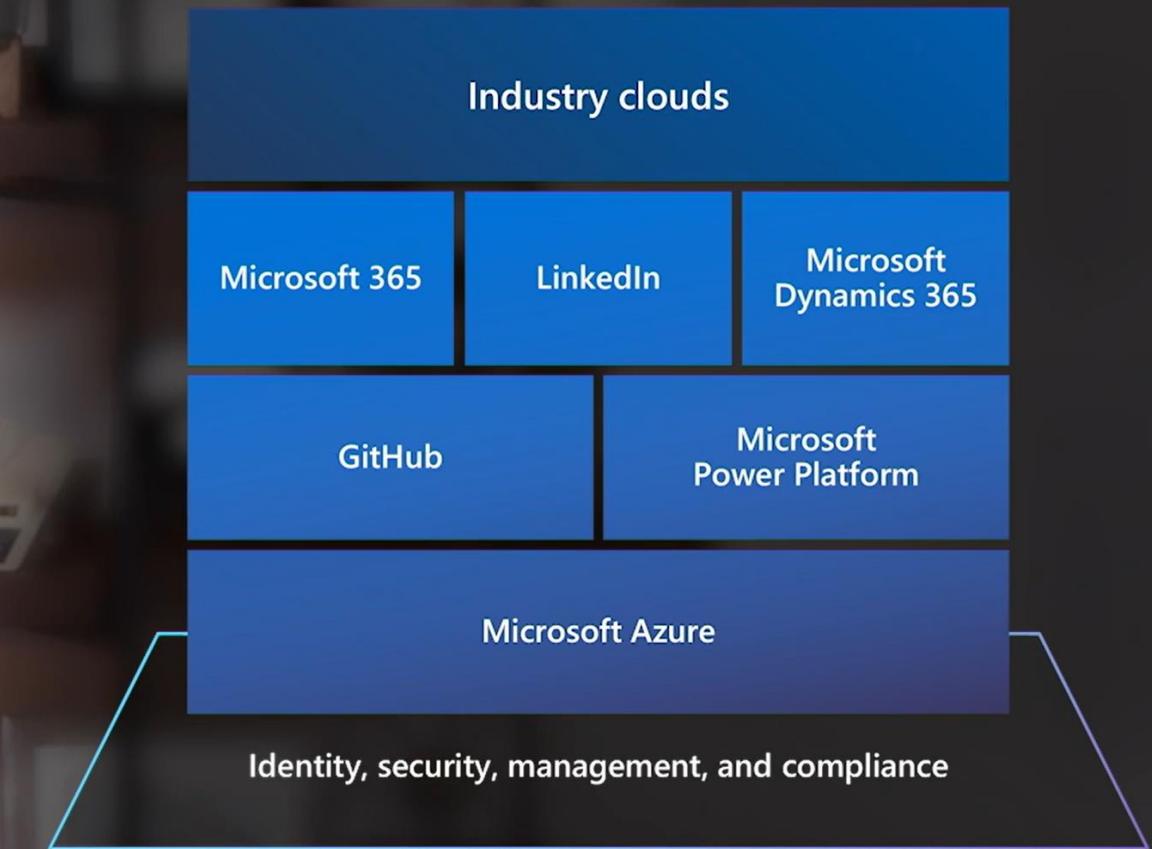




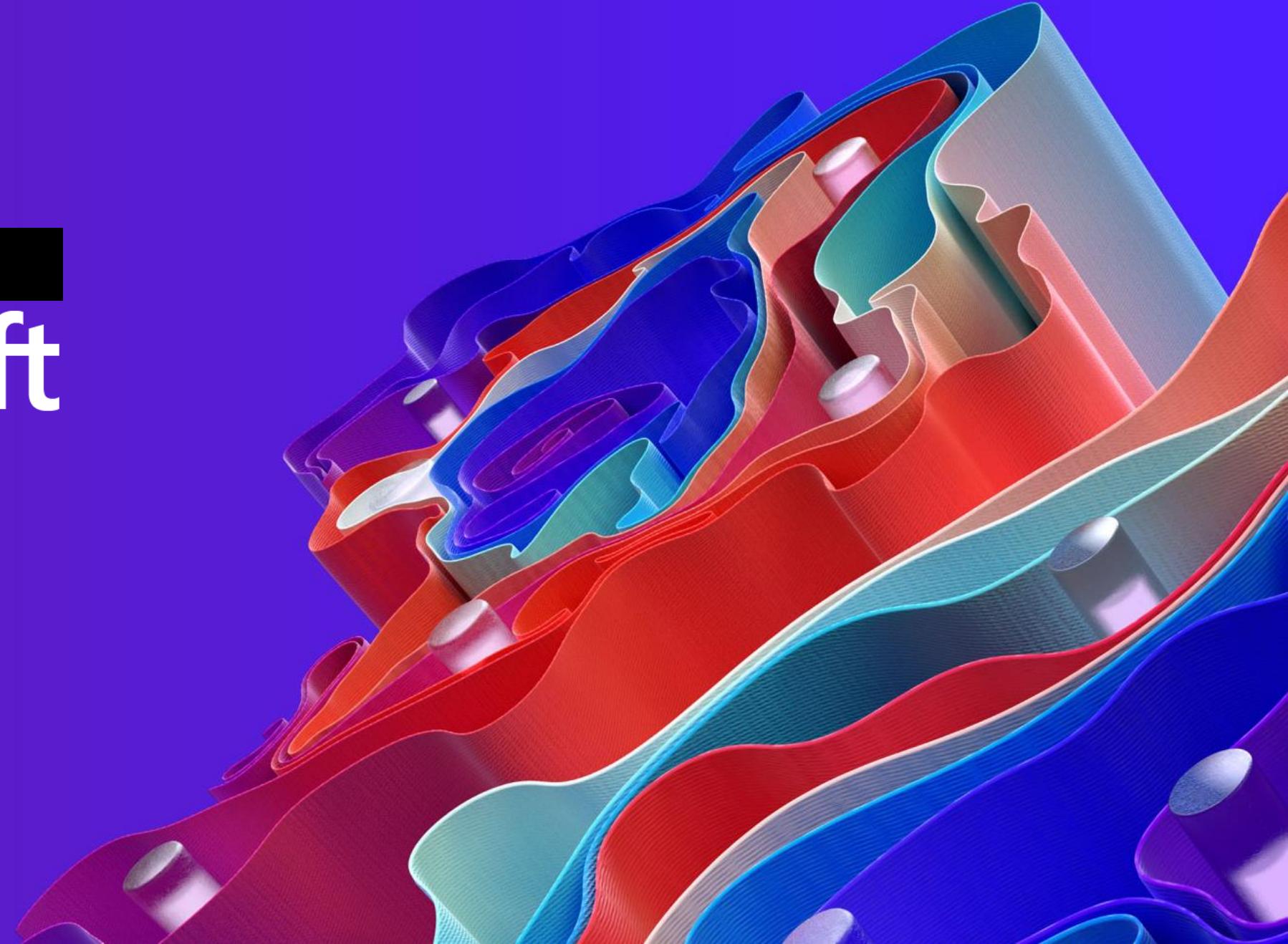
Microsoft Cloud





Hero Announcements

Microsoft Build





Increase developer velocity with Microsoft's end-to-end developer platform

Deliver new intelligent cloud-native apps by harnessing the power of data and AI

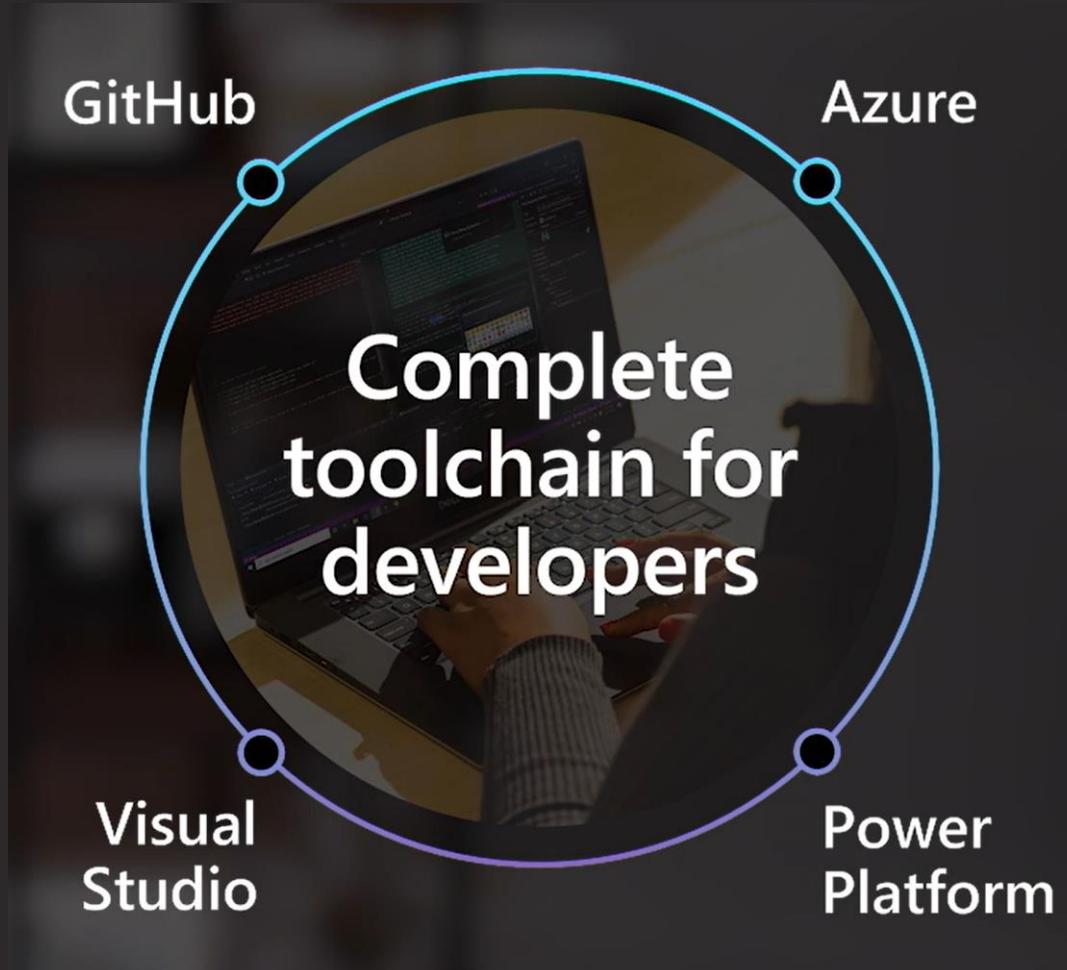
Build cloud-native apps your way and run them anywhere

Build the next generation of collaborative apps for hybrid work

Build differentiated SaaS apps with the Microsoft Cloud

Building digital twins, mixed reality, and metaverse apps

Application Platform



SPACE: A framework for understanding developer productivity

The SPACE framework offers a new way of thinking about developer productivity.



S Satisfaction and well-being

P Performance

A Activity

C Communication and collaboration

E Efficiency and flow

Coming soon

Visual Studio 2022

64-bit preview 1

Increased reliability and performance

Develop cross-platform and cloud
apps with .NET 6, Blazor, and MAUI

AI-assisted productivity with IntelliCode

aka.ms/VS2022roadmap

In preview

