Teams App Development

以Tab小程序为例

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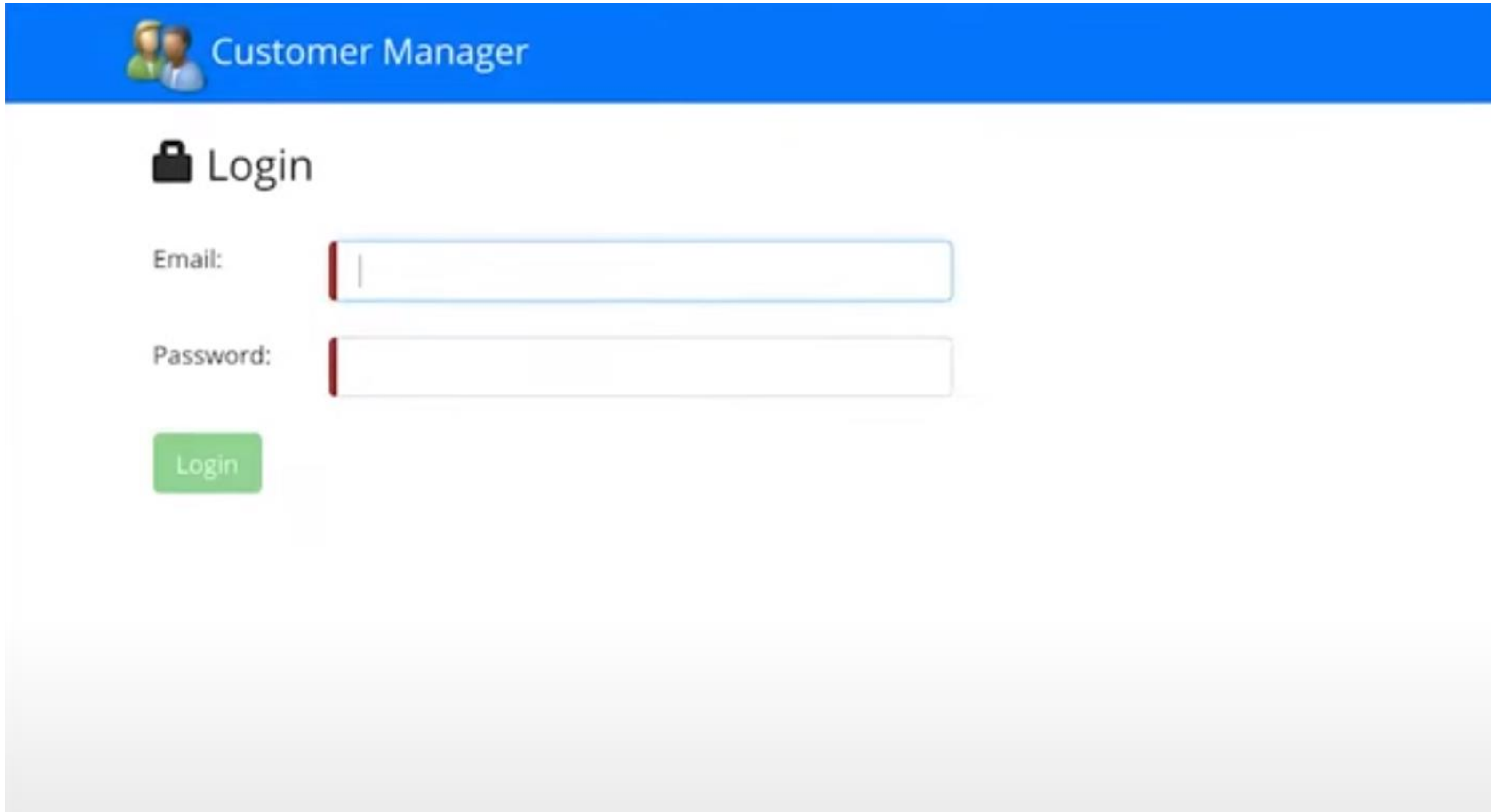
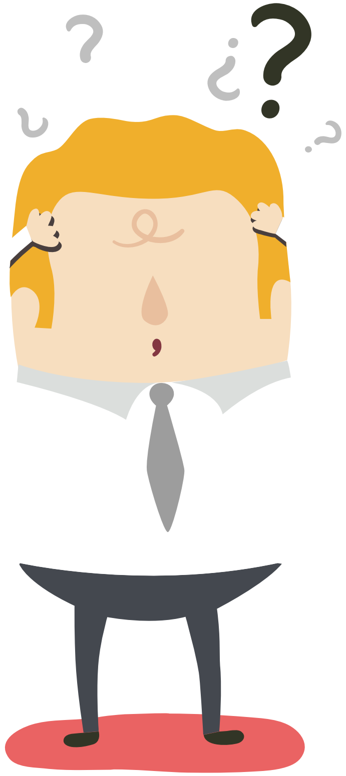
A Typical Buisiness App

