Using Visual Studio Team Services

For a Kickin' CI Pipeline

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Hi, I'm J.

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Summary

CI/CD Recap

What are VSTS and TFS?

Overview of VSTS Features

Demos

- Build and release to Azure
- Build and release to on-premises IIS
- Build non-VS project using 3rd party tools

If You Give $50, So Will I!

bit.ly/kcdc-vsts

"charity:water is a non-profit organization that provides clean and safe drinking water to people in developing nations. The organization was founded in 2006 and has helped fund 22,936 projects in 24 countries, benefiting over 4.6 million people." - Wikipedia

"4/4 Stars"
- CharityNavigator.org

charity: water

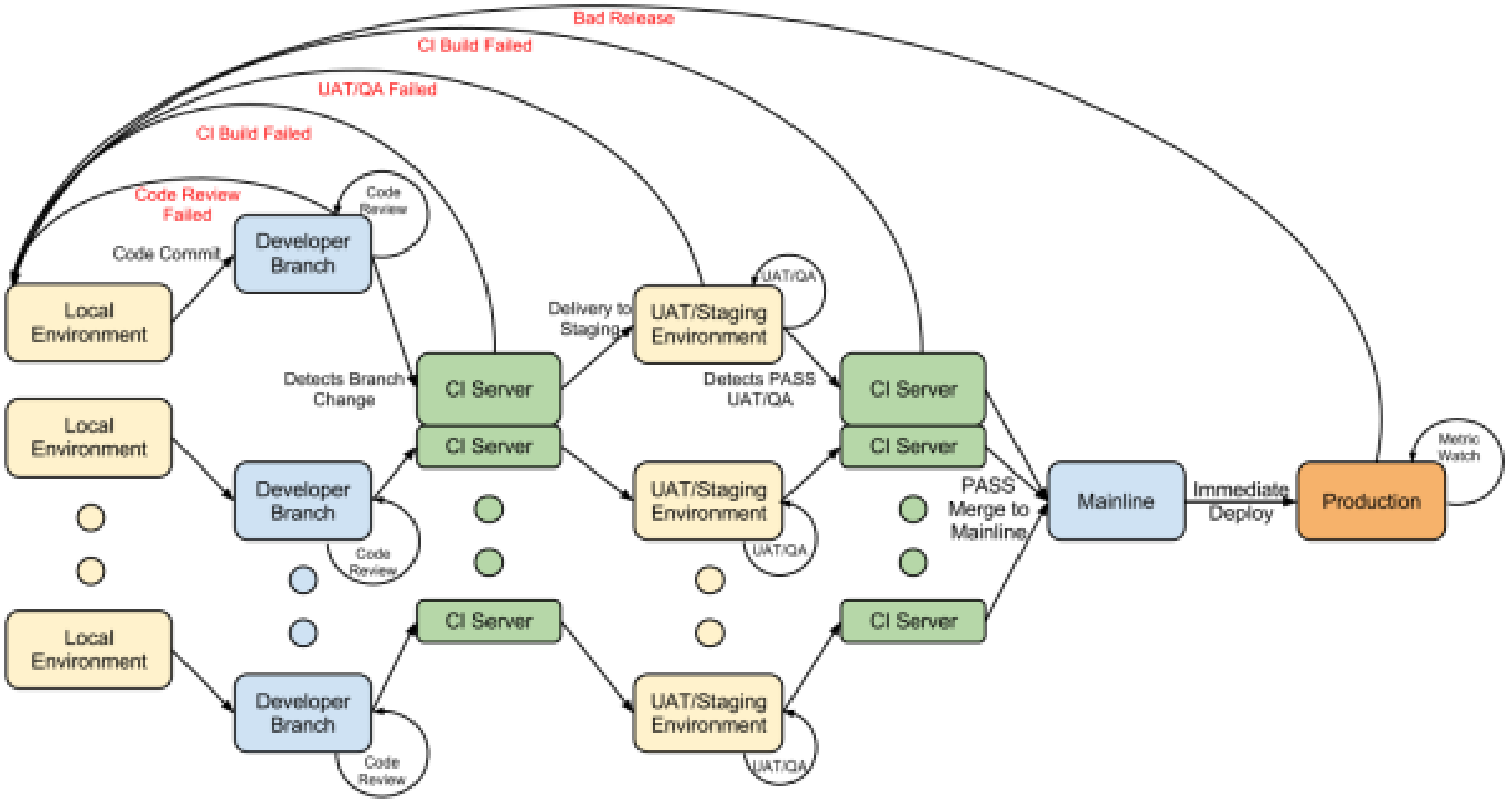
CI/CD Recap

Definitions

Continuous Integration - developer's working copies are synchronized with a shared mainline several times a day.

