Azure App Services

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Code.Digest();
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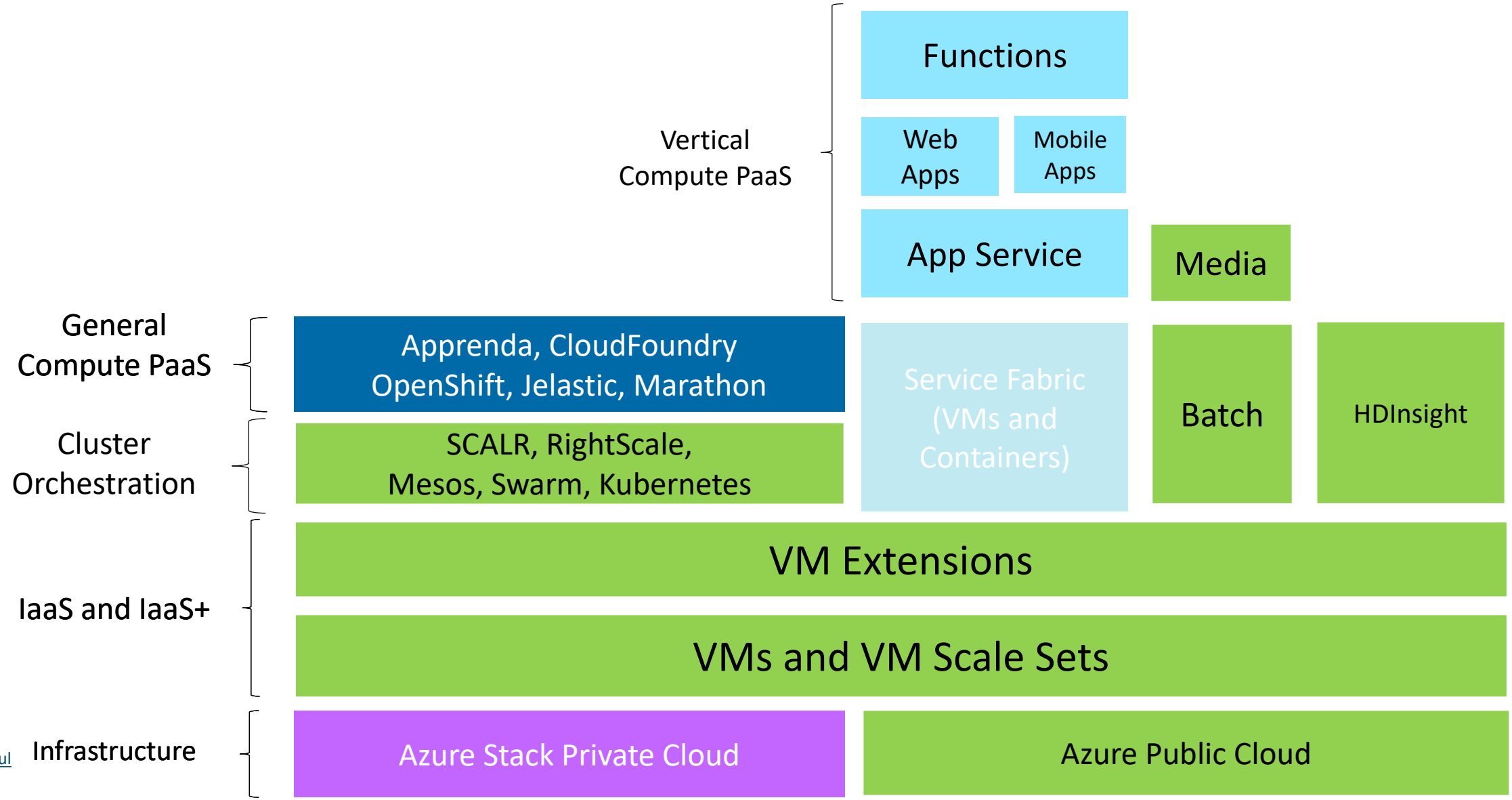
About Me

Code.Digest();

