



Integrating Salesforce, O365, & etc. using Microsoft PowerApps & Flow

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#BOS365

slalom

Session Agenda

- Quick Intro
- Overview of Salesforce.com
- IFTTT
- Introduction to Microsoft Flow
- Powerapps
- Remaining Demos
- Resources

Jared Matfess

Solution Architect with Slalom Consulting
10+ years in the IT Field



Happily married for 5+ years!

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E-mail: JaredM@slalom.com

Slideshare: www.slideshare.net/jmatfess/



Overview of Salesforce.com (for an O365 crowd)

What is Salesforce.com?

Cloud Software as a Service (SaaS)

- Sales Cloud
- Service Cloud
- Market Cloud
- Community Cloud
- Chatter
- Analytics
- Apps



Sign up for Developer instance

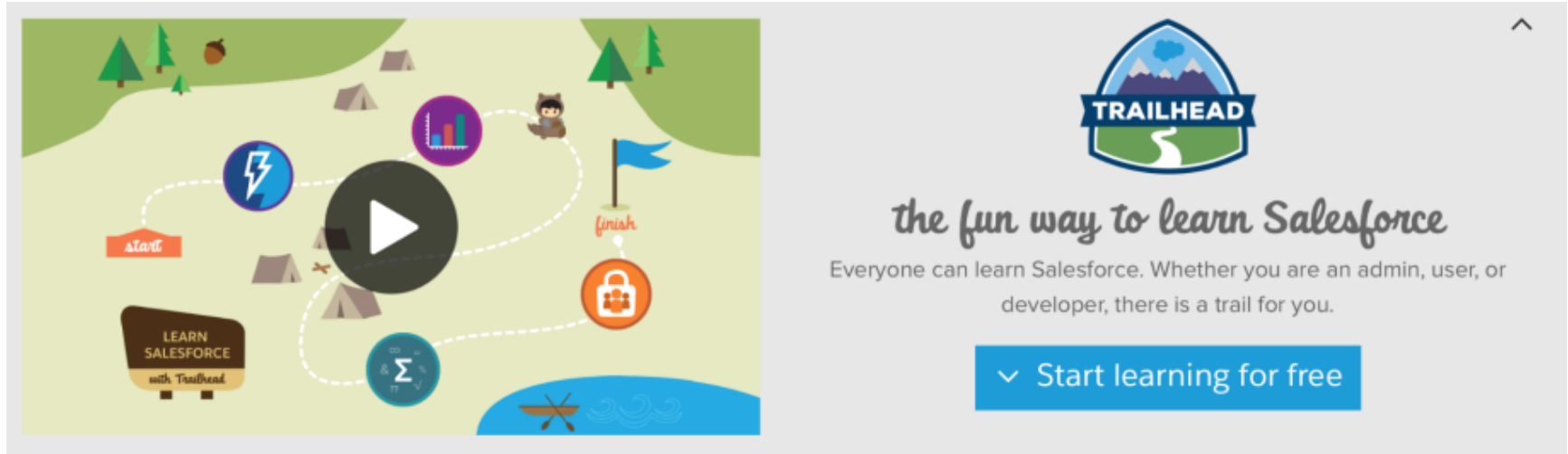


<http://developer.salesforce.com>

Why Learn Salesforce.com?

- Very popular CRM solution that continues to grow market share
- Skills are very transferable from what you've learned from SharePoint
- Developers – you can build HTML/JavaScript based solutions
- Become the SME for integrating Salesforce.com & SharePoint

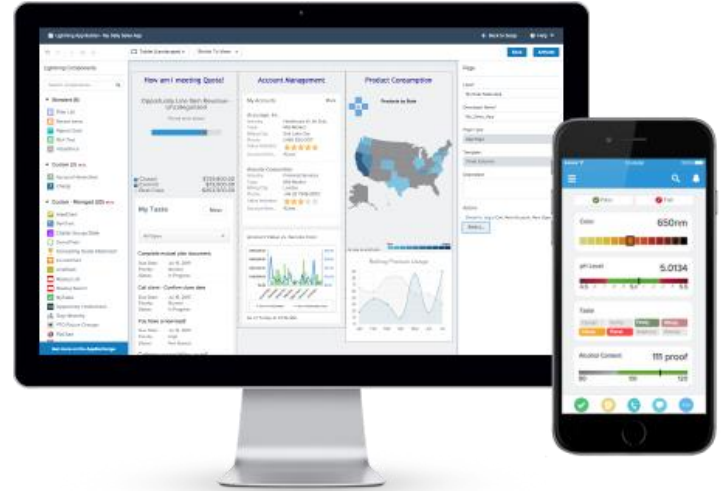
Trailhead for Additional Learning



<https://developer.salesforce.com/trailhead>

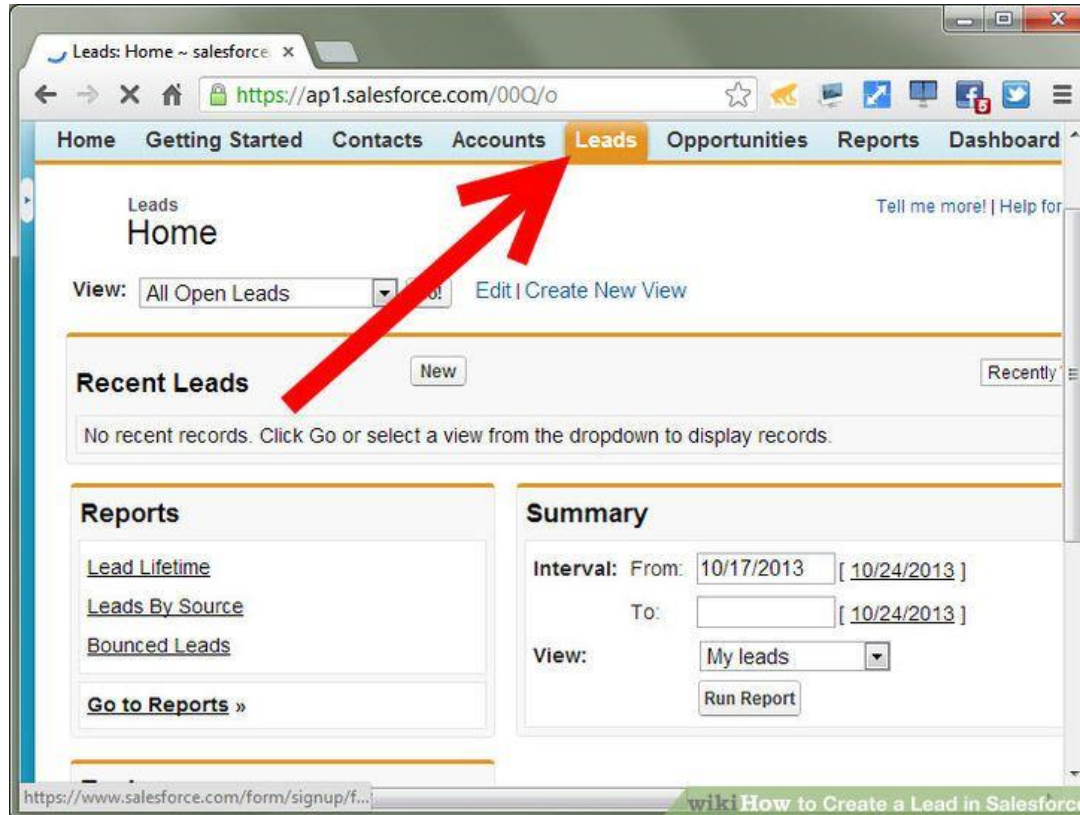
Salesforce Objects

- Similar to SharePoint Lists
 - Fields / Columns
- Pages are “Visual Force Pages”
 - Combination of HTML & Apex Code
- Salesforce1 Mobile App
 - “Integrate your custom apps” into this phone app



