PowerShell and Azure Command Line (CLI)

1. Use your Smartphones or Mobile Devices
2. Go to (*insert polling app link of your choice*)
3. Enter Code: **123-45-678**
4. Please participate in the quiz for this section



Learning Path Summary



Learned about cloud computing



Learned about the benefits of using cloud services



Learned about cloud service types

References

AZ-999 Azure Generic Title for Administrators

<https://docs.microsoft.com/en-us/learn/>







MS-900T01-A Learning Path: Describe Microsoft 365 apps and services

© Copyright Microsoft Corporation. All rights reserved.



Learning Path Agenda



What is Microsoft 365?



Describe productivity solutions of Microsoft 365



Describe collaboration solutions of Microsoft 365



Describe endpoint modernization, management concepts, and deployment options in Microsoft 365



Describe analytics capabilities of Microsoft 365

Module 1: What is Microsoft 365?



Module 1 Introduction

After completing this module, you'll be able to:

- Describe Office 365, Microsoft 365, and Windows 365
- Describe how Microsoft 365 empowers workers for hybrid and flexible work
- Create a Microsoft 365 trial organization

What is Microsoft 365?



Microsoft 365 (M365)

brings together the best-in-class productivity apps from Office 365 with advanced device management, intelligent security, and innovative online services.

The tools of Microsoft 365 help drive productivity, collaboration, and communication securely across many devices, whether you are at home, in the office, out in the field, or on the go.



The differences between Office 365 and Microsoft 365

Office 365

is a cloud-based service that includes apps such as Word, Excel, PowerPoint, and Outlook along with services such as Microsoft Exchange, SharePoint, Teams and OneDrive.



Microsoft 365

is a cloud-based service that includes the same Office apps and services, plus Windows 10, and Enterprise Mobility + Security.

- Enterprise Mobility + Security (EMS) is a mobility management and security platform.

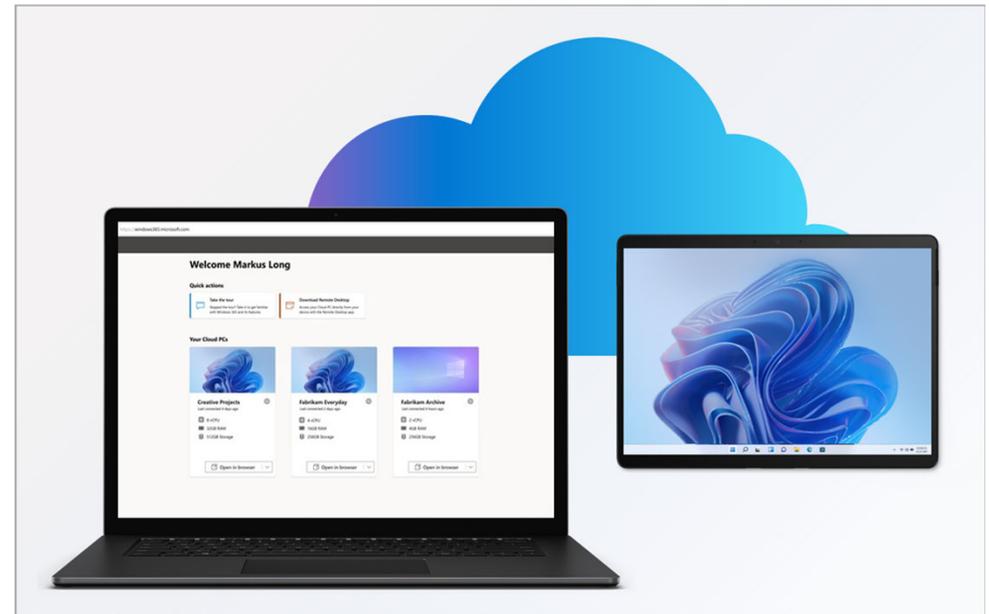


What is Windows 365?

Windows 365

is a cloud-based service that automatically creates a new type of Windows virtual machine, called Cloud PCs, for your end users.

Windows 365 securely streams your Windows desktop, apps, settings, and content from the Microsoft cloud to a Cloud PC so you can access a personalized Windows 10 or Windows 11 experience from any Windows, iOS, or Android device.



What is hybrid work and flexible work?

Hybrid work

is a combination of traditional, in-person office work and remote, offsite work.

Flexible work

is a hybrid work model that allows you to combine remote and in-person days however works best for you.

What is a frontline worker?

Frontline workers

are employees whose primary function is to work directly with customers or the general public providing services, support, and selling products, or employees directly involved in the manufacturing and distribution of products or services.

Examples: retail, rescue, protective service, healthcare, food service, utility, transportation workers



Microsoft 365 empowers workers in this hybrid world of work

Microsoft 365 can help your organization meet the diverse needs of all your workers:

Connected

Stay connected from anywhere in the world and at any time with cloud-based services.

Secure

Secure sign-ins with multi-factor authentication (MFA) and built-in security features to protect against malware, malicious attacks, and data loss.

Managed

Manage your worker's devices from the cloud with security settings, allowed apps, and to require compliance with system health.

Productive and Collaborative

Stay collaborative and productive with online meetings, chat, shared workspaces, and automated business processes.

Employee experiences

Foster an inclusive company culture and increase employee wellbeing while making sure they have the resources they need.

Explore Microsoft 365 tenant

Join the Microsoft 365 developer program:

1. Go to [Developer Program | Microsoft 365 Dev Center](#) to sign in with your Microsoft account.
2. After signing in, select **Join now** and follow the steps.

Set up and configure a sandbox subscription:

1. On your Microsoft 365 E5 developer profile page, choose **Set up E5 subscription**.
2. Choose whether you want an instant sandbox or a configurable sandbox, select next then follow the steps.
3. After the subscription is created, your subscription domain name and expiration date appear on your profile page.
4. On your profile page, choose **Go to subscription** and sign in with your user ID and the password that you specified for your developer subscription.
5. Use the app launcher to go to the Microsoft 365 admin center.
6. On the admin center home page, choose **Go to guided setup**.
7. **Explore the various admin centers** – Microsoft 365 admin center, Azure Active Directory admin center, and Microsoft Teams admin center.



Module 2: Describe productivity solutions of Microsoft 365



Module 2 Introduction

After completing this module, you'll be able to:

- Describe how the capabilities of Microsoft 365 can boost productivity
- Describe how Microsoft 365 Apps help people craft compelling content in real-time
- Describe how the capabilities of the work management tools optimize operations
- Describe additional Microsoft 365 productivity apps

Productivity capabilities and benefits of Microsoft 365



Create content in real time – *Office apps: Word, Excel, PowerPoint, OneNote*



Access files and photos anywhere – *OneDrive*



Collaborate through online meetings, chat, and calls – *Teams*



Always stay connected and organized – *Outlook*



Stay up-to-date through business-class email and calendaring – *Exchange*



Optimize and simplify operations – *Project, Planner, Bookings, To Do, Forms, Lists*



Streamline everyday processes – *Power Apps and Power Automate*

Microsoft 365 Apps

Microsoft 365 Apps is a cloud-connected version of Office, an always up-to-date suite of the core desktop apps.

Applications included:

- Access (PC only), Excel, Teams, OneDrive, OneNote, Outlook, PowerPoint, Publisher (PC Only), Word
- Available subscriptions: Microsoft 365 Apps for business and Microsoft 365 Apps for enterprise

Microsoft 365 Apps has the benefits of the cloud:

- Work across multiple devices.
- Work with apps that are always up-to-date.
- Work intelligently through connected experiences, ex: PowerPoint Designer, Editor, Research, etc.



Work management tools in Microsoft 365

Project

is a cloud-based work and project management tool designed for more complex work efforts.



Planner

is a task management tool that enables people to plan, manage, and complete task-based initiatives.



Booking

is an appointment scheduling and management system that includes a web-based booking calendar and integrates with Outlook.



To Do

is a task management app that makes it easy to plan and manage your day.



Forms

is an app that allows you to create surveys, quizzes, polls, and other types of forms to capture the information you need.



Lists

is an information tracking app that gives you a way to organize information and work through creating lists.



Additional Microsoft 365 productivity apps

ClipChamp

Delve

Dynamics
365

Dynamics
365
Customer
Voice

Power BI

Sway

Whiteboard

Module 3: Describe collaboration solutions of Microsoft 365



Module 3 Introduction

After completing this module, you'll be able to:

- Describe how the collaboration tools of Microsoft 365 drives teamwork
- Describe how Microsoft Teams helps people communicate and collaborate to do their best work
- Describe how Microsoft Viva helps organizations create thriving work cultures
- Describe how Yammer communities can help foster connections within your organization

Collaboration capabilities and benefits of Microsoft 365



Chat, call and virtually meet with your team – *Teams*



Collaborate on files in real-time – *OneDrive*



Network and engage with people across your organization – *Yammer*



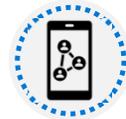
Share news and content with people inside and outside your organization – *SharePoint*



Distribute videos across your team or organization – *Stream (on SharePoint)*



Collaborate through business-class email and calendaring – *Exchange*



Stay connected and share your availability – *Outlook*



Empower people and teams to be their best – *Viva*



Microsoft Teams

Teams is a collaboration app, a hub for teamwork.

Security and compliance

Built on the same enterprise-level security, compliance, and manageability as the rest of Microsoft 365.



Teams and channels

Create teams and channels to bring together to work on projects and keep conversations and content organized.



Chat and instant messaging

Instantly connect to one team member or to an entire team in a group chat anywhere.



Online meetings

Collaborate through online meetings, webinars, live events, or audio and video conferencing.



Teams Phone

Use voice or video calling on your computer, tablet, mobile device or desk phone and transition calls from cellular service to Wi-Fi.

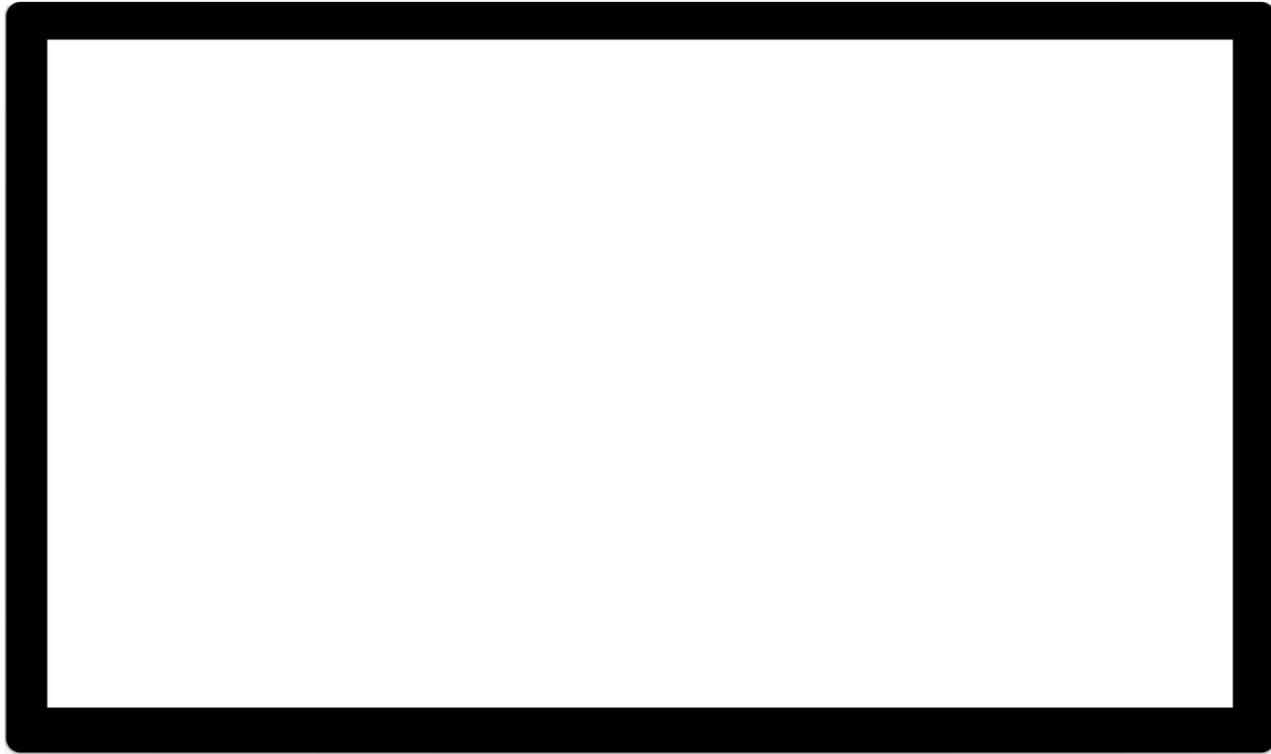


Collaborative apps

Integrate tools you already know or create custom applications to help your team work better together.



Team collaboration in Microsoft Teams





Microsoft Viva apps

Viva is an integrated employee experience platform (EXP) designed for everyone to connect, learn and grow.