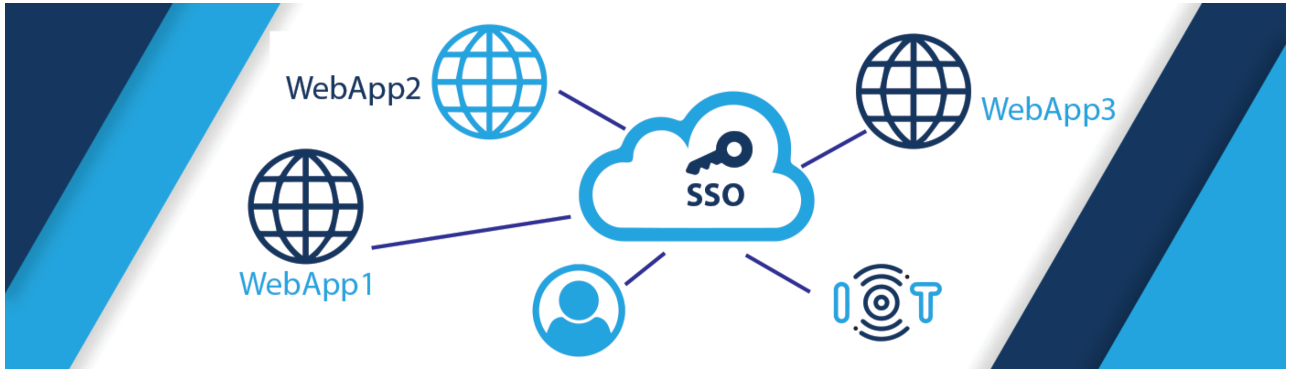




Some users pain points for enterprise apps

- Remember user/password for every enterprise app
- Remember the URL for the apps
- Users sometimes need to install the apps by themselves
- Sometimes need admin approval or local administrator for installation
- Remember in which scenario, which enterprise app to use
- Context switch between different apps
- Copy & paste

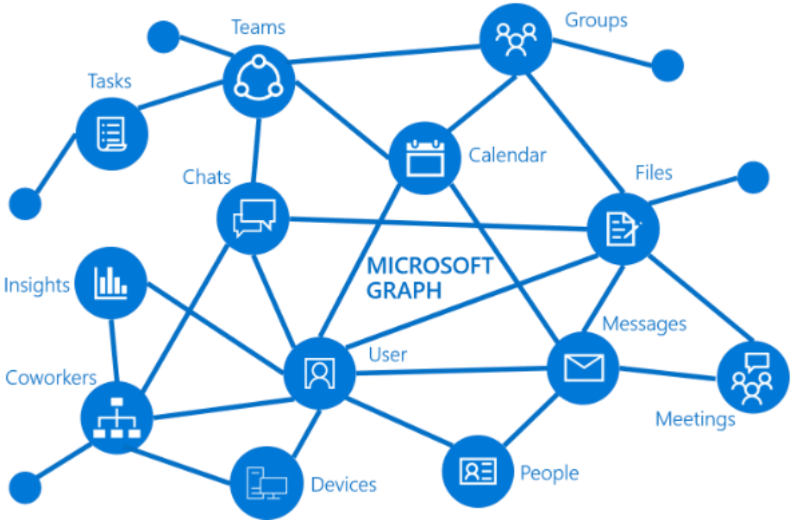
Why Teams App



- **SSO** (Sigle-sign on) enabled, easy to use while it doesn't compromise security
- No context switching.
- Accessing Apps in the suitable context
- Leverage data from Microsoft 365 platform
- More features
    - Bot to run code and automate tasks
    - Messaging extension to add more user interaction