Continuous Delivery - logical evolution of continuous integration: always be able to put a product into production!

Continuous Deployment - logical next step after continuous delivery: automatically deploy the product into production (or test/staging) whenever it passes QA!



Source: https://blog.assembla.com/assemblablog/tabid/12618/bid/92411/continuous-delivery-vs-continuous-deployment-vs-continuous-integration-wait-huh.aspx

Advantages of CI/CD

Lower cost – find bugs in dev

Automated tests - identify issues without manual intervention

Monitor progress

Prevent code/build issues from impacting team

What is VSTS?

TFS in the cloud

Hosted on Azure

Integration points with Azure services

Mostly identical to TFS on-premises offering

Users log in with Microsoft account

Definitions

TFS – Team Foundation Server. Microsoft's on-prem collaboration and project tools suite for software teams

VSTS – Visual Studio Team Services. TFS in the cloud, TFSaaS

TFVC – Team Foundation Version Control. Microsoft's centralized version control system (similar to Subversion)

One-stop shopping for dev teams

Agile Tools

Track work and manage your backlog with Agile planning tools

Git

Everything you love about git – plus free private repos, social code reviews, code search and more…

Continuous Integration

Simplify continuous integration for your apps for any platform or language.

Tools for Java teams

Eclipse, IntelliJ, Android Studio plugins and Maven, Ant, Gradle and Jenkins for your Java teams.

Package Management

Build, manage, secure and share your software components.

Release Management

Continuous Deployment for your applications- ship faster, ship often.

TFVC

A centralized version control system with free private repos

Testing

Tools for manual, performance and automated testing.

Reporting

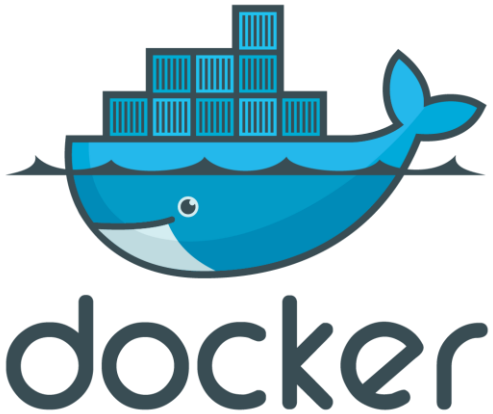
Insights that lead to action for fewer bottlenecks and increased productivity.

TFS (and VSTS) is not TFVC

Team Foundation Version Control
- Centralized version control system
- One version of each file on dev machines
- Historical data is maintained only on the server
- Branches are path-based and created on the server

TFS
- Version control (TFVC or Git)
- Work item tracking
- Builds
- Testing
- Reporting
- Wiki*

