



# Ship faster. Stress less.

Idea to Ops with Azure and GitHub Copilot

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the new command center..| >



Create

Collaborate

Operate

# Agentic DevOps



Evolving the developer experience from AI-infused to AI-native

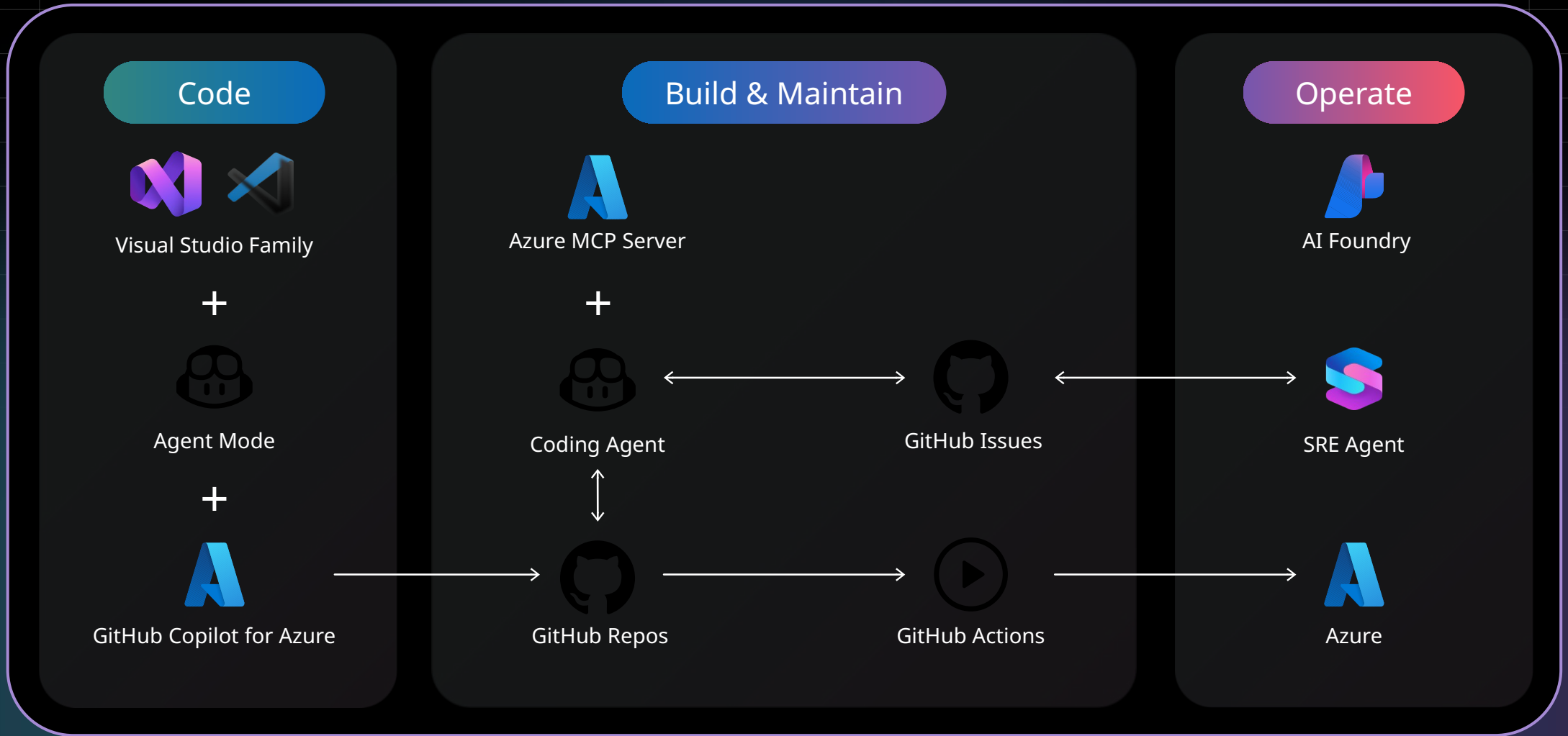


Increasing productivity with AI extended across the software lifecycle

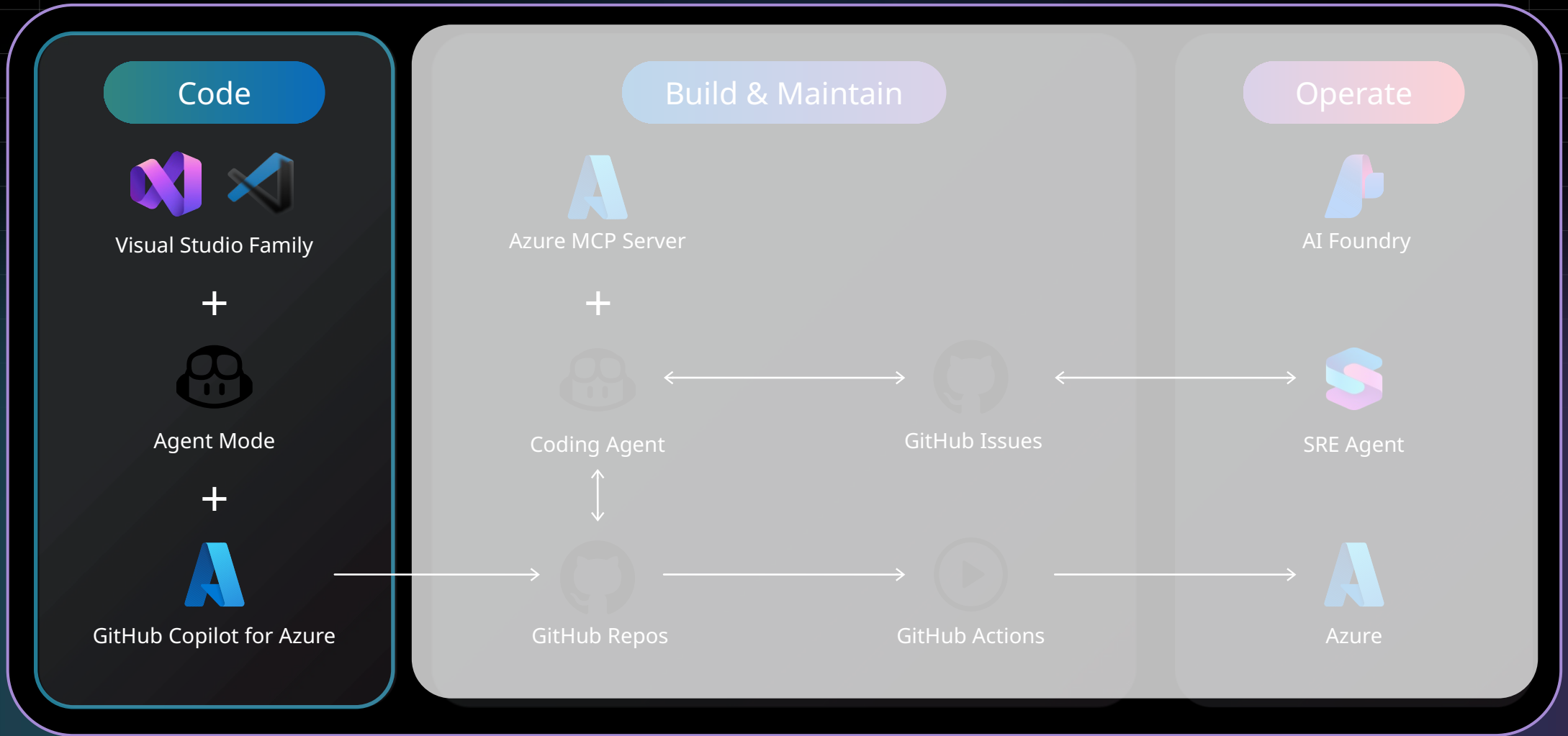


Accelerating delivery of AI apps and agents with AI platform services

# GitHub for Agentic Dev



# GitHub for Agentic Dev





VS Code  
+ GitHub Copilot



Visual Studio  
+ GitHub Copilot



IntelliJ & 3P IDEs  
that Support MCP



GitHub Coding  
Agent & CLI



Internal & External  
Custom Agents

## Azure MCP Server



Generally available

# All of Azure at your fingertips

## The Azure MCP Server

→ 47 services

→ Secured with Azure Identity

[aka.ms/azmcp](https://aka.ms/azmcp)  
[aka.ms/AzureToolsExtension](https://aka.ms/AzureToolsExtension)

The screenshot shows a VS Code editor with a Python file named `main.py` open. The code includes a shebang line, a docstring, and imports for `sys` and `asyncio`. A chat window is open on the right, showing a conversation with an AI assistant. The prompt is "Describe the tools in the Azure MCP server". The assistant's response is as follows:

Used 5 references

I'll help you explore the Azure MCP server tools. Let me gather information about what tools are available.

Thinking

Based on the available tools, here's an overview of the **Azure MCP Server** capabilities:

- Core Operations**
- Resource Management**
  - Subscriptions** - List and manage Azure subscriptions
  - Resource Groups** - Create and manage resource groups