Tonight's Featured Salesforce Object

- The Lead 😊

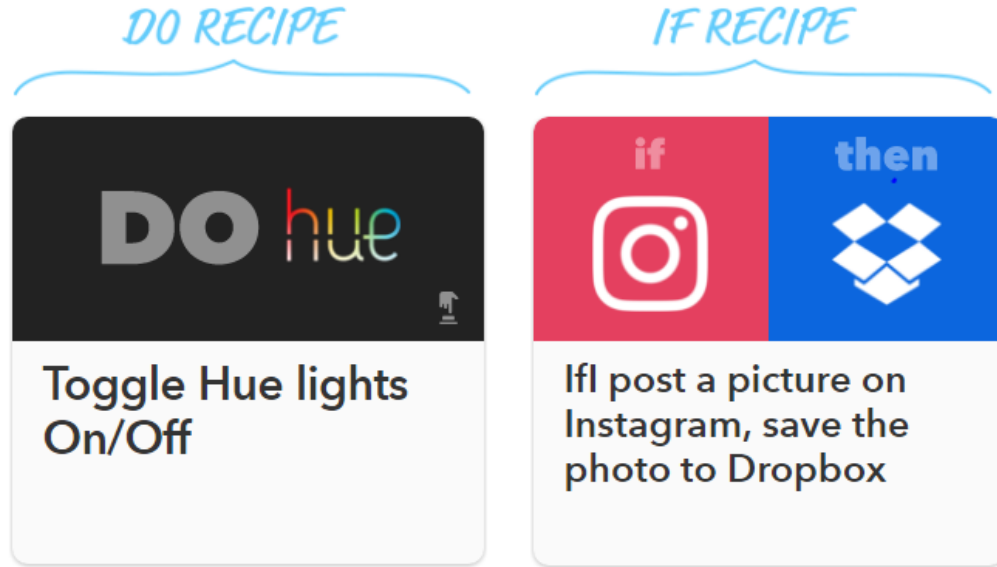


Quick demo of Salesforce



IFTTT (If This Then That)

What is IFTTT? IFTTT gives you creative control over the products and apps you love.



IF Recipes

IF Recipes run automatically in the background. Create powerful connections with one simple statement – if this then that.



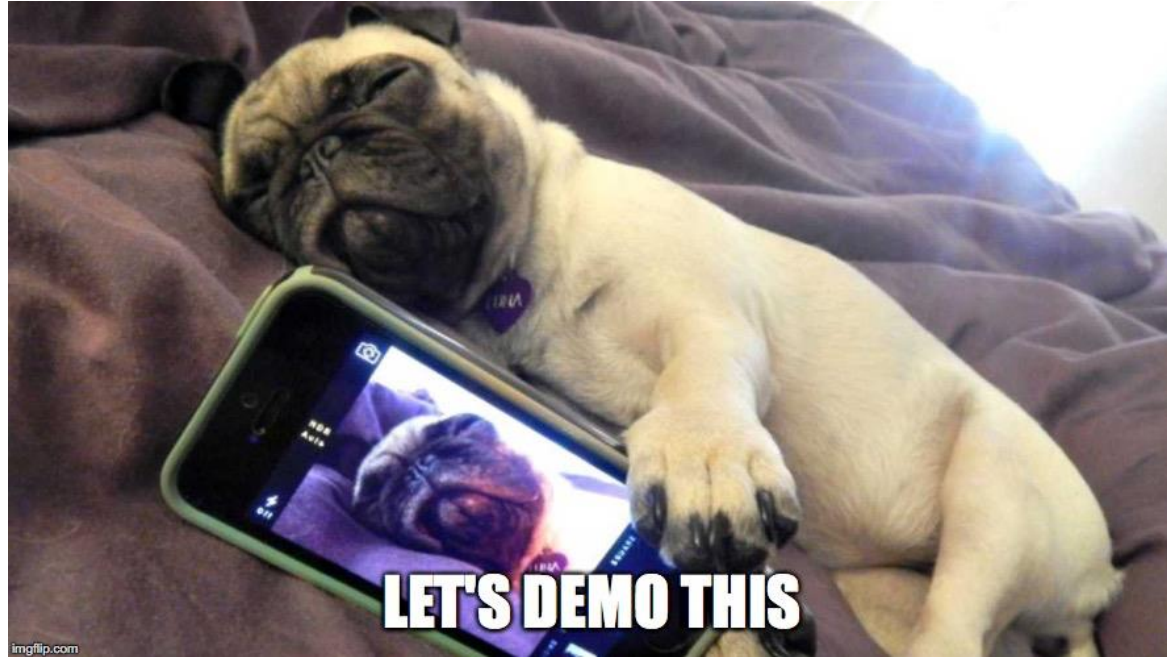
If I post a picture on Instagram, save the photo to Dropbox

DO Recipes

DO Recipes run with just a tap and enable you to create your own personalized Button, Camera, and Notepad. The DO apps are [available for iOS and Android](#).



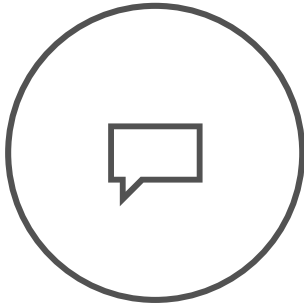
Quick Demo of IFTTT



Intro to Microsoft Flow

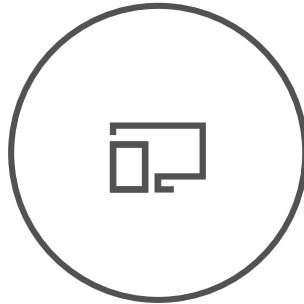
Microsoft Flow

An enterprise software service for **business users** to work smarter by **automating processes** across applications and services



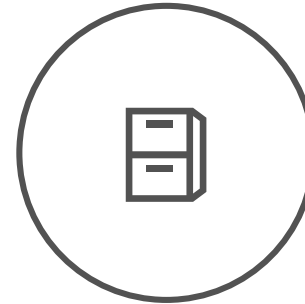
Get notifications

Get an alert when a file or folder is updated



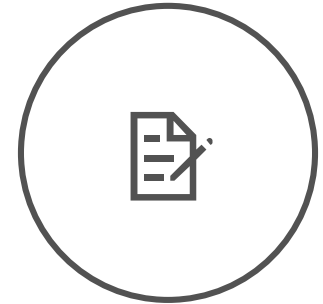
Synchronize files

Connect your folders to keep your data current



Organize data

Collect and organize business data automatically



Automate approvals

Streamline approvals with instant alerts and more



Connect to the systems you're already using






















Quickly generate and customize apps based on Excel files, SharePoint Online lists, Salesforce records and more. You can even connect custom APIs.

