

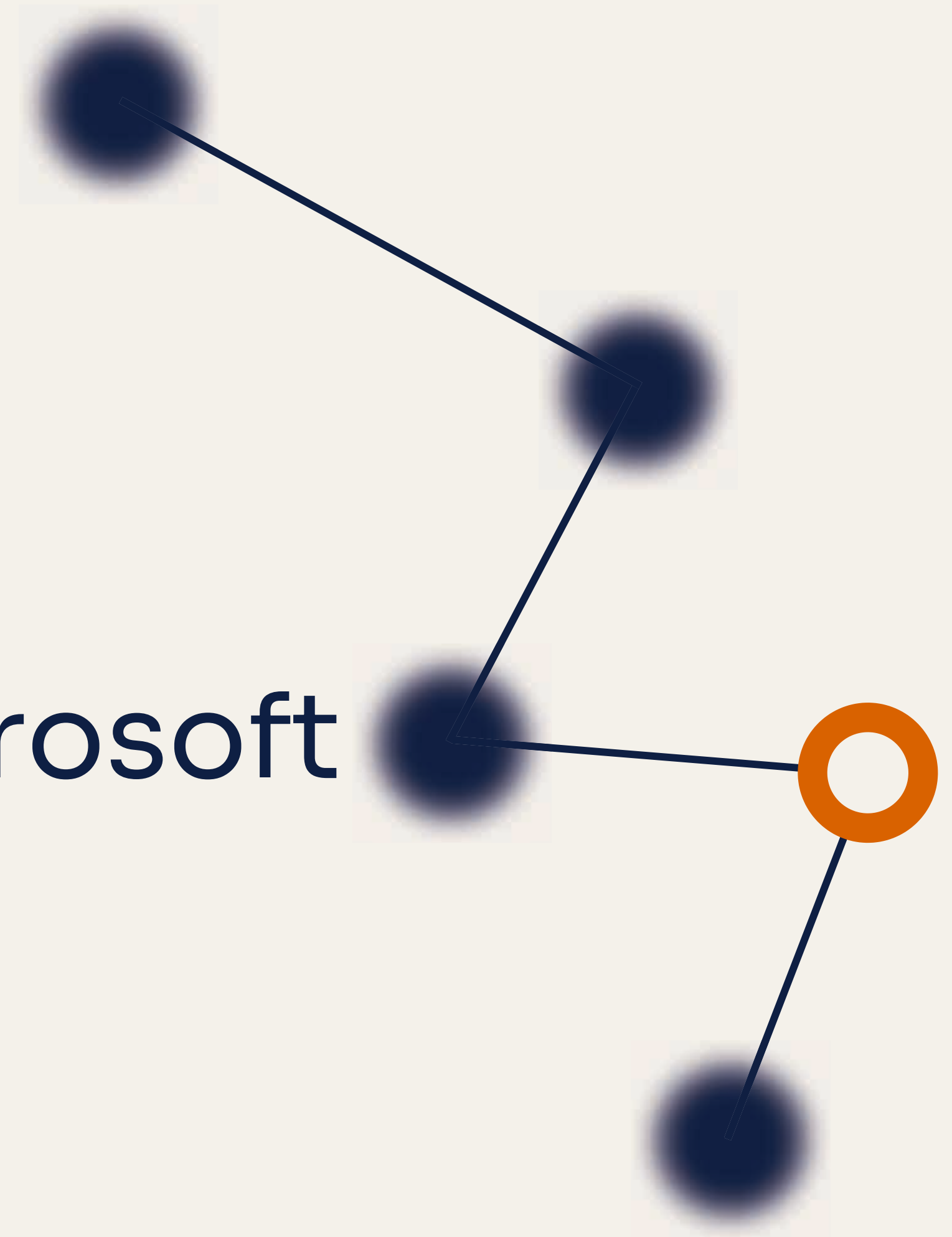


Microsoft Teams Application
Development Accelerator

Week 1: Class

Introduction to Microsoft Teams AppDev

September 24, 2025





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Developer · Instructor
Writer · Speaker · Coach
21 Year Microsoft MVP

ANDREW@VOITANOS.IO

VOITANOS.IO



- Microsoft 365 Developer
- SharePoint Framework (SPFx)
- Microsoft Teams Apps
- Microsoft Azure
- SharePoint Embedded
- Microsoft 365 Copilot



Voitanos



**Code. Deploy.
Go Live.**



Full Stack Dev's Microsoft 365 Playbook

Agenda

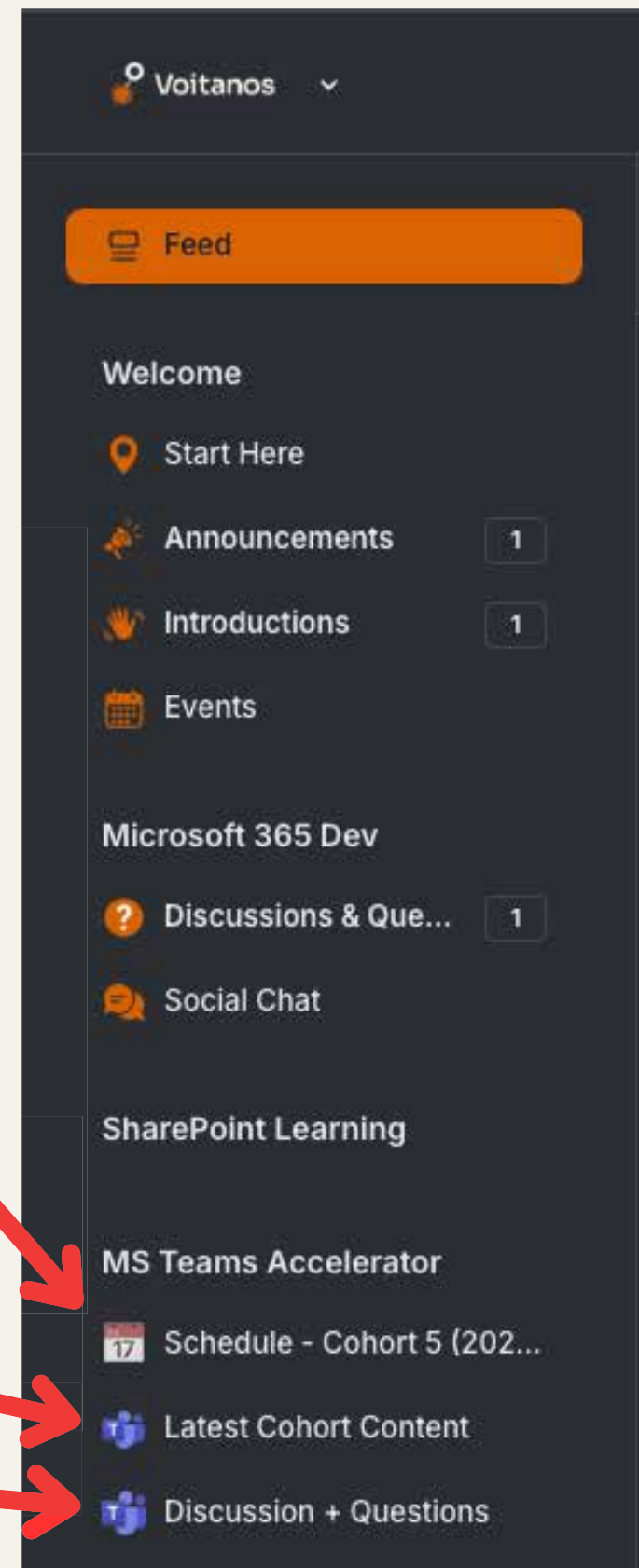
- **MS Teams AppDev Accelerator Logistics**
- **What's In [and Out] of Scope**
- **Introduction to Microsoft Teams Apps**
- **MS Teams AppDev Program Syllabus**
- **Prepare Your Dev Environments**
- **Week 1 Homework & Open Discussion**

