



2019

Global **Azure**
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Integrate Microsoft Graph with Azure Active Directory in your cloud applications



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Azure Meetup Frankfurt

Frankfurt University of Applied Sciences

Saturday, April 27th, 2019

2019

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Agenda

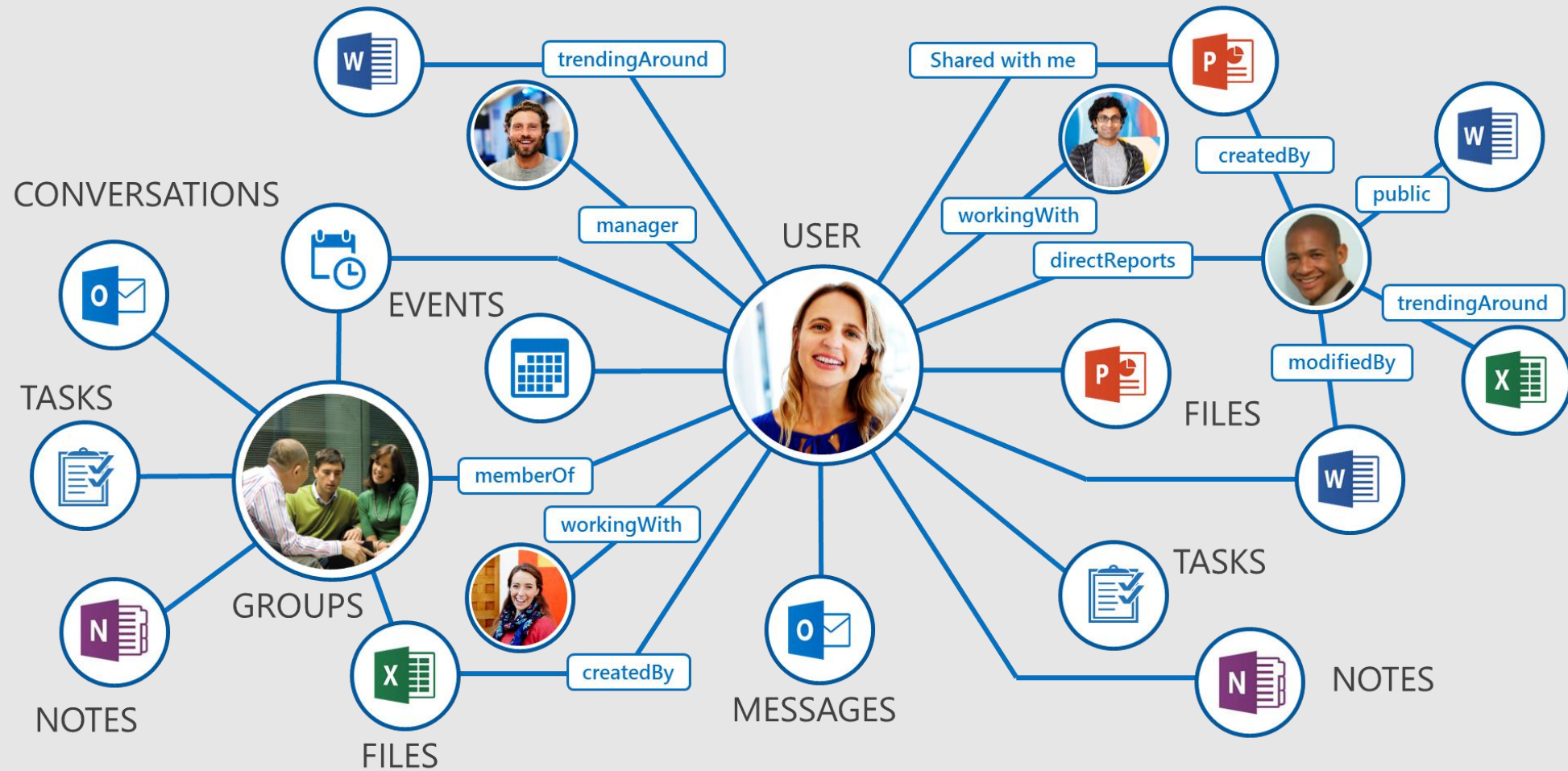
- Microsoft Graph
 - What ?
 - Why ?
 - How ?
 - Demo
- Azure Active Directory
 - What ?
 - Why ?
 - How ?
 - Demo
- MS Graph ❤️ AAD