Your apps will be able to fully interact with underlying sources and will respect the permissions you've already established in them.

Microsoft Flow

Start with dozens of premade SharePoint flows

<https://flow.microsoft.com>

 Create a new record in Dynamics CRM when a new list item is added  By Microsoft	 When a message is posted on a group, create entry into a SharePoint list  By Microsoft	 If you Approve a new file in SharePoint, move it to a different folder   By Microsoft	 Create a new item in SharePoint, when a new order is added in Salesforce   By Microsoft
 When a member is added to a MailChimp list, copy it to a Share Point list  By Microsoft	 When a new item is created in SharePoint list and meets certain conditions, post to my Yammer  By Dan Stoll	 When a new member is added to a MailChimp list, ask me if I also want to add it to a list in SharePoint    By Microsoft	 Create a Dynamics CRM entity for items in a SharePoint list that I have approved   By Microsoft

Build your own flows in an easy to use visual designer

Sending an Exchange email when a new file is added in Dropbox

Authenticate to your Dropbox account.

Select folder to monitor

Authenticate to your O365 account.

Build email *Subject* and *Body*

The screenshot displays the Microsoft Flow visual designer interface. At the top, a blue step titled 'When a file is created' is shown. Below it, a grey step titled 'Include a Folder' has a 'Folder*' field set to 'PowerApps'. A connection bar indicates the flow is 'Connected to johnsharp@hotmail.com' with a 'Change connection' link. To the right, a 'Dropbox / Dropbox' connector window is open, showing a folder selection interface with 'PowerApps' selected and 'Choose' and 'Cancel' buttons. Below the first step, an orange step titled 'Send Email' is shown. Its 'Subject*' field contains the text 'New file: [File name] has been added to your Dropbox'. The 'Body*' field contains 'New information available'. Below this, a section 'You can insert data from previous steps...' shows 'Outputs from When a file is created' with buttons for 'File content', 'File identifier', 'File name', 'File path', 'File entity tag', and 'File content type'. The 'Include a To' section has a 'To*' field set to 'To'. At the bottom, it shows 'Connected to johnsharp@contoso.com' with a 'Change connection' link. Arrows from the text annotations on the left point to the 'Dropbox / Dropbox' connector and the 'Send Email' step.

Choose to include properties from previous step (Dropbox file) to improve relevance

Specify *Send To* email address and additional properties (optional): *From*, *CC*, *BCC* and *Importance*

So what's Flow? (in a couple of bullet points)

- No-code “Data orchestration” service
- Allows you to connect services with clicks not code
- Supports both Cloud & On-Premises!

Flow can connect to On-Premises

- Requires Microsoft's "On-Premises Data Gateway"
- Gateway Server must "always be connected to the Internet"
- At this time SQL is the only supported target endpoint
 - Roadmap includes SharePoint
- Might be worth discussing if the database should be moved to Azure

On-premises data gateway

One gateway for multiple cloud services and experiences

Cloud services



Read access, scheduled refresh, live connection

Live connection, CRUD support (create, read, update and delete)



Gateway Cloud Service

Data source connection credentials are encrypted



Azure Service Bus



Application Gateway

Data source connection credentials can only be decrypted by the gateway

On-premises data sources



SQL Server



SQL Server Analysis Services

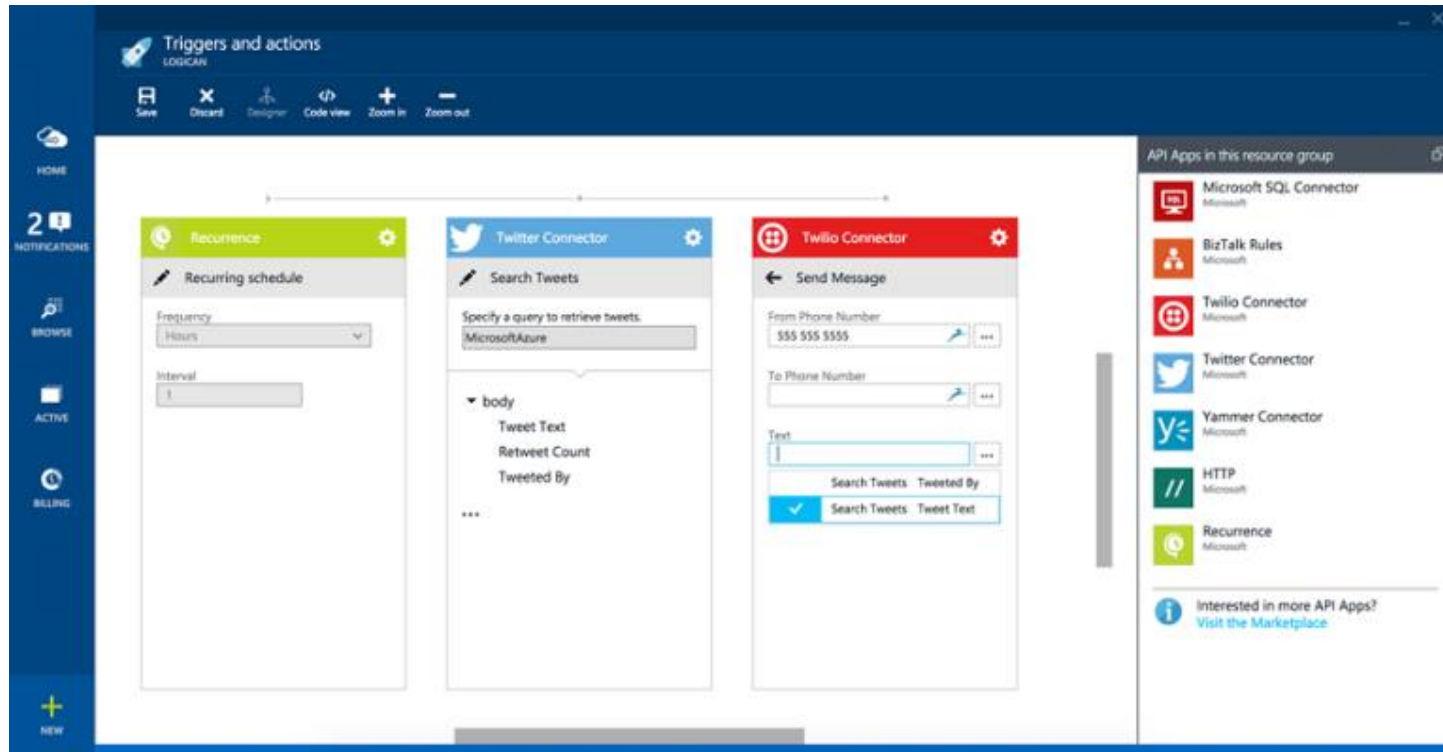


Other data sources



Files, SharePoint

What about Azure Logic Apps?