Not Proprietary



Familiar Tools

Features of VSTS

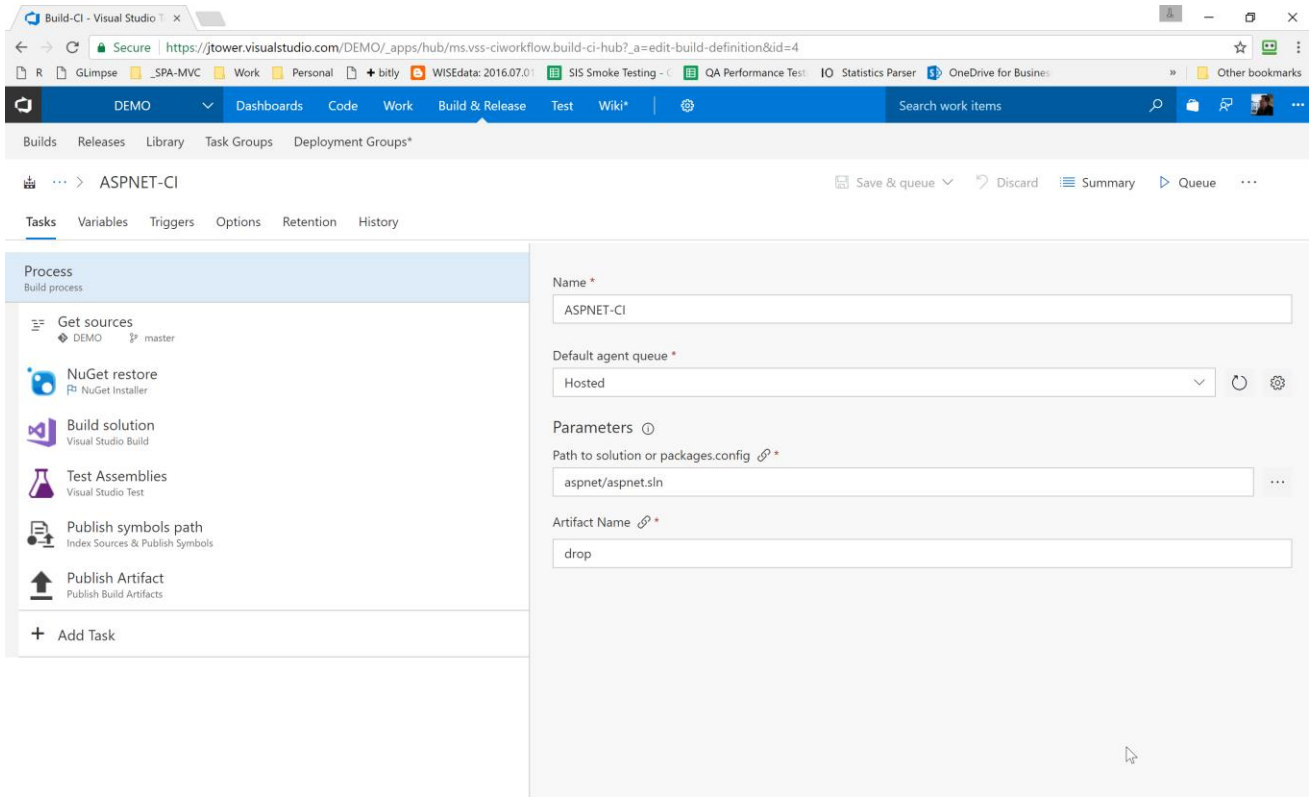
Version Control

DEMO

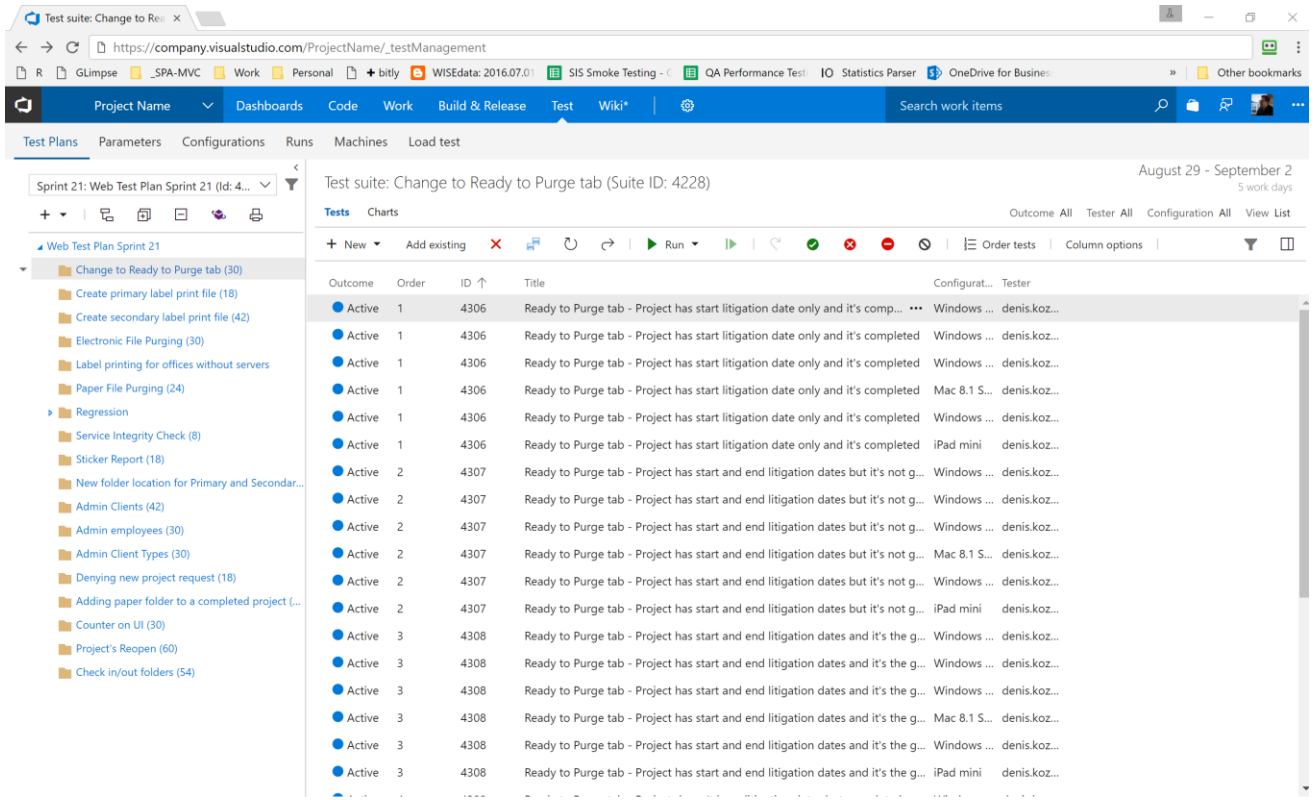
Work Item Tracking

DEMO

Automated Builds



Testing


Test suite: Change to Re
https://company.visualstudio.com/ProjectName/_testManagement
Project Name
Dashboards
Code
Work
Build & Release
Test
Wiki*
Search work items
Test Plans
Parameters
Configurations
Runs
Machines
Load test
Sprint 21: Web Test Plan Sprint 21 (Id: 4...
Web Test Plan Sprint 21
Change to Ready to Purge tab (30)
Create primary label print file (18)
Create secondary label print file (42)
Electronic File Purging (30)
Label printing for offices without servers
Paper File Purging (24)
Regression
Service Integrity Check (8)
Sticker Report (18)
New folder location for Primary and Secondar...
Admin Clients (42)
Admin employees (30)
Admin Client Types (30)
Denying new project request (18)
Adding paper folder to a completed project (...
Counter on UI (30)
Project's Reopen (60)
Check in/out folders (54)
Test suite: Change to Ready to Purge tab (Suite ID: 4228)
August 29 - September 2
5 work days
Tests
Charts
Outcome All
Tester All
