Docker-Mail

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Containerization of application and services
Docker-Mail

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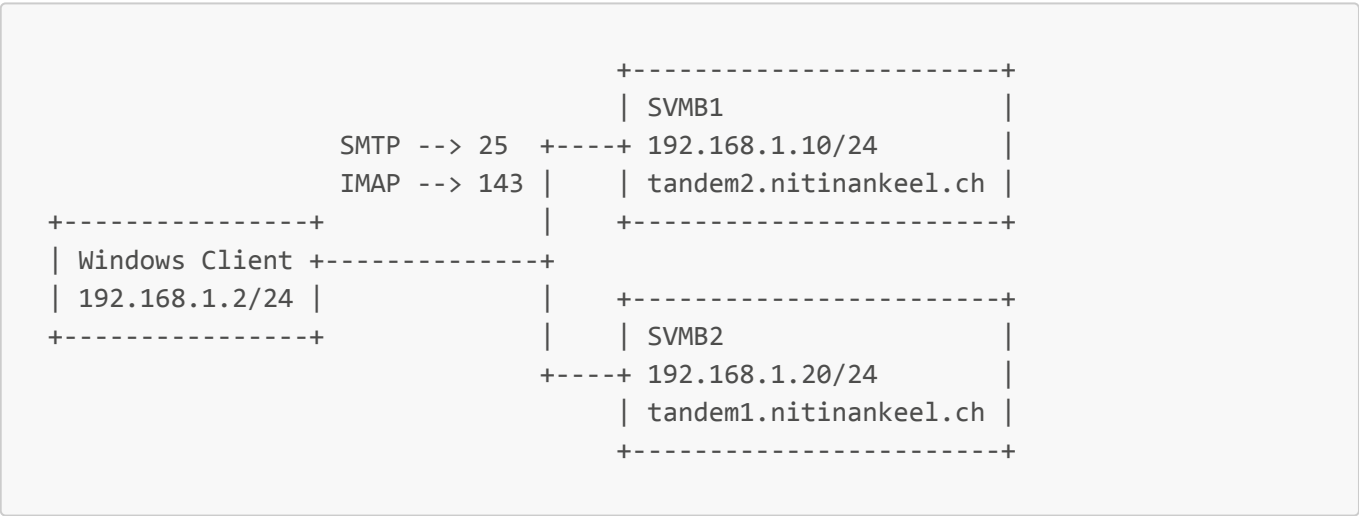
Concept

Requirements:

- Vagrant
- VirtualBox
- Git
- Vagrant plugin

Networkdiagramm

```
                                    +------------------------+
                                    | SVMB1                  |
                   SMTP --> 25  +----+ 192.168.1.10/24        |
                   IMAP --> 143 |    | tandem2.nitinankeel.ch |
+----------------+              |    +------------------------+
| Windows Client +--------------+
| 192.168.1.2/24 |              |    +------------------------+
+----------------+              |    | SVMB2                  |
                                +----+ 192.168.1.20/24        |
                                     | tandem1.nitinankeel.ch |
                                     +------------------------+
```

DNS Records

```
+----------------------------------------------------------+
| DNS Server                                               |
| ns1.hostserv.eu                                          |
|                                                          |
| A Record                                                 |
| mail.tandem1.nitinankeel.ch ==> 192.168.1.10/24          |
| mail.tandem2.nitinankeel.ch ==> 192.168.1.20/24          |
| tandem1.nitinankeel.ch      ==> 192.168.1.10/24          |
| tandem2.nitinankeel.ch      ==> 192.168.1.20/24          |
|                                                          |
| MX Record                                                |
| tandem1.nitinankeel.ch      ==> mail.tandem1.nitinankeel.ch |
| tandem2.nitinankeel.ch      ==> mail.tandem2.nitinankeel.ch |
+----------------------------------------------------------+
```

Setup folders and required files

```
.
├── tandem1
│   ├── docker-compose.yml
│   └── user.sh
├── tandem2
│   ├── docker-compose.yml
│   └── user.sh
├── LICENSE (GPLv2)
└── Vagrantfile                 # Vagrant file
```

Vagrantfile

```ruby
# BOX Image is Trusty64
BOX_IMAGE = "ubuntu/trusty64"
# Mail Node Server
WEB_COUNT = 2¨
# Start Vagrant configuration
Vagrant.configure("2") do |config|
# Foreach Mail Server
  (1..WEB_COUNT).each do |i|
    config.vm.provision :docker
    config.vm.provision :docker_compose
    config.vm.box = BOX_IMAGE
    config.vm.define "svmb#{i}" do |subconfig|
      subconfig.vm.hostname = "svmb#{i}"
      subconfig.vm.network :private_network, ip: "192.168.1.#{i}0"
        subconfig.vm.synced_folder "tandem#{i}", "/home/vagrant"
      subconfig.vm.provision "shell", inline: <<-SHELL
      mkdir /docker-mail
      cd /docker-mail
      cp /home/vagrant/docker-compose.yml /docker-mail/docker-compose.yml
```

```
        docker pull tvial/docker-mailserver:latest
        sudo curl -o setup.sh https://raw.githubusercontent.com/tomav/docker-
mailserver/master/setup.sh
        sudo chmod a+x /docker-mail/setup.sh
        cat /home/vagrant/test.sh | bash
        docker-compose up -d
        SHELL
        subconfig.vm.provider "virtualbox" do |v|
          v.gui = true
          v.name = "svmb#{i}"
          v.memory = 512
        end
      end
    end
  config.vm.provision "shell", inline: <<-SHELL
  echo "hallo"
  SHELL
end
```

Testing

Project review