Value Proposition for Microsoft Flow w/Salesforce

- Salesforce.com subscription licenses are expensive
- Most organizations only purchase subscription for sales personnel
- Supporting business functions & personnel can help to add values to sales cycle while not having to incur the additional expense
- Flow will bridge the gap between consumer systems, other cloud services, etc.

Example: Conference

- Slalom Atlanta sponsors a booth at SharePoint Saturday event
- Lots of interesting conversations with potential recruits
- Team captures a few potential consulting leads but nobody has access to CRM!

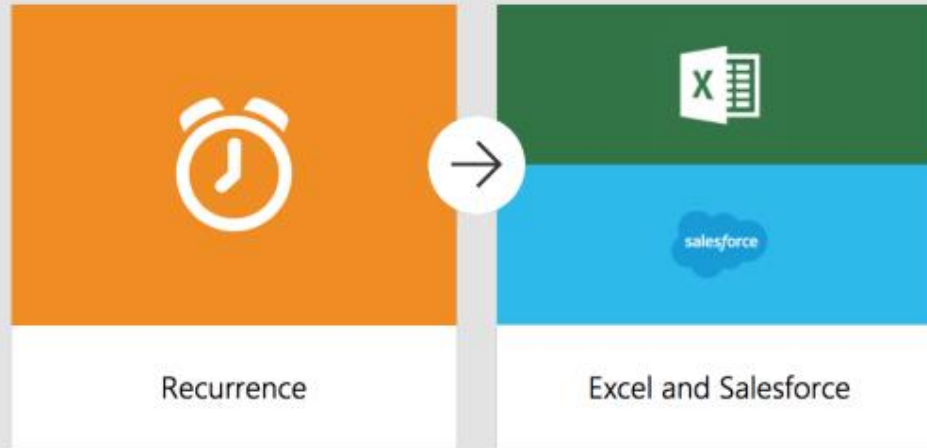


What would you do?



Flow it!

Create Salesforce Leads from a Excel table



It's now very easy to create Salesforce leads. Whenever you add a new row to the Excel Table you select, a lead will be created in Salesforce (and cleaned up from the Table). You need to select a sheet that has columns for: First Name, Last Name, Company, Phone and Email.

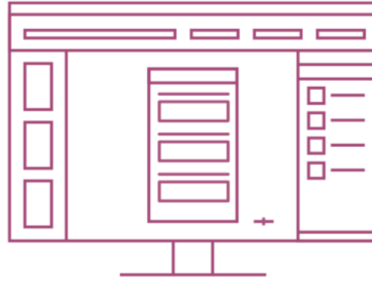


Power Apps

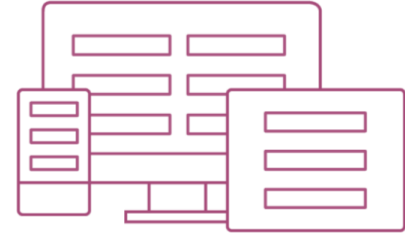
Microsoft PowerApps is a service for creating and using custom business apps across platforms



Connect to existing
systems and data
sources



Build apps, forms, and
workflows without
writing code

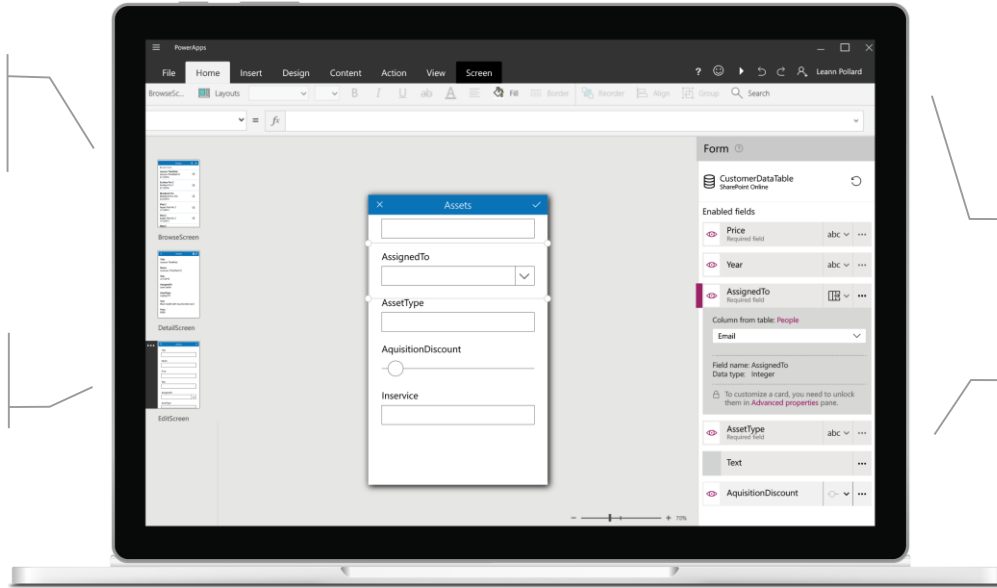


Publish apps
instantly for web
and mobile

Build useful apps without writing code

Craft forms and screens in a visual designer that helps you see exactly what you'll get

Take advantage of device capabilities like cameras, GPS, and pen controls

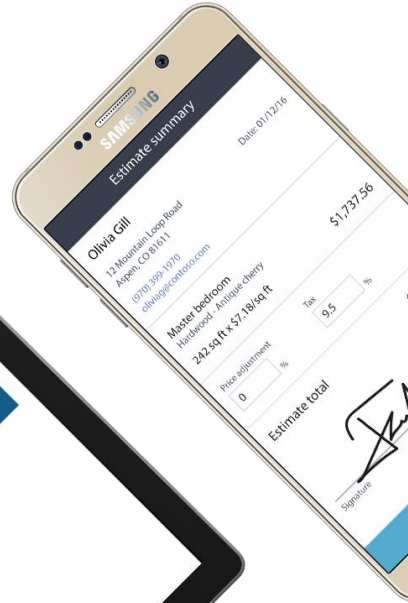


Build business logic into your apps with an Excel-inspired expression language

Extend the capabilities of connected data sources, or focus just on the bits you need

