

# DevOps Release Pipelines with Visual Studio Release Management

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# Overview



**What is Release Management?**

**What problem is it trying to solve?**

**Demos**



# The Last Mile of DevOps



The Goal:  
Build Once,  
Deploy Multiple Times



# What is Release Management?

**Extends automated build**

**Separates “Build” from “Deploy”**

**Deploy to environments**

**Approvals**

**Security**

**Traceability**



Tip #1:  
Use your build to prepare  
what will be released



Tip #2:  
Make the build output  
“environment agnostic”



Tip #3:  
Separate “build” stuff from  
“release” stuff





# Tip: Separate Build from Deploy

## Build

- Compile code
- Include database schema
- Run unit tests
- Organize artifacts for deployment
- Prepare deployment scripts
- Environment agnostic

## Deploy

- Define environments
- Environment-specific configuration
- Deploy to servers & databases
- Run Integration Tests
- Run user interface automation tests
- Approvals (“Sign-offs”)
- Tracking



Tip #4:  
Variables are your friend



# Triggers

## Release trigger

- Manual
- Continuous Integration
- Scheduled

## Environment trigger

- Manual
- After release creation
- After deployment on another environment
- Approval



Disclaimer:  
We're on TFS 2017 Update 2 now



# Demo Overview

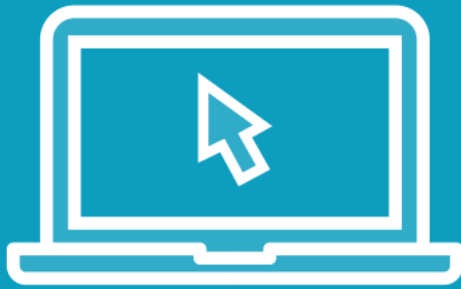
1. Simple release
2. Multi-phase release
3. Multiple things in parallel
4. Multiple environments
5. Approvals
6. Rollback



Next up:  
Create a basic  
release definition



# Demo



Modify a build to be “release-friendly”

Create a release definition



Next up:  
Multiple phases in a release





# Demo



Multiple phases

Server & agent phases

Server phase →  
pause for human interaction



Next up:  
Multiple things in parallel



# Demo



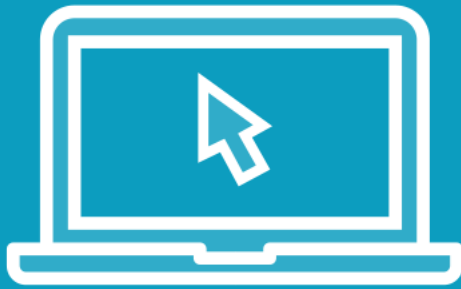
**Multiple things in parallel**



Next up:  
Add an environment to the  
release definition



# Demo



Add an environment

Environment-specific configuration



Next up:  
Add an approval to an  
environment



# Demo



Add an approval for an environment



Next up:  
Rollback





# Demo



## Rollback to an old version



# Summary



**What is Release Management?**

**What problem is it trying to solve?**

**Demos**



Next up:  
Automated release for  
ASP.NET

