

# Managing Application Lifecycle with PowerApps and Flow



# Agenda

- Publishing and Versioning PowerApps and Flow Solutions
- Working in the PowerApps and Flow Admin Center
- Installing and Configuring an On-Premises Data Gateway
- Understanding Environments
- Configuring Data Loss Prevention Policies
- Packaging and Deploying Custom Solutions



# Application Lifecycle Manage (ALM)

- **Managing Power Apps**
  - Sharing PowerApps
  - PowerApp Versioning
  - Microsoft AppSource
- **Running PowerApps**
  - PowerApps Mobile
  - Web Browser
  - SharePoint List
- **PowerApps Admin Center and Flow Admin Center**
  - Environments
  - Data Loss Prevention Policies



# Sharing PowerApps

- Apps can be shared with:
  - Users or groups
  - Entire organization
- There are 3 types of sharing options:
  - Can Use
    - Users/groups can run the app but cannot share
  - Can Use and Share
    - Users/groups can run the app and share with others
  - Can Edit
    - Users/groups can run the app, customize it, and share the new version of the app



# PowerApps Versioning

- PowerApps keeps version history for apps saved to cloud
  - Accessible via <https://web.powerapps.com>
  - Restore, delete, and publish versions

Details	•	Share	•	<u>Versions</u>	•	Settings
PowerApps keeps a version history of your apps.						
VERSION	MODIFIED	MODIFIED BY	POWERAPPS RELEASE <sup>(?)</sup>	PUBLISHED	COMMENT	
3	8/11/2017 11:30:26 PM	MOD Administrator	2.0.676		↑ Publish this version	
2	8/11/2017 11:24:14 PM	MOD Administrator	2.0.676		↺ Restore	🗑 Delete
1	8/11/2017 1:04:45 AM	MOD Administrator	2.0.676	Live	↺ Restore	🗑 Delete



# Microsoft AppSource

- What is Microsoft AppSource?
  - Repository for business users find and use SaaS apps
  - Find solutions for vertical industries from Microsoft and partners
  - Located at <https://appsource.microsoft.com>



## Get the right app, right now

Find top business solutions for your industry from Microsoft and select partners—including exclusive apps.



## Build on what you have

Add new capabilities to your existing business applications. From Dynamics to Power BI, you'll find solutions to enhance what you already use.



## Start with confidence

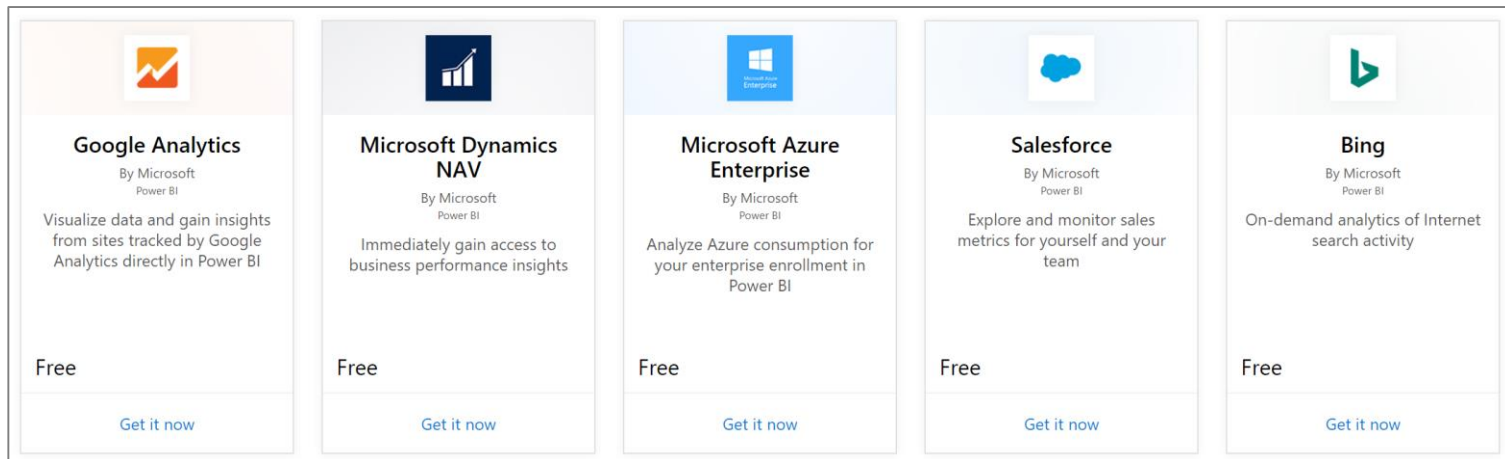
Try any app for free before you buy it, then work with a trusted Microsoft partner to implement your new solution.