Connection

Viva Connections- *discover relevant news, conversations, and quick access to tools and resources.*



Viva Engage- *openly share, ideate, problem solve, and contribute across boundaries.*



Insight

Viva Insights- *provides privacy-protected insights and actionable recommendations.*



Purpose

Viva Goals- *a goal-setting and objectives and key results management solution.*



Growth

Viva Learning- *centralized learning hub designed for skill building and learning.*



Viva Topics- *knowledge discovery through organized content and expertise on topic pages.*

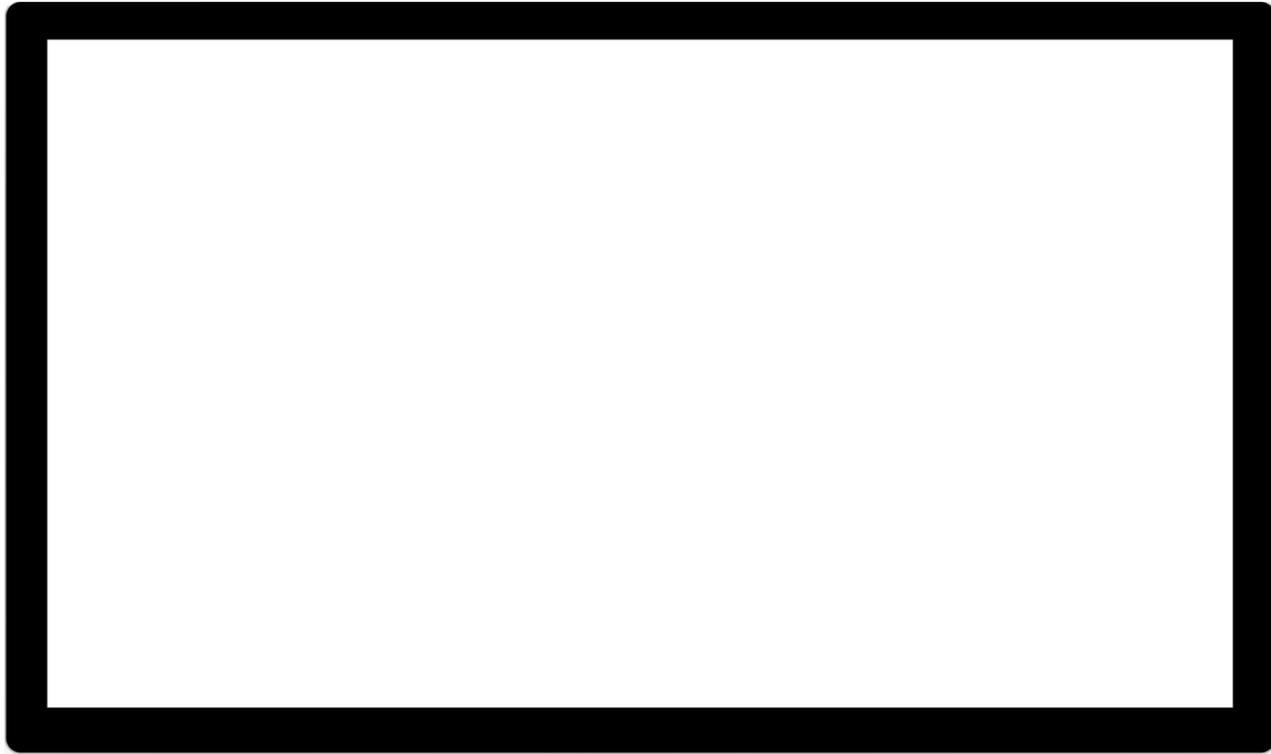


Role-based

Viva Sales- *a seller experience application designed to help sellers boost productivity.*



Exploring Microsoft Viva Insights and Learning





Microsoft Yammer

Yammer is a secure enterprise social network designed for connecting and engaging people across your organization.

-  **Leader engagement.** Communicate at scale with a site for leaders to share news, blogs, polls, broadcast live events and real-time Q&A.
-  **Modernize employee communication.** Create compelling communications with rich text and keep everyone informed and engaged across web and mobile.
-  **Knowledge sharing.** Share knowledge, best practices, ideas, and feedback across the organization.
-  **Engage your employees.** Provide communities for employees, find and join recommended communities around common interests.
-  **Powering communities in Microsoft 365.** Engage in discussions via Outlook, collaborate on Office files and bring communities to SharePoint.

Module 4: Describe endpoint modernization, management concepts, and deployment options in Microsoft 365



Module 3 Introduction

After completing this module, you'll be able to:

- Describe the endpoint modern management capabilities of Microsoft 365
- Describe the differences between Windows 365 and Azure Virtual Desktop
- Describe the deployment and release models for Windows-as-a-Service
- Describe the deployment methods and update channels for Microsoft 365 Apps

Endpoint management capabilities of Microsoft 365

Microsoft 365 enables you to simplify the management of all your devices (Android, iOS, Windows, MacOS) through their **endpoint management solutions**.

Microsoft Intune

cloud-based unified endpoint management solution

Endpoint Analytics

provides metrics on health and performance of devices

Configuration Manager

on-premises management solution

Windows Autopilot

sets up and pre-configures new devices to get ready for use

Co-management

combines Configuration Manager with features of Intune

Azure Active Directory (AD)

manages the identities of users, devices, and groups

Tenant-attach

manages a combination of cloud and on-premises endpoints

Endpoint Manager admin center

website to add users and groups, create and manage policies

Windows 365 and Azure Virtual Desktop

Windows 365 and **Azure Virtual Desktop** are both virtual desktop solutions, also known as ***Desktop-as-a-Service***.

Windows 365

is a subscription based-cloud PC service.

- Personalized Windows 10 or Windows 11 desktops
- Stream your apps, data, content and settings to any device
- Management and deployment with familiar desktop tools
- Predictable per-user pricing
- Optimized from simplicity

Azure Virtual Desktop (AVD)

is a desktop and app virtualization solution on Azure

- Multi-session desktops and remote app streaming
- Run Microsoft 365 Apps in multi-user virtual scenarios
- Full control over management and deployment
- Flexible consumption-based pricing
- Optimized for flexibility

Deployment and release models for Windows-as-a-Service (WaaS)

The **WaaS** model is designed to make life easier for both users and IT pros by simplifying the deployment and servicing of Windows client computers.

Servicing

Release types

- Feature updates
- Quality updates (non-security releases or combined security + non-security releases)

Servicing channels

- Windows Insider Program
- General Availability Channel
- Long-term Servicing Channel

Deployment

Deployment rings

- Preview
- Limited
- Broad

Deployment methods

- Modern
- Dynamic
- Traditional

Deployment methods and update channels for Microsoft 365 Apps

Deployment Methods

- Deploy from a local source with Configuration Manager
- Deploy from the cloud with the Office Deployment Tool (ODT)
- Deploy from a local source with the Office Deployment Tool (ODT)
- Self-install from the cloud

Update channels

- Current Channel
- Monthly Enterprise Channel
- Semi-Annual Enterprise Channel

How updates are installed

M365 Apps checks for updates regularly, and they're downloaded and installed automatically.

Module 5: Describe analytics capabilities of Microsoft 365



Module 4 Introduction

After completing this module, you'll be able to:

- Describe how Viva Insights help people and organizations work smarter and achieve balance
- Describe the capabilities of the Microsoft 365 admin center and user portal
- Describe the reports available in the Microsoft 365 admin center and other admin centers



The capabilities of Viva Insights

Viva Insights provides privacy-protected insights and actionable recommendations that help everyone in the organization work smarter and achieve balance.

Personal Insights

- Personal wellbeing
- Stay connected
- Protect time
- Effective meetings
- Inspiration libraries
- Daily briefing email
- Outlook add-in



Team Insights

Teamwork habits provide key recommendations and actions such as reviewing important emails or documents, scheduling 1:1s, consider changes for quiet hours and more.



Organization Insights

Organization trends gives visibility into current team or company-wide norms.

- Employee wellbeing
- Meeting effectiveness
- Manager connection



The Microsoft 365 admin center and Microsoft 365 user portal

Microsoft 365 admin center

- Manage users by adding, deleting, or restoring users.
- Manage licenses by adding and removing license.
- Manage a M365 group by creating, deleting a group, and editing the name or description.
- Manage billing.
- View or create service requests.
- Manage global settings for apps.
- View activity reports and service health.

Microsoft 365 user portal

Designed for users to access their email, calendar, and documents through M365 apps like Office, Teams, Outlook, and more, on the web with any device and internet access.

Reports in the M365 admin center and other admin centers

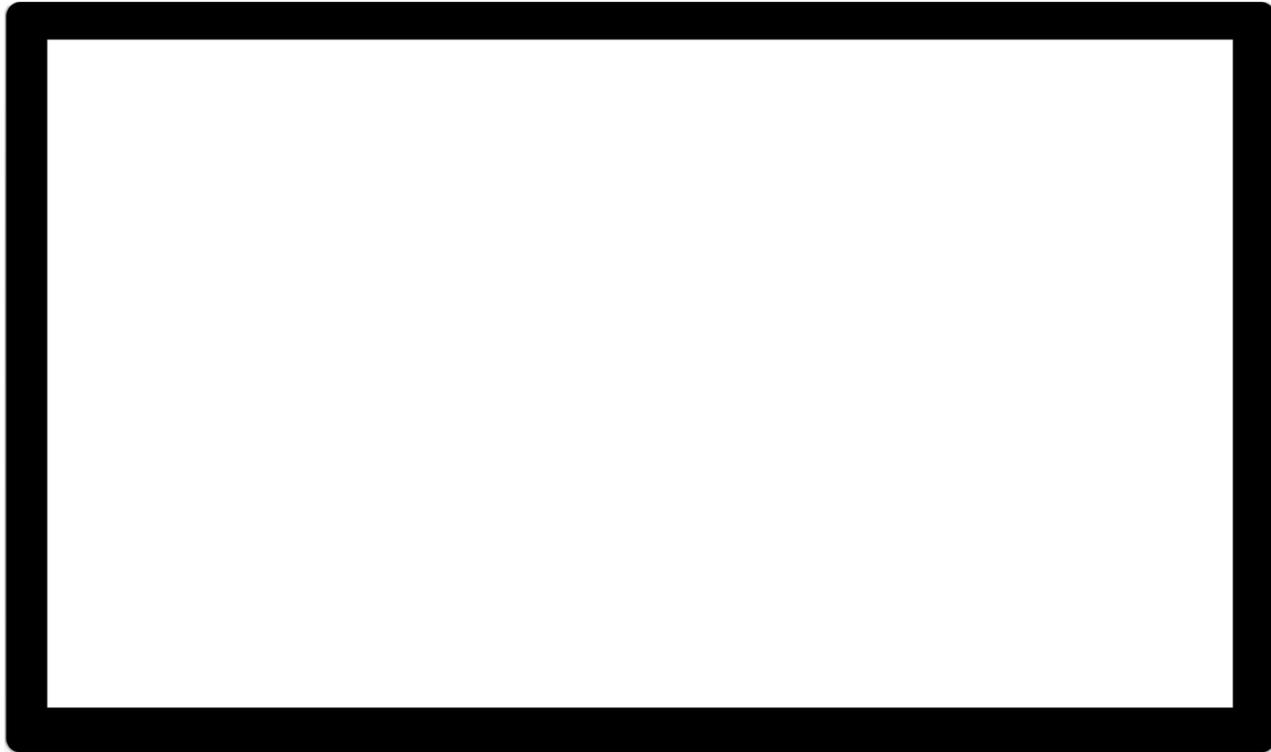
M365 admin center reports

- **Adoption Score**- provides metrics, insights and recommendations in two areas:
 - People experiences
 - Technology experiences
- **Usage**- helps you see how users are using M365 apps and services across your org.

Other admin centers with reports

- Security - Microsoft 365 Defender
- Compliance - Microsoft Purview
- Endpoint Manager
- Azure Active Directory
- Exchange
- SharePoint
- Teams

Explore Microsoft 365 admin center



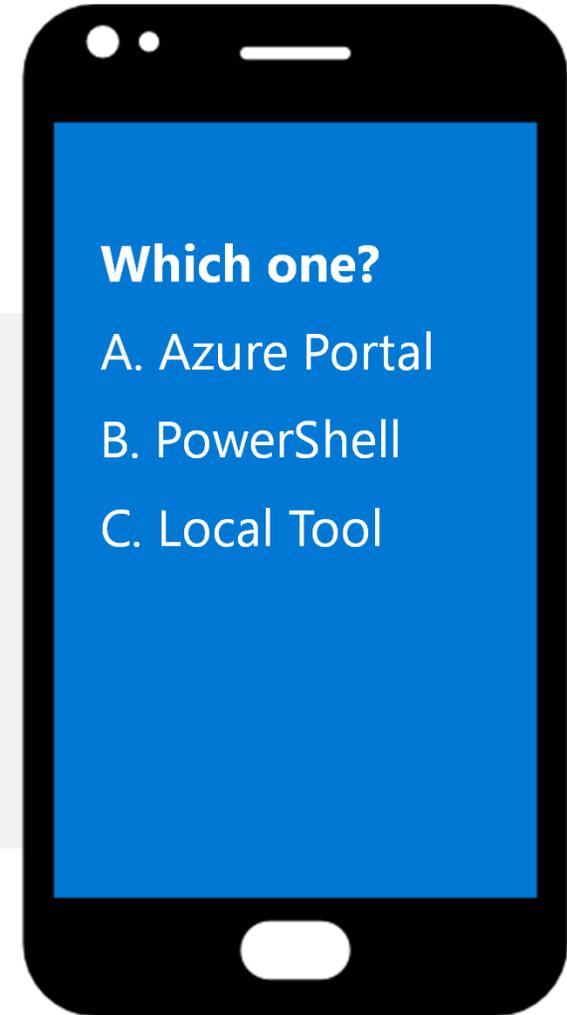
Knowledge Check

Populate with instructions to use the polling tool of your choice

Module 1:

PowerShell and Azure Command Line (CLI)

1. Use your Smartphones or Mobile Devices
2. Go to (*insert polling app link of your choice*)
3. Enter Code: **123-45-678**
4. Please participate in the quiz for this section



Learning Path Summary



Learned about Microsoft 365 (M365)



Learned about the productivity solutions of M365



Learned about the collaboration solutions of M365



Learned about the endpoint modernization, management concepts, and deployment options in M365



Learned about the analytics capabilities of M365

References

AZ-999 Azure Generic Title for Administrators

<https://docs.microsoft.com/en-us/learn/>







MS-900T01-A Learning Path: Describe Microsoft 365 security and compliance capabilities

© Copyright Microsoft Corporation. All rights reserved.



