



Microsoft

# Monthly Technical Briefing

## JULY 2023



**Abbas Kudrati**  
**APAC Chief Cybersecurity Advisor**  
**[Abbas.Kudrati@microsoft.com](mailto:Abbas.Kudrati@microsoft.com)**  
**<https://aka.ms/abbas>**



- [Microsoft Inspire 2023](#)
- [Microsoft Power Platform Conference 2023](#)
- [Microsoft Ignite 2023](#)
- [Microsoft and OpenAI Announcements](#)
- [Microsoft Tech Community Blog depot](#)
- [Microsoft Official Blog](#)
- [TechCommunity Events](#)
- [Microsoft Technical Documentation Hub](#)



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



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



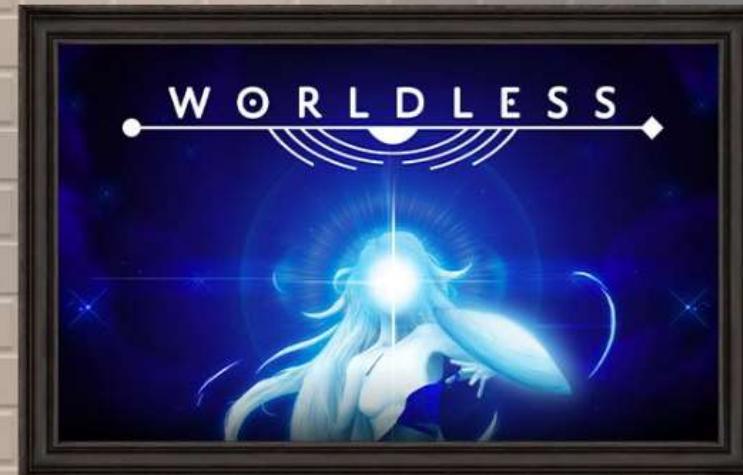
- [Products Reaching End of Support in 2023 and 2024](#)
- [Companies and Technologies Acquired Since 2018](#)

- [Office Updates](#)
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- [Power Platform and Dynamics](#)
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# ID@Xbox Demo Fest Is Back from July 11

by Jessica Ronell, ID@Xbox Events and Community Management Lead • Jul 6, 2023 @ 10:00am

We're back! What's summer without new game demos to entertain you during those hot days and nights? Starting July 11 and running until July 17, you'll be able to experience over 40 game demos on your Xbox console.





# Join us at Microsoft Inspire

Elevate your business by joining us for our largest partner event of the year July 18-19, 2023 PT.

[Register now](#)

## Session catalog

### Discover sessions

Browse our catalog, refine your results with filters, or use the search bar to find sessions specific to your interests. Shortly before the live event, sign in and plan your full schedule by adding impactful presentations and discussions that will help you grow your business.

# Microsoft Inspire

July 18-19, 2023

## Partner of the Year Awards

Celebrate with us as we honor our winning partners and highlight their achievements in delivering impactful solutions and services to customers around the globe.

OCTOBER 3RD-5TH, 2023

# Microsoft Power Platform Conference

Oct 3-5, 2023 in Las Vegas, Nevada at the MGM Grand Conference Center.

Register Today!



# emPOWER everyone

October 3 - 5

Workshops 1, 2 and 6 **2023**

Las Vegas • Nevada • #MPPC23

Power BI

Power Apps

Power Automate

Power Virtual Agents

Power Pages



## Microsoft Power Platform Conference

Produced by Power Platform Conf | Sponsored by Microsoft

We are excited to announce the second annual **Microsoft Power Platform Conference 2023**. This event is sponsored by Microsoft and will be held in-person on October 3-5 in Las Vegas, Nevada.

Come and get inspired by Microsoft's senior thought leaders, software engineers, and community experts who are focused on uniting humanity and technology. You'll also have the chance to hear from users that solve real business problems daily. Our fantastic speakers are ready to share their insights on how to accelerate and transform your business with Power Platform.

This one-of-a-kind event is **dedicated** to Microsoft Power Platform products including Power Apps, Power Automate, Power BI, Power Pages, and Power Virtual Agents.

You'll have insider access to all the information, opportunities, and connections you need to further your Power Platform journey.

- **Understand how your peers** are using the Power Platform and putting them to work.
- **Get new ideas** on how you can utilize the tools in more useful ways.
- **Meet new #PowerAddicts** just like you!
- **Learn about** all the tools in the platform
- **Give your organization the edge it needs** to provide a more productive and exciting work environment.
- **Ask product experts** your questions during the live Q&A



# Microsoft Ignite

Join us at the next Microsoft Ignite event November 15–16, 2023, to catch up on the latest industry innovations. Sign up to be one of the first to know when registration launches.

[Get notified >](#)

Explore key moments

Check out what you may have missed and discover new highlights from Satya Nadella's keynote.

[Session catalog](#)

Microsoft Learn

Spark possibility

Build skills that open doors. Find out all that you can do with interactive training and certifications from Microsoft Learn.



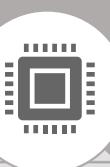
Dive into your next event

Check out the full lineup of upcoming event experiences to help you grow your skillset and community.

# Updates of Security and Compliance



# Monitoring Global Threats: Microsoft :: Threat Intelligence Blog



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.

#### Retail and consumer goods

Show all industries

Devices with encounters:  
840,627 (9.56%)



### Most affected industries

- Retail and consumer goods
- Manufacturing and professional services
- Healthcare and pharmaceuticals
- Financial services and insurance
- Automotive and transportation
- Information technology and telecommunications

### Top threats:

Backdoor:Win32/Marduk.B  
HackTool:Win32/IEPassview  
HackTool:Win32/PWDump.J  
HackTool:Win32/Patch.A  
PUA:Win32/Belix

## Microsoft Security Response Center

### Worldwide

76,747,879 devices with encounters

### Top threats:

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

[Research](#) [Threat intelligence](#) [Microsoft Defender](#) [Threat actors](#) · Jul 11 · 6 min read

## Storm-0978 attacks reveal financial and espionage motives >

Microsoft has identified a phishing campaign conducted by the threat actor tracked as Storm-0978 targeting defense and government entities in Europe and North America. The campaign involved the abuse of CVE-2023-36884, which included a zero-day remote code execution vulnerability exploited via Microsoft Word documents....

[Research](#) [Incident response](#) [Microsoft Incident Response](#) [Ransomware](#) · Jul 6 · 17 min read

## The five-day job: A BlackByte ransomware intrusion case study >

In a recent investigation by Microsoft Incident Response of a BlackByte 2.0 ransomware attack, we found that the threat actor progressed through the full attack chain, from initial access to impact, in less than five days, causing significant business disruption for the victim organization....

[Research](#) [Threat intelligence](#) [Microsoft Defender](#) [IoT / OT threats](#) · Jun 22 · 11 min read

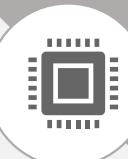
## IoT devices and Linux-based systems targeted by OpenSSH trojan campaign >

Microsoft has uncovered an attack leveraging custom and open-source tools to target internet-facing IoT devices and Linux-based systems. The attack involves deploying a patched version of OpenSSH on affected devices to allow root login and the hijack of SSH credentials.

[Research](#) [Threat intelligence](#) [Microsoft Defender](#) [Attacker techniques, tools, and infrastructure](#) · Jun 14 · 13 min read

## Cadet Blizzard emerges as a novel and distinct Russian threat actor >

Microsoft attributes several campaigns to a distinct Russian state-sponsored threat actor tracked as Cadet Blizzard (DEV-0586), including the WhisperGate destructive attack, Ukrainian website defacements, and the hack-and-leak front "Free Civilian"....



[Best practices](#) [AI and machine learning](#) [Microsoft Intune](#) · Jun 26 · 7 min read

### Why endpoint management is key to securing an AI-powered future >

With the coming wave of AI, this is precisely the time for organizations to prepare for the future. To be properly ready for AI, Zero Trust principles take on new meaning and scope. The right endpoint management strategy can help provide the broadest signal possible and make your organization more secure and productive for years...

[Best practices](#) [Cloud security](#) [Microsoft Purview](#) · Jul 5 · 6 min read

### 11 best practices for securing data in cloud services >

This blog explores the importance and best practices for securing data in the cloud. It discusses concepts such as authentication, zero trust, and encryption, among others....



[Best practices](#) [Incident response](#) [Microsoft Incident Response](#) [Cybercrime](#) · Jun 29 · 3 min read

### Patch me if you can: Cyberattack Series >

The Microsoft Incident Response team takes swift action to help contain a ransomware attack and regain positive administrative control of the customer environment.

## Microsoft Security Copilot: Empowering defenders with AI

[Best practices](#) [Security management](#) [Microsoft Sentinel](#) · Jun 28 · 6 min read

### How automation is evolving SecOps—and the real cost of cybercrime >

ramsay Founder and Managing Director Rob May shares insights on how automation can support SecOps and how to protect against phishing attacks.

[News](#) [Cloud security](#) [Microsoft Purview](#) · Jun 14 · 5 min read

### Expanding horizons—Microsoft Security's continued commitment to multicloud >

Learn how to manage multicloud security risk with Microsoft's native multicloud protection for three of the industry's main cloud platforms.

May 23, 2023

## Bringing the power of AI to Windows 11 – unlocking a new era of productivity for customers and developers with Windows Copilot and Dev Home

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By Panos Panay, Chief Product Officer, Windows and Devices

# Microsoft 365 update information

# What's New in Microsoft 365

News Identity and access management Microsoft Entra · Jul 11 · 7 min read

## Microsoft Entra expands into Security Service Edge and Azure AD becomes Microsoft Entra ID >

Microsoft Entra is unifying identity and network access with a new Security Service Edge (SSE) solution and more identity innovations.



**How to prepare for Microsoft 365 Copilot**  
Technical requirements and onboarding guide for IT admins

**How to prepare for Microsoft 365 Copilot**  
Yann Terukhaga on Jun 21, 2023 1:01 PM

Learn how to prepare for Microsoft 365 Copilot with this helpful onboarding guide for IT admins.



**What's new in your favorite Microsoft 365 app**



[M365 Blog](#) and [Microsoft-365 Product Blog](#) :: Covering Office 365, Enterprise Mobility + Security and Windows ::

- ❖ [Microsoft 365 Copilot Early Access Program](#)
- ❖ [Azure AD becomes Microsoft Entra ID](#)
- ❖ [Microsoft Entra Expands to Security Service Edge](#) : AAD becomes Entra ID
- ❖ [Oversharing Pop-up in Outlook](#) – Customize Experience via GPO
- ❖ [Microsoft 365 Admin Monthly Digest](#) – June 2023 Edition
- ❖ [Adoption Score and Experience Insights Updates](#)
- ❖ [Meeting Details in OneNote](#)

# 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](#)



➤ Microsoft Defender for Office 365: Security Threat Submission API	Preview Available: June 2022 Rollout Start: October 2023
➤ Microsoft Teams: Breakout Room pre-meeting room creation and participant assignment for DoD	Rollout Start: July 2023
➤ Microsoft Viva: Viva Insights manager, leader, and advanced insights available for GCC	Rollout Start: July 2023
➤ Microsoft Purview   Communication Compliance Empower end users to report inappropriate messages in Teams	Rollout Start: July 2023
➤ Microsoft Teams: Simulcast for Teams on AVD and Citrix VDI	Rollout Start: July 2023
➤ Microsoft Teams: Curriculum Management in Teams	Rollout Start: July 2023
➤ Microsoft Teams: Express yourself in Teams meetings on VDI	Rollout Start: July 2023
➤ Microsoft Teams: Enable second video stream with "Teams Content Camera on Desktop"	Rollout Start: July 2023
➤ OneDrive: Updated file sharing experience	Rollout Start: July 2023
➤ Microsoft Purview compliance portal: eDiscovery (Premium) - Tag templates and review set tagging usability enhancements	Rollout Start: July 2023
➤ Microsoft Teams: Breakout Room pre-meeting room creation and participant assignment for GCC-High	Rollout Start: June 2023
➤ Microsoft Planner: Rich text in Planner task notes	Rollout Start: June 2023
➤ Microsoft Viva: Connections News Notifications	Rollout Start: June 2023
➤ Microsoft To Do: Apple Watch Support	Rollout Start: June 2023
➤ Microsoft Purview   Insider Risk Management: Enhancements to detection and triage	Preview Available: October 2022 Rollout Start: June 2023
➤ Microsoft 365 admin center: Adoption Score People Experiences: Organizational Messages for Communication and Content Collaboration	Preview Available: November 2022 Rollout Start: June 2023
➤ Microsoft Teams: Attach cloud files in chat and channel from teams mobile	Rollout Start: June 2023
➤ Microsoft Teams: Attach cloud files in chat and channel from Teams Mobile	Rollout Start: June 2023
➤ Microsoft Teams: Share the system audio from Teams meetings on AVD VDI	Rollout Start: June 2023
➤ Microsoft Defender for Office 365: End user reporting for suspicious messages in Microsoft Teams	Preview Available: March 2023 Rollout Start: June 2023



# Microsoft Teams Blog:



What's New in Microsoft Teams | June 2023

What's New in Microsoft Teams | June 2023

Steve\_Stein on Jun 30 2023 08:00 AM

Welcome to the June 2023 edition of What's New in Teams! Following a month of great announcements from Microsoft Build 2...