Microsoft Teams Application Development Accelerator Logistics



Logistics

- **Weekly schedule (all times ET)**
 - Wednesday's, 11a – 1p · Class (Teaching)
 - Monday's, 11a – 1p · Office Hours
 - Live Meetings held in Voitanos Learn
- **Recorded meetings, links, on-demand lessons, weekly assignments**
- **Asking questions (async)** 🙋♂️🙋♀️
 - Text or video (Loom, Tella.tv, etc.)
 - No 1:1 (email & DMs) unless customer support issue



Schedule Adjustments

- **Week 8 Office Hours**
 - **Moved:**
 - ~~Monday, November 17~~ ▼
 - Friday, November 14
- **Other Topics**
 - Resource Specific Consent (RSC)
 - Meeting Extensions
 - Monetization of Teams Apps (App Source)

What's In [and Out] of Scope



What's In & Out of Scope?

In Scope

- **Primary:**
 - Microsoft Teams app dev
 - Native Teams app development
 - Audience: full-stack developers
- **Secondary:**
 - M365 Agents for VS Code (ATK)
 - Node.js
 - React
 - TypeScript
 - Cloud resources hosted in Azure

Out of Scope

- **Creating MS Teams apps using:**
 - YO Teams
 - SPFx*
 - Power Apps
 - Visual Studio ATK
 - .NET
 - ASP.NET
 - Blazor
 - Build Teams apps without VS Code ATK*

