COMMUNITY SUMMIT | NORTH AMERICA

ALM and the Power Platform

– a match [to be] made in Heaven

Jonas Rapp

Jonas Rapp

#LazyDeveloper

Dev	25+ years
CRM	10+ years
MVP	4th year
Tools	all the years

🐦 @rappen

🌐 jonasr.app

ALM – focus today

ALM in the Power Platform

Solution Management

Tests and QA

Tools for Automation

Demo

Power Platform Maturity Model

ALM – the basics

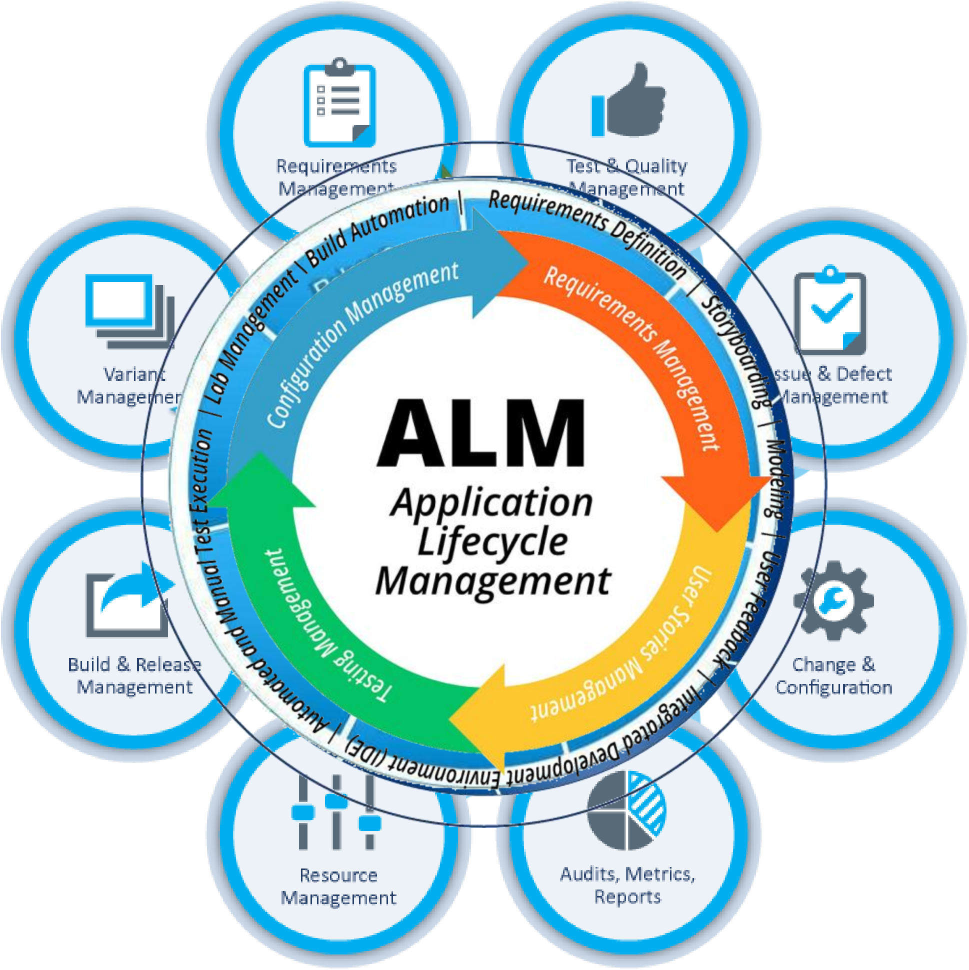
Application **Lifecycle** Management

Process – not tools

Tools – secure the process

Repeatability

Reproducibility


Requirements Management
Test & Quality Management
Issue & Defect Management
Change & Configuration
Audits, Metrics, Reports
Resource Management
Build & Release Management
Variant Management
Requirements Definition | Storyboarding | Modeling | User Feedback | Integrated Development Environment (IDE) | Automated and Manual Test Execution | Lab Management \ Build Automation |
Requirements Management
User Stories Management
Testing Management
Configuration Management
ALM
Application Lifecycle Management

