



Monthly Technical Update

JUNE 2022



Abbas Kudrati
APAC Chief Cybersecurity Advisor
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<https://aka.ms/abbas>



- [EU Corporate Sustainability Reporting Directive \(CSRD\)](#)
- [Microsoft Build Book of News](#)
- [RSA Conference – June 2022](#)
- [Black hat Security Conference August 2022](#)
- [Microsoft Tech Community Blog depot](#)
- [Microsoft Official Blog](#)
- [TechCommunity Events](#)

Announcements and Tips



New trends with Microsoft Technology

- [Azure Updates](#)
- [Industry Blogs](#)
- [Industry Cloud Announcements](#)
- [Microsoft Research Blog](#)
- [Microsoft Quantum Computing](#)

- [Microsoft Security Blog](#)
- [Microsoft Global Threat Monitor](#)
- [Microsoft Security Response Center](#)
- [Security, Compliance and Identity Blog](#)

Security and Compliance

- [Microsoft IT Showcase](#)
- [Technical Professional Training](#)
- [User Training and technology introductions](#)

Showcase of the month



- [Teams Updates](#)
- [Office Updates](#)
- [Power Platform and Dynamics](#)
- [Power Platform Templates](#)
- [GitHub Updates](#)
- [Developer Blogs and Showcase](#)
- [Office Developer Blog](#)

Microsoft 365 update information



Product Lifecycles

Acquisitions and Announcements

- [Products Reaching End of Support in 2022 and 2023](#)
- [Companies and Technologies Acquired Since 2018](#)

EU Corporate Sustainability Reporting Directive (CSRD)

After GDPR, the upcoming **Corporate Sustainability Reporting Directive (CSRD)** will be another law with **groundbreaking global impact**. Organizations need to prepare globally.



based on the common **ESG reporting** (Environmental, Social, Governance).



Extends the scope of companies in Europe under this directive



Extends the scope and depth of what to report



Reporting standards based on **EU Taxonomy For Sustainable Activities**



Requires the report to be audited to ensure accuracy



Will impact all companies doing business with EU customers – due to “Supply Chain Reporting” (Scope 2/Scope 3) requirements.

Microsoft

- **Microsoft Cloud for Sustainability**
- Modularity and Data Model allow for Partner value add .

Types of legislation (europa.eu)

- **Regulation** is a binding legislative act that applies directly at the national level.
- **Directive** sets out a goal but must be applied by national law to achieve these goals.

Greenhouse Gas Emissions (GHG) measurement

Scope

1



Direct emissions created by your activities, like exhaust from company vehicles or diesel generators

Scope

2



Indirect emissions from the production of electricity or heat you use to power buildings or processes

Scope

3



Indirect value chain emissions from all other activities in which you’re engaged, including all parts of your supply chain, from materials in buildings, business travel, and product lifecycle to the electricity your customers consume

Carbon neutral: A company becomes carbon neutral by reducing their emissions and/or paying others to not emit an equivalent of their remaining emissions.

Carbon net zero: An organization is considered net zero carbon when it removes as much carbon as it emits.

Carbon negative: A company is carbon negative when it removes more carbon than it emits each year.



Microsoft Build

May 24–26, 2022

What's next in tech

Come together with peers and experts May 24–26, 2022, for an engaging experience around the latest in innovation and tools that will help you stay informed.

Designed for development

- Learn about the latest tech and developer innovations with announcements, news, and tutorials.
- New for this year, experience market-specific content and connection opportunities for France, Germany, Japan, Latin America, and the UK.
- Ask Microsoft subject matter experts your technical questions and network with others in your area through live, interactive sessions.

Frequently asked questions

[Visit FAQ to learn more >](#)



REGISTER NOW

AUGUST 6-11, 2022

MANDALAY BAY / LAS VEGAS
+ VIRTUAL

ATTEND ▾ TRAININGS BRIEFINGS ▾ ARSENAL ▾ FEATURES ▾ SCHEDULE BUSINESS HALL ▾ SPONSORS ▾ PROPOSALS ▾

All times are Pacific Time (GMT/UTC -7h)

BLACK HAT USA 2022

August 6–11, 2022

Mandalay Bay Convention Center, Las Vegas

+ Virtual



[View the event site »](#)

[Book your hotel now »](#)

[Arsenal Call for Tools Now Open »](#)



Microsoft Exchange Community (MEC) Technical Airlift

September 13-14, 2022



Home ▾

Welcome to the Microsoft Exchange Community (MEC) Technical Airlift 2022!

[Register now!](#)

Welcome to the MEC Technical Airlift! This is a free, digital event for IT professionals who work with Exchange Online and/or Exchange Server day-to-day, and ISVs and developers who make solutions that integrate with Exchange.

MEC will be THE place for the Exchange community to come together to explore new innovations and information. It features learning opportunities, breakout sessions, and time with members of our passionate engineering teams. You'll also hear from some of the best-known names in Exchange around the world and get engaged in the community.

We're thrilled to bring back MEC, and excited to get into conversations with you about everything Exchange Online, Exchange Server, and Exchange Hybrid.

Prepare yourself for two days jam-packed with networking, unparalleled access to Exchange engineers and MVPs and, of course, the most in-depth information on Exchange you'll find anywhere.

Exchange Server Roadmap

This session provides the roadmap for Exchange Server for 2022 and beyond. Find out what's coming to Exchange Server over the next months and years and how you can get early access to new builds and features.

Expanding usage and security of email in Exchange Online

Email remains at the heart of business communications and workflow, and in this session, the Exchange Online Transport team will share how we're improving email security and adding new email functionality to support a broader range of email solutions and scenarios. New support for security features like DANE, DNSSEC, and MTA-STS, plus updates on features like M&A alias support and EAC mail flow updates are a few of the topics we'll discuss.

Exchange Online Transport Future Initiatives: Bulk Mail and Exchange Transport Rules

The Exchange Online Transport team is planning significant future investments in both a bulk mail offering for line of business solutions as well as the ETR platform and user experience. Now is the perfect time for you to engage with us on the ground floor of our efforts with your requirements and ideas for these future initiatives.

Basic Auth Deprecation in Exchange Online - This Time We Mean It!

Once upon a time, back in 2019 we said we would turn off Basic auth in Exchange Online. In 2021, we started doing it. By the start of 2022 we had already disabled it for millions of tenants, but we're not done yet. This session will give you the inside story on how we are doing it, how it's going, what we built to help us along the way, where we're going, and for the first time, we will share some details on our progress.



Build 2022: Book of News



Azure

- [Azure AI](#)
- [Azure Cloud Native & App Platform](#)
- [Azure Data](#)
- [Azure Hybrid](#)
- [Azure Infrastructure](#)
- [Azure Migration & Modernization](#)
- [Developer Tools and DevOps](#)

Developer Community

- [Microsoft Learn](#)

Microsoft 365

- [Microsoft Loop](#)
- [Microsoft Teams](#)

Build collaborative apps with Microsoft Teams and Microsoft 365 services
45 minutes

Build native apps for any device with .NET and Visual Studio
55 minutes

Microsoft Build

The live show is over but your opportunities to learn, connect, and discover never stop—explore all the year-around content designed for your development.



25 minutes

Dive back in

Check out all the key moments from this year's Microsoft Build experience.

Power Platform

- [Power Platform Updates](#)

Innovate with collaborative apps and low code

25 minutes

NVIDIA and Azure power BMW's manufacturing evolution

BMW transformed its electric vehicle production system by leveraging Azure Machine Learning and NVIDIA GPUs to power its fully automated quality control processes.

Find out how they did it >

Windows & Edge

- [Microsoft Edge](#)
- [Microsoft Windows](#)

Create next-gen experiences at scale with Windows

22 minutes

Deploy modern containerized apps and cloud native databases at scale

60 minutes

Accelerate innovation and achieve agility with a trusted, integrated data platform with hybrid and multi cloud capabilities

Learn more >

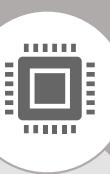
Creating secure identities for apps using the Microsoft identity platform
35 minutes

Updates of Security and Compliance



Monitoring Global Threats: Microsoft

Microsoft Security Response Center



Select a region ▾

Global threat activity

Countries or regions with the most malware encounters in the last 30 days

Most affected industries

Reported enterprise malware encounters in the last 30 days

Telecommunications

Show all industries >

Devices with encounters:

169,046 (2.43%)

Most affected industries

Reported enterprise malware encounters in the last 30 days

Education

Business and professional services

Retail and consumer goods

Financial services and insurance

Healthcare and pharmaceuticals

June 2, 2022 • 11 min read

Exposing POLONIUM activity and infrastructure targeting Israeli organizations

Microsoft successfully detected and disabled attack activity abusing OneDrive by a previously undocumented Lebanon-based activity group Microsoft Threat Intelligence Center (MSTIC) tracks as POLONIUM.

May 23, 2022 • 10 min read

Beneath the surface: Uncovering the shift in web skimming

Web skimming campaigns now employ various obfuscation techniques to deliver and hide the skimming scripts. It's a shift from earlier tactics where attackers conspicuously injected the malicious scripts into e-commerce platforms and content management systems (CMSs) via vulnerability exploitation, making this threat highly evasive to traditional security solutions.

Telecommunications ▾

Top threats:

Adware:Win32/Hiru
Behavior:Win32/PShellCobStager.A
Exploit:JS/CVE-2014-0322.A
HackTool:Win32/Wincred.H
PUA:AndroidOS/Dnotua.A!MTB

Worldwide

78,847,363 devices with encounters

Top threats:

HackTool:Win32/AutoKMS
HackTool:Win64/AutoKMS
Trojan:Win32/Wacatac.B!ml
HackTool:Win32/Keygen
HackTool:MSIL/AutoKms

May 23, 2022 • 8 min read

Anatomy of a DDoS amplification attack

Amplification attacks are one of the most common distributed denial of service (DDoS) attack vectors. These attacks are typically categorized as flooding or volumetric attacks, where the attacker succeeds in generating more traffic than the target can process, resulting in exhausting its resources due to the amount of traffic it receives.

May 19, 2022 • 22 min read

Rise in XorDdos: A deeper look at the stealthy DDoS malware targeting Linux devices

Observing a 254% increase in activity over the last six months from a versatile Linux trojan called XorDdos, the Microsoft 365 Defender research team provides in-depth analysis into this stealthy malware's capabilities and key infection signs.

May 31, 2022 • 7 min read

Secure access for a connected world—meet Microsoft Entra

Identity is not just about directories, and access is not just about the network. Security challenges have become much broader, so we need broader solutions. We need to secure access for every customer, partner, and employee—and for every microservice, sensor, network, device, and database.

May 23, 2022 • 5 min read

How to improve risk management using Zero Trust architecture

Risk management plays a critical role in helping organizations with their security posture enhancement. Taking insider incidents as an example, they are not only costly to organizations but also time-consuming to be contained. As such, the ROI is maximized in effectively protecting the organizations' assets as well as ensuring their business operations. Risk management is an ongoing activity. Are the long-established risk management programs in the enterprises staying on top of the evolving digital and threat landscapes?

May 25, 2022 • 8 min read

Detecting and preventing privilege escalation attacks leveraging Kerberos relaying (KrbRelayUp)

The privilege escalation hacking tool KrbRelayUp is a wrapper that can streamline the use of some features in Rubeus, KrbRelay, SCMUACBypass, PowerMad/ SharpMad, Whisker, and ADCSPwn tools in attacks. Although this attack won't function for Azure Active Directory (Azure AD) joined devices, hybrid joined devices with on-premises domain controllers remain vulnerable.