# Accessing Microsoft AppSource

- Get solutions tailored to your industry that work with the products you already use such as:
  - Dynamics 365, Office 365, Power BI, and various Cloud solutions



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# PowerApps Admin Center

- PowerApps Administration within in an organization
  - Need to have established boundaries and policies
- Tenant admins + environment admins have ability to
  - Create and manage environments
  - CDS Databases
  - Data loss policies (DPL)



# Flow Admin Center

- For tenant admins and environment admins
  - Accessible at <https://admin.flow.microsoft.com>
  - Configure Data Loss Prevention (DLP) Policies
  - Data Integration
    - Projects
    - Connection Sets
  - Tenant Administration
    - User licenses
    - Quota



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# On-premises Gateways

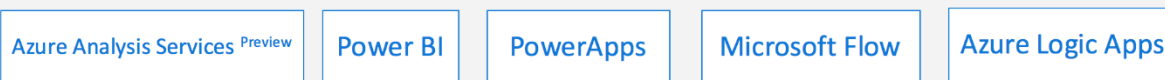
- Install an on-premises data gateway to transfer data quickly and securely between PowerApps and a data source that's not in the cloud
- With a gateway, you can connect to on-premises data over these connections:
  - SharePoint
  - SQL Server
  - Oracle
  - Informix
  - Filesystem
  - DB2



# On-premises data gateway

One gateway for multiple cloud services and experiences

Cloud services



Gateway Cloud Service  
Data source connection credentials are encrypted



Azure Service Bus

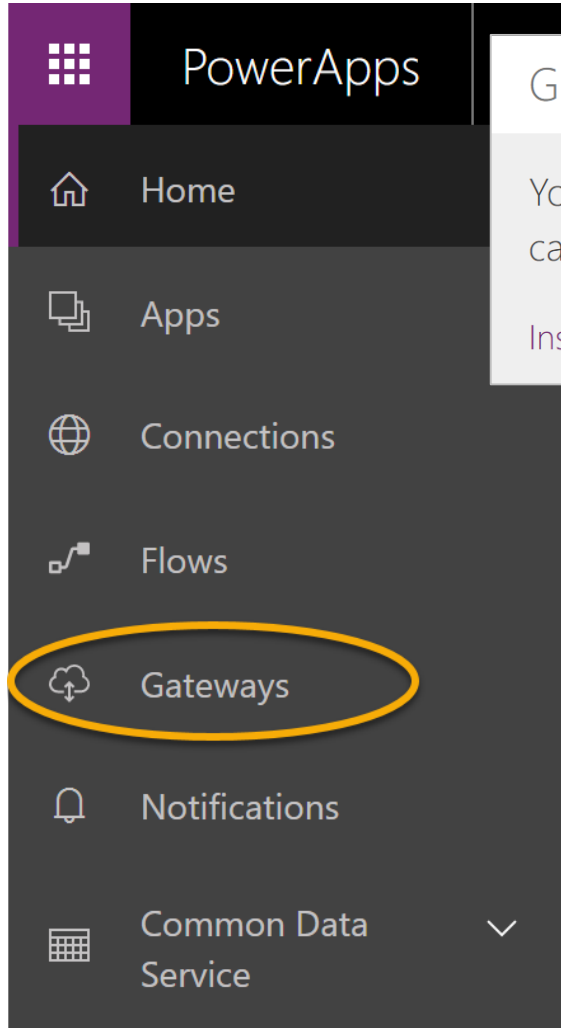


Application Gateway  
Data source connection credentials can only be decrypted by the gateway

On-premises data sources



# Install a Gateway



## Gateways

You don't have a gateway installed. To connect to your on-premises data, you can install one now.