## New for This Month:

- [Spatial Audio in Teams Meetings](#)
- [Together Mode enhancements](#)
- [Customize captions in Teams Meetings](#)
- Expanding up to 10,000 users in Distribution Lists for lobby policy in Teams meeting

## Chat and Collaboration:

- Mark all as read in your activity feed
- Compact chat list
- Work Locations in Teams

## Admin and Security:

- Management of external call routing settings in Teams admin center
- Teams Security Updates
- New widget for unspent Azure consumption commitment

### I Didn't Know Teams Phone Did That!

AI helps Microsoft Teams Phone deliver clear,...

Pete\_Daderko on Jul 12 2023 08:00 AM

What's the first thing you think of when you hear Artificial Intelligence? Maybe it's ChatGPT. Maybe it's the Terminator...

## Rooms and Devices:

- [Custom background enhancements for Teams Room on Windows](#)
- [View Together mode for everyone on Teams Rooms for Windows](#)
- [Default meeting layout controls for Microsoft Teams Rooms on Android](#)
- [Lenovo ThinkSmart Core with Lenovo IP Controller Kit for Microsoft Teams Rooms on Windows](#)
- [Yealink MVC860-C5 Bundle for Microsoft Teams Room on Windows](#)
- [Cisco Room Kit Pro for Teams Rooms on Android](#)
- [Cisco Desk Pro on Teams Rooms on Android](#)
- [SIP Gateway now supports Edge series IP Phones from Poly](#)

## Teams Premium

- [Intelligent Meeting Recap :: Generally Available](#)

Now in public preview: Collaborative notes in Microsoft...

AlexaJahston on Jun 15 2023 08:00 AM

Today, we're excited to announce the public preview of Collaborative notes, the new way to drive your work forward: coll...

## Introducing profanity filtering control and customization...

csang on Jun 26 2023 08:20 AM

We've recently rolled out two features that enhance the captions experience in Microsoft Teams meetings. We've added the...

## Platform

- Collaborative Stageview
- Export API Support for Teams Control Messages
- Search improvements in Teams App Store
- Share App to Channel or Chat
- Allow meeting apps to show an indicator on their icon to signal new activity

## Mobile

- Attach cloud files in chat and channel from teams mobile
- Updated companion mode for Android meetings

# Microsoft Viva: & Viva Blog:

# The employee experience platform for the new world of work



## [Viva Connections](#)

Employee Communications, Culture, & Collaboration

## [Viva Engage](#)



## [Viva Insights](#)

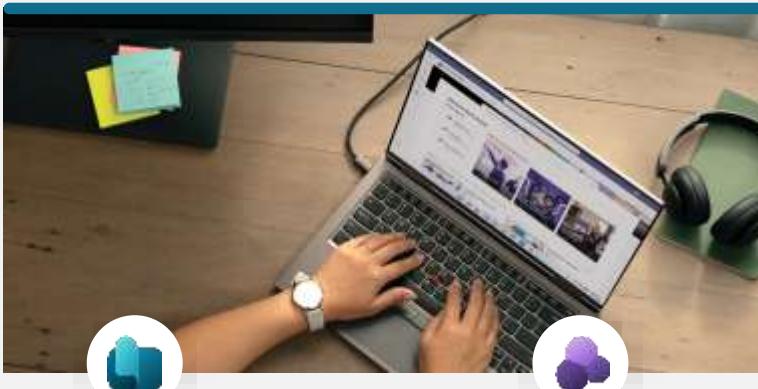
Workplace Analytics & Employee Feedback

## [Viva Pulse :: Preview](#)



## [Viva Goals](#)

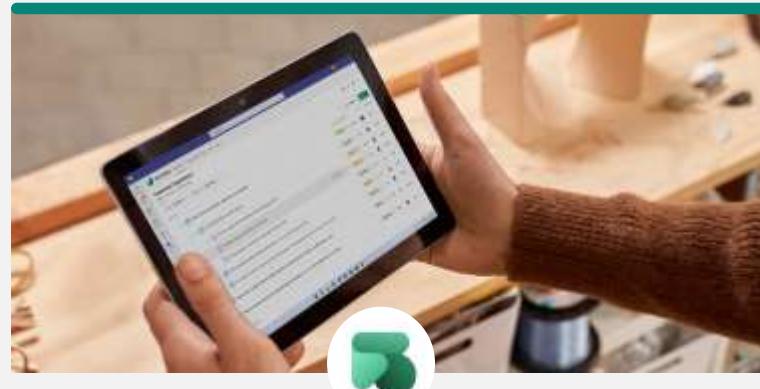
Goals and OKR (Objectives and Key Results) Management



## [Viva Learning](#)

Learning and Knowledge

## [Viva Topics](#)



## [Viva Sales](#)

Role-based Experiences and engagement



# Microsoft Viva: & Viva Blog: The employee experience platform for the new world of work



Microsoft Viva Connections

July 2023 – Introducing Viva Topics lightweight management...

We are excited to announce lightweight management of manually cre...

Microsoft Viva Engage

What's New in Viva Goals: Feature and Content Release...

This quarter Viva Goals has been releasing features and content t...

Microsoft Viva Insights

What's new in Viva Insights – June 2023

We're introducing new metrics, new meeting category insights in y...

Microsoft Viva Pulse (Public Preview)

Microsoft Viva Goals

Microsoft Viva Learning

Microsoft Viva Topics

Microsoft Viva Sales

Introducing Multiple Viva Connections Experiences for...

We are excited to announce that we are starting the rollout of mu...

Yammer.com Rebranded to Viva Engage

The Yammer web experience has now become Viva Engage.

Additional...

What's new for Viva Engage – June Edition

This month we are introducing several capabilities for leaders, c...



The Power Duo: Engagement and Productivity are...

Listen to Viva People Science team members, @EricKnudsen, People...

# Microsoft Power Platform



## Microsoft Power Platform

Announcements · 5 min read

Build solutions faster with Microsoft Power Platform and next-generation AI

By Richard Riley, General Manager, Power Platform, Product Marketing

The low code platform that spans Microsoft 365, Azure, Dynamics 365, and standalone apps.



**Power BI**  
Business analytics



**Power Apps**  
App development



**Power Automate**  
Process automation



**Power Virtual Agents**  
Intelligent virtual agents



**Power Pages**  
External-facing websites



**Data connectors**



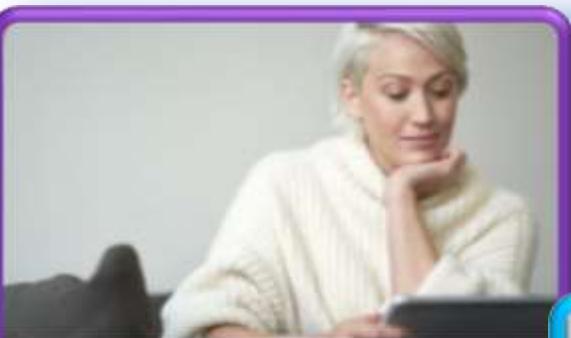
**AI Builder**



**Dataverse**

# Power Platform and Dynamics

Roadmaps and Release plans:



[News and product updates](#) • Jun 21

• 8 min read

## Copilot in Dynamics 365 Marketing revolutionizes marketing with query assist and content ideas >

The use cases for Copilot in customer experience (CX) are endless. Let's delve into how these copilot features came to be and highlight our generative AI roadmap moving forward.



Send an email to responder when response submitted in Microsoft Forms.

By Microsoft Power Automate

Automated  
309592



Save Outlook.com email attachments to your OneDrive

By Microsoft Power Automate Community

Automated  
196821



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

By Microsoft Power Automate Community

Automated  
123016



[Thought leadership](#) • Jun 19

5 min read

## Dynamics 365 application modernization on Azure: Envisioning the future >

Of all the questions that customers have, one of the most common is how Microsoft continually delivers new AI innovations at a rapid pace. If you are still running systems on-premises, it starts with application modernization in the cloud.



[Dynamics 365 Business Central](#) •

Jun 29 • 4 min read

## Get started with developing generative AI features for Dynamics 365 Business Central >

An answer to the question: How do I get started with AI in AI and Visual Studio Code?

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

- [Datasets are now in Power BI Mobile apps](#) : refresh your datasets also when you're on the go.
- [More Multitasking improvements for Power BI in Microsoft Teams](#)
- [Deep dive into Power BI Desktop Developer Mode](#) :: Preview
- [IP Firewall in Dataverse](#) :: Public Preview
- [Shared Device Mode for Power Apps on Android](#) :: Generally Available
- [Integrating Microsoft Sentinel and Power Platform](#) to better monitor and protect your low-code solutions
- [Power Platform Customer-managed key \(CMK\)](#) :: Generally Available
- [Automate email data extraction in minutes with Power Automate, AI Builder, and GPT](#)

[Business Decision Makers](#) [News and product updates](#) [Dynamics 365 Project Operations](#) [AI Operations](#) •

Published June 15, 2023 • 4 min read

## Introducing next-generation AI and Microsoft Dynamics 365 Copilot capabilities for ERP >

Welcome to a new era in enterprise resource planning (ERP) systems. As businesses around the world embrace the power of AI to streamline operations, speed time to actionable insight, and drive innovation, a game-changer is taking center stage: generative AI.

# Developer and GitHub

## GitHub Blog and Changelog

- GitHub Enterprise Server 3.9 :: Generally Available
- Passwordless authentication on GitHub.com
- Improved Issue creation experience for GitHub Mobile
- Pull request merge queue :: Generally Available
- Code scanning with CodeQL no longer installs Python dependencies automatically for new users
- Workato is now a GitHub secret scanning partner
- New and Updated ISO and CSA STAR Certifications Are Now Available
- Security risk and coverage pages are now generally available and replace the enterprise-level overview page



## Microsoft Developer Blogs:

- OpenAI API endpoints
- Package Management in the Python extension for Visual Studio Code
- Azure DevOps 2023 Q3 Roadmap update
- What does Azure AD renamed Microsoft Entra ID mean for .NET developers?
- Automatically Install Windows Subsystem for Linux from Visual Studio using New Seamless Integration
- OpenAI chat functions on Android
- .NET Framework July 2023 Security and Quality Rollup Updates
- Announcing .NET MAUI in .NET 8 Preview 6: Hello VS Code & VS for Mac
- Introducing System.Web Adapters v1.2 with new APIs and scenarios
- Introducing the New T4 Command-Line Tool for .NET

### Demonstrating end-to-end traceability with pull requests

Reduce developer and auditor friction involved in demonstrating compliance and maintaining end-to-end traceability by focusing your efforts around the pull request.



Philip Holleran July 11, 2023

### Introduction to SELinux

SELinux is the most popular Linux Security Module used to isolate and protect system components from one another. Learn about different access control systems and Linux security as I introduce the foundations of a popular type system.

Kevin Stubnings July 5, 2023

### Moving from a product to a service mindset

Thanks to DevOps, cloud computing and other industry trends, many organizations are shifting from a product mindset to a service mindset. Here's how you can implement a service-led strategy.

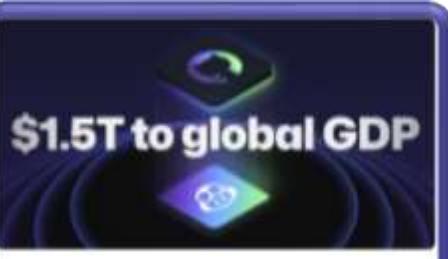
Chris Reddington July 13, 2023



### How to use GitHub Copilot: Prompts, tips, and use cases

In this prompt guide for GitHub Copilot, two GitHub developer advocates, Rizel and Michelle, will share examples and best practices for communicating your desired results to the AI pair programmer.

Rizel Scarlett & Michelle Mannering June 29, 2023

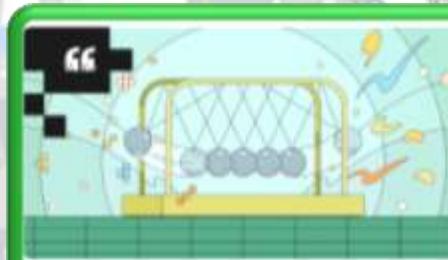


### \$1.5T to global GDP

The economic impact of the AI-powered developer lifecycle and lessons from GitHub Copilot

Today at Collision Conference we unveiled breaking new research on the economic and productivity impact of generative AI-powered developer tools. The research found that the increase in developer productivity due to AI could boost global GDP by over \$1.5 trillion.

Thomas Dohmke June 27, 2023



### GitHub achieves ISO/IEC 27701:2019, 27018:2019, and CSA STAR certifications

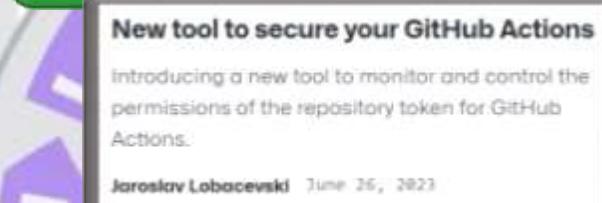
GitHub's Information Security and Privacy Management System (ISPMS) has been certified against ISO/IEC 27701:2019 (PII Processor) and 27018:2019 standards, as well as the Cloud Controls Matrix (CCM). These standards and frameworks are internationally recognized for security and privacy program best practices.