Publish apps instantly for web and mobile

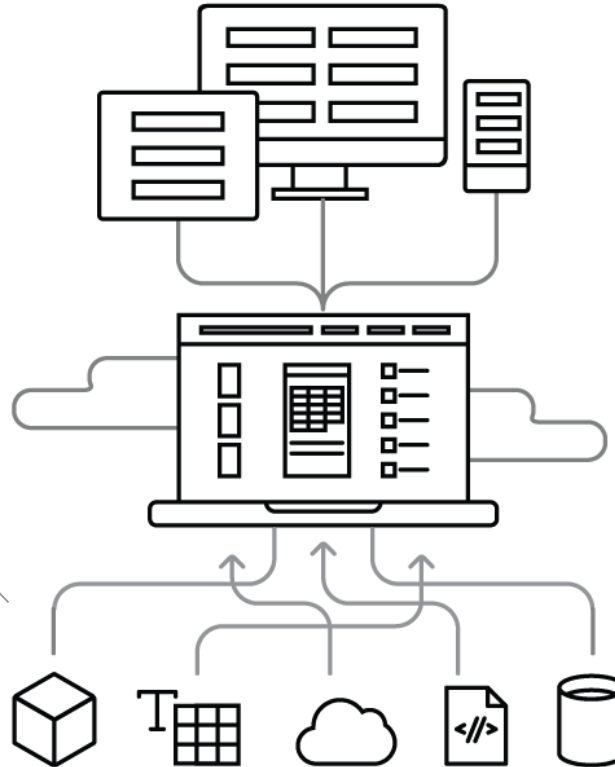
Get apps to your team when and where
they're needed, whether that's on the web,
iOS or Android—no app store required.



How it works

PowerApps Cloud
Publish apps to people in your organization so they can access anywhere

Connections
Build apps that interact with your data sources and respect their permissions

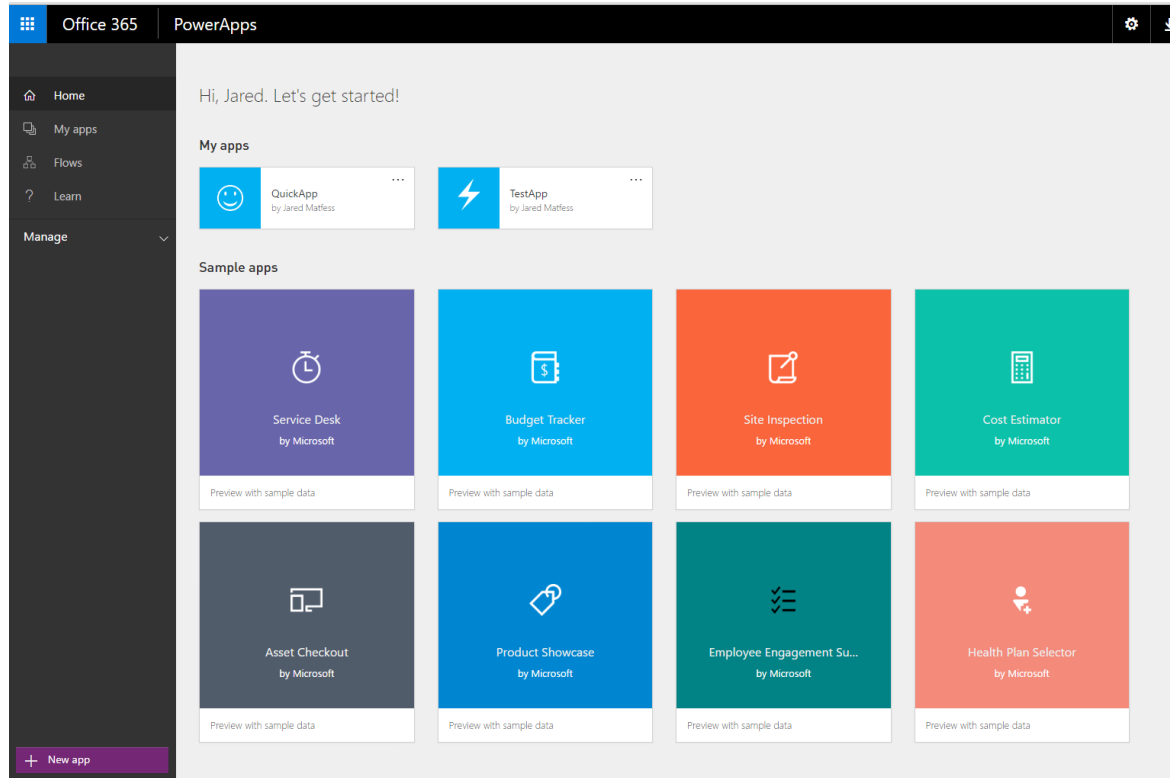


Use on web and mobile
Find and use apps instantly on the web and in PowerApps mobile for iOS and Android

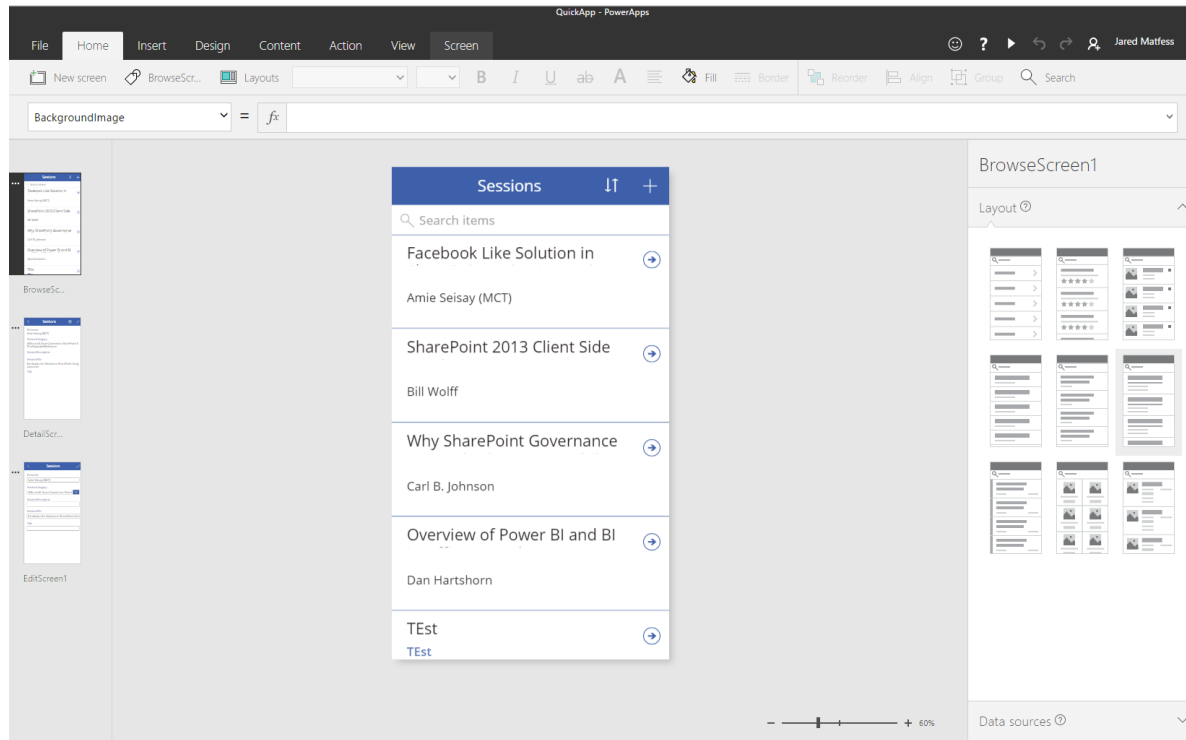
Create in PowerApps Studio or web
Build apps in a visual experience that shows exactly what you'll get