Microsoft Teams Toolkit 2.0 for the Visual Studio family

A simpler and faster way to build Teams apps

Support for popular tools and frameworks

Single-line authentication and identity with
Azure Active Directory and Microsoft Graph

Streamlined hosting with Azure and SharePoint,
including cloud storage and serverless compute

aka.ms/Teams-Toolkit

Early access

GitHub Codespaces

Cloud-powered development environments

Bootstrap dedicated environments from any GitHub repo with 2 to 32 dedicated cores

Code from any machine using Visual Studio Code or the browser

Isolated sandboxes for each project

github.com/features/codespaces

Collaborative applications

Device OS



UX



Microsoft Teams



Microsoft Office

Components

Fluid Framework • Adaptive Cards • Connectors

Logic



Azure PaaS



Power Platform

Data



Microsoft Graph



Microsoft Dataverse

Communications



Azure Communications Services

Identity



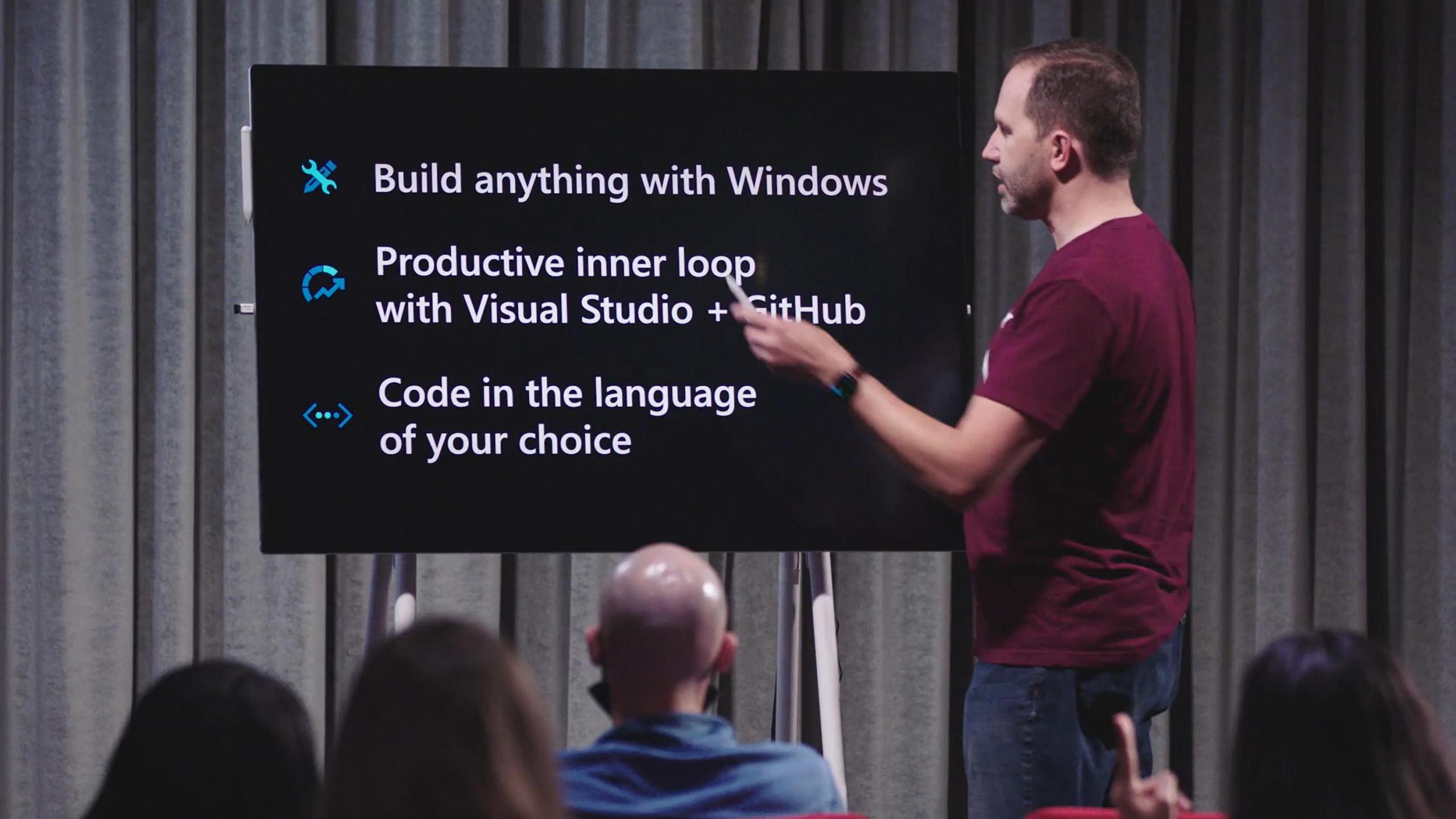
Azure Active Directory



Pro-dev



Low/no code

- 
- ❖ Build anything with Windows
 - ⟳ Productive inner loop
with Visual Studio + GitHub
 - ↔ Code in the language
of your choice