ALM in the Power Platform

Azure DevOps

Power Platform Build Tools

Community Tools

Test Frameworks

Solutions are the vessels

Solutions are the vessels

CDS concept since 2011

Add ALL components to solutions

One unmanaged in each DEV

Only managed downstream

Dependency management

Update connections on import

Tests and Quality Assurance

Power Platform Checker

Canvas Test Studio

Easy Repro

Unit tests

Power Automate UI flows (RPA)

Tools for Automation

Azure DevOps Pipelines

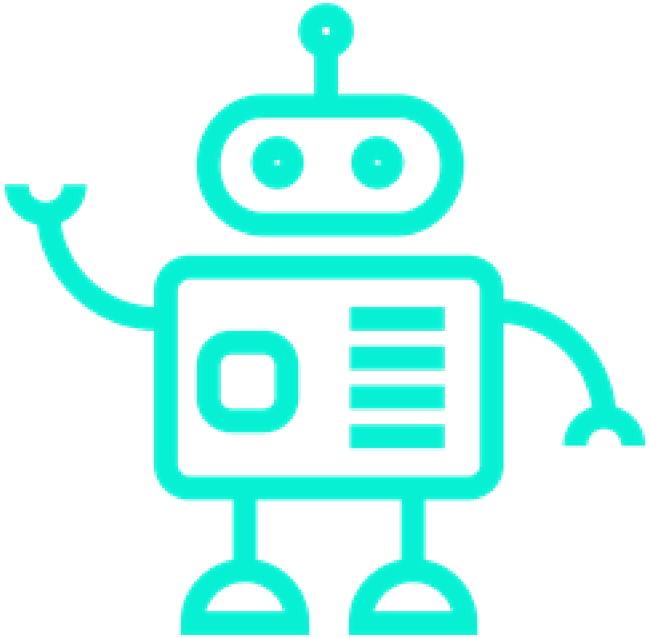
GitHub Actions

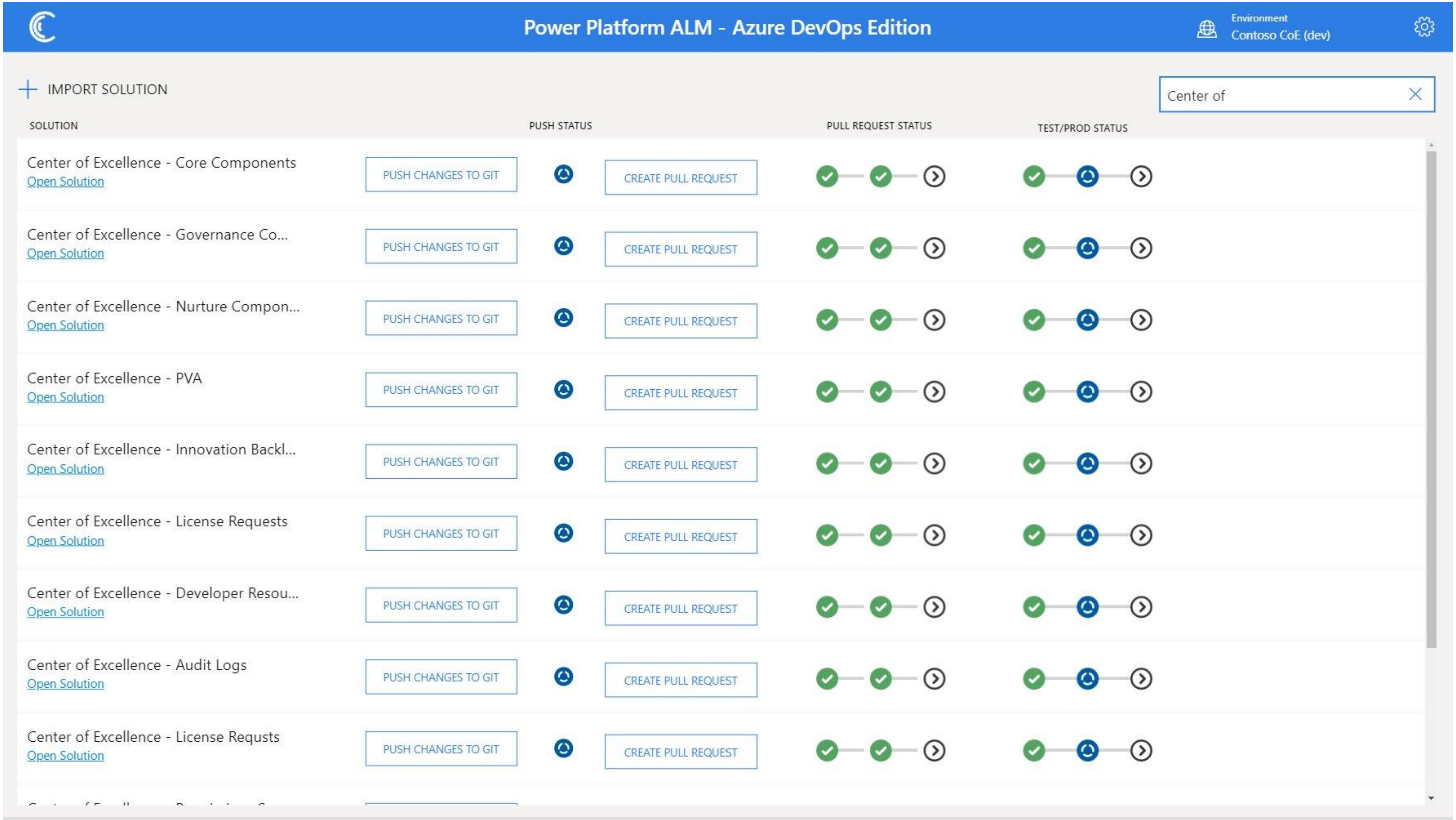
PowerShell scripts

Canvas App 😮

jonasr.app/canvas-alm

Marc Schweigert





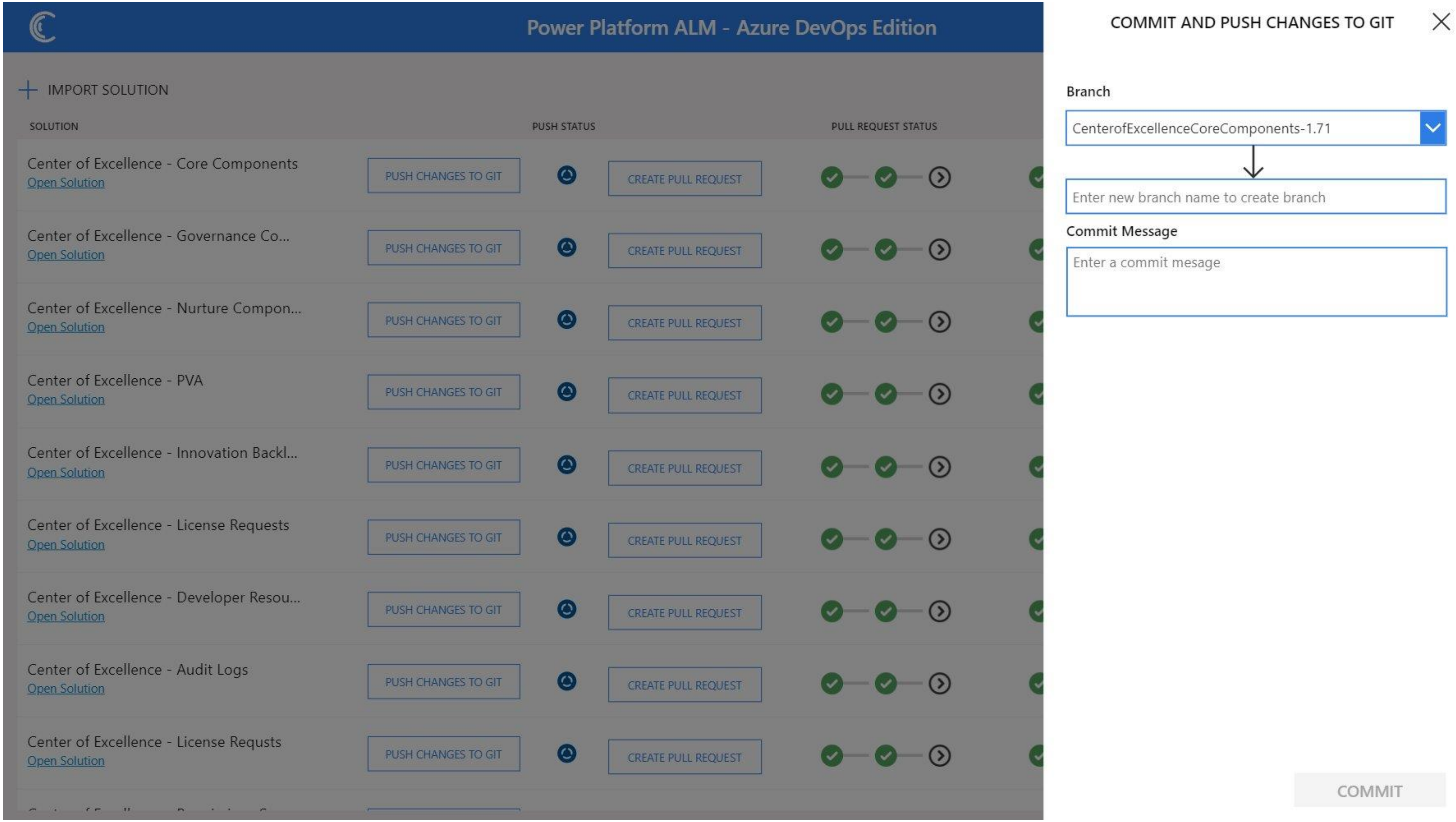
Power Platform ALM - Azure DevOps Edition

