



SUS03M

Application Lifecycle Management (ALM) for Microsoft Sustainability Manager

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Customer and Partner Success



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Ask me about...

- *Power Platform*
- *CRM*
- *Well-Architected for Industry*






Agenda

- Why: ALM for MSM
- What: ALM for MSM
- How: Continuous Integration
- How: Continuous Delivery
- Comparison of CI/CD Tools
- Key takeaways
- Q&A



Prerequisites for level 300 session

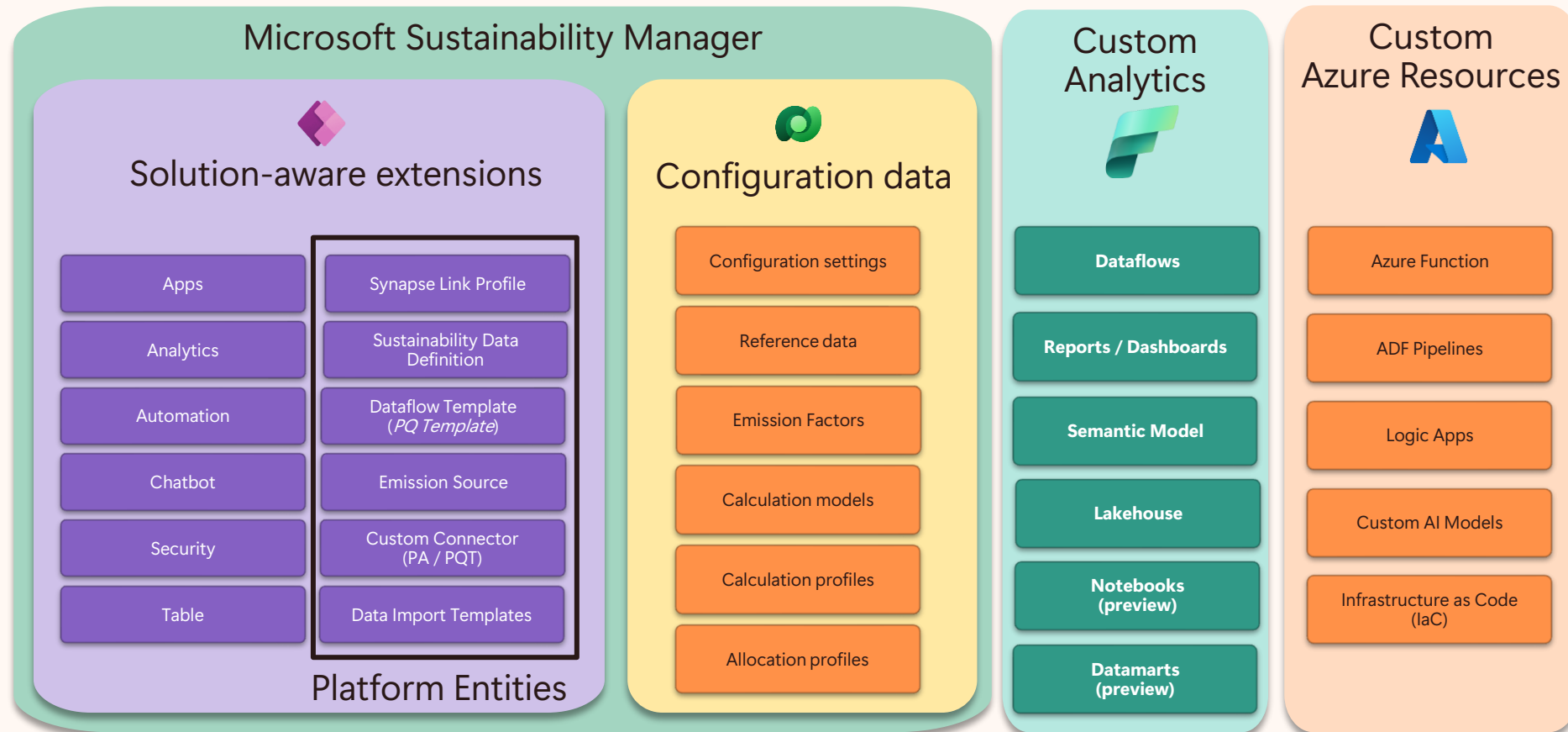
- 
- **Power Platform Environment Strategy**
<https://aka.ms/ppalmbasics>
 - **Power Apps Solution Concepts, Lifecycle**
<https://aka.ms/ppalmsolutions>
 - **Microsoft Sustainability Manager Architecture**
<https://aka.ms/wai-msm-architecture>
 - **Power Platform ALM Developer Tools**
<https://aka.ms/ppalmdevtools>

Why ALM for MSM?