[Install a gateway](#)



## On-Premises Data Gateway

Mobilize legacy on-premises systems into great apps that work across devices – without having to migrate any data. [Learn more](#)

[Download](#)



# Install a Gateway

## On-premises data gateway installation

Reminder before you install.

- ⚠ The gateway works best when it is installed on a computer that is always on and not asleep.
- The gateway will perform more slowly on a wireless network.

Next

Cancel

## On-premises data gateway installation

Getting ready to install the on-premises data gateway.

Install to

C:\Program Files\On-premises data gateway

☒ I accept the [terms of use](#) and [privacy statement](#)

Install

Close





# Install a Gateway



## On-premises data gateway

Almost done.

Installation was successful!

Enter email to identify the account to use with this gateway.

zoe@ck2017.onmicrosoft.com

Next, you need to sign in to register your gateway.

Sign in

Cancel



Sign in to your account



Microsoft Azure

Work or school account

zoe@ck2017.onmicrosoft.com

••••••••••

Sign in

[Can't access your account?](#)

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[Terms of use](#) [Privacy & Cookies](#)



# Install a Gateway



## On-premises data gateway

You are signed in as zoe@ck2017.onmicrosoft.com and are ready to register the gateway.

New on-premises data gateway name

MyOnPremGateway

Recovery key (8 character minimum)

.....

This key is needed to restore the gateway and can't be changed. Record it in a safe place.

Confirm recovery key

.....

We'll use this region to connect the gateway to cloud services: West US [Change Region](#)

<< Back

Configure

Cancel



## On-premises data gateway

Status

Service Settings

Diagnostics

Network

✓ The gateway MyOnPremGateway is online and ready to be used.

Gateway version number: 14.16.6423.3

☐ Help us improve the on-premises data gateway by sending usage information to Microsoft.

[Read the privacy statement online](#)

### Logic Apps

West US

[Create a gateway resource in Azure](#)

### PowerApps and Flow

Default environment

✓ Ready

### Power BI

Default environment

✓ Ready

Close



# Install a Gateway

More information about on-premises gateways and installation can be found at:

<https://powerapps.microsoft.com/en-us/tutorials/gateway-reference/>



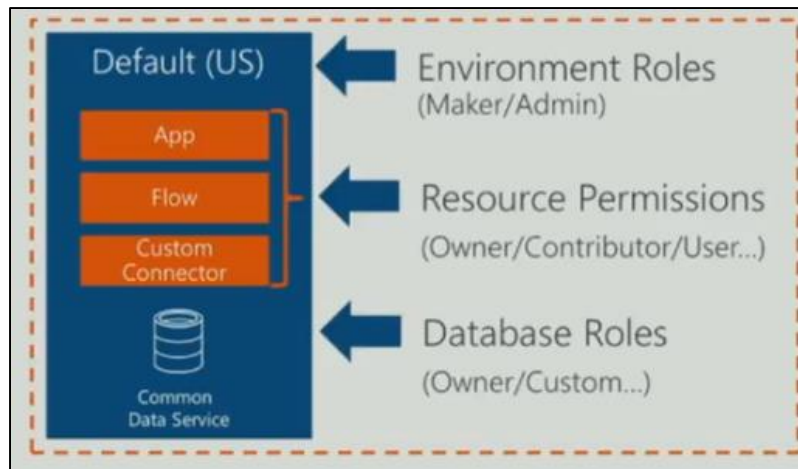
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# Environments

- Environments serve two purposes
  - Resource partitioning (by region)
  - Governance boundary
- Every tenant is provisioning with default environment
- Access to environment controlled at 3 different levels
  - Environmental roles
  - Resource permissions for apps and flows
  - CDS Database roles



# Managing Environments

- Environment is scope to store, manage, and share custom solutions
  - Custom solutions include PowerApps, Flows and CDS Schema
- Environments serves as containers to separate apps that have:
  - Different roles
  - Security requirements
  - Target audiences
- How you choose to leverage environments depends on your organization and apps you are trying to build



# Environment Roles (Admin and Maker)

- **Environment Admin role** - can perform all administrative actions on an environment including the following:
  - Add or remove a user or group from either Environment Admin or Environment Maker role
  - Provision Common Data Service database for environment
  - View and manage all resources created in environment
  - Set Data Loss Prevention policies
- **Environment Maker role** - can create new resources within environment including apps, connections, custom APIs, gateways, and flows using Microsoft Flow