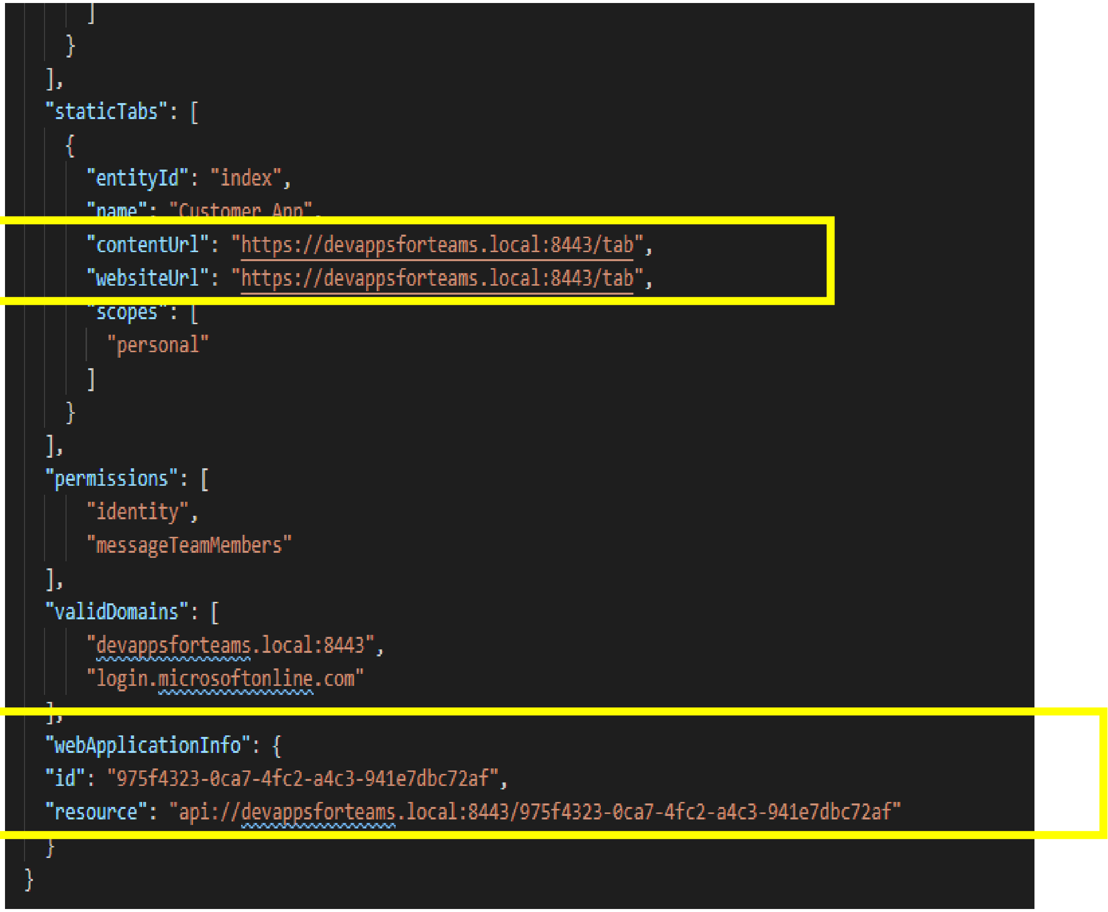
M365 and Azure AD

- Office 365(Microsoft 365)
  - Include Word, Excel, Outlook, Teams, etc
  - **One company account for all the apps**
  - **Graph** provides a unified programmability model that you can use to access the tremendous amount of data in Microsoft 365, Windows 10, and Enterprise Mobility + Security
- Azure Active Directory (Azure AD)
  - Centralized identity service
  - Access your apps from anywhere
  - Conditional multi-factor authentication
- How to make a Teams app
  - VS code toolkit
  - Teamsfx CLI



