

kubectl get pv

```
Терминал - igor@ubuntu-server: ~
Файл  Правка  Вид  Терминал  Вкладки  Справка

igor@ubuntu-server:~$ minikube status
minikube
type: Control Plane
host: Running
kubelet: Running
apiserver: Running
kubeconfig: Configured

igor@ubuntu-server:~$ kubectl get pv
No resources found
igor@ubuntu-server:~$
```

kubectl describe pv

```
Терминал - igor@ubuntu-server: ~
Файл  Правка  Вид  Терминал  Вкладки  Справка

type: Control Plane
host: Running
kubelet: Running
apiserver: Running
kubeconfig: Configured

igor@ubuntu-server:~$ kubectl get pv
No resources found
igor@ubuntu-server:~$ kubectl describe pv
No resources found in default namespace.
igor@ubuntu-server:~$
```

kubectl describe pvc

```
Терминал - igor@ubuntu-server: ~
Файл  Правка  Вид  Терминал  Вкладки  Справка

kubelet: Running
apiserver: Running
kubeconfig: Configured

igor@ubuntu-server:~$ kubectl get pv
No resources found
igor@ubuntu-server:~$ kubectl describe pv
No resources found in default namespace.
igor@ubuntu-server:~$ kubectl describe pvc
No resources found in default namespace.
igor@ubuntu-server:~$
```

kubectl describe pvc webdav2

```
Терминал - igor@ubuntu-server: ~
Файл  Правка  Вид  Терминал  Вкладки  Справка

kubeconfig: Configured

igor@ubuntu-server:~$ kubectl get pv
No resources found
igor@ubuntu-server:~$ kubectl describe pv
No resources found in default namespace.
igor@ubuntu-server:~$ kubectl describe pvc
No resources found in default namespace.
igor@ubuntu-server:~$ kubectl describe pvc webdav2
Error from server (NotFound): persistentvolumeclaims "webdav2" not found
igor@ubuntu-server:~$
```

kubectl get pods

```
Терминал - igor@ubuntu-server: ~
Файл  Правка  Вид  Терминал  Вкладки  Справка

igor@ubuntu-server:~$ kubectl get pv
No resources found
igor@ubuntu-server:~$ kubectl describe pv
No resources found in default namespace.
igor@ubuntu-server:~$ kubectl describe pvc
No resources found in default namespace.
igor@ubuntu-server:~$ kubectl describe pvc webdav2
Error from server (NotFound): persistentvolumeclaims "webdav2" not found
igor@ubuntu-server:~$ kubectl get pods
No resources found in default namespace.
igor@ubuntu-server:~$
```

kubectl describe pods counter-app-88t67

```
Терминал - igor@ubuntu-server: ~
Файл  Правка  Вид  Терминал  Вкладки  Справка

igor@ubuntu-server:~$ kubectl describe pv
No resources found in default namespace.
igor@ubuntu-server:~$ kubectl describe pvc
No resources found in default namespace.
igor@ubuntu-server:~$ kubectl describe pvc webdav2
Error from server (NotFound): persistentvolumeclaims "webdav2" not found
igor@ubuntu-server:~$ kubectl get pods
No resources found in default namespace.
igor@ubuntu-server:~$ kubectl describe pods counter-app-88t67
Error from server (NotFound): pods "counter-app-88t67" not found
igor@ubuntu-server:~$
```

ls

```
Терминал - igor@ubuntu-server: ~
Файл  Правка  Вид  Терминал  Вкладки  Справка

igor@ubuntu-server:~$ kubectl describe pvc webdav2
Error from server (NotFound): persistentvolumeclaims "webdav2" not found
igor@ubuntu-server:~$ kubectl get pods
No resources found in default namespace.
igor@ubuntu-server:~$ kubectl describe pods counter-app-88t67
Error from server (NotFound): pods "counter-app-88t67" not found
igor@ubuntu-server:~$ ls
deployment_.yaml  kubectl.sha256  minikube-linux-amd64  pod_.yaml  replicaset_.yaml
igor@ubuntu-server:~$
```