Microsoft Graph

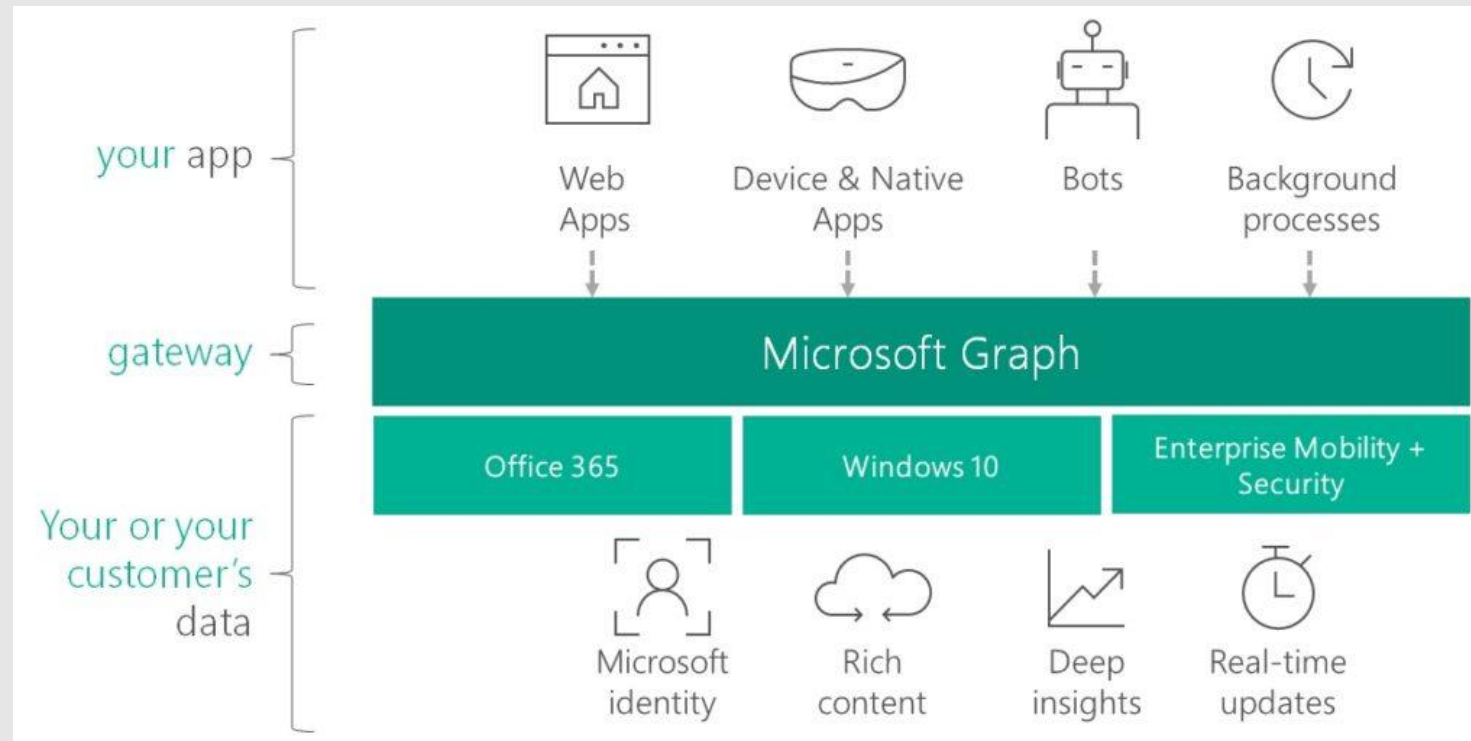
What is Microsoft Graph ?

- Gateway to data and intelligence in Microsoft 365
- Unified programmability model
- Exposes REST APIs and SKDs to access data on
 - Azure Active Directory
 - Office 365 services
 - Enterprise Mobility and Security services
 - Windows 10 services
 - Education
- Microsoft Graph is the API of Microsoft 365

What is Microsoft Graph ?



What is Microsoft Graph ?



Why ?

- Build experiences around the user's unique context
- Apps can traverse relationships to access resources and perform actions
- Get valuable insights and intelligence about the data



Users



Apps



Data

How ?

Graph Explorer

The screenshot displays the Microsoft Graph Explorer web application. The top navigation bar includes the Microsoft logo, 'Microsoft Graph', and links to Solutions, Graph Explorer, Getting Started, Docs, API Reference, Resources, Programs, All Microsoft, and a Sign in button. The left sidebar contains sections for Authentication (with user profile for Firas Mdimagh and links to modify permissions and sign out), Sample Queries (with a list of sample queries and a 'show more samples' link), and History (with a list of recent queries and a 'show more' link). The main area shows a GET request to 'https://graph.microsoft.com/v1.0/me/' with a 'Run Query' button. Below the request, a green status bar indicates 'Success - Status Code 200, 239ms'. The 'Response Preview' tab is active, displaying the JSON response for the user's profile.