Build anything with Windows

Improvements to terminal & winget

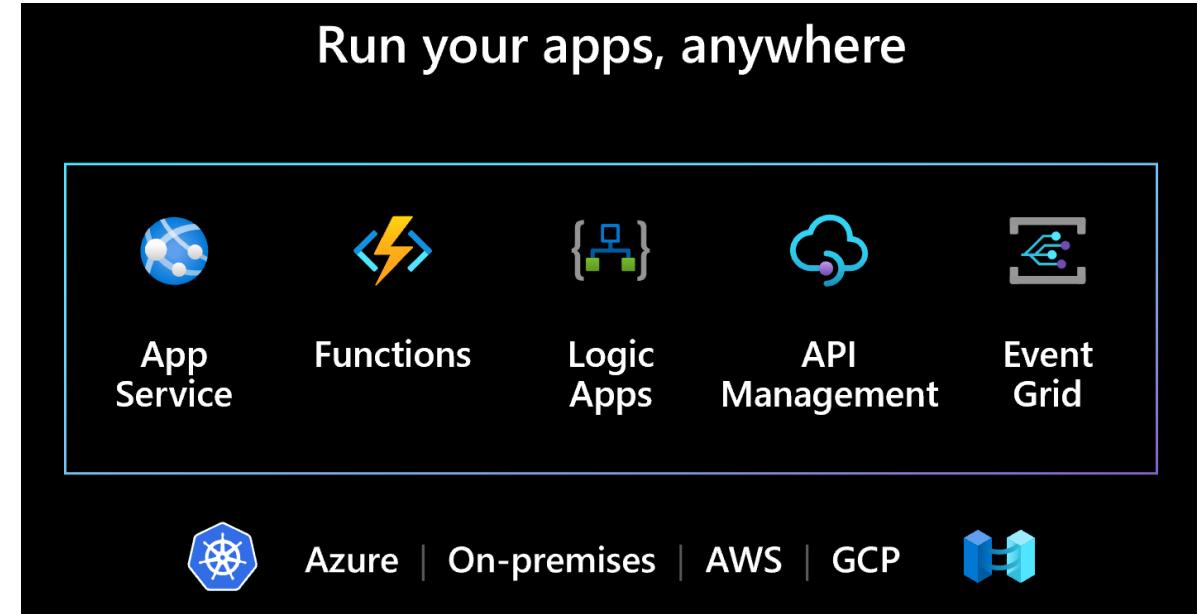
Linux app development with WSL2

Cross-platform UI testing
with Playwright



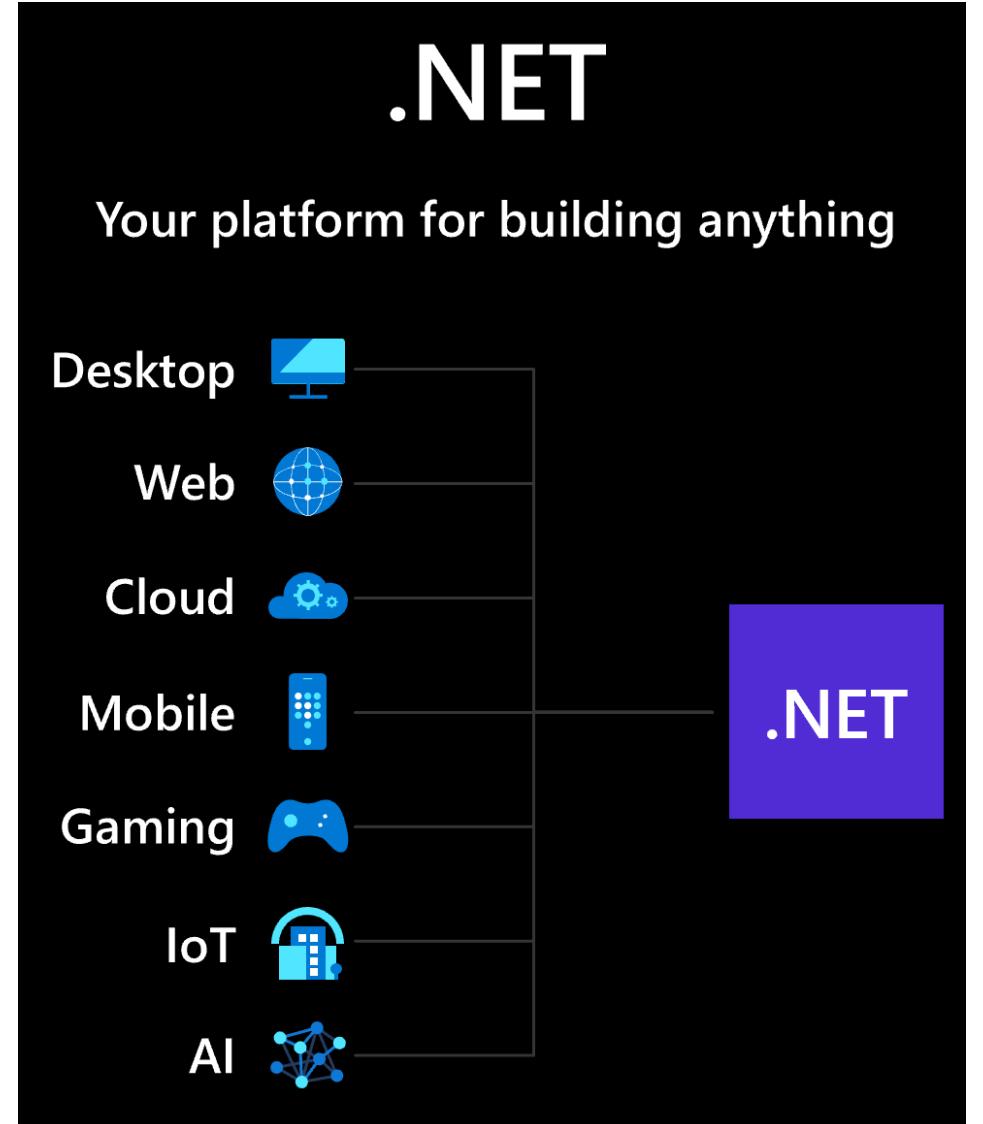
Azure Application Services

Azure app services like App Service, Functions, Logic Apps, API Management and Event Grid can now run on Kubernetes clusters anywhere across on-premises, multicloud and edge environments with Azure Arc.