- 
- Moving tested configuration to production
 - Solution and configuration versioning
 - Reducing regression with automated testing
 - Reduce deployment errors and operations
 - Align environments solutions and data
 - Empower developers to work on multiple branches
 - Traceability between work items (feature, bug) back to solution or configuration items
 - Solution quality (gate reviews, pull requests, solution checker)

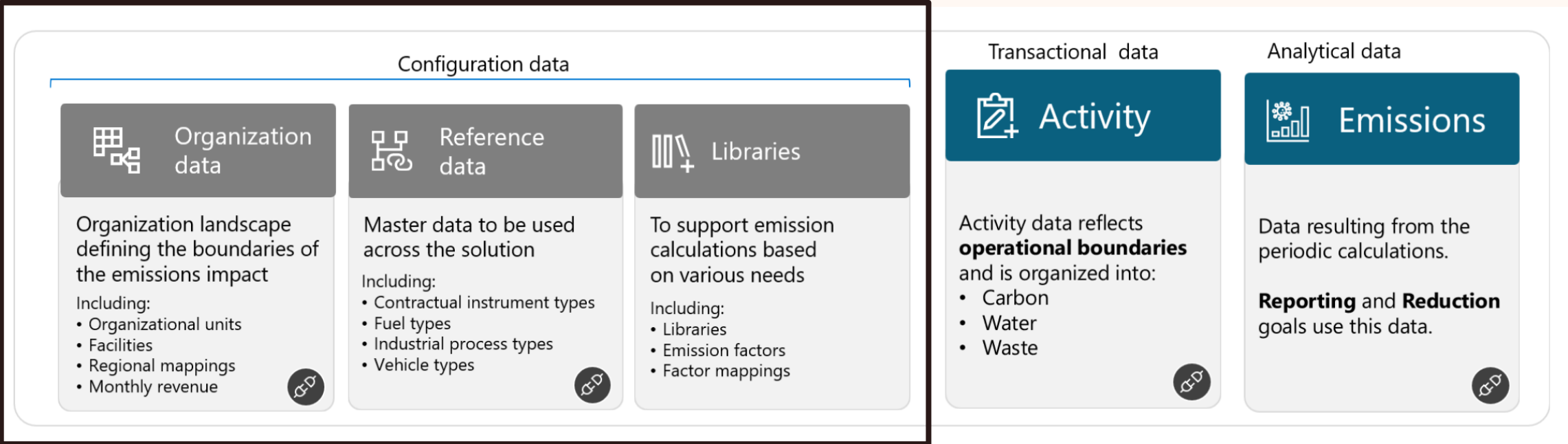
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What: ALM Scope for MSM Implementations