Web App to Teams Tab

- Teams App Manifest



```
      ]
    }
  ],
  "staticTabs": [
    {
      "entityId": "index",
      "name": "Customer App",
      "contentUrl": "https://devappsforteams.local:8443/tab",
      "websiteUrl": "https://devappsforteams.local:8443/tab",
      "scopes": [
        "personal"
      ]
    }
  ],
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      "messageTeamMembers"
  ],
  "validDomains": [
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      "login.microsoftonline.com"
  ],
  "webApplicationInfo": {
  "id": "975f4323-0ca7-4fc2-a4c3-941e7dbc72af",
  "resource": "api://devappsforteams.local:8443/975f4323-0ca7-4fc2-a4c3-941e7dbc72af"
  }
}
```
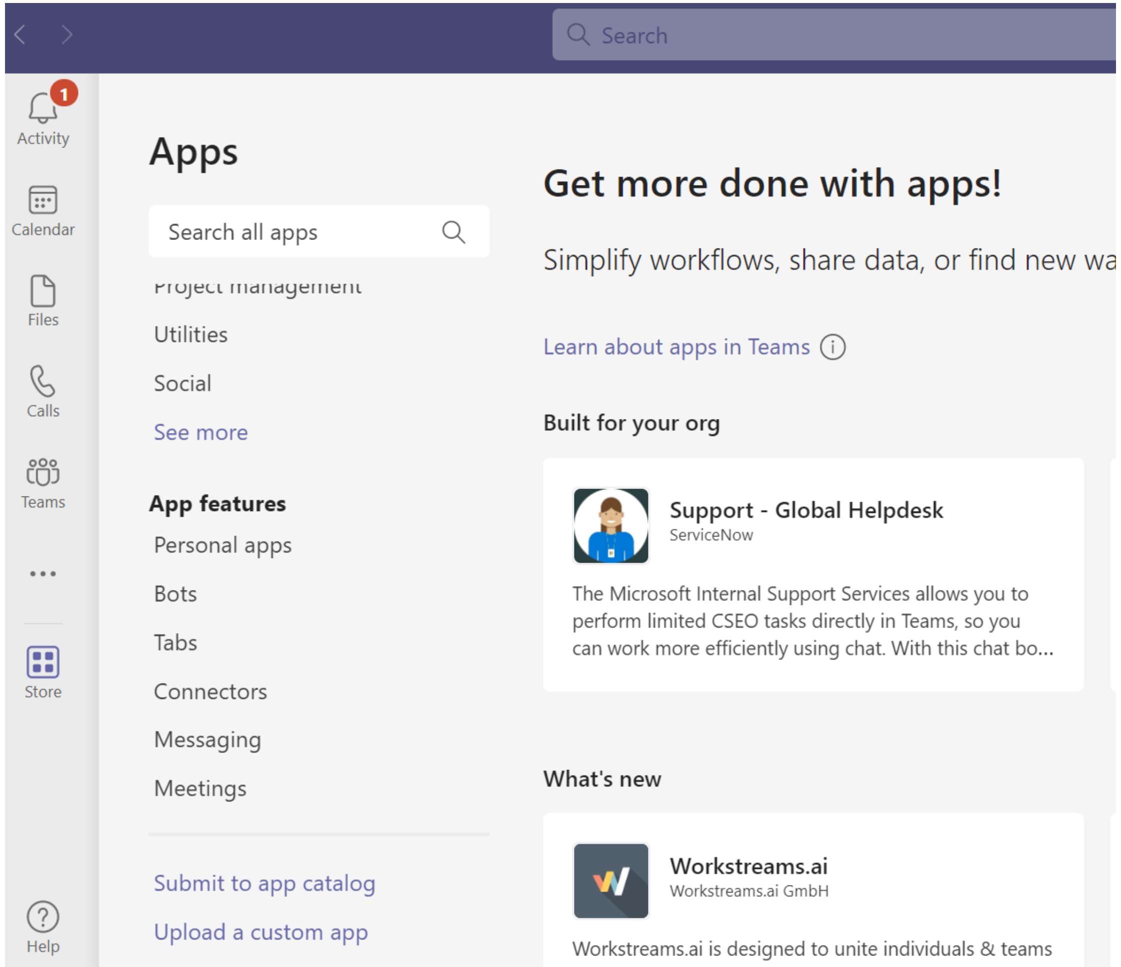

- Upload custom app



Apps

Get more done with apps!

Simplify workflows, share data, or find new wa

App features

Built for your org

Support - Global Helpdesk
ServiceNow

The Microsoft Internal Support Services allows you to perform limited CSEO tasks directly in Teams, so you can work more efficiently using chat. With this chat bo...

