

De weg naar Continuous Delivery

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About me

René van Osnabrugge



Delta-N
IT with brains 





Sessie Agenda



Klant vraag





Wacht tijd



Wat zou er gebeuren....als het on
demand was?





Continuous delivery (CD) is a set of processes, tools and techniques for the rapid, reliable and continuous development and delivery of software.



Source: Techopedia.com



Er is sprake van Continuous Delivery als:

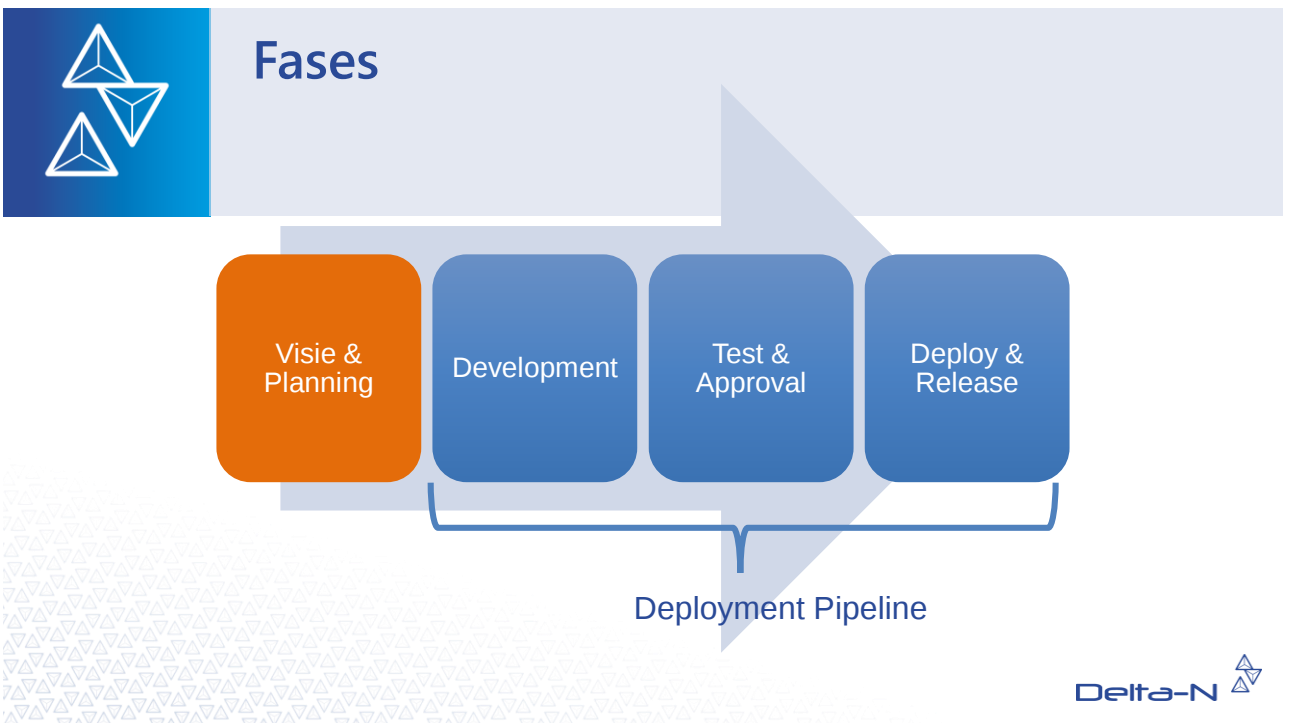
- De software gedurende zijn lifecycle deployable is
- Deploybaarheid een hogere prioriteit krijgt van het team dan nieuwe features
- Iedereen snel en geautomatiseerde feedback over productie readiness wanneer er een wijziging is gedaan
- Wanneer je push button deployment kunt doen van iedere versie op iedere omgeving

Source: Martin Fowler

Hoe vaak?