Learning Path Agenda



Describe the services and identity types of Azure AD



Describe the access management capabilities of Azure AD



Describe threat protection with Microsoft 365 Defender



Describe security capabilities of Microsoft Sentinel



Describe the compliance management capabilities in Microsoft Purview



Describe the Service Trust Portal and privacy at Microsoft

Module 1: Describe the services and identity types of Azure AD



Module 1 Introduction

After completing this module, you'll be able to:

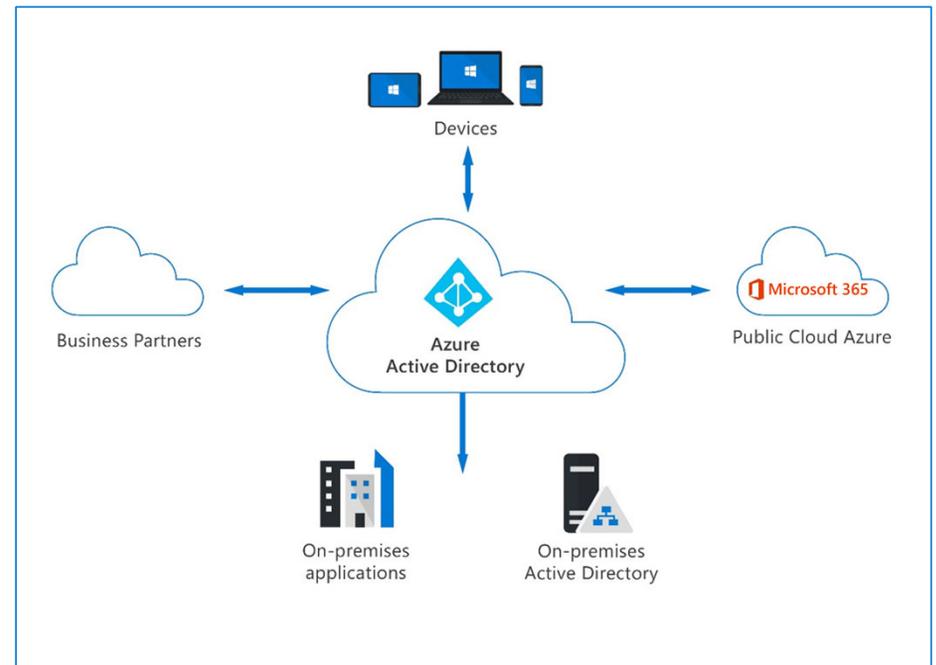
- Describe Azure AD
- Describe the identity types that Azure AD supports

Microsoft Azure Active Directory, part of Microsoft Entra

Microsoft Entra is our product family that encompasses all of Microsoft's identity and access capabilities, including Microsoft Azure Active Directory (Azure AD).

Azure AD is Microsoft's cloud-based identity and access management service. Capabilities of Azure AD include:

- Organizations can enable their employees, guests, and others to sign in and access the resources they need.
- Provide a single identity system for their cloud and on-premises applications.
- Protect user identities and credentials and to meet an organization's access governance requirements.
- Each Microsoft 365, Office 365, Azure, and Dynamics 365 Online subscription automatically use an Azure AD tenant.



Azure AD identity types

Azure AD manages different types of identities: users, service principals, managed identities, and devices.



User – Generally speaking, a user is a representation of an individual's identity that's managed by Azure AD. Employees and guests are represented as users in Azure AD.



Device - A piece of hardware, such as mobile devices, laptops, servers, or printer. Device identities can be set up in different ways in Azure AD, to determine properties such as who owns the device.

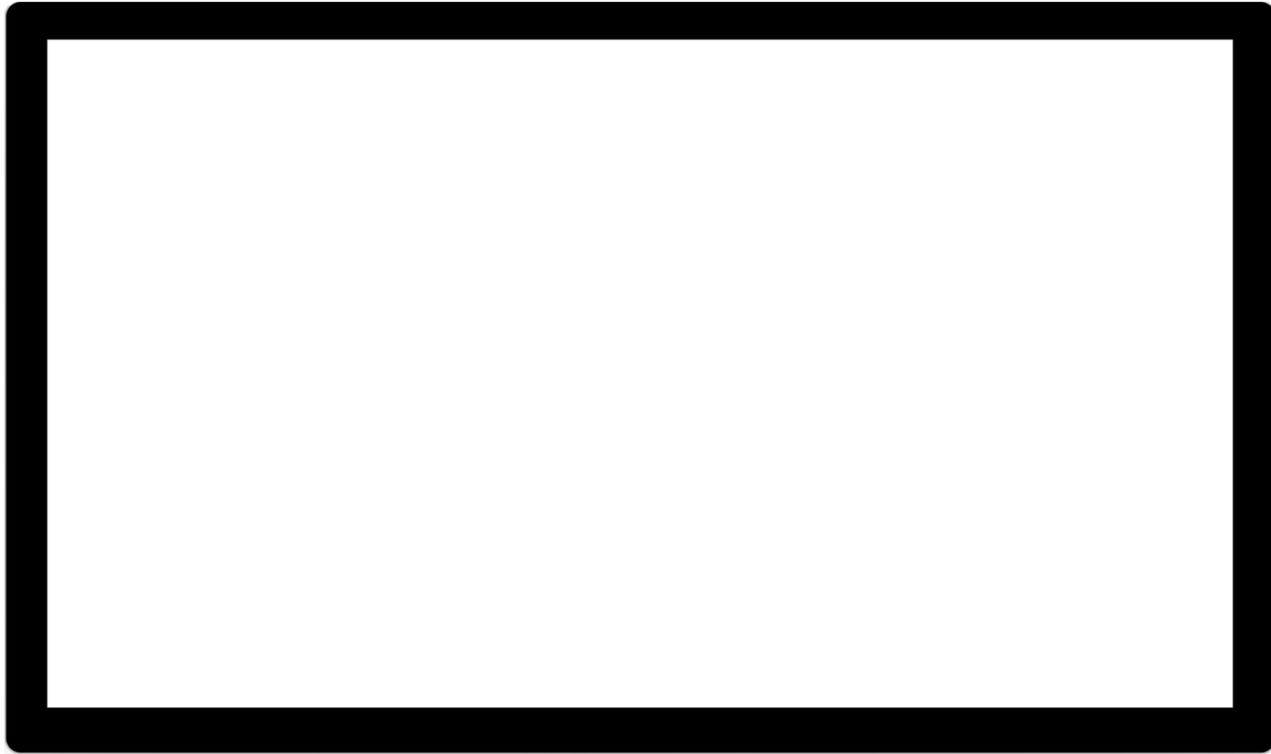


Service principal - You can think of it as an identity for an application. A service principal is created in every tenant the application is used & defines who can access the app, what resources the app can access, and more.



Managed identity – A type of service principal, a managed identity provides an identity for applications to use when connecting to resources that support Azure AD authentication. Developers don't need to manage credentials.

Azure AD user settings



External identities in Azure AD

Two different Azure AD External Identities:

B2B collaboration

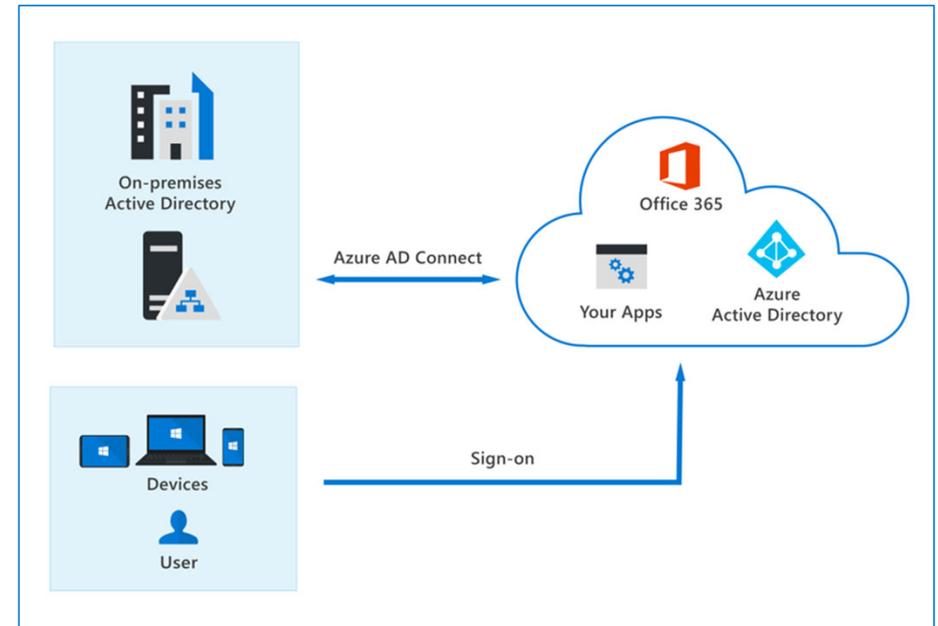
B2B collaboration allows you to share your apps and resources with external users.

B2C access management

B2C is an identity management solution for consumer and customer facing apps.

The concept of hybrid identities

- A **hybrid identity** is a common user identity for authentication and authorization to all resources, regardless of location (on-prem & cloud).
- With **Azure AD Connect**, updates to your on-premises AD DS are synchronized to your Azure AD.
- Hybrid identity Authentication methods:
 - Password hash sync
 - Passthrough authentication
 - Federated authentication



Module 2: Describe the access management capabilities of Azure AD



Module 2 Introduction

After completing this module, you'll be able to:

- Describe Conditional Access and its benefits
- Describe Azure AD roles and role-based access control (RBAC)

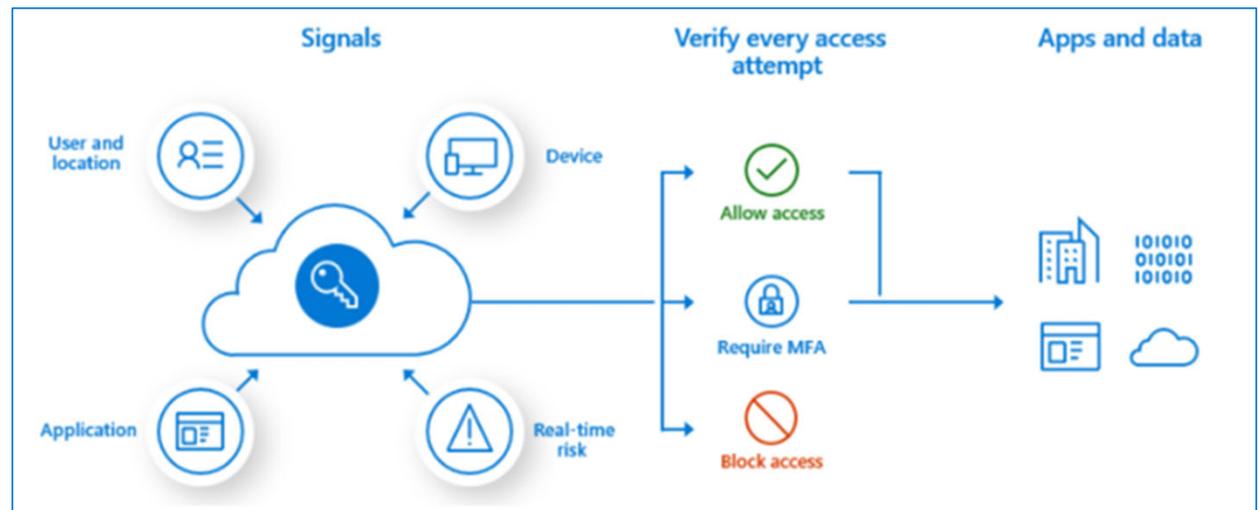
Conditional access

Conditional Access signals:

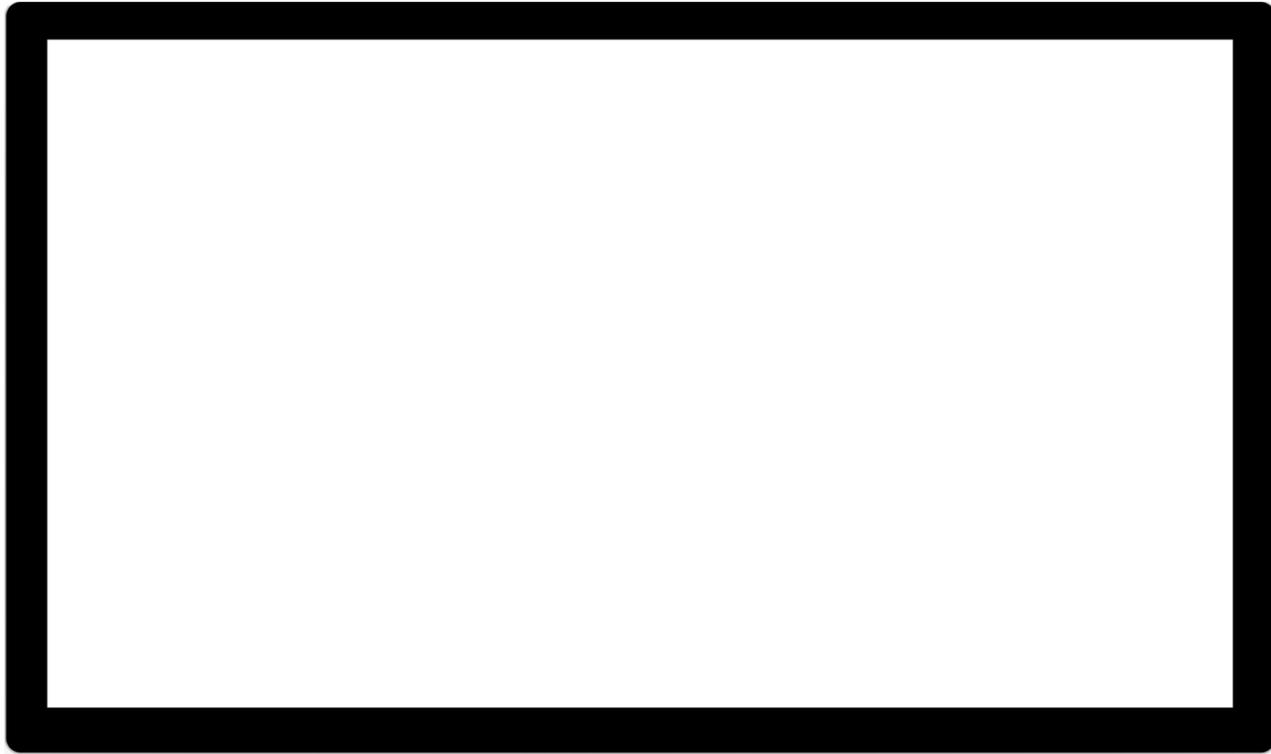
- User or group membership
- Named location information
- Device
- Application
- Real-time sign-in risk detection
- Cloud apps or actions
- User risk

Access controls:

- Block access
- Grant access
- Require one or more conditions to be met before granting access.
- Control user access based on session controls to enable limited experiences within specific cloud applications.



Azure AD Conditional Access



Azure AD roles & role-based access control (RBAC)

Azure AD roles control permissions to manage Azure AD resources.



Built-in roles



Custom roles



Categories of
Azure AD roles:
Azure AD
specific, service-
specific, cross
service



Only grant
the access
users need

Module 3: Describe threat protection with Microsoft 365 Defender



Module 3 Introduction

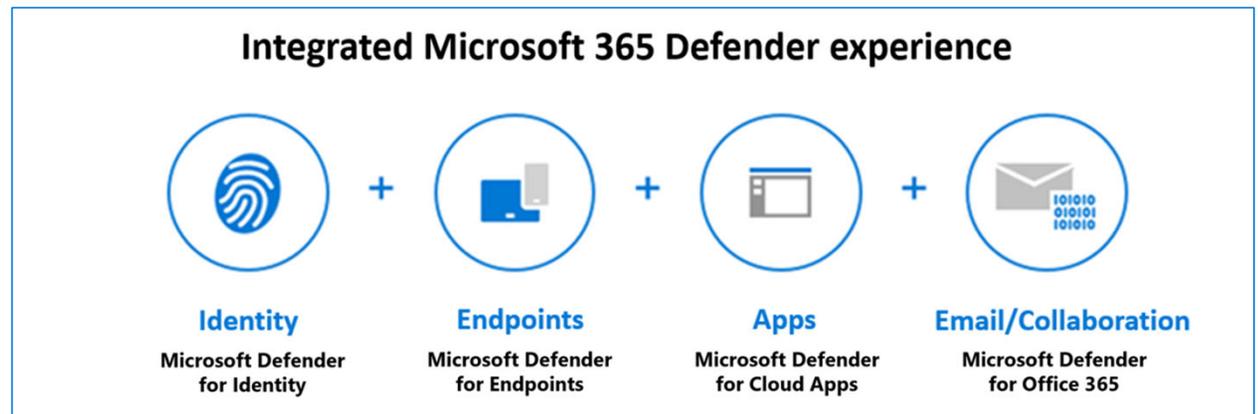
After completing this module, you'll be able to:

- Describe the Microsoft 365 Defender service
- Describe how Microsoft 365 Defender provides integrated protection against sophisticated attacks
- Describe and explore Microsoft 365 Defender portal

Microsoft 365 Defender services

Microsoft 365 Defender

- Natively coordinate the detection, prevention, investigation, and response to threats.
- Protects identities, endpoints, apps, and email & collaboration.



Microsoft Defender for Office 365

Microsoft Defender for Office 365 covers:

1

Threat protection policies

2

Reports

3

Threat investigation and response capabilities

4

Automated investigation and response capabilities

Microsoft Defender for Office 365 Plan 1

- Safe Attachments
- Safe Links
- Safe Attachments for SharePoint, OneDrive, & Microsoft Teams
- Anti-phishing protection
- Real-time detections

Microsoft Defender for Office 365 Plan 2

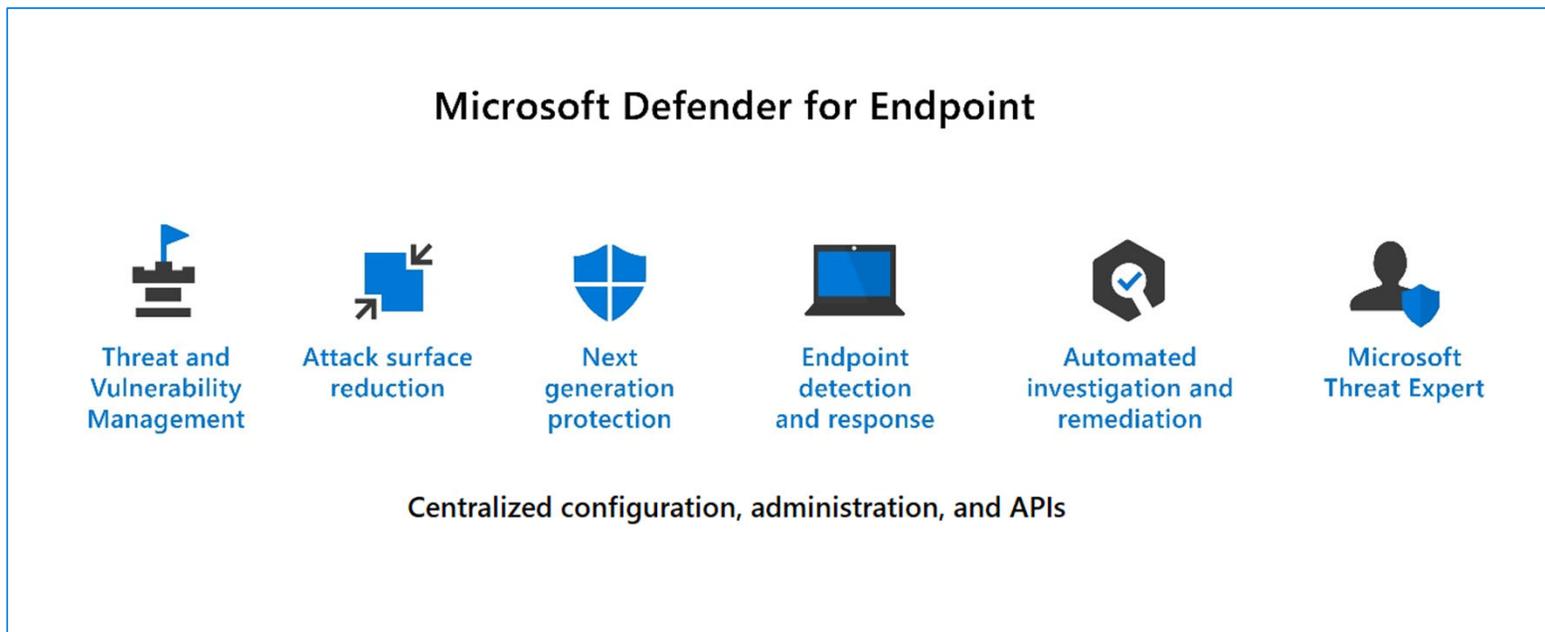
- Threat Trackers & Threat Explorer
- Automated investigation & response (AIR)
- Attack Simulator
- Proactively hunt for threats
- Investigate incidents and alerts

Microsoft Defender for Office 365 availability

- Microsoft 365 E5
- Office 365 E5
- Office 365 A5
- Microsoft 365 Business Premium

Microsoft Defender for Endpoint

Microsoft Defender for Endpoint is a platform designed to help enterprise networks protect endpoints.



Microsoft Defender for Cloud Apps

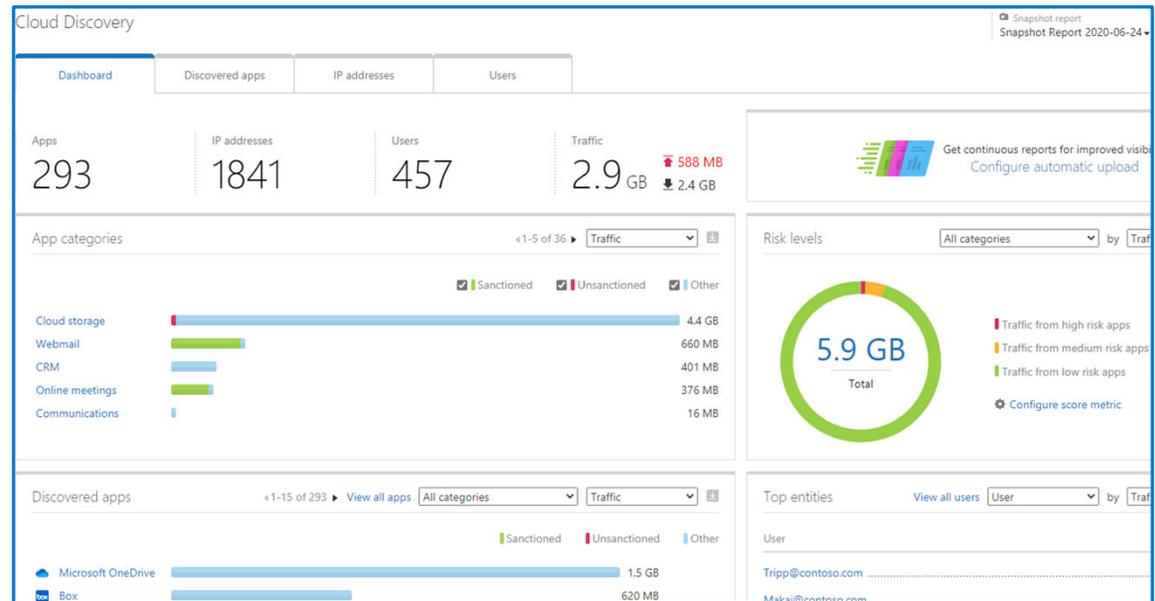
Microsoft Defender for Cloud Apps provides rich visibility to your cloud services, control over data travel, and sophisticated analytics to identify and combat cyberthreats across all your Microsoft and third-party cloud services.