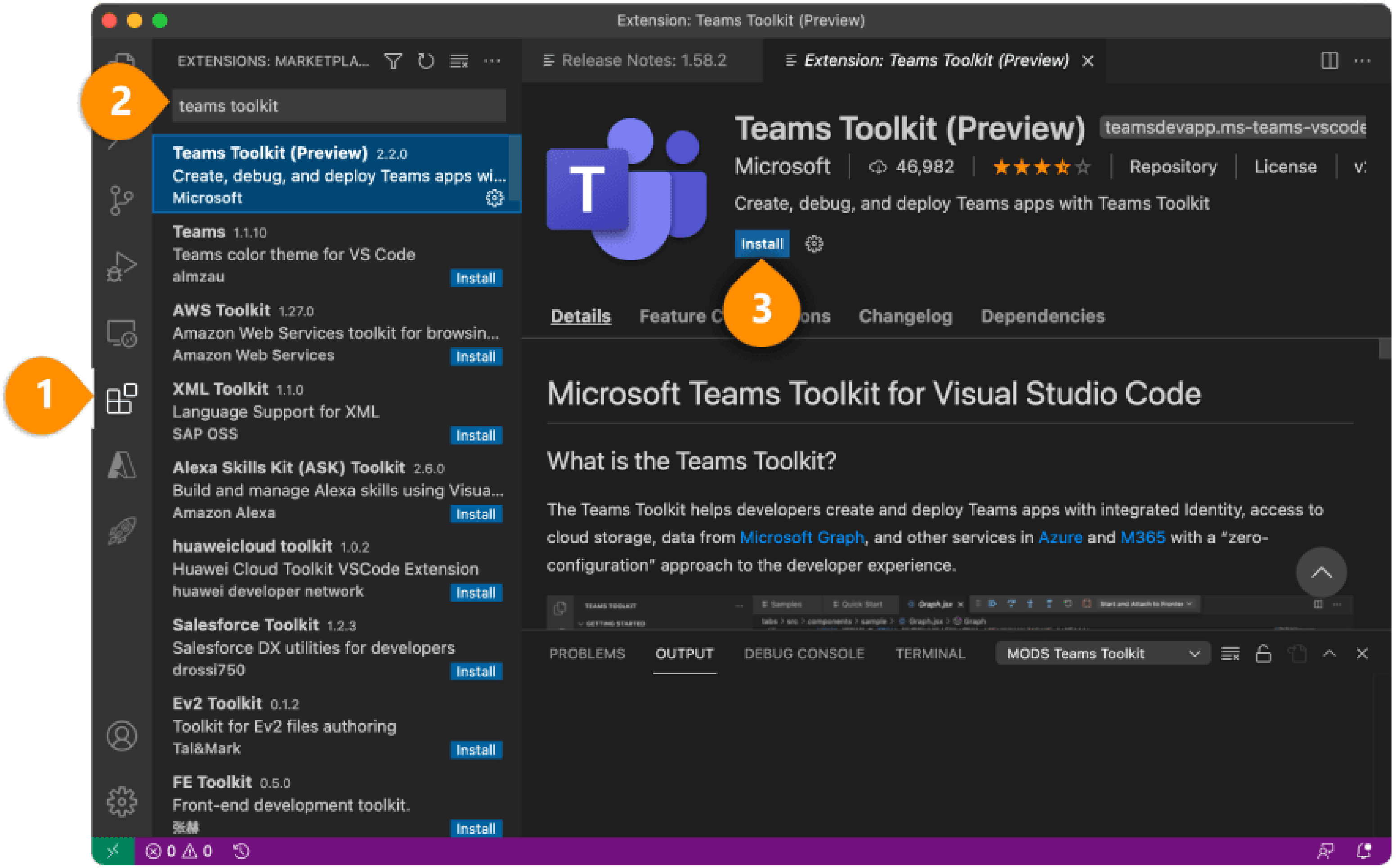
What's new

Workstreams.ai
Workstreams.ai GmbH

Workstreams.ai is designed to unite individuals & teams

Demo

- Quickly scaffold a new Tab app within Toolkit
- Scaffold and F5, that’s it and everything will be set up
  - AAD app
  - Teams app



Teams Toolkit (Preview) 2.2.0
Create, debug, and deploy Teams apps wi...
Microsoft

Teams 1.1.10
Teams color theme for VS Code
almzau
Install

AWS Toolkit 1.27.0
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Language Support for XML
SAP OSS
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Alexa Skills Kit (ASK) Toolkit 2.6.0
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huaweicloud toolkit 1.0.2
Huawei Cloud Toolkit VSCode Extension
huawei developer network
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Salesforce Toolkit 1.2.3
Salesforce DX utilities for developers
drossi750
Install