- ⌘ Deliver fast enough so that a customer does not have time to change their mind





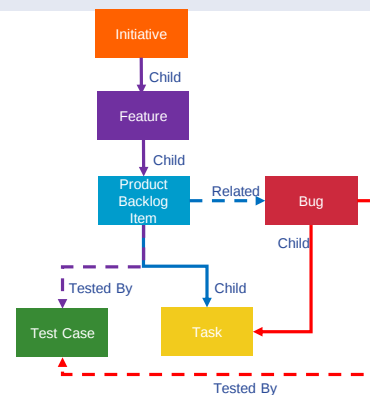
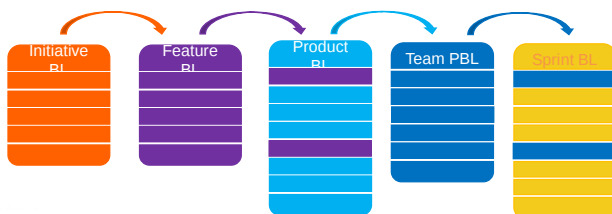
Continuous Delivery is the logical evolution of Agile!



Source: Continuous Delivery is reshaping the future of ALM, Forrester



TFS Roles & Artefacts





Demo

• Agile tooling in TFS 2013



Development

There are two ways of constructing a software design: One way is to make it so simple that there are obviously no deficiencies, and the other way is to make it so complicated that there are no obvious deficiencies. The first method is far more difficult.”-

Source: C.A.R. Hoare (British computer scientist, winner of the 1980 Turing Award)





