Project Plan

Case Study: Cloud infrastructure orchestration

Group: RDEnvi

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# Project Goal

Our main goal is to build an infrastructure which will be suitable for hosting certain software products created by developers in an advanced and automotive way. The infrastructure is going to be mainly based on AWS which will work in correlation with local Fontys servers which are planned to be used as a database. As foretold, our infrastructure will be automated and orchestrated via an advanced tool called Ansible. Lastly, our environment will follow the most progressive and advanced security innovations due to the implementation of stable logging mechanism, Software Defined Networking (SDN), Software Defined Wide Area Network (SD-WAN) and several monitoring tools similar to or Nagios itself.

# Problem Definition

# Milestones

|  |  |
| --- | --- |
| Deliverables | Expected delivery time |
| Project Plan |  |
| Design Document |  |
| Project Report |  |
| Amazon Web Services   * Configured virtual machines * Control node (Ansible) * Control node (SDN) |  |
| Fontys server   * Private database |  |
| Playbooks for Ansible |  |
| Terraform code |  |
|  |  |
|  |  |

# Deliverables

* Configured infrastructure
  + Terraform code
    - AWS Policies
    - EC2 Instances
  + Ansible playbooks
    - SSH
    - Web server
    - Email server
    - FTP server
  + Virtual Private Cloud
    - Public Subnet
    - Private Subnet
      * Database
* Documentation