May 27, 2022 • 13 min read

Android apps with millions of downloads exposed to high-severity vulnerabilities

Microsoft uncovered high-severity vulnerabilities in a mobile framework used by multiple large mobile service providers in pre-installed Android System apps that potentially exposed users to remote or local attacks.

June 1, 2022 • 11 min read

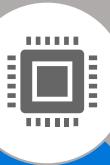
Using Python to unearth a goldmine of threat intelligence from leaked chat logs

Dealing with a great amount of data can be time consuming, thus using Python can be very powerful to help analysts sort information and extract the most relevant data for their investigation. The open-source tools library, MSTICPy, for example, is a Python tool dedicated to threat intelligence. It aims to help threat analysts acquire, enrich, analyze, and visualize data.

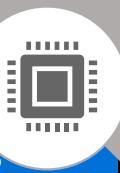
May 18, 2022 • 6 min read

So you want to be a CISO: What you should know about data protection

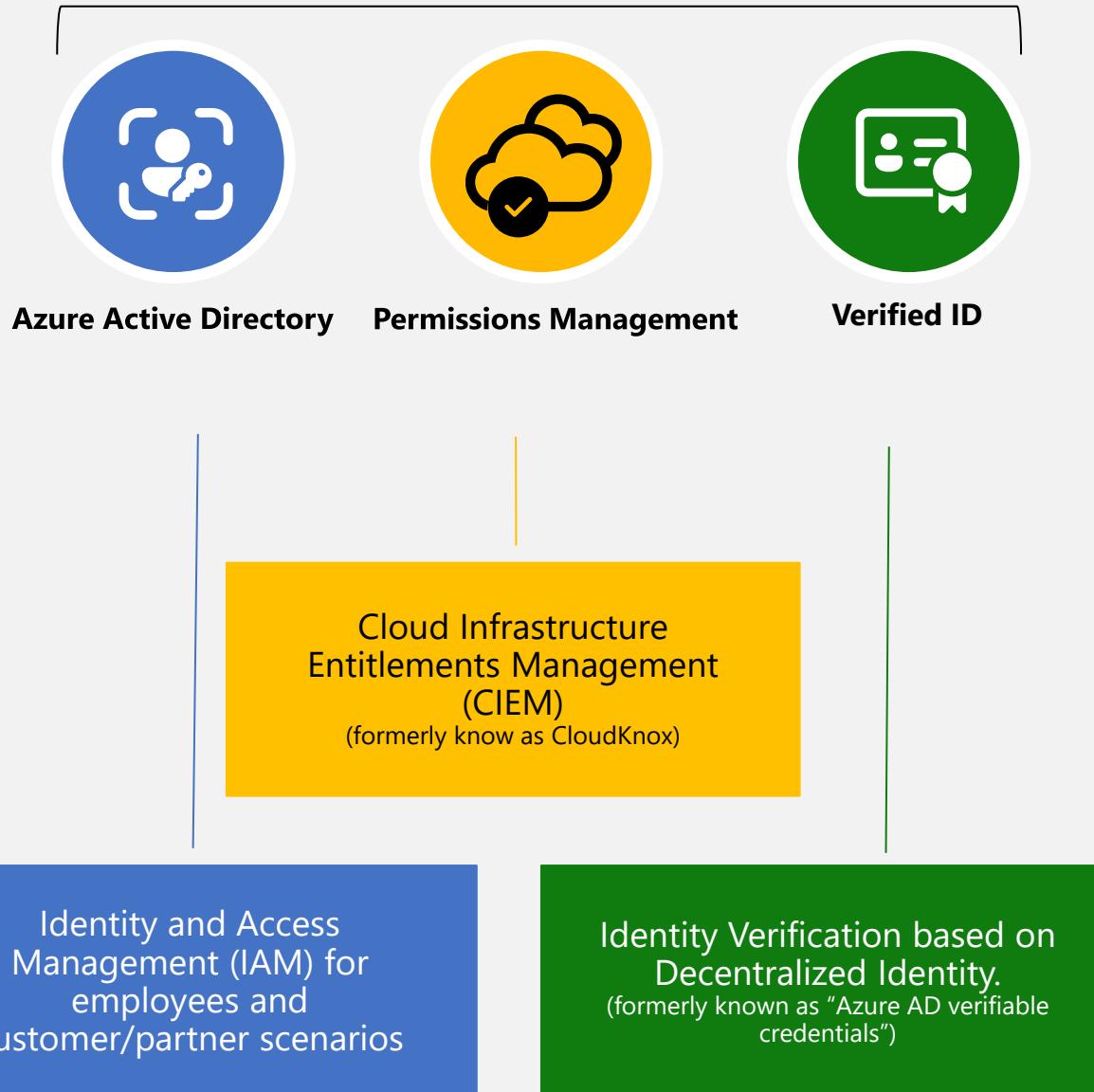
Learn how insider threats, data siloes, and shifting responsibilities are all affecting data management—and how security professionals can diminish risks to the organization.



Microsoft Entra



Microsoft Entra

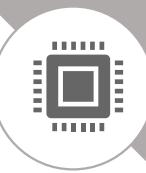


Microsoft Entra Function	Licensing
Employee Identity	M365 E3 / M365 E5 / Azure AD P1 / Azure AD P2
Identity for customers and partners	Azure AD External Identities
Microsoft Entra Permissions Management	Standalone, annual license
Microsoft Entra Verified ID	currently a free service (as of 1-June-2022); can be used independently or with a premium Azure AD plan for high-value scenarios

The screenshot shows the Microsoft Entra admin center interface, which includes:

- Azure AD admin center (aad.portal.azure.com)**
- Azure portal (portal.azure.com)**
- M365 portal Azure AD admin page**
- Microsoft Entra admin center** (Main interface):
 - Home
 - Azure Active Directory
 - Permissions Management
 - Verified ID (Preview)
- entra.microsoft.com**: The Microsoft Entra admin center gives visibility to an organization's hybrid and multicloud identity infrastructure, as well as all the admin features of:
 - Microsoft Azure Active Directory (Azure AD)
 - Microsoft Entra Permissions Management
 - Microsoft Entra Verified ID
- Microsoft Entra**: Secure access for a connected world. It includes links to:
 - Azure Active Directory
 - Permissions Management
 - Verified ID

Microsoft Defender Vulnerability Management :: Public Preview



Microsoft Defender Vulnerability Management Preview

Reduce cybersecurity risk with continuous vulnerability discovery and assessment, risk-based prioritization, and remediation.

Defender Vulnerability Management delivers:

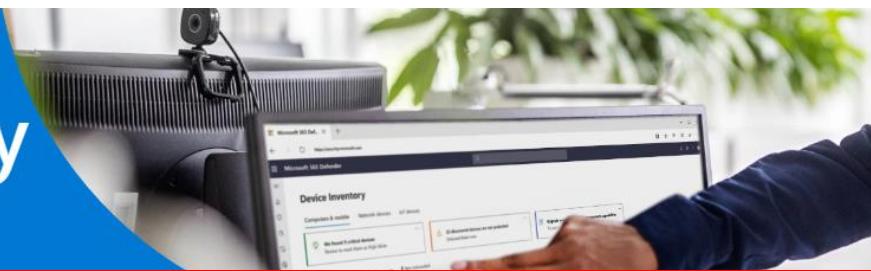
- Asset Discovery and Inventory
- Continuous Vulnerability and Misconfiguration Assessments
- Security Baseline Assessments
- Expert-level Threat Monitoring and Analysis
- Prioritized Security Recommendations
- Blocks Vulnerable Applications
- Seamlessly Remediate and Track Progress

Defender Vulnerability Management provides continuous monitoring and alerts through the agent-based module built into devices and authenticated scanning.

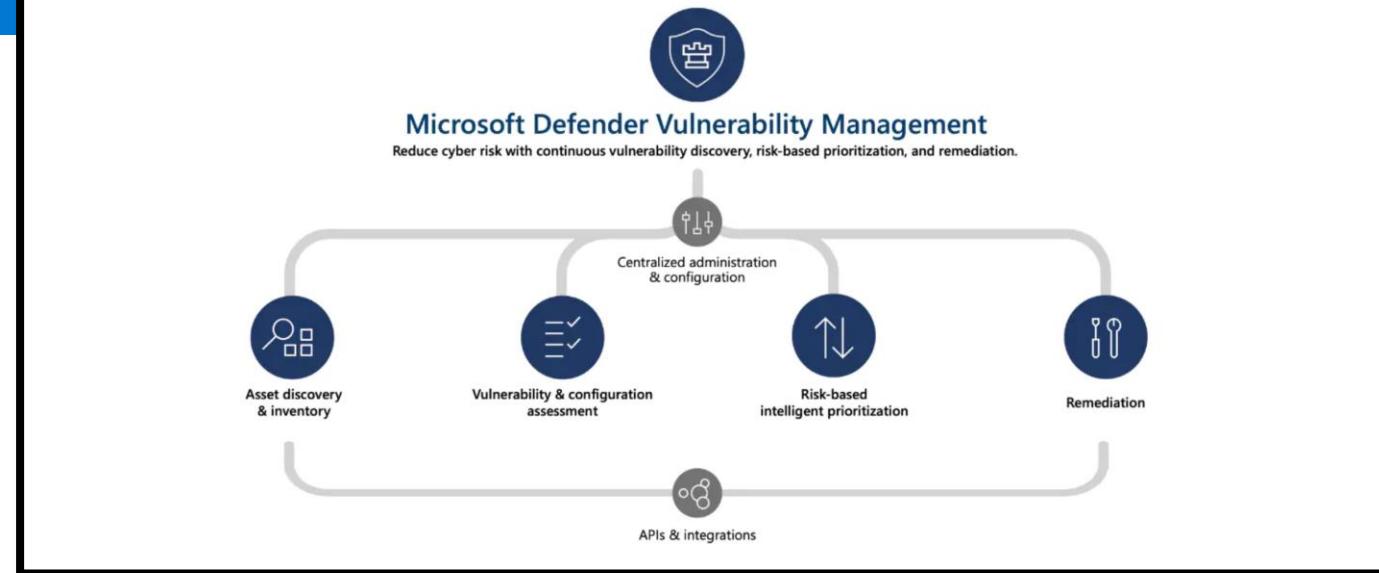
- Uses Microsoft threat intelligence
- Creates breach likelihood predictions
- Develops business contexts
- Runs device assessments

Defender Vulnerability Management rapidly and continuously prioritizes the biggest vulnerabilities on your most critical assets and provides security recommendations to mitigate risk.

- Automated remediation tools
- Built-in workflows
- See Real-time measurements through your organization's exposure score
- Leverages Microsoft Secure Score for Devices
- Use security baselines assessment to empower teams to bridge workflow gaps, quickly reduce risk, and track progress across the organization.



Defender Vulnerability Management **rapidly and continuously prioritizes** the biggest vulnerabilities on your most critical assets **and provides security recommendations to mitigate risk.**



Download the solution brief

Explore how Defender Vulnerability Management helps discover, assess, and remediate risk.

[Download](#)

Defender Vulnerability Management documentation

Learn about each capability in depth and how it can help you protect your organization.

[Learn more](#)



Microsoft 365 update information

Microsoft Teams Blog:



What's New in Microsoft Teams | May 2022

What's New in Microsoft Teams | May 2022

Microsoft_Teams_team on May 31 2022 03:00 AM

In the May edition of "What's New in Microsoft Teams," we are excited to share new updates with you to enhance the way y...

