Candidate Quan Ha Le
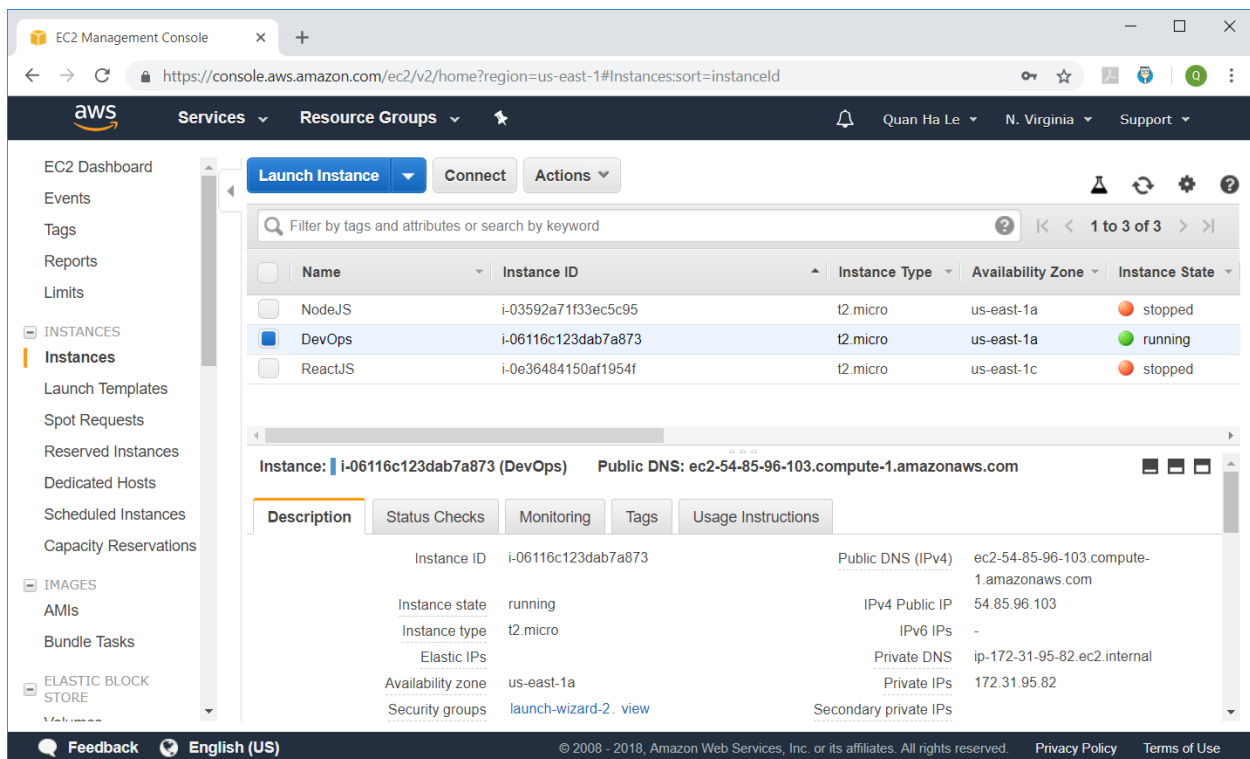
I deployed this work on Amazon Webservices.

The AMI that I used to deploy my CentOS ec2 instance is

CentOS-7-x86_64-EBS-HVM-20180318_121109-877e76fd-a132-410c-9982-c70ca8e41d88-ami-f5cb0388.4 (ami-7d579d00)

From the above AMI, I installed Docker, MariaDB and Symfony4

You can use the MS Word and PDF files inside this package to see all the screenshots

A) Install docker

[root@ip-172-31-95-82 centos]# cd /etc/yum.repos.d/

[root@ip-172-31-95-82 yum.repos.d]# ls -lai

```
total 52
     102 drwxr-xr-x.  2 root root  229 Oct  7 01:33 .
4194368 drwxr-xr-x. 74 root root 8192 Oct 13 22:54 ..
   34412 -rw-r--r--.  1 root root 1664 Aug 13 14:34 CentOS-Base.repo
     104 -rw-r--r--.  1 root root 1309 Aug 13 14:34 CentOS-CR.repo
     105 -rw-r--r--.  1 root root  649 Aug 13 14:34 CentOS-Debuginfo.repo
     109 -rw-r--r--.  1 root root  314 Aug 13 14:34 CentOS-fasttrack.repo
     106 -rw-r--r--.  1 root root  630 Aug 13 14:34 CentOS-Media.repo
     107 -rw-r--r--.  1 root root 1331 Aug 13 14:34 CentOS-Sources.repo
     108 -rw-r--r--.  1 root root 4768 Aug 13 14:34 CentOS-Vault.repo
  243374 -rw-r--r--.  1 root root  951 Oct  2  2017 epel.repo
  146211 -rw-r--r--.  1 root root 1050 Oct  2  2017 epel-testing.repo


[root@ip-172-31-95-82 yum.repos.d]# vi epel.repo
enabled=1


[root@ip-172-31-95-82 yum.repos.d]# yum clean all
sudo yum install -y yum-utils   device-mapper-persistent-data   lvm2
sudo yum-config-manager    --add-repo    https://download.docker.com/linux/centos/docker-ce.repo


sudo yum-config-manager --enable docker-ce-edge
sudo yum-config-manager --enable docker-ce-test
sudo yum install docker-ce
sudo yum update


[root@ip-172-31-95-82 yum.repos.d]# yum list docker-ce --showduplicates | sort -r | grep stable
docker-ce.x86_64      18.06.1.ce-3.el7              docker-ce-stable
docker-ce.x86_64      18.06.0.ce-3.el7              docker-ce-stable
docker-ce.x86_64      18.03.1.ce-1.el7.centos          docker-ce-stable
```

