

## ЛАБ 15

### Поднятие Кластера в GCP Google Kubernetes Engine

#### 1) Каластеры

```
billzhas06@reddit-app:~$ gcloud container clusters create lab15 --zone us-central1-a
WARNING: Starting in January 2021, clusters will use the Regular release channel by default when '--cluster-version', '--release-channel', '--no-enable-autoupgrade',
enable-autorepair' flags are not specified.
WARNING: Currently VPC-native is not the default mode during cluster creation. In the future, this will become the default mode and can be disabled using '--no-enable-
flag. Use '--[no-]enable-ip-alias' flag to suppress this warning.
WARNING: Starting with version 1.18, clusters will have shielded GKE nodes by default.
WARNING: Your Pod address range ('--cluster-ipv4-cidr') can accommodate at most 1008 node(s).
WARNING: Starting with version 1.19, newly created clusters and node-pools will have COS_CONTAINERD as the default node image when no image type is specified.
Creating cluster lab15 in us-central1-a... Cluster is being health-checked (master is healthy)...done.
Created [https://container.googleapis.com/v1/projects/docker-296912/zones/us-central1-a/clusters/lab15].
To inspect the contents of your cluster, go to: https://console.cloud.google.com/kubernetes/workload_/gcloud/us-central1-a/lab15?project=docker-296912
kubeconfig entry generated for lab15.
NAME      LOCATION  MASTER VERSION  MASTER IP  MACHINE TYPE  NODE VERSION  NUM_NODES  STATUS
lab15     us-central1-a  1.16.15-gke.4300  35.184.114.66  n1-standard-1  1.16.15-gke.4300  3          RUNNING
```

west1-b							
<input type="checkbox"/>	<input checked="" type="checkbox"/>	gke-lab15-default-pool-b8fd3692-nz7p	us-central1-a	gke-lab15-default-pool-b8fd3692-grp	10.128.0.4 (nic0)	35.223.245.34	SSH ▾
<input type="checkbox"/>	<input checked="" type="checkbox"/>	gke-lab15-default-pool-b8fd3692-qd5c	us-central1-a	gke-lab15-default-pool-b8fd3692-grp	10.128.0.2 (nic0)	34.122.145.96	SSH ▾
<input type="checkbox"/>	<input checked="" type="checkbox"/>	gke-lab15-default-pool-b8fd3692-z3wz	us-central1-a	gke-lab15-default-pool-b8fd3692-grp	10.128.0.3 (nic0)	34.66.195.31	SSH ▾

Введите ярлык или название...

<input type="checkbox"/>	Название ▴	Местоположение	Размер кластера	Общее количество ядер	Общий объем памяти	Уведомления	Ярлыки
<input type="checkbox"/>	<input checked="" type="checkbox"/> lab15	us-central1-a	3	3 виртуальных ЦП	11,25 ГБ		<input type="button" value="Подключиться"/>

#### 2) Получить credenшиалс

```
billzhas06@reddit-app:~$ gcloud container clusters get-credentials lab15 --zone us-central1-a
Fetching cluster endpoint and auth data.
kubeconfig entry generated for lab15.
Ожидание ssh.cloud.google.com...
```

#### 3) Kluster info

```
Run 'kubectl --help' for usage.
billzhas06@reddit-app:~$ kubectl cluster-info
Kubernetes master is running at https://35.184.114.66
SLBDefaultBackend is running at https://35.184.114.66/api/v1/namespaces/kube-system/services/default-http-backend:http/proxy
KubeDNS is running at https://35.184.114.66/api/v1/namespaces/kube-system/services/kube-dns:dns/proxy
Metrics-server is running at https://35.184.114.66/api/v1/namespaces/kube-system/services/https:metrics-server:/proxy
To further debug and diagnose cluster problems, use 'kubectl cluster-info dump'.
```

#### 4) Статус компонентов

```
To further debug and diagnose cluster problems, use 'kubectl cl
billzhas06@reddit-app:~$ kubectl get componentstatuses
NAME      AGE
controller-manager  <unknown>
etcd-0         <unknown>
scheduler     <unknown>
etcd-1         <unknown>
```

## 5) Nodes

```
ollzhas06@reddit-app:~$ kubectl get nodes
```

NAME	STATUS	ROLES	AGE	VERSION
gke-lab15-default-pool-b8fd3692-nz7p	Ready	<none>	9m17s	v1.16.15-gke.4300
gke-lab15-default-pool-b8fd3692-qd5c	Ready	<none>	9m17s	v1.16.15-gke.4300
gke-lab15-default-pool-b8fd3692-z3wz	Ready	<none>	9m17s	v1.16.15-gke.4300

## 6) Delete cluster

```
ollzhas06@reddit-app:~$ gcloud container clusters delete lab15
The following clusters will be deleted.
- [lab15] in [us-central1-a]

Do you want to continue (Y/n)? Y

Deleting cluster lab15...done.
Deleted [https://container.googleapis.com/v1/projects/docker-296912/zones/us-central1-a/clusters/lab15].
Ожидание ssh.cloud.google.com...
```