New for This Month:

- [New Developer Tools for building collaborative apps inside Teams](#)
- [Teams Performance Update](#)
- [Adjustable brightness and soft-focus video filters](#)
- [View Together Mode for everyone](#)
- [Multi-Window support for Teams for VDI :: Azure Virtual Desktop, Windows 365 and VMware](#)
- [Give and Take Control for Teams on VDI for Citrix](#)
- [Background Blur for VDI on Azure Virtual Desktop and Windows 365](#)
- [Dynamic Emergency Calling for work-from-home on VDI for VMware](#)
- [Teams App Store Updates](#)
- [New and updated Collaborative apps from ISV partners](#)
- [Follow Office Update Preview Update Policy setting](#)

Devices:

- [Direct Guest Join for Microsoft Teams Rooms on Android](#)
- [Horizontal Participant Gallery for Teams Room Systems](#)
- [Logitech Zone True Wireless Earbuds](#)
- [Huddly L1 camera :: Certified for Microsoft Teams](#)
- [Yamaha ADECIA Tabletop Solution](#)
- [Shure Digital Signal Processor](#)

Chat and Collaboration

- [Additional language support for Suggested Replies for mobile](#)
- [Choose your own status for a meeting](#)
- [Mandatory Comments for Approvals App in Teams](#)
- [Data export within Approvals App](#)

Management:

- [Enhancement to app usage report - support for Line of Business apps](#)
- [Policy operations details in enhanced activity log](#)
- [View Custom app's external app ID on Manage apps page and app details page](#)

Power Platform and Custom Development

- [New Microsoft Graph APIs for Teams](#)
- [Teams Toolkit for Visual Studio Code :: Generally Available](#)
- [App Compliance Automation Tool for M365 :: Preview](#)



Crafting a new hybrid meeting room experience at Microsoft...

Lukas_Velush on Jun 08 2022 08:00 AM

There's a place on Microsoft's Puget Sound campus where our software engineers, audio-video engineers, architects, and i...

Frontline Workers

- [Team Templates maintenance](#)
- [Walkie Talkie app in Teams :: supported on Crosscall devices](#)
- [Teams F SKUs with new default pre-pinned apps](#)

Government Cloud Updates : GCC-High and DoD Clouds:

- [Together Mode in Teams Meetings on Web](#)
- [Anonymous meeting join across clouds](#)
- [Presenter mode: Controls to move and resize presenter video](#)
- [Mirror my video](#)
- [Music Mode](#)
- [Support of Live Caption for Teams on VDI for Azure Virtual Desktop and Citrix](#)
- [New default settings when opening Office files For Government clouds](#)



What's New in Microsoft 365

[M365 Blogs](#), and [Administrative Blogs](#) covering Office 365, Enterprise Mobility + Security and Windows ::



Microsoft 365 Updates:

- [Microsoft Loop & Adaptive Cards-based Loop Components :: Preview](#)
- [Software Updates page in the Microsoft 365 admin center :: Preview](#)
- [Exchange Server Roadmap Update](#)
- [Windows 11 22H2 :: Preview](#)
- [OneDrive Sync Admin Reports for macOS :: Public Preview](#)
- [Troubleshooting common DLP issues :: New Guide](#)
- [Project for the web :: May updates](#)
- [Trusted ARC Sealers for Microsoft Defender for Office 365 :: Improving "Defense in Depth"](#)
- [Microsoft Endpoint Manager :: May 2022 Updates](#)
- [Excel Updates :: May 2022](#)
- [Microsoft Defender for Cloud :: RSA Announcements](#)
- [Viva Learning Updates :: May 2022](#)
- [Entra – Modern Identity and Access :: New Product Family](#)

Microsoft 365 roadmap

Get the latest updates on our best-in-class productivity apps and intelligent cloud services. Rethink productivity, streamline business processes, and protect your business with Microsoft 365.

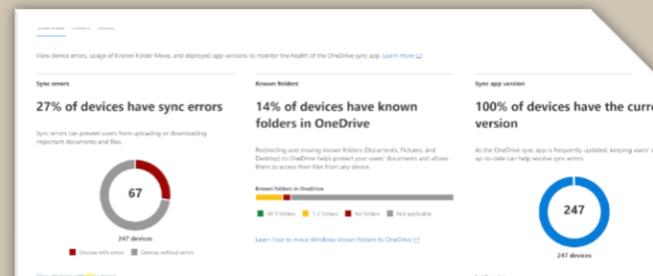
[Using this roadmap](#)

[Roadmap improvements](#)

'Follow Office Preview' update policy setting in Micros...

Shikha Varshney in Microsoft Teams Blog Jun 06 2022 08:00 AM

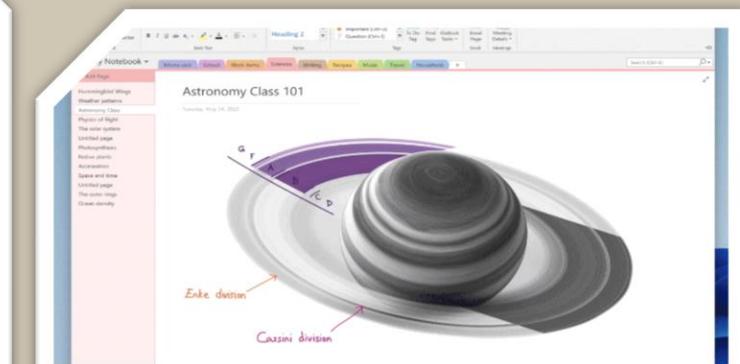
Microsoft Teams has been furthering its alignment with Microsoft 365 deployment channels b...



Calling macOS Admins: OneDrive Sync Reports are in Publ...

Ankita Kirti in Microsoft OneDrive Blog Jun 07 2022 10:13 AM

Today we're excited to announce the public preview of OneDrive Sync Admin Reports for macO...



Refreshing the OneNote app on Windows

OneNotePM on May 24 2022 09:02 AM

We're giving users an update to the to the advancements in OneNote discussed last summer.

Power Platform and Dynamics



Microsoft Dynamics 365 at Hannover Messe 2022 >

May 25, 2022 • 6 min read

By [Vignesh Balasubramanian](#), Senior Product Marketing Manager, Supply Chain Management

We are excited to return to Hannover Messe in person this year between May 30, 2022 and June 2, 2022. The pandemic has been difficult for most manufacturers, and there are still many lingering challenges—yet, manufacturers are intent on digital transformation to drive resilience. There are several emerging trends that we believe are instrumental to...[Read more](#)



Create a task in Planner from Microsoft Forms and post message in Teams

By Microsoft Power Automate Community

Automated
84557



Microsoft Dynamics 365 at Gartner Supply Chain Symposium Xpo™ 2022 >

June 3, 2022 • 6 min read

By [Vignesh Balasubramanian](#), Senior Product Marketing Manager, Supply Chain Management

Although the pandemic exposed our supply chain fragilities, there are other factors that will continue to disrupt our supply chains for the foreseeable future.

Geopolitical tensions between world superpowers are forcing companies to change how they trade, source, and manufacture goods, so redesigning your supply chain networks or setting up new supply chains to gain...[Read more](#)



Get a push notification when a new file is added in OneDrive for Business

By Microsoft

Automated
47360



3 advantages of composable applications to empower supply chain network innovations >

May 19, 2022 • 4 min read

By [Lili Lau](#), Senior Product Marketing Manager, Dynamics 365 Intelligent Order Management

Manufacturing supply chains are experiencing a post-pandemic paradigm shift. As business models evolve to solve market disruptions, such as changing or adding direct-to-consumer (D2C) to a business-to-business (B2B) model, supply chains require agility and innovation to build resiliency and stay ahead of trends. United States D2C e-commerce sales have more than tripled in the past...[Read more](#)



Email me with a list of upcoming Calendar events

By Microsoft

Scheduled
21844



3 reasons to not delay your migration to Dynamics 365 in the cloud >

June 1, 2022 • 4 min read

By [Thomas Wisniewski](#), Product Marketing Manager, Business Apps & Global Industry

The “changing technology landscape” has become a common trope when discussing the cloud. I understand why—it helps contextualize the disruption and advancement we’re experiencing. But you know as well as I do, this “change” has happened. The on-premises solutions and infrastructure you built your business on, though once state-of-the-art, are now less adaptable, less useful,...[Read more](#)

Roadmaps and Release plans:



- ❖ [Power BI Blog](#)
- ❖ [PowerApps Blog](#)
- ❖ [Power Automate Blog](#)
- ❖ [Power Virtual Agents Blog](#)

- [Enhanced refresh with the Power BI REST API](#):: Generally Available
- [Dynamic format strings](#):: Supported in all chart elements
- [Mandatory Label Policy](#):: Ensure MIP sensitivity labels are applied to new content in Power BI
- [Updated Slicer Defaults](#) for accessibility improvements
- [ExecuteQueries REST API](#):: Generally Available
- [Datamart in Power BI](#):: Public Preview
- [Power Apps Canvas Components and Component Libraries](#):: Generally Available
- [Microsoft Power Pages](#):: Preview
- [Rich Text Editor for Power Apps Portals](#)
- [Automate unstructured documents like contracts with AI Builder](#)
- [New Power Automate pane in Power Apps](#)
- [The evolution of Power Virtual Agents](#)



Convert Word files in OneDrive (Business) to PDF and store in SharePoint

By Microsoft Power Automate Community

Automated
6639



Create an Azure DevOps work item when email arrives with 'Bug' in subject

By Microsoft

Automated
2457

Developer and GitHub



Product

Introducing GitHub Skills

Today, we're announcing GitHub Skills, a new learning experience to help you throughout your GitHub journey.



A beginner's guide to CI/CD and automation on GitHub

CI/CD and workflow automation are native capabilities on GitHub platform. Here's how to start using them and speed up your workflows.

Rizel Scarlett June 3, 2022

Connecting to a private network from GitHub-hosted Actions runners

Several ways for GitHub-hosted Actions runners to connect to resources on your private network.

Zachary Steindler June 1, 2022

Microsoft Developer Blogs:

- [Build Book of News](#)
- [Python in Visual Studio Code :: June 2022 Release](#)
- [Bazel Build :: Android Developers tool – dual screen capabilities](#)
- [New Profiler feature in Visual Studio :: File I/O tool](#)
- [Microsoft Teams JS SDK v2 :: Generally Available](#)
- [Quantum Development Kits adopts .NET6 and supports Visual Studio 2022](#)
- [Serial and Zephyr support for Visual Studio and VS Code](#)
- [Simplified Write and Read Paths in the Azure Cosmos DB Cassandra API](#)
- [.NET Framework May 2022 Cumulative Update](#)
- [New features for scalable, cost-effective application development](#)

GitHub Blog

- [Implementing a robust digital identity leveraging GitHub Entitlements :: GitHub's open-source Identity and Access Management Solution](#)
- [Introducing Achievements:: recognizing the many stages of a developer's coding journey](#)
- [How GitHub is using projects to build projects](#)
- [GitHub Free or Team? How to Choose](#)
- [How GitHub uses Dependabot to secure GitHub](#)
- [NPM Security Update : Attack campaign using stolen OAuth tokens](#)
- [Improved REST API Documentation to integrate with GitHub](#)
- [Eight Years of the GitHub Security Bug Bounty Program](#)
- [Best Practices to keep your projects secure on GitHub](#)

Now in private preview: Cluster Key Index support for Azure Cosmos DB Cassandra API

June 9, 2022

Iria Osara

Join the private preview for cluster key index in Azure Cosmos DB Cassandra API. To enable on your account contact the Azure Cosmos DB Cassandra API team at previewcassandraapi@microsoft.com Benefits of indexes on clustering keys Cluster Key Index use cases We will be creating a table, inserting sample data and ...

GitHub brings supply chain security features to the Rust community

The Rust community can now discover, report, and prevent security vulnerabilities.