vi pv.yaml

```
~/Микросервисная архитектура и контейнеризация/5. Сетевые абстракц - + x
File Edit Selection Find View Goto Tools Project Preferences Help

pod_.yaml x | replicaset_.yaml x | deployment_.yaml x | pv.yaml + v
1  apiVersion: v1
2  kind: PersistentVolume
3  metadata:
4      name: pv
5  spec:
6      capacity:
7          storage: 2Gi
8      accessModes:
9          - ReadWriteOnce
10     hostPath:
11         path: /data
12     storageClassName: local

Line 7, Column 18 Spaces: 2 YAML
```

du -fs

```
Терминал - igor@ubuntu-server: ~
Файл Правка Вид Терминал Вкладки Справка

igor@ubuntu-server:~$ kubectl describe pods counter-app-88t67
Error from server (NotFound): pods "counter-app-88t67" not found
igor@ubuntu-server:~$ ls
deployment_.yaml kubectl.sha256 minikube-linux-amd64 pod_.yaml replicaset_.yaml
igor@ubuntu-server:~$ vi pv.yaml
igor@ubuntu-server:~$ du -fs
du: invalid option -- 'f'
Try 'du --help' for more information.
igor@ubuntu-server:~$
```

du

```
Терминал - igor@ubuntu-server: ~
Файл Правка Вид Терминал Вкладки Справка

933736 ./minikube/cache
44 ./minikube/profiles/minikube
48 ./minikube/profiles
92 ./minikube/logs
4 ./minikube/files
20 ./minikube/certs
933968 ./minikube
1004572 .
igor@ubuntu-server:~$
```

df

```
Терминал - igor@ubuntu-server: ~
Файл  Правка  Вид  Терминал  Вкладки  Справка
/dev/loop1      63360    63360      0 100% /snap/core20/1169
/dev/loop0      56832    56832      0 100% /snap/core18/2128
/dev/loop4      33280    33280      0 100% /snap/snapd/13640
/dev/loop3      68864    68864      0 100% /snap/lxd/21545
/dev/loop5      33152    33152      0 100% /snap/snapd/12704
/dev/loop6      56832    56832      0 100% /snap/core18/2246
/dev/loop7      68864    68864      0 100% /snap/lxd/21803
tmpfs          403040      0 403040  0% /run/user/1000
igor@ubuntu-server:~$
```

mkdir /pv_1

```
Терминал - igor@ubuntu-server: ~
Файл  Правка  Вид  Терминал  Вкладки  Справка
/dev/loop4      33280    33280      0 100% /snap/snapd/13640
/dev/loop3      68864    68864      0 100% /snap/lxd/21545
/dev/loop5      33152    33152      0 100% /snap/snapd/12704
/dev/loop6      56832    56832      0 100% /snap/core18/2246
/dev/loop7      68864    68864      0 100% /snap/lxd/21803
tmpfs          403040      0 403040  0% /run/user/1000
igor@ubuntu-server:~$ mkdir /pv_1
mkdir: cannot create directory '/pv_1': Permission denied
igor@ubuntu-server:~$
```

sudo mkdir /pv_1

```
Терминал - igor@ubuntu-server: ~
Файл  Правка  Вид  Терминал  Вкладки  Справка
/dev/loop5      33152    33152      0 100% /snap/snapd/12704
/dev/loop6      56832    56832      0 100% /snap/core18/2246
/dev/loop7      68864    68864      0 100% /snap/lxd/21803
tmpfs          403040      0 403040  0% /run/user/1000
igor@ubuntu-server:~$ mkdir /pv_1
mkdir: cannot create directory '/pv_1': Permission denied
igor@ubuntu-server:~$ sudo mkdir /pv_1
[sudo] password for igor:
igor@ubuntu-server:~$
```

vi pv2.yaml

```
~/Микросервисная архитектура и контейнеризация/5. Сетевые абстракц - + x
File Edit Selection Find View Goto Tools Project Preferences Help
replicaset.yaml x deployment.yaml x pv.yaml ● pv2.yaml x + v
1  apiVersion: v1
2  kind: PersistenVolume
3  metadata:
4      name: pv2
5  spec:
6      capacity:
7          storage: 5Gi
8      accessModes:
9          - ReadWriteOnce
10     hostPath:
11         path: /pv_1
12     storageClassName: local

Line 12, Column 32 Spaces: 8 YAML
```