Some frameworks

- If-Else
- Nfeature
- Feature Toggle
- Feature Switcher
- FlipIt

<http://www.philjhale.com/2012/07/a-brief-look-at-some-feature-toggle.html>

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Architectuur





Demo

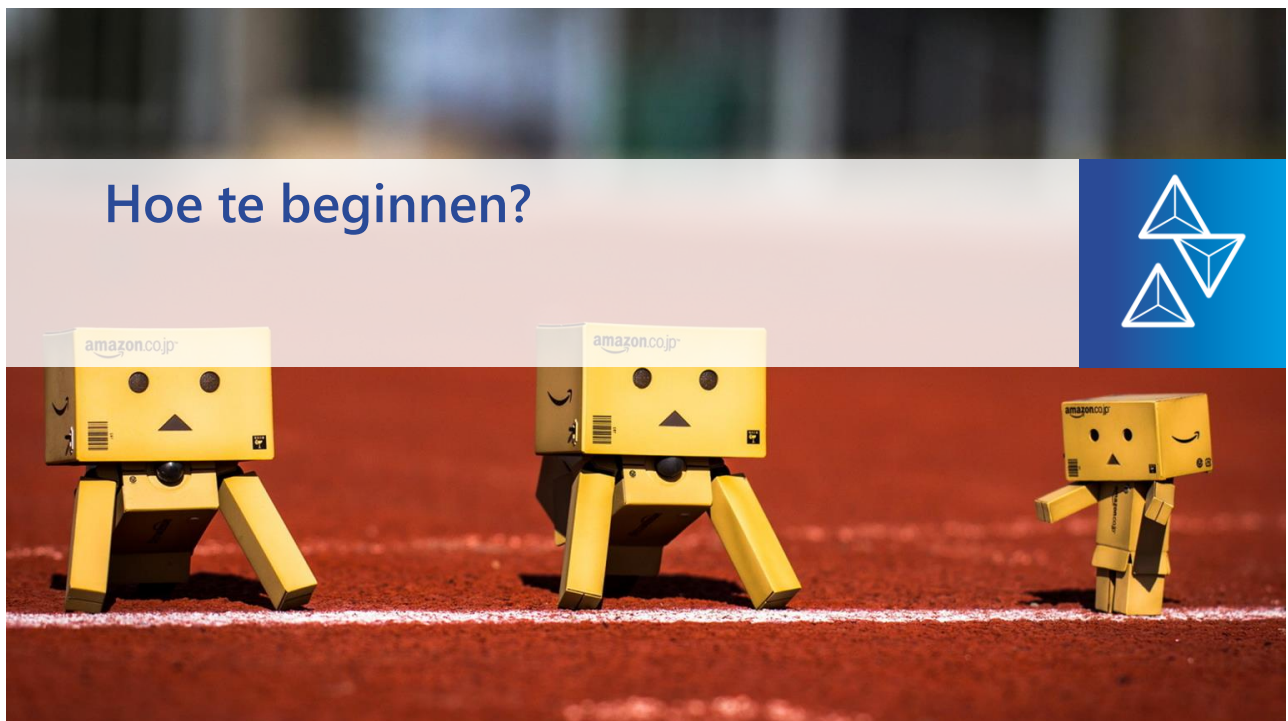
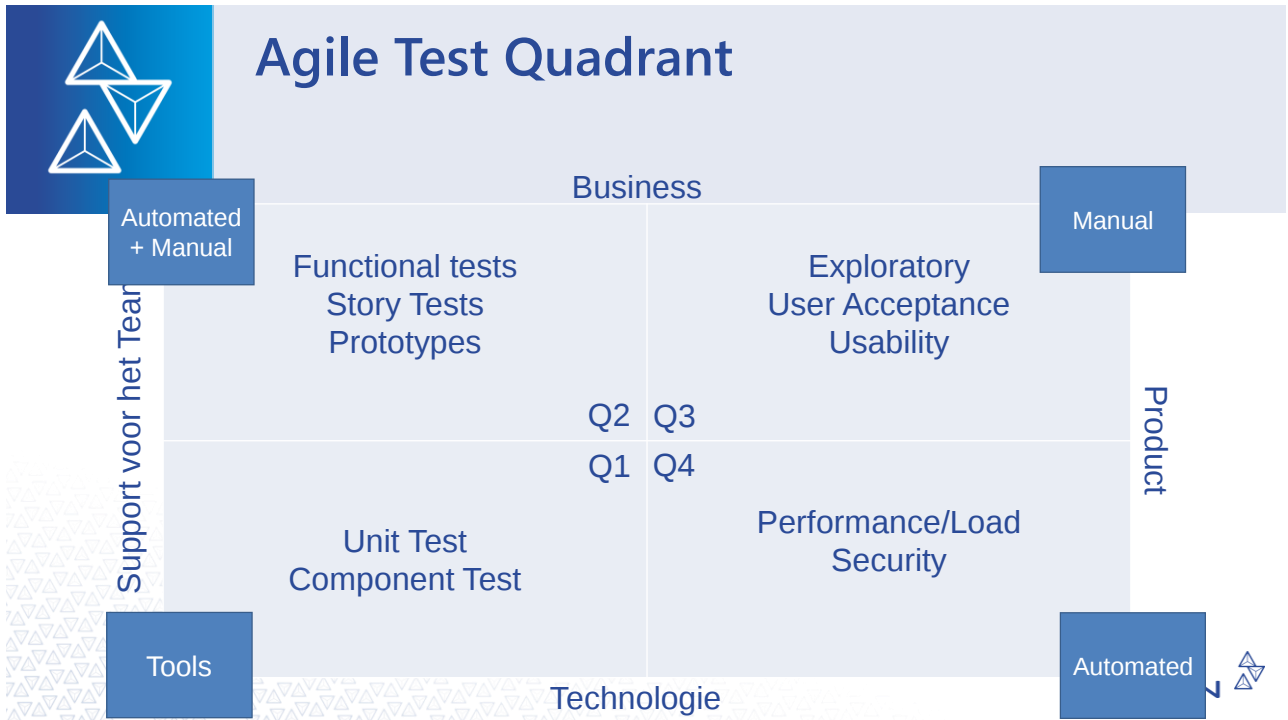
⌘ Developer tools



Testing

⌘ "Every large system that works started as a small system that worked."