# Monitoring Environments

- PowerApps Admin center allows monitoring resources:
  - View and manage environments
  - View and manage all apps and flows within an environment
  - View and manage your CDS database
- Require PowerApps Plan 2 or Microsoft Plan 2 license



# Environment Examples

- **Single environment:** Build apps in a single environment
- **Separate environments:** Create separate environments that group Test and Production versions of your apps
- **Separate environments by teams:** Create separate environments corresponding to specific teams or departments in your company.
  - Each containing the relevant data and apps for each audience
- **Separate environments by branches:** Create separate environments for different global branches of your organization



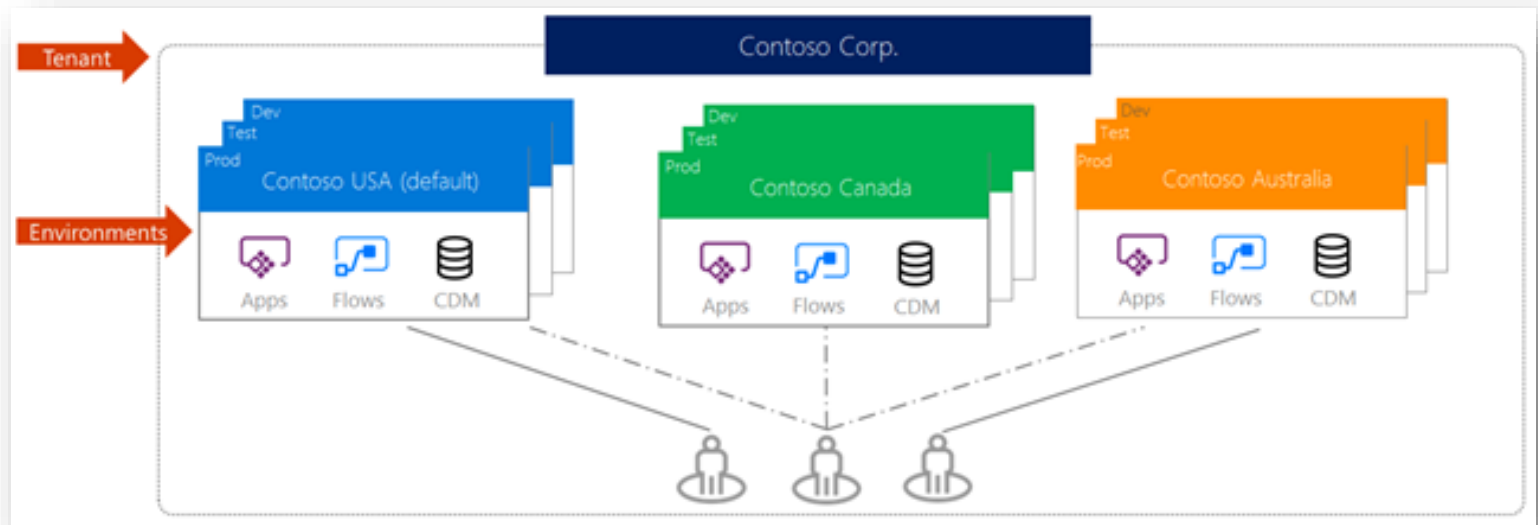
# Apps in Environments

- App in an environment is permitted to connect to data sources deployed in same environment which includes:
  - Connections, Gateways, Flows, and Common Data Service databases
- For example, in a scenario with two environments for Test and Production (named *Test* and *Prod*):
  - You create a Common Data Service database in each of the environments
    - App in 'Test' environment only permitted to connect to the 'Test' database
    - App in 'Test' environment cannot connect to the 'Prod' database and vice-versa