Alex Pshul

- Architect, Consultant and lecturer
- More than 9 years of hands on experience
- Co-organizer of the Code.Digest Meetup
  - https://www.meetup.com/Code-Digest/
- Talk to me about:
  - Software Development
  - Hardware and Gadgets
  - Gaming
  - Animals

Service hosting & management layers



Agenda

- Web Apps
- App Service Plans
- Deployment Slots
- Mobile Apps
- API Apps
- Logic Apps

Azure App Services

- Building and hosting web applications without managing infrastructure
- Offers auto-scaling and high availability
- Supports both Windows and Linux
- Enables automated deployments from GitHub, VSTS, or any Git repo
- Service App suite includes
  - **Web Apps** - websites and web applications
  - **API Apps** - RESTful APIs
  - **Mobile Apps** - mobile app back ends
  - **Logic Apps** - automating business processes and integrating systems and data across clouds without writing code
- **Azure Functions** are also based on the App Services infrastructure

Azure Web APPS

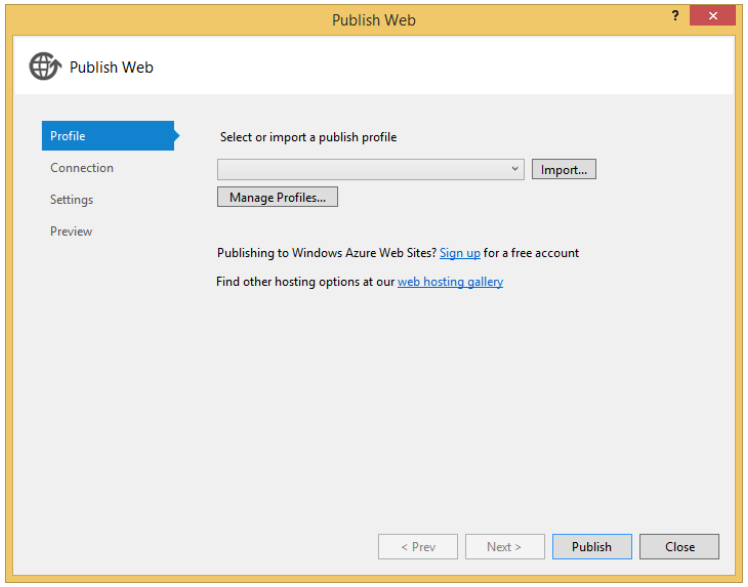
Azure App Services

Azure Web Sites

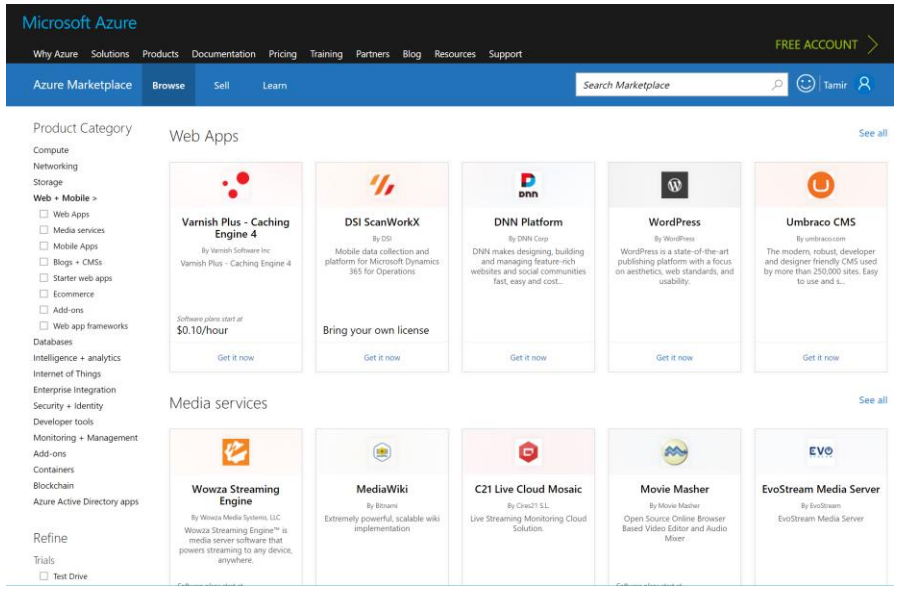
- Provision a Web Application Fast
- You can use IDE, PowerShell, Portal
- Deploy Easily via a Source Control