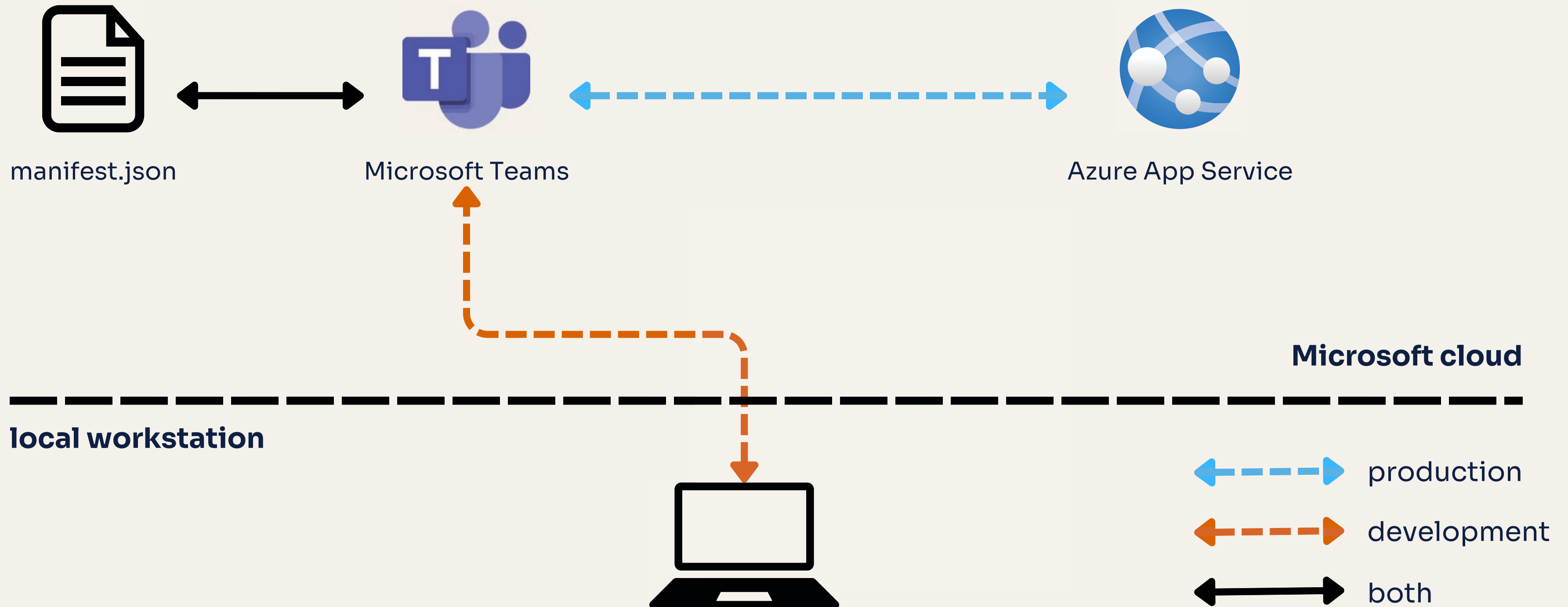
Introduction to Microsoft Teams Apps



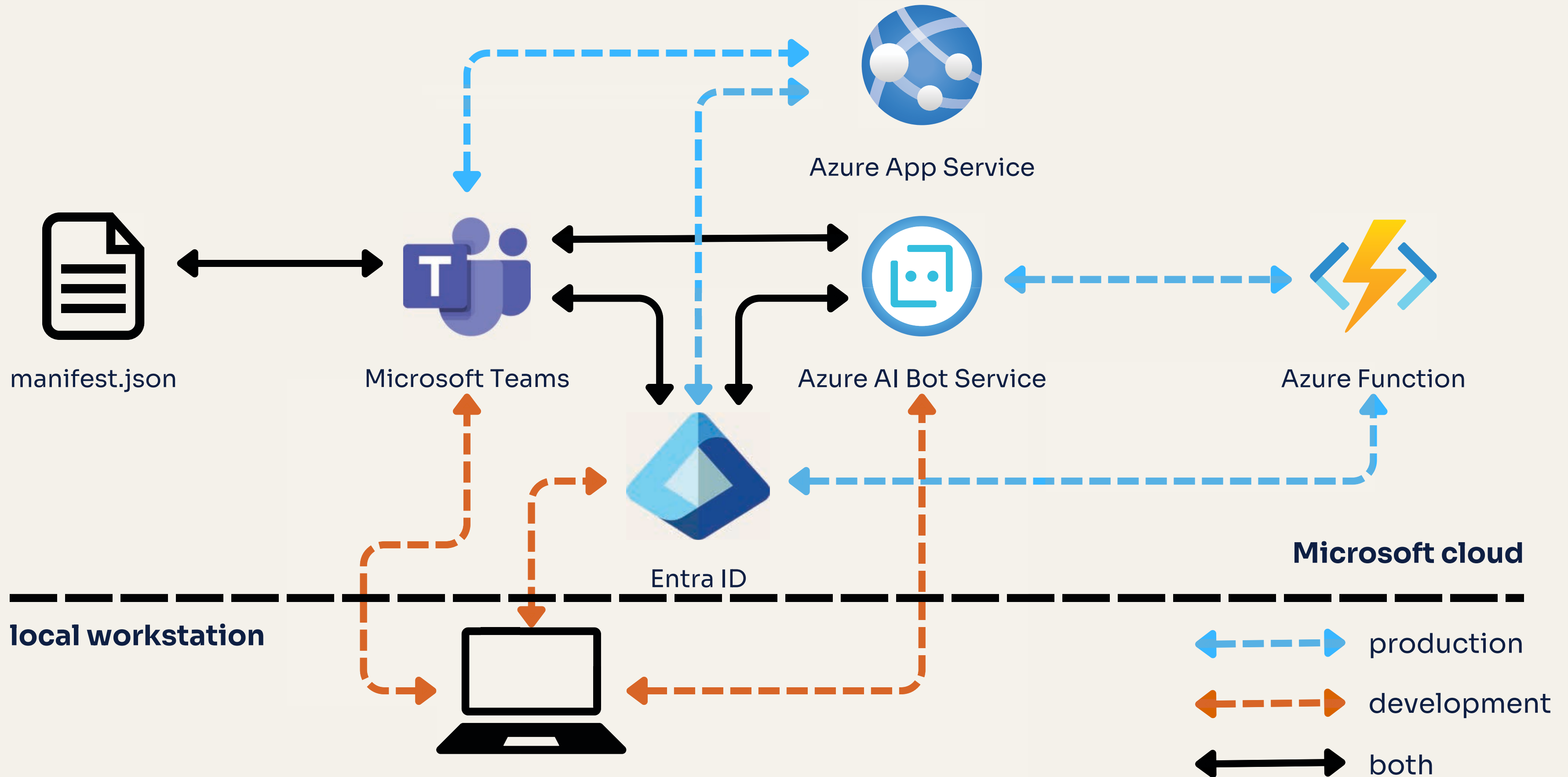
**Microsoft Teams Apps
are JUST Web Apps**