Brandon Griffeth & Glory Francke July 5, 2023

### (De)coding conventions

Navigating the ebb and flow of programming paradigms - from the shifts in the JavaScript ecosystem and TypeScript's rise, to AI's role in advancing accessibility, and strategies for encouraging non-code contributions - tune in to the latest episode of The ReadME Podcast for more.

Martin Woodward & Neha Butta July 13, 2023



### New tool to secure your GitHub Actions

Introducing a new tool to monitor and control the permissions of the repository token for GitHub Actions.

Jaroslav Lobacevski June 26, 2023



# Office Developer Blogs and Microsoft 365 Dev Center



Microsoft

Join today  
Microsoft 365  
Technology Adoption  
Program (TAP)

Announcing the Microsoft 365 Developer Technology Adoption Program (TAP)  
June 27, 2023  
 Brian T. Jackett

Today, we are announcing the launch of the Microsoft 365 Developer Technology Adoption Program (TAP), an evolution of the Microsoft Graph TAP.

Microsoft

How to join the  
New Microsoft Graph  
APIs for managing  
Microsoft Teams webinars

New Microsoft Graph APIs for managing Microsoft Teams webinars  
June 19, 2023  
 Sheri Mehmod, Annie Wang

Earlier this year, we shared details on advanced webinars in Teams Premium. Today, we're announcing the preview (beta) of new Microsoft Graph APIs that allows you to get and monitor webinar data.

Microsoft

June 2023  
Top five AppSource validation errors for Office Add-ins submissions

Top 5 AppSource validation errors for Office Add-ins submissions – June 2023  
June 29, 2023  
 Elizabeth Samuel

Don't lose valuable time getting your Office Add-in to market – learn how to avoid these common AppSource validation pitfalls!

Reshape the future of collaboration with AI-powered apps  
[Read more](#)

Shaping the future of work with AI  
Integrating your app with Microsoft 365 Copilot can transform how your users create and collaborate.  
[Learn more](#) [Explore AI capabilities >](#)

Introducing Microsoft Entra ID Recommendations For Identifying ADAL...  
[View blog >](#)

Use Outlook event-based activation to set the signature  
[View code sample >](#)

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

- Upgrade to Microsoft Graph PowerShell SDK v2 :: Generally Available
- Use Outlook event-based activation to set the signature
- Send task approvals using activity feed notification (Graph APIs)
- Use a shared library to migrate your Visual Studio Tools for Office add-in to an Office web add-in
- Interact with Calendar, Mail, Profile, geolocation from Personal Tabs App
- Messaging Extension quick start
- Microsoft Graph Toolkit v3.0 :: Generally Available
- Breaking change: Enum property addition to teamworkDevice resource in Microsoft Graph
- Bot Framework powered Viva Connections extensibility :: Public Preview

Develop apps with Microsoft Graph Toolkit  
[Learn more >](#)

Microsoft Graph PowerShell v1 to v2 migration toolkit  
[View code sample >](#)

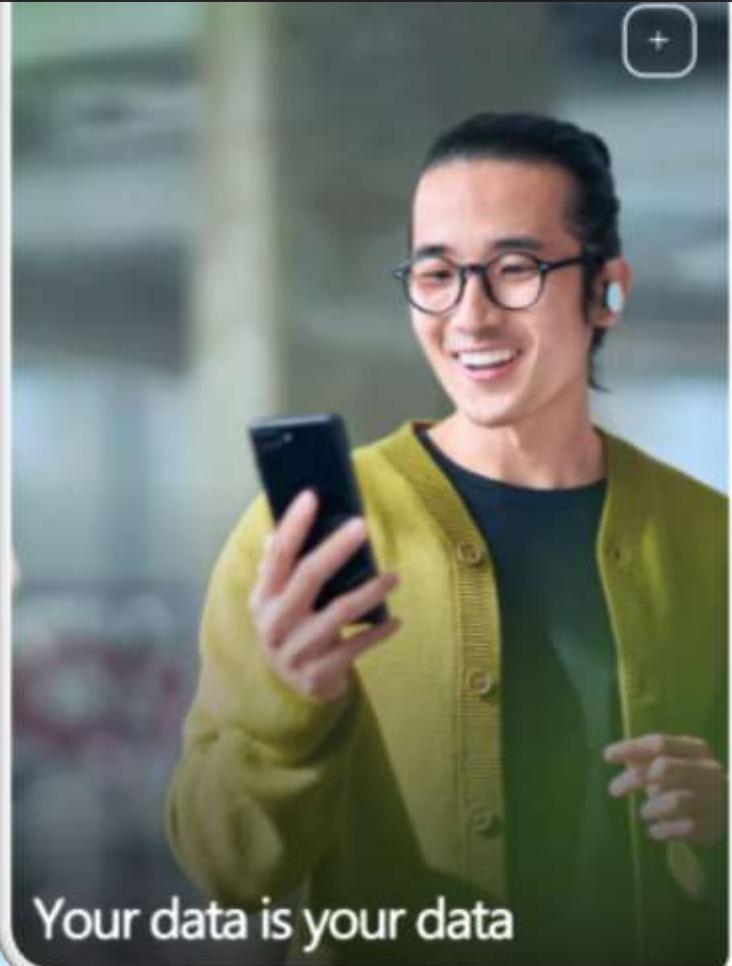
Create a spreadsheet from your web page, populate it with data, and embed you...

# Microsoft AI runs on Trust

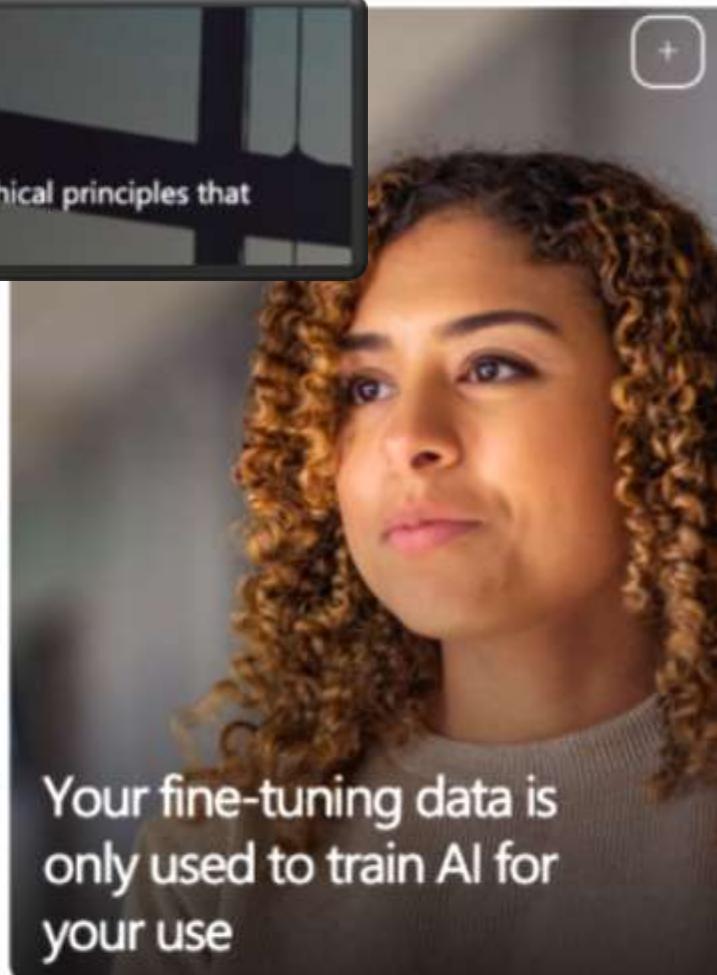


## Responsible AI

We are committed to the advancement of AI driven by ethical principles that put people first.



Your data is your data

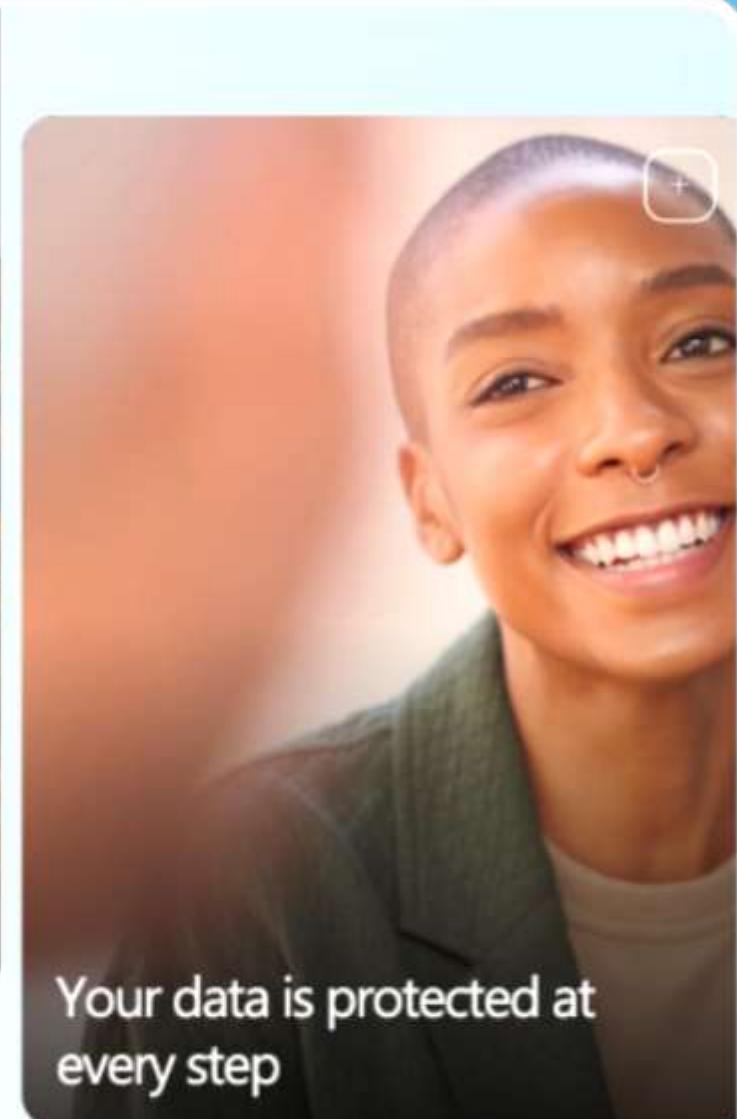


A close-up portrait of a woman with voluminous, curly brown hair. She is looking slightly to her left with a neutral expression. The background is blurred.

Your fine-tuning data is only used to train AI for your use

**Putting principles into practice at Microsoft**

We are committed to making sure AI systems are developed responsibly and in ways that warrant people's trust.



A close-up portrait of a person with short, dark hair, smiling broadly. The background is a warm, orange-toned gradient.

Your data is protected at every step

# New trends with Microsoft Technology



# Updates from Microsoft Industry Blogs



[Financial services](#) • Jul 10 • 6 min read

## The era of generative AI: Driving transformation in capital markets >

It's the dawn of a new era in capital markets. We share our perspectives on generative AI garnered from our work with capital markets clients in recent months as they seek answers to essential questions.



[Sustainability](#) • Jul 10 • 4 min read

## Announcing Well-Architected for Industry: Improve workloads and solution deployments >

To help our partner and customer ecosystem effectively launch new Industry solutions, we are thrilled to launch Well-Architected for Industry, starting with Microsoft Cloud for Sustainability.

July 10, 2023 • 4 min read

## Advance manufacturing digital operations with industrial IoT solutions >

This edition of Digital Operations Signals focuses on customers' real-world experiences in initiating and scaling projects. We interviewed a range of partners to gather a holistic, in-depth understanding of the opportunities and challenges of scaling digital operations:



[Government](#) • Jun 20 • 5 min read

## Enhance command and control with AI and machine learning >

Explore ways defense and intelligence organizations are partnering with Microsoft to enhance command and control and gain advantages to make better decisions ahead of their adversaries.

[Energy and resources](#) • Jun 29 • 5 min read

## Partnerships for a sustainable future at Microsoft Inspire and Reuters Global Energy Transition 2023 >

From individual consumers to global corporations, we must all work together for solutions that advance us toward a cleaner, sustainable future. We're excited to continue to co-innovate with our partners to meet the needs of the ever-evolving energy industry and the world we live in.



[Sustainability](#) • Jun 15 • 7 min read

## Introducing the latest ESG innovations with Microsoft Cloud for Sustainability >

With Microsoft Cloud for Sustainability, we have enabled organizations to accelerate sustainability progress and business growth by bringing together environmental, social, and governance (ESG) capabilities from Microsoft and our global ecosystem of partners.