Creating a Web Site

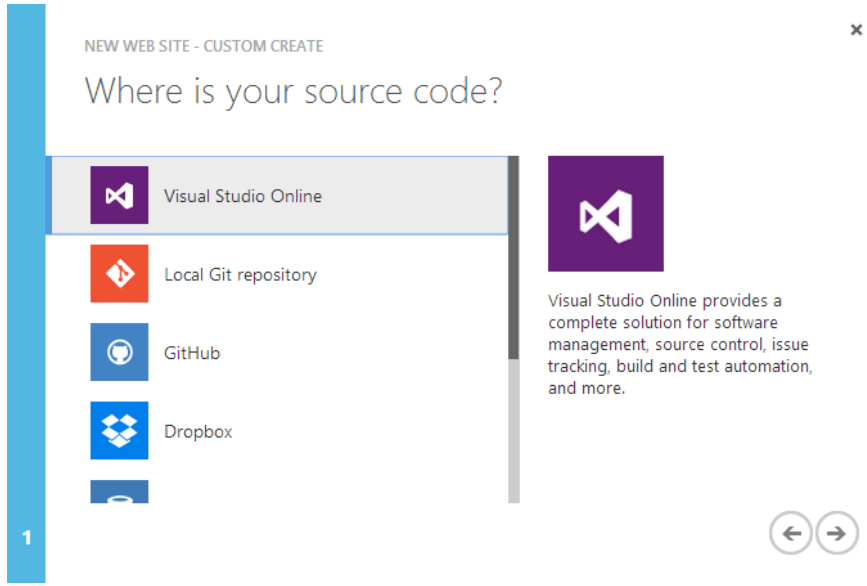
Publish from VS



From Gallery



Sync with Source Control



App Service Plan

- Represents a set of feature and capacity that can be shared across multiple apps in Azure App Service.
- This is the physical resources representative
- Apps can share the Service Plan if they are in the same subscription and same location
- A good usage for example is to share resources for each environment (DEV, TEST, PROD)

App Service Plan

- **Shared compute**
  Free and **Shared**, the two base tiers, runs an app on the same Azure VM as other App Service apps, including apps of other customers. These tiers allocate CPU quotas to each app that runs on the shared resources, and the resources cannot scale out.
- **Dedicated compute**
  The **Basic**, **Standard**, **Premium**, and **PremiumV2** tiers run apps on dedicated Azure VMs. Only apps in the same App Service plan share the same compute resources. The higher the tier, the more VM instances are available to you for scale-out.