Microsoft | Microsoft Graph Solutions Graph Explorer Getting Started Docs API Reference Resources Programs All Microsoft Sign in

Graph Explorer

Authentication

Firas Mdimagh
modify permissions sign out

Sample Queries

Getting Started

- GET my profile
- GET my photo
- GET my mail
- GET all the items in my drive
- GET items trending around me
- GET my manager

show more samples

History

- GET /v1.0/me/ 200 a few seconds ago 239 ms

show more

GET v1.0 https://graph.microsoft.com/v1.0/me/ Run Query

Request Body Request Headers

Success - Status Code 200, 239ms

Response Preview Response Headers

```
{
  "@odata.context": "https://graph.microsoft.com/v1.0/$metadata#users/$entity",
  "displayName": "Firas Mdimagh",
  "surname": "Mdimagh",
  "givenName": "Firas",
  "id": "11111111-1111-1111-1111-111111111111",
  "userPrincipalName": "firas.mdimagh@contoso.com",
  "businessPhones": [],
  "jobTitle": null,
  "mail": null,
  "mobilePhone": null,
  "officeLocation": null,
  "preferredLanguage": null
}
```

How ?

API

```
https://graph.microsoft.com  
/{version}/{resource}/{id}/{property}?{query-parameters}
```

{version} : V1.0 (Stable) and Beta (Preview)

```
https://graph.microsoft.com/v1.0/users/63576aaur341er99/messages?$top=5
```

How ?

SDK

```
// Send request to get user's messages  
var messages = graphClient.Me.Messages.Request().GetAsync().Result;
```

Demo

Microsoft Graph

Azure Active Directory

What is Azure Active Directory (AAD) ?

- Identity Management as a Service for modern applications

Why ?

- Manage Users, Groups, Roles
- Use Single Sign-On (SSO)
- Add custom domains

How ?

~~Use Azure AD Graph API~~

Use Microsoft Graph API 

Important

As of February 2019, we started the process to deprecate some earlier versions of Azure Active Directory Graph API in favor of the Microsoft Graph API.

For details, updates, and time frames, see [Microsoft Graph or the Azure AD Graph](#) in the Office Dev Center.