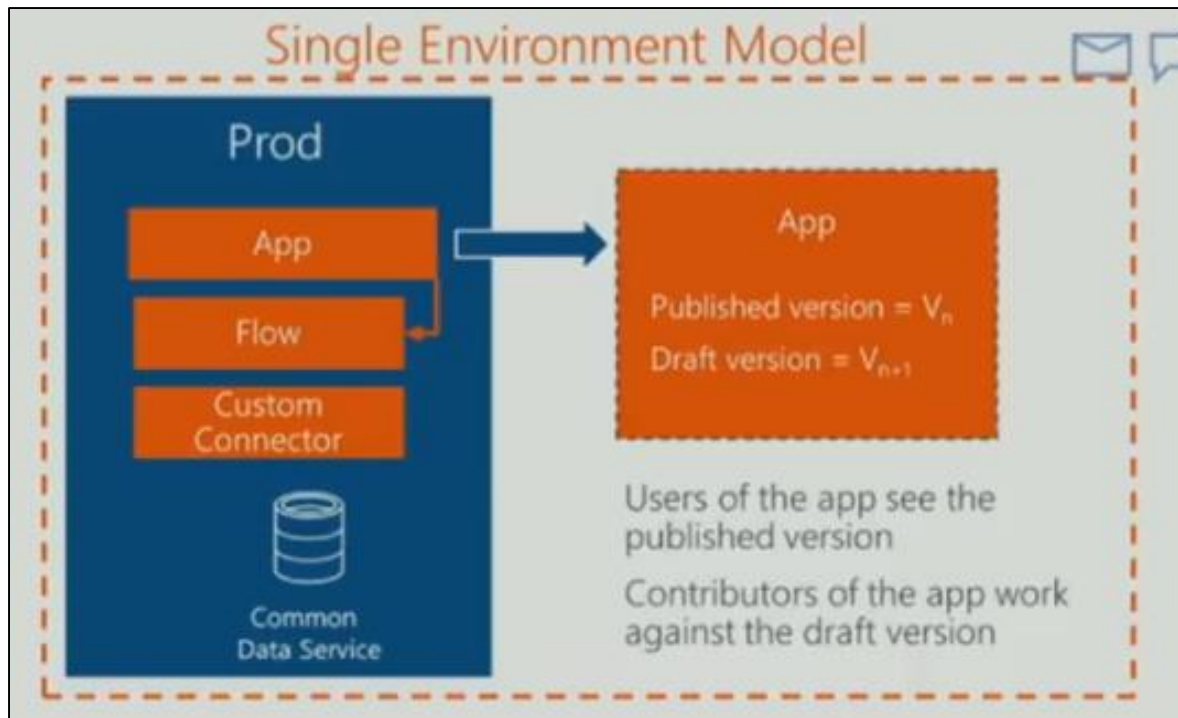
# CDS in Environments

- Every environment has either 0 or 1 CDS database
  - Environment created without CDS database by default
  - You can only create a single CDS database per environment
  - The ability to create a CDS database for your environment depends on your purchased PowerApps license and your permission within the environment.