  - Resource Graph** - Query resources across subscriptions using Azure Resource Graph (ARG)
  - Authorization/RBAC** - Manage role assignments and permissions
  - Resource Health** - Monitor resource availability and health status
  - Quota** - Check resource quotas, usage, and available regions
- Diagnostics & Monitoring**
  - AppLens** - Primary tool for diagnosing Azure resource issues with AI-powered insights and remediation recommendations
  - Activity Logs** - Track resource deployment, modification, and access history
  - Azure Monitor** - Query logs and metrics using KQL
  - Application Insights** - Monitor application performance and telemetry
- Data & Storage Services**

The chat window also shows a text input field with the prompt "Add context (#), extensions (@), commands (/)" and a dropdown menu for the AI model, currently set to "Claude Sonnet 4.5".

# Let's build an app



**VS Code & GitHub Copilot**



**The Azure MCP Server**



**Spec Kit**

# Azure MCP Server + GitHub Spec

[github.com/github/spec-kit](https://github.com/github/spec-kit), 42.4K stars

## `/speckit.constitution`

Use the Azure MCP Server tools. Always check Azure Best practices. Host my app in Azure Container Apps. Always use Managed Identity

## `/speckit.specify`

I want to build an app for a website named ZavaFit that helps people discover and locate fitness studios and personal trainers

## Azure Tools + Azure MCP Server

[aka.ms/AzureToolsExtension](https://aka.ms/AzureToolsExtension)



## Spec Kit

<https://github.com/github/spec-kit>



## `/speckit.constitution`

Use the Azure MCP Server

Use the Best Practices tools from the Azure MCP Server to decide how to implement Azure related changes.