Environment
Contoso CoE (dev)

+ IMPORT SOLUTION

Center of

SOLUTION		PUSH STATUS		PULL REQUEST STATUS	TEST/PROD STATUS
Center of Excellence - Core Components Open Solution	PUSH CHANGES TO GIT	●	CREATE PULL REQUEST	✓ — ✓ — ›	✓ — ● — ›
Center of Excellence - Governance Co... Open Solution	PUSH CHANGES TO GIT	●	CREATE PULL REQUEST	✓ — ✓ — ›	✓ — ● — ›
Center of Excellence - Nurture Compon... Open Solution	PUSH CHANGES TO GIT	●	CREATE PULL REQUEST	✓ — ✓ — ›	✓ — ● — ›
Center of Excellence - PVA Open Solution	PUSH CHANGES TO GIT	●	CREATE PULL REQUEST	✓ — ✓ — ›	✓ — ● — ›
Center of Excellence - Innovation Backl... Open Solution	PUSH CHANGES TO GIT	●	CREATE PULL REQUEST	✓ — ✓ — ›	✓ — ● — ›
Center of Excellence - License Requests Open Solution	PUSH CHANGES TO GIT	●	CREATE PULL REQUEST	✓ — ✓ — ›	✓ — ● — ›
Center of Excellence - Developer Resou... Open Solution	PUSH CHANGES TO GIT	●	CREATE PULL REQUEST	✓ — ✓ — ›	✓ — ● — ›
Center of Excellence - Audit Logs Open Solution	PUSH CHANGES TO GIT	●	CREATE PULL REQUEST	✓ — ✓ — ›	✓ — ● — ›
Center of Excellence - License Requsts Open Solution	PUSH CHANGES TO GIT	●	CREATE PULL REQUEST	✓ — ✓ — ›	✓ — ● — ›



Power Platform ALM - Azure DevOps Edition

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Center of Excellence - License Requsts Open Solution	PUSH CHANGES TO GIT		CREATE PULL REQUEST	✓ — ✓ — ›