kubectl create -f pv2.yaml

```
Терминал - igor@ubuntu-server: ~
Файл Правка Вид Терминал Вкладки Справка
tmpfs 403040 0 403040 0% /run/user/1000
igor@ubuntu-server:~$ mkdir /pv_1
mkdir: cannot create directory '/pv_1': Permission denied
igor@ubuntu-server:~$ sudo mkdir /pv_1
[sudo] password for igor:
igor@ubuntu-server:~$ vi pv2.yaml
igor@ubuntu-server:~$ kubectl create -f pv2.yaml
error: unable to recognize "pv2.yaml": no matches for kind "PersistenVolume" in version "v1"
igor@ubuntu-server:~$
```

kubectl get pv

```
Терминал - igor@ubuntu-server: ~
Файл Правка Вид Терминал Вкладки Справка
mkdir: cannot create directory '/pv_1': Permission denied
igor@ubuntu-server:~$ sudo mkdir /pv_1
[sudo] password for igor:
igor@ubuntu-server:~$ vi pv2.yaml
igor@ubuntu-server:~$ kubectl create -f pv2.yaml
error: unable to recognize "pv2.yaml": no matches for kind "PersistenVolume" in version "v1"
igor@ubuntu-server:~$ kubectl get pv
No resources found
igor@ubuntu-server:~$
```

kubectl describe pv2

```
Терминал - igor@ubuntu-server: ~
Файл  Правка  Вид  Терминал  Вкладки  Справка

[sudo] password for igor:
igor@ubuntu-server:~$ vi pv2.yaml
igor@ubuntu-server:~$ kubectl create -f pv2.yaml
error: unable to recognize "pv2.yaml": no matches for kind "PersistenVolume" in version "v1"
igor@ubuntu-server:~$ kubectl get pv
No resources found
igor@ubuntu-server:~$ kubectl describe pv2
error: the server doesn't have a resource type "pv2"
igor@ubuntu-server:~$
```

kubectl describe pv pv2

```
Терминал - igor@ubuntu-server: ~
Файл  Правка  Вид  Терминал  Вкладки  Справка

igor@ubuntu-server:~$ kubectl create -f pv2.yaml
error: unable to recognize "pv2.yaml": no matches for kind "PersistenVolume" in version "v1"
igor@ubuntu-server:~$ kubectl get pv
No resources found
igor@ubuntu-server:~$ kubectl describe pv2
error: the server doesn't have a resource type "pv2"
igor@ubuntu-server:~$ kubectl describe pv pv2
Error from server (NotFound): persistentvolumes "pv2" not found
igor@ubuntu-server:~$
```

vi pod_pv_deployment.yaml


```
~/Микросервисная архитектура и контейнеризация/5. Сетевые абстракции Kubernetes/pod_pv_deployment.ya - + X
File Edit Selection Find View Goto Tools Project Preferences Help

pod_.yaml x | replicaset_.yaml x | deployment_.yaml x | pv.yaml | pv2.yaml x | _deployment.yaml x + ▾

1  apiVersion: apps/v1
2  kind: Deployment
3  metadata:
4    name: web
5  spec:
6    replicas: 2
7    selector:
8      matchLabels:
9        app: web
10   strategy:
11     rollingUpdate:
12       maxSurge: 1
13       maxUnavailable: 1
14     type: RollingUpdate
15   template:
16     metadata:
17       labels:
18         app: web
19     spec:
20       initContainers:
21         - image: busybox
22           name: mount-permissions-fix
23           comand: ["sh", "-c", "chmod 777 /data"]
24           volumeMounts:
25             - name: data
26               mountPath: /metadata
27       containers:
28         - image: nginx:1.14
29           name: nginx
30           ports:
31             - containersPort: 80
32       resources:
33         requests:
34           cpu: 100m
35           memory: 100Mi
36         limits:
37           cpu: 100Mimemory: 100Mi
38       volumeMounts:
39         - name: config
40           configMap:
41             name: web
42         - name: data
43           persistenVolumeClaim:
44             claimName: webclaim
45

Line 17, Column 14 Spaces: 2 YAML
```