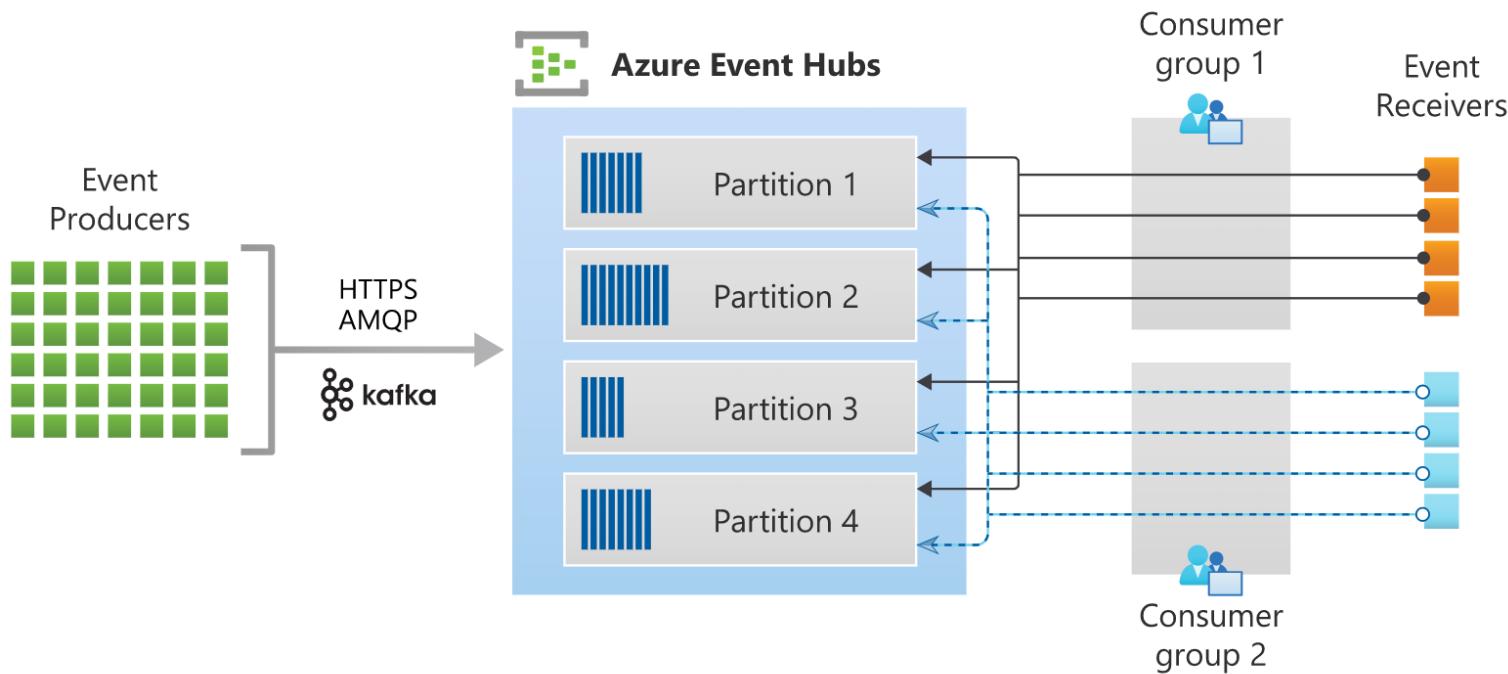
.NET 6

We are delighted to release .NET 6 Preview 4. Speaking of the final release, we now have a date! Book off November 9-11 for .NET Conf 2021. **We'll launch .NET 6 on the 9th Nov** with many in-depth talks and demos that tell you everything you want to know about .NET 6.



Event Hubs Premium

Event Hubs Premium now available in public preview. Event Hubs Premium provides you with a multi-tenant offering with resource isolation, enabling more predictable high-throughput and low latency workloads while providing higher limits and extending support to more Apache Kafka workloads.



Logic Apps – New Runtime

Built on top of Azure Functions runtime

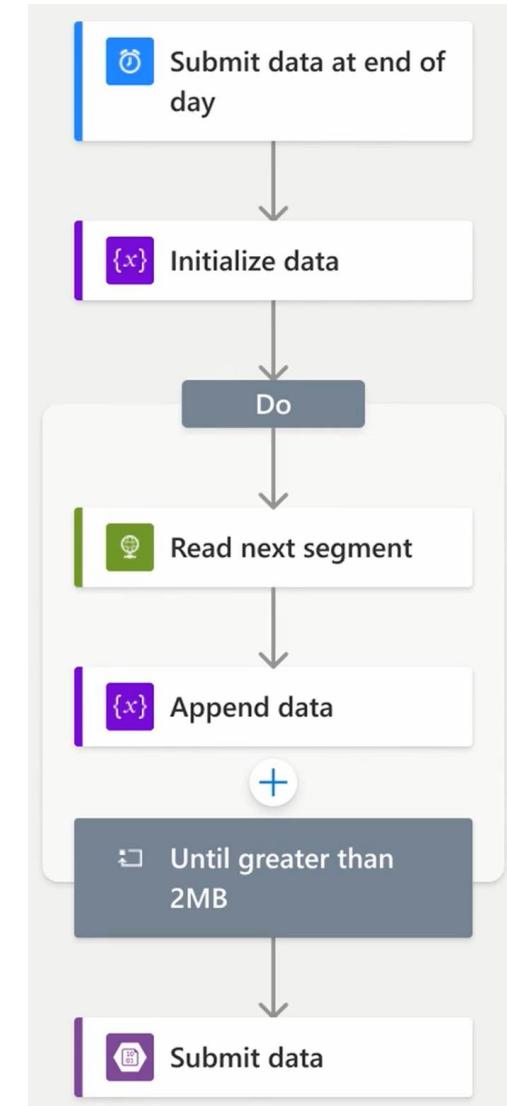
- Re-hostable, containerized
- Cross-platform support

Support local development

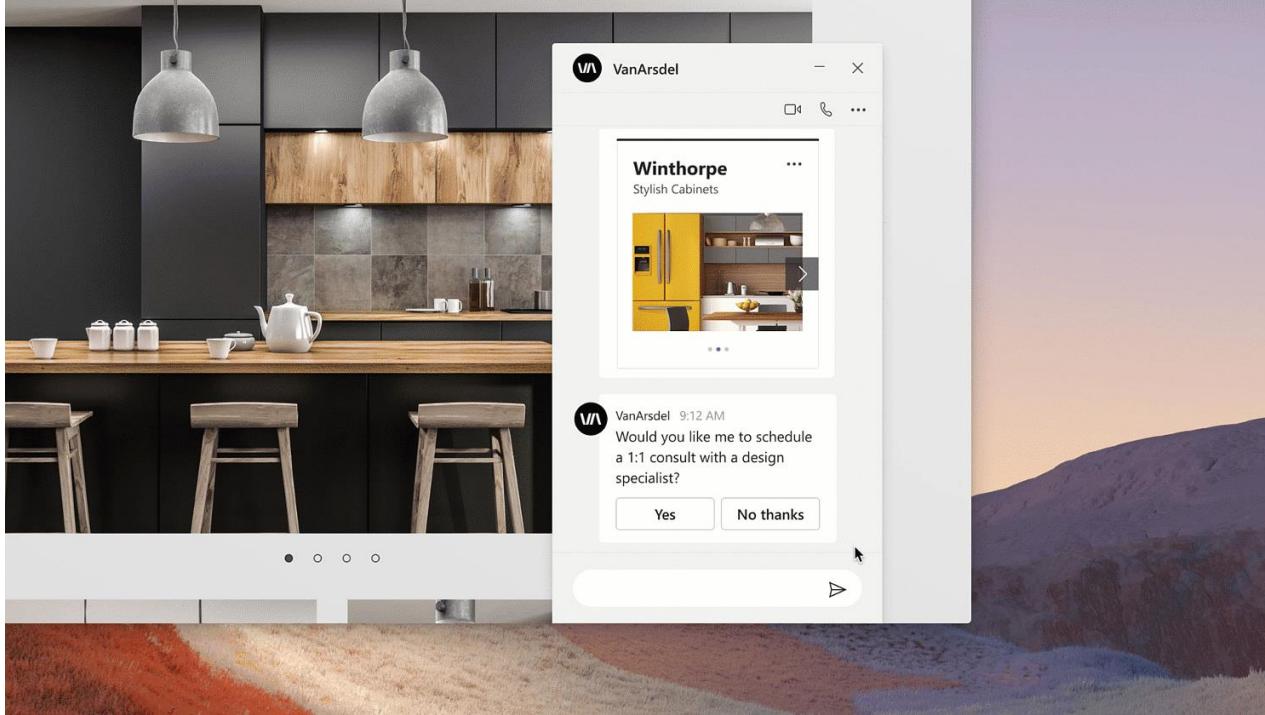
- Local project in VS Code
- Workflow designer
- Runtime on the machine
- Breakpoint debugging
- Azurite as local, cross-platform storage emulator

Advanced networking

- VNet, private endpoints



Azure Communication Services



- A UI Library for Azure Communication Services
- Call recording for Azure Communication Services
- Direct routing for Azure Communication Service
- Traversal Using Relays around NAT (TURN)
- Azure Communication Services Calling SDK for Windows Universal Windows Platform (UWP)

Microsoft Build of OpenJDK

The screenshot shows a dark blue header with the text "Java development with Microsoft" and a subtitle "Learn how to develop Java applications and services with Microsoft technologies.". Below the header are six white cards arranged in two rows of three:

- DOWNLOAD**: Download Microsoft Build of OpenJDK ↗
- GET STARTED**: Develop Java in Visual Studio Code ↗
- LEARN**: Browse Java on Azure learning paths

- GET STARTED**: Use the Azure SDK for Java
- DEPLOY**: Create and deploy a Java app on Azure
- OVERVIEW**: Use Java in GitHub Actions ↗