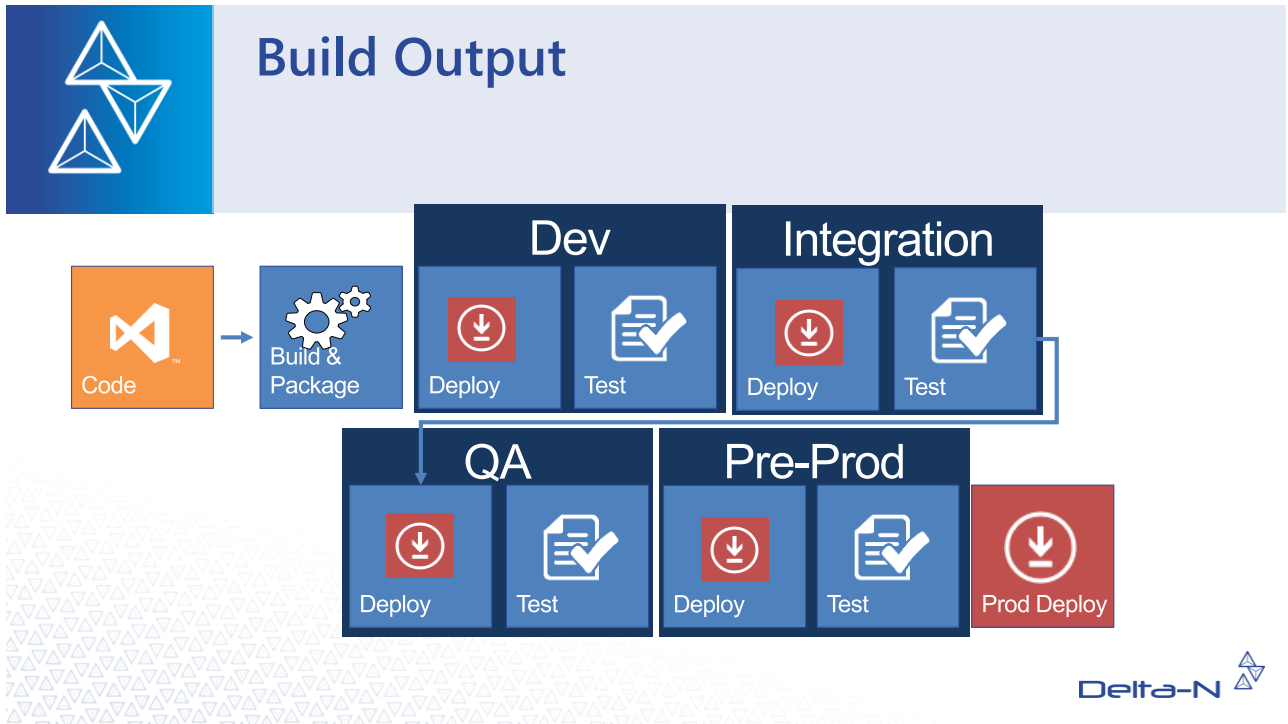
Source: Anonymous





Deploy & Release

- ⌘ Wat hebben we nodig
 - ⌘ De output van een build
 - ⌘ Een productie (like) omgeving
 - ⌘ Een deployment proces
 - ⌘ Validatie van de release
 - ⌘
 - ⌘ En dit dan automatisch



Een omgeving

- ⌘ Provisioning van omgevingen
 - ⌘ Powershell DSC
 - ⌘ SCVMM
- ⌘ Configuratie Scripts
 - ⌘ Powershell DSC
 - ⌘ Puppet
 - ⌘ Chef



Powershell DSC

```
Configuration ContosoWebsite
{
    param ($MachineName)
    Node $MachineName
    {
        #Install the IIS Role
        WindowsFeature IIS
        {
            Ensure = "Present"
            Name = "Web-Server"
        }
        #Install ASP.NET 4.5
        WindowsFeature ASP
        {
            Ensure = "Present"
            Name = "Web-Asp-Net45"
        }
    }
}

ContosoWebsite -MachineName "server2.contoso.com"
```



Deployment Proces

- ⌵ Opzetten omgeving
- ⌵ Configureren omgeving
- ⌵ Deployen software
- ⌵ Configureren software
- ⌵ Uitvoeren Tests
- ⌵ Rollback!