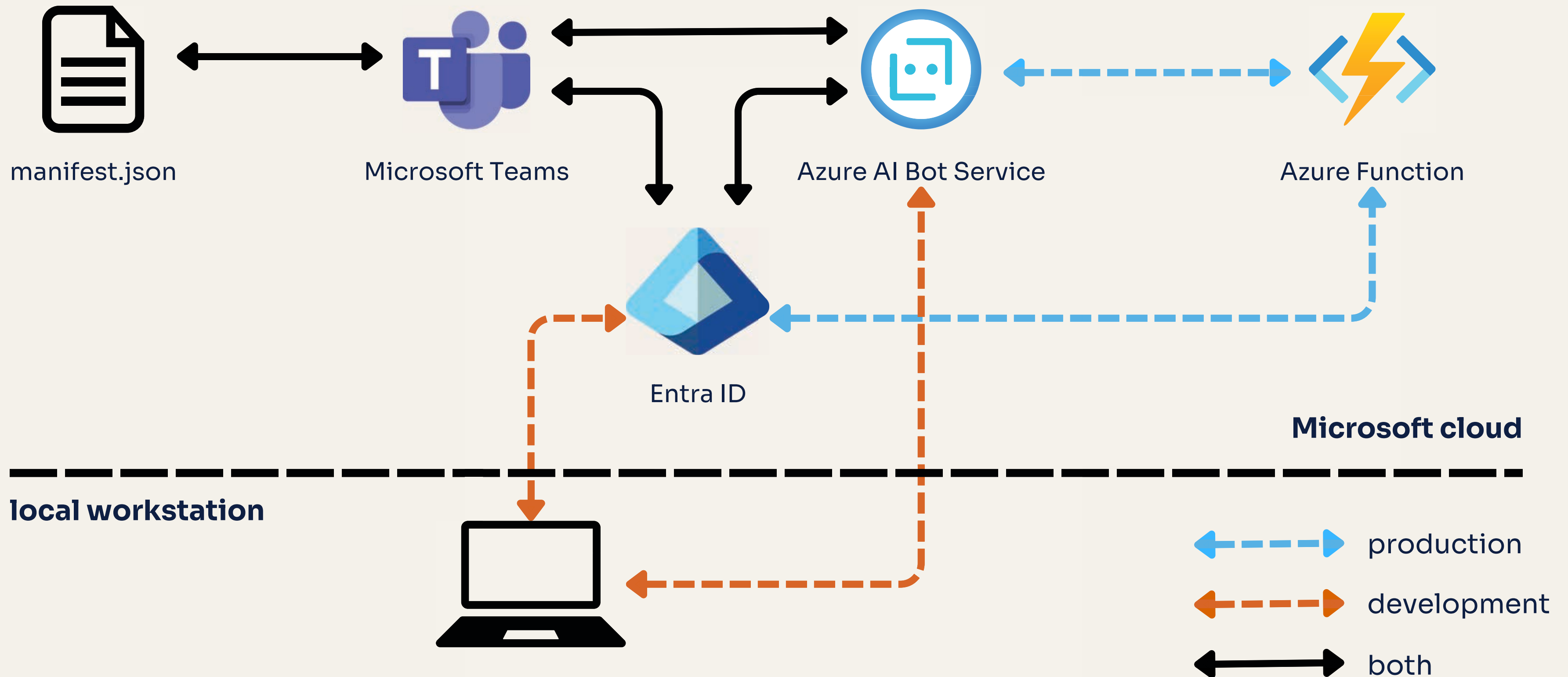
Microsoft Teams Tab



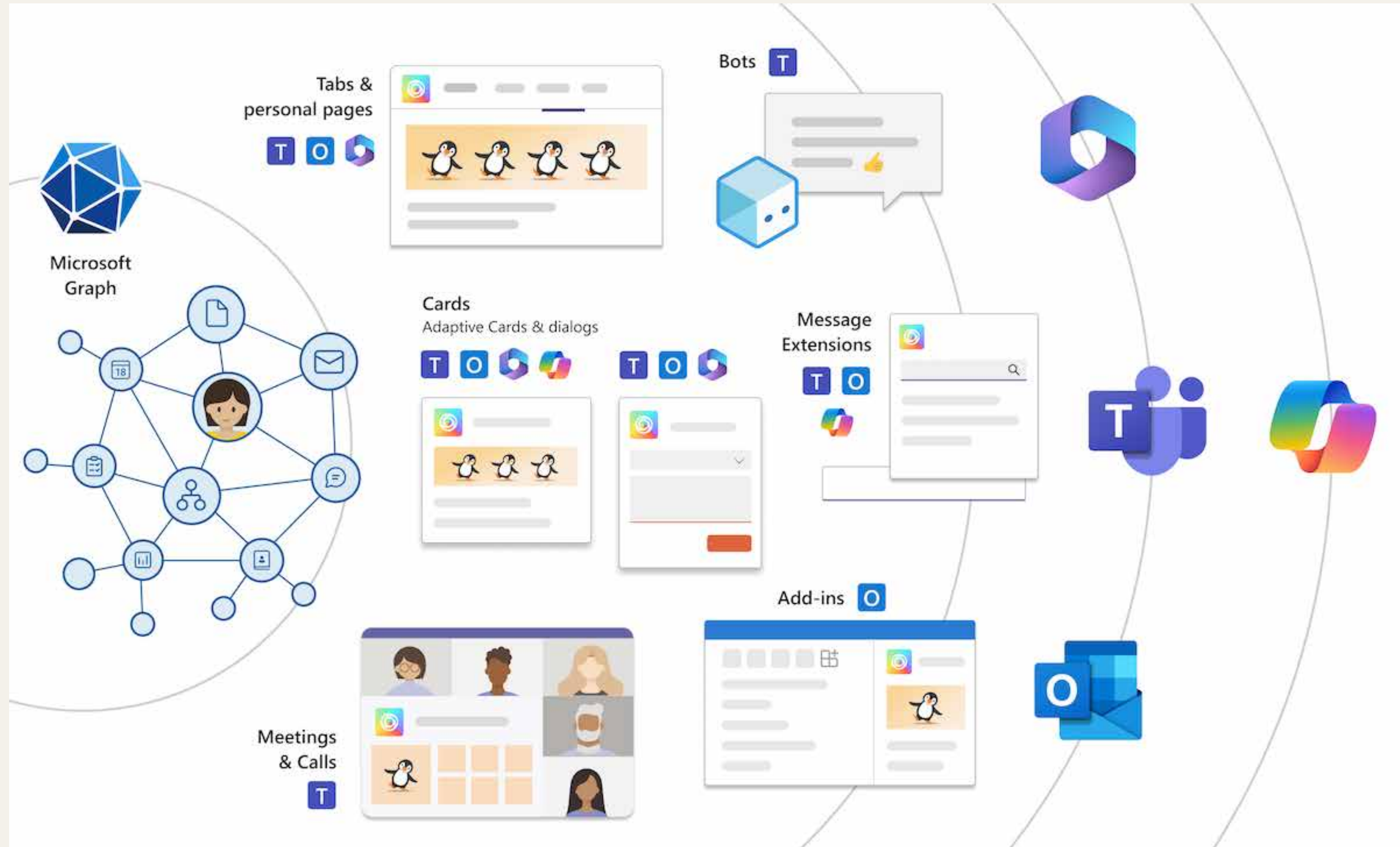
Microsoft Teams Meeting Extension



Microsoft Teams Bot



Teams Platform Features



Microsoft Teams Application Development Accelerator Syllabus



Syllabus

- **Kickoff & Introduction to Microsoft Teams Application Development**
- **Personal & Channel Apps**
- **Deployment of Microsoft Teams Apps**
- **Conversational Bots (Microsoft 365 Agents SDK & Teams AI Library)**
- **Dialogs in Apps & Bots**
- **Message Extensions**
- **Authentication & SSO with Teams**
- **Declarative Agents for Microsoft 365 Copilot**

Prepare Your Environments for Microsoft Teams App Development



Teams App Development Tooling Options

- **Microsoft 365 Agents Toolkit for VS Code**
 - aka: ATK
- **Microsoft 365 Agents Toolkit for Visual Studio**
- **Anything else**



Prepare Your Development Environments for Microsoft Teams App Dev



Prepare for Microsoft Teams App Dev

- **What you need**
 - Microsoft 365 Tenant
 - Microsoft Entra ID (Azure AD)
 - Tech stack to build the app
 - Host for cloud resources
- **What you can use**
 - Cloud resource host (Azure, AWS, GCP)
 - Any tech stack (Node, ASP.NET, Next.js, Remix, etc)
 - Any tooling
- **What we will use**
 - Node.js
 - M365 Agents Toolkit (ATK)
 - Azure
- **What else is available?**
 - Developer Portal for Teams

What You NEED

- **Cloud resources**
 - Where is your app code **hosted**?
 - Cloud resources
 - What does your app **use**?
 - Cloud resources
 - Where is the app **surfaced**?
 - Microsoft Teams
- **App developer environment**
 - Your tech stack (Node.js, ASP.NET, etc)
 - M365 Agents Toolkit
 - Visual Studio Code Extension
 - CLI
- **Microsoft 365 Tenant**
 - M365 Dev Program Status
 - Microsoft 365 Biz Basic (\$6–7.20/mo)
 - Microsoft 365 Copilot license (\$30/mo)

What Will We USE?