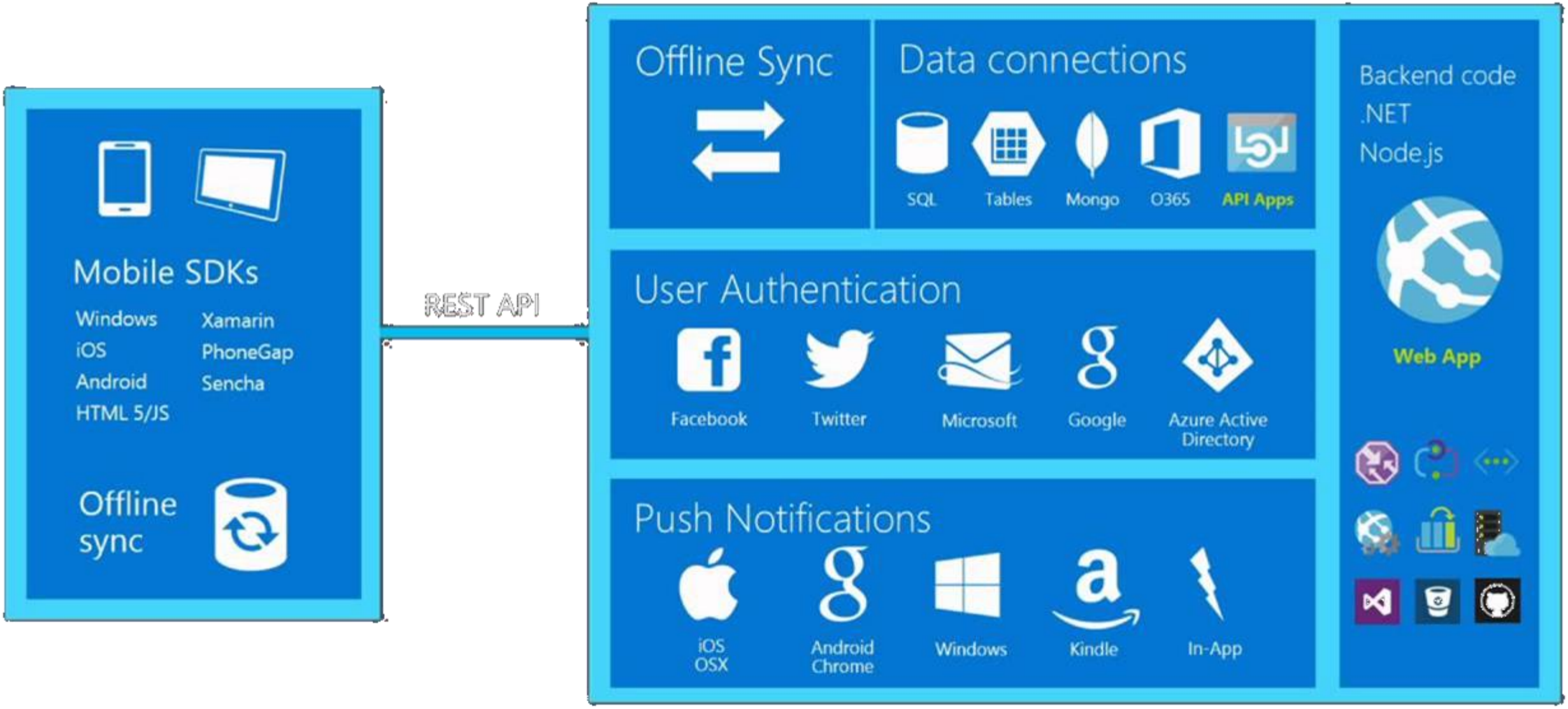
App Service Plan

- **Isolated**
  This tier runs dedicated Azure VMs on dedicated Azure Virtual Networks, which provides network isolation on top of compute isolation to your apps. It provides the maximum scale-out capabilities.
- **Consumption**
  This tier is only available to function apps. It scales the functions dynamically depending on workload. For more information, see Azure Functions hosting plans comparison.

Mobile Apps

Azure App Services

What is Mobile Apps?



Structured Storage

- Powered by SQL Database
- Same DB – Multiple Mobile Services
- Data management in
  - Windows Azure Portal
  - SQL Portal
  - SQL Management Studio
  - REST API
  - CLI Tools
- JSON to SQL Type Mappings

The REST API

Base REST API Endpoint URL

https://Mobileservice.azure-mobile.net/tables/*

Data Operations and their REST Equivalents

Action	HTTP Verb	URL Suffix
Create	POST	/TodoItem
Read	GET	/TodoItem?$filter=id%3D42
Update	PATCH	/TodoItem/id
Delete	DELETE	/TodoItem/id

