

# CI/CD Demo 1

Monday, May 8, 2017 3:20 PM

Open Visual Studio 2017

Open Project Demo\Begin\WorkoutSharing\WorkoutSharing.sln

Demo IaC (Shift Right)

Build Project

Add to SourceControl (git)

Setup Build

- Select Visual Studio Version on Build Solution Task
- Visual Studio 2017

- Test Platform Version on Test Assemblies Task
- Visual Studio 2017

- Version 2 on Test Assemblies Task
- Select "Code Coverage Enabled"

- Setup trigger
- Continuous Integration (Auto Build on commit)

- Build Option
- Agents
  - Default Agent Queue
  - Hosted VS2017

Start Build

Show Dashboard Customization

Build Failure :(

Back to Visual Studio 2017

Demo Live Unit Testing (Shift Left)

- Fix Breaking Test

- `WorkoutSharing.DomainLogic => WorkOut.cs => workout`

```
if (notes == null)
{
    throw new ArgumentNullException(nameof(notes));
}
```

Commit code

Build Start Automatically

Build Success :)

Setup Release

Create Release Definition

Add Azure Resource Group Deployment Task

Resource Group Name  
\$(WebSiteName)

Template Parameter  
-hostingPlanName \$(WebSiteName)

Azure App Service Deploy Task

App Service Name  
\$(WebSiteName)

App Service Url  
WebSiteUrl

Rename Release Name to Dev

Configure Variables

Add WebSiteName => WorkoutSharingD

Clone Dev to Create QA

Configure Variables

Change

WebSiteName => WorkoutSharingQ

Add Deployment Conditions

Add Dependency to DEV

Add Approvals

Clone Dev to Create PROD

Configure Variables

Change

WebSiteName => WorkoutSharingQ

Add Deployment Conditions

Add Dependency to DEV

Add Approvals



# CI/CD Demo 2

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Add ReadyRoll Database Project to the Solution

Import from (localDB)\ProjectsV13 => WorkoutSharingDb

From Visual Studio add a new Column to WorkOuts table

Add new script to Migrations folder

```
Alter table dbo.WorkOuts ADD
    [Equipment] varchar(max)
GO
```

Deploy Script.

Verify the database

From SSMS Add new column to the dbo.Athlets table

Go to Visual Studio 2017, Refresh the database. Show the script generation

Show the Data Seed script

Post-Deployment folder, add a new script 02-Gender\_Seed\_Deployment.sql

Go to SSMS , execute sp\_generate\_merge 'Gender' save the script

Post-Deployment folder, add a new script 03\_WorkoutTypes\_Seed\_Deployment

Go to SSMS , execute sp\_generate\_merge 'WorkoutType' save the script

Update Resource Group Add Sql Server

Commit changes

Update Build

Add a new Task (Command Line Task)

Setup Shadow Server

C:\Program Files\Microsoft SQL Server\130\Tools\Binn\SqlLocalDB.exe

Create \$(ShadowSqlInstance)

Add a new Task (Command Line Task)

Setup Target Server

C:\Program Files\Microsoft SQL Server\130\Tools\Binn\SqlLocalDB.exe

Create \$(TargetSqlInstance)

Update Build Solution Task

Add MSBuild Argument

/p:TargetServer="(localDb)\\$(TargetSqlInstance)"

/p:ShadowServer="(localdb)\\$(ShadowSqlInstance)"

/p:TargetDatabase="\$(DatabaseName)" /p:GenerateSqlPackage=True

Add a new Task (Command Line Task)

Copy Database Script

Xcopy

/Y /Q /S "\$(build.repository.localPath)\WorkoutSharingDb\bin

\\$(BuildConfiguration)\WorkoutSharingDb.sql"

"\$(build.artifactstagingdirectory)\WorkoutSharingDb\"

Build

Update Release

Add new Task (Deploy ReadyRoll )

Add readyRoll Tasks

Update Resource Group Task

Template Parameters

-hostingPlanName \$(WebSiteName) -skuName F1 -skuCapacity 1 -  
sqlServerName sigwsdemo2017 -sqlserverAdminLogin sql\_admin\_user -  
sqlserverAdminLoginPassword D3vOp\$D3m0 -databaseName  
WorkoutSharingDb -databaseCollation SQL\_Latin1\_General\_CP1\_CI\_AS -  
databaseEdition Basic -databaseRequestedServiceObjectiveName Basic

-hostingPlanName \$(WebSiteName) -skuName F1 -skuCapacity 1 -  
sqlServerName \$(ServerName) -sqlserverAdminLogin \$(AdministratorLogin) -  
sqlserverAdminLoginPassword (ConvertTo-SecureString -String  
'\$(AdministratorLoginPassword)' -AsPlainText -Force) -databaseName  
\$(DatabaseName) -databaseCollation SQL\_Latin1\_General\_CP1\_CI\_AS -  
databaseEdition Basic -databaseRequestedServiceObjectiveName Basic