docker-ce.x86_64	18.03.0.ce-1.el7.centos	docker-ce-stable
docker-ce.x86_64	17.12.1.ce-1.el7.centos	docker-ce-stable
docker-ce.x86_64	17.12.0.ce-1.el7.centos	docker-ce-stable
docker-ce.x86_64	17.09.1.ce-1.el7.centos	docker-ce-stable
docker-ce.x86_64	17.09.0.ce-1.el7.centos	docker-ce-stable
docker-ce.x86_64	17.06.2.ce-1.el7.centos	docker-ce-stable
docker-ce.x86_64	17.06.1.ce-1.el7.centos	docker-ce-stable
docker-ce.x86_64	17.06.0.ce-1.el7.centos	docker-ce-stable
docker-ce.x86_64	17.03.3.ce-1.el7	docker-ce-stable
docker-ce.x86_64	17.03.2.ce-1.el7.centos	docker-ce-stable
docker-ce.x86_64	17.03.1.ce-1.el7.centos	docker-ce-stable
docker-ce.x86_64	17.03.0.ce-1.el7.centos	docker-ce-stable

sudo yum install docker-ce-18.03.1.ce

Install docker-compose

sudo curl -L "https://github.com/docker/compose/releases/download/1.22.0/docker-compose-$(uname -s)-$(uname -m)" -o /usr/local/bin/docker-compose

sudo chmod +x /usr/local/bin/docker-compose

docker-compose --version

B) Install Symfony4

B1) Install PHP7

yum install https://dl.fedoraproject.org/pub/epel/epel-release-latest-7.noarch.rpm

yum install http://rpms.remirepo.net/enterprise/remi-release-7.rpm

yum install yum-utils

yum-config-manager --enable remi-php72

yum install php php-mcrypt php-cli php-gd php-curl php-mysql php-ldap php-zip php-fileinfo

php -v

B2) Install composer

sudo yum -y update

cd /tmp

sudo curl -sS https://getcomposer.org/installer | php

mv composer.phar /usr/local/bin/composer

B3) Create a Symfony project

yum install php-xml

yum install php-mbstring

yum install php-process

cd /root/

composer create-project symfony/website-skeleton mariadbapi

cd mariadbapi/

vi .env

DATABASE_URL=mysql://root:admin2018@127.0.0.1:3306/eStore

C) Install Kahlan

composer require --dev kahlan/kahlan

[root@ip-172-31-95-82 symfonyapi]# ./vendor/bin/kahlan --spec=tests

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```

The PHP Test Framework for Freedom, Truth and Justice.

src directory : /root/symfonyapi/src

spec directory : /root/symfonyapi/tests

1 / 1 (100%)

Expectations   : 0 Executed

Specifications : 0 Pending, 0 Excluded, 0 Skipped

Passed 0 of 0 PASS in 0.005 seconds (using 2MB)

[root@ip-172-31-95-82 Symfony4]# vi kahlan-config.php

<?php // kahlan-config.php

use App\Kernel;

use Kahlan\Filter\Filters;

use Symfony\Component\HttpFoundation\Request;

Filters::apply($this, 'bootstrap', function($next) {

```php
    require __DIR__ . '/vendor/autoload.php';


  $root = $this->suite()->root();
  $root->beforeAll(function () {

    $this->request = Request::createFromGlobals();

    $this->kernel  = new Kernel('test', false);

  });


  return $next();


});


?>
```

D) Install MariaDB

yum update

yum install mariadb-server

sudo systemctl enable mariadb

systemctl start mariadb

[root@ip-172-31-95-82 docker]# systemctl status mariadb

  mariadb.service - MariaDB database server

  Loaded: loaded (/usr/lib/systemd/system/mariadb.service; enabled; vendor preset: disabled)

  Active: active (running) since Sat 2018-10-27 19:58:46 UTC; 53min ago

  Process: 773 ExecStartPost=/usr/libexec/mariadb-wait-ready $MAINPID (code=exited, status=0/SUCCESS)

Process: 725 ExecStartPre=/usr/libexec/mariadb-prepare-db-dir %n (code=exited, status=0/SUCCESS)

Main PID: 772 (mysqld_safe)

CGroup: /system.slice/mariadb.service

├─772 /bin/sh /usr/bin/mysqld_safe --basedir=/usr

└─953 /usr/libexec/mysqld --basedir=/usr --datadir=/var/lib/mysql --plugin-dir=/usr/lib64/mysql/plugin --log-error=/var/log/mariadb/mariadb.log --pid-file=/var/run/mariadb/mar...

Oct 27 19:58:43 ip-172-31-95-82.ec2.internal systemd[1]: Starting MariaDB database server...

Oct 27 19:58:43 ip-172-31-95-82.ec2.internal mariadb-prepare-db-dir[725]: Database MariaDB is probably initialized in /var/lib/mysql already, nothing is done.

Oct 27 19:58:44 ip-172-31-95-82.ec2.internal mysqld_safe[772]: 181027 19:58:44 mysqld_safe Logging to '/var/log/mariadb/mariadb.log'.

Oct 27 19:58:44 ip-172-31-95-82.ec2.internal mysqld_safe[772]: 181027 19:58:44 mysqld_safe Starting mysqld daemon with databases from /var/lib/mysql

Oct 27 19:58:46 ip-172-31-95-82.ec2.internal systemd[1]: Started MariaDB database server.

sudo mysql_secure_installation

(Please set up the mariadb user = root and the root password = admin2018)