Ev2 Toolkit 0.1.2
Toolkit for Ev2 files authoring
Tal&Mark
Install

FE Toolkit 0.5.0
Front-end development toolkit.
张赫
Install

Teams Toolkit (Preview) teamsdevapp.ms-teams-vscode
Microsoft | 46,982 | ★★★★☆ | Repository | License | v:
Create, debug, and deploy Teams apps with Teams Toolkit
Install

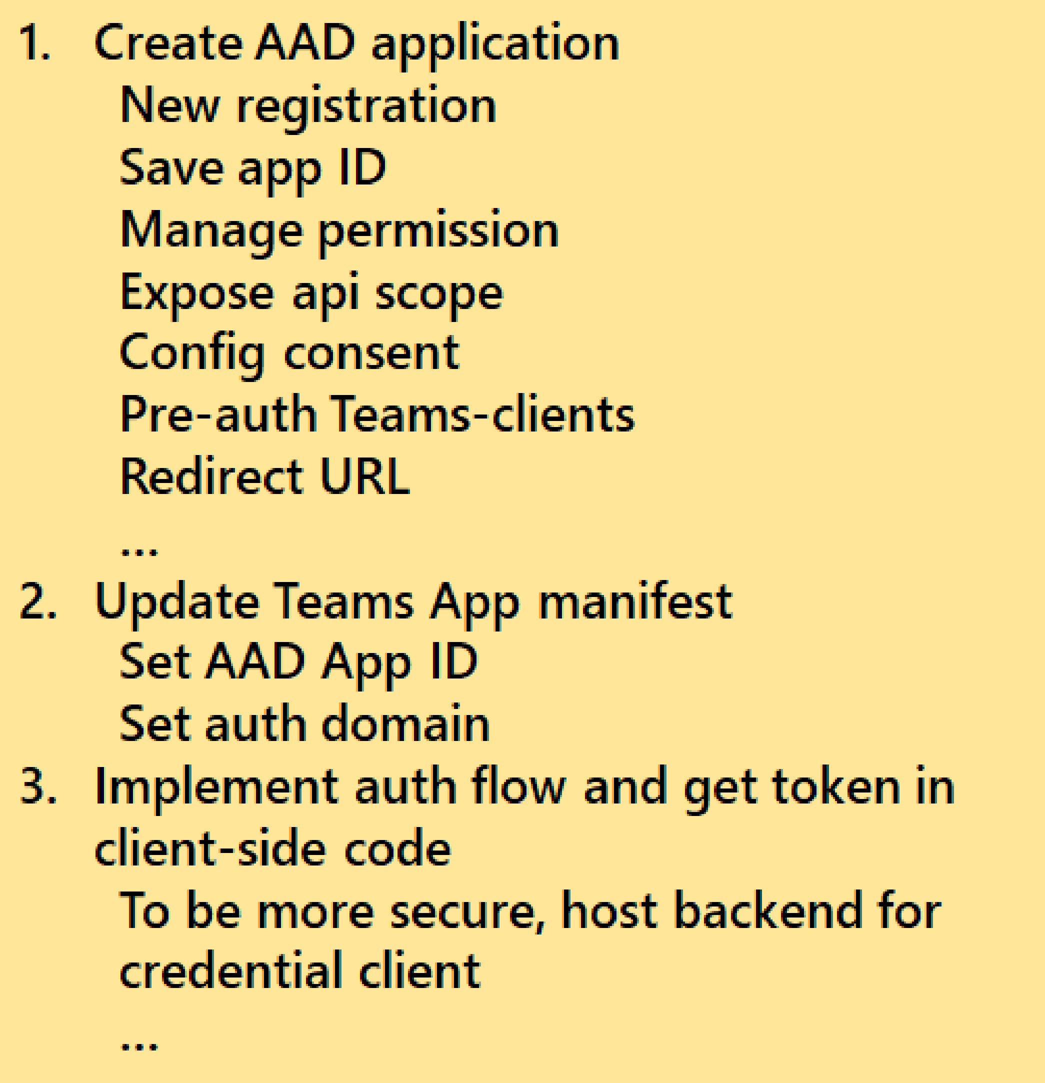
Microsoft Teams Toolkit for Visual Studio Code

What is the Teams Toolkit?

The Teams Toolkit helps developers create and deploy Teams apps with integrated Identity, access to cloud storage, data from Microsoft Graph, and other services in Azure and M365 with a “zero-configuration” approach to the developer experience.