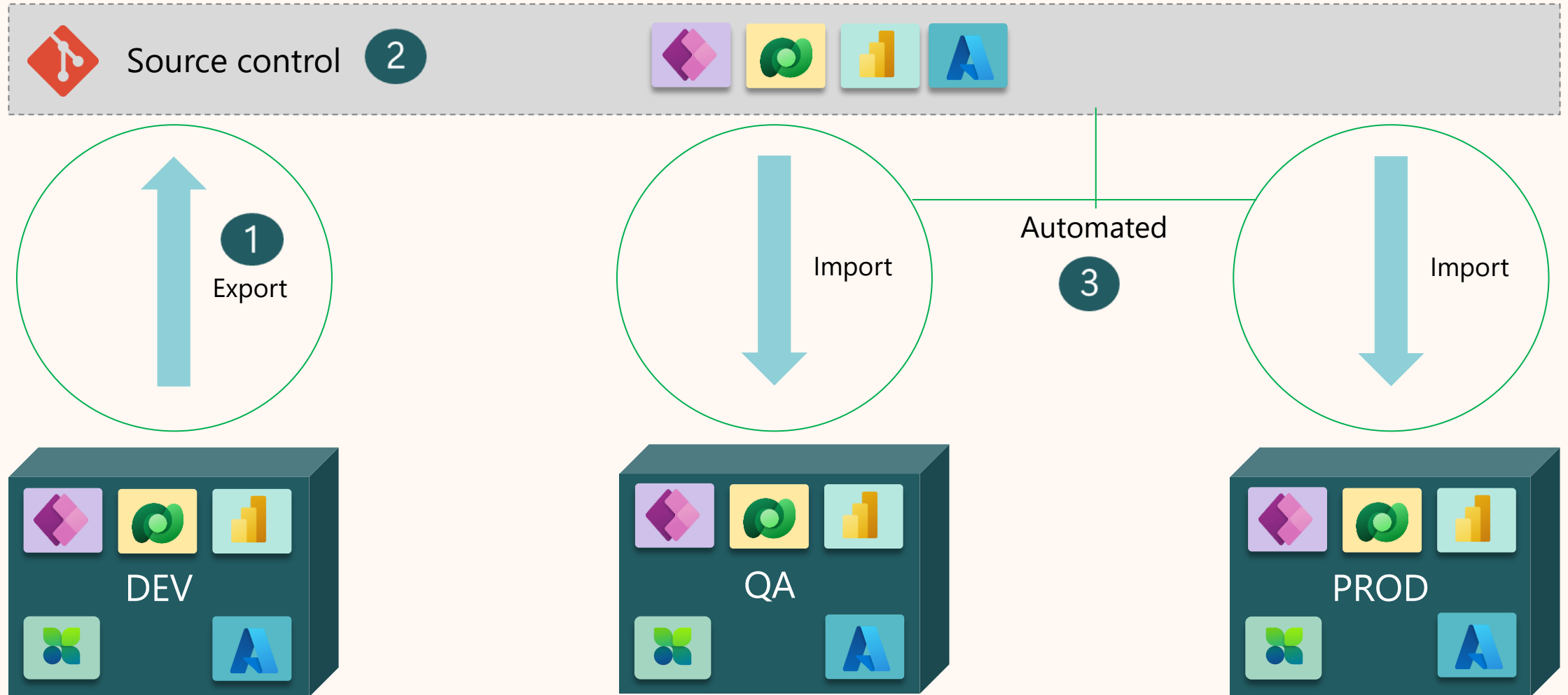


What: Promoting Data Between Environments

ALM SCOPE



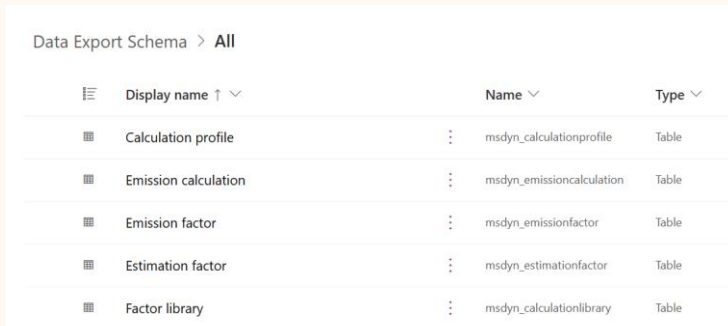
How: Continuous Integration & Delivery



Prerequisite: Creating Data Export Schema

1 (optional)