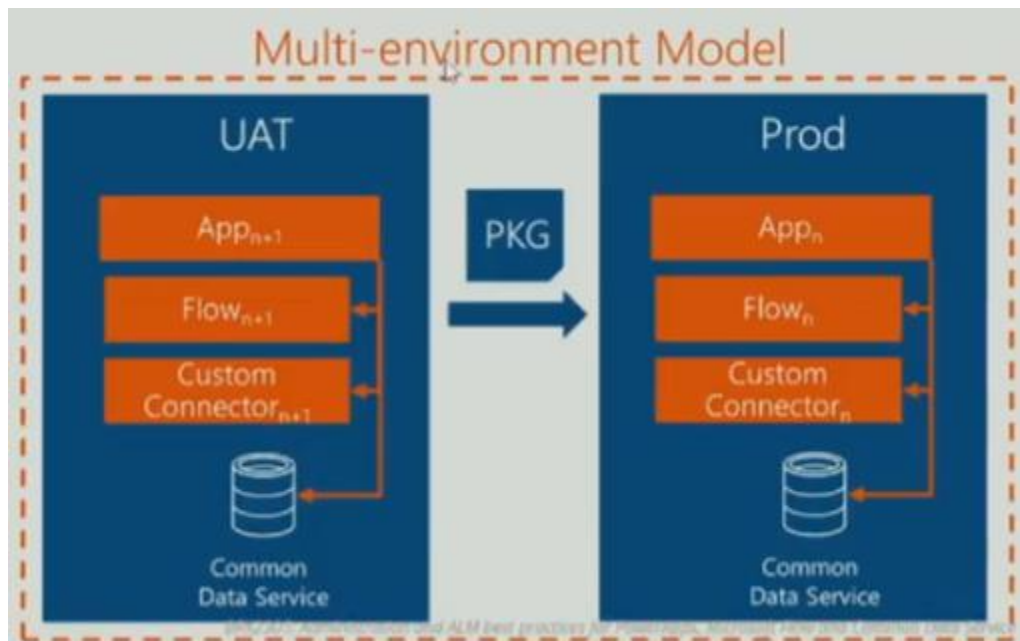
# Single Environment Model

- [Save + Publish] allows testing and verifying new app versions without impacting users working with app in production
- Best for scenarios where you're not introducing breaking changes to your data model (e.g. connectors and CDS schema)



# Multi-environment Model

- Leverage packaging to move custom solutions across environments (or tenants)
- Required in scenarios where you're introducing breaking changes to data model (e.g. connectors and CDS schema)
- PowerApps Plan 2 required for users who are packaging solutions



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# Data Loss Prevention Policies

- **Data is critical in an organization's success**
  - It needs to be readily available for decision-making
  - Needs to be protected so it's not shared with audiences that should not have access to the data
- **Data Loss Prevention (DLP) Policies**
  - PowerApps provides a way to protect your data by providing the ability to create and enforce policies
  - You can define which consumer services/connectors specific business data may be shared with



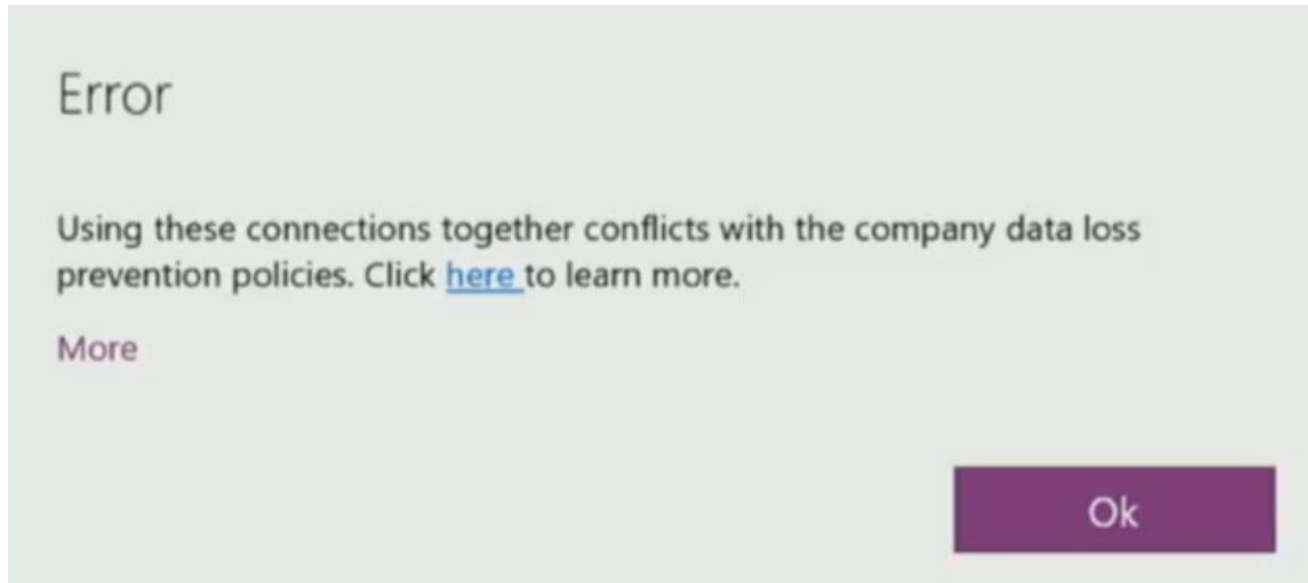
# Data Loss Prevention Policies

- **Benefits of a DLP policy**
  - Ensures data is managed in a uniform manner across the organization.
  - Prevents important business data from being accidentally published to services such as social media sites.
- **Example:** Prevent business data stored in SharePoint from being automatically published to a Twitter feed.
  - Create a DLP policy that blocks SharePoint data from being used as the source for tweets.



# Policy Violation

- Business Data vs Non-business Data



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**DEMO**

# Packaging and Deploying Solutions



# Summary

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