The Defender for Cloud Apps framework

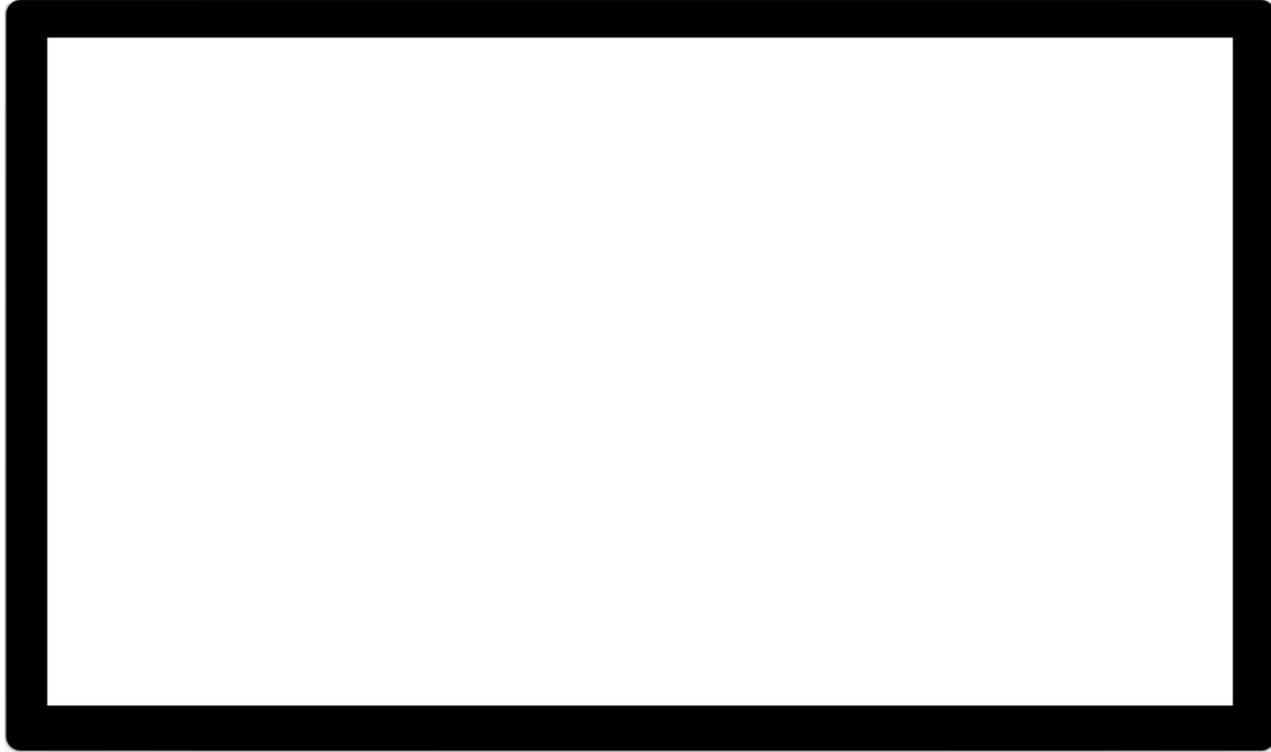
- Discover and control the use of Shadow IT.
- Protect your sensitive information anywhere in the cloud.
- Protect against cyberthreats and anomalies.
- Assess your cloud apps' compliance.

Office 365 Cloud App Security

Enhanced Cloud App Discovery in Azure Active Directory



Microsoft Defender for Cloud Apps



Microsoft Defender for Identity

Microsoft Defender for Identity covers following key areas:

Monitor and profile user behavior and activities

Defender for Identity monitors and analyzes user activities and information across your network, including permissions and group membership, creating a behavioral baseline for each user.

Protect user identities and reduce the attack surface

Defender for Identity gives invaluable insights on identity configurations and suggested security best practices. Through security reports and user profile analytics.

Identify suspicious activities and advanced attacks across the cyberattack kill-chain

- Reconnaissance
- Compromised credentials
- Lateral movements
- Domain dominance

Investigate alerts and user activities

Defender for Identity is designed to reduce general alert noise, providing only relevant, important security alerts in a simple, real-time organizational attack timeline.

Microsoft 365 Defender portal

The **Microsoft 365 Defender portal** combines protection, detection, investigation, and response to email, collaboration, identity, and device threats, in a central portal.



View the security health of your organization.

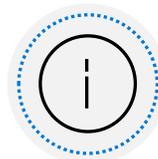


Act to configure devices, users, and apps.



Get alerts for suspicious activity.

The Microsoft 365 Defender navigation pane include these options and more:



Incidents & alerts



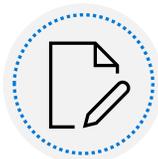
Hunting



Action center



Threat analytics



Secure Score



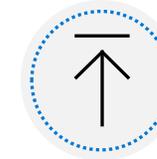
Learning hub



Endpoints



Email & collaboration



Reports



Permissions & roles

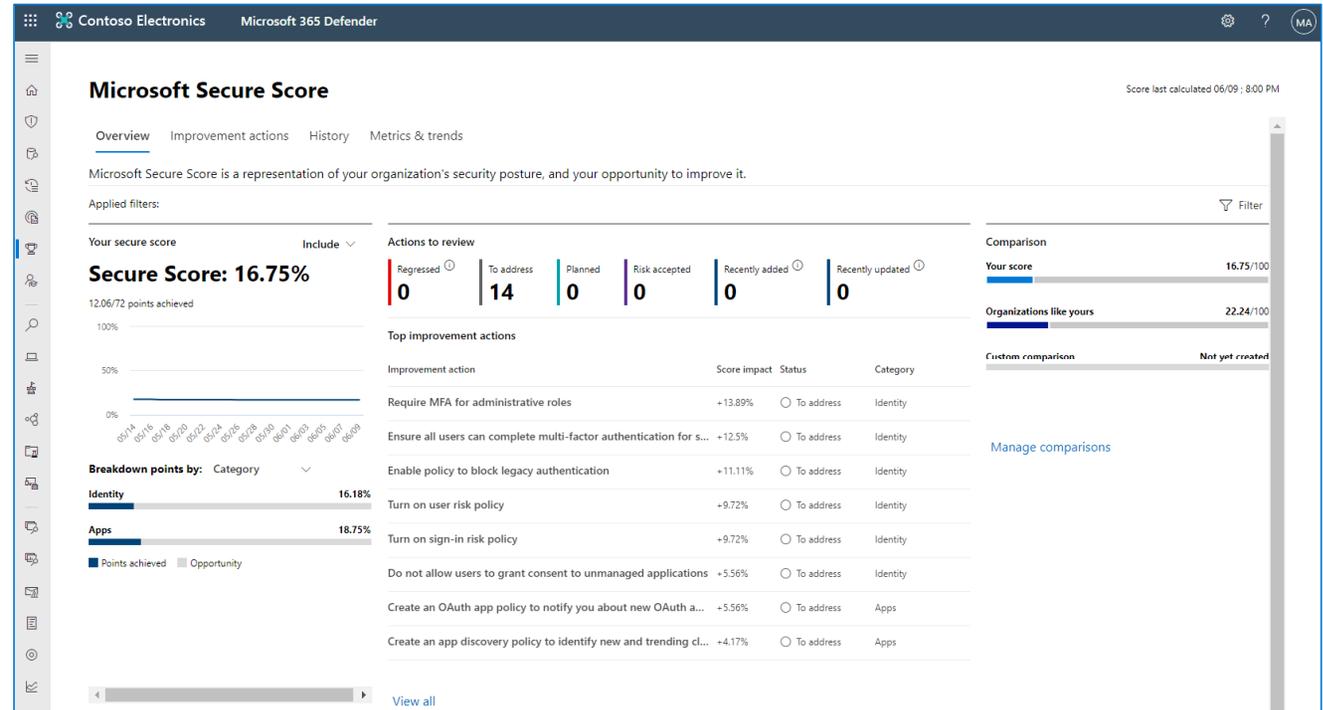
Microsoft Secure Score

Microsoft Secure Score is a representation of a company's security posture.

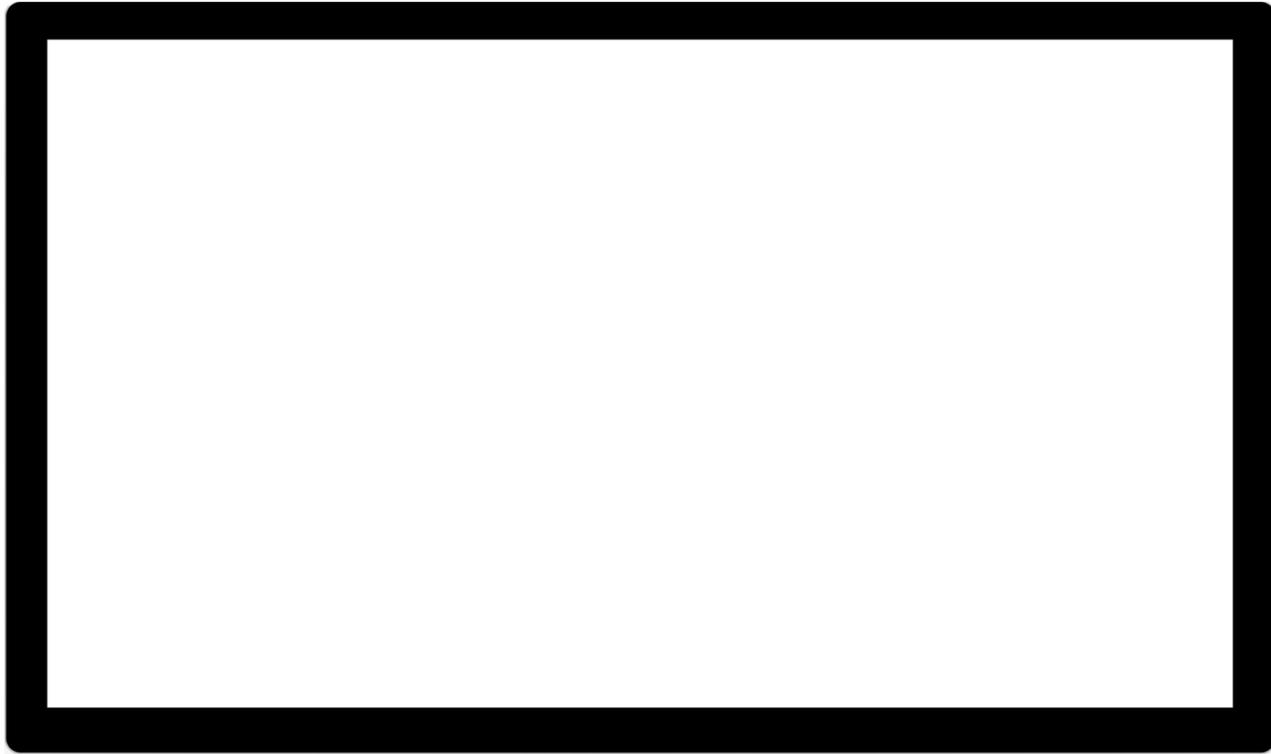
Will show all possible improvements for the product, whatever the license edition, subscription, or plan.

Supports recommendations for:

- Microsoft 365
- Azure Active Directory
- Microsoft Defender for Endpoint
- Microsoft Defender for Identity
- Microsoft Defender for Cloud Apps



The Microsoft 365 Defender portal



Module 4: Describe security capabilities of Microsoft Sentinel



Module 4 Introduction

After completing this module, you'll be able to:

- Describe the security concepts for SIEM and SOAR
- Describe how Microsoft Sentinel provides integrated threat protection
- Describe the pricing models of Microsoft Sentinel

SIEM and SOAR

SIEM

What is security incident and event management?

A SIEM system is a tool that an organization uses to collect data from across the whole estate, including infrastructure, software, and resources. It does analysis, looks for correlations or anomalies, and generates alerts and incidents.

SOAR

What is security orchestration automated response?

A SOAR system takes alerts from many sources, such as a SIEM system. The SOAR system then triggers action-driven automated workflows and processes to run security tasks that mitigate the issue.

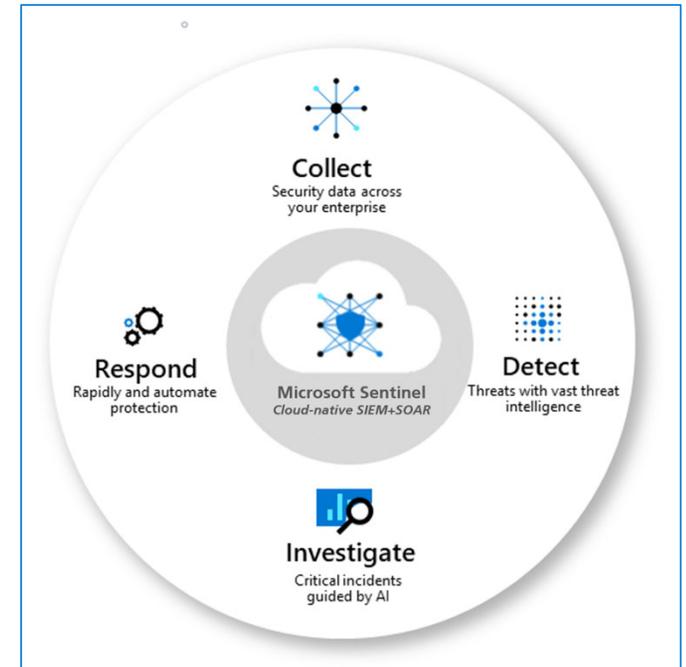
Microsoft Sentinel provides integrated threat management (Slide 1)

Collect data at cloud scale across all users, devices, applications, and infrastructure, both on-premises and in multiple clouds.

Detect previously uncovered threats and minimize false positives using analytics and unparalleled threat intelligence.

Investigate threats with AI and hunt suspicious activities at scale, tapping into decades of cybersecurity work at Microsoft.