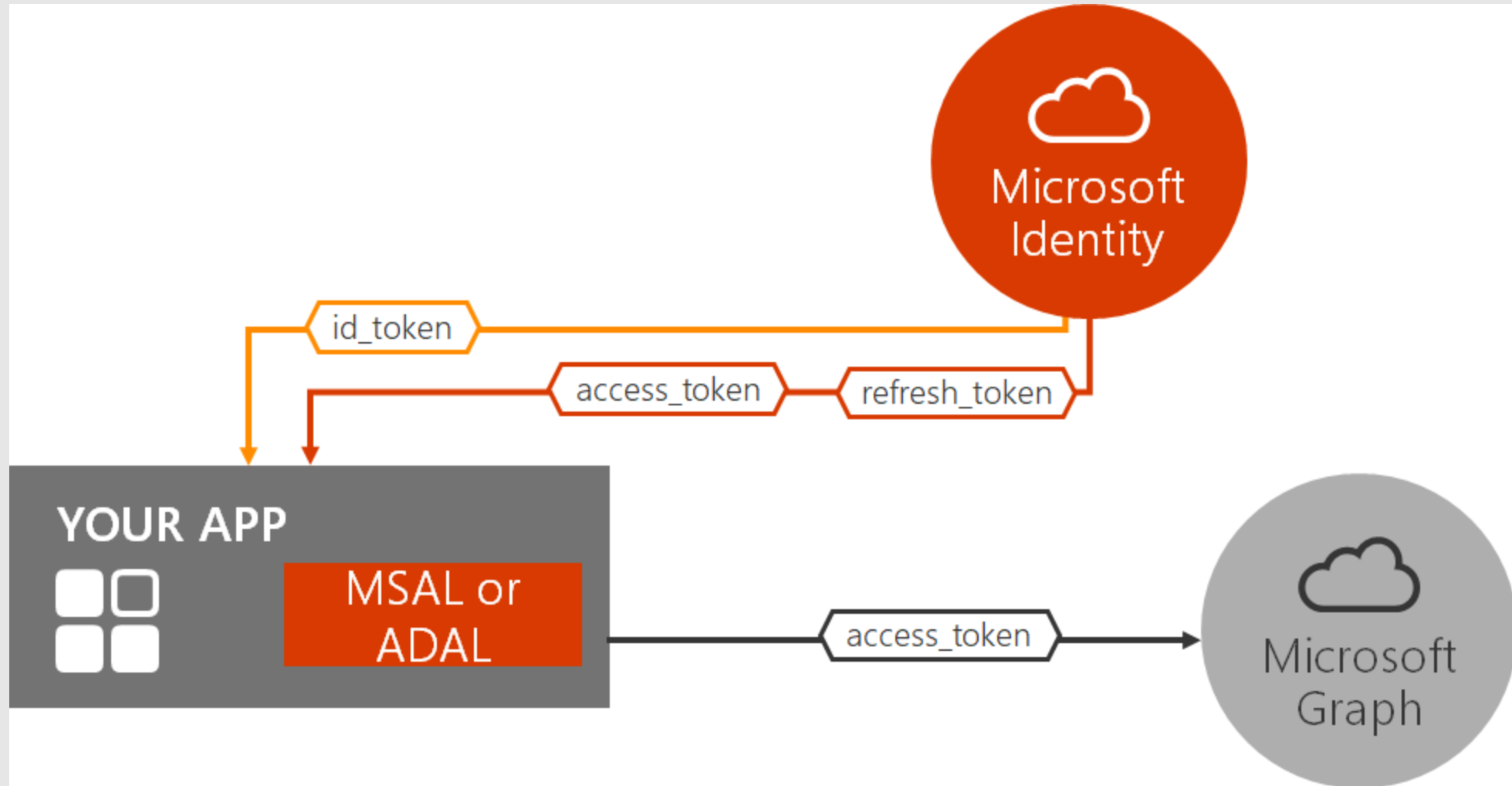
Moving forward, applications should use the Microsoft Graph API.