vi conf_map_pv.yaml

```
~/Микросервисная архитектура и контейнеризация/5. Сетевые абстракции Kubernetes/conf_map_pv.yaml - Sub - + x
File Edit Selection Find View Goto Tools Project Preferences Help
rep deployment_yaml x pv.yaml pv2.yaml pod_pv_deployment.yaml conf_map_pv.yaml x + v
1 ---
2 apiVersion: v1
3 kind: ConfigMap
4 metadata:
5   name: web
6 data:
7   default.conf: |
8     server {
9       listen      80 default_server;
10      server_name _;
11      default_type text/plain;
12      location / {
13        alias /data;
14        autoindex on;
15        client_body_temp_path /tmp;
16        dav_methods PUT DELETE MKCOL COPY MOVE;
17        create_full_put_path on;
18        dav_access user:rw all:r;
19      }
20    }
21
```

Line 21, Column 1 Spaces: 2 YAML

vi pvc_2.yaml


```
~/Микросервисная архитектура и контейнеризация/5. Сетевые абстракции Kubernetes/pvc_2.yaml - Sublime Te
File Edit Selection Find View Goto Tools Project Preferences Help
deployme pv.yaml x pv2.yaml x pod_pv_deployment.yaml x conf_map_pv.yaml x pvc_2.yaml x
1 ---
2 kind: PersistentVolumeClaim
3 apiVersion: v1
4 metadata:
5   name: webclaim
6 spec:
7   accessModes:
8     - ReadWriteOnce
9   resources:
10     requests:
11       storage: 5Gi
12   storageClassName: local
13
```

Line 13, Column 1 Spaces: 2 YAML

kubectl create -f pvc_2.yaml

kubectl create -f conf_map_pv.yaml

```
Терминал - tolstikov@my3vm: ~
Файл Правка Вид Терминал Вкладки Справка
tolstikov@my3vm:~$ kubectl create -f conf_map_pv.yaml
error: error validating "conf_map_pv.yaml": error validating data: apiVersion not set; if
you choose to ignore these errors, turn validation off with --validate=false
tolstikov@my3vm:~$ vi pvc_2.yaml
tolstikov@my3vm:~$ kubectl create -f pvc_2.yaml
error: error validating "pvc_2.yaml": error validating data: ValidationError(PersistentVo
lumeClaim.spec.resources): unknown field "requests" in io.k8s.api.core.v1.ResourceRequire
ments; if you choose to ignore these errors, turn validation off with --validate=false
tolstikov@my3vm:~$ vi pvc_2.yaml
tolstikov@my3vm:~$ kubectl create -f pvc_2.yaml
persistentvolumeclaim/webclaim created
tolstikov@my3vm:~$
```

error: error validating "conf_map_pv.yaml": error validating data: apiVersion not set; if you choose to ignore these errors, turn validation off with --validate=false

```
Терминал - tolstikov@my3vm: ~
Файл Правка Вид Терминал Вкладки Справка
re.v1.ResourceRequirements; if you choose to ignore these errors, turn validation off with --validate=false
tolstikov@my3vm:~$ vi pvc_2.yaml
tolstikov@my3vm:~$ kubectl create -f pvc_2.yaml
persistentvolumeclaim/webclaim created
tolstikov@my3vm:~$ kubectl create -f conf_map_pv.yaml
error: error validating "conf_map_pv.yaml": error validating data: apiVersion not set; if you choose to ignore these errors, turn validation off with --validate=false
tolstikov@my3vm:~$ vi conf_map_pv.yaml
tolstikov@my3vm:~$ kubectl create -f conf map pv.yaml
error: error validating "conf map pv.yaml": error validating data: apiVersion not set; if you choose to ignore these errors, turn validation off with --validate=false
tolstikov@my3vm:~$
```

```
Терминал - tolstikov@my3vm: ~
Файл  Правка  Вид  Терминал  Вкладки  Справка
persistentvolumeclaim/webclaim created
tolstikov@my3vm:~$ kubectl create -f conf_map_pv.yaml
error: error validating "conf_map_pv.yaml": error validating data: apiVersion not set; if you choose to ignore these errors, turn validation off with --validate=false
tolstikov@my3vm:~$ vi conf_map_pv.yaml
tolstikov@my3vm:~$ kubectl create -f conf_map_pv.yaml
error: error validating "conf_map_pv.yaml": error validating data: apiVersion not set; if you choose to ignore these errors, turn validation off with --validate=false
tolstikov@my3vm:~$ vi conf_map_pv.yaml
tolstikov@my3vm:~$ kubectl create -f conf_map_pv.yaml
configmap/web created
tolstikov@my3vm:~$
```