Your data
PowerApps connects to a range of data sources and systems, including custom APIs

Part of O365 App Launcher

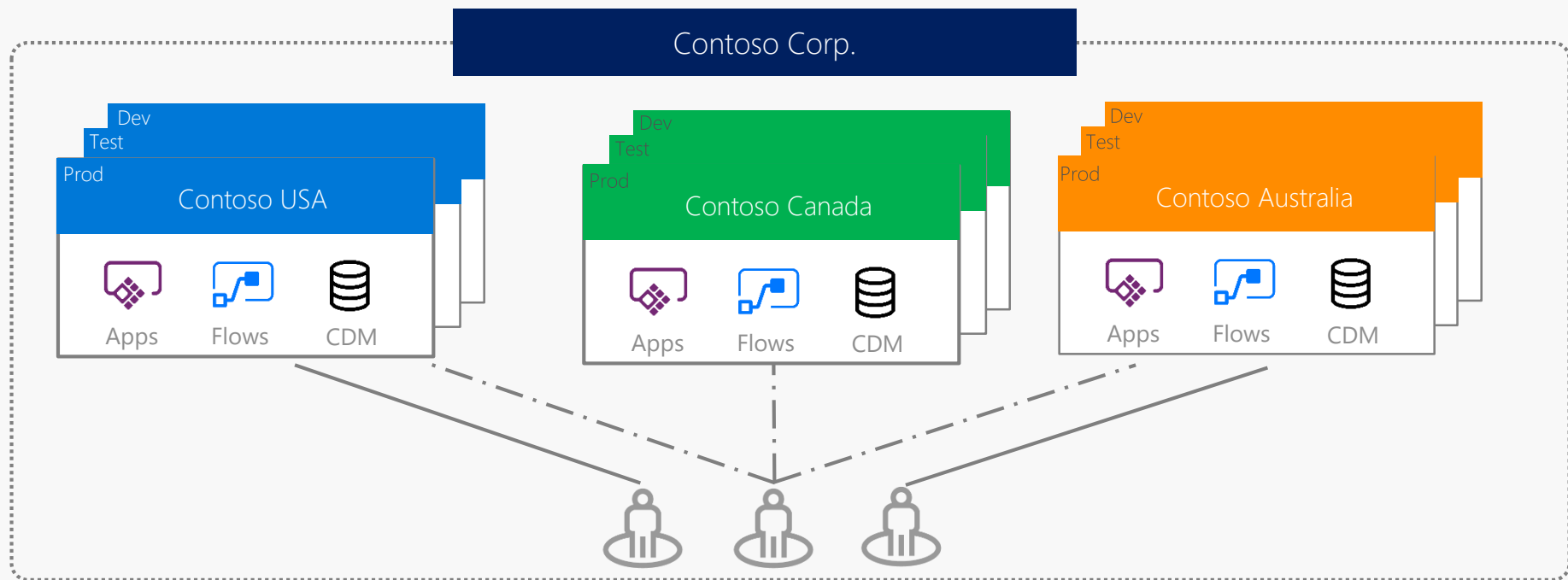


PowerApps Authoring



Deployment environments

Easily manage enterprise scale-out of applications and data.
Move solutions across environments with packages.



Admin center

Environment administration

Lifecycle and management for all resources

Manages roles and role membership

List and monitor list of all resources in a given environment (*)

Data Loss Protection

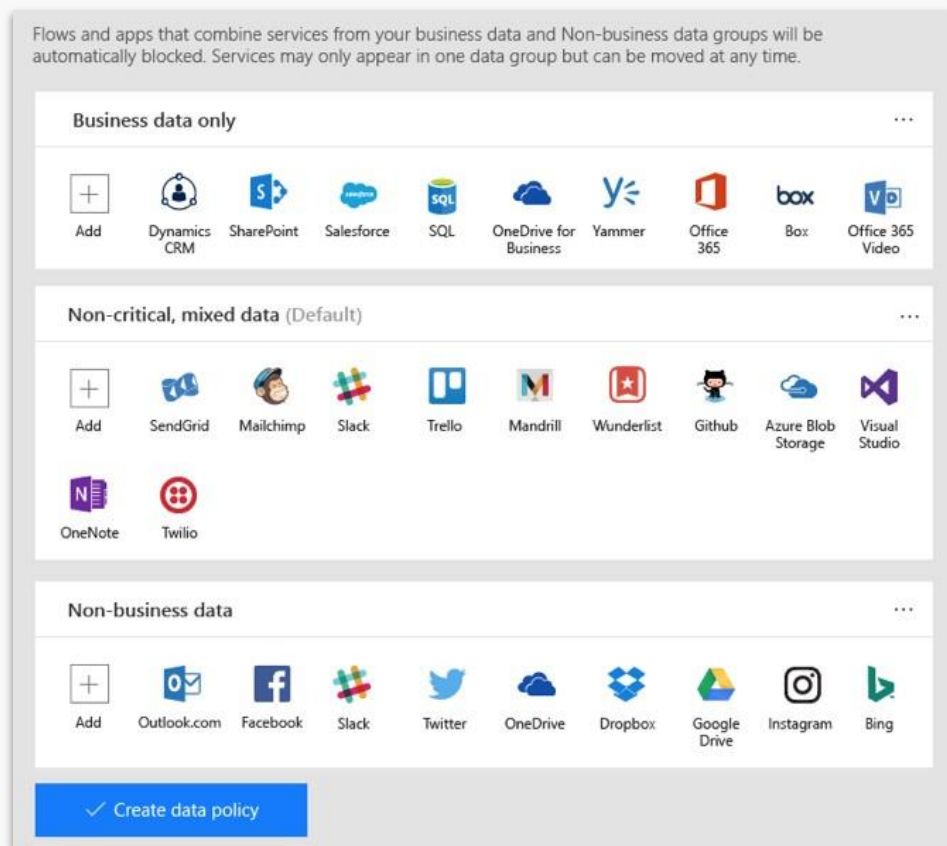
Provide IT-administrators with full control of how data flows within an organization

