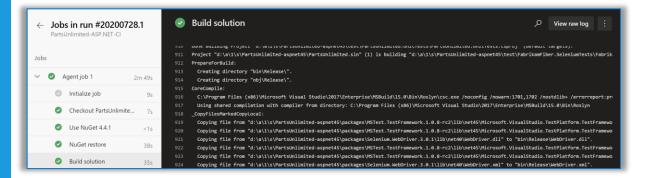
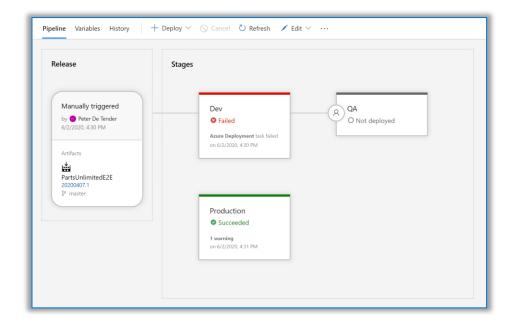


MC2MC

Azure DevOps Pipelines to bring cloud magic





About Me (Peter L.)

Peter Linders

• Freelancer > 30 years

• Current: Sr. Cloud Infrastructure engineer @ Ingram Micro Belux

What will be covered



SOURCE CONTROL



PROJECT MANAGEMENT



VALIDATION (PRE-FLIGHT)



DEPLOYMENT OPTIMIZATION



Q & A

The traditional way...

Source / Version Control - Manually

A deployment script (PowerShell, ARM Template, TerraForm,...)
or web app probably comes with different versions before it is
"ready"

You can treat it like "SharePoint" files, using v0.1, v0.5, v1.0

 You can store it in a "shared" location like OneDrive, DropBox, GitHub, or email it around

Project Management - Manually

- Allocate project members
- Use any collaboration tool (Outlook, Teams, Slack, MS ToDo...)
- Switch to a "real" tool like MS Project

- Create Project Tasks + do (manual) follow up
- Script / Update Deployment tasks are also done manually



Code Validation (Pre-flight) - Manually

- PowerShell, ARM Template, TerraForm,... What-if
- Right Click / Publish from development environment to Azure Dev/Test environment
- Multiple tests = multiple test environments
- Challenging to deal with continuous changes

Deployment - Manually

- PowerShell, ARM Template, TerraForm,...
- Right Click / Publish from development environment to Azure Q&A, Staging or Production environment
- You need to validate after the deployment if it actually got deployed successfully
- If the backend fails (e.g. Azure Policies, cloud down,...) it won't detect it during the deployment



Let's optimize with DevOps...

About Me (Peter D.)

Peter De Tender

Azure Business Program Mgr |
 Azure Technical Trainer - @ Microsoft

Former Azure MVP (5y)

Technical Writer & Book publisher



Source / Version Control – <u>DevOps Optimized</u>

Repos

Commits

Pushes

In Pull requests

 Azure DevOps Repos is by itself a GIT compatible source control system

Integrate with "any" GIT compatible source control version

(GitLab, BitBucket, GitHub,...)

• Commit changes, Branching, Pull Requests,...



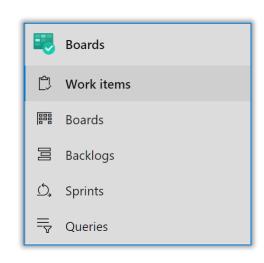


Demo

Source / Version Control – DevOps Optimized

Project Management – DevOps Optimized

- Azure DevOps Boards (Scrum, Agile, Basic,...) Proj Mgmt
- DevOps Project Members are Azure AD or guest users
- Create and follow-up on different "work items"
- Integrate work items with deployment (initiate, update, close)





Demo

Project Management – DevOps Optimized

Code Validation (Pre-flight) – DevOps Optimized

Pipelines

Environments

Task groups

₩ Pipelines

Releases

II\ Library

 Azure DevOps Pipelines (Build) allows for testing and validation of your source code, before it gets deployed

Hosted or Custom Build Agents (also on-prem) running Linux,

MacOS and Windows

FREE (Public Projects), build queue

Extend with functional testing, code scanning,...





Demo

Code Validation – DevOps Optimized

Deployment (Release) – DevOps Optimized

 Azure DevOps Pipelines (Release) starts from the Build Artifact, and runs the actual deployment

Service Connection to integrate with "any" platform (Azure,

Pipelines

Pipelines

Releases

II Library

Environments

Task groups

↑ Deployment groups

VMware, AWS,...)

 Easy deployment across different stages (Dev/Test, Q&A, Production,...)

Azure Pipelines "Release Gates" bring intelligence





Demo

Code Validation – DevOps Optimized

This is where I would like another 40 hours...

• Tip from the speaker: Please ask for more DevOps topics by Peter D. In future MC2MC events, so I can show you more and lots more;)

(but don't tell the MC2MC board I asked for it)

What will be covered



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Q & A

Thank you

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