kubectl get pvc

```
Терминал - tolstikov@my3vm: ~
Файл  Правка  Вид  Терминал  Вкладки  Справка
ate=false
tolstikov@my3vm:~$ vi conf_map_pv.yaml
tolstikov@my3vm:~$ kubectl create -f conf_map_pv.yaml
error: error validating "conf_map_pv.yaml": error validating data: apiVersion not set; if you choose to ignore these errors, turn validation off with --validate=false
tolstikov@my3vm:~$ vi conf_map_pv.yaml
tolstikov@my3vm:~$ kubectl create -f conf_map_pv.yaml
configmap/web created
tolstikov@my3vm:~$ kubectl get pvc
NAME      STATUS  VOLUME  CAPACITY  ACCESS MODES  STORAGECLASS  AGE
webclaim  Bound   pv2     5Gi       RWO            local          45m
tolstikov@my3vm:~$
```

kubectl get pods

```
Терминал - tolstikov@my3vm: ~
Файл  Правка  Вид  Терминал  Вкладки  Справка
NAME      STATUS  VOLUME  CAPACITY  ACCESS MODES  STORAGECLASS  AGE
webclaim  Bound   pv2     5Gi       RWO            local          45m
tolstikov@my3vm:~$ kubectl get pods
NAME                                READY  STATUS   RESTARTS  AGE
hello-minikube-6ddfcc9757-lxjpj    1/1    Running  1 (2d12h ago)  2d15h
my-deployment2-76499ffb7-c2w4g     1/1    Running  0           3h11m
my-deployment2-76499ffb7-xzqqf     1/1    Running  0           3h11m
my-pod                               1/1    Running  0           3h48m
my-replicaset-qb674                 1/1    Running  0           3h42m
my-replicaset-v5k2j                 1/1    Running  0           3h42m
my-replicaset-wzfqm                 1/1    Running  0           3h39m
tolstikov@my3vm:~$
```