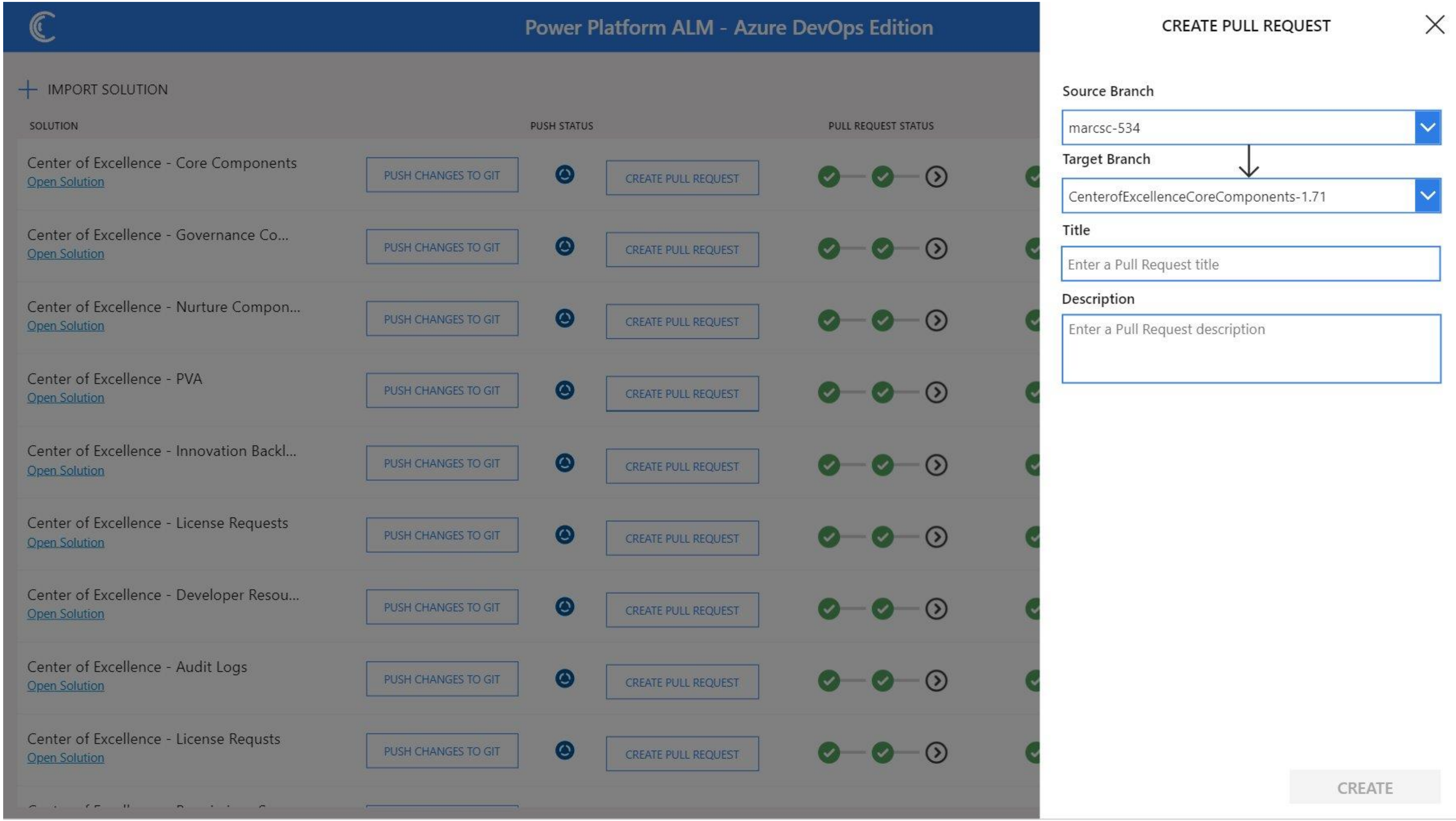
COMMIT AND PUSH CHANGES TO GIT

Branch: CenterofExcellenceCoreComponents-1.71

Enter new branch name to create branch

Commit Message: Enter a commit mesage

COMMIT



Power Platform ALM - Azure DevOps Edition

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Center of Excellence - Audit Logs Open Solution	PUSH CHANGES TO GIT	●	CREATE PULL REQUEST	✓ — ✓ — ›
Center of Excellence - License Requsts Open Solution	PUSH CHANGES TO GIT	●	CREATE PULL REQUEST	✓ — ✓ — ›