- **Cloud resources**
 - Where is your app code **hosted**?
 - Cloud resources 🖱️ **Azure** (or any cloud)
 - What does your app **use**?
 - Cloud resources 🖱️ **Azure** (or any cloud)
 - Where is the app **surfaced**?
 - Microsoft 365
- **App developer environment**
 - **Node.js & React**
 - M365 Agents Toolkit extension for VSCode
 - M365 Agents Toolkit CLI (**atk**)
 - Developer Portal for Teams
- **SDKs**
 - [client] Teams JavaScript SDK (Teams.js)
 - [server] M365 Agents SDK for Node.js
 - [server] Teams AI Library for Node.js

What is NOT Covered?

- **.NET / ASP.NET**
- **SharePoint Framework***
- **Power Apps**
- **Copilot Studio** (Lite / Full experience)
- **M365 Agents Toolkit for Visual Studio**



Prepare for Microsoft Teams App Development



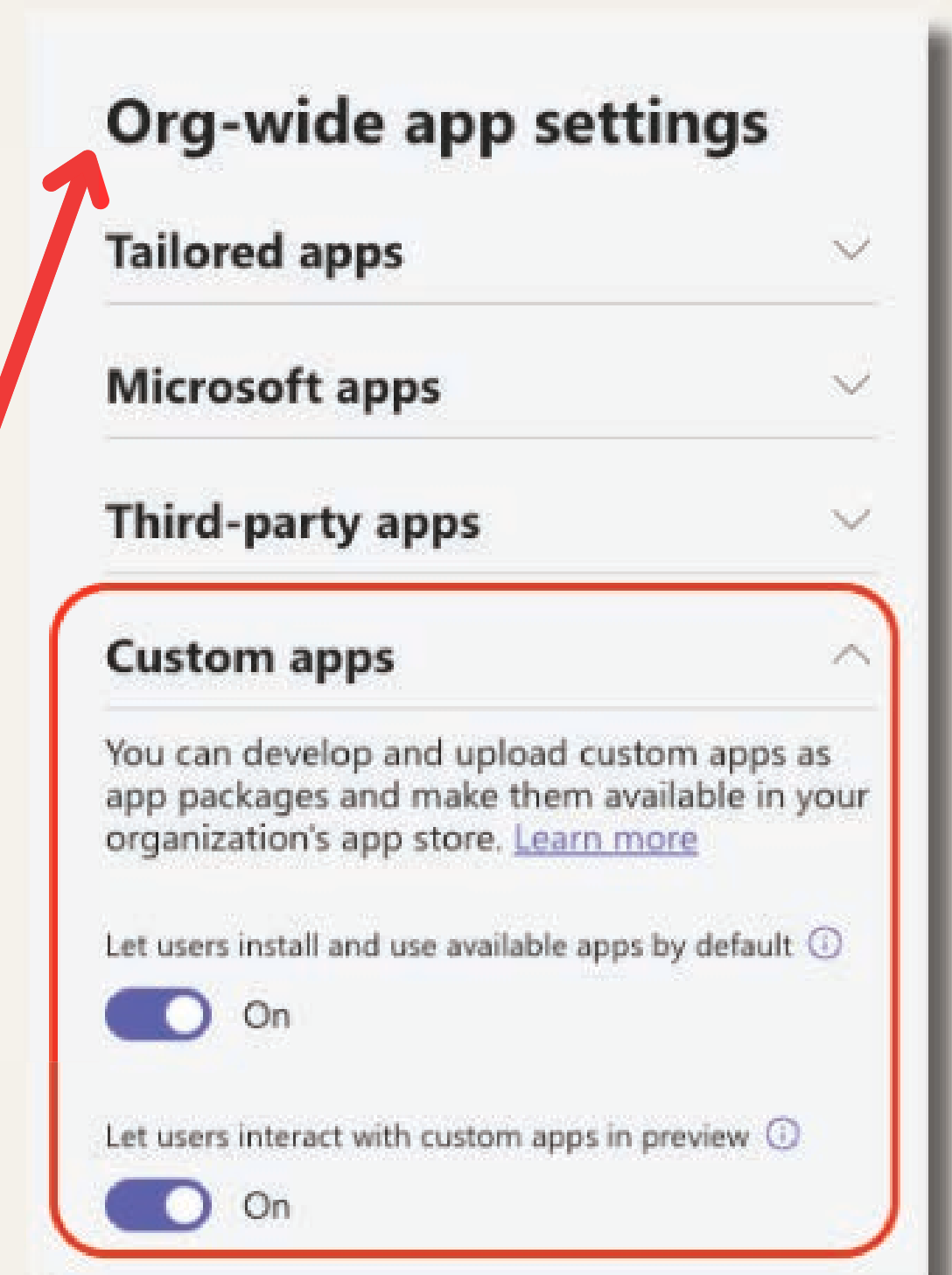
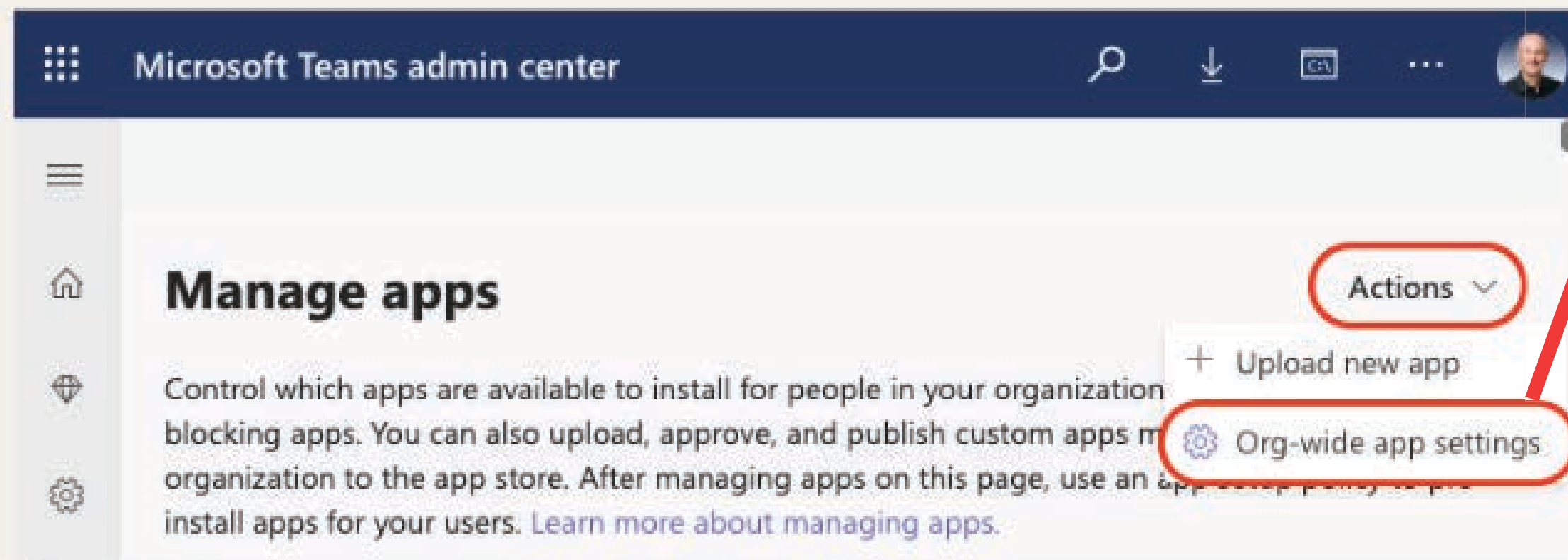
**Ensure Custom Apps Are
Allowed & Your Account
Can Sideload**