kubectl apply -f pod_pv_deployment.yaml

error: error parsing pod_pv_deployment.yaml: error converting YAML to JSON: yaml: line 37: mapping values are not allowed in this context

```
Терминал - tolstikov@my3vm: ~
Файл  Правка  Вид  Терминал  Вкладки  Справка
Path: /pv_1
HostPathType:
Events: <none>
tolstikov@my3vm:~$ vi pod_pv_deployment.yaml
tolstikov@my3vm:~$ vi pod_pv_deployment.yaml
tolstikov@my3vm:~$ vi conf_map_pv.yaml
tolstikov@my3vm:~$ vi conf_map_pv.yaml
tolstikov@my3vm:~$ vi conf_map_pv.yaml
tolstikov@my3vm:~$ vi pvc 2.yaml
tolstikov@my3vm:~$ kubectl create -f conf_map_pv.yaml
error: error validating "conf_map_pv.yaml": error validating data: apiVersion not set; if you choose to ignore these errors, turn validation off with --validate=false
tolstikov@my3vm:~$ vi pvc 2.yaml
tolstikov@my3vm:~$ kubectl create -f pvc 2.yaml
error: error validating "pvc 2.yaml": error validating data: ValidationError(PersistentVolumeClaim.spec.resources): unknown field "requests" in io.k8s.api.core.v1.ResourceRequirements; if you choose to ignore these errors, turn validation off with --validate=false
tolstikov@my3vm:~$ vi pvc 2.yaml
tolstikov@my3vm:~$ kubectl create -f pvc 2.yaml
persistentvolumeclaim/webclaim created
tolstikov@my3vm:~$ kubectl create -f conf_map_pv.yaml
error: error validating "conf_map_pv.yaml": error validating data: apiVersion not set; if you choose to ignore these errors, turn validation off with --validate=false
tolstikov@my3vm:~$ vi conf_map_pv.yaml
tolstikov@my3vm:~$ kubectl create -f conf_map_pv.yaml
error: error validating "conf_map_pv.yaml": error validating data: apiVersion not set; if you choose to ignore these errors, turn validation off with --validate=false
tolstikov@my3vm:~$ vi conf_map_pv.yaml
tolstikov@my3vm:~$ kubectl create -f conf_map_pv.yaml
configmap/web created
tolstikov@my3vm:~$ kubectl get pvc
NAME      STATUS  VOLUME  CAPACITY  ACCESS MODES  STORAGECLASS  AGE
webclaim  Bound   pv2     5Gi       RWO            local          45m
tolstikov@my3vm:~$ kubectl get pods
NAME                                READY  STATUS   RESTARTS  AGE
hello-minikube-6ddfcc9757-lxjpj    1/1    Running  1 (2d12h ago)  2d15h
my-deployment2-76499ffb7-c2w4g     1/1    Running  0           3h11m
my-deployment2-76499ffb7-xzqqf     1/1    Running  0           3h11m
my-pod                               1/1    Running  0           3h48m
my-replicaset-qb674                 1/1    Running  0           3h42m
my-replicaset-v5k2j                 1/1    Running  0           3h42m
my-replicaset-wzfqm                 1/1    Running  0           3h39m
tolstikov@my3vm:~$ kubectl apply -f pod_pv_deployment.yaml
error: error parsing pod_pv_deployment.yaml: error converting YAML to JSON: yaml: line 37: mapping values are not allowed in this context
tolstikov@my3vm:~$ vi pod_pv_deployment.yaml
tolstikov@my3vm:~$ ^C
tolstikov@my3vm:~$
```

error: error parsing pod_pv_deployment.yaml: error converting YAML to JSON: yaml: line 37: mapping values are not allowed in this context

```
Терминал - tolstikov@my3vm: ~
Файл  Правка  Вид  Терминал  Вкладки  Справка

tolstikov@my3vm:~$ vi conf_map_pv.yaml
tolstikov@my3vm:~$ vi conf_map_pv.yaml
tolstikov@my3vm:~$ vi pvc_2.yaml
tolstikov@my3vm:~$ kubectl create -f conf_map_pv.yaml
error: error validating "conf_map_pv.yaml": error validating data: apiVersion not set; if you choose to ignore these errors, turn validation off with --validate=false
tolstikov@my3vm:~$ vi pvc_2.yaml
tolstikov@my3vm:~$ kubectl create -f pvc_2.yaml
error: error validating "pvc_2.yaml": error validating data: ValidationError(PersistentVolumeClaim.spec.resources): unknown field "requests" in io.k8s.api.core.v1.ResourceRequirements; if you choose to ignore these errors, turn validation off with --validate=false
tolstikov@my3vm:~$ vi pvc_2.yaml
tolstikov@my3vm:~$ kubectl create -f pvc_2.yaml
persistentvolumeclaim/webclaim created
tolstikov@my3vm:~$ vi conf_map_pv.yaml
tolstikov@my3vm:~$ kubectl create -f conf_map_pv.yaml
error: error validating "conf_map_pv.yaml": error validating data: apiVersion not set; if you choose to ignore these errors, turn validation off with --validate=false
tolstikov@my3vm:~$ vi conf_map_pv.yaml
tolstikov@my3vm:~$ kubectl create -f conf_map_pv.yaml
error: error validating "conf_map_pv.yaml": error validating data: apiVersion not set; if you choose to ignore these errors, turn validation off with --validate=false
tolstikov@my3vm:~$ vi conf_map_pv.yaml
tolstikov@my3vm:~$ kubectl create -f conf_map_pv.yaml
configmap/web created
tolstikov@my3vm:~$ kubectl get pvc
NAME          STATUS    VOLUME   CAPACITY   ACCESS MODES   STORAGECLASS   AGE
webclaim      Bound     pv2      5Gi        RWO            local          45m
tolstikov@my3vm:~$ kubectl get pods
NAME                                READY   STATUS    RESTARTS   AGE
hello-minikube-6ddfcc9757-lxjpf    1/1     Running   1 (2d12h ago)  2d15h
my-deployment2-76499ffb7-c2w4g     1/1     Running   0           3h11m
my-deployment2-76499ffb7-xzqqf     1/1     Running   0           3h11m
my-pod                               1/1     Running   0           3h48m
my-replicaset-qb674                1/1     Running   0           3h42m
my-replicaset-v5k2j                1/1     Running   0           3h42m
my-replicaset-wzfqm                1/1     Running   0           3h39m
tolstikov@my3vm:~$ kubectl apply -f pod_pv_deployment.yaml
error: error parsing pod_pv_deployment.yaml: error converting YAML to JSON: yaml: line 37: mapping values are not allowed in this context
tolstikov@my3vm:~$ vi pod_pv_deployment.yaml
tolstikov@my3vm:~$ ^C
tolstikov@my3vm:~$ vi pod_pv_deployment.yaml
tolstikov@my3vm:~$ kubectl apply -f pod_pv_deployment.yaml
error: error parsing pod_pv_deployment.yaml: error converting YAML to JSON: yaml: line 37: mapping values are not allowed in this context
tolstikov@my3vm:~$ vi pod_pv_deployment.yaml
tolstikov@my3vm:~$ kubectl apply -f pod_pv_deployment.yaml
error: error parsing pod_pv_deployment.yaml: error converting YAML to JSON: yaml: line 37: mapping values are not allowed in this context
tolstikov@my3vm:~$
```

