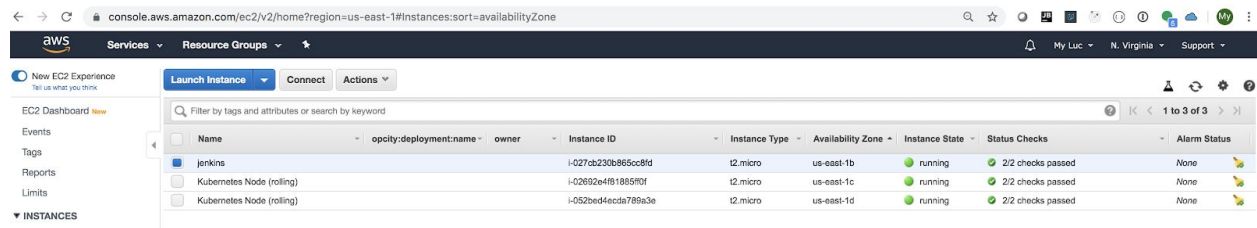


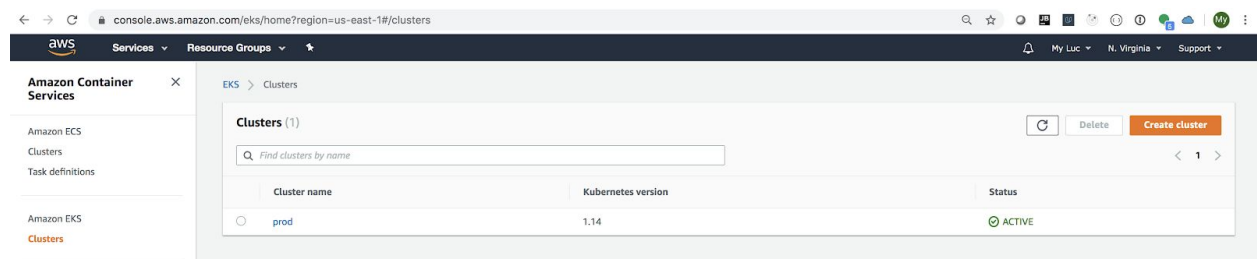
EC2 instance for jenkins:



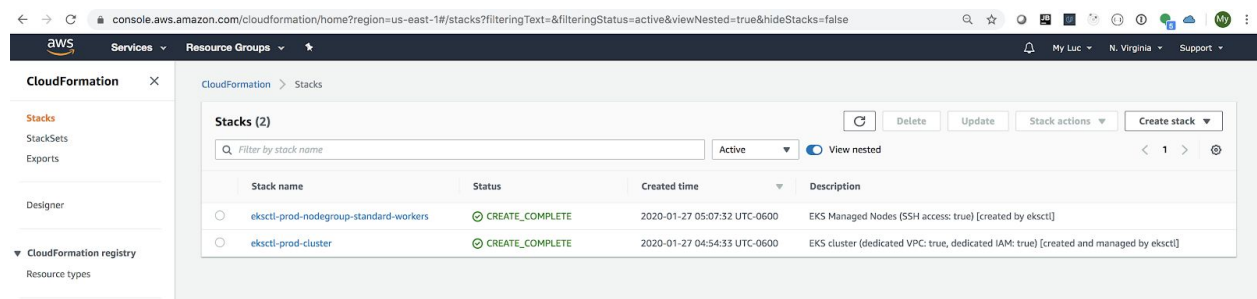
Name	opcity:deployment:name	owner	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status
jenkins			i-027cb230b865cc8fd	t2.micro	us-east-1b	running	2/2 checks passed	None
Kubernetes Node (rolling)			i-02692e4f81885f0f	t2.micro	us-east-1c	running	2/2 checks passed	None
Kubernetes Node (rolling)			i-052bed4ecd789a3e	t2.micro	us-east-1d	running	2/2 checks passed	None

Create an eks cluster:

```
eksctl create cluster --name prod --version 1.14 --nodegroup-name standard-workers  
--node-type t2.micro --nodes 2 --nodes-min 1 --nodes-max 2 --ssh-access --managed
```



Cluster name	Kubernetes version	Status
prod	1.14	ACTIVE



Stack name	Status	Created time	Description
eksctl-prod-nodegroup-standard-workers	CREATE_COMPLETE	2020-01-27 05:07:32 UTC-0600	EKS Managed Nodes (SSH access: true) [created by eksctl]
eksctl-prod-cluster	CREATE_COMPLETE	2020-01-27 04:54:33 UTC-0600	EKS cluster (dedicated VPC: true, dedicated IAM: true) [created and managed by eksctl]

console.aws.amazon.com/ec2/v2/home?region=us-east-1#instances:sort=availabilityZone

Services Resource Groups

Launch Instance Connect Actions

Filter by tags and attributes or search by keyword

Name	opcity:deployment:name	owner	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status
jenkins			i-027cb230b665cd8fd	t2.micro	us-east-1b	running	2/2 checks passed	None
Kubernetes Node (rolling)			i-02692e4f81885f0f	t2.micro	us-east-1c	running	2/2 checks passed	None
Kubernetes Node (rolling)			i-052bed4ecfa789a3e	t2.micro	us-east-1d	running	2/2 checks passed	None