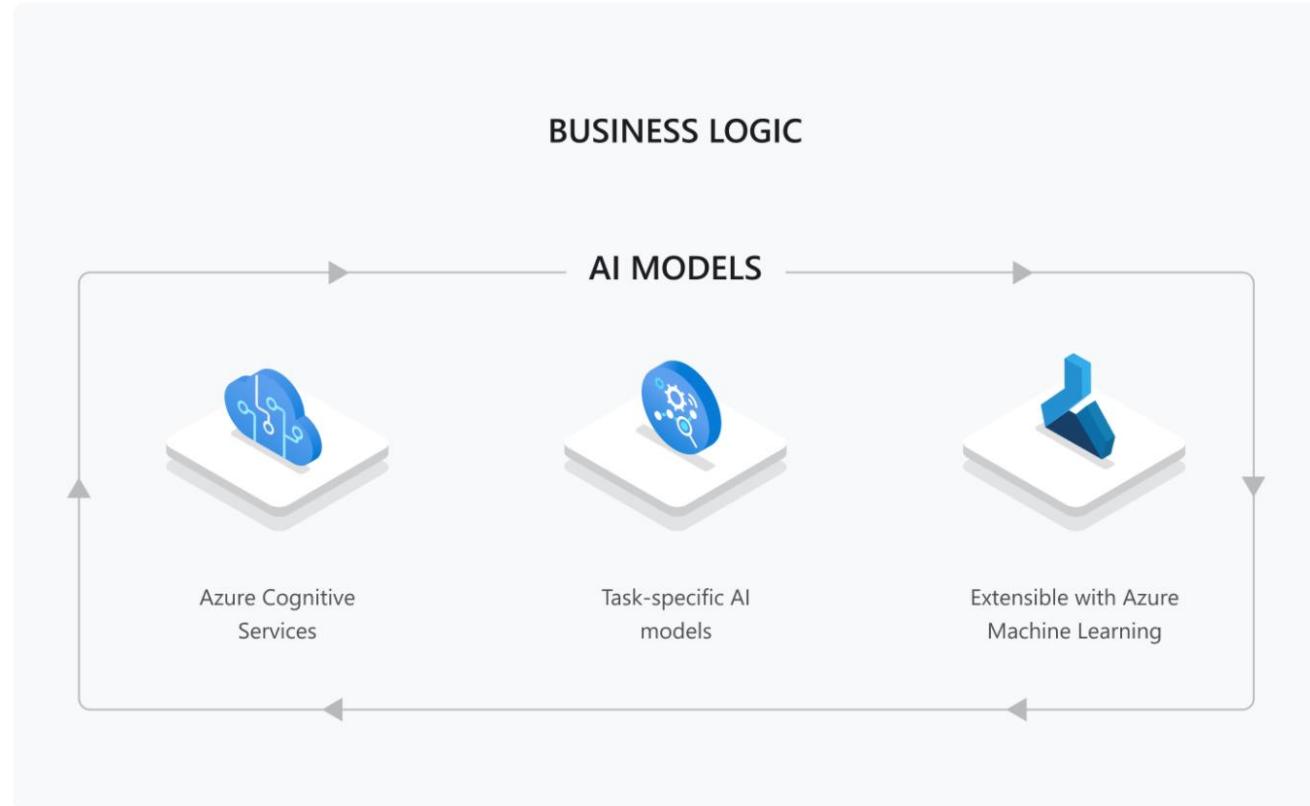
The Microsoft Build of OpenJDK is generally available for customers to build their Java apps. Microsoft will recommend optimizations to customers running Java-based workloads using the Microsoft Build of OpenJDK at scale across services like LinkedIn, Minecraft, Yammer and other internal systems.

The Microsoft Build of OpenJDK is a long-term support (LTS) distribution of OpenJDK, the free and open-source reference implementation of the Java SE Platform. The Microsoft Build of OpenJDK is free for anyone to deploy anywhere and is fully supported by Microsoft for customers with qualifying Azure support plans.

Azure AI

Launching Azure Applied AI Services

What is the difference between Applied AI Services and Cognitive Services?



Applied AI Services build on top of Cognitive Services with additional task-specific AI and business logic to optimize for specific use cases so that developers spend less time designing solutions or setting up pipelines.

Azure Applied AI Services

Go live with AI solutions in days—not months. Generate tangible value for your organization quickly with AI services for common business processes.

CONVERSATIONS



Azure Bot Service

Create bots and connect them across channels.

DOCUMENTS



Azure Form Recognizer

Turn documents into usable data at a fraction of the time and cost.

SEARCH



Azure Cognitive Search

Bring AI-powered cloud search to your mobile and web apps.

MONITORING



Azure Metrics Advisor

Proactively monitor metrics and diagnose issues.

VIDEOS



Azure Video Analyzer

Extract actionable insights from your videos.

ACCESSIBILITY



Azure Immersive Reader

Help users read and comprehend text.

Azure AI feature updates

Azure Bot Service now offers a [visual authoring canvas](#) with extensible open-source tools, enabling developers to add speech and telephony capabilities and to test, debug and publish bots to multiple channels with minimal code changes.

Azure Metrics Advisor is now [generally available](#). The service ingests time-series data, using machine learning to automatically find anomalies from sensors, products and business metrics, and provide diagnostics insights.

Azure Video Analyzer, in preview, brings [Live Video Analytics](#) and [Video Indexer](#) into a single service. This combination of existing services helps developers quickly build AI-powered video analytics from both stored and streaming videos. This can be used for workplace safety, in-store experiences, digital asset management, content monetization and more

Azure AI feature updates

Document Translation, a feature of Translator in Azure Cognitive Services announced in preview in February, is now generally available. Document Translation enables developers to quickly translate documents while preserving the structure and format of the original document. This feature helps enterprises and translation agencies that require the translation of complex documents into one or more languages.

Text Analytics for health is now generally available with Text Analytics in Azure Cognitive Services. It enables developers to process and extract insights from unstructured medical data. Unstructured text includes doctors' notes, medical journals, electronic health records, clinical trial protocols and more.

Question Answering. Now in preview, Question Answering helps users find answers from a passage of text without saving or managing any data in Azure.

Azure AI feature updates

Azure Machine Learning managed endpoints, now in preview, is a new capability within Azure Machine Learning that helps developers and data scientists build and deploy machine learning models rapidly. It helps customers deploy and operationalize their machine learning models more easily by automating the creation and management of the underlying compute infrastructure, including updates and security. Using this capability, customers also get out-of-the-box infrastructure monitoring and log analytics capabilities.

Microsoft is introducing PyTorch Enterprise on Microsoft Azure, which gives Microsoft Premier and Unified Support for Enterprise customers additional benefits, such as prioritized requests, hands-on support and solutions for hotfixes, bugs and security patches. PyTorch is an open-source, deep-learning framework that provides a seamless path from research to production. Microsoft is a contributor to the PyTorch ecosystem, with innovations such as PyTorch Profiler. Microsoft is collaborating with PyTorch to create a new initiative, the PyTorch Enterprise Support Program, that provides PyTorch users with a more reliable production experience.



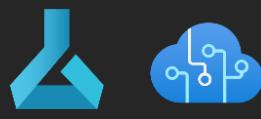
Database services

Azure is the best destination for all your data



Analytics and insights

Fastest time to insights



Artificial intelligence

Responsible, mission-critical AI on your terms

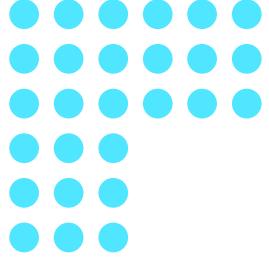


Data governance

AI-powered discovery, catalogue, and protection

Data

Azure SQL Database ledger – The power of blockchain in SQL



Makes data in SQL
tamper-evident
through cryptography

Provides a historical
record of all changes,
verified through
cryptographic proofs

The same SQL you
already know across
Azure and on-
premises

Azure Synapse feature updates

Azure Synapse Link for Dataverse is now in preview. This new capability removes barriers between business apps data and analytical systems. In just a few clicks, developers working in Microsoft Power Apps or Dynamics 365 can bring their entire Dataverse environment to Azure Synapse to power new insights, perform predictive analytics and enrich existing data with other business datasets and explore their data lake or other large repository of data.

Azure Synapse support for Spark 3.0.1 is now in preview. In March, Azure Synapse Analytics made significant investments in the overall performance of Apache Spark workloads. Customers using Azure Synapse data engineering and big data workloads can now use the Spark 3.0.1 runtime with additional performance enhancement optimizations directly from their Synapse workspace. This improves the overall performance of critical workloads up to two times faster.