error: error validating "pod_pv_deployment.yaml": error validating data: ValidationError(Deployment.spec.template.spec.containers[0].resources): unknown field "volumeMounts" in io.k8s.api.core.v1.ResourceRequirements; if you choose to ignore these errors, turn validation off with — validate=false

vi pod_pv_deployment.yaml

```
Терминал - tolstikov@my3vm: ~
Файл  Правка  Вид  Терминал  Вкладки  Справка

apiVersion: apps/v1
kind: Deployment
metadata:
  name: web
spec:
  replicas: 2
  selector:
    matchLabels:
      app: web
  strategy:
    rollingUpdate:
      maxSurge: 1
      maxUnavailable: 1
    type: RollingUpdate
  template:
    metadata:
      labels:
        app: web
    spec:
      initContainers:
        - image: busybox
          name: mount-permissions-fix
          command: ["sh", "-c", "chmod 777 /data"]
          volumeMounts:
            - name: data
              mountPath: /data
      containers:
        - image: nginx:1.14
          name: nginx
          ports:
            - containerPort: 80
          resources:
            requests:
              cpu: 100m
              memory: 100Mi
            limits:
              cpu: 100Mi
              memory: 100Mi
            volumeMounts:
              - name: config
                mountPath: /etc/nginx/conf.d
              - name: data
                mountPath: /data
      volumes:
        - name: config
          configMap:
            name: web
        - name: data
          persistentVolumeClaim:
```

1,19 Top

vi conf_map_pv.yaml

```
Терминал - tolstikov@my3vm: ~
Файл  Правка  Вид  Терминал  Вкладки  Справка

---
apiVersion: v1
kind: ConfigMap
metadata:
  name: web
data:
  default.conf: |
    server {
      listen      80 default_server;
      server_name _;
      default_type text/plain;
      location / {
        alias /data;
        autoindex on;
        client_body_temp_path /tmp;
        dav_methods PUT DELETE MKCOL COPY MOVE;
        create_full_put_path on;
        dav_access user:rw all:r;
      }
    }
}
```

1,1 All

vi pvc_2.yaml

```
Терминал - tolstikov@my3vm: ~
Файл  Правка  Вид  Терминал  Вкладки  Справка

---
kind: PersistentVolumeClaim
apiVersion: v1
metadata:
  name: webclaim
spec:
  accessModes:
    - ReadWriteOnce
  resources:
    requests:
      storage: 5Gi
  storageClassName: local
~
"pvc_2.yaml" 13L, 190C
```