Validatie van de release

- ⌘ Direct na deployment
- ⌘ Smoke Test
- ⌘ Altijd
- ⌘ Meten gebruik en Server



Demo

- ⌘ Release Management vNext





Server & Environment

Release Management

Releases | Configure Apps | Configure Paths | Inventory | Administration

Release Paths | Environments | Servers

Servers

Search name Active

New Open Refresh

Name	DNS Name	IP Address	Deployer Status	Deployer Version	Deployer Error	Status
TFSSERVER13	TFSSERVER13	127.0.0.1	Ready	12.0.2		Active

Release Management

Releases | Configure Apps | Configure Paths | Inventory | Administration

Release Paths | Environments | Servers

Environments

Search name Active

New Open Refresh

Name	Description	Owner	Status
Development Environment		Administrator	Active
Test Environment		Administrator	Active

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Release Path

Release Management

Releases | Configure Apps | Configure Paths | Inventory | Administration

Release Paths | Environments | Servers

Release Path Release Demo Application Path (Active)

Delete Deactivate Save Save & Close Close

General Information

Name Release Demo Application Path

Description

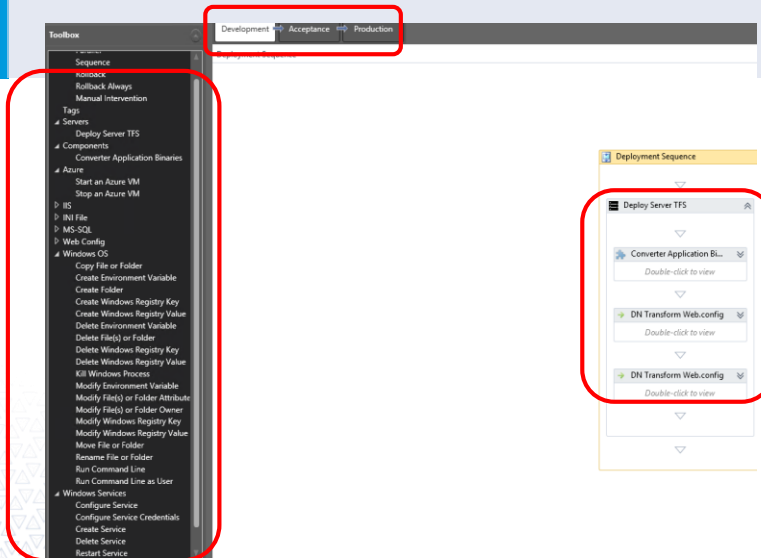
Stages Security

Add Remove Move Left Move Right

Stage	1 Development	Stage	2 Test
Environment	Development Environment	Environment	Test Environment
Acceptance Step	☒ Automated	Acceptance Step	☐ Automated
Approver	Administrator	Approver	Administrator
Deployment Step		Deployment Step	
Owner	Administrator	Owner	Administrator
Validation Step	☒ Automated	Validation Step	☐ Automated
Validator	Administrator	Validator	Administrator
Approval Step	0 Approver(s)	Approval Step	0 Approver(s)

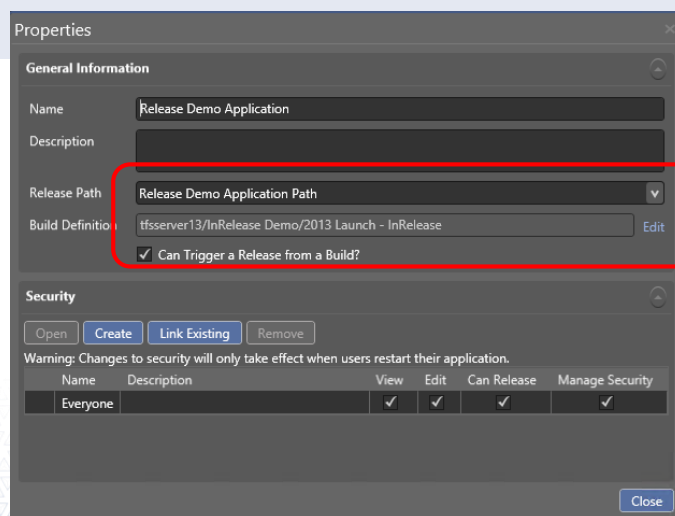
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Release Template



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Release Template - Properties



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Demo

• Release Management



Vragen?