API Apps

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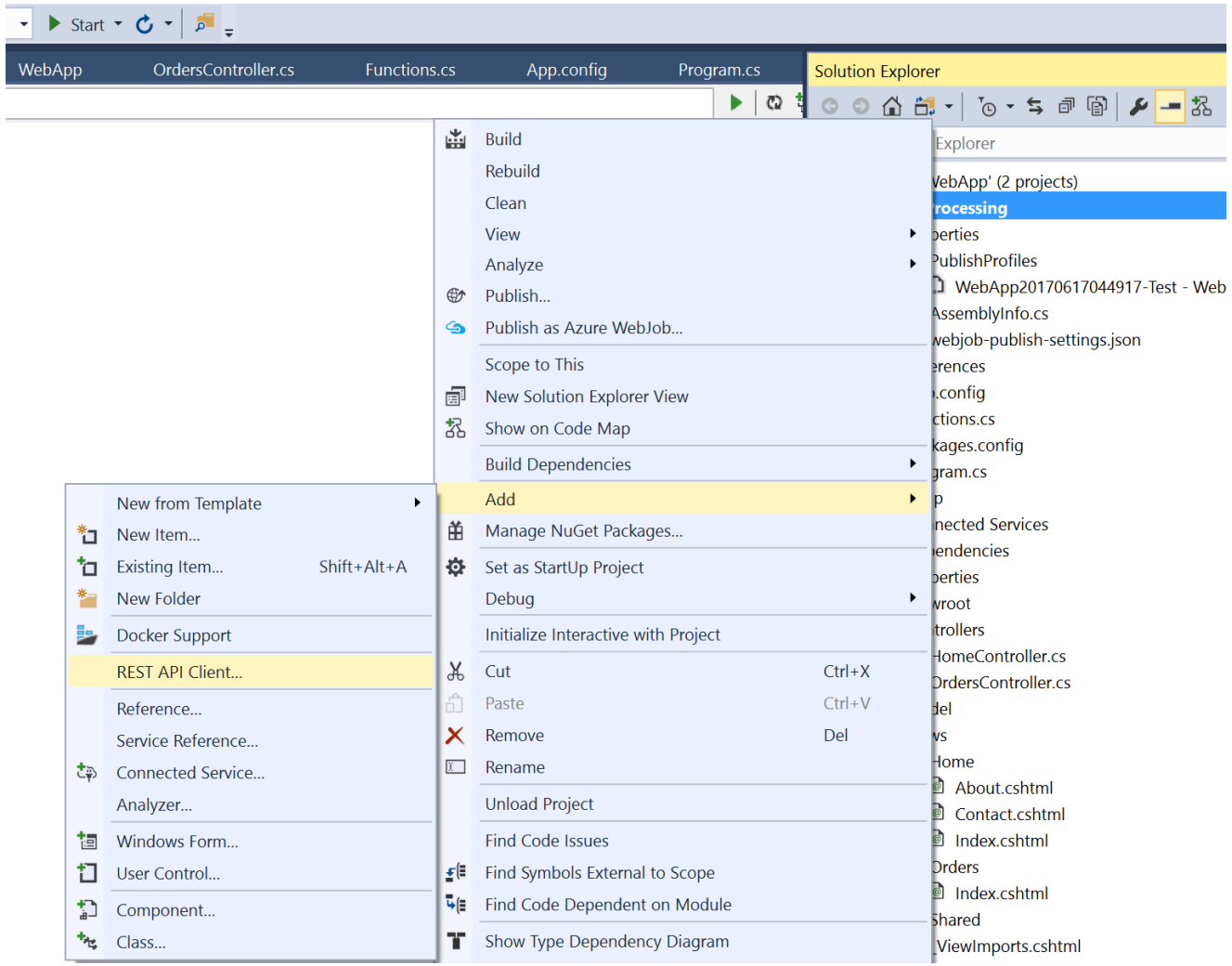
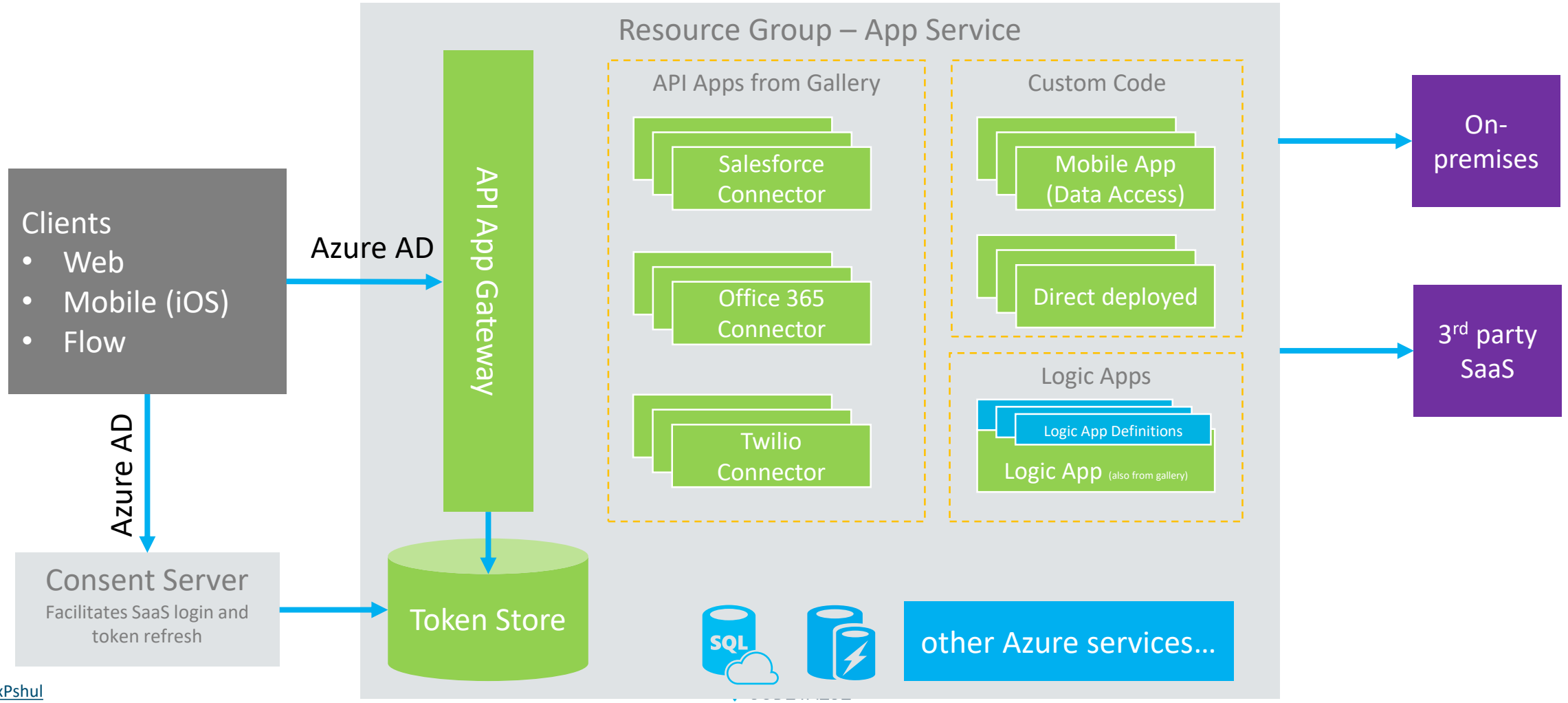
API Apps