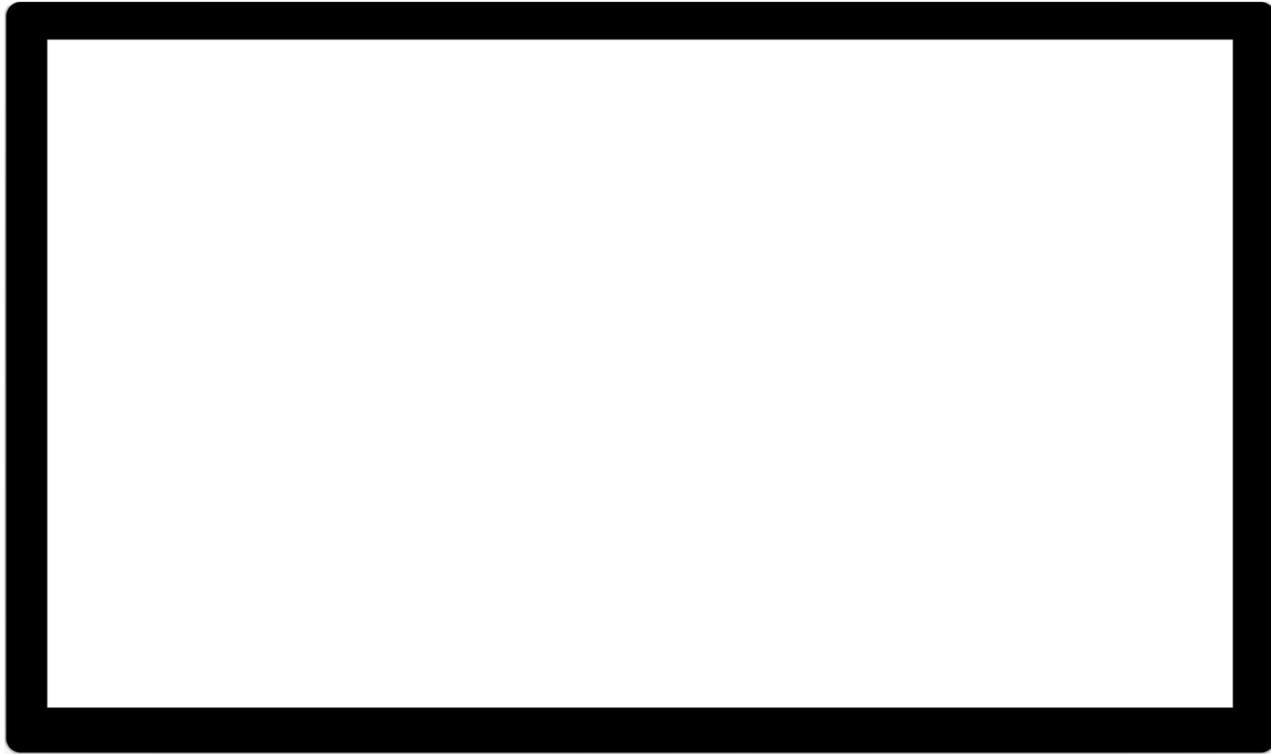
Respond to incidents rapidly with built-in orchestration and automation of common security.



Microsoft Sentinel provides integrated threat management (Slide 2)

-  **Connect Microsoft Sentinel to your data:** Use connectors for Microsoft solutions providing real-time integration.
-  **Workbooks:** Monitor the data using the Microsoft Sentinel integration with Azure Monitor Workbooks.
-  **Analytics:** Using built-in analytics alerts, you'll get notified when anything suspicious occurs.
-  **Manage incidents:** An incident is created when an alert that you've enabled is triggered.
-  **Security automation and orchestration:** Integrate with Logic Apps, to create workflows & playbooks.
-  **Notebooks:** Use Jupyter notebooks to extend the scope of what you can do with Microsoft Sentinel data.
-  **Investigation:** Understand the scope of a potential security threat and find the root cause.
-  **Hunting:** Use search-and-query tools, to hunt proactively for threats, before an alert is triggered.
-  **Community:** Download content from the private community GitHub repository to create custom workbooks, hunting queries, and more.

Microsoft Sentinel



Module 5: Describe the compliance management capabilities in Microsoft Purview



Module 5 Introduction

After completing this module, you'll be able to:

- Describe the Microsoft Purview compliance portal
- Describe Compliance Manager
- Describe the use and benefits of compliance score

Microsoft Purview compliance portal

Microsoft Purview compliance portal

- A view of how the organization is meeting its compliance requirements.
- Solutions that can be used to help with compliance.
- Information about active alerts.
- And more...

Navigation

- Access to alerts, reports, policies, compliance solutions, and more.
- Add or remove options for a customized navigation pane.
- Customize navigation control.

The screenshot shows the Microsoft Purview compliance portal for Contoso Electronics. The interface includes a navigation pane on the left with the following items:

- Home
- Compliance Manager
- Data classification
- Data connectors
- Alerts
- Reports
- Policies
- Permissions
- Trials
- Solutions
 - Catalog
 - App governance
 - Audit
 - Content search
 - Communication compliance
 - Data loss prevention
 - eDiscovery
 - Data lifecycle management
 - Information protection
 - Information Barriers
 - Insider risk management
 - Records management

The main content area features a 'Home' header and a 'Welcome to the Microsoft Purview compliance portal' message. Below the welcome message are links for 'Intro', 'Next steps', and 'Give feedback'. A 'Next' button and a 'Close' button are also present. A 'What's new?' link and an 'Add cards' button are located at the bottom right of the main content area.

The 'Compliance Manager' card displays 'Your compliance score: 0%'. The 'Solution catalog' card displays 'Discover solutions for your compliance needs'. The 'High risk apps' card displays a table of third-party apps:

App name	Permission level	Users
CDX MS Cloud Ap...	2	1
MOD Demo Platfor...	2	0
dxprovisioning-gra...	2	0
dxprovisioning-wo...	2	0

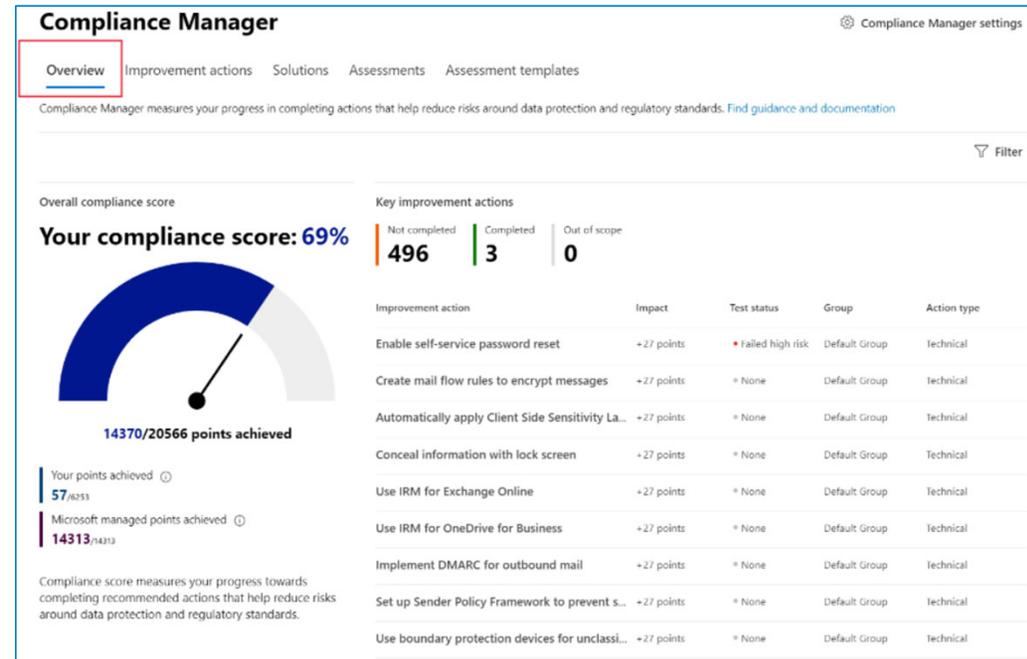
Compliance Manager

Compliance Manager simplifies compliance and reduces risk by providing

- Prebuilt assessments based on common standards
- Workflow capabilities to complete risk assessments
- Step-by-step improvement actions
- Compliance score, shows overall compliance posture.

Key elements of Compliance Manager

- Controls
- Assessments
- Templates
- Improvement actions



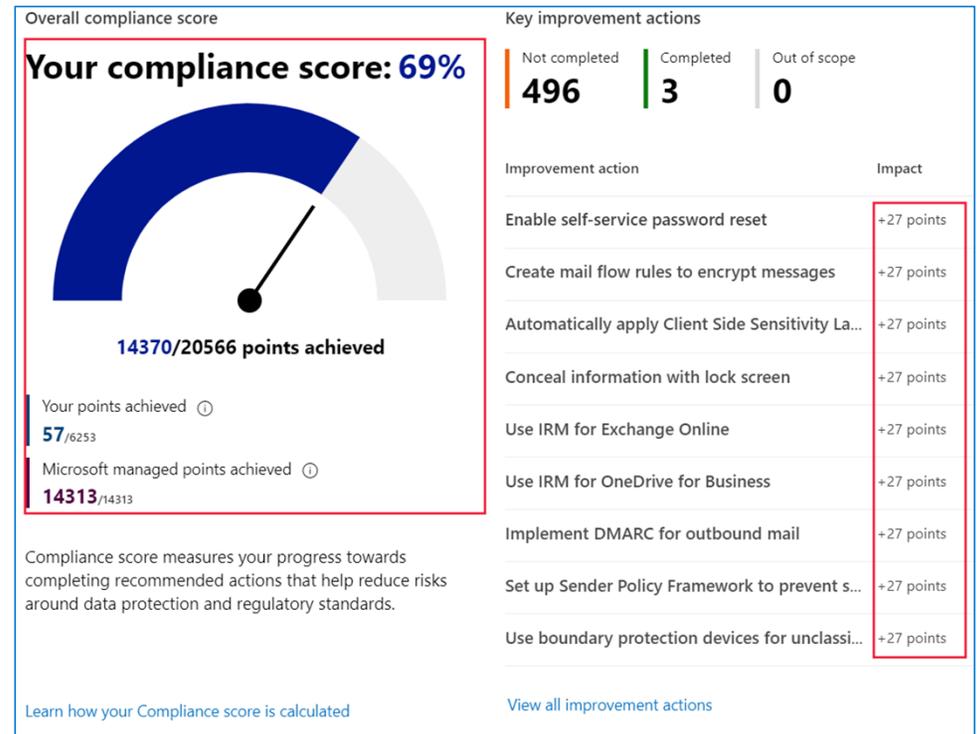
Compliance score

Benefits of compliance score:

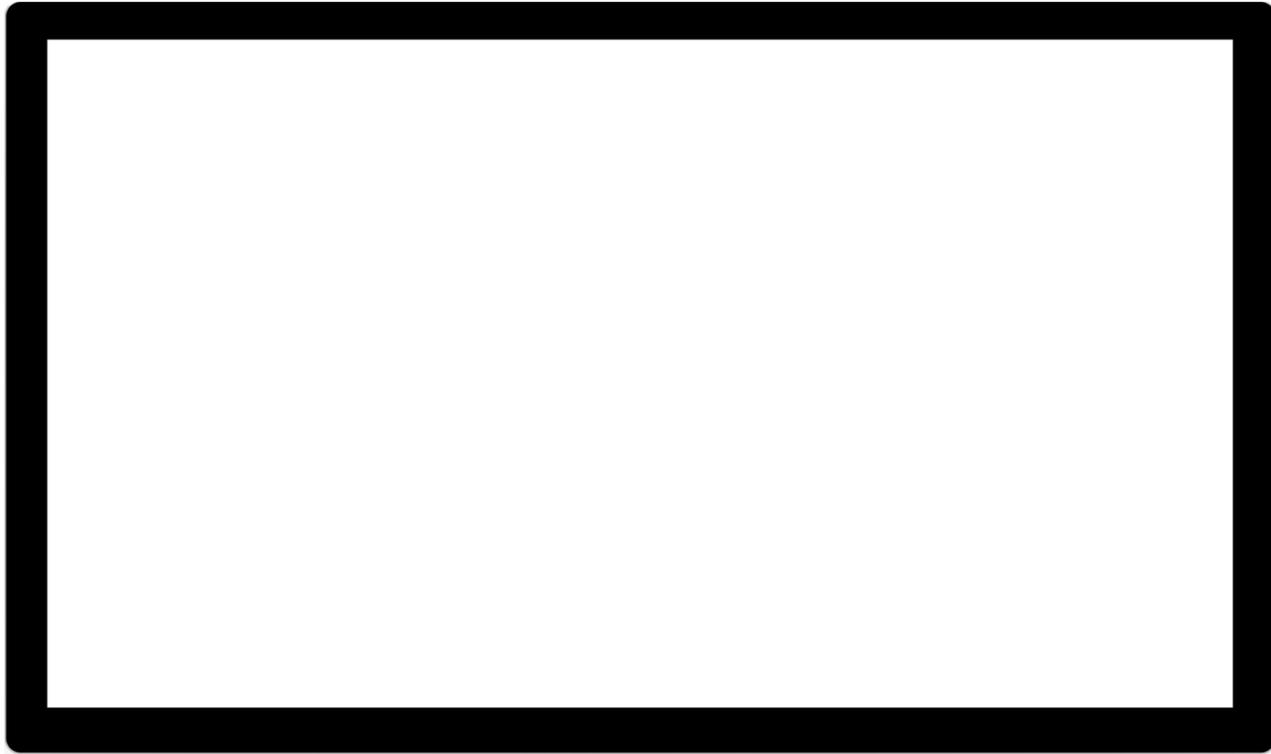
- Help an organization understand its current compliance posture.
- Help prioritize actions based on their potential to reduce risk.