Instance: i-02692e4f81885f0f (Kubernetes Node (rolling)) Public DNS: ec2-34-235-155-86.compute-1.amazonaws.com

Description	Status Checks	Monitoring	Tags
Instance ID	i-02692e4f81885f0f		
Instance state	running		
Instance type	t2.micro		
Finding	Opt-in to AWS Compute Optimizer for recommendations. Learn more		
Private DNS	ip-192-168-59-121.ec2.internal		
Private IPs	192.168.56.175, 192.168.59.121		
Secondary private IPs	192.168.60.22, 192.168.50.84		
VPC ID	vpc-0118f3290122955e6 (ekscrt-prod-cluster/VPC)		
Subnet ID	subnet-0dfe28d815b3ad147 (ekscrt-prod-cluster/SubnetPublicUSEAST1C)		
Network interfaces	eth0 eth1		
Source/dest. check	True		
T2/T3 Unlimited	Disabled		
EBS-optimized	False		
Root device type	ebs		
Root device	/dev/xvda		
Block devices	/dev/xvda		
Elastic Graphics ID	-		
Elastic Inference accelerator ID	-		
Capacity Reservation	-		
Public DNS (IPv4)	ec2-34-235-155-86.compute-1.amazonaws.com		
IPv4 Public IP	34.235.155.86		
IPv6 IPs	-		
Elastic IPs	-		
Availability zone	us-east-1c		
Security groups	eks-remoteAccess-4ec70357-sdbc-b663-5665-af23cd85b1f, eks-cluster-sg-prod-3449687, view inbound rules, view outbound rules		
Scheduled events	No scheduled events		
AMI ID	amazon-eks-node-1.14-v20190927 (ami-0392bafcd801b7520f)		
Platform	-		
IAM role	ekscrt-prod-nodegroup-standard-wo-NodeInstanceRole-JEY7XSMVETNA		
Key pair name	ekscrt-prod-nodegroup-standard-workers-22:16:03:c3:dd:cb:02:33:b3:47:c2:a8:1e:5e:5b:9a		
Owner	78683652153		
Launch time	January 27, 2020 at 5:08:44 AM UTC-6 (PDT)		
Termination protection	False		
Lifecycle	normal		
Monitoring	basic		
Alarm status	None		
Kernel ID	-		
RAM disk ID	-		

Failed linting:

Not Secure | ec2-3-83-90-200.compute-1.amazonaws.com:8081/blue/organizations/jenkins/udacity-devops-project5/detail/master/82/pipeline

udacity-devops-project5 < 82 Pipeline Changes Tests Artifacts Logout

Branch: master 4s Changes by my.luc
Commit: 89bca14 a few seconds ago Branch indexing

Start Lint HTML Run docker Upload docker Apply Kubernetes deployment file Apply Kubernetes service file wait for 10 seconds Results End

Lint HTML - <1s

Check out from version control 1s

tidy -q -e templates/*.html -- Shell Script <1s

```

1 + tidy -q -e templates/hello.world.html
2 line 7 column 52 - Warning: replacing unexpected script with </script>
3 script returned exit code 1

```

Pipeline:

jenkins / udacity-devops-proje x Project 5 x | kubernetes rolling deployment x +

Not Secure | ec2-3-83-90-200.compute-1.amazonaws.com:8081/blue/organizations/jenkins/udacity-devops-project5/detail/master/84/pipeline

✓ udacity-devops-project5 ◀ 84

Branchmaster @ 42s Changes by myluc
Commit/7de8c9f @ a few seconds ago Branch indexing

Start | | | | | | | | | End

Results - 2s

✓ + kubectl get deployments -- Shell Script

1	NAME	READY	UP-TO-DATE	AVAILABLE	AGE
2	hello-world-project5	2/2	2	2	47m

✓ + kubectl get replicaset -- Shell Script

1	NAME	DESIRED	CURRENT	READY	AGE
2	hello-world-project5-5bd69fc	2	2	2	47m

✓ + kubectl describe replicaset -- Shell Script

```
1 + kubectl describe replicaset
2 Name: hello-world-project5-5bd69fc
3 Namespace: default
4 Selector: app=hello-world-project5,pod-template-hash=5bd69fc
5 Labels: app=hello-world-project5,pod-template-hash=5bd69fc
6 Annotations: deployment.kubernetes.io/desired-replicas: 2
7 deployment.kubernetes.io/max-replicas: 3
8 deployment.kubernetes.io/revision: 1
9 Controlled By: Deployment/hello-world-project5
10 Replicas: 2 current / 2 desired
11 Pod Status: 2 Running / 0 Waiting / 0 Succeeded / 0 Failed
12 Pod Template:
13 Labels: app=hello-world-project5,pod-template-hash=5bd69fc
14 Containers:
15 hello-world-project5:
16 Image: myluc/udacity-devops:proj5
17 Port: 8080/TCP
18 Host Port: 0/TCP
19 Environment: <none>
20 Mounts: <none>
21 Volumes: <none>
22 Events:
23 Type Reason Age From Message
24 ---
25 Normal SuccessfulCreate 47m replicaset-controller Created pod: hello-world-project5-5bd69fc-cpd5s
26 Normal SuccessfulCreate 47m replicaset-controller Created pod: hello-world-project5-5bd69fc-w14zk
```

