## OPSTARTVERSLAG Academiejaar 2017 - 2018

AT , E-ICT , EMA , EMK , EMO , OP

**STUDENT** Opleiding

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Titel bachelorproef

***Migrating a Software Deployment & Testing Framework (SDTF) to a microservice architecture (via Docker).***

**(definitieve)**

VASCO Data Security

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**GEGEVENS Bachelorproef**

**Omschrijving Probleem**

VASCO’s software deployment and testing framework (SDTF) runs on a windows test control host. Migrating it to a microservice architecture based architecture using docker containers would reduce the amount of resources required to run the framework and the test running on it. This would lead to a more cost-effective system as it removes the need to virtualize the operating systems on V-Cloud.

**Doelstellingen van de bachelorproef (kwantitatief en moeten meetbaar zijn)**

Implement the SDTF runtime so that it can include a microservice architecture via Docker containers.

Working demo running a large batch of VASCO’s test automation.

Document the impacted test suites that would need to be adapted due to the change in architecture.

The subsequent goal is to measure the impact this has on the resource usage of the set up as a whole and quantify how much more test can be run in parallel using this framework as opposed to the current way of running everything in VM’s on V-Cloud.

**Gewenste resultaat (Wat moet er (minimaal) opgeleverd worden?)**

Minimum:

Selenium grid

SDTF

Multiple test suite that are able to be run in parallel (from webadmin)

Quantify the impact on the resource implementing this

Ideal:

BuildIntake test suite

Radious clients in containers

Document which test suites need to be modified (and how they need to be modified?) to make them compatible with this new architecture.

Load balancing: start to deploy sdtf containers on a second machine when the first gets saturated. (is this useful? End goal is deployment on cloud)

Stretch:

Internet Explorer in a selenium node as a container.

**Opmerking :** alle bijzondere kosten gemaakt buiten het bedrijf en/of hogeschool, evenals de verplaatsingskosten zijn ten laste van de student, tenzij anders overeengekomen.

In het bedrijf is er (\*) ~~familie~~ / (\*) **geen familie** van de student die deel uitmaken van de begeleiding van de student.

(\*) Doorhalen wat niet van toepassing is.

**Opgemaakt te** **op**

**Handtekeningen :**

Bedrijfspromotor Schoolpromotor Student 1 Student 2

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