Courtney Claessens June 6, 2022

The Microsoft Planetary Computer

June 8, 2022

Developer Support

Susan Leighton spotlights the Planetary Computer, combining a multi-petabyte catalog of global environmental data with intuitive APIs, a flexible scientific environment that allows users to answer global questions about that data, and applications that put those answers in the hands of conservation stakeholders. In Microsoft's 2021 ...

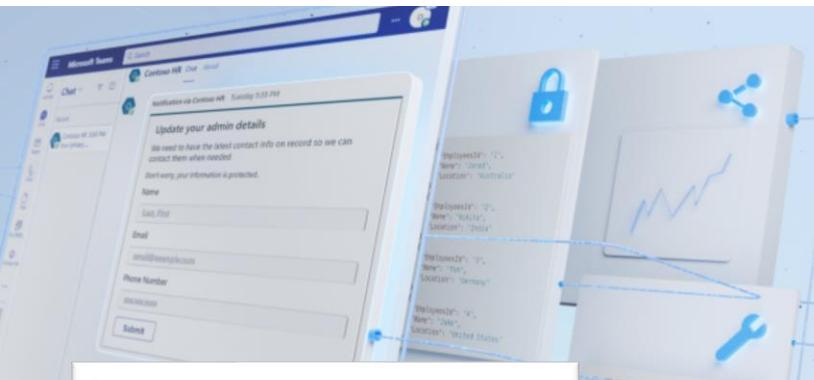
What's new in security and user management for GitHub Enterprise

Learn how you can securely manage users with the latest ships for GitHub Enterprise.

Rizel Scarlett June 2, 2022



Office Developer Blogs and Microsoft 365 Dev Center



Innovate with collaborative apps

Build collaborative apps for Microsoft 365 and Microsoft Teams that connect people, data, and processes to help users thrive in the hybrid workplace.

[Read blog](#)

Build low-code apps and workflows with Power Platform

[Learn more](#)

Grow customer reach and engagement with apps built for Microsoft Viva

[Learn more](#)

Create customized experiences for Viva and SharePoint

[Learn more](#)

Design beautiful user experiences using Fluent UI

[Learn more](#)

Office Scripts

Easily automate your day-to-day tasks with **Office Scripts in Excel on the web**. Get started automating today!

[Learn more >](#)[Try sample scripts >](#)

Global Developer Updates and Bootcamps :: M365 Developer Blog :: Office Developer

- [Build Apps for Microsoft Viva](#)
- [Application permissions for Bookings API in Microsoft Graph :: Generally Available](#)
- [Changes for the Insights API :: Beta](#)
- [Microsoft Teams Toolkit for Visual Studio Code :: Generally Available](#)
- [Office Add-Ins :: Build Announcements](#)
- [Microsoft Graph :: Engineering changes announced at Build](#)

Build powerful apps with Outlook and Office

[Learn more](#)

Build rich collaborative experiences with Microsoft Teams

[Learn more](#)

Azure



Azure Updates



Azure Announcements : Azure Blog

VMs, Features, & Announcements

- [Azure SDK for Go :: Generally Available](#)
- [Azure Container Apps support for custom domains and TLS :: Generally Available](#)
- [Microsoft Graph API integration with Azure Event Grid :: Public Preview](#)
- [Microsoft Purview access policies for Azure SQL Databases :: Public Preview](#)
- [ExpressRoute IPv6 Support for Global Reach :: Public Preview](#)
- [JavaScript and Python support in SQL bindings :: Public Preview](#)
- [Azure Digital Twins 3D Scenes Studio :: Public Preview](#)
- [NGINX for Azure :: Public Preview](#)

Data, AI, Security, & Availability

- [Azure Monitor Agent available on latest Linux distros :: Generally Available](#)
- [Dynatrace for Azure :: Seamless observability](#)
- [Azure Firewall :: Updates and "What's New"](#)
- [Virtual Desktop Infrastructure \(VDI\) Security Best Practices for Azure](#)
- [Linux emulator with Azure Cosmos DB API for Mongo DB :: Public Preview](#)
- [Azure NC A100 v4 virtual machines for AI :: Generally Available](#)
- [Conversational language understanding :: Generally Available](#)
- [Azure Bastion IP-based connection :: Generally Available](#)

Operations & Benefits

- [Mount Azure Files and ephemeral storage in Azure Container Apps :: Public Preview](#)
- [API Management authorizations :: Public Preview](#)
- [Supporting openEHR with Azure Health Data Services](#)
- [Budget Alert supports action groups with common alert schema :: Generally Available](#)

Azure announcements at Build 2022

- [Azure AI](#)
- [Azure Cloud Native & App Platform](#)
- [Azure Data](#)
- [Azure Hybrid](#)
- [Azure Infrastructure](#)
- [Azure Migration & Modernization](#)
- [Developer Tools and DevOps](#)

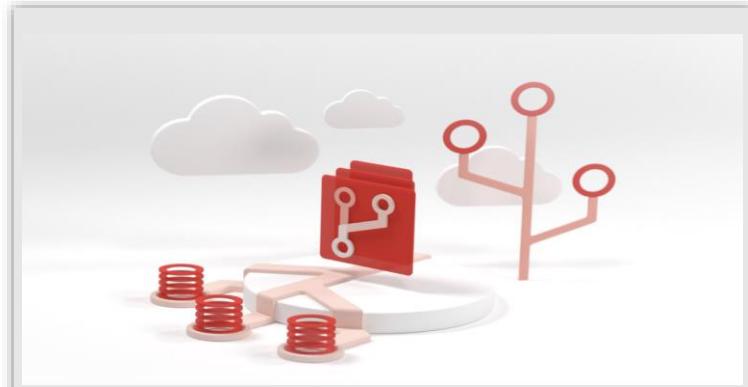
Introducing the Microsoft Intelligent Data Platform

Tuesday, May 24, 2022

It's clear that the fragmentation which exists today between databases, analytics, and governance products must be addressed. To help organizations unlock these new capabilities, we shared several exciting announcements today at Microsoft Build that demonstrate our continued innovation and investment in the data products our customers have come to know and trust.

[Rohan Kumar](#), Corporate Vice President, Azure Data

Azure Services Directory



Azure Managed Grafana PREVIEW

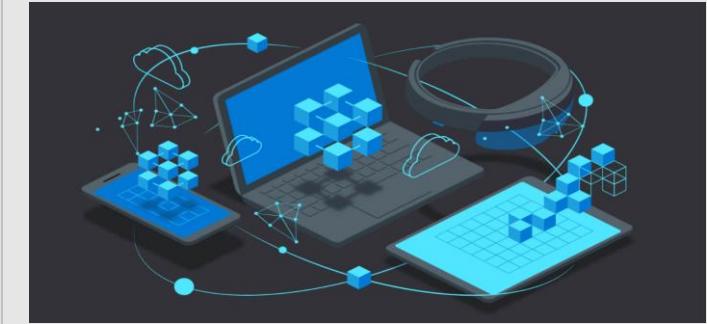
Deploy Grafana dashboards as a fully managed Azure service

Fully managed service for analytics and monitoring solutions



Azure OpenAI Service PREVIEW

Apply advanced coding and language models to a variety of use cases



Object Anchors PREVIEW

A mixed reality service that automatically aligns and anchors 3D content

Create rich, immersive experiences by automatically aligning 3D content with physical objects.

Azure Managed Grafana : Preview

- ❖ Observe all telemetry data in one place
- ❖ [Prescriptive guides](#)
- ❖ Built-in support for [Azure Monitor](#) and [Azure Data Explorer](#)
- ❖ Fully managed service : Deploy Grafana without having to setup.
- ❖ High Availability, SLA guarantees and automatic updates
- ❖ [Secure Dashboard sharing with a dispersed team](#)
- ❖ [Integrated Identity Management with Azure AD](#)

Azure OpenAI Services: Preview

[The Azure OpenAI service provides REST API access to OpenAI's powerful](#) language models including the GPT-3, Codex and Embeddings model series.

- ❖ **Adaptable Models** like GPT-3, [Codex](#) and Embeddings model series
- ❖ [New responsible AI system](#) that filters out harmful content and helps detect abuse.
- ❖ [Part of the Azure Cognitive Services family](#)
- ❖ Access different models from Open AI like Ada, Babbage, Curie and DaVinci
- ❖ Secure mission-critical workloads with role-based authentication and private network connectivity
- ❖ Adapt AI models to your specification with labeled data
- ❖ Pretrained models can be applied to your scenarios, language, code, reasoning, inferencing and comprehension

Object Anchors: Preview

- ❖ Automatic alignment of 3D content with physical objects
- ❖ [Rapidly create Guides and instructions](#) for Mixed Reality / Augmented reality workload
- ❖ Collaborate around physical objects with interactive holograms
- ❖ [Build immersive mixed reality experience](#)
- ❖ Simplify training development
- ❖ [Quickly create Object Anchors from a 3D model](#)
- ❖ Link physical and virtual objects for training, modeling, interactive collaboration and visual inspections

New trends with Microsoft Technology



Updates from Microsoft Industry Blogs



Accelerate your journey to net-zero with Microsoft Cloud for Sustainability >

June 1, 2022 • 6 min read

By [Satish Thomas](#), Corporate Vice President, Microsoft Industry Clouds

Today, we are excited to announce the general availability of Microsoft Cloud for Sustainability. This release marks another step in our goal to empower organizations to accelerate their sustainability progress and business growth by bringing together a growing set of Environmental, Social, and Governance (ESG) capabilities across the Microsoft Cloud portfolio plus solutions from our...

[Read more](#)



Microsoft Cloud for Manufacturing: Boost supply chain resilience >

May 26, 2022 • 4 min read

By [Colin Masson](#), Global Industry Marketing Director, Manufacturing

Supply chain resilience, or the ability of companies to adapt to unforeseen challenges in production and distribution, has come into the spotlight due to COVID-19. Manufacturers are under pressure to prevent and minimize disruptions, and as a result, almost 90 percent of supply chain professionals plan to invest in ways to make their supply chains more...[Read more](#)

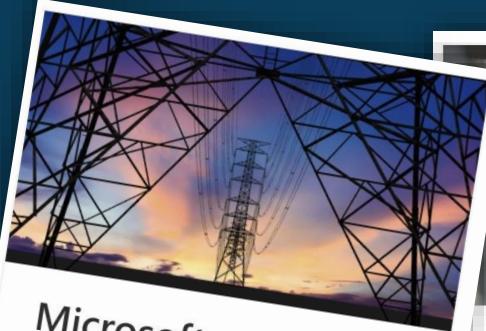


Why the future of buildings is efficient, safe, and sustainable >

June 7, 2022 • 4 min read

By [Jeremy M. Goldberg](#), WWPS Director of Critical Infrastructure

Throughout my life, I've traveled to many places for work, pleasure, and education. Often with family, sometimes alone. Whether I am in Barcelona or Buenos Aires, Austin or Cleveland, Doha or Tel-Aviv, or closer to home exploring Manhattan, I'm always struck by the variation in the built environment. Of course, cities look different based on when...[Read more](#)



Microsoft at DISTRIBUTECH International: Innovation and technology for the power and utilities industry >

May 19, 2022 • 4 min read

By [Darryl Willis](#), Corporate Vice President, Worldwide Energy Industry

The power and utilities sector plays a critical role in building a sustainable energy future while providing safe, reliable, affordable, clean energy to homes and businesses. As a technology innovator and partner of the industry, the Microsoft Energy team looks forward to participating in DISTRIBUTECH International in Dallas, Texas, from May 23 to 25, 2022,...[Read more](#)



Hannover Messe 2022: Empowering people for the future in manufacturing >

June 8, 2022 • 4 min read

By [Colin Masson](#), Global Industry Marketing Director, Manufacturing

After more than three years, we were excited to join global leaders and our manufacturing colleagues in Hannover, Germany at the world's biggest trade show for industrial technology, Hannover Messe 2022. Since we last met, Microsoft has released new solutions and capabilities to help our customers and partners thrive through this disruptive era. Most notably...[Read more](#)

Microsoft Sustainability

Sustainability Solutions for Industry

Introducing Microsoft Sustainability Manager—available June 1

Explore this new Microsoft Cloud for Sustainability solution that unifies data to help you monitor and manage your environmental impact.