Understand your compliance score

- Actions
 - Your improved actions
 - Microsoft actions
- Action types (& action subcategory)
 - Mandatory (preventive, detective, or corrective)
 - Discretionary (preventive, detective, or corrective)



Microsoft Purview compliance portal



Module 6: Describe the Service Trust Portal and privacy at Microsoft



Module 6 Introduction

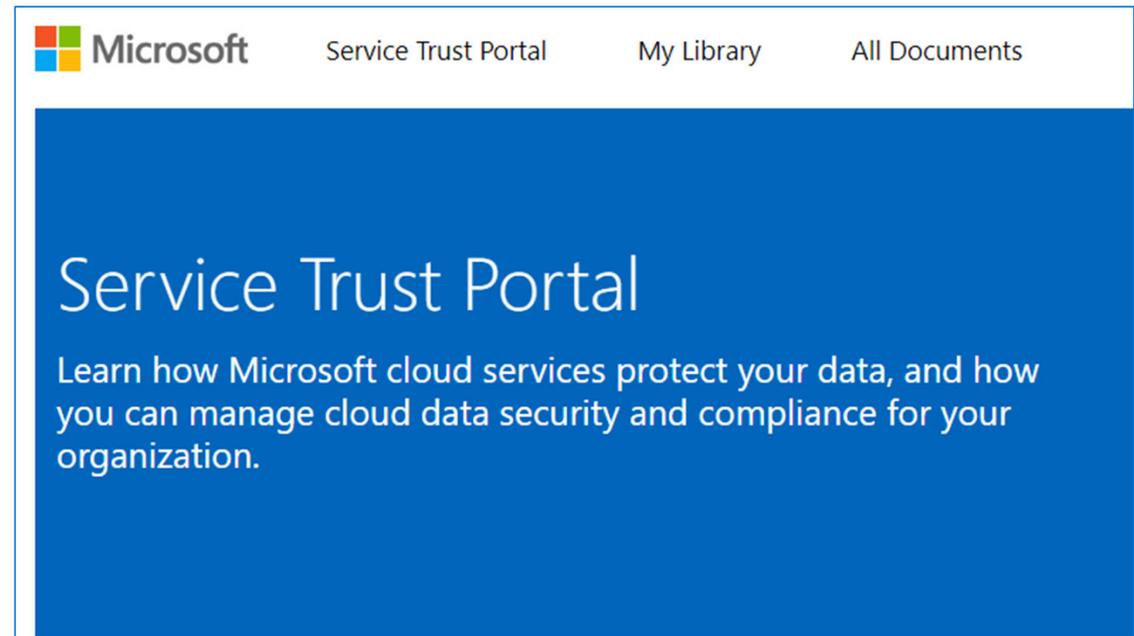
After completing this module, you'll be able to:

- Describe the offerings of the Service Trust Portal
- Describe Microsoft's privacy principles
- Describe Microsoft Priva

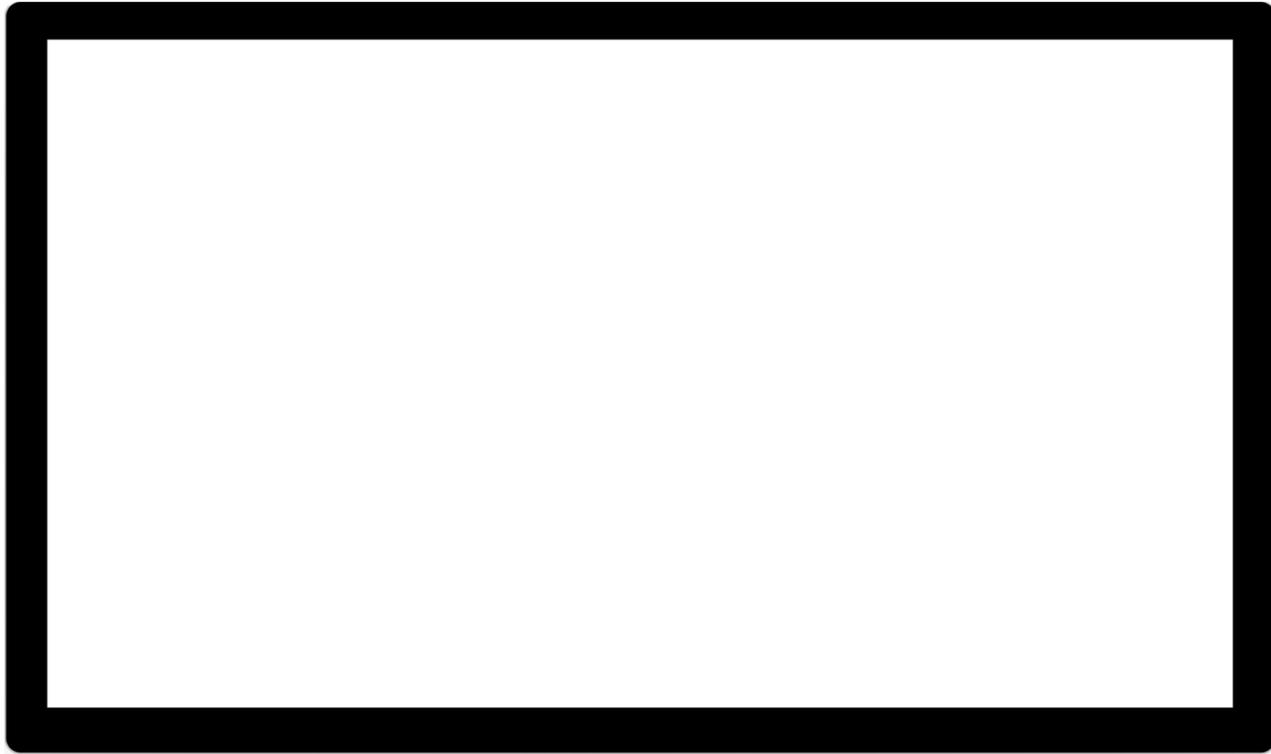
Microsoft Service Trust Portal

Microsoft's site for publishing audit reports and other compliance-related information associated with Microsoft's cloud services.

- Certifications, Regulations and Standards
- Reports, Whitepapers and Artifacts
- Industry and Regional Resources
- Resources for your Organization



Service Trust Portal



Microsoft's privacy principles



Control: Putting you, the customer, in control of your privacy with easy-to-use tools and clear choices.



Transparency: Being transparent about data collection and use so that everyone can make informed decisions.



Security: Protecting the data that's entrusted to Microsoft by using strong security and encryption.



Strong legal protections: Respecting local privacy laws and fighting for legal protection of privacy as a fundamental human right.



No content-based targeting: Not using email, chat, files, or other personal content to target advertising.



Benefits to you: When Microsoft does collect data, it's used to benefit you, the customer, and to make your experiences better.

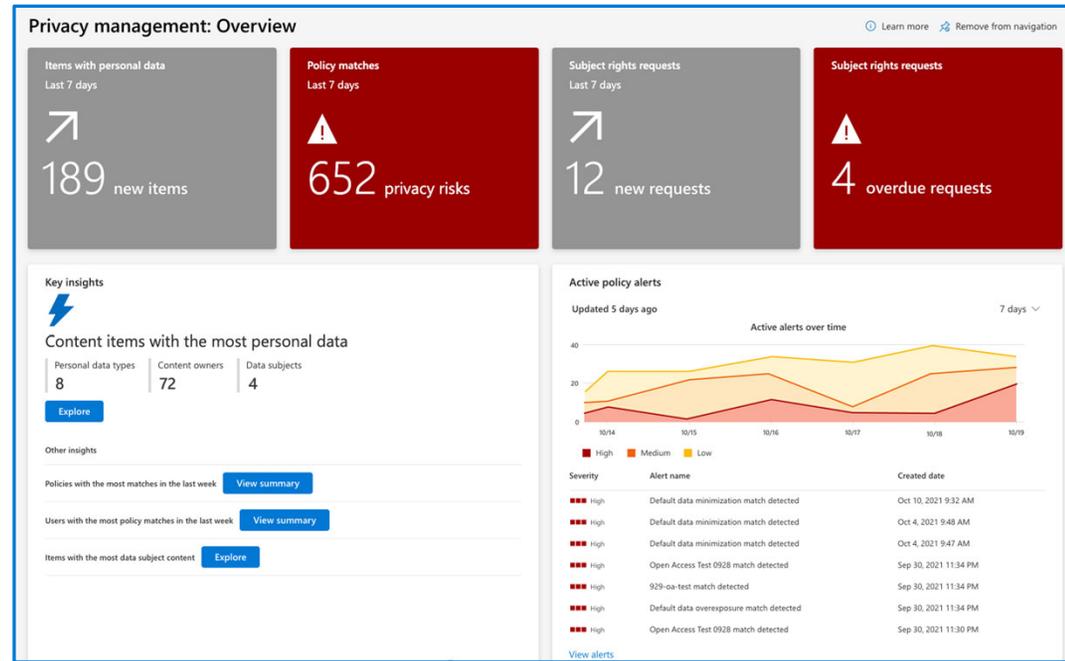
Microsoft Priva

Priva Privacy Risk Management

- Overview dashboard provides automatic updates about your data with important trends.
- Data profile provides a snapshot view of the personal data your organization stores in Microsoft 365 and where it lives.
- Set up policies that identify privacy risks in your Microsoft 365 environment and enable easy remediation.

Priva Subject Rights Requests

Workflow, automation, and collaboration capabilities to help search for subject data, review findings, collect the appropriate files, and produce reports



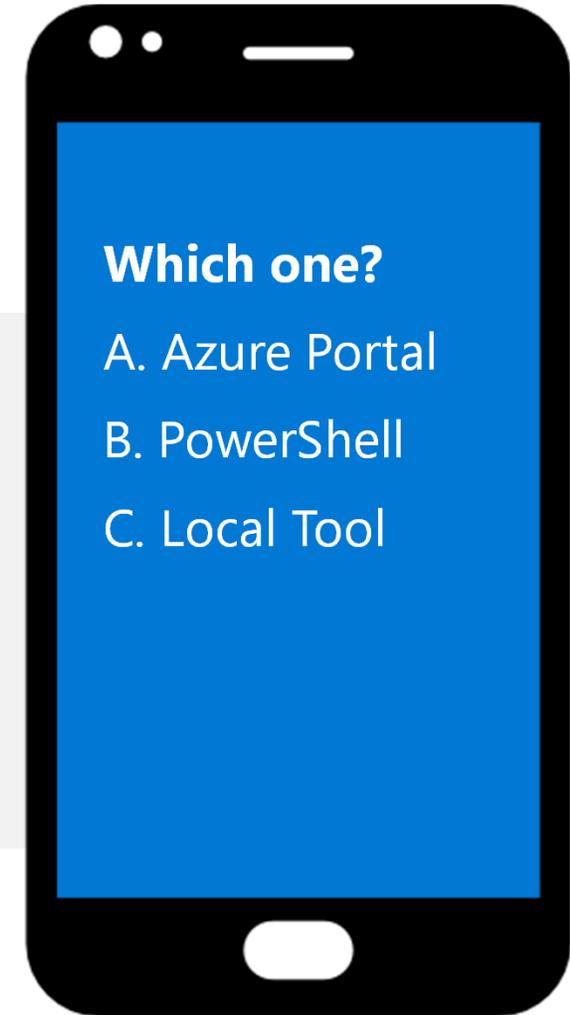
Knowledge Check

Populate with instructions to use the polling tool of your choice

Module 1:

PowerShell and Azure Command Line (CLI)

1. Use your Smartphones or Mobile Devices
2. Go to (*insert polling app link of your choice*)
3. Enter Code: **123-45-678**
4. Please participate in the quiz for this section



Learning Path Summary



Learned about Azure AD and services and identity types
Azure AD supports



Explored the access management capabilities of Azure AD
with Conditional Access and Azure AD RBAC



Learned about the threat protection with Microsoft 365
Defender



Learned about the security capabilities of Microsoft
Sentinel



Learned about the compliance management capabilities
in Microsoft Purview, including the compliance portal,
Compliance Manager, and Compliance Score.



Learned about the Service Trust Portal and privacy with
Microsoft

References

AZ-999 Azure Generic Title for Administrators

<https://docs.microsoft.com/en-us/learn/>







MS-900T01-A Learning Path: Describe Microsoft 365 pricing, licensing, and support

© Copyright Microsoft Corporation. All rights reserved.