13,0-1 All

kubectl create -f conf_map_pv.yaml

Error from server (AlreadyExists): error when creating "conf_map_pv.yaml": configmaps "web" already exists

kubectl create -f pvc_2.yaml

Error from server (AlreadyExists): error when creating "pvc_2.yaml": persistentvolumeclaims "webclaim" already exists

kubectl get pvc

```
Терминал - tolstikov@my3vm: ~
Файл  Правка  Вид  Терминал  Вкладки  Справка

* Support:      https://ubuntu.com/advantage
Last login: Sat Nov  6 05:55:53 2021 from 109.252.20.121
tolstikov@my3vm:~$ vi pod_pv_deployment.yaml
tolstikov@my3vm:~$ vi conf_map_pv.yaml
tolstikov@my3vm:~$ vi pvc_2.yaml
tolstikov@my3vm:~$ kubectl create -f conf_map_pv.yaml
Error from server (AlreadyExists): error when creating "conf_map_pv.yaml": configmaps "web"
already exists
tolstikov@my3vm:~$ kubectl create -f pvc_2.yaml
Error from server (AlreadyExists): error when creating "pvc_2.yaml": persistentvolumeclaims
"webclaim" already exists
tolstikov@my3vm:~$ kubectl get pvc
NAME          STATUS  VOLUME  CAPACITY  ACCESS MODES  STORAGECLASS  AGE
webclaim      Bound   pv2      5Gi       RWO            local          21h
tolstikov@my3vm:~$
```

kubectl get pv

```
Терминал - tolstikov@my3vm: ~
Файл  Правка  Вид  Терминал  Вкладки  Справка

tolstikov@my3vm:~$ kubectl create -f conf_map_pv.yaml
Error from server (AlreadyExists): error when creating "conf_map_pv.yaml": configmaps "web"
already exists
tolstikov@my3vm:~$ kubectl create -f pvc_2.yaml
Error from server (AlreadyExists): error when creating "pvc_2.yaml": persistentvolumeclaims
"webclaim" already exists
tolstikov@my3vm:~$ kubectl get pvc
NAME          STATUS  VOLUME  CAPACITY  ACCESS MODES  STORAGECLASS  AGE
webclaim      Bound   pv2      5Gi       RWO            local          21h
tolstikov@my3vm:~$ kubectl get pv
NAME  CAPACITY  ACCESS MODES  RECLAIM POLICY  STATUS  CLAIM          STORAGECLASS  REASON  AGE
pv2    5Gi       RWO           Retain          Bound   default/webclaim  local          23h
tolstikov@my3vm:~$
```

kubectl get pods

```
Терминал - tolstikov@my3vm: ~
Файл  Правка  Вид  Терминал  Вкладки  Справка

NAME          STATUS  VOLUME  CAPACITY  ACCESS MODES  STORAGECLASS  AGE
webclaim      Bound   pv2      5Gi       RWO            local          21h
tolstikov@my3vm:~$ kubectl get pv
NAME  CAPACITY  ACCESS MODES  RECLAIM POLICY  STATUS  CLAIM          STORAGECLASS  REASON  AGE
pv2    5Gi       RWO           Retain          Bound   default/webclaim  local          23h
tolstikov@my3vm:~$ kubectl get pods
NAME                                READY  STATUS   RESTARTS   AGE
hello-minikube-6ddfcc9757-lxjpf    1/1    Running  1 (3d10h ago)  3d12h
my-deployment2-76499ffb7-c2w4g     1/1    Running  0            24h
my-deployment2-76499ffb7-xzqqf     1/1    Running  0            24h
my-pod                              1/1    Running  0            24h
my-replicaset-qb674                 1/1    Running  0            24h
my-replicaset-v5k2j                 1/1    Running  0            24h
my-replicaset-wzfqm                 1/1    Running  0            24h
tolstikov@my3vm:~$
```

kubectl apply -f pod_pv_deployment.yaml
error: error validating "pod_pv_deployment.yaml": error validating data:
ValidationError(Deployment.spec.template.spec.containers[0].resources): unknown field "volumeMounts" in
io.k8s.api.core.v1.ResourceRequirements; if you choose to ignore these errors, turn validation off with --
validate=false

kubectl describe pv pv2