Improving Team Collaboration using Database Projects and Azure DevOps

Van Steenlandt Olivier

DATA SATURDAYS

twoday

kapacity

PLATINUM

Fellowmind

GOLD

CatMan Solution

redgate

STRUCTURED CONCEPTS.

SILVER

delegate

ARROW

BIWISE

BASED ON INTELLIGENCE

INSPARI

BRONZE

About me

BI Teamlead – X²O

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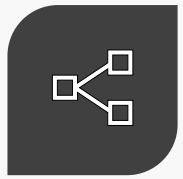
Schedule

Current Situation

Moving forward



How to get started?

What’s next?

Summary

Current Situation

Environments

Development
Production

Process

Tracking changes manually

Tools

SQL Server Management Studio

Use cases from the field (1/4)

Moving Big Projects to Production

Free Beer Image on Unsplash

Use cases from the field (2/4)

Priority changes

person holding drinking glass photo – Free Beer Image on Unsplash

Use cases from the field (3/4)

Unwanted changes in Production

Heineken bottles placed on brown cooler box photo – Free Bottle Image on Unsplash

Use cases from the field (4/4)

Code went missing

glass bottle lot photo – Free Shichahai Image on Unsplash

Summary - What goes wrong?

Human Mistake

Team Communication

Code management

New Situation

Environments

Development
Acceptance
Production

Process