Synapse Apache Spark Hardware Acceleration is now in preview. Azure Synapse Analytics now supports using field-programmable gate array (FPGA) hardware and graphics processing unit (GPU) processors, designed to better handle AI, to accelerate Apache Spark for data processing and machine learning. This development will help enterprise data engineers using large datasets for things like developing new product lines, transforming supply-chain models or responding to security threats, as well as data scientists using larger and more complex datasets for AI needs.

Azure Cosmos DB Updates

With **partial document update** for Azure Cosmos DB, developers can modify specific fields or properties within a document without requiring a full document read and replace. This gives developers more flexibility to update only certain portions. Partial document update is available for Core (SQL) API and via .NET SDK, Java SDK and stored procedures.

Azure Cosmos DB serverless is now generally available for all APIs (Core, MongoDB, Cassandra, Gremlin and Table)..

Azure Cosmos DB Linux emulator is now in preview. Developers can now build, test and learn on Azure Cosmos DB, free and locally on their Linux and macOS machines.

Azure Cosmos DB integrated cache is now in preview. Customers can optimize costs for read-heavy workloads by setting up an integrated cache in their Azure Cosmos DB account.

Always Encrypted for Azure Cosmos DB is now in preview. Customers can encrypt sensitive data inside their client app before it gets stored in their database with Always Encrypted for Azure Cosmos DB.

Power Platform

Coming soon

Visual Studio extensions for Power Platform

Publish your APIs to Power Platform

Build Power Platform components

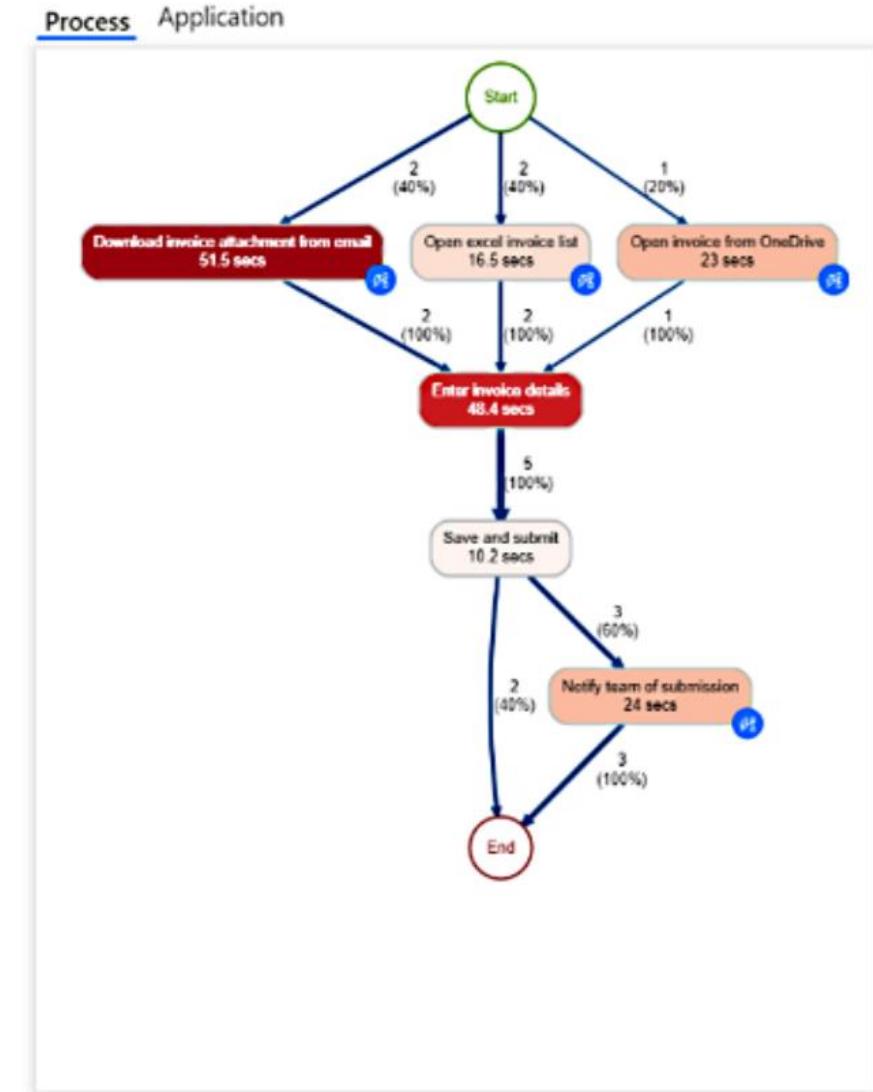
Configure Power Apps portals

aka.ms/2021BuildPowerPlatform

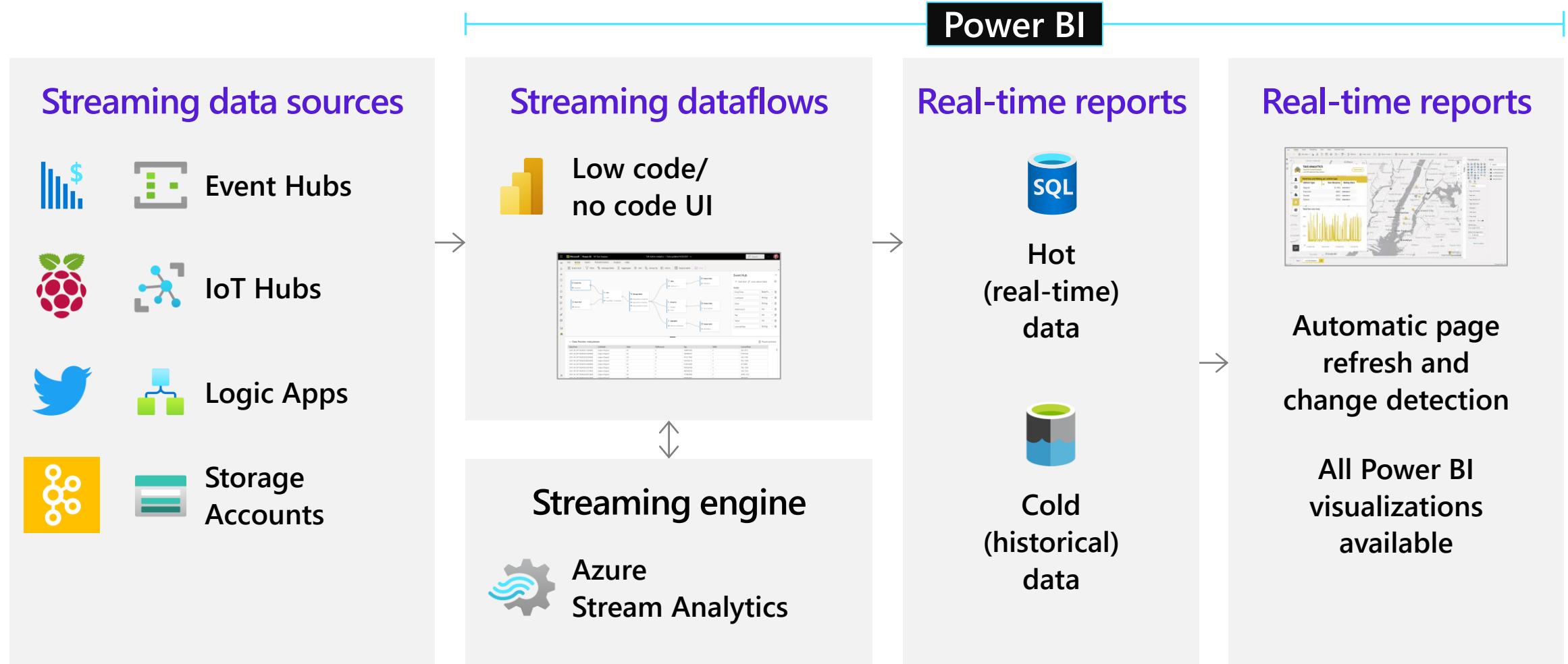
Process Advisor - GA

Process Advisor, a process mining capability in Microsoft Power Automate that helps identify which activities take the most time and are consistently repeated across an organization.

Process Advisor recommends what to automate, including insights into organizational bottlenecks.