CREATE PULL REQUEST ×

Source Branch: marcsc-534

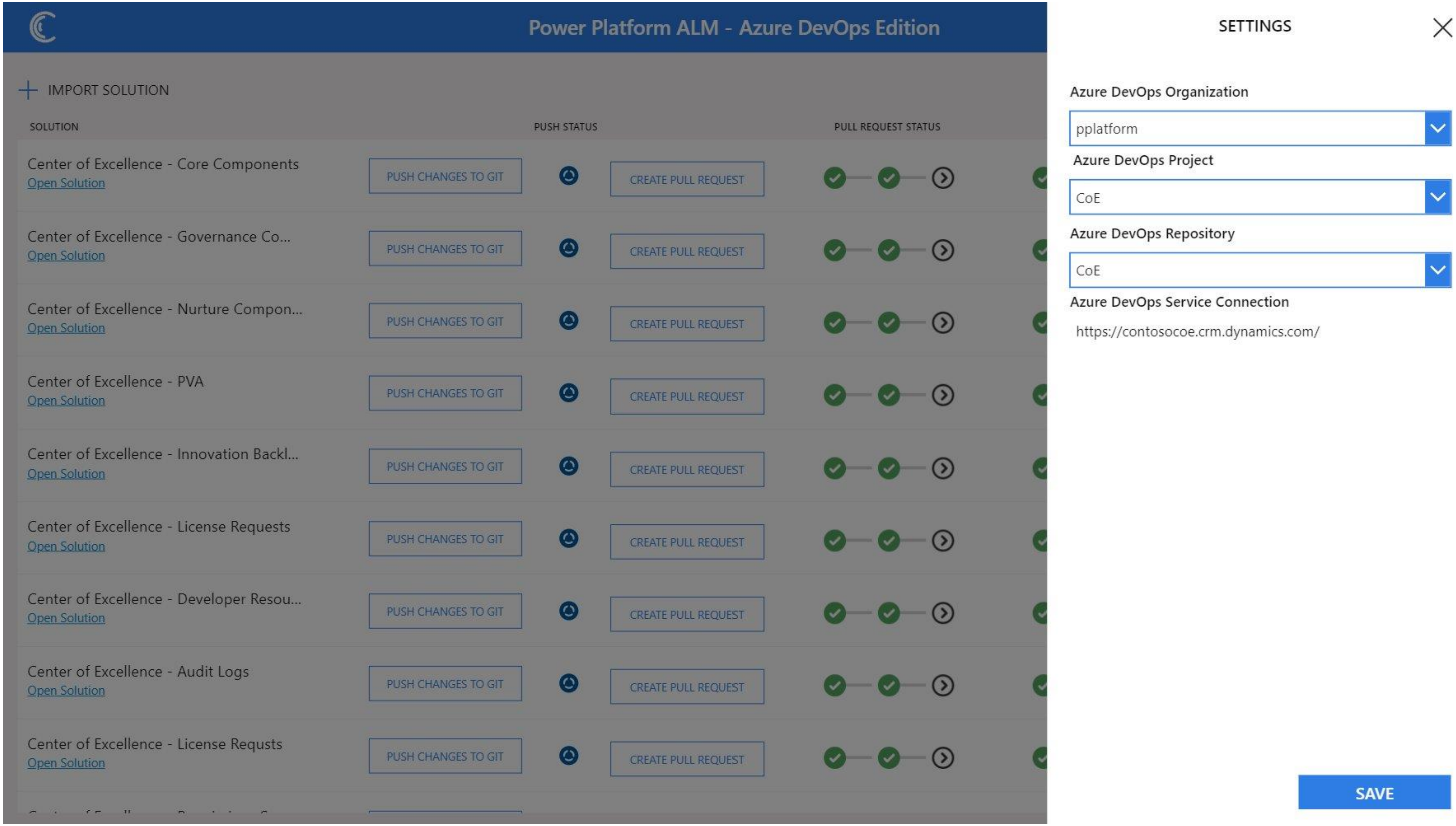
↓

Target Branch: CenterofExcellenceCoreComponents-1.71

Title: Enter a Pull Request title

Description: Enter a Pull Request description

CREATE



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Center of Excellence - License Requsts Open Solution	PUSH CHANGES TO GIT		CREATE PULL REQUEST	✓ — ✓ — ›

SETTINGS

Azure DevOps Organization: pplatform

Azure DevOps Project: CoE

Azure DevOps Repository: CoE

Azure DevOps Service Connection: https://contosocoe.crm.dynamics.com/

Automation areas

Quality checks

Environments

Solutions

Configuration

Environment Variables

DEMO!