Host the app in Azure Container apps.

Use the Azure Developer CLI for deployment.

I want to use the Microsoft Agent Framework to implement

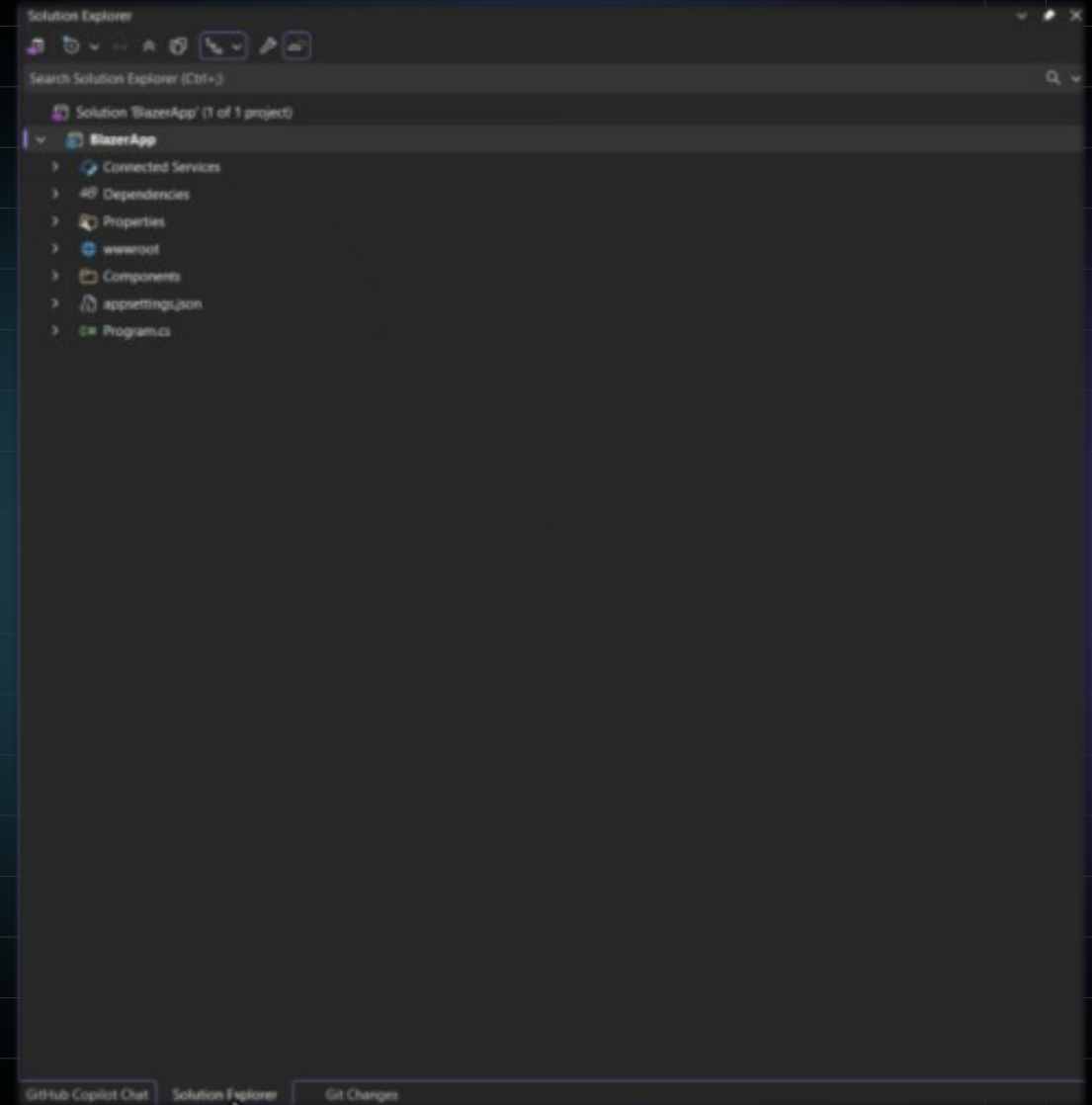
# Azure MCP Server in Visual Studio 2026