[Learn more >](#)[Try for free >](#)

Sustainability tools and resources

Find training, data, reports, and other resources from Microsoft to support your sustainability journey.

[Tools](#)[Videos](#)[White papers and guides](#)[Infographics](#)

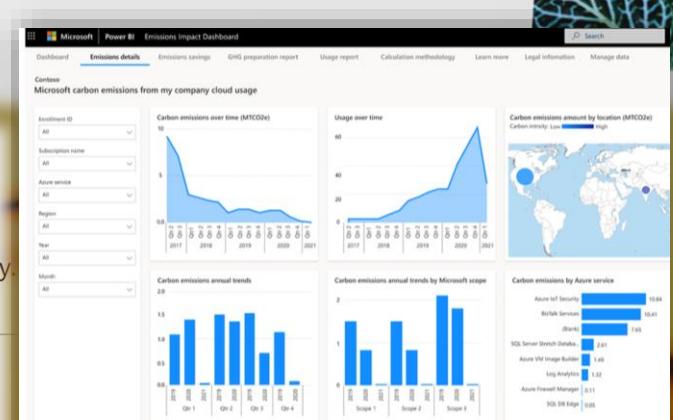
Explore Microsoft Cloud for Sustainability

Get an in-depth look at Microsoft Cloud for Sustainability.

[Read documentation >](#)

Optimize operations to decrease your environmental footprint

Tap into actionable data insights to minimize the impact of your operational systems and processes and drive change.



Migrate to the cloud to drive energy efficiencies

Use cloud solutions to cut energy consumption and costs while reducing the physical footprint of your datacenters.

[Discover the Emissions Impact Dashboard](#)[Try the Emissions Savings Estimator](#)

The screenshot shows the Microsoft Sustainability Manager interface. On the left, a sidebar lists 'Data management', 'Activity data', 'Data connections', 'Data providers', 'Calculations', 'Factor libraries', 'Calculation models', and 'Calculation profiles'. A central panel titled 'New data connection' shows steps: 'Select data type' (Activity data/Purchased electricity), 'Choose connector' (radio button selected), 'Create connection' (radio button), 'Schedule data import' (radio button), and 'Review and Finish' (radio button). Below this are sections for 'Choose connector' (Power Query, Excel File, CSV File, OData, XML File, PDF File, JSON File, MySQL Database, SAP HANA Database, Azure Data Lake Storage, Azure Blob, Oracle Database, Azure Synapse), 'Recently used' (Adatum Utility Management, Excel), and 'See all Power Query connectors'.

Connect your data to gain actionable insights

Collect and centralize your data to more easily record, report, and reduce your environmental impact.

Adopt sustainable technologies

Choose devices that maximize sustainability of materials and minimize your carbon footprint and energy consumption.

[Explore sustainable devices](#)



Microsoft Cloud for Sustainability

Record, report, and reduce your organization's environmental impact.

Emissions Impact Dashboard

Estimate your carbon emissions related to using Microsoft cloud services—including Azure and Microsoft 365—and make more data-driven decisions about cloud usage.

Emissions Impact Dashboard

Understand and help reduce your organization's environmental impact with the Emissions Impact Dashboard.

[Explore the dashboard >](#)

GHG emissions reporting training

Explore learning modules to measure and report greenhouse gas (GHG) emissions.

[Get started >](#)

Energy efficiency training

Learn how increasing efficiencies and using less energy can help reduce your carbon emissions.

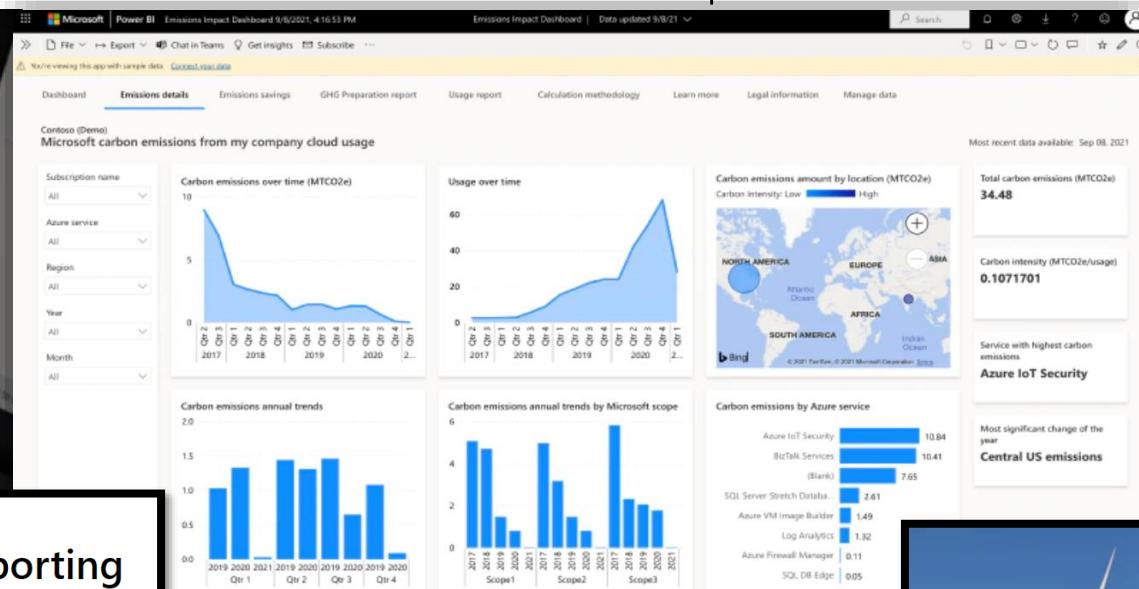
[Get started >](#)

Cloud carbon tracking for your path to net zero

Using Power BI template apps and consistent, third party-validated carbon accounting, the Emissions Impact Dashboard for Azure and the Emissions Impact Dashboard for Microsoft 365 (now in preview) help you measure your Microsoft Cloud-based emissions and carbon savings potential.

[App for Azure >](#)

[App for Microsoft 365 >](#)

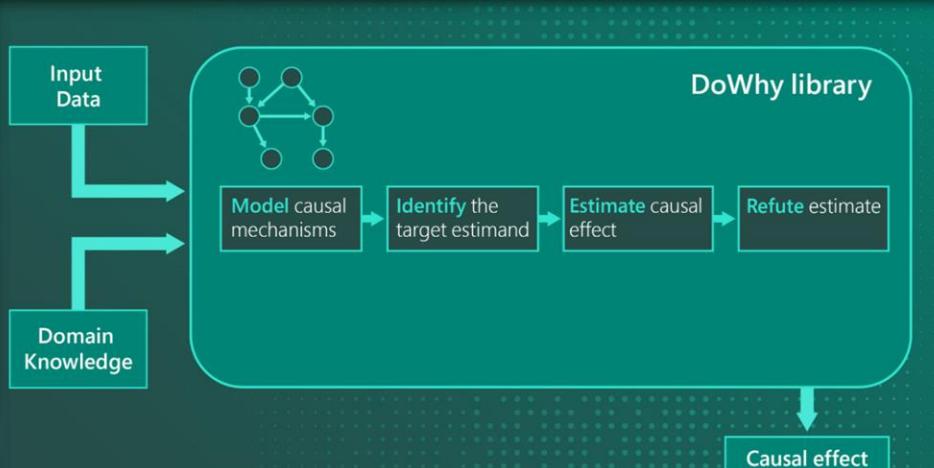


Renewable energy procurement training

Find out how to build a roadmap to support your shift to renewable energy.

[Get started >](#)

Microsoft Research Blog



DoWhy evolves to independent PyWhy model to help causal inference grow >

May 31, 2022 by [Emre Kiciman](#) and [Amit Sharma](#)

Identifying causal effects is an integral part of scientific inquiry. It helps us understand everything from educational outcomes to the effects of social policies to risk factors for diseases. Questions of cause-and-effect are also critical for the design and data-driven evaluation of many technological systems...



Partnering people with large language models to find and fix bugs in NLP systems >

<https://www.youtube.com/watch?v=9xQd8On3u3Q>
Advances in platform models—large-scale models that can serve as foundations across applications—have significantly improved the ability of computers to process natural language. But natural language processing (NLP) models are still far from perfect, sometimes failing in embarrassing ways, like translating “Eu não recomendo este...”

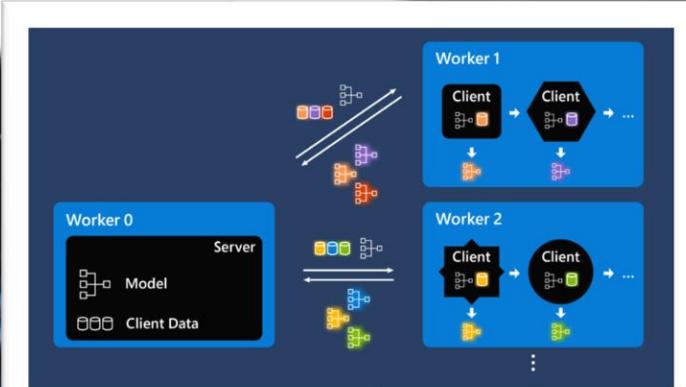
May 23, 2022 by [Scott Lundberg](#) and [Marco Túlio Ribeiro](#)



(De)ToxiGen: Leveraging large language models to build more robust hate speech detection tools >

It's a well-known challenge that large language models (LLMs)—growing in popularity thanks to their adaptability across a variety of applications—carry risks. Because they're trained on large amounts of data from across the internet, they're capable of generating inappropriate and harmful language based on similar language...

May 23, 2022 by [Hamid Palangi](#) and [Dipankar Ray](#)



FLUTE: A scalable federated learning simulation platform >

Federated learning has become a major area of machine learning (ML) research in recent years due to its versatility in training complex models over massive amounts of data without the need to share that data with a centralized entity. However, despite this flexibility and the...

May 16, 2022



Microsoft Quantum

Get to know the world's first full-stack, open cloud quantum computing ecosystem

Azure Quantum PREVIEW

The most innovative quantum computing and optimization solutions converge in a single marketplace quantum service



```
/// # Summary
/// This operation applies Grover's algorithm to an operation to find a particular
operation SearchForMarkedInput (nQubits : INT) :
    using (qubits = Qubit [nQubits]) {
        // Initialize a uniform superposition over all states.
        PrepareUniform(qubits);
        // The search itself consists of repeatedly
        // marked state and our start state, which we
        // do as a for loop.
        for (idxIteration in 0...NIterations (nQubits))
            ReflectAboutMarked(qubits);
            ReflectAboutUniform(qubits);
    }
    // Measure and return the answer.
    return ForEach(MResetZ, qubits);
}
```

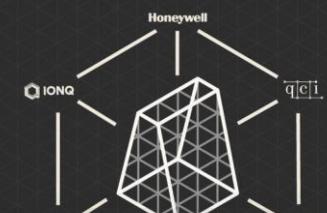
Grow your quantum skills

Join the growing global community of experts, enthusiasts, and quantum computing companies by learning the fundamentals of quantum computing concepts, operations, and Q# programming. Get started with a wide variety of learning resources for developers, researchers, and students, including free, self-paced Microsoft Learn courses and open-source GitHub katas.