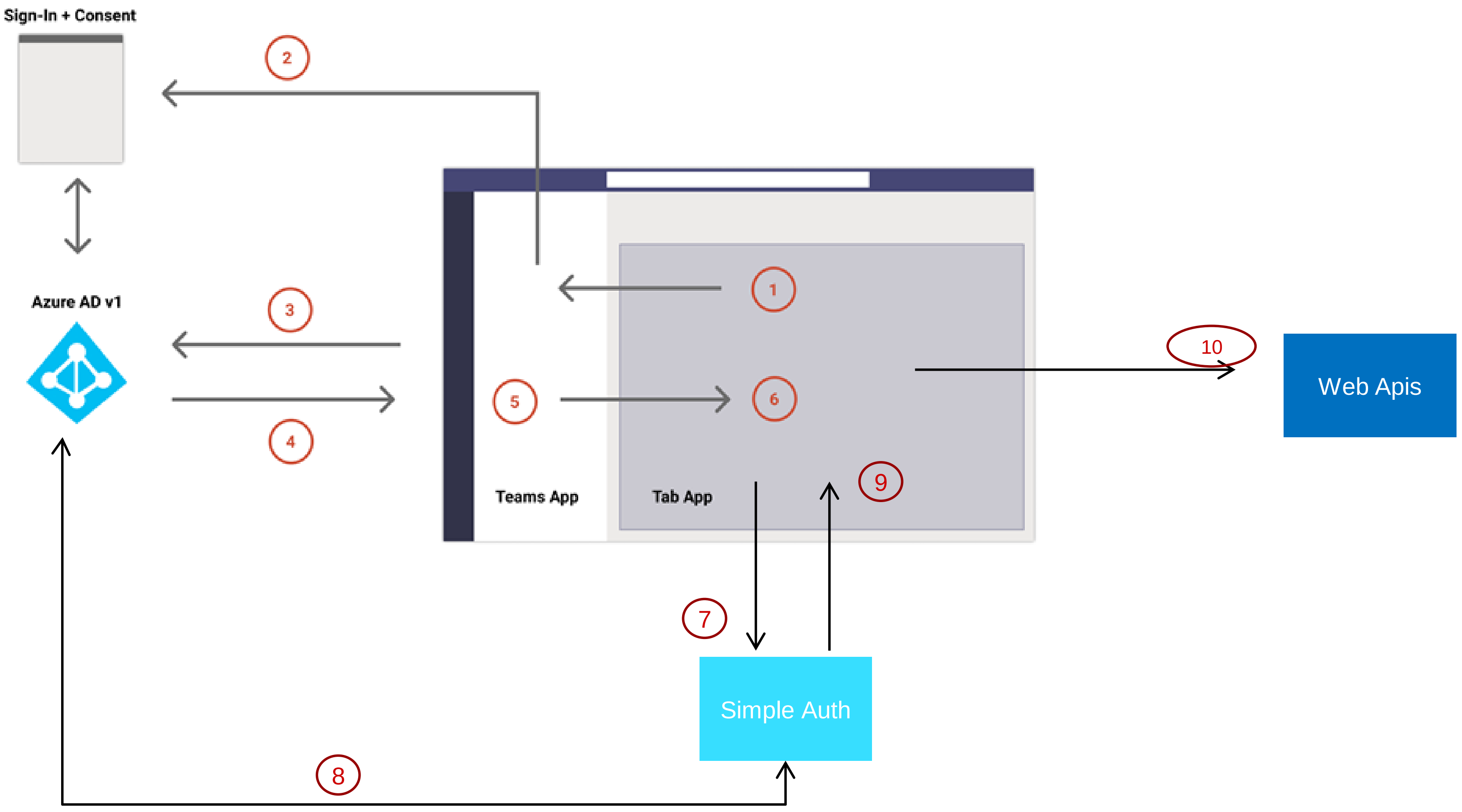
What Happened in F5

- Build the package
- Setup the Single Sign On configurations
- Start the frontend and auth component
- The simple API in SDK is used to finish the SSO flow