Now GA and built into Visual Studio 2026

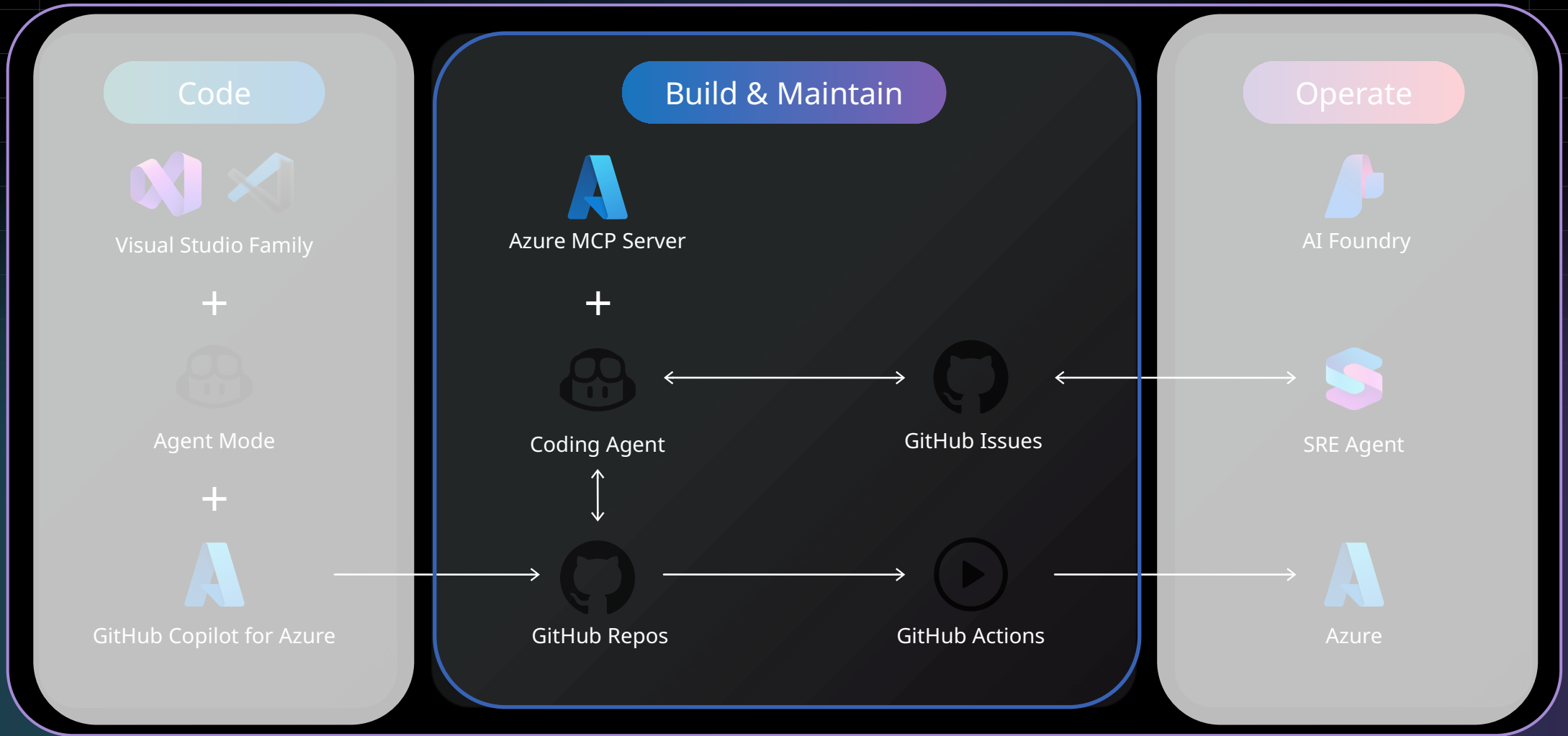
- Bring Azure resource context to your code
- Build smarter with AI and best practices
- Manage and troubleshoot with confidence
- Streamline CI/CD setup and publish with ease



[aka.ms/azmcp/vs2026](https://aka.ms/azmcp/vs2026)



# GitHub for Agentic Dev



## Copilot Coding agent

# Copilot handles the entire pull request workflow, so you can ship faster

From working on existing PRs, to summarizing changes, to logically grouping changes, Copilot does the prep work so you can review & merge.

The screenshot shows a GitHub pull request page for the repository 'octoarcade / invaders'. The pull request title is 'Add glowing sprites to characters #6230' and it is currently in 'Draft' status. The pull request was created by 'semyonrush' 3 minutes ago using Copilot. The description states: 'Implements some polish to our characters, especially when in a battle sequence. Adds some glowing sprites when that happens, and does so for all our main characters.' A commit is shown as 'first commit' with a 'Verified' badge and commit hash '3fbdce0'. A comment from 'semyonrush' asks '@copilot can you continue where i left off? Just need to make sure to update test coverage and do the busywork'. A comment from 'Copilot' responds: 'I've opened a new pull request, #3624, to work on those changes. Once the pull request is ready, I'll request review from you. Help improve Copilot by leaving feedback using the thumbs up or thumbs down buttons.' A note indicates 'Copilot linked an issue that may be closed by this pull request' with the issue title '[WIP]: Add test coverage and update glowing sprites for remaining characters #6233' in draft status. The right sidebar shows 'Reviewers' (None), 'Assignees' (None), 'Labels' (None), 'Development' (with a note that merging may close issues), 'Projects' (None), 'Notifications' (with an 'Unsubscribe' button), and '1 participant'.

GitHub Copilot

# Coding Agent + Azure MCP Server

→ Make the Coding Agent an Azure Expert

→ Create custom agents

→ azd coding-agent config

Investigating backend errors and aligning IaC with container resources ✓ 18m 19s ...

