

Continuous Delivery for Data Warehouses and Marts

About Me

John Welch, SQL Server MVP, SSAS Maestro 2008

Coauthor on:

SQL Server MVP Deep Dives

Smart Business Intelligence Solutions with Microsoft SQL Server 2008

Microsoft Big Data Solutions

Contact Info:

<http://agilebi.com/jwelch>

Twitter: @john_welch

Email: jwelch@pragmaticworks.com

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



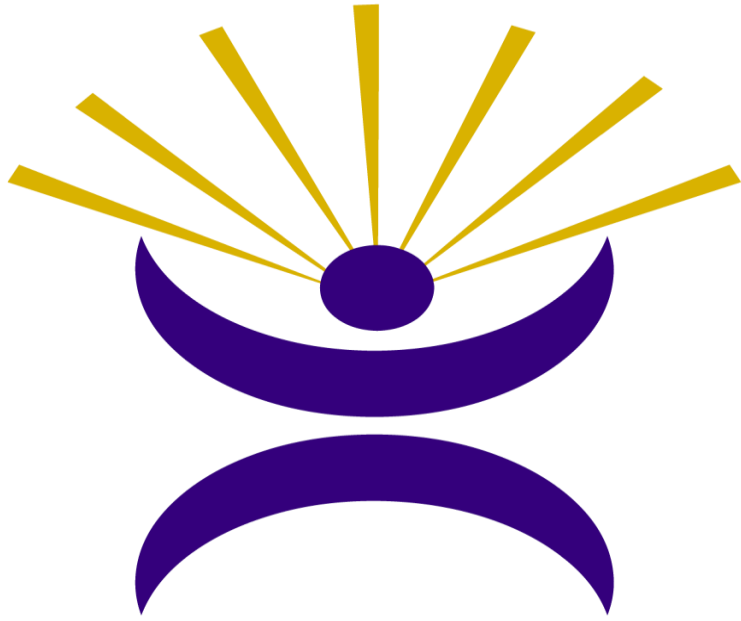
Best Practices

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>

jwelch@pragmaticworks.com
[@john_welch](#)



Products

Improve the quality, productivity, and performance of your SQL Server and BI solutions.



Services

Speed development through training and rapid development services from Pragmatic Works.



Foundation

Helping those who don't have the means to get into information technology and to achieve their dreams.