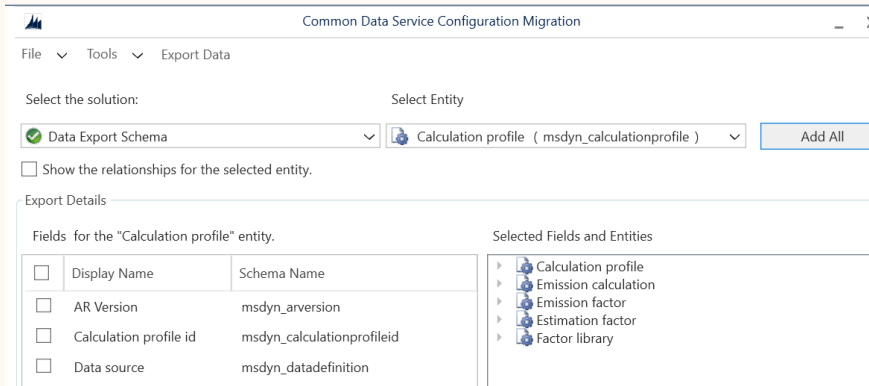
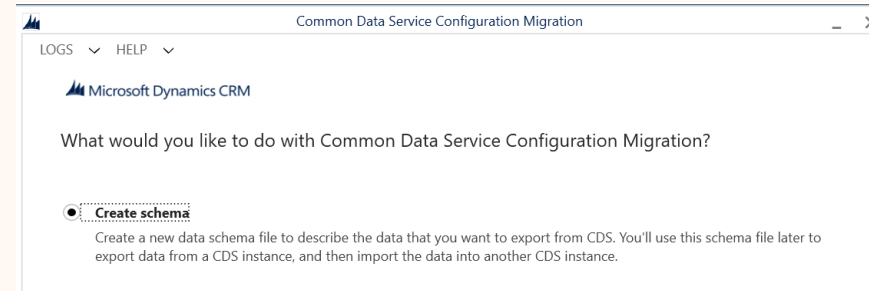
Create an unmanaged solution to select entities for export



Display name	Name	Type
Calculation profile	msdyn_calculationprofile	Table
Emission calculation	msdyn_emissioncalculation	Table
Emission factor	msdyn_emissionfactor	Table
Estimation factor	msdyn_estimationfactor	Table
Factor library	msdyn_calculationlibrary	Table

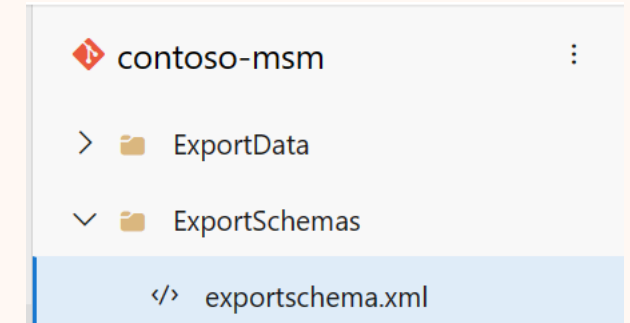
2

Run Configuration Migration tool, create schema for selected entities



3

Save schema to code repository



How: Continuous Integration



1 Solution Export

Pipeline
Build pipeline

Get sources
contoso-msm main

Agent job 1
Run on agent

- Power Platform Tool Installer
- Power Platform Publish Customizations
- Power Platform Export Solution - Unmanaged
- Power Platform Export Solution - Managed
- Power Platform Unpack Solution
- Power Platform Export Data Templates**
- Commit unpacked solution to code repo

Power Platform Export Data [Link settings](#) [View YAML](#) [Remove](#)

Task version: 2.*

Display name *
Power Platform Export Data Templates

Authentication type *
 Username/password (no MFA support) Service Principal/client secret (supports MFA)

Service connection * [Manage](#)
contoso-msm-dev [Refresh](#) [+ New](#)

Environment *
\$(BuildTools.EnvironmentUrl)