# 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 >](#)

The screenshot shows the Microsoft Emissions Impact Dashboard interface. It features a top navigation bar with links like 'Dashboard', 'Emissions details', 'Emissions savings', 'ESG Preparation report', 'Usage report', 'Calculate methodology', 'Learn more', 'Legal information', and 'Message API'. Below the navigation is a section titled 'Carbon Details' with a sub-section 'Microsoft carbon emissions from my company cloud usage'. It includes filters for 'Subscription name', 'Azure service', 'Region', 'Year', and 'Month'. The main area contains several charts: a line chart of 'Carbon emissions over time (MTCO2e)', a line chart of 'Usage over time', a map of 'Carbon emissions amount by location (MTCO2e)', a bar chart of 'Carbon emissions annual trends', a bar chart of 'Carbon emissions annual trends by Microsoft scope', and a bar chart of 'Carbon emissions by Azure service'. To the right of the dashboard is a green landscape image with recycling arrows.

**Emissions Impact Dashboard**

Microsoft carbon emissions from my company cloud usage

Carbon emissions over time (MTCO2e)

Usage over time

Carbon emissions amount by location (MTCO2e)

Total carbon emissions (MTCO2e): 34.48

Carbon emissions annual trends

Carbon emissions annual trends by Microsoft scope

Carbon emissions by Azure service

**Sustainability • Jun 15 • 9 min read**

**Introducing new ESG data and reporting capabilities in Microsoft Cloud for Sustainability >**

New tools can play a critical role in helping organizations prepare for CSRD. We're announcing powerful new reporting capabilities to help organizations collect and manage more ESG data. Microsoft Sustainability Manager, a Cloud for Sustainability solution, is being expanded to give customers fuller visibility into their environmental impact across carbon, water, and waste.

# Microsoft Sustainability Report for 2022



## 2022 progress

### Microsoft Cloud for Sustainability

The Microsoft Cloud for Sustainability data model centralizes emissions data from disparate sources in a shared data language—streamlining data ingestion, integration, and calculations and enabling more accurate and reliable reporting. The Microsoft Cloud for Sustainability data model initially focused on carbon and was expanded in 2022 to include water data.

### Advanced policy

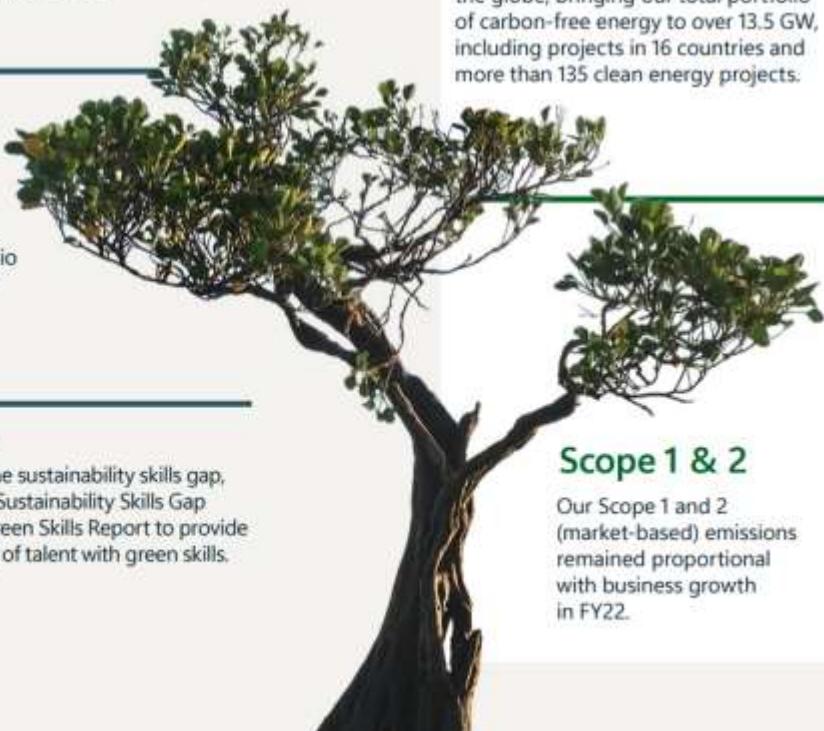
To support our policy work, we published several briefs on carbon and electricity policy to share the priorities and principles that guide Microsoft's policy advocacy work around the world.

### >\$600M in climate innovation

Since its inception, Microsoft has allocated over \$600 million impact investment capital from our Climate Innovation Fund into a global portfolio of investments, featuring sustainable solutions in energy, industrial, and natural systems.

### Sustainability skills gap

To better understand how to close the sustainability skills gap, Microsoft published the Closing the Sustainability Skills Gap report and LinkedIn published the Green Skills Report to provide insights into the demand and supply of talent with green skills.



### Carbon

#### 1.4M metric tons

We contracted 1,443,981 metric tons of carbon removal in FY22. We also made first-of-a-kind multi-year forward offtake commitments to carbon removal, which we view as the model for scaling this industry.

#### 13.5 GW

In FY22, we signed new PPAs around the globe, bringing our total portfolio of carbon-free energy to over 13.5 GW, including projects in 16 countries and more than 135 clean energy projects.

### Scope 1 & 2

Our Scope 1 and 2 (market-based) emissions remained proportional with business growth in FY22.

### Water

#### 15.6M m<sup>3</sup>

In FY22, we contracted for replenishment projects that are estimated to provide more than 15.6 million m<sup>3</sup> in volumetric water benefit over the lifetime of these projects.

#### 1M

By the end of FY22, we provided more than 550,000 people with access to clean water and sanitation solutions in Brazil, India, Indonesia, and Mexico and reached just under one million people by the end of the calendar year 2022.

### Environmental justice

Environmental justice is embedded in our water access target, and we are looking for ways to be more intentional about integrating environmental justice into our replenishment investments.

#### Scopes explained

Scope 1  
Direct emissions created by a company's activities



Scope 2  
Indirect emissions from a company's activities



Scope 3  
Indirect emissions from all other activities up and down the value chain

### Waste

#### 12,159 metric tons

In FY22, we diverted 12,159 metric tons of solid waste from landfills and incinerators across our direct operational footprint.

#### 82%

Our reuse and recycle rates of servers and components across all cloud hardware reached 82 percent in FY22.

#### 29%

We reduced single-use plastics in our Microsoft product packaging by more than 29 percent, a decrease from 4.7 percent to 3.3 percent by weight (on average) of plastic per package in FY22.

### Ecosystems

#### 12,270 acres

In FY22, we protected 12,270 acres of land in Belize. We now protect more than the 11,206 acres of land that we use.

### Big game migration program

Through the NFWF Western Big Game Migration Program, we invested in projects in the American West that are vital for preserving the migration corridors of endangered and at-risk species, including mountain lions and grizzly bears.



### Protecting biodiversity

Last year, we contributed to the TNC Belize Maya Forest Project (BMF) to protect an additional 236,000 acres in a global biodiversity hotspot.

# Microsoft Research Blog



## Thinking beyond audio: Augmenting headphones for everyday digital interactions >

July 12, 2023 | [Payod Panda](#)

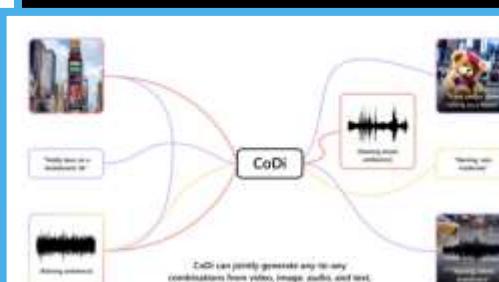
Because headphones rank among the most popular wearables in the market, we have an exciting opportunity to expand their capabilities through integrating existing sensors with...



### Distributional Graphomer: Toward equilibrium distribution prediction for molecular systems >

July 7, 2023

Distributional Graphomer, Microsoft's new deep learning framework for predicting the equilibrium distribution of molecular structures, can generate realistic and diverse molecular structures with high efficiency and low cost.



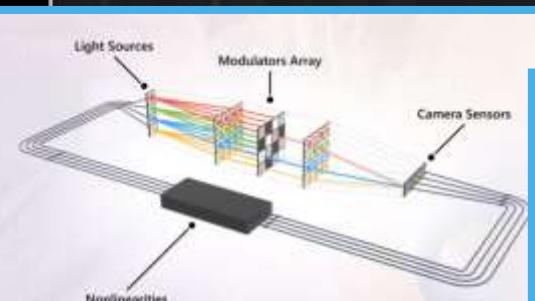
### Breaking cross-modal boundaries in multimodal AI: Introducing CoDi, composable diffusion for any-to-any generation >

June 29, 2023

Imagine an AI model that can seamlessly generate high-quality content across text, images, video, and audio, all at once. Such a model would more accurately capture the multimodal nature of the world and human comprehension, seamlessly consolidate information from a wide range of sources, and...

## Microsoft at DIS 2023: Thinking beyond Audio: Augmenting headphones for everyday digital interactions

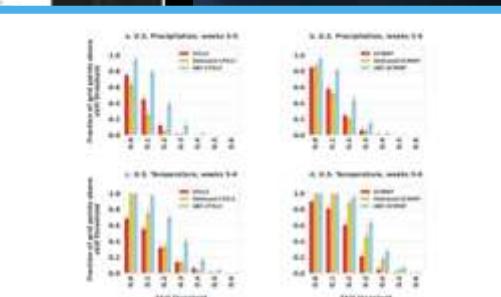
**DIS23**  
rebuilding & resilience



### Unlocking the future of computing: The Analog Iterative Machine's lightning-fast approach to optimization >

June 27, 2023 | [Hitesh Ballani](#)

Picture a world where computing is not limited by the binary confines of zeros and ones, but instead, is free to explore the vast possibilities of continuous value data. Over the past three years a team of Microsoft researchers has been developing a new kind...



### Improving Subseasonal Forecasting with Machine Learning >

June 16, 2023 | [Lester Mackey](#), [Soukaina Mouatadid](#), [Genevieve Flaspoehler](#), and [Judah Cohen](#)

This content was previously published by Nature Portfolio and Springer Nature Communities on Nature Portfolio Earth and Environment Community. Improving our ability to forecast the weather and climate is of interest to all sectors of the economy and to government agencies from the local to the...



### DeepSpeed ZeRO++: A leap in speed for LLM and chat model training with 4X less communication >

June 22, 2023 | [DeepSpeed Team](#) and [Andrey Proskurin](#)

Large AI models are transforming the digital world. Generative language models like Turing-NLG, ChatGPT, and GPT-4, powered by large language models (LLMs), are incredibly versatile, capable of performing tasks like summarization, coding, and translation. Similarly, large multimodal generative models like DALL-E, Microsoft Designer, and Bing...

# Microsoft Quantum Blog



Towards a quantum supercomputer

## Microsoft achieves first milestone towards a quantum supercomputer >

June 21, 2023 • 8 min read

 By Chetan Nayak, Technical Fellow and Corporate Vice President of Quantum Hardware

Today marks an important moment on our path to engineering a quantum supercomputer and empowering scientists to solve many of the hardest problems facing our planet. [Read more](#)



June 7, 2023

Learn how Microsoft is accelerating scientific discovery with Azure Quantum

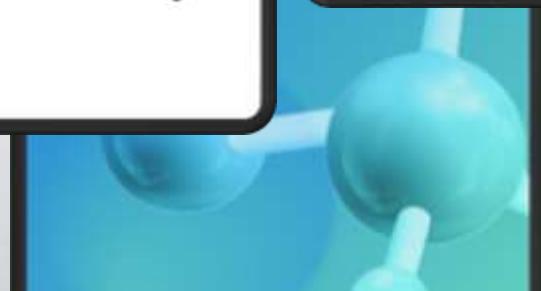
Innovation



June 21, 2023

Azure Quantum Elements aims to compress 250 years of chemistry into the next 25

Innovation



Azure Quantum Elements private preview

Sign up to learn more about the [Azure Quantum Elements](#)



## Building a quantum-safe future >

May 31, 2023 • <1 min read

 By Charlie Bell, Executive Vice President, Security, Compliance, Identity, and Management

While the AI revolution feels like the biggest innovation in a generation, scaled quantum computing is set to disrupt many aspects of technology again — and we must prepare for it now. [Read more](#)