- Basically Web Apps for Web Api's
- Simple access control
- Swagger metadata
- Logic App Integration
- Marketplace support for connectors
- VS tooling and support (for client side as well)

Creating REST Client from Swagger



API Apps Architecture Example



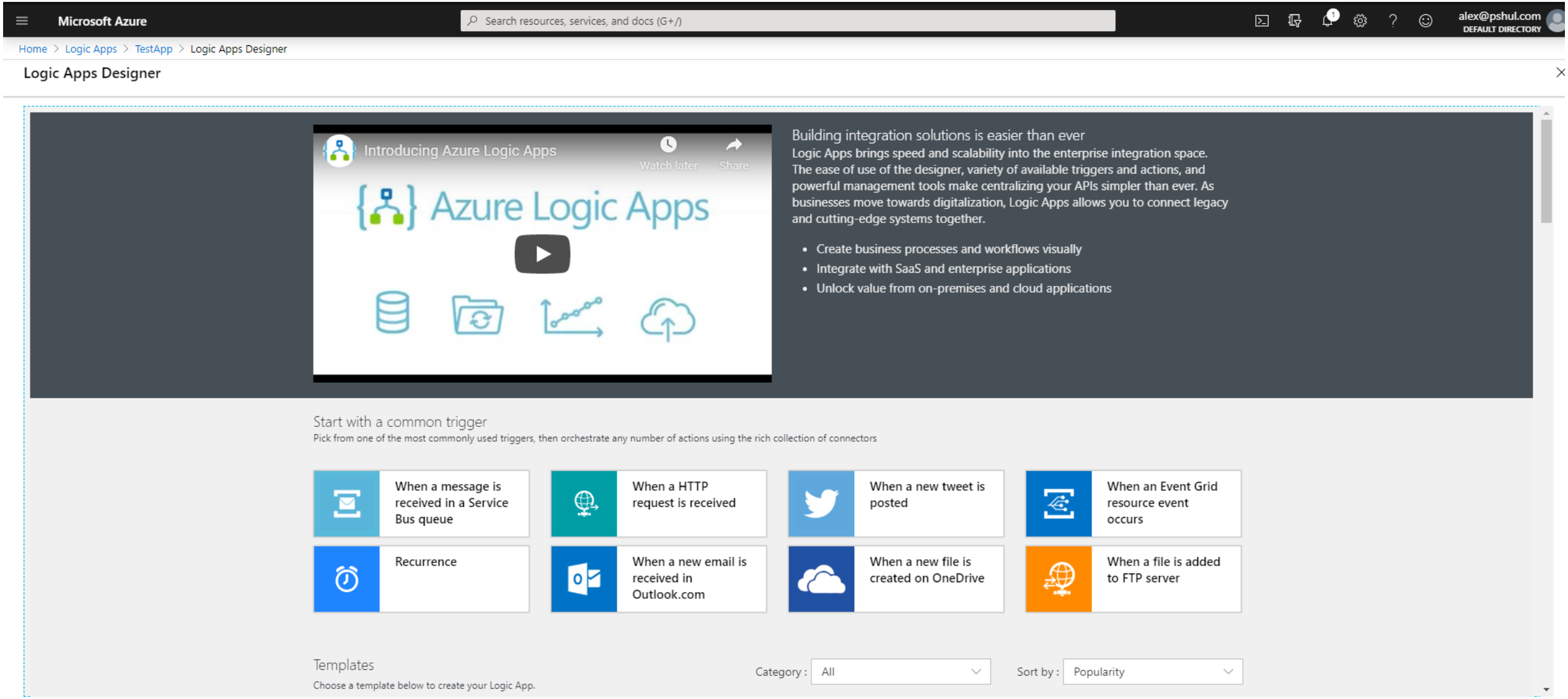
Logic Apps

Azure App Services

Logic Apps

- Visually create business process and workflows based on Triggers and Actions
- Deliver integration capabilities in Web, Mobile, and API Apps
- Integrate with your SaaS and enterprise applications
- Automate EAI/B2B and business processes
- Connect to on-premises data

Logic App Designer



Built-in API Connectors

Connectors

- Box
- Chatter
- Delay
- Dropbox
- Azure HD Insight
- Marketo
- Azure Media Services
- OneDrive
- SharePoint
- SQL Server
- Office 365
- Oracle
- QuickBooks
- SalesForce
- Sugar CRM
- SAP
- Azure Service Bus
- Azure Storage
- Timer / Recurrence
- Twilio
- Twitter
- IBM DB2
- Informix
- Websphere MQ
- Azure Web Jobs
- Yammer
- Dynamics CRM
- Dynamics AX
- Hybrid Connectivity

Protocols

- HTTP, HTTPS
- File
- Flat File
- FTP, SFTP
- POP3/IMAP
- SMTP
- SOAP + WCF

BizTalk Services

- Batching / Debatching
- Validate
- Extract (XPath)
- Transform (+Mapper)
- Convert (XML-JSON)
- Convert (XML-FF)
- X12
- EDIFACT
- AS2
- TPMOM
- Rules Engine