Schema File *
ExportSchemas\exportschema.xml

Data File *
ExportData\exportdata.zip

Overwrite

How: Continuous Delivery

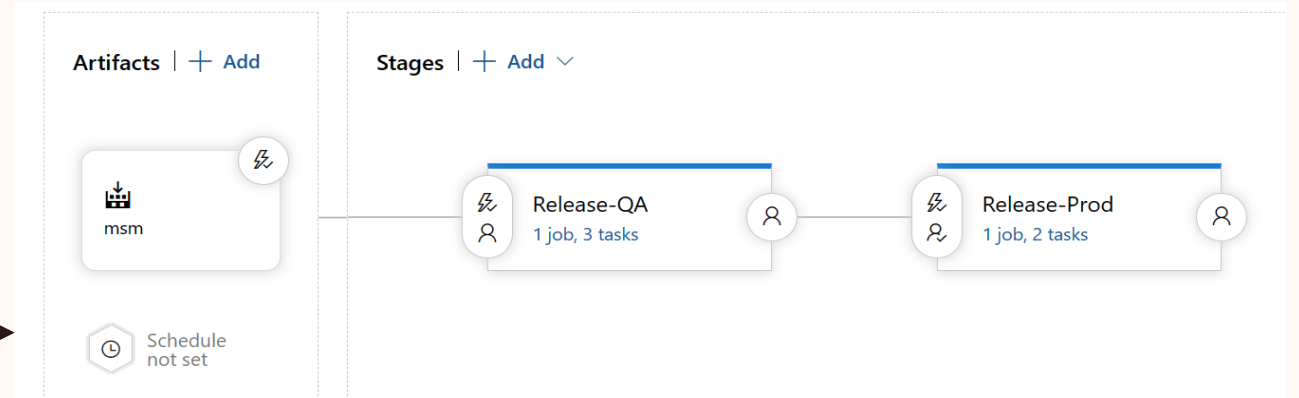
3 Release Pipeline

2 Build from Code Repo

Agent job 1
Run on agent

- Power Platform Tool Installer
Power Platform Tool Installer
- Power Platform Pack Solution
Power Platform Pack Solution
- Copy Setting Files to Artifact Folder
Copy files
- Copy Exported Data Files to Artifact Folder
Copy files
- Publish Artifact: drop
Publish build artifacts

Triggers Release



Release-QA
Deployment process

Agent job
Run on agent

- Power Platform Tool Installer
Power Platform Tool Installer
- Power Platform Import Solution
Power Platform Import Solution
- Power Platform Import Data
Power Platform Import Data

Power Platform Import Data ⓘ

Task version 2.*

Display name *
Power Platform Import Data

Authentication type * ⓘ
 Username/password (no MFA support) Service Principals

Service connection * ⓘ | [Manage](#) ⓘ
contoso-msm-qa

Environment * ⓘ
\$(BuildTools.EnvironmentUrl)

Data file or folder * ⓘ
\$(System.DefaultWorkingDirectory)/msm/drop/ExportData

Comparison of CI/CD options

Capability	Power Platform Pipelines	DevOps/GitHub	ALM Accelerator
IT/Developer involvement	Not required	Required for every project	Up-front setup
Source code integration	No, but planned	Yes	Yes
Maker requires elevated privileges in target environment	Yes	No, service principal is supported	No, service principal is supported
Quality control	Minimal	Unlimited	Best practices
Move Config Data	No	Yes	No
In-product experience	Yes	No	Canvas app provided, but not in the maker experience
Support	Microsoft-supported	Microsoft-supported and GitHub issues	Power CAT support through GitHub issues and discussions
Customization	Yes	Yes	Yes
Code-first development supported	No	Yes	Yes

Quick Start

Long-Term

Managed Env.

Key takeaways




- ✓ Use source code for versioning both solution and configuration data and plan code branching
- ✓ Move configuration and reference data using Configuration Migration Tool (automated/manual), XRM Toolbox Data Transporter plugin (manual)
- ✓ Move operation data using data import
- ✓ Invest further by adding gate reviews, automated unit/integration testing
- ✓ Add additional steps such as security scanning, solution checker and static code checker for customizations

Related sessions

Session code	Title	Abstract	Speaker	Date
SUS02M	Deployment and license management of Microsoft Sustainability Manager	As organizations globally strive to meet their sustainability commitments, the deployment and management of Sustainability Manager stand as critical components in achieving these goals. This technical session will provide a step-by-step guide on how to effectively deploy Sustainability Manager within your organization and manage its licenses to ensure compliance and optimization.	Shelly Bakke	Monday, May 6



Thank you!



→ How was the Summit? Share your feedback!
aka.ms/MCfSTSFeedback

→ Power Platform ALM with Azure DevOps
aka.ms/ppalmstep

→ Join the Sustainability Community!
aka.ms/MCfSCommunity

→ Learning Resources
aka.ms/CloudforSustainabilityLearnCollection



Q&A

Please type your questions **in the chat** and we will answer them during the Q&A session.