# Azure

## 2. Azure

### 2.1. Azure AI ^

2.1.1. AI-focused updates for Azure solutions improve productivity, efficiency

2.1.2. Operationalize generative AI responsibly with Azure Machine Learning

### 2.2. Azure Data ^

2.2.1. Introducing the new Microsoft Fabric, built for the era of AI

2.2.2. Power BI updates increasing speed, productivity in preview

2.2.3. Azure Cosmos DB updates improve developer productivity, optimize costs

2.2.4. Azure SQL Database lets users build and rapidly scale multiple apps

### 2.3. Azure Infrastructure ^

2.3.1. New features in Azure Container Storage in preview

2.3.2. Microsoft Azure Monitor managed service for Prometheus updates

2.3.3. New feature in Microsoft Cost Management lets users understand cloud costs, coming soon in preview

### 2.4. Azure Confidential Computing ^

2.4.1. New confidential virtual machines based on Intel Trust Domain Extensions in preview

2.4.2. Red Hat Enterprise Linux support for Azure AMD-based confidential virtual machines

2.4.3. Confidential containers on Azure Container Instances now generally available

2.4.4. New AMD-based confidential virtual machine options for Azure services in preview

2.4.5. Confidential containers on Azure Kubernetes Service now in preview

### 2.5. Developer Tools and DevOps ^

2.5.1. Azure Deployment Environments now generally available

2.5.2. Microsoft Dev Box introducing several new capabilities to enhance developer experience and productivity

2.5.3. GitHub Advanced Security for Azure DevOps is now in preview

2.5.4. New capabilities for Azure API Management

2.5.5. Call automation from Azure Communication Services launching soon

2.5.6. Updates to Azure Event Grid now in preview

2.5.7. Azure Linux as a container host operating system for Azure Kubernetes Service now generally available

2.5.8. Azure Container Apps introduces new capabilities for enhanced developer productivity

2.5.9. Azure Functions introduces new hosting option to build serverless, cloud-native apps

2.5.10. Azure Kubernetes Service receives multiple updates

# Azure Updates

## Azure Blog

### VMs, Features, & Announcements

- [Azure Dedicated Host – Resize](#) :: Public Preview
- [Microsoft Dev Box](#) - Dev-optimized, Cloud-based workstations :: Generally Available
- [Azure Digital Twins supports Digital Twins Definition Language version 3](#) :: Generally Available
- [Azure Premium SSD v2 Disk Storage is now available in more regions.](#) :: Generally Available
- [Managed private endpoint for Azure Managed Grafana](#) :: Public Preview
- [Azure OpenAI Service On Your Data](#) :: Public Preview
- [IT Service Management Connector \(ITSMC\) is now certified with ServiceNow Utah version](#)
- [Azure Blob Storage SDK for Go](#) :: Generally Available
- [Microsoft is a Leader in the 2023 Gartner® Magic Quadrant™ for Cloud AI Developer Services](#)
- [Azure Monitor Pod Sandboxing support in Container insights](#) :: Public Preview

### Data, AI, Security, & Availability

- [Azure AD is becoming Microsoft Entra ID](#)
- [Azure Managed Lustre for HPC and AI workloads](#) :: Generally Available
- [Azure Virtual Network encryption](#) :: Public Preview
- [Sensitive Data Protection for Application Gateway Web Application Firewall logs](#) :: Public Preview
- [Azure NetApp Files double encryption at-rest](#) :: Public Preview
- [Datadog – An Azure Native ISV Service – the most desired new features now available](#)
- [Azure Data Explorer adds support for PostgreSQL, MySQL, and CosmosDB SQL external tables](#) :: Generally Available

### Operations & Benefits

- [Autoscale Stream Analytics jobs](#) :: Generally Available
- [ExpressRoute private peering support for BGP communities](#) :: Generally Available
- [Call automation capabilities for Azure Communication Services](#) :: Generally Available
- [Azure's cross-region Load Balancer](#) :: Generally Available

AI + Machine Learning • 9 min read

### What's new in Azure Data & AI: How customers realize tangible ROI with the industry leading AI platform >

[Jessica Hawk](#)

Corporate Vice President Data, AI, and Digital Application Product Marketing

In this month's blog, I'll highlight recent product updates and spotlight great customers and partners who are putting Azure to work to solve real problems in innovative ways.

AI + Machine Learning, Announcements, Azure AI, Azure Form Recognizer, Industry trends

Published June 21, 2023 • 4 min read

### The economic benefits of innovating with Azure AI >

By [Olivia Shone](#) Senior Director, Azure AI Product Marketing

While business and technology leaders are ready to invest in AI, they need help making the financial case for tools they need to build great products. That's why today we're sharing a new commissioned Total Economic Impact™ (TEI) study conducted by Forrester Consulting, which captures the costs and benefits of innovating with Azure AI services over a three-year journey



# Azure Services Directory



## Azure Confidential Computing

Tamperproof, unstructured data store hosted in Trusted Execution Environments (TEE) and backed by cryptographically verifiable evidence



## Azure Arc

Secure, develop, and operate infrastructure, apps, and Azure services anywhere



## Azure Sphere

Create, Connect, and maintain secured intelligent IoT devices from the edge to the cloud

## Azure Confidential Compute

- ❖ [Solutions to enable the isolation your sensitive data](#)
- ❖ [Confidential VMs with Application Enclaves](#) + [Confidential VMs](#) + [Confidential Containers](#)
- ❖ [Azure Confidential Ledger](#) : Tamper-proof register for storing sensitive data for record keeping and auditing or for data transparency in multi-party scenarios. It offers Write-Once-Read-Many guarantees, which make data non-erasable and non-modifiable. The service is built on Microsoft Research's [Confidential Consortium Framework](#).
- ❖ [Microsoft Azure Attestation](#) : a remote attestation service for validating the trustworthiness of multiple Trusted Execution Environments (TEEs) and verifying integrity of the binaries running inside the TEEs.

## Azure Arc

- ❖ [View and run across datacenters, at the edge, and in multi-cloud environments](#)
- ❖ [Get up and running immediately with your existing tools](#) and practices including GitHub, Terraform, and Visual Studio.
- ❖ [Leverage Reference Architectures to cross environments, datacenters, and clouds](#)
- ❖ [Use Linux and Windows virtual machines \(VMs\), bare-metal servers, and other clouds with the same server management experience across environments.](#)
- ❖ [Meet governance and compliance standards for apps, infrastructure, and data with Azure Policy.](#)

## Azure Sphere

- ❖ [Secured IoT platform for building solutions](#) : From Silicon, through the OS, and the Cloud
- ❖ [Develop, Connect, Manage and Protect intelligent devices](#)
- ❖ [Deploy updates, real-time security patches, OS Updates Over-the-Air \(OTA\)](#)
- ❖ [Solve industry-specific Chip-to-Cloud solutions](#) with advanced device security
- ❖ [Develop real-time capable apps](#)
- ❖ [Use Azure IoT and Azure Sphere for factory-floor operations](#)



# Microsoft Fabric: Data Control end-to-end

Microsoft Fabric—an end-to-end analytics platform that brings together all the data and analytics tools that organizations need:

Data Factory (Data Integration)

Synapse Data Engineering

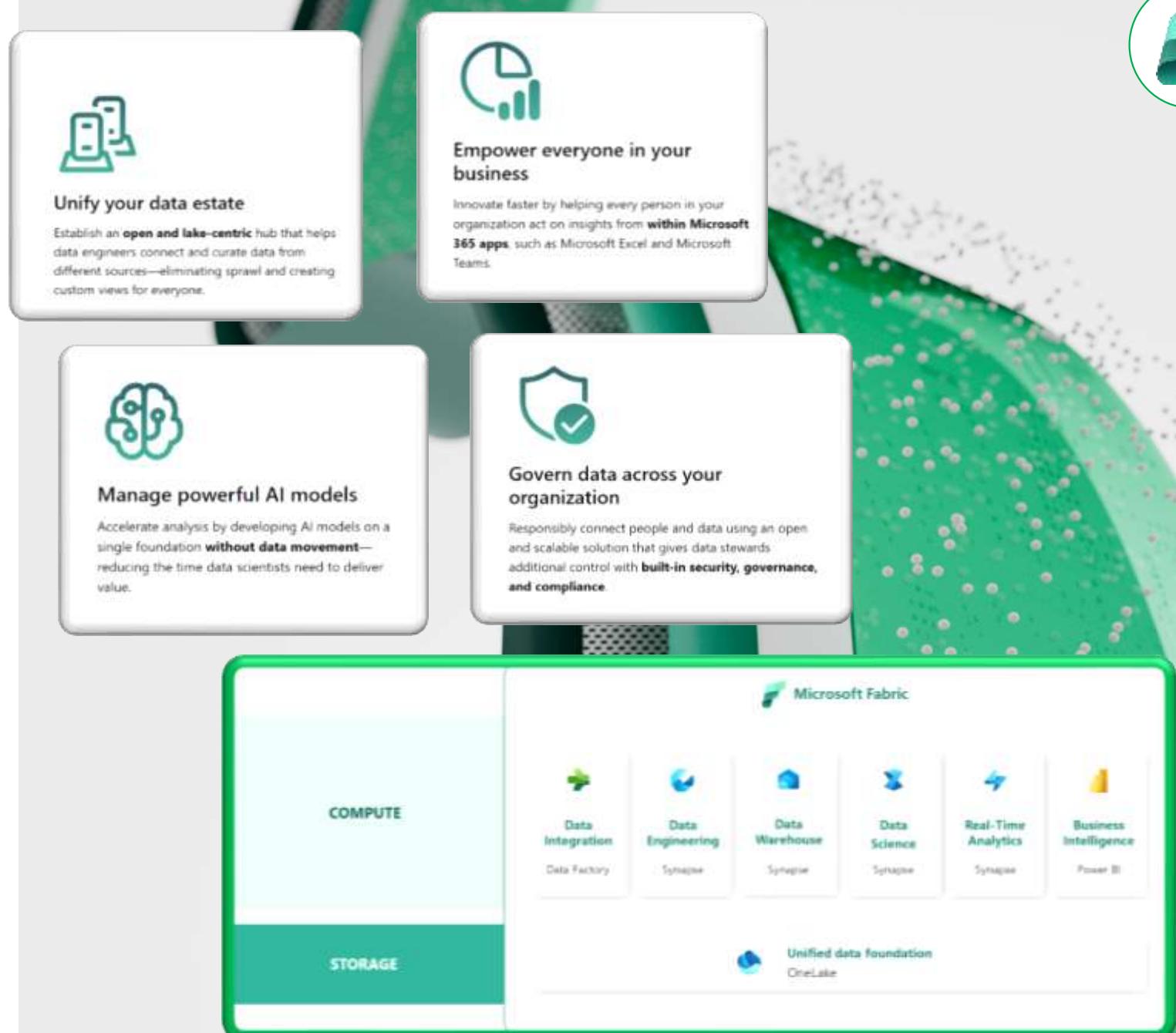
Synapse Data Warehouse

Synapse Data Science

Synapse Real-Time Analytics

Power BI (Business Intelligence)

Data Activator (*coming soon*)



# Azure Services Directory



## Azure AI

Drive business results and improve customer experiences with AI solutions

### Azure AI

- ❖ [Azure Applied AI Services](#) – Modernize business, Accelerate development, and run responsibly
- ❖ [Azure Cognitive Services](#) – New sophisticated AI models, Deploy anywhere – Cloud to Edge and all in between
- ❖ [Azure Machine Learning](#) – Develop in your choice of tools, Create and deploy models at scale, Innovate responsibly, and build with your frameworks and languages
- ❖ [Azure AI Infrastructure](#) – Purpose-built AI Supercomputing infrastructure for accelerating your innovation running [AI at scale](#).
- ❖ [AI models for Financial Services, Manufacturing, Retail, and Healthcare](#).
- ❖ [AI Business Solutions](#) – Knowledge Mining, Conversational AI, Document Process Automation, Machine Translation and Speech Transcript



## Azure Cognitive Services

Add cognitive capabilities to apps with APIs and AI services

### Azure Cognitive Services

- ❖ [Speech, Language, Vision, Decision, and Azure OpenAI Services](#) are all part of OpenAI and Cognitive Services
- ❖ [AI and Cognitive Services resources for developers](#)
- ❖ [Azure OpenAI and Azure Cognitive Search can be combined](#) to power application experiences like ChatGPT on enterprise data.
- ❖ Customizable, pretrained models built on responsible AI and security
- ❖ [Deploy Cognitive Services anywhere from cloud to edge with containers](#)
- ❖ [Microsoft's Florence foundation model](#) is a renaissance in computer vision AI



## Azure OpenAI Service

Apply large language models and generative AI to a variety of use cases:

### Azure OpenAI Service : Updates

- ❖ [Power Apps with large-scale AI Models](#)
- ❖ [Apply pre-trained generative models to new scenarios](#) for language, code, reasoning, inferencing, and comprehension
- ❖ [GPT-4 now in Azure OpenAI Services](#)
- ❖ [New Service Models](#) grouped by family and capacity
- ❖ [Responsible AI – Data, Privacy, and Security](#) for Azure OpenAI Service
- ❖ [Azure Reliability tools and training](#) designed for operating Azure OpenAI and mission-critical systems
- ❖ [Safety built directly into Azure GPT-4 model](#)
- ❖ [GPT-4 and ChatGPT models on Azure](#)
- ❖ [Speech, Language, Vision, Decision, and Azure OpenAI Services](#) are all part of OpenAI and Cognitive Services

# 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.

Jul 10, 2023 | Lori Lamkin

### [The power of AI in Microsoft Viva Sales: Insights from Lori Lamkin and Nathalie D'Hers](#)

Join me, Lori Lamkin, and my esteemed colleague Nathalie D'Hers, as we take you on an extraordinary journey through the development, deployment, and continuous improvement of Microsoft Viva Sales. As the Corporate Vice President (CVP)...

Jun 30, 2023 | Alessiah Avvari

### [How Microsoft kept its underwater datacenter connected while retrieving it from the ocean](#)

[Editor's note: This content was written to highlight a particular event or moment in time. Although that moment has passed, we're republishing it here so you can see what our thinking and experience was like.]

Aug 28, 2023 | Jason Kellington

### [Doing more with less internally at Microsoft with Microsoft Azure](#)

How do we at Microsoft get the best value from our Microsoft Azure environment? We've been refining and optimizing the way we use the cloud for years, and as such, our answer isn't just about...