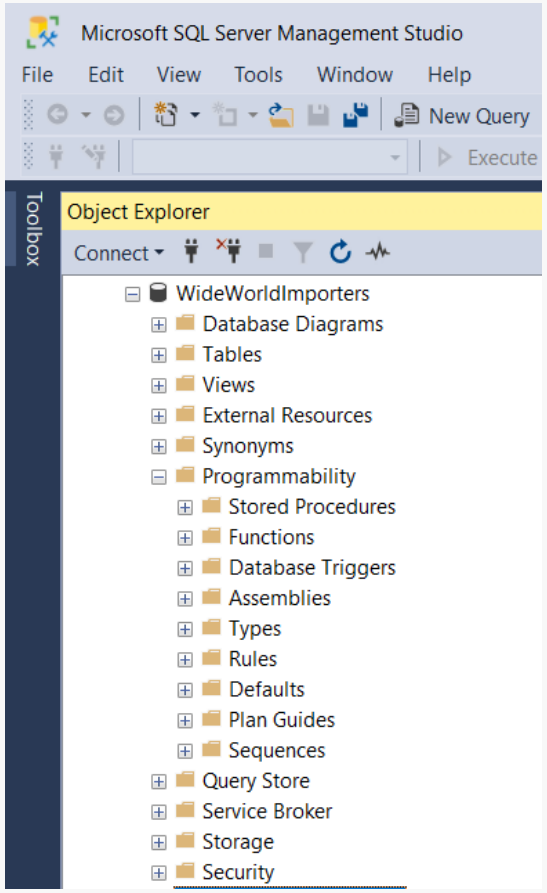
Automatic
Change Tracking

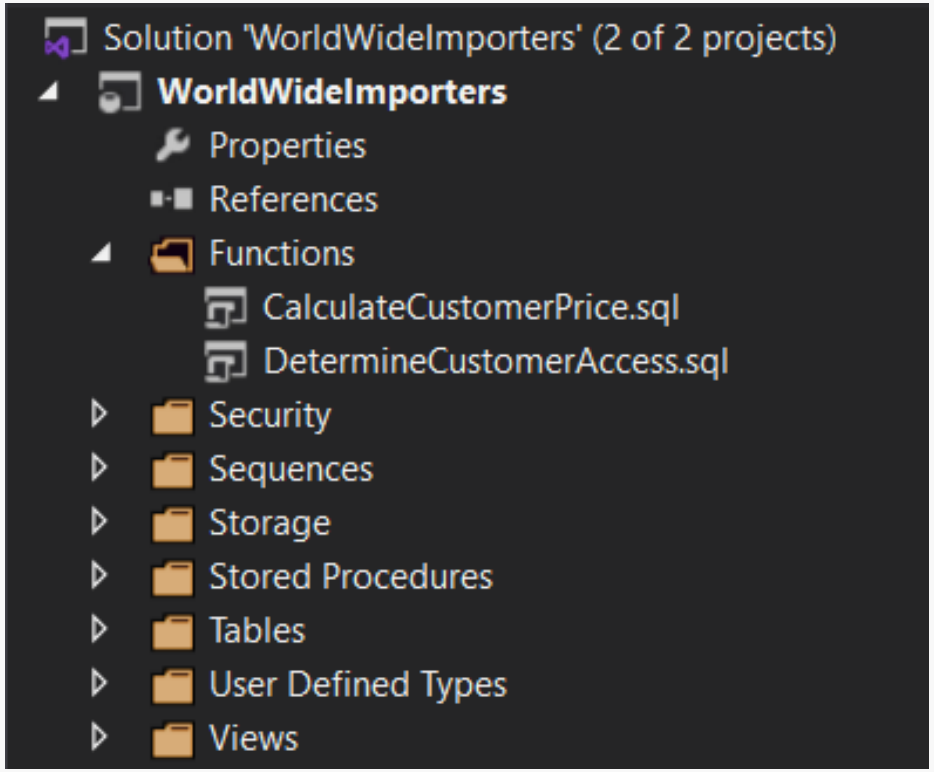
Tools

GIT
Azure DevOps
Visual Studio
(Azure Data Studio)
SSMS

Database Projects

Project Oriented Database Development





Database Projects

Database names in scripts

Indexes

Publishing Profiles

Azure DevOps

Repos

(Pipelines)

(Test Plans)

(Artifacts)

(Boards)

Repos - Git

Distributed Version Control System

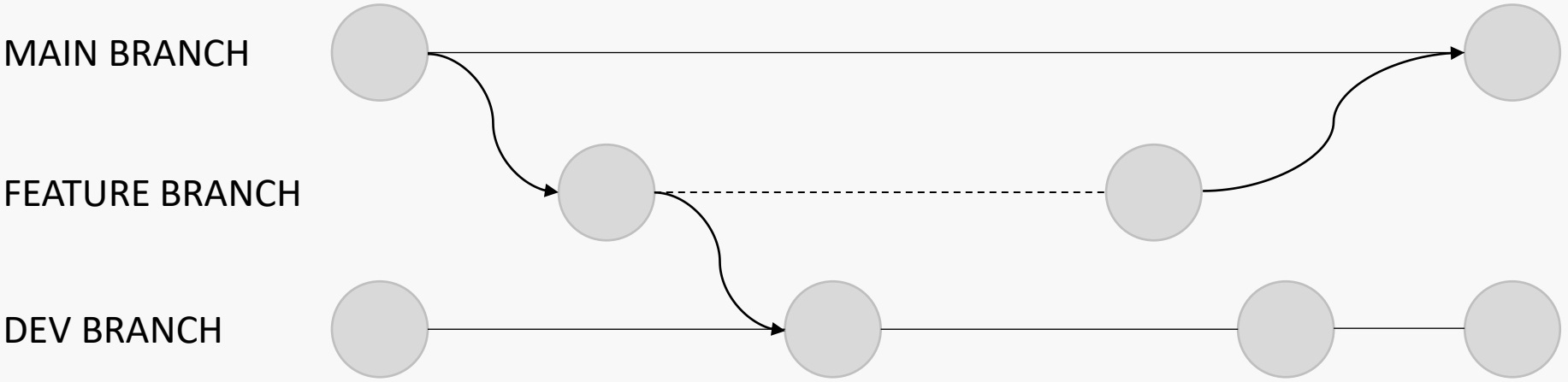
Branching

Most important Commands

- Pull
- Push
- Merge

Azure DevOps – Repos

>Branching / Feature



Source Control - Challenges

Merge Conflicts (.sqlproj file)

Pull → Merge

Branch Maintenance

People

Demo

Free Image on Unsplash

Moving Forward

Database Project Setup ✓

Azure DevOps Setup ✓

Branching ✓

Using Pull Requests ✓

Test Automation

Deployment Automation

Benefits & Challenges

- Benefits
  - Easy to setup
  - Clear Changelog
  - Efficiency of Deploying
  - Pull Requests
    - Improving Development Quality
- Challenges
  - Changing habits (way of working)

Questions?

BI Teamlead – X²O

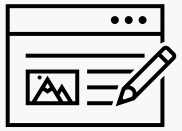
Core member @ dataMinds

Feedback?

oliviervs.be/feedback

Slides?

Github.com/oliviervs/sessions



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