Learning Path Agenda



Describe Microsoft 365 pricing, licensing and billing options



Describe support offerings for Microsoft 365 services

Module 1: Describe Microsoft 365 pricing, licensing and billing options



Module 1 Introduction

After completing this module, you'll be able to:

- Describe the pricing models available for Microsoft cloud services
- Describe billing management features such as billing frequency and methods of payment
- Describe the differences between base licensing and add-on licensing

Pricing models for Microsoft cloud services

Cloud Solution Provider model:

Microsoft partner program that provides the expertise and services you need through an expert CSP partner.

- The CSP manages your entire subscription, provide billing and technical support.
- Provides a pay-as-you-go subscription model with per-user, per-month pricing.

Enterprise Agreements:

Designed for organizations that want to license software and cloud services for a minimum three-year period.

- A single organization-wide agreement.
- 24x7 technical support, planning services, end-user and technical training, and unique technologies through Software Assurance.

Direct Billing:

Buy and pay for your Microsoft 365 subscription with a credit or debit card, or a bank account.

Trial:

Sign up for a free trial subscription for Microsoft 365 for 30 days.

Billing and bill management options

Billing account options

The Microsoft 365 admin center currently supports the following type of billing accounts:

- Microsoft Online Services Program
- Microsoft Products & Services Agreement (MPSA) Program
- Microsoft Customer Agreement

Consumption and fixed cost models

- Consumption-based price: charged for only what you use, known as *Pay-As-You-Go*.
- Fixed-priced: charged for instances whether or not they're used.

Bill management

Microsoft 365 admin center allows you to:

- Manage subscriptions and licenses
- View billing statements.
- Modify payment methods
- Modify billing frequency
- Buy and manage other services or features
- Manage billing notification emails and invoice attachments

Available subscription plans

Microsoft 365 for home

Bring the same great productivity benefits into your personal and family life with *Microsoft 365 Personal* or *Microsoft 365 Family*.



Microsoft 365 Education

Designed for educational institutions and has three subscription plans for faculty and students.



Microsoft 365 Government

Designed for government institutions and has two subscription plans.



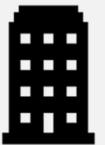
Microsoft 365 for business

Designed for small and medium-sized organizations that have up to 300 employees and has four subscription plans.



Microsoft 365 Enterprise

Designed for large organizations and has three subscription plans and four subscription plans for Office 365.



Available licensing options

A **license**, or **base license** allows users to use the features and services included in the subscription plan.

Subscription licenses (USLs):

Microsoft 365 products and services are available as USLs and are licensed on a per-user basis.

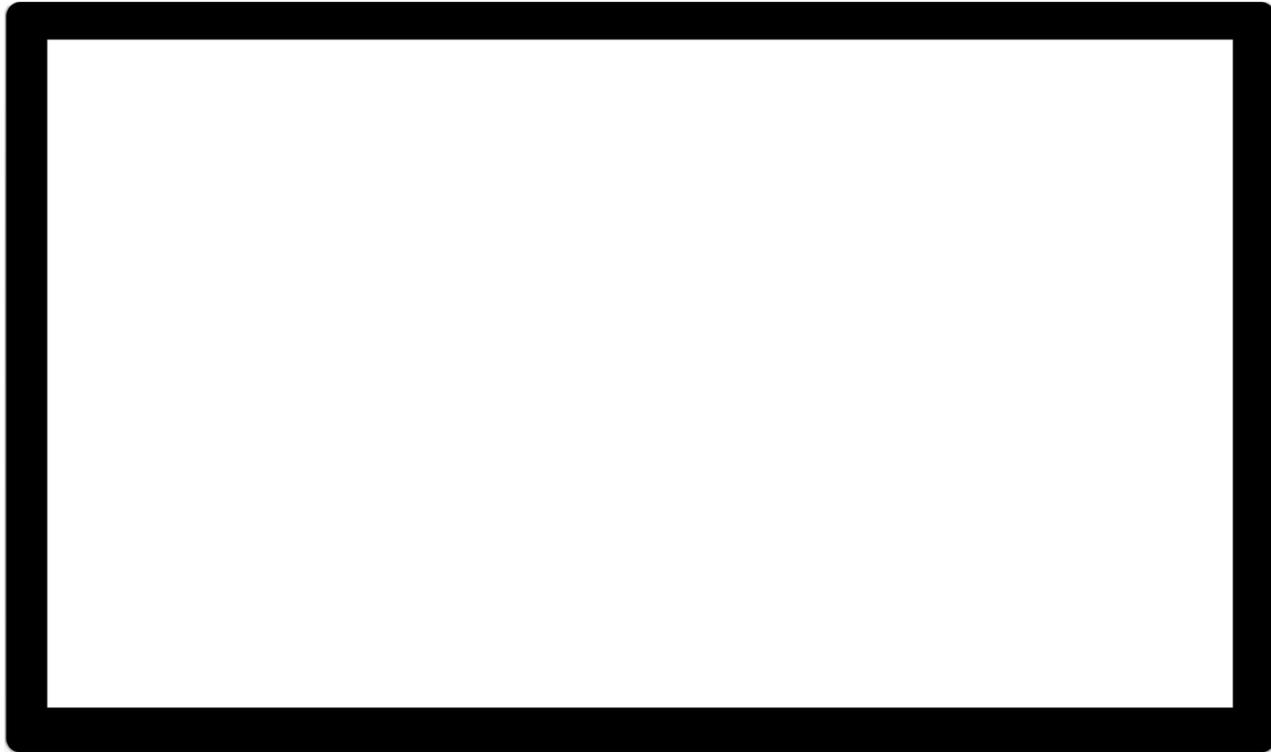
- Full USLs
- Add-on USLs
- From SA USLs
- Step Up USLs

Types of add-ons:

Add-ons provide more capabilities to enhance your subscription.

- Traditional add-ons
- Standalone add-ons

User and billing management in the Microsoft 365 admin center



Module 2: Describe support offerings for Microsoft 365 services



Module 2 Introduction

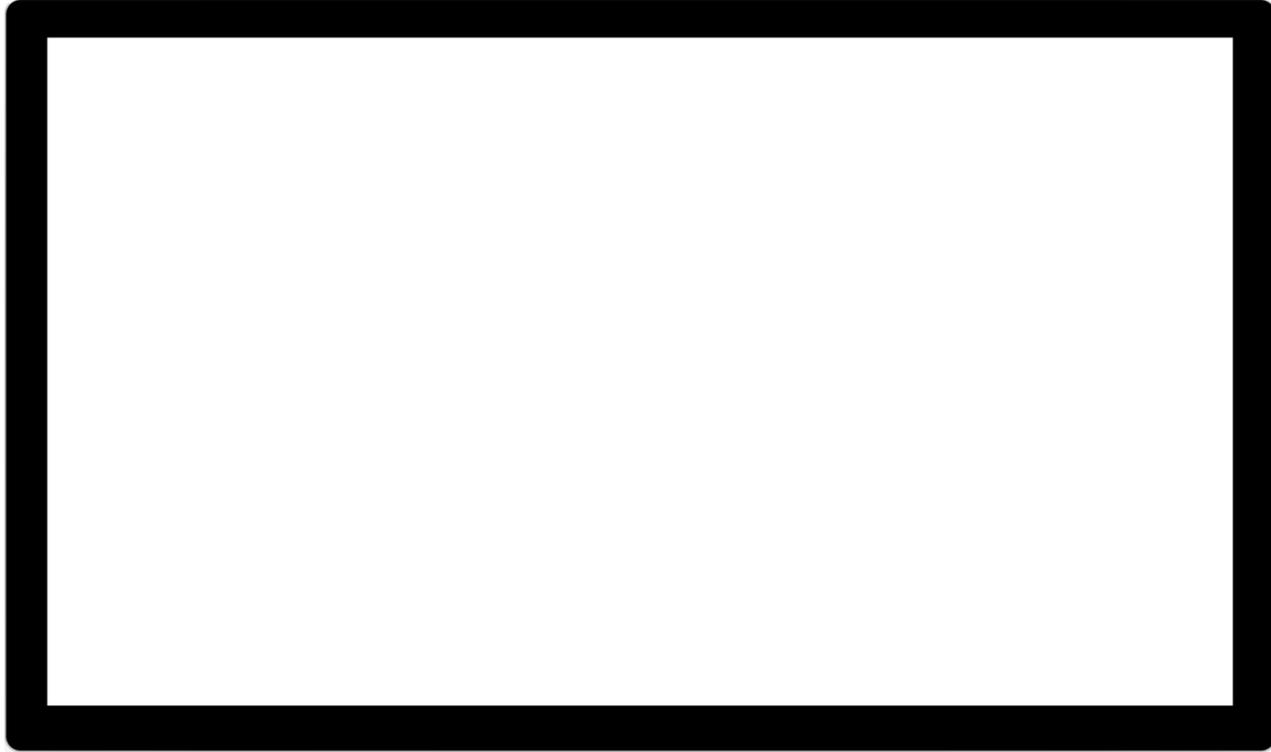
After completing this module, you'll be able to:

- Describe the support offerings available for Microsoft 365 and how to create a support request
- Describe service level agreements (SLAs) concepts
- Identify how to track service health through the Microsoft 365 admin center
- Describe how organizations can provide feedback on Microsoft 365 products and services

Support options for Microsoft 365 services

-  **Community-based support**
-  **Self-help**
-  **Web chat, email, and phone support**
-  **Q&A forums and online help**
-  **Pre-sales support**
-  **FastTrack**
-  **Microsoft unified support**
-  **Support through a Microsoft Partner**
-  **Microsoft Support and Recovery or Business Assist for Microsoft 365**

Support requests in the Microsoft 365 admin center



Service level agreement concepts

Microsoft 365 services guarantees level of service for your organization. Level of service is detailed in a legal agreement referred to as a **Service Level Agreement (SLA)**. The SLA describes Microsoft's commitments for uptime and connectivity for Microsoft Online Services.

Service Level	Claim
Incident	Applicable monthly service fees
Uptime	Service credit
Downtime and scheduled downtime	Uptime agreement

Track the service health status

View the health status of Microsoft 365 services:

- Microsoft 365 admin center
- Microsoft 365 Admin app on your mobile device
- Sign up for email notifications of new incidents that affect your tenant and status changes for an active incident
- Microsoft 365 Service health status page to check for known issues
- Sign up to follow Microsoft 365 at @MSFT365status on Twitter to see information on certain events or issues



Share feedback on Microsoft 365 services

You can directly influence change at Microsoft by providing feedback through the following ways:

- Send feedback from within a Microsoft 365 app via the Help button
- Send feedback directly within the community feedback web portal, Feedback
- Send feedback from the Windows Feedback Hub, located directly on your Windows device



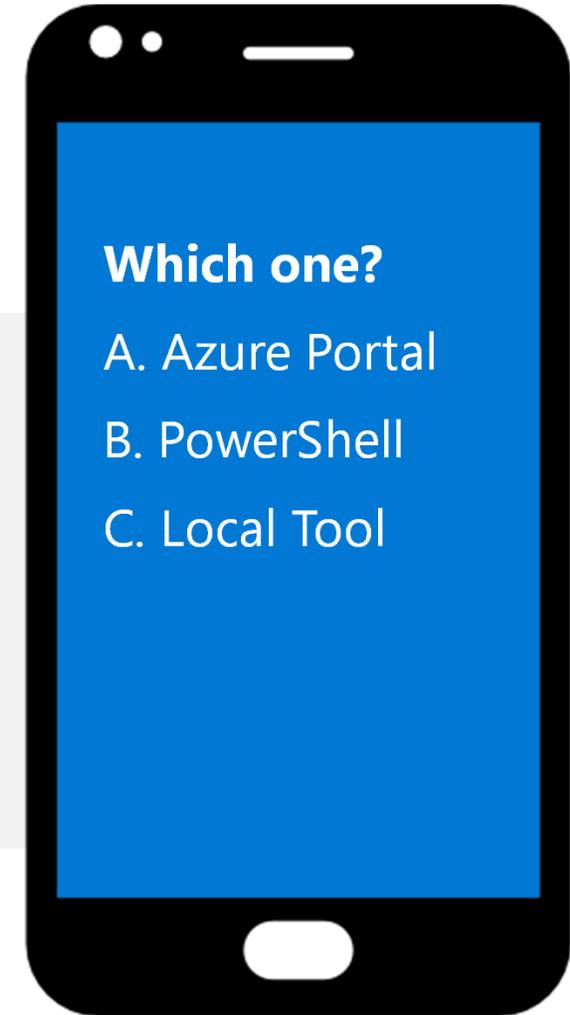
Knowledge Check

Populate with instructions to use the polling tool of your choice

Module 1:

PowerShell and Azure Command Line (CLI)

1. Use your Smartphones or Mobile Devices
2. Go to (*insert polling app link of your choice*)
3. Enter Code: **123-45-678**
4. Please participate in the quiz for this section



Learning Path Summary



Learned about Microsoft 365 pricing, licensing and billing options



Learned about support offerings for Microsoft 365 services

References

AZ-999 Azure Generic Title for Administrators

<https://docs.microsoft.com/en-us/learn/>