- > Run "Install azd" custom setup step
- > Run "Azure login" custom setup step
- > Start 'playwright' MCP server
- > Start 'Azure' MCP server
- > Start 'github-mcp-server' MCP server

Now let me get the Bicep schema for Container Apps to ensure correct syntax:

- > Call to Azure Bicep Schema
- > Call to Azure Bicep Schema

Great! Now I have the schema. Let me update the Bicep file with the scaled resources. Based on the schema, I can see that:

- `cpu` should be a number (can use `json()`)
- `memory` is a string (e.g., "3Gi")
- `scale` properties: `minReplicas` and `max`

> Edit `infra/main.bicep`

> Edit `infra/main.bicep`

Assign Copilot to issue Preview Feedback X

Copilot will open a pull request using the issue's description, comments, and the additional prompt if you provide one. Choose a custom agent to tailor Copilot for specific tasks.

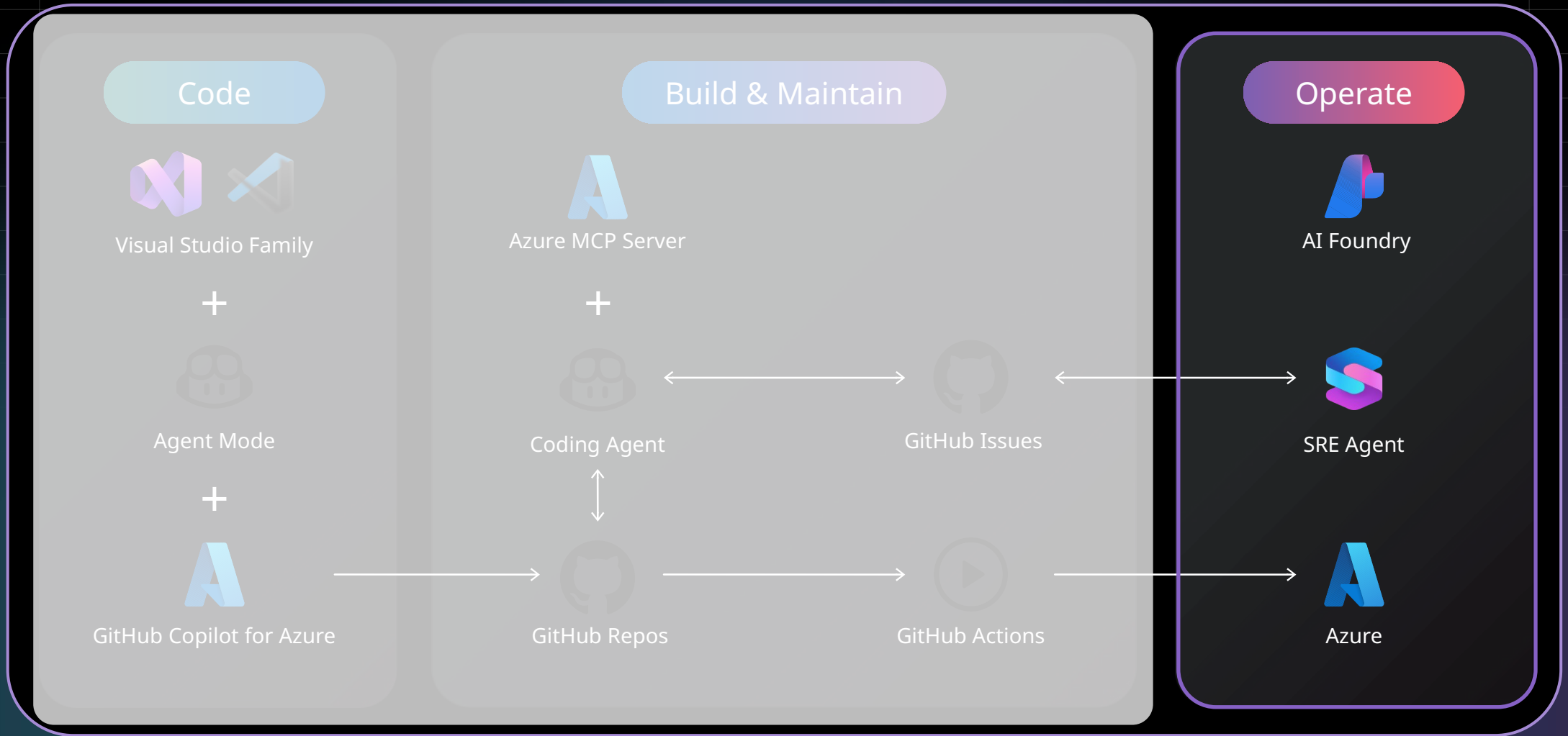
Target repository: `akwintx/agent-devops-azure-spec` Base branch: `001-fitness-disco...`

Custom agent: `None`

- ✓ None
- Azure Expert
- + Create an agent

Cancel Assign

# GitHub for Agentic Dev





# Azure SRE Agent

# Azure SRE

Automate operations, reduce toil and accelerate innovation



## Infuse expertise

Incorporate your domain knowledge and context for intelligent automation



## Native incident integrations

Automate detection, triage, and resolution with PagerDuty and ServiceNow



## Manage Azure resources

Improve uptime and reduce toil with automated alerts, runbooks, and resource actions



## Extend your stack

Connect Dynatrace, Datadog, and other sources via MCP for unified telemetry



## Proactive checks

Schedule health, compliance, and policy tasks to prevent incidents



## Actionable workflows

Trigger notifications and updates through Outlook, Teams and DevOps (GitHub and ADO)

# Azure SRE Agent Partners

- Connect to third-party logs, traces and metrics via partners MCP Servers
- Collaborate with partner SRE agents on multi-cloud workflows
- More incident management, TSG and observability partners in 2026