Create Solution

Add Components

Export / Import

Create AzDO Build pipeline

Run Build

Create AzDO Release pipeline

Deploy Release

DEMO!

Create Solution

Add Components

Export / Import

Create AzDO Build pipeline

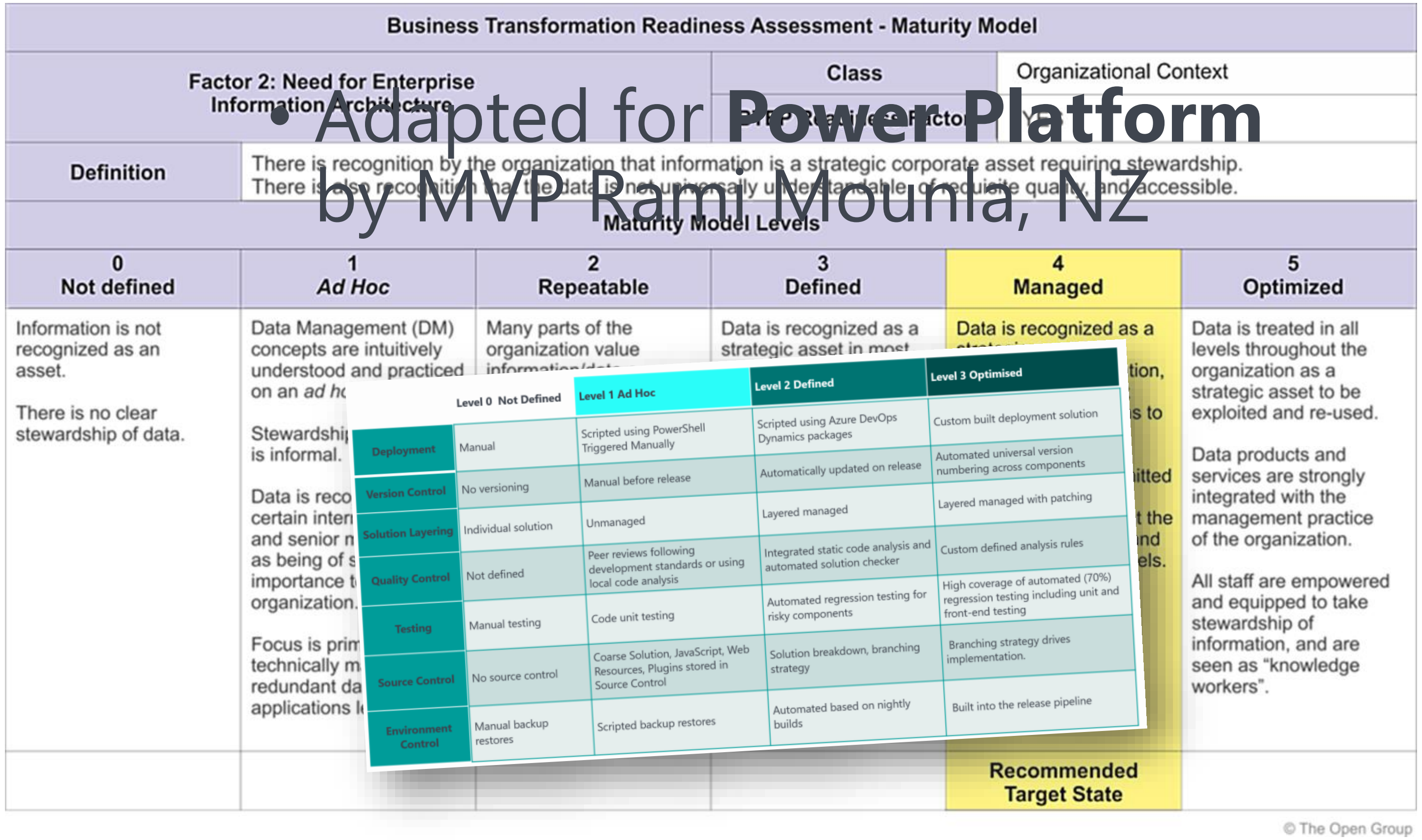
Run Build

Create AzDO Release pipeline

Deploy Release

Power Platform Maturity Model

- ‘Where are we?’
- Based on TOGAF Maturity Model
- Adapted for **Power Platform** by MVP Rami Mounla, NZ



Business Transformation Readiness Assessment - Maturity Model					
Factor 2: Need for Enterprise Information Architecture			Class	Organizational Context	
			BTEP Readiness Factor	Yes	
Definition	There is recognition by the organization that information is a strategic corporate asset requiring stewardship. There is also recognition that the data is not universally understandable, of requisite quality, and accessible.				
Maturity Model Levels					
0 Not defined	1 *Ad Hoc*	2 Repeatable	3 Defined	4 Managed	5 Optimized
Information is not recognized as an asset. There is no clear stewardship of data.	Data Management (DM) concepts are intuitively understood and practiced on an *ad ho* Stewardshi is informal. Data is reco certain inter and senior m as being of s importance t organization. Focus is prim technically m redundant da applications l	Many parts of the organization value information/data	Data is recognized as a strategic asset in most	Data is recognized as a strategic tion, s to itted t the nd els.	Data is treated in all levels throughout the organization as a strategic asset to be exploited and re-used. Data products and services are strongly integrated with the management practice of the organization. All staff are empowered and equipped to take stewardship of information, and are seen as “knowledge workers”.
				Recommended Target State	

	Level 0 Not Defined	Level 1 Ad Hoc	Level 2 Defined	Level 3 Optimised
Deployment	Manual	Scripted using PowerShell Triggered Manually	Scripted using Azure DevOps Dynamics packages	Custom built deployment solution
Version Control	No versioning	Manual before release	Automatically updated on release	Automated universal version numbering across components