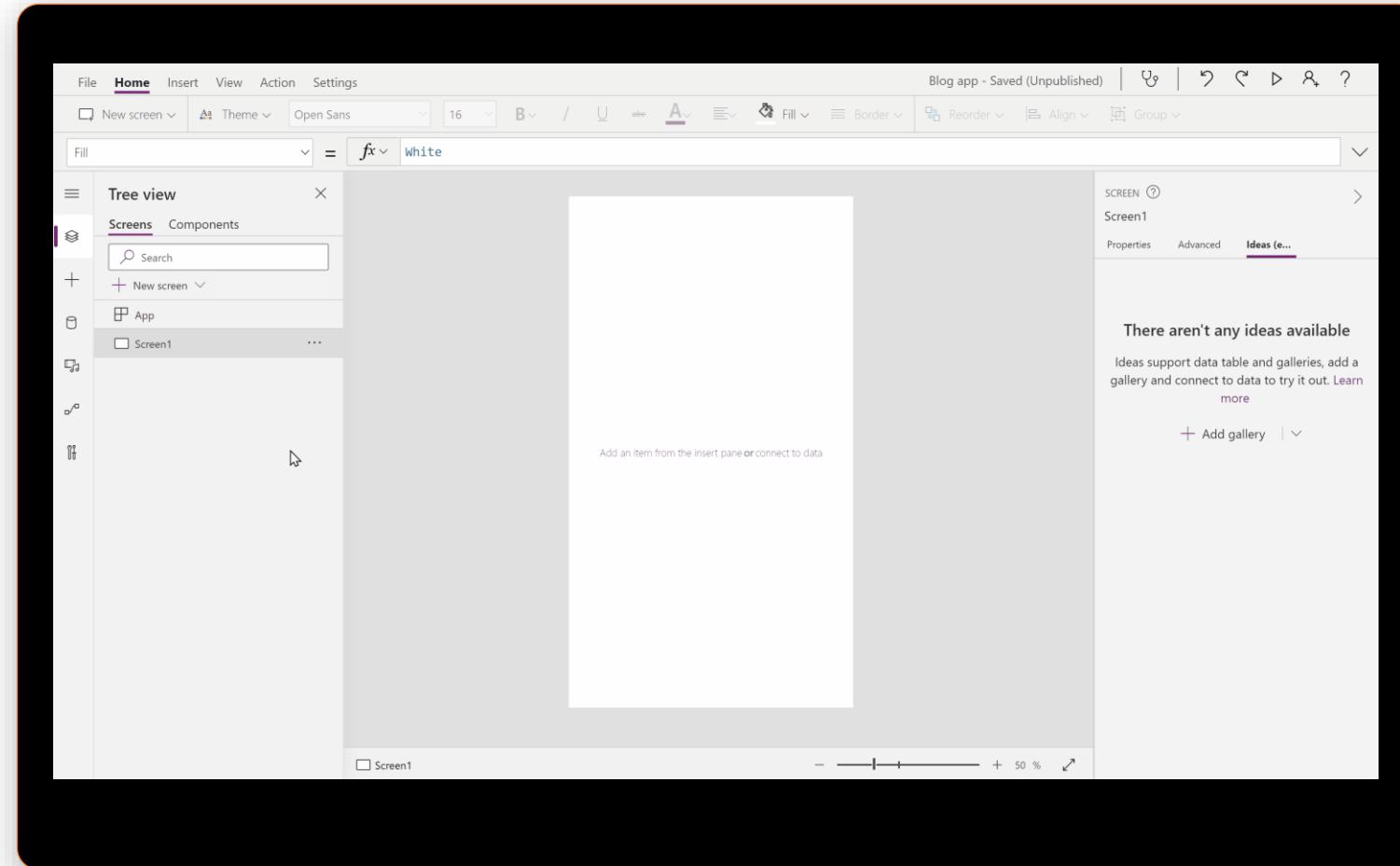


Power BI - Streaming



These speed up report creation, consumption and support projects with large datasets. Streaming dataflows will enable report creators to incorporate real-time data in a more user-friendly and faster way than currently required

Power Fx - Transform natural language to code with GPT-3



The new experience centers around three key scenarios: natural language transforms to Power Fx code, Power Fx code transforms to natural language and programming by example where a user inputs an example of a data pattern that trains the model.

Fusion development – Learning Path

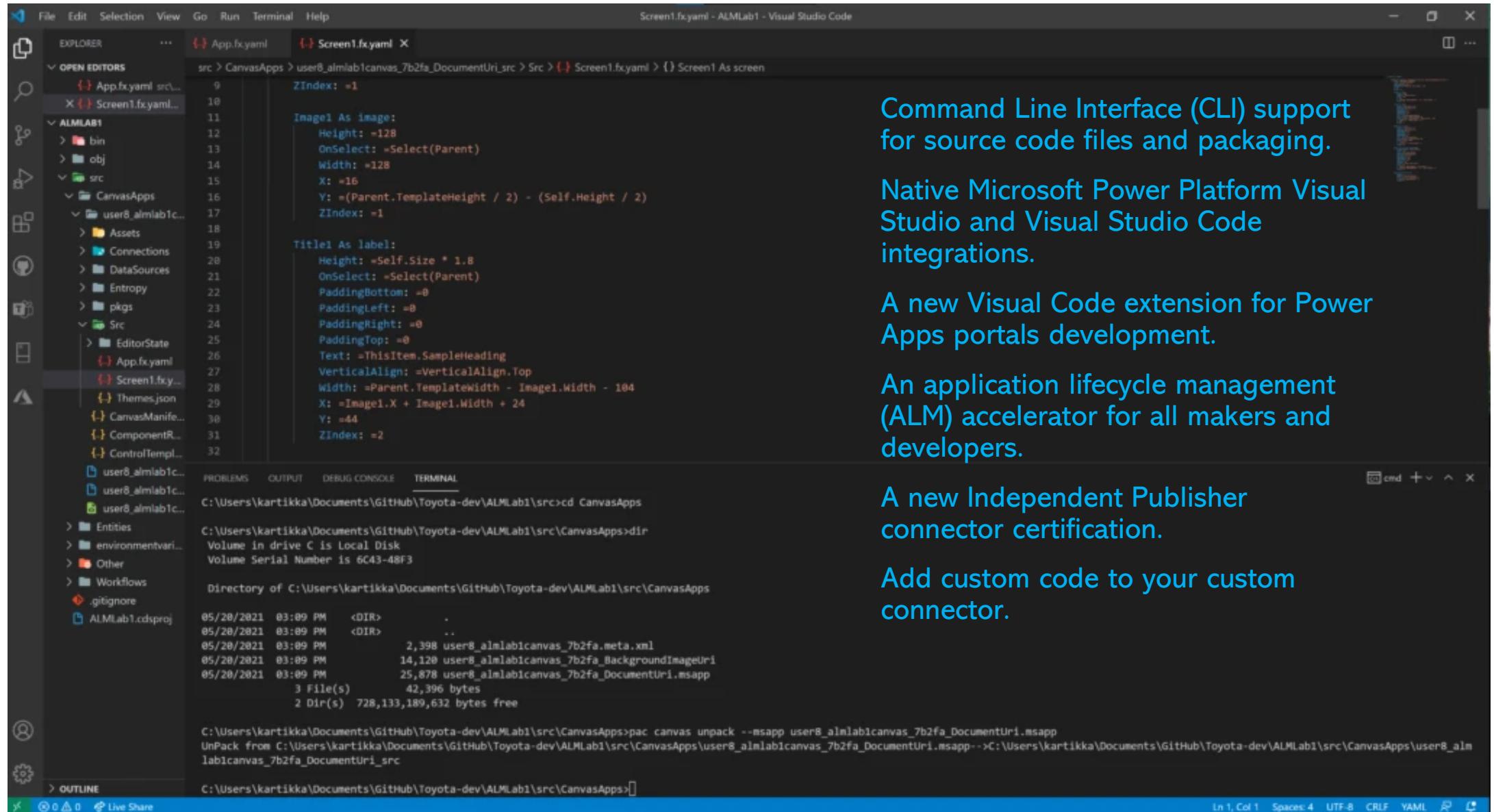
Fusion development allows your business to build better applications, faster by bringing together professional developers with citizen, or low-code, developers.



This learning path will teach you how a fusion development team functions, introduce low-code concepts for professional developers, and explain how a professional developer can enable their citizen developer counterparts to build amazing Power Apps applications using pro-code tools and frameworks they're already familiar and comfortable with, like JavaScript, ASP.NET Core web APIs, and Azure API Management.