Demo

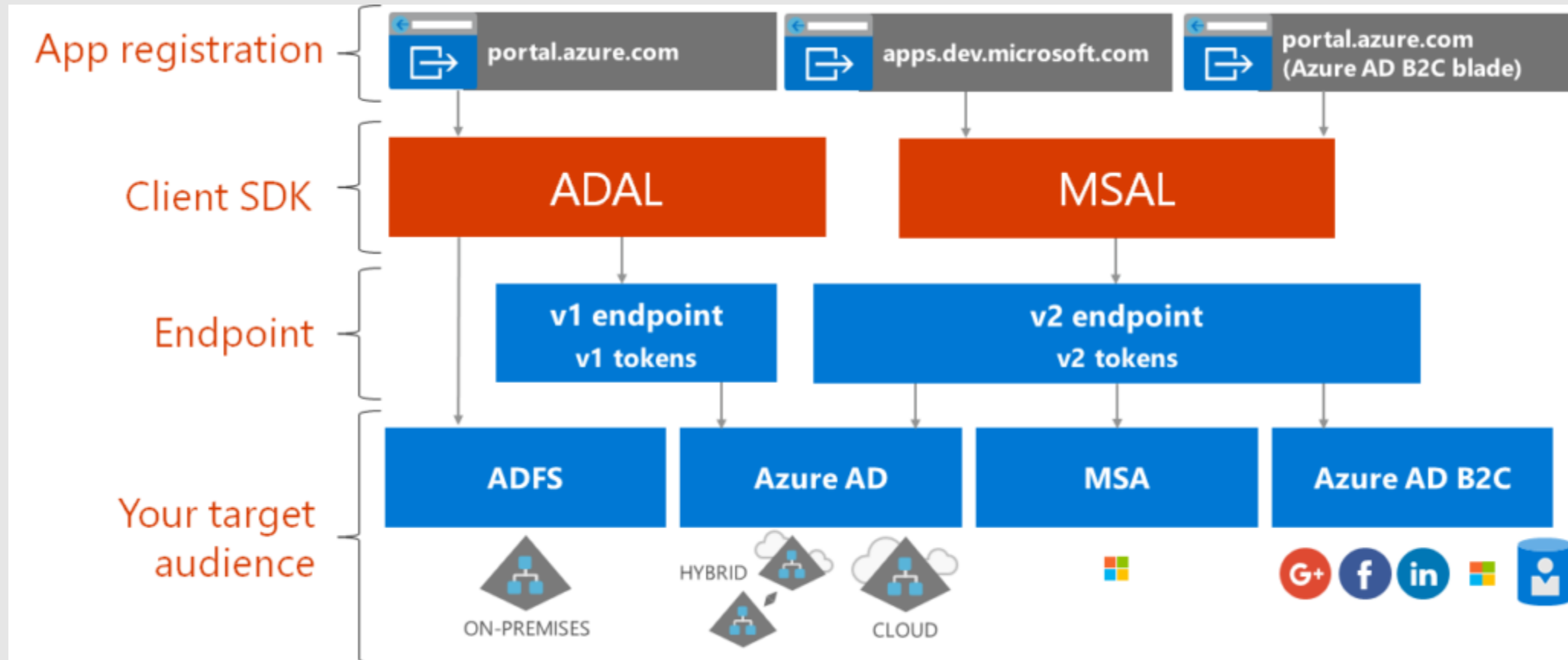
Azure Active Directory

MS Graph  AAD

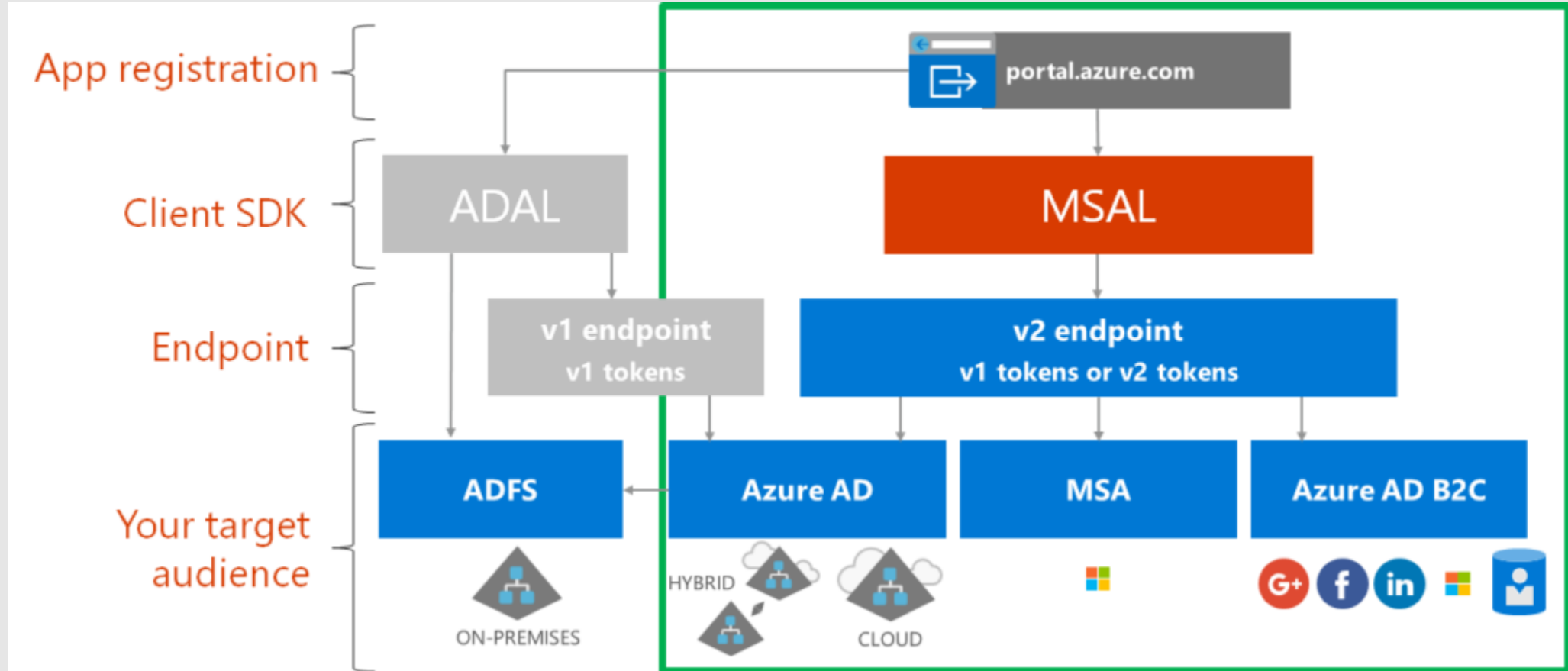
Integration



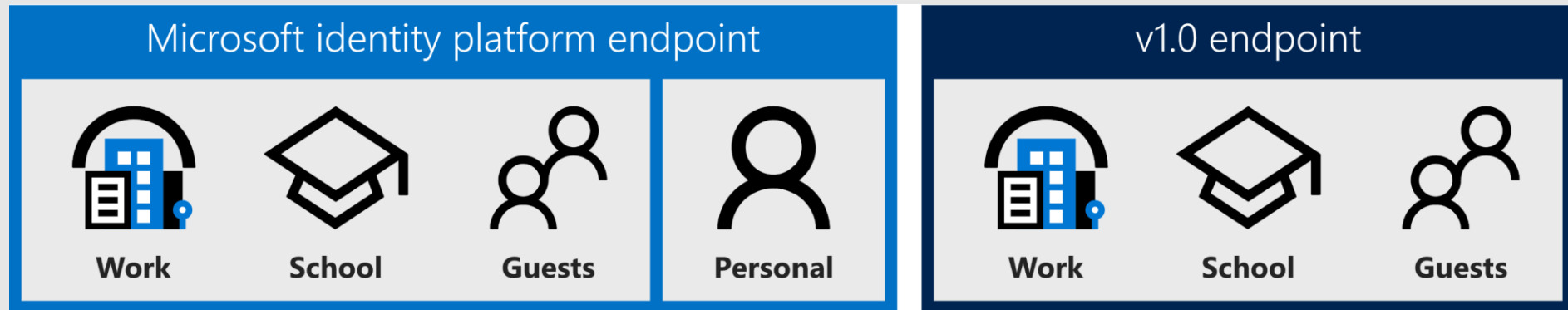
Integration



Integration

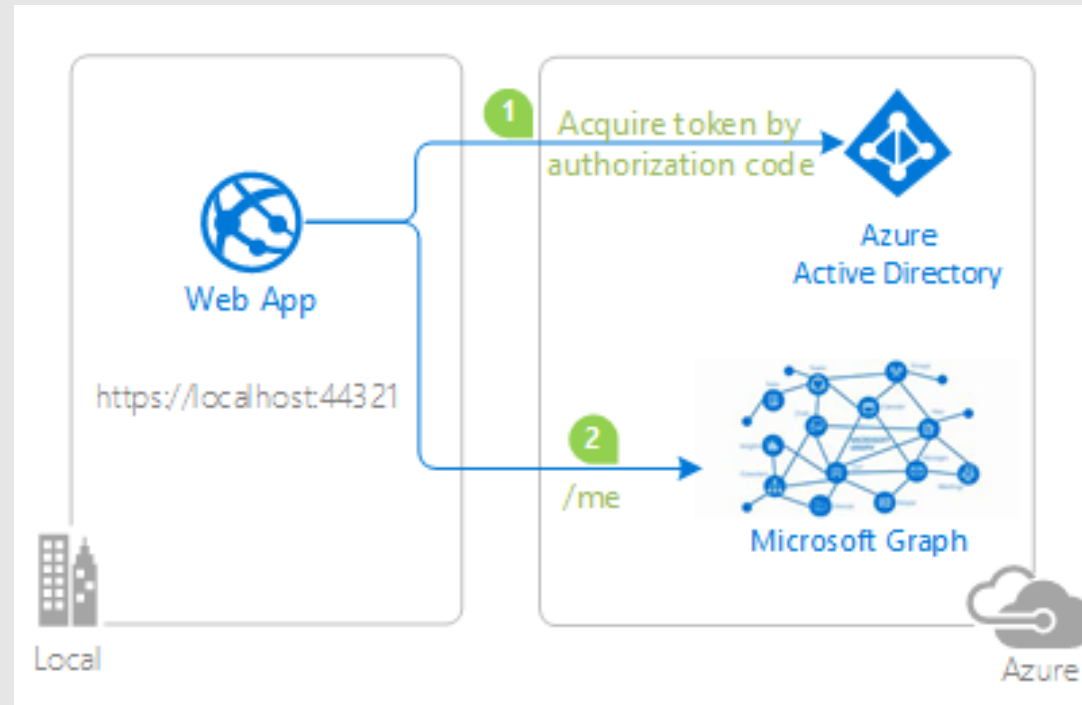


Integration



Demo

Sample App



github.com/Azure-Samples/active-directory-aspnetcore-webapp-openidconnect-v2

Next

- aka.ms/graph
- github.com/MicrosoftGraph
- aka.ms/ge
- aka.ms/30DaysMSGraph
- docs.microsoft.com/azure/active-directory
- docs.microsoft.com/learn

Thank You !



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