Configuration All
View List
New
Add existing
Run
Order tests
Column options
Outcome Order ID Title Configurat... Tester
Active 1 4306 Ready to Purge tab - Project has start litigation date only and it's comp... Windows ... denis.koz...
Active 1 4306 Ready to Purge tab - Project has start litigation date only and it's completed Windows ... denis.koz...
Active 1 4306 Ready to Purge tab - Project has start litigation date only and it's completed Windows ... denis.koz...
Active 1 4306 Ready to Purge tab - Project has start litigation date only and it's completed Mac 8.1 S... denis.koz...
Active 1 4306 Ready to Purge tab - Project has start litigation date only and it's completed Windows ... denis.koz...
Active 1 4306 Ready to Purge tab - Project has start litigation date only and it's completed iPad mini denis.koz...
Active 2 4307 Ready to Purge tab - Project has start and end litigation dates but it's not g... Windows ... denis.koz...
Active 2 4307 Ready to Purge tab - Project has start and end litigation dates but it's not g... Windows ... denis.koz...
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Active 2 4307 Ready to Purge tab - Project has start and end litigation dates but it's not g... iPad mini denis.koz...
Active 3 4308 Ready to Purge tab - Project has start and end litigation dates and it's the g... Windows ... denis.koz...
Active 3 4308 Ready to Purge tab - Project has start and end litigation dates and it's the g... Windows ... denis.koz...
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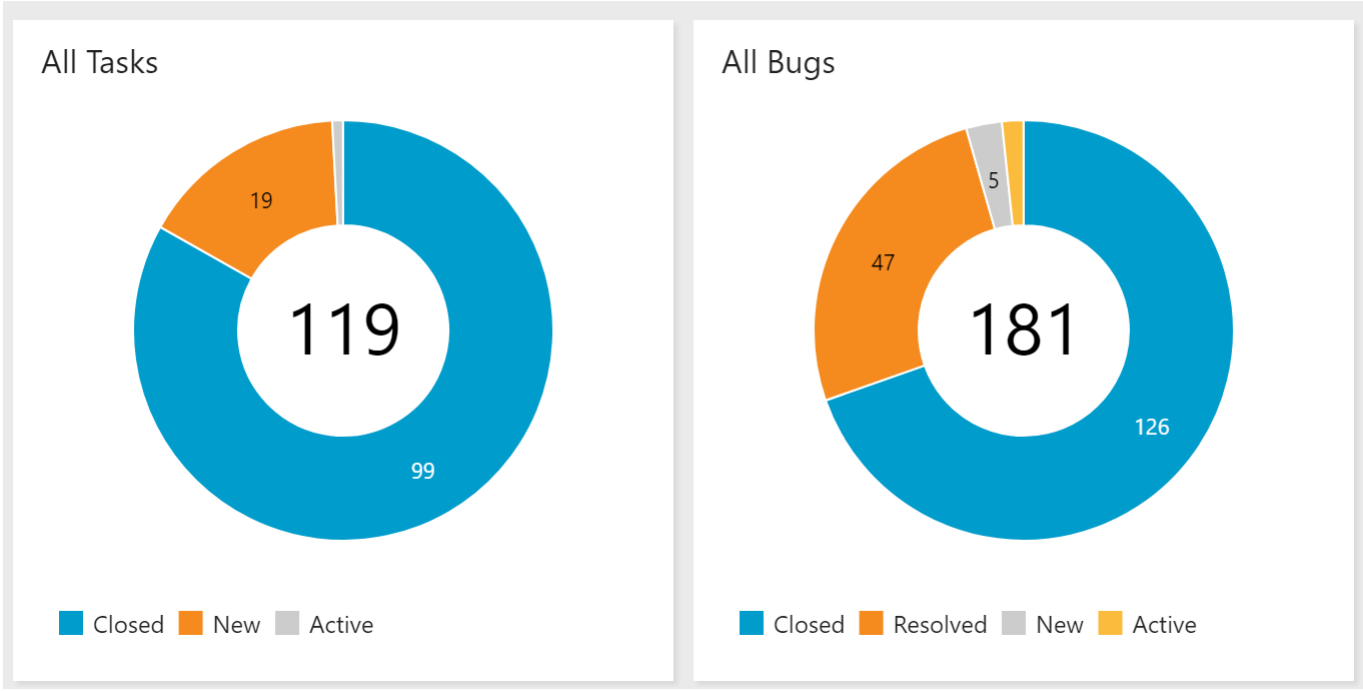
Active 3 4308 Ready to Purge tab - Project has start and end litigation dates and it's the g... Mac 8.1 S... denis.koz...
Active 3 4308 Ready to Purge tab - Project has start and end litigation dates and it's the g... Windows ... denis.koz...
Active 3 4308 Ready to Purge tab - Project has start and end litigation dates and it's the g... iPad mini denis.koz...

Reporting


All Tasks
19
119
99
Closed
New
Active
All Bugs
5
47
181
126
Closed
Resolved
New
Active

Wiki*

DEMO

Build and release to Azure

DEMO

.NET Core Support

DEMO

Build non-VS project with 3rd party tools

DEMO

Build and release to on-premises IIS

DEMO

Recap

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Thanks! Questions?

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