[Transform your business applications with fusion development - Learn | Microsoft Docs](#)

Fusion development – Visual Studio



The screenshot shows the Visual Studio Code interface with the following details:

- File Explorer:** Shows the project structure under "ALMLab1".
- Open Editors:** Displays two files: "App.fx.yaml" and "Screen1.fx.yaml".
- Code Editor:** The "Screen1.fx.yaml" file contains the following code:

```
Screen1.fx.yaml - ALMLab1 - Visual Studio Code
src > CanvasApps > user8_almlab1canvas_7b2fa_DocumentUri_src > Src > Screen1.fx.yaml > Screen1 As screen

ZIndex: =1
Image1 As image:
    Height: =128
    OnSelect: =Select(Parent)
    Width: =>128
    X: =>16
    Y: =((Parent.TemplateHeight / 2) - (Self.Height / 2))
    ZIndex: =1

Title1 As label:
    Height: =>Self.Size * 1.8
    OnSelect: =Select(Parent)
    PaddingBottom: =>0
    PaddingLeft: =>0
    PaddingRight: =>0
    PaddingTop: =>0
    Text: =ThisItem.SampleHeading
    VerticalAlign: =VerticalAlign.Top
    Width: =>Parent.TemplateWidth - Image1.Width - 104
    X: =>Image1.X + Image1.Width + 24
    Y: =>44
    ZIndex: =2
```

- Terminal:** Shows command-line output for navigating to the "CanvasApps" directory and listing its contents.
- Status Bar:** Shows the current file path: "C:\Users\kartikka\Documents\GitHub\Toyota-dev\ALMLab1\src\CanvasApps".

Command Line Interface (CLI) support for source code files and packaging.

Native Microsoft Power Platform Visual Studio and Visual Studio Code integrations.

A new Visual Code extension for Power Apps portals development.

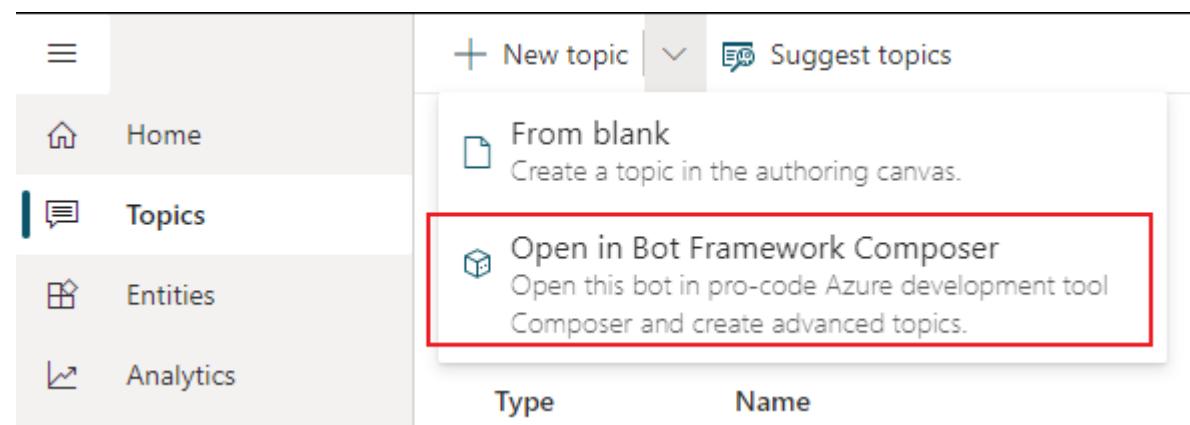
An application lifecycle management (ALM) accelerator for all makers and developers.

A new Independent Publisher connector certification.

Add custom code to your custom connector.

Bot Framework Composer

Power Virtual Agents is integrated with Bot Framework Composer, a visual authoring tool for building conversational AI apps.



Learn more about the people in your organization with Profile+

Screenshot of Microsoft Teams interface showing the Profile+ app.

The sidebar includes:

- Activity
- Chat (10)
- Teams
- Calendar
- Calls
- Files
- Profile+ (selected)
- ...
- Apps
- Help

The main area shows the Profile+ app interface:

- Search bar: Find people in your org
- User card for **Patti Fernandez**: President, Executive Management. 5 reports.
- User card for **Miriam Graham**: Director, Sales & Marketing. MiriamG@M365x864633.OnMicroso...
Works from 131/2103. Lives in San Diego, CA. Reports: 9. Request an update button.
- User cards for **Adele Vance**, **Alex Wilber**, and **Bianca Pisani**.

Bottom right corner: Built with Power Apps >

Tap into the knowledgebase of peers and experts with Perspectives

Microsoft Teams

Perspectives Perspectives About

Activity Chat Teams Calendar Calls Files Power Apps Perspectives ...

Search

Good afternoon, Navjot.

Everyone's perspective matters. Share yours and learn from others.

Add a topic

All topics

Diversity & Inclusion

Our mission is deeply inclusive: empower every person and every organization on the planet to achieve more.

6

Hiring

Learn best practices for how to navigate hiring path, review design portfolio, and prepare employees for a successful career.

1

Career

You're passionate about building teams and helping people realize their full potential. Here are ways to approach these challenges!

1

Power Apps

Questions about Microsoft Power Apps.

3

Just for fun

The place for fun discussions an camraderie.

2

New discussions

How do I use Power Apps with more than one user?

Navjot Marwaha 05/24

Power Apps 1 0

Should we create records with Power Apps or Power Automate?

Navjot Marwaha 05/24

Power Apps 1 0

Built with Power Apps >

Apps Help

Stay organized and discover content with Boards

Microsoft Teams

Search

Activity Chat Teams Calendar Calls Files Power Apps Boards Help

Boards Boards About

Good afternoon, Navjot.

Glad to have you here. As part of a team board, you will get to pin, connect, and share with people who have - you guessed it - similar interests!

+ Add a board ↑ ⚙

Find a board

Clubs

Book club 3 ⓘ Game club 0 ⓘ Hiking 7 ⓘ Outdoor sports 0 ⓘ Photography 6 ⓘ

Digital wellbeing

Meditation 2 ⓘ Remote work 3 ⓘ

Diversity & Inclusion

Built with Power Apps >

The screenshot shows the Microsoft Teams Boards interface. At the top, there's a navigation bar with 'Microsoft Teams' and a search bar. On the left, a sidebar includes icons for Activity, Chat (with 3 notifications), Teams, Calendar, Calls, Files, Power Apps, Boards (selected), and Help. The main area has tabs for 'Boards' and 'About'. A profile picture of a person is at the top right. Below, a greeting says 'Good afternoon, Navjot.' followed by a message: 'Glad to have you here. As part of a team board, you will get to pin, connect, and share with people who have - you guessed it - similar interests!'. There's a search bar labeled 'Find a board'. The interface is organized into sections: 'Clubs' (Book club, Game club, Hiking, Outdoor sports, Photography), 'Digital wellbeing' (Meditation, Remote work), and 'Diversity & Inclusion'. Each section has a thumbnail image and a title with a comment count. At the bottom, a footer says 'Built with Power Apps >'.

Power Apps portals: Introducing Power Virtual Agents integration using “Chatbot” component (public preview)

Screenshot of the Power Apps portal builder interface showing the integration of a Chatbot component.

The interface includes:

- Header:** Power Apps, Environment, Notifications, Settings, Help, User profile.
- Toolbar:** New page, Delete, Saved, Sync configuration, Browse website.
- Left Sidebar:** File, Create, Paint, Insert, Components, Settings.
- Main Area:** A preview window for the "Contoso Ltd" portal. It displays a welcome message "Hey, welcome to Power Apps Portals!" with a "Learn more" link, a cityscape illustration with a cloud icon, and a blue "Getting started" section with text about creating powerful websites.
- Right Sidebar:** Component Webpage settings for the "Home" component.
 - Display:** Name (Home), Partial URL (/).
 - Formatting:** Template (Default studio template).
 - Permissions:** (Not expanded).
- Bottom:** Chatbot component preview with a "Chatbot" icon and a cursor pointing at it.



OUR FOCUS AREAS

Standards: Agreeing on standards, best practices and patterns for building green software.

Innovation: Nurture the creation of trusted open-source and open-data projects and supporting academic research.

Community: Facilitate the growth of a diverse and international community of green software ambassadors.