Set policies for classification of services

Local agility, central control

Allow developers/teams control over their environment and still have centralized control

(*) Capabilities planned for Post GA release









Environments

Search



New environment

NAME ^	REGION	DATABASE	CREATED BY	CREATED
Contoso Primary <small>DEFAULT</small>	East U.S.	 Created	System	9/13/16
Contoso Retail US	Central U.S.	 Created	Nitish Kumar Meena	9/13/16
Contoso Retail APAC	Southeast Asia	 Created	John Doe	9/16/16
Contoso Retail Europe	West Europe	 Created	John Doe	9/24/16
Contoso Retail Dev	West U.S.	 Created	Nitish Kumar Meena	9/16/16
Contoso Ops Global	East U.S.	 Created	Nitish Kumar Meena	9/20/16



Environments

Search



New environment

NAME ^

Contoso Primary DEFAULT

Contoso Retail US

Contoso Retail APAC

Contoso Retail Europe

Contoso Retail Dev

Contoso Ops Global

CREATED BY

CREATED

System

9/13/16

Nitish Kumar Meena

9/13/16

John Doe

9/16/16

John Doe

9/24/16

Nitish Kumar Meena

9/16/16

Nitish Kumar Meena

9/20/16

New environment

Create a new environment to test apps and maintain separate databases

Environment name

ABC Environment

*Cannot be changed later

Region ⓘ

East U.S.



*Cannot be changed later

Database

☒ Provision database for this environment (recommended)

ⓘ All users in your environment will have access to this database. If there is highly sensitive data in your database, you can turn off this setting. [Learn more](#)

☐ I do not want to provide full access to all users

Environment-wide access can be disabled any time from the admin portal.

Cancel

Create



ABC Environment

Details

Security

Database

Environment roles

User roles

Permission sets

Environment roles

NAME ^

DESCRIPTION

Environment admin

Can create new environments, create a database, create and manage environment roles and permissions.

Maker

Can create, edit, share, and delete apps, and assign contributor permissions for apps.



ABC Environment

Details

Security

Database

Environment roles

User roles

Permission sets

Permission sets



New permission set

NAME	DESCRIPTION	CATEGORY	
Inquire into Sales Order Progress	Access to fulfillment status and customer information.	Sales	
Maintain Check Progress	Fulfillment status.	Sales	
Maintain Sales Order	Allows for updating of invoice and customer info.	Sales	
Release to Warehouse	Shipping data and customer information.	Logistics	
Employee Salary data	Access to employee contact information, salary, and org status.	HR	
Employee contact information	Read contact information.	HR	
Maintain Sales Order	Allows for updating of invoice and customer info.	Sales	

AppSource Integration

Organization gallery

Create and distribute apps within your company

Easy sharing to specific audiences

Role-based access control

Get apps from partners

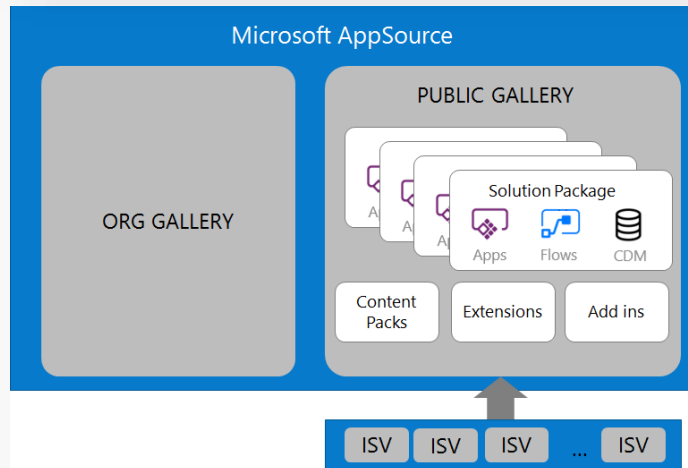
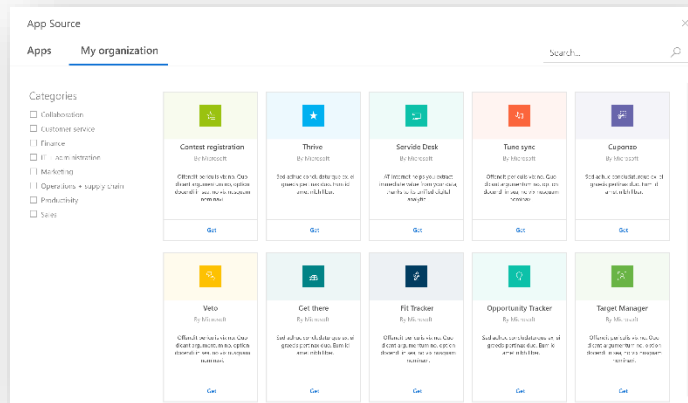
Deploy apps, templates and components provided by partners

Solution packages allow moving apps and data across tenants

Avoid overloading users

Users pull applications they need

Admins can push key applications to users



PowerApps packaging

Extending Office 365 and
Dynamics 365

PowerApps and MSFT Flow for Office 365 and Dynamics 365

- Included with O365 & D365 workloads
- PowerApps & MSFT Flow capabilities
- **Create & run within the context of O365 & D365 data sources**

Quotas (per user; pooled tenant-wide):

- 2,000 flow runs per month

For business users
Run any app using CDM

PowerApps P1

- PowerApps & MSFT Flow capabilities
- Access to Common Data Model and premium connectors
- **Run any app or flow & build against any existing data source**

Quotas (per user; pooled tenant-wide):

- 4,500 flow runs per month
- 20MB Data Storage
- 2GB File Storage

For creators and IT admins
Full creation & admin capabilities

PowerApps P2

- Included in full D365 Plans
- Includes everything in P1, plus
- **Create any app or flow**
 - **Model your business data and create custom entities (CDM)**
 - Create/manage environments and databases
 - Set policy and view usage

Quotas (per user; pooled tenant-wide):

- 15,000 flow runs per month
- 200 MB Data Storage
- 20 GB File Storage per user

Additional flow runs, Data Storage, and File Storage may be purchased as needed

PowerApps Preview – key features shipped

In addition to numerous bug fixes, usability and perf improvements



May - Sep 2016

- Register and use custom APIs
- Android app
- App from Data improvements
- New samples and templates
- Enabled single sign-on for AAD based services
- Support for look ups
- No record limit for working with data
- Support for on-premises SQL Server
- SharePoint Online modern list integration
- Many new connectors
- Support for on-premises SharePoint lists
- PowerApps Studio in a web browser
- Preview of Common Data Model
- Push notifications support for Android
- App templates based on Common Data Model
- Bar code scanner
- Favorite apps and native gestures
- Dynamics AX connector
- Samples connected to Office 365, Salesforce, Wunderlist, etc.