# Microsoft teams are benefitting from using SRE

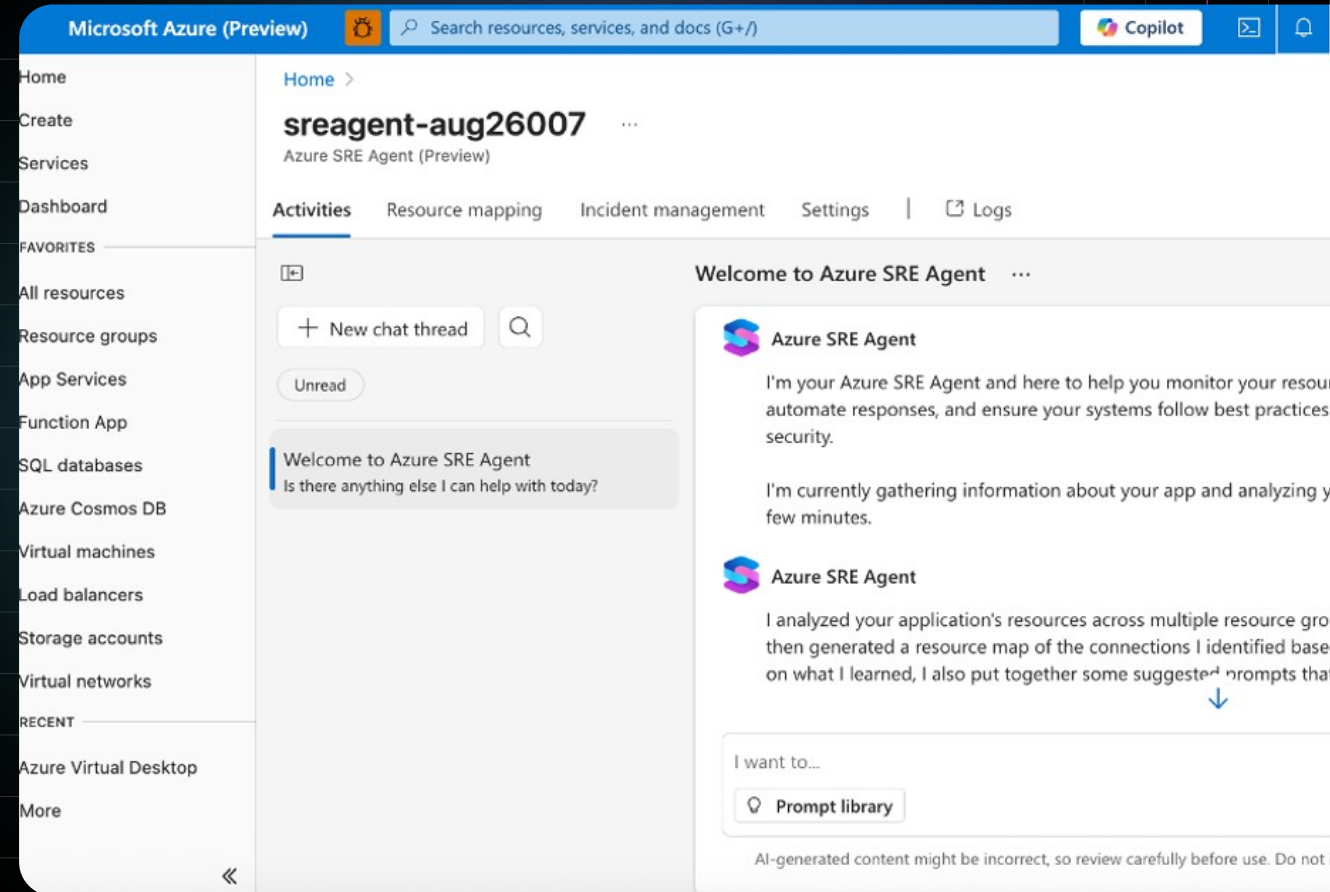
73K+

20K+

95%+

# New capabilities announced at Ignite

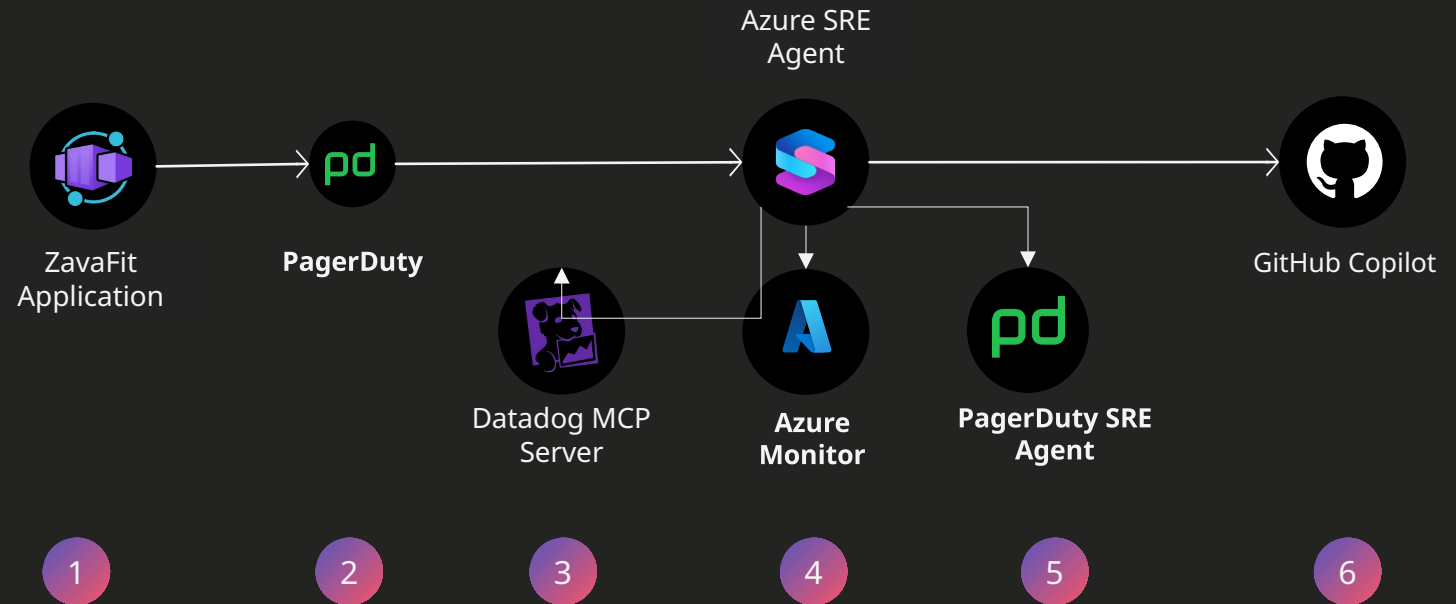
- Custom sub-agent builder
- Debug trace view
- Scheduled tasks
- Incident analysis
- Bring your own data and knowledge
- File upload
- Outlook/Teams Notifications



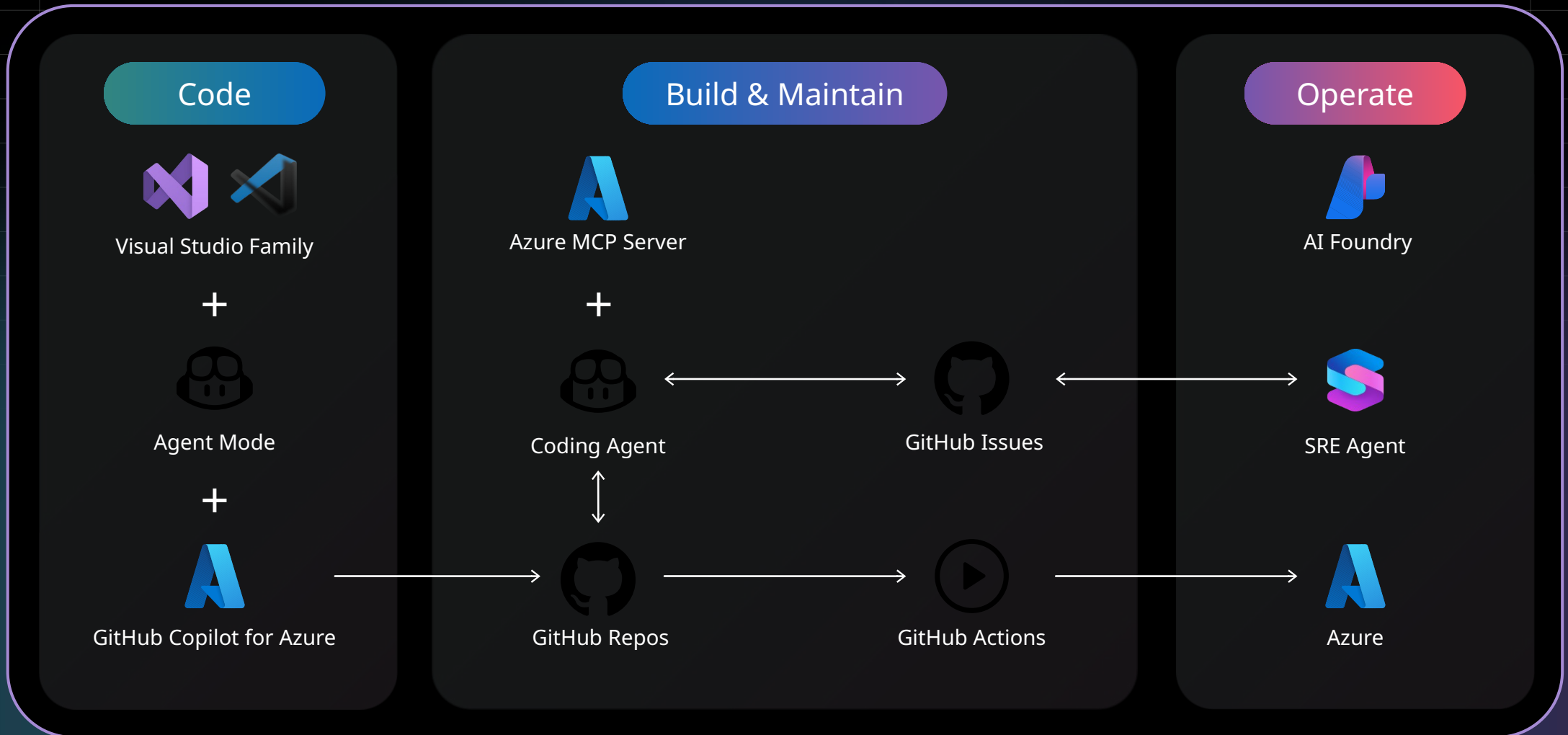
The screenshot displays the Microsoft Azure (Preview) portal interface. The top navigation bar includes the Microsoft Azure (Preview) logo, a search bar for resources, services, and docs, and the Copilot logo. The left sidebar lists various Azure services and categories like Home, Create, Services, Dashboard, FAVORITES, All resources, Resource groups, App Services, Function App, SQL databases, Azure Cosmos DB, Virtual machines, Load balancers, Storage accounts, Virtual networks, RECENT, Azure Virtual Desktop, and More. The main content area shows the Azure SRE Agent (Preview) chat interface for a resource named 'sreagent-aug26007'. The chat interface includes a 'New chat thread' button, an 'Unread' indicator, and a welcome message from the Azure SRE Agent. The agent's messages state: 'I'm your Azure SRE Agent and here to help you monitor your resources, automate responses, and ensure your systems follow best practices for security. I'm currently gathering information about your app and analyzing your logs. It will take a few minutes.' and 'I analyzed your application's resources across multiple resource groups and then generated a resource map of the connections I identified based on what I learned. I also put together some suggested prompts that you can use to get started.' Below the messages is a 'Prompt library' button and a disclaimer: 'AI-generated content might be incorrect, so review carefully before use. Do not use for critical decisions.'

