

# Continuous Delivery for Data Warehouses and Marts

# About Me

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# Continuous Delivery Defined

Continuous Delivery is a software development discipline where you build software in such a way that the software can be released to production at any time.

-Martin Fowler

# Deployments Today

Stressful  
Frightening  
Error prone



# Continuous Deployments

Practice makes  
~perfect

Better responsiveness

More control

Less stress



# Techniques

Feature Toggles  
Automated Testing  
Continuous Integration  
Automated Deployment  
Ops Integration  
(DevOps)



# What It Is ...and Isn't

Can you deploy to production today?

Is anyone freaking out?

Does everyone collaborate on getting solutions out?

Including those "operations" people?

Is the process automated?

How much "magic" is involved?

Continuous Integration -> Continuous Delivery ->  
Continuous Deployment

# Deployment Pipeline

# Build

SSDT / dacpac for databases

## MSBuild Tasks for SSIS

Get code from <http://sqlsrvintegrationsrv.codeplex.com/>

Update references and change code signing

Build for your version

Copy to appropriate VS Private Assemblies folder

"C:\Program Files (x86)\Microsoft Visual Studio  
12.0\Common7\IDE\PrivateAssemblies"

# Test

SSDT for stored procs

ssisUnit for SSIS

<http://ssisunit.codeplex.com>

Download for your version

ssisUnit for comparing result sets

# Deploy

SSDT / dacpac for databases and data

MSBuild Task for SSIS

# Demo

# Challenges

Schema Changes

View Layer

Data Migration

Feature Toggles

Rollbacks



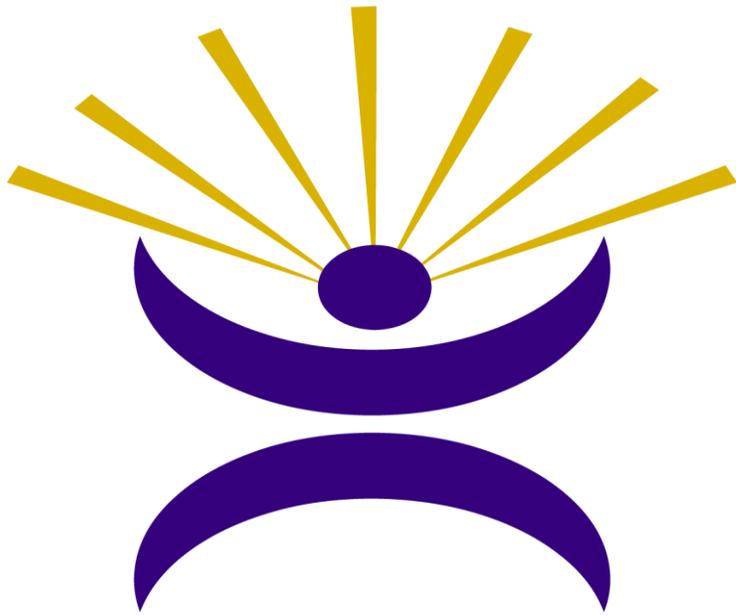
# Best Practices

Compile to artifact, deploy that artifact

Deploying to test and production should use the same process

Tools should support bundling changes

Any issues in the deployment pipeline are top priority



<http://continuousdelivery.com/>  
<http://martinfowler.com/bliki/ContinuousDelivery.html>

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