[Start learning](#)

Microsoft Quantum Network

The Microsoft Quantum Network is a community of pioneering individuals and organizations working together to develop practical solutions, grow talent through education, and build a worldwide quantum partner ecosystem



Unified development interface

With Azure Quantum and its [quantum development kit](#), what could be a heterogeneous hardware and software set of solutions is unified. Your development investments are protected in a rapidly evolving technological landscape.

Microsoft and its Partners ensure hardware and software



Qubit Engineering optimizes wind farm energy production with Azure Quantum >

May 17, 2022 • 3 min read

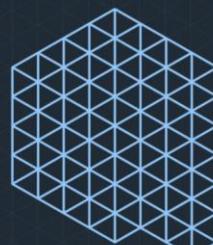


By [Matt Zanner](#), Principal Program Manager, Outreach and Partnerships, Azure Quantum

Qubit Engineering is using quantum-inspired capabilities available on the Azure Quantum platform to optimize wind farm layouts and, in doing so, capture more available energy with the same physical wind farm assets. A constructed wind farm in operation Wind farms have achieved tremendous efficiency gains over the last two decades through hardware innovation. Software innovation,...[Read more](#)

Building a scalable quantum system

Learn how Microsoft is leading the way to scalable, accessible quantum computing with worldwide research teams and partnerships



Showcase of the Month



Microsoft Showcase Series



Inside Track

Discover the inside story of how Microsoft Digital is powering, protecting and transforming Microsoft, helping you learn from our experiences and accelerate your own transformation.



Implementing a Zero Trust security model at Microsoft

June 10, 2022

[PRINT AS PDF >](#)

Implementing Azure cost optimization for the enterprise

June 07, 2022

[PRINT AS PDF >](#)

Location-based routing enables Microsoft India move to Microsoft Teams

Jun 2, 2022 | Danielle Veluz

Shining a light on how Microsoft manages Shadow IT

June 06, 2022

[PRINT AS PDF >](#)



Microsoft Learning and Training : New Sessions



Virtual workshops and training

Our interactive virtual workshops and training sessions are taught live by Microsoft Store associates for an in-person experience—wherever you are.

Microsoft Power Platform Foundations



[See all 4 sessions >](#)

Get Started with Power BI Artificial Intelligence



[See all 9 sessions >](#)



Get Started with Power BI service



[See all 5 sessions >](#)

Introduction to Microsoft Planner



[See all 10 sessions >](#)

Microsoft Virtual Training Days

Microsoft Events and Training: Updates



Microsoft Virtual Training Days

Events Catalog



Microsoft Build

May 24-26, 2022

Microsoft Build is where developers, architects, start-ups, and students learn, connect, and code together, sharing knowledge and expanding their skillset, while exploring new ways of innovating for tomorrow.

[Watch on demand >](#)



Microsoft Inspire

July 19-20, 2022

Microsoft Inspire is where Microsoft partners connect, empower, and celebrate as one community, gaining insights into what's coming in the year ahead and learning effective new strategies to propel business forward.

[Learn more >](#)

Further your goals with Microsoft events

Whether you're a developer, IT professional, partner, educator, or business professional, we have plenty of Microsoft events specifically created with your growth in mind. Explore special events and learning opportunities created to help you expand your expertise, learn new skills, and build community.

Microsoft Azure Virtual Training Day: DevOps with GitHub

7/12/2022 12:00 PM (EST)

[Register Now >](#)

Microsoft Security Virtual Training Day: Zero Trust

6/22/2022 9:00 AM (EST)

[Register Now >](#)

Microsoft Azure Virtual Training Day: Cloud-Native Apps

6/21/2022 12:00 PM (EST)

[Register Now >](#)

Microsoft Azure Virtual Training Day: AI Fundamentals

7/5/2022 12:00 PM (EST)

[Register Now >](#)

Microsoft Enterprise Skills Initiative (ESI)

self-paced learning, virtual training, instructor-led training, certifications



Enterprise Skills Initiative (ESI) continues*

- We have increased capacity and number of offerings.
- ESI covers training and certification for Azure technology.
- New: now also covers Security technology for eligible customers.
- ESI has options for different learning styles and stages:
 - Training is available as self-paced, instructor-led, Event.
 - Other training formats (e.g. Open Hack, GitHub, Cloud Skills Challenge) planned. ETA to be announced later.
 - Free exam vouchers available for eligible customers.
 - Free practice tests available for eligible customers.

*Eligibility required; trainings and free offers are limited in numbers/availability.

Try it: <https://esi.microsoft.com>

1. Microsoft enables your organization for the Customer Experience Portal (CxP)
2. Login with your work account
 - *Authentication is federated, meaning you may see Multi-Factor Authentication from your organization if this has been configured by your administrator.*
3. Create your learning profile
4. Start your skilling

Discover & Explore

Uncover the latest technologies and imagine new ways to create solutions



Learn skills

Choose the way you want to learn and grow your expertise



Prove skills

Demonstrate your knowledge and abilities



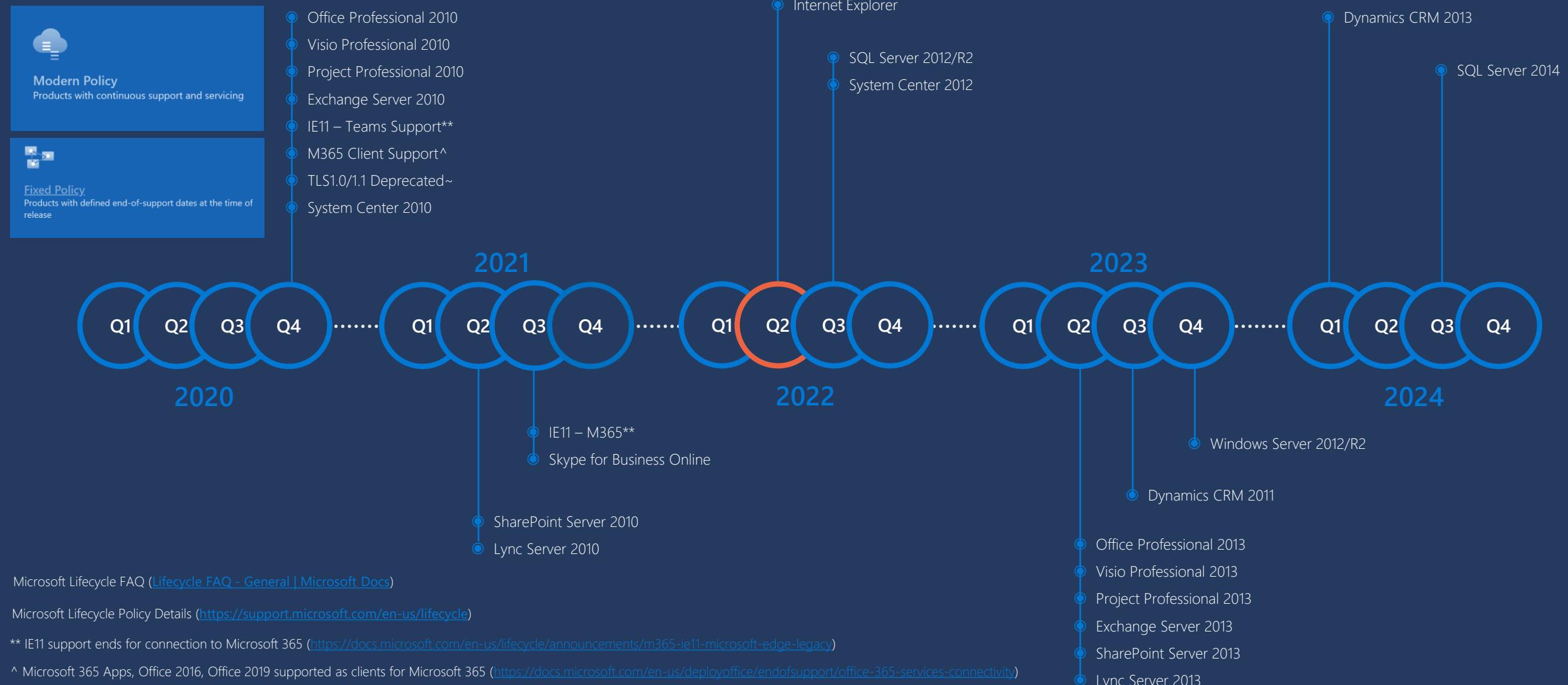
Login not working? Your organization may need to be onboarded to ESI. Please talk to your Microsoft Account Team.

Product Lifecycles

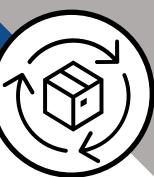




End of Service Roadmap to 2024



Microsoft Product Lifecycle: Modern Policy Products that will Retire



Products under Modern Policy that will Retire in 2022

Products that will Retire in 2022 (Modern Policy)	End of Support Date
Dynamics 365 for Talent	February 2, 2022
Dynamics 365 Field Service (on-premises)	June 30, 2022
Microsoft Machine Learning Server (Microsoft R Server)	July 1, 2022
Windows Server	August 9, 2022

Products under Modern Policy that will Retire in 2023

Products that will Retire in 2023 (Modern Policy)	End of Support Date
Microsoft Azure Virtual Machine (classic)	March 1, 2023
Windows 11 Home and Pro (Version 21H2)	October 10, 2023

Lifecycle data export

Export all products

Export lifecycle data for all products by clicking below:

[Export All Products](#)

Announcements

- ⌚ Office 2013 ends support in one year
- ⌚ Internet Explorer 11 desktop app support ending for certain versions of Windows 10
- ⌚ Support extended for Dynamics 365 for Customer Engagement Apps, v9 (on-premises)
- ⌚ Retirement of SQL Server 2019 Big Data Clusters
- ⌚ Windows 10, version 20H2 end of servicing
- ⌚ Windows 10, version 1909 end of servicing (Enterprise and Education)

- ⌚ Mainstream support extended for BizTalk Server 2020 and Host Integration Server 2020
- ⌚ Office 2013 and Skype for Business 2015 end of support on April 11, 2023
- ⌚ UPDATE: Skype for Business Online retirement on July 31, 2021
- ⌚ UPDATED: Support extended for Visio Services in SharePoint Online (aka Visio Web Access)
- ⌚ Windows 10, version 2004 end of servicing (all editions)

[See more >](#)

Microsoft Product Lifecycle: Modern Policy Reaching End of Servicing



Products Release End of Servicing for 2022

Products Moving to End of Servicing (Modern Policy)	End of Servicing Date
Microsoft Endpoint Configuration Manager, Version 2006	February 11, 2022
Dynamics 365 Business Central on-premises (Modern Policy), 2020 release wave 2, version 17.x	April 12, 2022
.NET 5.0	May 8, 2022
Windows 10 Enterprise and Education, Version 1909 Windows 10 Home and Pro, Version 20H2 Windows 10 IoT Enterprise, Version 1909	May 10, 2022
Microsoft Endpoint Configuration Manager, Version 2010	May 30, 2022
Azure Active Directory (AD) Connect, Version 1.x	August 31, 2022
Microsoft Endpoint Configuration Manager, Version 2103	October 5, 2022
Dynamics 365 Business Central on-premises (Modern Policy), 2021 release wave 1, version 18.x	October 11, 2022
.NET Core 3.1 (LTS)	December 3, 2022
Windows 10 Enterprise and Education, Version 21H1 Windows 10 Home and Pro, Version 21H1 Windows 10 IoT Enterprise, Version 21H1	December 13, 2022