# Scenario: Modern Site Reliability Stack

- 1 Azure Container App crashes
- 2 PagerDuty detects an Incident and informs Azure SRE Agent
- 3 Azure SRE Agent begins investigation
- 4 Azure SRE Agent brings in information from Azure, Datadog, and PagerDuty
- 5 Azure SRE Agent performs a mitigation
- 6 Azure SRE Agent hands off to GitHub Copilot with details on a long-term fix



# Azure + GitHub for Agentic DevOps



## SRE Agent

<http://aka.ms/sreagent>

## Azure Tools for VS Code

[aka.ms/AzureToolsExtension](http://aka.ms/AzureToolsExtension)

## Azure MCP server

[aka.ms/azmcp](http://aka.ms/azmcp)

## AI Toolkit

[aka.ms/AIToolkit](http://aka.ms/AIToolkit)

BRK105 • Reimagining software development with GitHub Copilot and AI agents

On demand

BRK107 • Safe and scalable DevOps with AI agents on GitHub

On demand

BRK108 • Secure, compliant, and fast with GitHub

On demand

BRK122 • Visual Studio 2026 is fast, modern, and AI-powered

Nov 20 4:45 - 5:30 PM Pacific Moscone West, Level 3, Room 3016



# Thank You



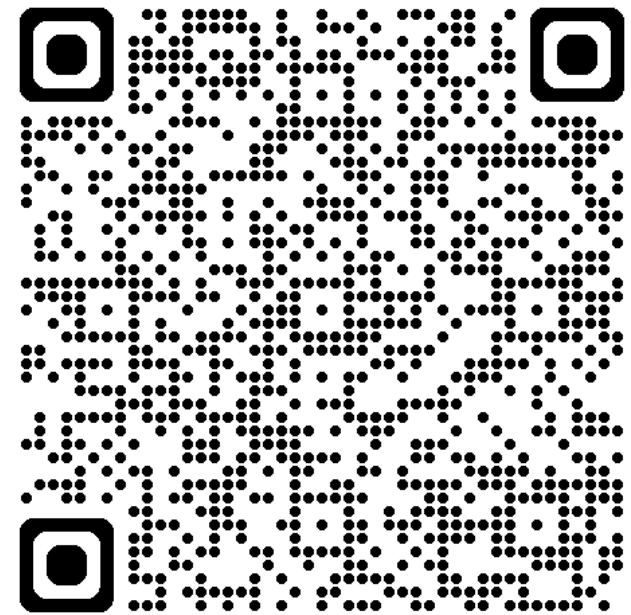
# How did we do?

Tell us your thoughts about our sessions and complete the event survey



Go to [aka.ms/ignite/sessions/evals](https://aka.ms/ignite/sessions/evals) or scan the QR code

Get started and  
build Azure skills  
on MS Learn



# Azure Accelerate

Fuel transformation with experts and investments



## Access trusted experts

Specialized partners | Cloud Accelerate Factory



## Unlock Microsoft investments

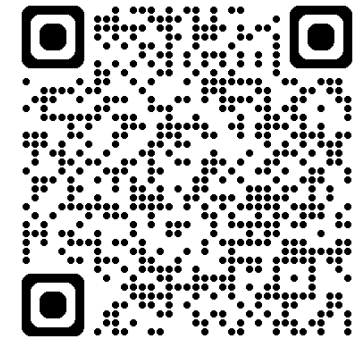
Partner funding | Azure credits



## Succeed with comprehensive coverage

Spans migration, modernization, and AI scenarios

Includes **new** zero cost deployment benefit with **Cloud Accelerate Factory**



[aka.ms/AzureAccelerate](https://aka.ms/AzureAccelerate)