Enable Sideloading Capability

MICROSOFT TEAMS ADMIN CENTER

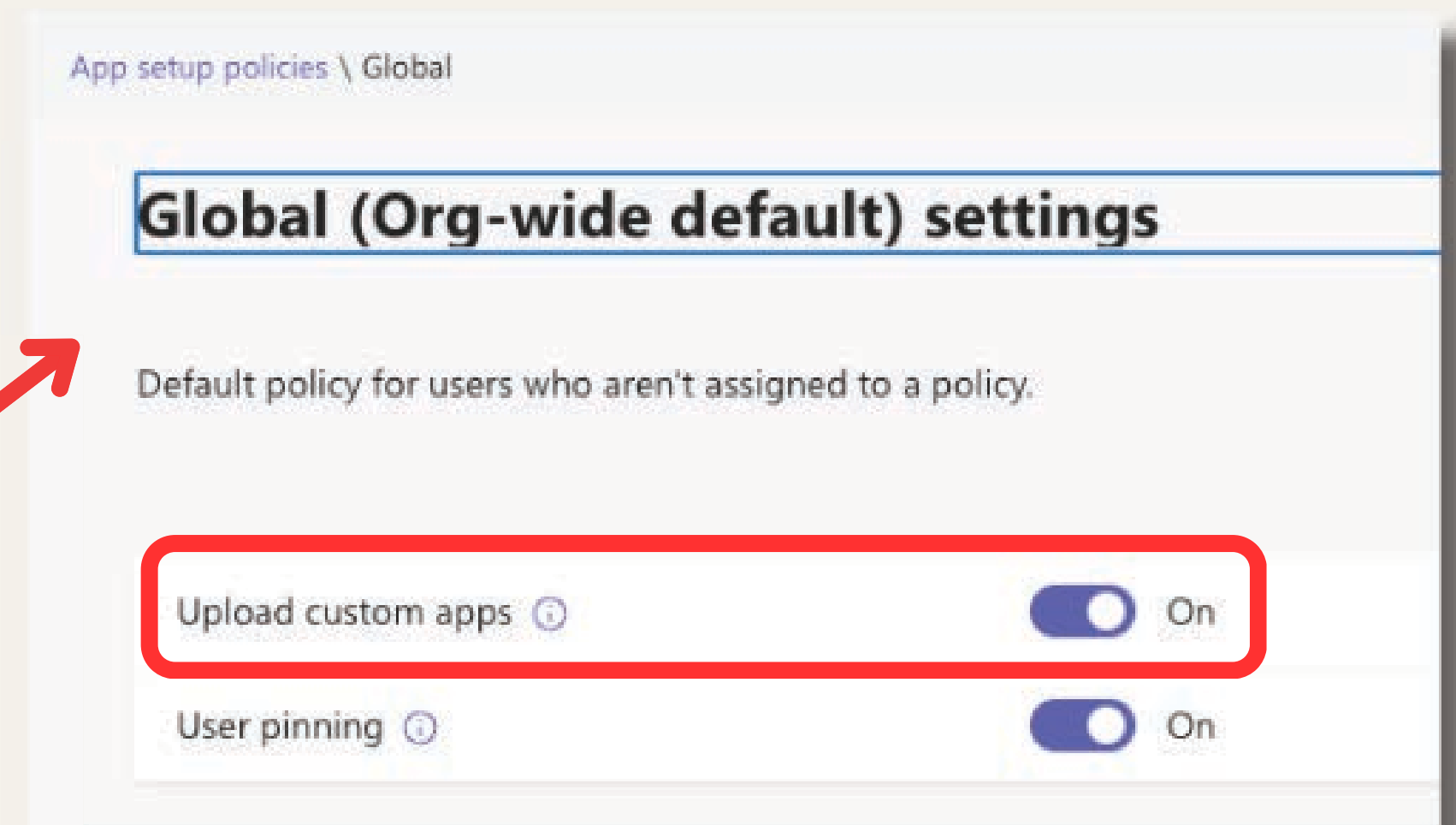
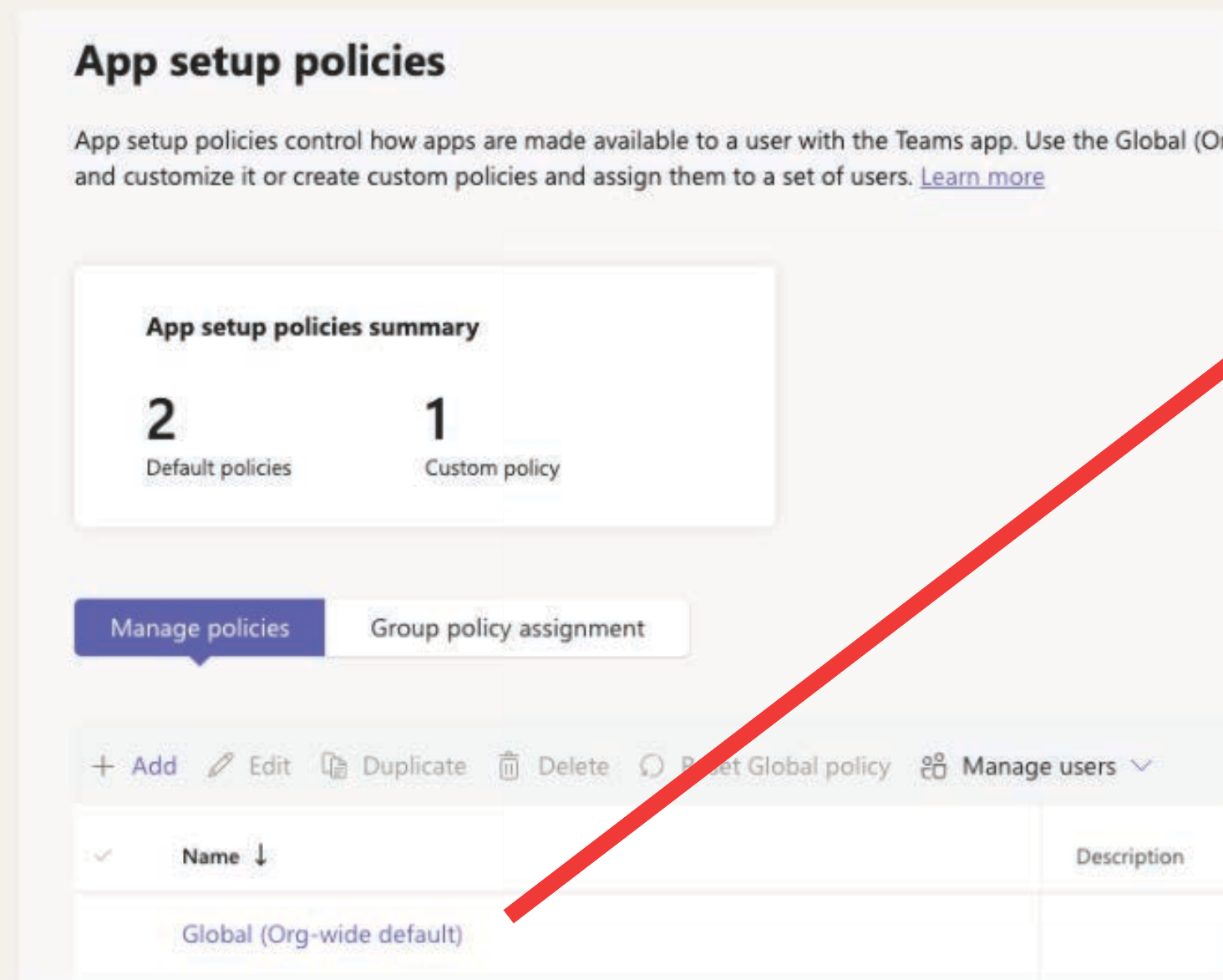
- Teams Apps ➡ Manage Apps
 - Actions [selector top right]
 - Org-wide App Settings
 - Custom Apps = 