Jun 30, 2023 | Inside Track staff

### [Powering IoT-based experiences at Microsoft with the Digital Integration Platform](#)

Watch to see how we're using our to connect data from different IoT devices, which enables our employees and guests to feel supported and be productive when they come to our buildings here at Microsoft. Instead of managing different signals from dozens of different devices, Eric Slipperin and his team standardize disparate signals within the...

Jun 27, 2023 | Cody Bay

### [Powering Microsoft smart buildings with Microsoft Azure Digital Twins](#)

Editor's note: We've republished this blog with a new companion video. If Microsoft smart buildings had brains, what would they do with them? Maybe they would perfectly heat and cool themselves, sending energy to the right places at the right times. Maybe they would greet visitors and help them find their way, boosting their productivity...

Jun 29, 2023 | Summer Frederickson

### [Start reducing your organization's Shadow IT risk in 3 steps](#)

You've heard a lot about Shadow IT risk, but what is it, and what should you do about it? Shadow IT is the set of applications, services, and infrastructure that are developed and managed outside...

Jun 22, 2023 | Josh Krenz

### [Detecting anomalies at Microsoft with unsupervised machine learning in Microsoft Azure](#)

[Editor's note: This content was written to highlight a particular event or moment in time. Although that moment has passed, we're republishing it here so you can see what our thinking and experience was like at the time.] Can unsupervised machine learning in Microsoft Azure be used to find errors and anomalies inside financial data?...



# ESI Training Journey

PDF documents outlining the right journey to your training needs: <https://aka.ms/pathways>

Microsoft Azure Training Journey

<https://aka.ms/ESIAzureTrainingJourney>

Microsoft Security, Compliance, and Identity Training Journey

<https://aka.ms/ESISecurityTrainingJourney>

**Azure AI Engineer Learning Pathway**  
www.aka.ms/pathways

**Getting started**

Zero to hero in 4 weeks with Azure AI

What is Computer Vision?

Optical Character Recognition (OCR)

What is the Ink Recognizer API?

What is Form Recognizer?

Cognitive Service Containers

Process and classify images with the Azure Cognitive Vision Services

Quickstart: Build a classifier with the Custom Vision website

Quickstart: Build an object detector with the Custom Vision website

Deploy a model to Azure Container Instances

**Additional Study**

Computer Services

What are Azure Cognitive Services?

Quickstart: Create a Cognitive Services resource using the Azure portal

Provision and manage Azure Cognitive Services

Azure Cognitive Services - Privacy Policy

Manage Cognitive Services keys

Authenticate requests to Azure Cognitive Service

Computer Vision

What is Computer Vision?

Optical Character Recognition (OCR)

What is the Ink Recognizer API?

What is Form Recognizer?

Cognitive Service Containers

Process and classify images with the Azure Cognitive Vision Services

Quickstart: Build a classifier with the Custom Vision website

Quickstart: Build an object detector with the Custom Vision website

Deploy a model to Azure Container Instances

Natural Language

Batch testing with a set of example utterances

Publish your active, trained app to a staging or production endpoint

Deploy and run container on Azure Container Instance

Knowledge Mining

Introduction to Azure Cognitive Search

Implement knowledge mining with Azure Cognitive Search

Creating search indexes in Azure Cognitive Search

Create Indexer (Azure Cognitive Search REST API)

Autocomplete and Suggestions

Synonyms in Azure Cognitive Search

Search overview for Azure Cognitive Search

Scale for performance on Azure Cognitive Search

Data import overview - Azure Cognitive Search

Microsoft Learn

Prepare for AI engineering

Process and manage Azure Cognitive Services

Process and translate text with Azure Cognitive Services

Process and Translate Speech with Azure Cognitive Speech Services

Create a Language Understanding solution

Build a question answering solution

Build custom text analytics solutions

Create conversational AI solutions

Create computer vision solutions with Azure Cognitive Services

Extract text from images and documents

Implement knowledge mining with Azure Cognitive Search

**Role Based Certification**  
Azure AI Engineer

**AI-102: Designing and Implementing a Microsoft Azure AI Solution**

**Skills Measured (AI-102)**

- Plan and manage an Azure AI solution (25–30%)
- Implement image and video processing solutions (15–20%)
- Implement natural language processing solutions (25–30%)
- Implement knowledge mining solutions (5–10%)
- Implement conversational AI solutions (15–20%)

**Microsoft Learn**

Click Here

**Azure Connected Learning Experience**

Microsoft Azure Connected Learning Experience (CLX) is an experiential training program that sets a trajectory for aspiring learners and working professionals to be Azure experts. The CLX program offers a personalized journey that aims to optimize learning experience while maximizing return on time invested.

Click Here

**Microsoft Virtual Training Days**

Build the technical skills you need with free Virtual Training Days.

Click Here

# Microsoft AI Skills Initiative : Empower workers around the world



## New skills for a new way of working

AI offers tremendous potential to empower workers around the world—but only if everyone, everywhere has the skills to use it.

[Introducing our AI Skills Initiative >](#)



### Microsoft's approach to AI

You might not realize it, but you probably use artificial intelligence (AI) every day. AI is everywhere, and it's constantly changing how we work and play. Explore how AI is helping people create, solve complex problems, and benefit their communities.

[▷ Watch the video](#)



### Harnessing the power of AI

As part of our Skills for Jobs program, Microsoft is focused on helping people around the world stay ahead of emerging skills gaps and succeed in an ever-changing digital economy.

[Learn more about Skills for Jobs >](#)

### AI skills to help you achieve more

The new Skills for Jobs learning pathway offers free introductory generative AI content and coursework and allows learners to earn a Career Essentials Certificate that demonstrates their commitment to skill-building.

[Skills for Jobs learning pathways >](#)



### Generative AI

Generative AI is simplifying our everyday. Learn how it works, what it can do, and how you can use it to unleash your creativity, unlock more productivity, and uplevel your skills.

[▷ See it in action](#)

### Generative AI

Discover the skills needed to apply generative AI in your career. Learn the core concepts of Artificial Intelligence and generative AI functionality.

- Develop an understanding of generative AI models.
- Learn the ethical considerations of using generative AI.
- Explore the impact of generative AI tools.

[Earn a Career Essentials in Generative AI Professional Certificate](#)

### Responsible AI

Microsoft is committed to a practice of responsible AI by design, guided by a core set of principles: fairness, reliability and safety, privacy and security, inclusiveness, transparency, and accountability.

[▷ Learn more about responsible AI](#)

# Microsoft Learning and Training:



## Browse all learning paths and modules

Learn new skills and discover the power of Microsoft products with step-by-step guidance. Start your journey today by exploring our learning paths and modules.

The image displays a collection of dark blue, rounded rectangular cards representing Microsoft learning modules, arranged against a dark background. In the upper right, there is a stylized graphic of a human brain with various colored regions (red, blue, purple) connected by white lines, symbolizing thought processes or learning pathways. The learning cards include the following details:

- Microsoft Security, Compliance, and Identity Fundamentals:** Description: "Describe the concepts of security, compliance, and identity management." Type: LEARNING PATH. Duration: 43 min. Audience: Azure • Business User • Beginner. Rating: ★★★★ 4.8 (4.7K). Add button.
- Explore Microsoft Teams:** Type: MODULE. Duration: 49 min. Audience: Microsoft 365 • Administrator • Intermediate. Rating: ★★★★ 4.8 (4.7K). Add button.
- Get started with AI on Azure:** Type: MODULE. Duration: 34 min. Audience: Azure • AI Engineer • Beginner. Rating: ★★★★ 4.8 (4.6K). Add button.
- Introduction to Power BI:** Type: MODULE. Duration: 46 min. Audience: Microsoft Power Platform • Business Analyst • Beginner. Rating: ★★★★ 4.8 (13K). Add button.
- PL-900: Microsoft Power Platform Fundamentals:** Description: "Understand the Microsoft Power Platform and how it can help you build intelligent solutions." Type: LEARNING PATH. Duration: 7 hr 5 min. Audience: Dynamics 365 • Business User • Beginner. Rating: ★★★★ 4.7 (24K). Add button.
- Introduction to Microsoft Power Platform:** Type: MODULE. Duration: 36 min. Audience: Microsoft Power Platform • Business Analyst • Beginner. Rating: ★★★★ 4.7 (24K). Add button.
- Write your first C# code:** Description: "Learn how to write basic C# code." Type: MODULE. Duration: 17 min. Audience: .NET • Developer • Beginner. Rating: ★★★★ 4.9 (20K). Add button.

**Microsoft Virtual Training Days**

# Microsoft Events and Training: Updates



## Microsoft Virtual Training Days

### Events Catalog

## Microsoft Ignite

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#### Digitally Transform your business with Azure OpenAI

06/21/2023 | 09:00 - 10:00 (CDT)

Digital

Workshop

Delivery language: English, with subtitles in English The rise of generative AI has the potential to...

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[Registration and details](#)

#### Microsoft Security Virtual Training Day: Security, Compliance, and Identity Fundamentals

Explore the basics of security, compliance, and identity—including best practices to help protect people and data against cyberthreats for greater peace of mind.

Date & Time: Wed 05 Jul 2023, 01:00 PM - Thu 06 Jul 2023, 01:00 PM

Timezone: EDT

Skill Level: Beginner

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#### Microsoft Azure Virtual Training Day: Migrate and Modernise Your Data Estate and Infrastructure

06/15/2023 | 08:00 (CDT) - 06/16/2023 | 11:20 (CDT)

Digital

Training

[Registration and details](#)



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- Using external code
- Finding and fixing bugs

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Explore foundational concepts used in data analysis and practice using software tools for data analytics and data visualization.

Skills you'll learn:

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- SQL queries
- Quality data sets and visualizations
- Data analysis software tools

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## Business analyst

Explore foundational business analysis concepts and understand key processes. Practice using software tools for common business analysis tasks.

Skills you'll learn:

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- Requirements for gathering and analysis
- Data science basics

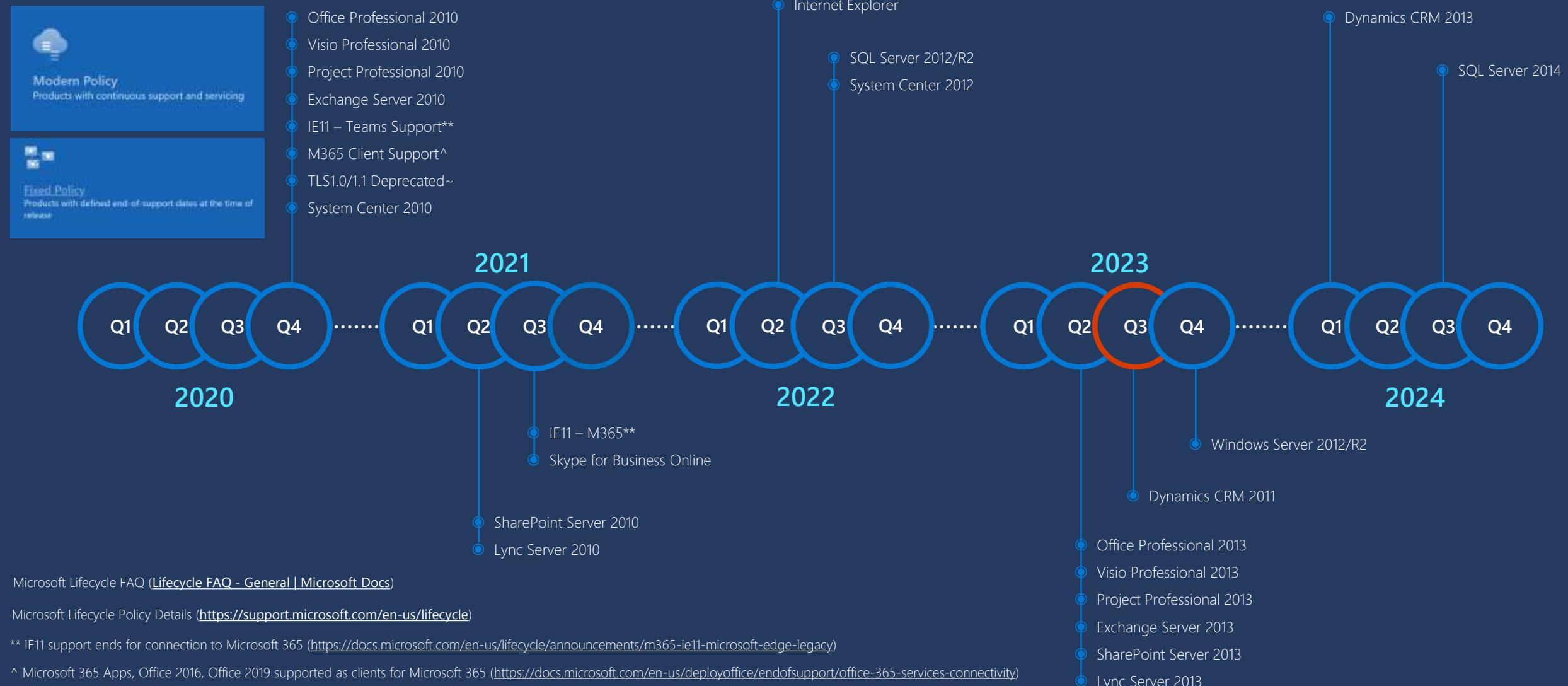
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# Product Lifecycles