Solution Layering	Individual solution	Unmanaged	Layered managed	Layered managed with patching
Quality Control	Not defined	Peer reviews following development standards or using local code analysis	Integrated static code analysis and automated solution checker	Custom defined analysis rules
Testing	Manual testing	Code unit testing	Automated regression testing for risky components	High coverage of automated (70%) regression testing including unit and front-end testing
Source Control	No source control	Coarse Solution, JavaScript, Web Resources, Plugins stored in Source Control	Solution breakdown, branching strategy	Branching strategy drives implementation.
Environment Control	Manual backup restores	Scripted backup restores	Automated based on nightly builds	Built into the release pipeline

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Power Platform Maturity Model

	Level 0 Not Defined	Level 1 Ad Hoc	Level 2 Defined	Level 3 Optimised
Deployment	Click-Import-Browse…	Scripted using PowerShell Triggered Manually	Scripted using Azure DevOps Dynamics/CDS packages	Custom built deployment solution
Version Control	1.0.0.0	Manual before release	Automatically updated on release	Automated universal version numbering across components
Solution Layering	Default solution	Unmanaged	Layered managed	Layered managed with patching
Quality Control	Works on my machine	Peer reviews following development standards or using local code analysis	Integrated static code analysis and automated solution checker	Custom defined analysis rules
Testing	Manual testing	Code unit testing	Automated regression testing for risky components	High coverage (70%) of automated regression testing including unit and front-end testing
Source Control	USB stick	Coarse Solution, JavaScript, Web Resources, Plugins stored in Source Control	Solution breakdown, branching strategy	Branching strategy drives implementation.
Environment Control	Manual backup Hopefully restores	Scripted backup restores	Automated based on nightly builds	Built into the release pipeline

Thank You!

Evaluations 🙏

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Dynamic
Communities