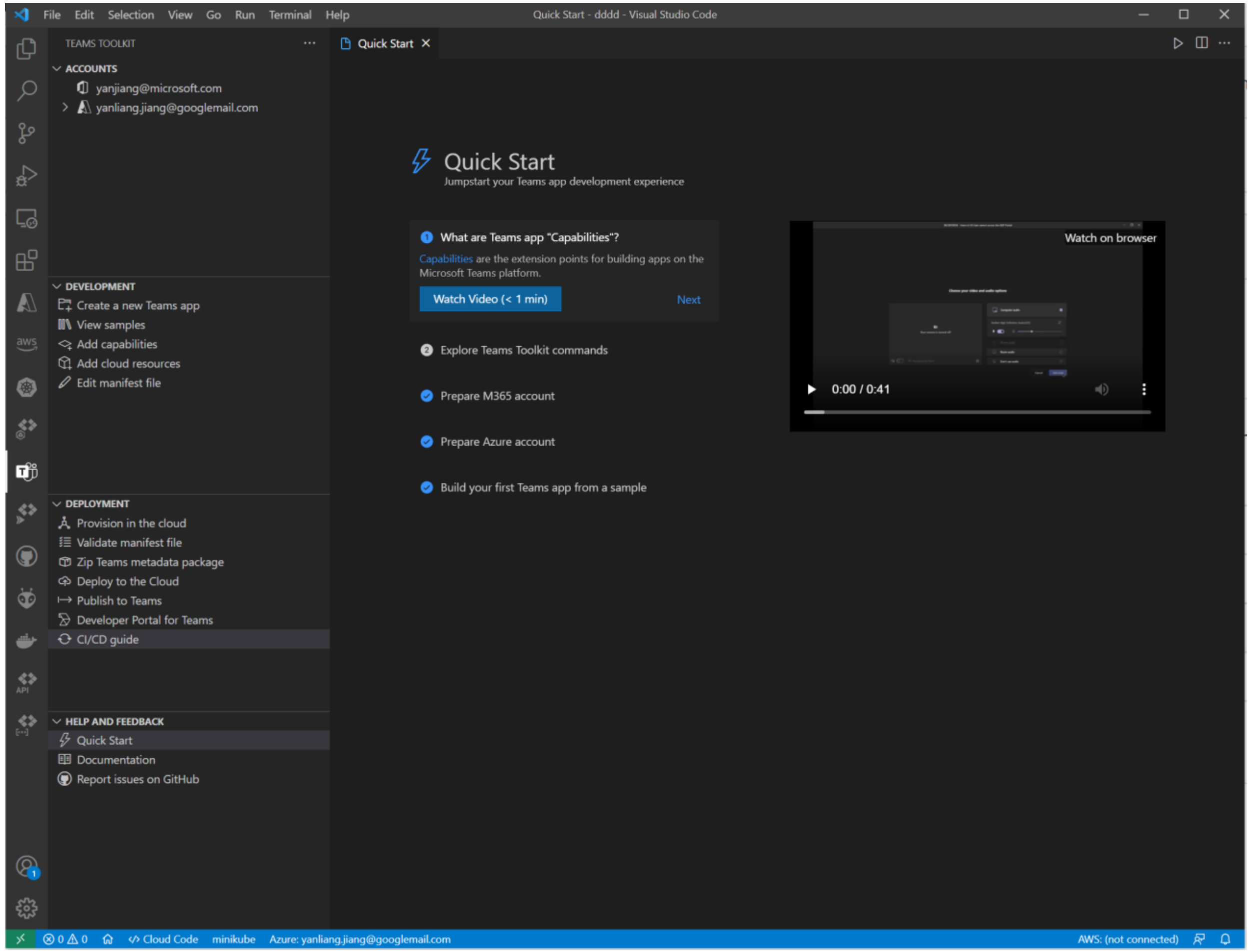
1. Create AAD application
   - New registration
   - Save app ID
   - Manage permission
   - Expose api scope
   - Config consent
   - Pre-auth Teams-clients
   - Redirect URL
   - ...
2. Update Teams App manifest
   - Set AAD App ID
   - Set auth domain
3. Implement auth flow and get token in client-side code
   - To be more secure, host backend for credential client
   - ...

Authentication and Authorization Flow



Teams Toolkit for VS Code

- 10 minutes to create and debug a Teams app
- Hide auth implementations from developers who can focus on business logic



Quick Start - dddd - Visual Studio Code

Quick Start

Jumpstart your Teams app development experience

What are Teams app "Capabilities"?

Capabilities are the extension points for building apps on the Microsoft Teams platform.

Thank You!

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