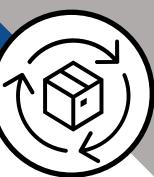




# End of Service Roadmap to 2024



# Microsoft Product Lifecycle: Modern Policy Products that will Retire



## Products under Modern Policy that will Retire in 2023

Products that will Retire in 2023 (Modern Policy)	End of Support Date
<a href="#">Visio Services in SharePoint (in Microsoft 365)</a>	<b>February 10, 2023</b>
<a href="#">Microsoft Azure Virtual Machine (classic)</a>	<b>March 1, 2023</b>
<a href="#">Kaizala</a>	August 31, 2023
<a href="#">Scheduler for Microsoft 365</a>	September 1, 2023

## Products under Modern Policy that will Retire in 2024

Products Moving to End of Servicing (Modern Policy)	End of Servicing Date
<a href="#">Azure Data Lake Storage Gen1</a>	February 29, 2024
<a href="#">Azure Cloud Services (classic)</a> <a href="#">Machine Learning Studio (classic)</a>	August 31, 2024

### Lifecycle data export

#### Export all products

Export lifecycle data for all products by clicking below:

[Export All Products](#)

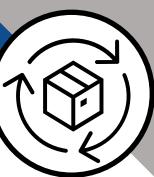
## Announcements

- ⌚ Windows 11, version 21H2 end of servicing (Home & Pro)
- ⌚ Power BI Windows app for Surface Hub reaching retirement
- ⌚ Windows 10, version 22H2 end of support date updated
- ⌚ Windows 10, version 21H2 end of servicing (Home & Pro)
- ⌚ Windows 10, version 20H2 end of servicing (Enterprise, Education)
- ⌚ Microsoft Store for Business and Education retiring March 31, 2023

- ⌚ Windows Server 2012 and 2012 R2 reaching end of support
- ⌚ UPDATED: Support extended for Visio Services in SharePoint Online (aka Visio Web Access)
- ⌚ Windows 10, version 21H1 end of servicing
- ⌚ Deprecation of Basic Authentication (Basic Auth) in Exchange Online
- ⌚ Kaizala to be retired August 31, 2023
- ⌚ UPDATED: Windows Analytics retirement on January 31, 2020

[See more >](#)

# Microsoft Product Lifecycle: Modern Policy Reaching End of Servicing



## Products Release End of Servicing for 2023

<b>Products Moving to End of Servicing (Modern Policy)</b>	<b>End of Servicing Date</b>
<a href="#">Microsoft Endpoint Configuration Manager, Version 2107</a>	<b>February 2, 2023</b>
<a href="#">Dynamics 365 Business Central on-premises (Modern Policy), 2021 release wave 2, version 19.x</a>	<b>April 12, 2023</b>
<a href="#">Windows 10 Enterprise and Education, Version 20H2</a> <a href="#">Windows 10 IoT Enterprise, Version 20H2</a>	<b>May 9, 2023</b>
<a href="#">Microsoft Endpoint Configuration Manager, Version 2111</a>	<b>June 1, 2023</b>
<a href="#">Windows 10 Home and Pro, Version 21H2</a>	<b>June 13, 2023</b>
<a href="#">Microsoft Endpoint Configuration Manager, Version 2203</a>	October 6, 2023
<a href="#">Dynamics 365 Business Central on-premises (Modern Policy), 2022 release wave 1, version 20.x</a> <a href="#">Windows 11 Home and Pro, Version 21H2</a>	October 10, 2023

## Products Release End of Servicing for 2024

<b>Products Moving to End of Servicing (Modern Policy)</b>	<b>End of Servicing Date</b>
<a href="#">Microsoft Endpoint Configuration Manager, Version 2207</a>	February 12, 2024
<a href="#">Dynamics 365 Business Central on-premises (Modern Policy), 2022 release wave 2, version 21.x</a>	April 14, 2024
<a href="#">Windows 10 Home and Pro, Version 22H2</a>	May 14, 2024
<a href="#">Windows 10 Enterprise and Education, Version 21H2</a> <a href="#">Windows 10 IoT Enterprise, Version 21H2</a>	June 11, 2024
<a href="#">Windows 11 Enterprise and Education, Version 21H2</a> <a href="#">Windows 11 Home and Pro, Version 22H2</a> <a href="#">Windows 11 IoT Enterprise, Version 21H2</a>	October 8, 2024
<a href="#">PowerShell, PowerShell 7.2 (LTS-current)</a>	November 8, 2024
<a href="#">Azure IoT Edge, Version 1.4 (LTS)</a> <a href="#">.NET 6.0 (LTS)</a>	November 12, 2024

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

# Microsoft Product Lifecycle: Fixed Policy Reaching End of Support 2024



## Products Reaching End of Support for 2024

Products Moving to End of Support (Modern Policy)	End of Servicing Date
<a href="#">Dynamics CRM 2013</a> <a href="#">Microsoft Host Integration Server 2013</a> <a href="#">Visual Studio 2022 , Version 17.2 (LTSC channel)</a> <a href="#">Windows Server 2008, Extended Security Update Year 4 (Azure only)</a> <a href="#">Windows Server 2008 R2, Extended Security Update Year 4 (Azure only)</a>	January 9, 2024
<a href="#">Microsoft Deployment Agent 2013</a> <a href="#">Microsoft Diagnostics and Recovery Toolset 8.1</a> <a href="#">Test Agent, Controller</a> <a href="#">User Experience Virtualization (UE-V) 2.0</a> <a href="#">Visual Studio 2013</a> <a href="#">Visual Studio Team Foundation Server 2013</a>	April 9, 2024
<a href="#">Microsoft SQL Server 2012, Extended Security Update Year 2</a> <a href="#">SQL Server 2014</a>	July 9, 2024
<a href="#">Visual Studio 2022 , Version 17.4 (LTSC channel)</a>	July 11, 2024

# Microsoft Product Lifecycle: Products moving to Extended Support



## Products Moving to Extended Support for 2023

Products Moving to Extended Support (Fixed Policy)	End of Support Date
<a href="#">Dynamics GP 2018</a> <a href="#">Dynamics GP 2018 R2</a> <a href="#">Dynamics NAV 2018</a> <a href="#">Visual Studio Team Foundation Server 2018</a>	<b>January 10, 2023</b>
<a href="#">Access 2019</a> <a href="#">Dynamics 365 Business Central on-premises (Fixed Policy)</a> <a href="#">Excel 2019</a> <a href="#">Microsoft Office 2019</a> <a href="#">OneNote 2016</a> <a href="#">Outlook 2019</a> <a href="#">PowerPoint 2019</a> <a href="#">Project 2019</a> <a href="#">Publisher 2019</a> <a href="#">Visio 2019</a> <a href="#">Word 2019</a>	October 10, 2023

## Products Moving to Extended Support for 2024

Products Moving to Extended Support (Fixed Policy)	End of Support Date
<a href="#">Dynamics SL 2018</a> <a href="#">Exchange Server 2019</a> <a href="#">Hyper-V Server 2019</a> <a href="#">Project Server 2019</a> <a href="#">SharePoint Server 2019</a> <a href="#">Skype for Business 2019</a> <a href="#">Skype for Business Server 2019</a> <a href="#">Windows 10 Enterprise LTSC 2019</a> <a href="#">Windows 10 IoT Core LTSC</a> <a href="#">Windows 10 IoT Enterprise LTSC 2019</a> <a href="#">Windows 10 IoT LTSC 2019 Core</a> <a href="#">Windows Server 2019</a> <a href="#">Windows Server IoT 2019</a> <a href="#">Windows Server IoT 2019 for Storage</a>	January 9, 2024
<a href="#">Azure DevOps Server 2019</a> <a href="#">System Center 2019 Data Protection Manager</a> <a href="#">System Center 2019 Operations Manager</a> <a href="#">System Center 2019 Orchestrator</a> <a href="#">System Center 2019 Service Manager</a> <a href="#">System Center 2019 Virtual Machine Manager</a> <a href="#">Visual Studio 2019</a>	April 9, 2024



# Acquisitions and Announcements

# Microsoft Acquisitions - 2023



Company	Date	Description
<a href="#"><b>Fungible</b></a>	01-09-2023	<p><a href="#"><b>Fungible Inc.</b></a>, a provider of composable infrastructure aimed at accelerating networking and storage performance in datacenters with <b>high-efficiency, low-power data processing units (DPUs)</b>. Fungible's technologies help enable <b>high-performance, scalable, disaggregated, scaled-out datacenter infrastructure</b> with reliability and security. <b>The Fungible team will join Microsoft's datacenter infrastructure engineering teams and will focus on delivering multiple DPU solutions, network innovation and hardware systems advancements.</b></p>

# Microsoft Acquisitions - 2022



Company	Date	Description
<a href="#"><b>Lumenisity</b></a>	12-09-2022	<b>Lumenisity® Limited</b> , a leader in next-generation hollow core fiber (HCF) solutions. Lumenisity's innovative and industry-leading HCF product can enable fast, reliable and secure networking for global, enterprise and large-scale organizations. The acquisition will <b>expand Microsoft's ability to further optimize its global cloud infrastructure and serve Microsoft's Cloud Platform and Services customers with strict latency and security requirements</b> .
<a href="#"><b>Miburo</b></a>	06-14-2022	<b>Miburo</b> will enhance Microsoft's Cybersecurity and Threat Analysis capabilities. The addition of Miburo will <b>enable Microsoft to expand its threat detection and analysis capabilities to address new cyber-attacks and shed light on the ways in which foreign actors use information operations</b> in conjunction with other cyber-attacks to achieve their objectives. Miburo is a leading <b>expert in the identification of foreign information operations</b> . Miburo's research teams <b>detect and attribute malign and extremist influence campaigns across 16 languages</b> . The combination of Microsoft and Miburo will help to stop foreign adversaries from threatening public and private sector customers and, in fact, the very foundations of our democracy.
<a href="#"><b>Minit</b></a>	03-31-2022	<b>Minit</b> currently <b>enables businesses to transform the way they analyze, monitor and optimize their processes</b> . Minit's solutions have helped businesses gain <b>deep insights into how processes run</b> , uncover root causes of operational challenges and help mitigate undesired process outcomes. This acquisition <b>will further empower Microsoft to help our customers digitally transform and drive operational excellence</b> 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 <b>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</b> .
<a href="#"><b>Oribi</b></a>	02-28-2022	Microsoft's LinkedIn will acquire <a href="#"><b>Oribi</b></a> , an Israel based <b>marketing analytics company</b> , to further help customers, from marketers to recruiters, <b>gain actionable insights, make smarter decisions and drive business results</b> . The integration of LinkedIn and Oribi will <b>accelerate Microsoft's marketing attribution and codeless analytics capabilities</b> .
<a href="#"><b>Activision Blizzard</b></a>	01-18-2022	Microsoft announced <b>plans to acquire Activision Blizzard Inc.</b> (Nasdaq: ATVI), a leader in game development and interactive entertainment content publisher. This <b>acquisition will accelerate the growth in Microsoft's gaming</b> business across mobile, PC, console and cloud and <b>will provide building blocks for the metaverse</b> . "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
<a href="#">Xandr</a>	12-21-2021	Microsoft will <b>acquire Xandr from AT&amp;T</b> . Xandr provides a <b>data-enabled technology platform with tools</b> that help power a diverse ecosystem <b>connecting marketers and media owners through first-party, data-led advertising solutions</b> across its network. With Xandr, <b>Microsoft can accelerate the delivery of digital advertising solutions for the open web</b> by combining Microsoft's audience understanding, technology and global advertising customer base with Xandr's large-scale, data-driven platforms for advertising.
<a href="#">Two Hat</a>	10-29-2021	<b>Two Hat</b> , 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.
<a href="#">Clear Software</a>	10-22-2021	<b>Clear Software</b> provides iPaaS and business process solutions with <b>strong connectivity into SAP and Oracle</b> . <b>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</b> that reside beyond Microsoft first-party services.
<a href="#">Ally.IO</a>	10-07-2021	<b>Ally.io</b> , a leading OKR (objectives and key results) company, will <b>join the Microsoft Viva family as part of our employee experience platform (EXP)</b> designed to help companies embrace the new digital work life. <b>Ally.io will power a new Microsoft Viva module</b> . Viva is an employee experience platform that brings together communications, knowledge, learning, resources and insights – from anywhere you work. <b>Powered by Microsoft 365 and Microsoft Teams</b> , Viva helps organizations foster a culture of human connection, growth, well-being and success.
<a href="#">TakeLessons</a>	09-08-2021	We're so excited to announce that <b>TakeLessons has been acquired by Microsoft</b> . We believe this will further support TakeLessons' mission: <b>to empower people to learn, connect, grow, and live more meaningful lives through education</b> .
<a href="#">Clipchamp</a>	09-07-2021	<b>Clipchamp</b> is a natural fit to extend the cloud-powered productivity experiences in <b>Microsoft 365</b> for individuals, families, schools, and businesses. It's also a great fit for Microsoft Windows, which is a platform for boundless creativity. <b>Clipchamp's template-driven, task-focused user experience</b> gives everyone the confidence that they can create. Its <b>rich library of filters, styles, transitions, and stock media combined with the power of a multi-track audio and video compositing editor</b> gives everyone the fine control they need, and artistic help if they need it, to <b>create exactly what they want, quickly and with confidence</b> .
<a href="#">Peer5</a>	08-10-2021	<b>Peer5</b> expands Microsoft's ability for delivering <b>secure, high-quality, large-scale live video streaming with optimized network performance in Teams</b> . 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 <b>mesh networks are self-balancing and automatically scale</b> as the number of viewers increase.