PowerApps roadmap - highlights



Q4 Calendar 2016

- General available, 7 regions, 42 languages
- AppSource for company wide app sharing
- Deployment Environments
- Admin center
- Data flow policies
- Re-usable, dynamic forms support (preview)
- Windows Phone support



H1 Calendar 2017

- Power BI integration across the platform
- Solution packages
- Embedded, in-context SharePoint Online
- Pro-dev control extensibility
- Re-usable, dynamic business process & logic
- Common Data Platform Office 365 data sync
- Enhanced mobile Flow integration
- Extended Common Data Platform security model
- Additional embedded experiences
- Sovereign cloud deployments

Common Data Model

So how about creating me a new table in your...





MEASURE

ACT

AUTOMATE

Power users



Power BI



PowerApps



Microsoft Flow

Developers and IT pros

Pro
BI

Pro
Dev

Pro
Integration



Common
data model



Connectors
+ gateways


So what is it?


- Place to store data outside of major systems (Salesforce, SharePoint, etc.)
- Rich data types: Entities support rich data types including business abstractions like Address, Email, Currency, Auto-numbering (for invoices, orders etc.) etc. Modern types such as images, geographic location, Phone, Website URL will enable building modern, mobile applications on enterprise data. These data types are implemented using the latest SQL Server data types
- System attributes (created, modified, etc.)
- Data encryption at rest

<https://powerapps.microsoft.com/en-us/blog/announcing-powerapps-common-data-model/>

Let's take a look...

Jared Matfess's database ▾

Search 

 New entity ...

ENTITY ▾	MODIFIED	CATEGORIES	TYPE	
Alumnus	1 d ago	Person	Standard	...
Business Unit	1 d ago	Foundation	Standard	...
Case	1 d ago	Customer Service	Standard	...
Case Activity	1 d ago	Customer Service	Standard	...
Case Activity KB Article	1 d ago	Customer Service	Standard	...
Case Worker Assignment	1 d ago	Customer Service	Standard	...
Company	1 d ago	Organization	Standard	...
Constituent	1 d ago	Person	Standard	...
Contact	1 d ago	Person	Standard	...
Contractor	1 d ago	Person	Standard	...

How to get PowerApps and Flow?

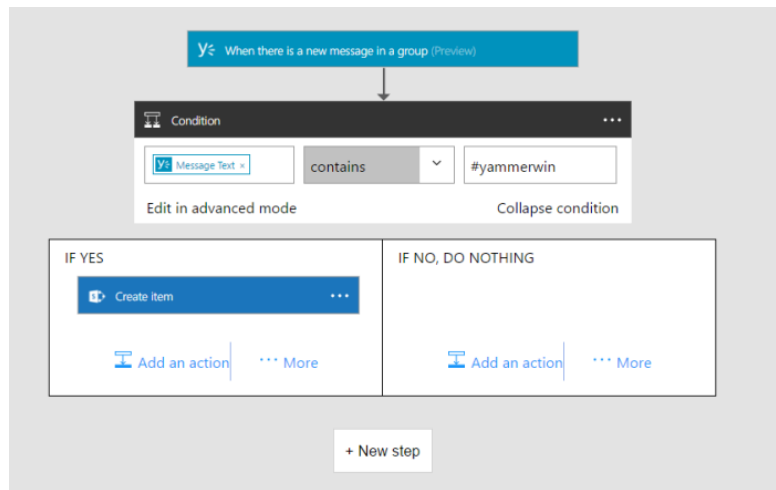
Flow Free	Flow for Office 365 Flow for Dynamics 365	PowerApps for Office 365 PowerApps for Dynamics 365
Anyone can sign up for free with their personal, work or school email	Included for free with most* Office 365 and Dynamics 365 application SKUs	Included for free with most* Office 365 and Dynamics 365 application SKUs
Very low # of flow runs per month included Limited to connect to “standard” services No on-premises connectivity (Post-GA) No co-authoring or sharing within an organization No SLA	Low # of flow runs per month included Limited to connect to “standard” services On-premises connectivity to Office, Dynamics services* (Post-GA) Includes co-authoring or sharing within an organization	Limited to connect to “standard” services On-premises connectivity to Office, Dynamics services* (Post-GA) Includes co-authoring or sharing within an organization

A Quick Conversation about Yammer

Yammer – it's not just what your sales person does



#YammerWin



- <https://jaredmatfess.wordpress.com/2016/08/18/leveraging-microsoft-flow-to-capture-yammerwins-for-knowledge-management/>

Final Thoughts & Resources

Limits are awesome

Company Information

Slalom

[Help for this Page](#) ?

The organization's profile is below.

[User Licenses \[104\]](#) | [Permission Set Licenses \[5\]](#) | [Feature Licenses \[13\]](#) | [Usage-based Entitlements \(BETA\) \[0\]](#)

Organization Detail

Edit

Organization Name	Slalom	Phone	
Primary Contact	Jared Mattfess	Fax	
Division		Default Locale	English (United States)
Address		Default Language	English
	US		
Fiscal Year Starts In	January	Default Time Zone	(GMT-07:00) Pacific Daylight Time (America/Los_Angeles)
Allow Support to Activate Multiple Currencies	<input type="checkbox"/>	Currency Locale	English (United States) - USD
Newsletter	<input checked="" type="checkbox"/>	Used Data Space	310 KB (6%) [View]
Admin Newsletter	<input checked="" type="checkbox"/>	Used File Space	767 KB (4%) [View]
Hide Notices About System Maintenance	<input type="checkbox"/>	API Requests, Last 24 Hours	15,025 (15,000 max)
Hide Notices About System Downtime	<input type="checkbox"/>	Streaming API Events, Last 24 Hours	0 (10,000 max)
		Restricted Logins, Current Month	0 (0 max)
		Salesforce.com Organization ID	00D61000000es74
		Organization Edition	Developer Edition
Created By Jared Mattfess , 11/12/2015 10:05 AM		Modified By Jared Mattfess , 5/20/2016 7:28 AM	

Edit

Flow, PowerApps, & Governance

- Companies definitely need to identify “who” will build these solutions
- The ease of development does not negate the need to have data discussions
- Be aware of API limitations on target systems (Salesforce.com) is a great example
- Consider developing “naming conventions” for Flows (Logic Apps)

Final Thoughts

- PowerApps – the InfoPath replacement?
- Flow – the SharePoint Designer workflow replacement?
- How much will it cost? Public Preview vs Final Service?
- Azure Logics Apps vs Microsoft Flows?

Resources

- <https://flow.microsoft.com/en-us/documentation/gateway-reference/>
- <http://powerusers.microsoft.com>
- <http://powerapps.microsoft.com>
- <http://flow.microsoft.com>
- <https://www.youtube.com/watch?v=IWGM3uNkFDQ>



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