Grant Users Sideloading Rights

MICROSOFT TEAMS ADMIN CENTER

- Teams Apps ➡ Setup Policies
 - Global (Org-wide default)
 - Upload custom Apps = 





Prepare your Development Experience



Developer Environment Requirements

GitHub Codespaces

- **Microsoft 365 Tenant**
- **Microsoft 365 Account**
 - Global Admin for tenant
- **GitHub Account**

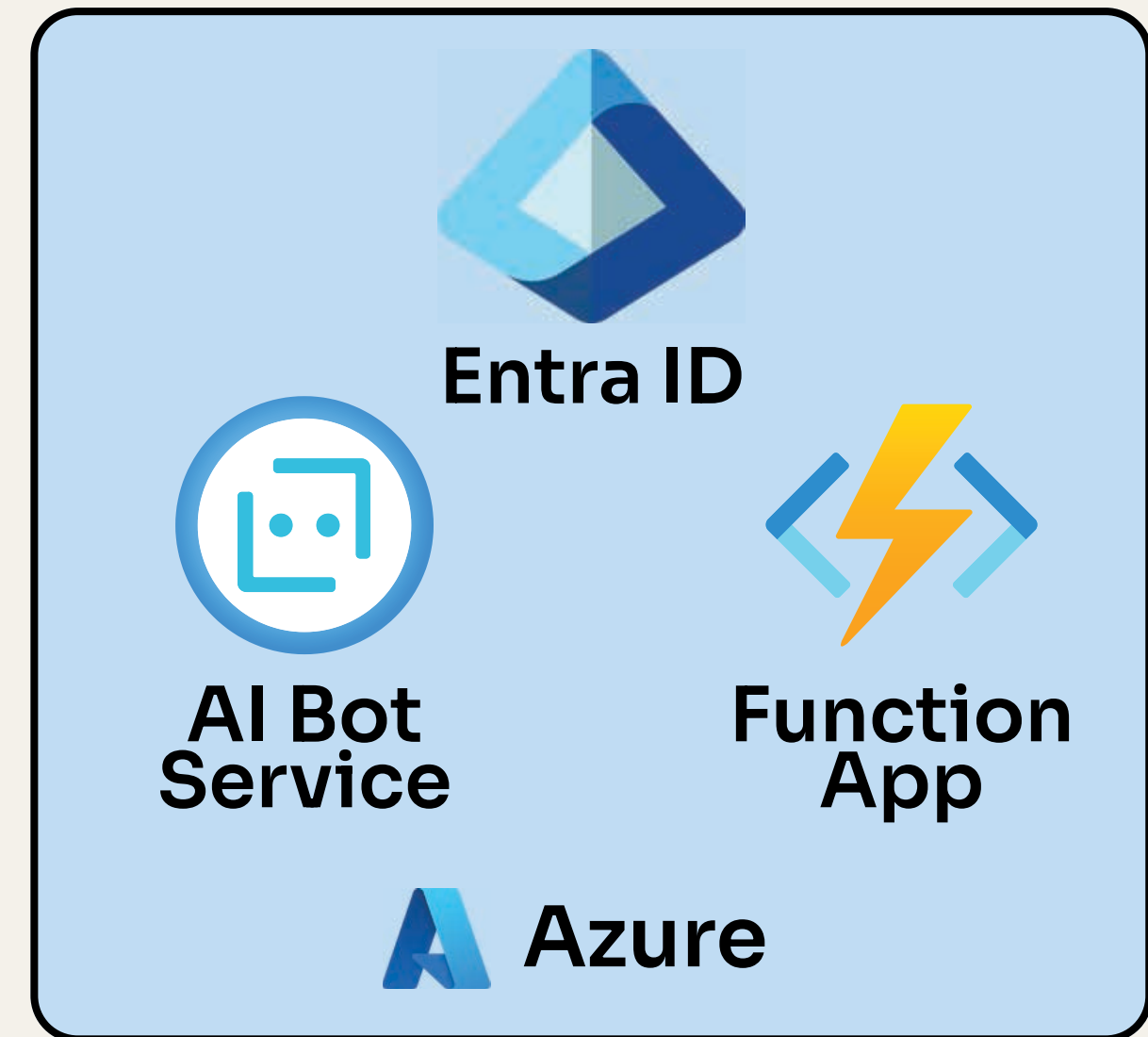
Local Workstation

- **Microsoft 365 Tenant**
- **Microsoft 365 Account**
 - Global Admin for tenant
- **Node.js v22**
- **M365 Agents Toolkit for VS Code**
- **M365 Agents Toolkit CLI**

```
npm install @microsoft/m365agentstoolkit-cli -g
```

Developing with the Microsoft Cloud

COMMON MISCONCEPTION

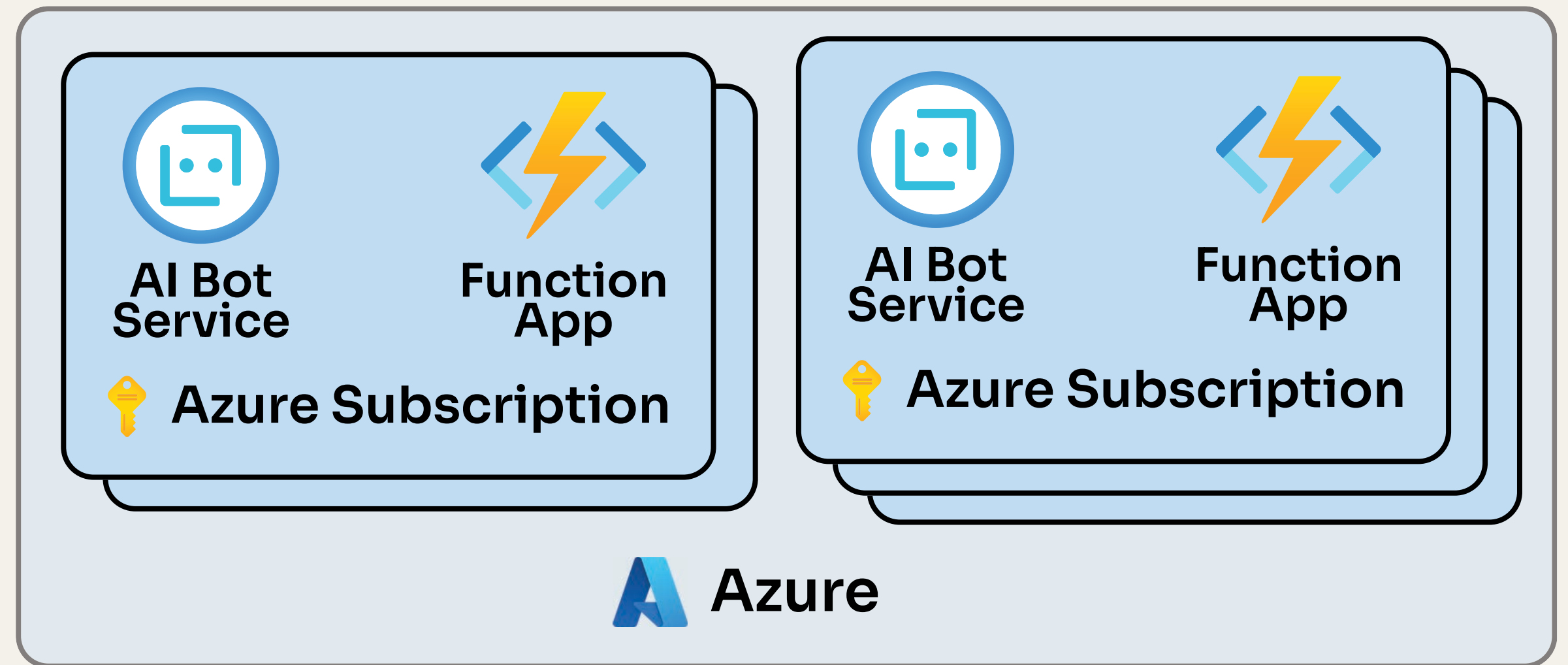


Developing with the Microsoft Cloud

REALITY



Entra ID



For Example: My Configuration

Production

- **M365:** `aconn.microsoft.com`
- **Microsoft Entra ID:** `c24e6842-*`
- **Azure Subscriptions:**
 - **ACI – MSDN:** `e8a8f513-*`
 - **Voitanos:** `f502d26e-*`

Dev Tenant & Demo Tenant

- **M365:** `y77k1.microsoft.com`
- **Microsoft Entra ID:** `57542ea4-*`
- **Azure Subscriptions:**
 - **Voitanos Demos:** `7d5edbc3-*`
 - **Voitanos PAYG:** `01f1d43e-*`

Week 1 Homework



Week 1

Assignments

- **Finish Circle onboarding & RSVP to all meetings**
 - Watch **Orientation & START HERE** course
 - Update your profile (including profile pic)
 - Post an **Introduction**
- **Get ready to build Teams Apps!**
 - **Get:** Microsoft 365 tenant
 - **Get:** Azure subscription
 - **Install:** dev environment dependencies
- **Create tab project & start up to see it working**
 - a. **New Project ► Teams Agents & Apps ► Other Teams Capabilities ► Tab**
 - b. Start debugging, watch it build, load app, show tab...
just want to see it work
- **Think about a scenario you can work on**
 - Project for your employer or client?
 - Personal project?

Week 1

Office Hours

... in lieu of
questions

Office Hours is for answering your questions & unblocking your homework issues

... but

... if there's extra time, I'll cover the following

- **M365 Agents Toolkit VS Code Project tour**
 - Understand how projects are organized
 - What folders/files are used for
 - How to customize the build toolchain