✓ + kubectl get services my-service -- Shell Script

1	NAME	TYPE	CLUSTER-IP	EXTERNAL-IP	PORT(S)	AGE
2	my-service	LoadBalancer	10.100.221.208	ac7d22b09419911ea908c0a7b2a8fd58-1016038653.us-east-1.elb.amazonaws.com	8080:31375/TCP	47m

✓ + kubectl describe services my-service -- Shell Script

```
1 + kubectl describe services my-service
2 Name: my-service
3 Namespace: default
4 Labels: <none>
5 Annotations: {"apiVersion":"v1","kind":"Service","metadata":{"annotations":{},"name":"my-service","namespace":"default"},"spec":{"ports":[{"port":8080,...
6 Selector: app=hello-world-project5
7 Type: LoadBalancer
8 IP: 10.100.221.208
9 LoadBalancer Ingress: ac7d22b09419911ea908c0a7b2a8fd58-1016038653.us-east-1.elb.amazonaws.com
10 Port: <unset> 8080/TCP
11 TargetPort: 8080/TCP
12 NodePort: <unset> 31375/TCP
13 Endpoints: 192.168.0.116:8080,192.168.25.137:8080
14 Session Affinity: None
15 External Traffic Policy: Cluster
16 Events:
17 Type Reason Age From Message
18 ---
19 Normal EnsuringLoadBalancer 47m service-controller Ensuring load balancer
20 Normal EnsuredLoadBalancer 47m service-controller Ensured load balancer
```

✓ + kubectl get pods --output=wide -- Shell Script

1	NAME	READY	STATUS	RESTARTS	AGE	IP	NODE	NOMINATED NODE	READINESS GATES
2	hello-world-project5-5bd69fc-cpd5s	1/1	Running	0	47m	192.168.0.116	ip-192-168-14-22.ec2.internal	<none>	<none>
3	hello-world-project5-5bd69fc-w14zk	1/1	Running	0	47m	192.168.25.137	ip-192-168-14-22.ec2.internal	<none>	<none>

Expose load balancer:

console.aws.amazon.com/ec2/v2/home?region=us-east-1#LoadBalancers:sort=loadBalancerName

Services Resource Groups

New EC2 Experience

Launch Templates New

Spot Requests

Savings Plans

Reserved Instances

Dedicated Hosts

Scheduled Instances

Capacity Reservations

IMAGES

AMIs

Bundle Tasks

ELASTIC BLOCK STORE

Volumes

Snapshots

Lifecycle Manager

NETWORK & SECURITY

Security Groups

Elastic IPs New

Placement Groups New

Key Pairs New

Network Interfaces

LOAD BALANCING

Load Balancers

Target Groups

AUTO SCALING

Launch Configurations

Auto Scaling Groups

Create Load Balancer Actions

Filter by tags and attributes or search by keyword

Name	DNS name	State	VPC ID	Availability Zones	Type
ac7d22b09419911ea908c0a7b2a8fd58	ac7d22b09419911ea908c0a7b2a8fd58-1016038653.us-east-1.elb.amazonaws.com		vpc-0118f3290122955e6	us-east-1c, us-east-1d	classic

Load balancer: ac7d22b09419911ea908c0a7b2a8fd58

Description Instances Health check Listeners Monitoring Tags Migration

Basic Configuration

Name	ac7d22b09419911ea908c0a7b2a8fd58	Creation time	January 28, 2020 at 12:45:33 AM UTC-6
DNS name	ac7d22b09419911ea908c0a7b2a8fd58-1016038653.us-east-1.elb.amazonaws.com (A Record)	Hosted zone	Z35SXDOTRQ7X7K
Type	Classic (Migrate Now)	Status	2 of 2 instances in service
Scheme	internet-facing	VPC	vpc-0118f3290122955e6
Availability Zones	subnet-08757c2acba66911f - us-east-1d, subnet-0dfe28c815b0ad147 - us-east-1c		

Port Configuration

Port Configuration 8080 (TCP) forwarding to 31375 (TCP)

Stickiness options not available for TCP protocols

Security

Source Security Group sg-0361246c30708695e1, k8s-elb-ac7d22b09419911ea908c0a7b2a8fd58

Security group for Kubernetes F5 B ac7d22b09419911ea908c0a7b2a8fd58 (default/mv-service)

jenkins / udacity-devops-proje x Project 5

Not Secure | ac7d22b09419911ea908c0a7b2a8fd58-1016038653.us-east-1.elb.amazonaws.com:8080

Hello World, my name is **My Luc**.