Products Release End of Servicing for 2023

Products Moving to End of Servicing (Modern Policy)	End of Servicing Date
Microsoft Endpoint Configuration Manager, Version 2107	February 2, 2023
Dynamics 365 Business Central on-premises (Modern Policy), 2021 release wave 2, version 19.x	April 12, 2023
Windows 10 Enterprise and Education, Version 20H2 Windows 10 IoT Enterprise, Version 20H2	May 9, 2023
Windows 10 Home and Pro, Version 21H2	June 13, 2023
Azure Dev Spaces	October 31, 2023

Microsoft Product Lifecycle: Fixed Policy Reaching End of Support 2022



Products Reaching End of Support for 2022

Products Moving to End of Support (Modern Policy)	End of Servicing Date	Products Moving to End of Support (Modern Policy)	End of Servicing Date
Visual Studio LightSwitch 2011 Windows 7, Extended Security Update Year 2* Windows Server 2008, Extended Security Update Year 2 Windows Server 2008 R2, Extended Security Update Year 2	January 11, 2022	Microsoft Forefront Identity Manager 2010 Microsoft Forefront Identity Manager 2010 R2 SQL Server 2016, Service Pack 2 Visual Studio 2019, Version 16.9 Windows Embedded POSReady 7, Extended Security Update Year 1* Windows Embedded Standard 7, Extended Security Update Year 2*	October 11, 2022
AppFabric 1.1 for Windows Server Dynamics AX 2009 Dynamics AX 2012 Dynamics AX 2012 R2 Visual Studio 2019, Version 16.7	April 12, 2022	Azure StorSimple 1200 Series Azure StorSimple 8000 Series StorSimple Data Manager	December 31, 2022
Microsoft .NET Framework, .NET Framework 4.5.2 Microsoft .NET Framework, .NET Framework 4.6 Microsoft .NET Framework, .NET Framework 4.6.1	April 26, 2022		
Internet Explorer 11 on Windows 10	June 14, 2022		
Cloud Platform System Microsoft Report Viewer Redistributable 2012 Microsoft SQL Server 2008, Extended Security Update Year 3 Microsoft SQL Server 2008 R2, Extended Security Update Year 3 Microsoft SQL Server 2012 Microsoft System Center 2012 App Controller Microsoft System Center 2012 Configuration Manager Microsoft System Center 2012 Data Protection Manager Microsoft System Center 2012 Endpoint Protection Microsoft System Center 2012 Operations Manager Microsoft System Center 2012 Orchestrator Microsoft System Center 2012 R2 App Controller Microsoft System Center 2012 R2 Configuration Manager Microsoft System Center 2012 R2 Data Protection Manager Microsoft System Center 2012 R2 Endpoint Protection Microsoft System Center 2012 R2 Operations Manager Microsoft System Center 2012 R2 Orchestrator Microsoft System Center 2012 R2 Service Manager Microsoft System Center 2012 R2 Virtual Machine Manager Microsoft System Center 2012 Service Manager Microsoft System Center 2012 Virtual Machine Manager Windows Azure Pack (on Windows Server 2012 R2)	July 12, 2022		

Microsoft Product Lifecycle: Fixed Policy Reaching End of Support 2023



Products Reaching End of Support for 2023

Products Moving to End of Support (Modern Policy)	End of Servicing Date	Products Moving to End of Support (Modern Policy)	End of Servicing Date
Dynamics AX 2012 R3 Dynamics NAV 2013 Dynamics NAV 2013 R2 Hyper-V Server 2012 Hyper-V Server 2012 R2 Internet Information Services (IIS), IIS 8.5 on Windows 8.1 Microsoft Diagnostics and Recovery Toolset 8.0 Service Bus for Windows Server User Experience Virtualization (UE-V) 1.0 Visual Studio 2012 Visual Studio Team Foundation Server 2012 Windows 7, Extended Security Update Year 3* Windows 8.1 Windows Defender For Windows 8 and 8.1 Windows Embedded 8.1 Pro Windows RT Windows Server 2008, Extended Security Update Year 3 Windows Server 2008 R2, Extended Security Update Year 3 Workflow Manager 1.0	January 10, 2023	BizTalk Server 2013 BizTalk Server 2013 R2 Dynamics 365 for Customer Engagement Apps, version 9 (on-premises update), Original Release (ver 9.0) Microsoft BitLocker Administration and Monitoring 2.0 Microsoft SQL Server 2008, Extended Security Update Year 4 (Azure only) Microsoft SQL Server 2008 R2, Extended Security Update Year 4 (Azure only) Microsoft SQL Server 2012, Extended Security Update Year 1 Visual Studio 2022 , Version 17.0 (LTSC channel) Windows Embedded 8 Standard Windows Embedded 8.1 Industry	July 11, 2023
Access 2013 Dynamics GP 2013 Dynamics GP 2013 R2 Excel 2013 Exchange Server 2013 HPC Pack 2012 HPC Pack 2012 R2 Lync 2013 Microsoft Lync Phone Edition Microsoft Lync Server 2013 Microsoft Office 2013 Microsoft OneNote 2013 Outlook 2013 PowerPoint 2013 Project 2013 Project Server 2013 Publisher 2013 SharePoint Foundation 2013 SharePoint Server 2013 Skype for Business 2015 Visio 2013 Word 2013	April 11, 2023	Excel 2019 for Mac Internet Explorer 7 Internet Information Services (IIS), IIS 8 on Windows Server 2012 Internet Information Services (IIS), IIS 8.5 on Windows Server 2012 R2 Microsoft Office 2019 for Mac Microsoft Office Audit and Control Management Server 2013 Outlook 2019 for Mac PowerPoint 2019 for Mac Windows Embedded Compact 2013 Windows Embedded POSReady 7, Extended Security Update Year 2* Windows Embedded Standard 7, Extended Security Update Year 3* Windows MultiPoint Server 2012 Windows Server 2012 Windows Server 2012 R2 Windows Server Update Services for Windows Server 2012 Windows Server Update Services for Windows Server 2012 R2 Windows Storage Server 2012 Windows Storage Server 2012 R2 Word 2019 for Mac	October 10, 2023

Microsoft Product Lifecycle: Products moving to Extended Support



Products Moving to Extended Support for 2022

Products Moving to Extended Support (Fixed Policy)	End of Support Date
BizTalk Server 2016	January 11, 2022
Dynamics NAV 2017	
HPC Pack 2016	
Hyper-V Server 2016	
Microsoft Host Integration Server 2016	
System Center 2016 Data Protection	
System Center 2016 Operations Manager	
System Center 2016 Orchestrator	
System Center 2016 Service Manager	
System Center 2016 Virtual Machine Manager	
Visual Studio Team Foundation Server 2017	
Windows Azure Pack (on Windows Server 2016)	
Windows Server 2016	
Windows Storage Server 2016	
Visual Studio 2017	April 12, 2022
SQL Server 2017	October 11, 2022

Products Moving to Extended Support for 2023

Products Moving to Extended Support (Fixed Policy)	End of Support Date
Dynamics GP 2018	January 10, 2023
Dynamics GP 2018 R2	
Dynamics NAV 2018	
Visual Studio Team Foundation Server 2018	
Dynamics SL 2018	July 11, 2023
Access 2019	October 10, 2023
Dynamics 365 Business Central on-premises (Fixed Policy)	
Excel 2019	
Microsoft Office 2019	
OneNote 2016	
Outlook 2019	
PowerPoint 2019	
Project 2019	
Publisher 2019	
Visio 2019	
Word 2019	



Acquisitions and Announcements

Microsoft Acquisitions - 2022



Company	Date	Description
Minit	03-31-2022	Minit currently enables businesses to transform the way they analyze, monitor and optimize their processes . Minit's solutions have helped businesses gain deep insights into how processes run , uncover root causes of operational challenges and help mitigate undesired process outcomes. This acquisition will further empower Microsoft to help our customers digitally transform and drive operational excellence by creating a complete picture of their business processes, enabling every process to be easily and automatically analyzed and improved. Customers will be able to better understand their process data, uncover what operations look like in reality and drive process standardization and improvement across the entire organization to ensure compliance at every step .
Oribi	02-28-2022	Microsoft's LinkedIn will acquire Oribi , an Israel based marketing analytics company , to further help customers, from marketers to recruiters, gain actionable insights, make smarter decisions and drive business results . The integration of LinkedIn and Oribi will accelerate Microsoft's marketing attribution and codeless analytics capabilities .
Activision Blizzard	01-18-2022	Microsoft announced plans to acquire Activision Blizzard Inc. (Nasdaq: ATVI), a leader in game development and interactive entertainment content publisher. This acquisition will accelerate the growth in Microsoft's gaming business across mobile, PC, console and cloud and will provide building blocks for the metaverse . "The combination of Activision Blizzard's world-class talent and extraordinary franchises with Microsoft's technology, distribution, access to talent, ambitious vision and shared commitment to gaming and inclusion will help ensure our continued success in an increasingly competitive industry."

Microsoft Acquisitions - 2021



Company	Date	Description
Xandr	12-21-2021	Microsoft will acquire Xandr from AT&T . Xandr provides a data-enabled technology platform with tools that help power a diverse ecosystem connecting marketers and media owners through first-party, data-led advertising solutions across its network. With Xandr, Microsoft can accelerate the delivery of digital advertising solutions for the open web by combining Microsoft's audience understanding, technology and global advertising customer base with Xandr's large-scale, data-driven platforms for advertising.
Two Hat	10-29-2021	Two Hat , a leading content moderation solution provider offering protection measures for online communities. Two Hat's technology has helped to make global communities in Xbox, Minecraft and MSN safer for users.
Clear Software	10-22-2021	Clear Software provides iPaaS and business process solutions with strong connectivity into SAP and Oracle . Clear Software's API access and system knowledge will strengthen Microsoft Power Platform's integration with outside systems and accelerate how customers leverage data and processes that reside beyond Microsoft first-party services.
Ally.IO	10-07-2021	Ally.io , a leading OKR (objectives and key results) company, will join the Microsoft Viva family as part of our employee experience platform (EXP) designed to help companies embrace the new digital work life. Ally.io will power a new Microsoft Viva module . Viva is an employee experience platform that brings together communications, knowledge, learning, resources and insights – from anywhere you work. Powered by Microsoft 365 and Microsoft Teams , Viva helps organizations foster a culture of human connection, growth, well-being and success.
TakeLessons	09-08-2021	We're so excited to announce that TakeLessons has been acquired by Microsoft . We believe this will further support TakeLessons' mission: to empower people to learn, connect, grow, and live more meaningful lives through education .
Clipchamp	09-07-2021	Clipchamp is a natural fit to extend the cloud-powered productivity experiences in Microsoft 365 for individuals, families, schools, and businesses. It's also a great fit for Microsoft Windows, which is a platform for boundless creativity. Clipchamp's template-driven, task-focused user experience gives everyone the confidence that they can create. Its rich library of filters, styles, transitions, and stock media combined with the power of a multi-track audio and video compositing editor gives everyone the fine control they need, and artistic help if they need it, to create exactly what they want, quickly and with confidence .
Peer5	08-10-2021	Peer5 expands Microsoft's ability for delivering secure, high-quality, large-scale live video streaming with optimized network performance in Teams . Peer5 offers a WebRTC-based eCDN solution that runs in-browser to optimize bandwidth usage helping mitigate impacts to network and line of business (LOB) applications. Its mesh networks are self-balancing and automatically scale as the number of viewers increase.