# Microsoft Acquisitions - 2021



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



## Microsoft Acquisitions - 2020

Company	Date	Description
<a href="#"><u>ZeniMax Media</u></a>	09-21-2020	<b>ZeniMax Media, the parent company of Bethesda Softworks</b> , one of the <b>largest privately held game developers and publishers in the world</b> . Creators of critically acclaimed and <b>best-selling gaming franchises including The Elder Scrolls, Fallout and many others</b> , Bethesda brings an <b>impressive portfolio of games, technology and talent</b> — as well as a track record of blockbuster commercial success — to Xbox.
<a href="#"><u>Orions Systems</u></a>	07-07-2020	Orions Systems, a pioneer in the development <b>of large-scale, hybrid, smart vision systems focused on “human-in-the-loop” machine teaching</b> combined with <b>services that can adapt to running on a single device or scale to address large scale edge-to-cloud network topologies</b> . 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.
<a href="#"><u>CyberX</u></a>	06-22-2020	CyberX will complement the existing <a href="#"><u>Azure IoT security</u></a> capabilities and <b>extends to existing devices including those used in industrial IoT, Operational Technology and infrastructure scenarios</b> . With CyberX, customers can <b>discover their existing IoT assets, and both manage and improve the security posture of those devices</b> . 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,
<a href="#"><u>ADRM Software</u></a>	06-18-2020	ADRM Software is a <b>leading provider of large-scale industry data models</b> , 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. <b>Together with Microsoft Azure, these capabilities will be delivered at scale</b> , enabling our customers to accelerate digital progress, and reduce risk in a variety of major initiatives.
<a href="#"><u>Softomotive</u></a>	05-19-2020	<a href="#"><u>Softomotive</u></a> currently helps more than 9,000 global customers seamlessly <b>automate business processes across legacy and modern desktop applications</b> . Together <b>with Power Automate, WinAutomation will provide customers additional options for RPA desktop authoring</b> so anyone can build a bot and automate Windows-based tasks.
<a href="#"><u>Metaswitch Networks</u></a>	05-14-2020	<a href="#"><u>Metaswitch Networks</u></a> , a leading provider of <b>virtualized network software and voice, data and communications solutions for 5G operators</b> .
<a href="#"><u>Corp.Com</u></a>	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."
<a href="#"><u>Affirmed Networks</u></a>	03-26-2020	<b>Affirmed Networks with its leadership in virtualized 5G mobile networks</b> . 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, <b>including autonomous vehicles, smart cities, virtual reality and a range of other smart industry use cases and services</b> .

# Microsoft Acquisitions - 2019



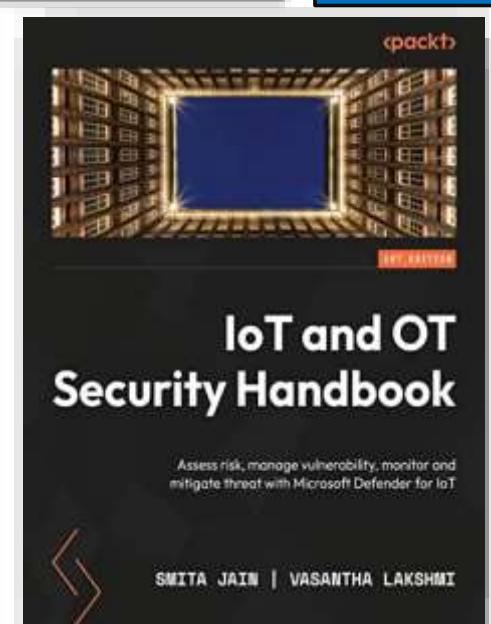
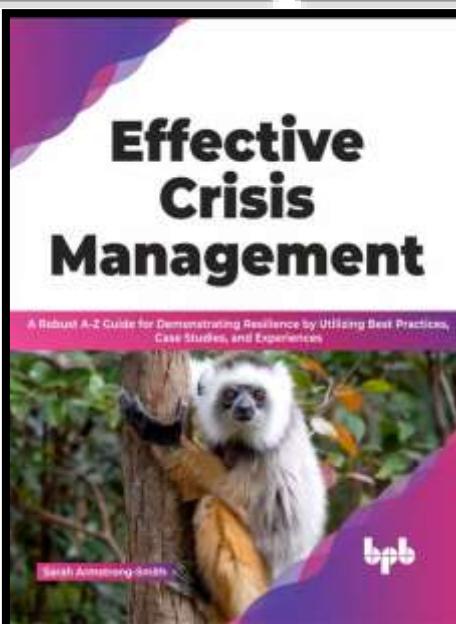
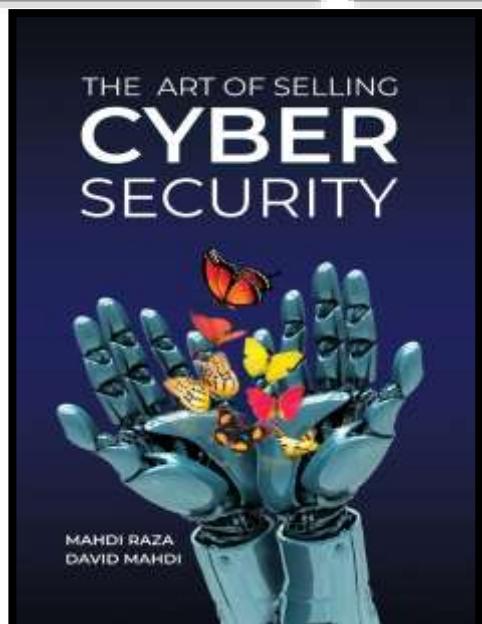
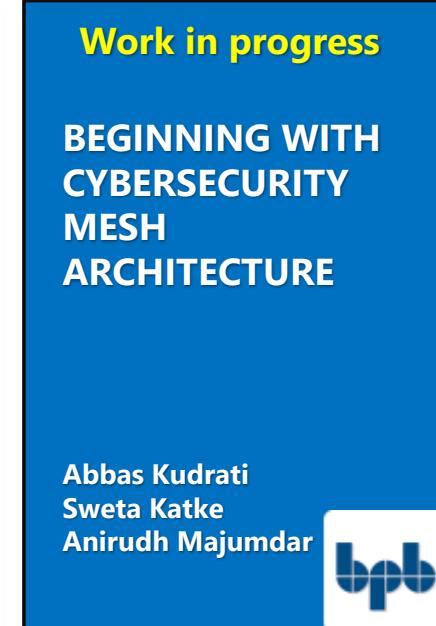
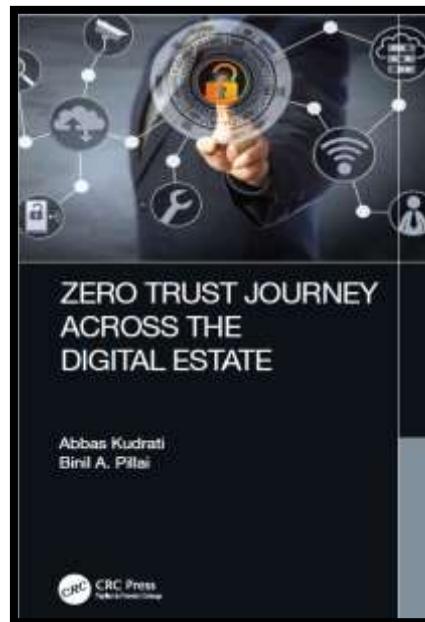
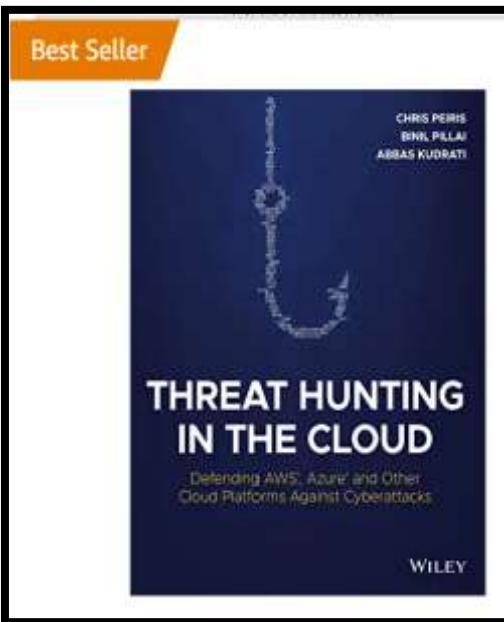
Company	Date	Description
Movere	10-21-2019	Movere accelerates cloud migrations. It increases business intelligence by accurately <b>presenting entire IT environments within a single day</b> , providing enterprises with the confidence they need to have <b>visibility and control of their environments regardless of platform, application or geography as organizations grow, change and digitally optimize</b> .
Semmle	09-18-2019	Semmle's revolutionary <b>semantic code analysis engine allows developers to write queries that identify code patterns in large codebases and search for vulnerabilities and their variants</b> . Semmle is <b>trusted by security teams at Uber, NASA, Microsoft, Google</b> , and has <b>helped find thousands of vulnerabilities in some of the largest codebases in the world</b> , as well as over 100 CVEs in open source projects to date.
JClarity	08-19-2019	The <b>leading contributor to the AdoptOpenJDK project</b> , to support their continued contributions to open source while <b>driving increased performance for Java workloads on Azure</b> . The team, formed by Java champions and data scientists with proven <b>expertise in data driven Java Virtual Machine (JVM) optimizations</b> , will help teams at Microsoft to leverage advancements in the Java platform.
PromotelQ	08-05-2019	The <b>leading provider of vendor marketing technology to online retailers and brands</b> . 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 <b>Unified Data Access Control solutions for modern data platforms</b> . 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^ <b>helps teams create more efficient and effective code review workflows on GitHub</b> . 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^ <b>gives teams a better way to manage reviews, reduce turnaround times, and ship code faster</b> .
Double Fine Productions	06-09-2019	Double Fine is <b>a beacon of creativity and spirit in game development for almost 20 years with classic games like Psychonauts, Brütal Legend and Broken Age</b> . 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 <b>real time operating systems (RTOS) for IoT and edge devices powered by microcontroller units (MCUs)</b> . Express Logic's ThreadX RTOS has over 6.2 billion deployments, making it one of the most deployed RTOS in the world per <a href="#">VDC Research</a> . 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 <b>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</b> within Azure to help drive the best possible learning outcomes for their students. Read more at <a href="https://educationblog.microsoft.com/en-us/2019/02/introducing-datasense-to-microsoft-educations-family-of-products/#E6CKQEBUjS35TOH4.99">https://educationblog.microsoft.com/en-us/2019/02/introducing-datasense-to-microsoft-educations-family-of-products/#E6CKQEBUjS35TOH4.99</a>
Citus Data	01-24-2019	a leader in the PostgreSQL community. Citus is an <b>innovative open source extension to PostgreSQL that transforms PostgreSQL into a distributed database, dramatically increasing performance and scale for application developers</b> . Because Citus is an extension to open source PostgreSQL, it <b>gives enterprises the performance advantages of a horizontally scalable database while staying current with all the latest innovations in PostgreSQL</b> . 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 <b>next-generation app-provisioning platform that reduces the resources, time and labor required to support virtualization</b> . 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 <b>software product design and development studio known for its conversational AI and bot development capabilities</b> . The company has been paving the way in conversational AI since 2013 and was responsible for the creation of <a href="#">Howdy</a> , the first commercially available bot for Slack that <b>helps schedule meetings, and Botkit, which provides the development tools used by hundreds of thousands of developers on GitHub</b> . Over the years, we have partnered with XOXCO and have been inspired by this work.
Obsidian	11-10-2018	<b>The studio quickly made a name for itself with the Xbox exclusive Star Wars: Knights of the Old Republic II: The Sith Lords</b> . 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 <a href="https://news.xbox.com/en-us/2018/11/10/obsidian-inxile-join-microsoft-studios/#P4ARqRq505qOpmfU.99">https://news.xbox.com/en-us/2018/11/10/obsidian-inxile-join-microsoft-studios/#P4ARqRq505qOpmfU.99</a>
InXile	11-10-2018	<b>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</b> . Read more at <a href="https://news.xbox.com/en-us/2018/11/10/obsidian-inxile-join-microsoft-studios/#P4ARqRq505qOpmfU.99">https://news.xbox.com/en-us/2018/11/10/obsidian-inxile-join-microsoft-studios/#P4ARqRq505qOpmfU.99</a>
Lobe	09-13-2018	Lobe makes deep learning simple, understandable and accessible to everyone. Lobe's <b>simple visual interface empowers anyone to develop and apply deep learning and AI models quickly, without writing code</b> .

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