Microsoft Acquisitions - 2021



Company	Date	Description
Suplari	07-28-2021	Suplari , a leading provider of supplier spend insights . Suplari enables companies to proactively manage supplier spend by transforming data from multiple sources , such as contracts, purchase orders, invoices, expenses, and supplier risk, into valuable insight. By bringing Suplari's spend intelligence insights together with the existing Microsoft Dynamics 365 capabilities, Microsoft is further helping organizations become insight-driven and enabling business leaders to take strategic action.
CloudKnox	07-21-2021	Enhanced Zero-Trust controls. The acquisition of CloudKnox further enables Microsoft Azure Active Directory customers with granular visibility, continuous monitoring and automated remediation for hybrid and multi-cloud permissions . Microsoft is committed to providing our customers with unified privileged access management, identity governance and entitlement management. With this Cloudknox, Microsoft is uniquely positioned to empower and defend the future of hybrid work and multi-cloud environments, providing essential visibility, control and monitoring Zero Trust demands .
RiskIQ	07-12-2021	A leader in global threat intelligence and attack surface management , to help our shared customers build a more comprehensive view of the global threats to their businesses, better understand vulnerable internet-facing assets, and build world-class threat intelligence. RiskIQ offers global threat intelligence collected from across the internet, crowd-sourced through its PassiveTotal community of security researchers and analyzed using machine learning . The combination of RiskIQ's attack surface management and threat intelligence empowers security teams to assemble, graph, and identify connections between their digital attack surface and attacker infrastructure and activities, to help provide increased protection and faster response .
ReFirm Labs	06-02-2021	ReFirm Labs is joining Microsoft to enrich our firmware analysis and security capabilities across devices that form the intelligent edge, from servers to IoT . This acquisition marks the next step in our journey and ability to help secure customers from the chip to the cloud , backed by more than 3,500 defenders at Microsoft and the >8 trillion security signals we process every day. ReFirm are the authors of the well-respected Binwalk open-source software , which has been used to analyze thousands of device types for firmware security issues , uncovering unpatched common vulnerabilities and exposures (CVEs), insecure secrets, and a multitude of other security problems in plugin IoT devices and embedded firmware. Microsoft acquires ReFirm Labs to enhance IoT security - Microsoft Security
Kinvolk	04-29-2021	Kinvolk has a rich, innovative history in open source cloud-native distributed computing, including Kubernetes, eBPF, community building, and container-optimized Linux . Kinvolk will be key contributors to the engineering development of Azure Kubernetes Service (AKS) , Azure Arc , and future projects that will expand Azure's hybrid container platform capabilities and increase Microsoft's upstream open source contributions in the Kubernetes and container space.
Nuance	04-12-2021	Nuance is a cloud software pioneer and a leading provider of conversational AI and ambient clinical intelligence. Nuance provides AI expertise and intelligent customer engagement across Interactive Voice Response (IVR), virtual assistants, and digital and biometric solutions to some of the largest organizations in the world. Nuance's global customer and partner base spans nearly every industry, and together we are well-positioned to advance our AI capabilities with high-value solutions and a platform to support our customers' and partners' future innovation .
The Marsden Group	03-16-2021	The Marsden Group is a leader in industrial technology innovation and rapid prototyping. The Marsden Group has earned a unique reputation as a powerful and trusted partner among industry leaders who seek to quickly identify business needs, ideate technology solutions and build high-quality prototypes tailored to individual customer needs . The Marsden Group has helped its enterprise customers rapidly envision, prototype and implement solutions that drive meaningful value to their businesses, employees and customers .



Microsoft Acquisitions - 2020

Company	Date	Description
ZeniMax Media	09-21-2020	ZeniMax Media, the parent company of Bethesda Softworks , one of the largest privately held game developers and publishers in the world . Creators of critically acclaimed and best-selling gaming franchises including The Elder Scrolls, Fallout and many others , Bethesda brings an impressive portfolio of games, technology and talent — as well as a track record of blockbuster commercial success — to Xbox.
Orions Systems	07-07-2020	Orions Systems, a pioneer in the development of large-scale, hybrid, smart vision systems focused on “human-in-the-loop” machine teaching combined with services that can adapt to running on a single device or scale to address large scale edge-to-cloud network topologies . The Power Platform and Orions Systems is enabling intelligent retail spaces by leveraging observational data to unlock the full potential of customers, employees, and assets.
CyberX	06-22-2020	CyberX will complement the existing Azure IoT security capabilities and extends to existing devices including those used in industrial IoT, Operational Technology and infrastructure scenarios . With CyberX, customers can discover their existing IoT assets, and both manage and improve the security posture of those devices . CyberX, customers can see a digital map of thousands of devices across a factory floor or within a building and gather information about their asset profile and vulnerabilities,
ADRM Software	06-18-2020	ADRM Software is a leading provider of large-scale industry data models , which are used by large companies worldwide as information blueprints. ADRM's robust industry data models have been built and refined over decades for business-critical analytics. Together with Microsoft Azure, these capabilities will be delivered at scale , enabling our customers to accelerate digital progress, and reduce risk in a variety of major initiatives.
Softomotive	05-19-2020	Softomotive currently helps more than 9,000 global customers seamlessly automate business processes across legacy and modern desktop applications . Together with Power Automate, WinAutomation will provide customers additional options for RPA desktop authoring so anyone can build a bot and automate Windows-based tasks.
Metaswitch Networks	05-14-2020	Metaswitch Networks , a leading provider of virtualized network software and voice, data and communications solutions for 5G operators .
Corp.Com	04-07-2020	"To help in keeping systems protected we encourage customers to practice safe security habits when planning for internal domain and network names. We released a security advisory in June of 2009 and a security update that helps keep customers safe. In our ongoing commitment to customer security, we also acquired the Corp.com domain."
Affirmed Networks	03-26-2020	Affirmed Networks with its leadership in virtualized 5G mobile networks . Affirmed Networks and Microsoft will play an important role in helping advance 5G and deliver new network solutions that offer step-change advancements in speed, cost and security. This combination of technology leaders will enable a host of new opportunities for businesses and society, including autonomous vehicles, smart cities, virtual reality and a range of other smart industry use cases and services .

Microsoft Acquisitions - 2019



Company	Date	Description
Movere	10-21-2019	Movere accelerates cloud migrations. It increases business intelligence by accurately presenting entire IT environments within a single day , providing enterprises with the confidence they need to have visibility and control of their environments regardless of platform, application or geography as organizations grow, change and digitally optimize .
Semmle	09-18-2019	Semmle's revolutionary semantic code analysis engine allows developers to write queries that identify code patterns in large codebases and search for vulnerabilities and their variants . Semmle is trusted by security teams at Uber, NASA, Microsoft, Google , and has helped find thousands of vulnerabilities in some of the largest codebases in the world , as well as over 100 CVEs in open source projects to date.
JClarity	08-19-2019	The leading contributor to the AdoptOpenJDK project , to support their continued contributions to open source while driving increased performance for Java workloads on Azure . The team, formed by Java champions and data scientists with proven expertise in data driven Java Virtual Machine (JVM) optimizations , will help teams at Microsoft to leverage advancements in the Java platform.
PromotelQ	08-05-2019	The leading provider of vendor marketing technology to online retailers and brands . PromotelQ has pioneered the private marketplace approach to digital vendor marketing. PromotelQ's technology strategically complements Microsoft's current retail advertising offerings, and can enable retailers with a portfolio of technology solutions to modernize their e-commerce platforms and maximize their monetization opportunity. Retailers such as Kroger, Kohl's and Overstock.com — will continue to benefit from the PromotelQ platform and team.
BlueTalon	07-29-2019	A leading provider of Unified Data Access Control solutions for modern data platforms . BlueTalon works with leading Fortune 100 companies to eliminate data security blind spots and gain visibility and control of data. BlueTalon provides a customer-proven, data-centric solution for data access management and auditing across the diverse systems resident in modern data estates.
PullPanda^	06-17-2019	PullPanda^ helps teams create more efficient and effective code review workflows on GitHub . Better code reviews mean better code for software teams of all sizes, whether you work in open source or on a Fortune 500 team. PullPanda^ gives teams a better way to manage reviews, reduce turnaround times, and ship code faster .
Double Fine Productions	06-09-2019	Double Fine is a beacon of creativity and spirit in game development for almost 20 years with classic games like Psychonauts, Brütal Legend and Broken Age . At the root of every game is an emphasis on creating crazy worlds with originality, story and fun. That commitment to creating a unique, player-centric experience is what drew us to the studio, and I'm looking forward to seeing what we create together.
Drawbridge Solutions	05-28-2019	LinkedIn will integrate Drawbridge's technology into our marketing solutions portfolio to help our customers better reach and understand their professional audiences and measure the ROI of their campaigns.
Dependabot	05-23-2019	Dependabot is integrated directly into GitHub and will monitor your dependencies for known security vulnerabilities and automatically open pull requests to update them to the minimum required version. We are rolling out automated pull requests to all accounts with security alerts enabled along with other enhancements in the coming months.



Microsoft Acquisitions – 2019 & late 2018

Company	Date	Description
Express Logic	04-18-2019	a leader in real time operating systems (RTOS) for IoT and edge devices powered by microcontroller units (MCUs) . Express Logic's ThreadX RTOS has over 6.2 billion deployments, making it one of the most deployed RTOS in the world per VDC Research . This widespread popularity is driven by demand for technology to support resource constrained environments, especially those that require safety and security.
DataSense	02-04-2019	The integration of DataSense into Microsoft's suite of products, we will help educational institutions – and school and district IT leaders in particular – better collect, manage and explicitly control access to their data within Azure to help drive the best possible learning outcomes for their students. Read more at https://educationblog.microsoft.com/en-us/2019/02/introducing-datasense-to-microsoft-educations-family-of-products/#E6CKQEBUjS35TOH4.99
Citus Data	01-24-2019	a leader in the PostgreSQL community. Citus is an innovative open source extension to PostgreSQL that transforms PostgreSQL into a distributed database, dramatically increasing performance and scale for application developers . Because Citus is an extension to open source PostgreSQL, it gives enterprises the performance advantages of a horizontally scalable database while staying current with all the latest innovations in PostgreSQL . Citus is available as a fully-managed database as a service, as enterprise software, and as a free open source download.
FSLogix	11-19-2018	FSLogix is a next-generation app-provisioning platform that reduces the resources, time and labor required to support virtualization . From small businesses to very large global enterprises across numerous industries, FSLogix solutions enhance customer experience and productivity, while reducing support requirements for IT departments.
XOXCO	11-14-2018	A software product design and development studio known for its conversational AI and bot development capabilities . The company has been paving the way in conversational AI since 2013 and was responsible for the creation of Howdy , the first commercially available bot for Slack that helps schedule meetings, and Botkit, which provides the development tools used by hundreds of thousands of developers on GitHub . Over the years, we have partnered with XOXCO and have been inspired by this work.
Obsidian	11-10-2018	The studio quickly made a name for itself with the Xbox exclusive Star Wars: Knights of the Old Republic II: The Sith Lords . Over the last fifteen years, they have delivered genre-defining RPGs to players on both console and PC through titles including <i>Fallout: New Vegas</i> , <i>South Park: The Stick of Truth</i> , and <i>Pillars of Eternity</i> . Read more at https://news.xbox.com/en-us/2018/11/10/obsidian-inxile-join-microsoft-studios/#P4ARqRq505qOpmfU.99
InXile	11-10-2018	Like Obsidian, InXile excels at creating vast worlds for players to explore with titles such as Wasteland 2, Torment: Tides of Numenera, Bard's Tale IV and the upcoming Wasteland 3 . Read more at https://news.xbox.com/en-us/2018/11/10/obsidian-inxile-join-microsoft-studios/#P4ARqRq505qOpmfU.99
Lobe	09-13-2018	Lobe makes deep learning simple, understandable and accessible to everyone. Lobe's simple visual interface empowers anyone to develop and apply deep learning and AI models quickly, without writing code .



Thank YOU!