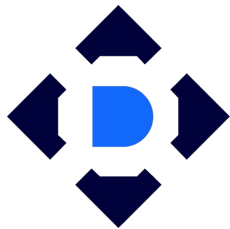


Getting started

Bare metal



FLANT

Deckhouse

Kubernetes Platform



master-0
Server

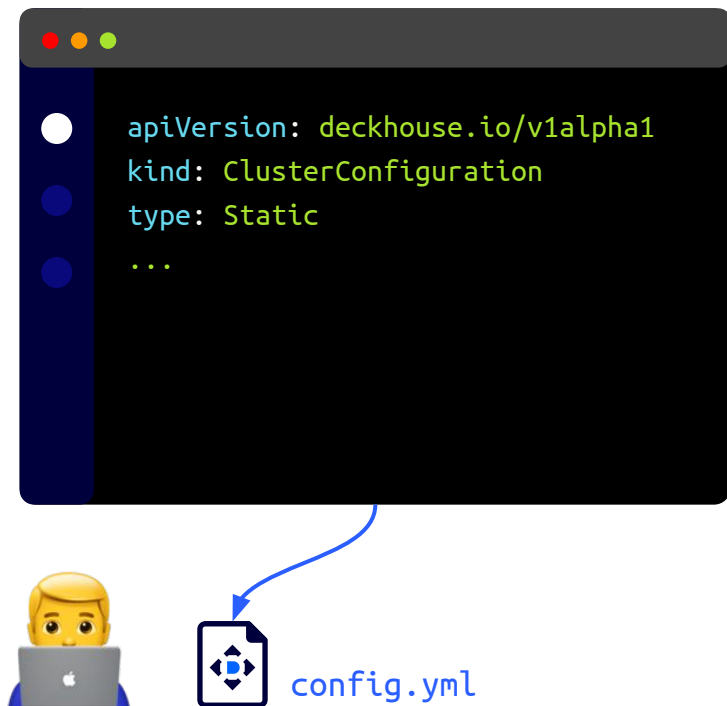
To install Deckhouse, you will need a PC and an SSH-accessible server with Ubuntu or CentOS installed.



master-0
Server

worker-0
Server

If you need additional nodes, prepare them in the same way.



master-0
Server

worker-0
Server

Installation is based on the configuration file.
The following steps of the Getting Started guide will help you to create it correctly.



```
$ dhctl bootstrap --config config.yml --ssh-host master-0
```



config.yml

master-0
Server

worker-0
Server

The resulting configuration file is passed to the dhctl utility and it starts the installation.



```
$ dhctl bootstrap --config config.yml --ssh-host master-0
```



>_
SSH

master-0
Server

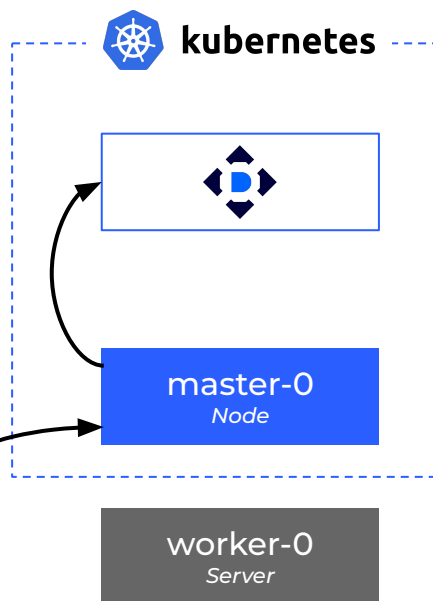
worker-0
Server

Then utility connects to master server via SSH ...

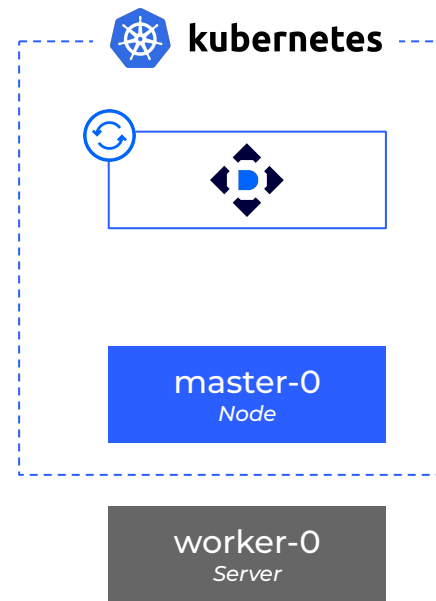


... and initializes the Kubernetes cluster.
At this stage, a minimal Kubernetes vanilla cluster is ready.

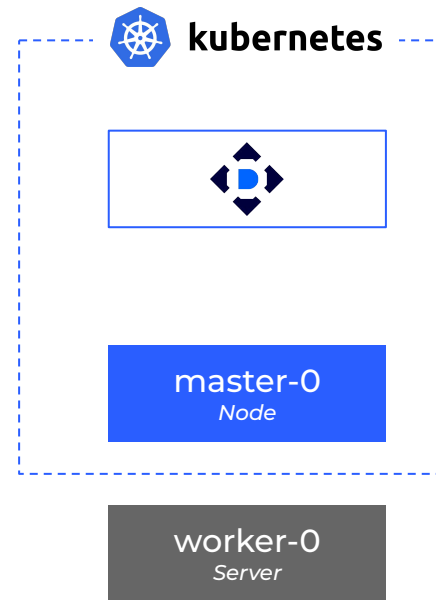
```
$ dhctl bootstrap --config config.yml --ssh-host master-0
```



To complete the installation, dhctl installs a Deckhouse controller in the cluster.



The Deckhouse controller installs the necessary modules.

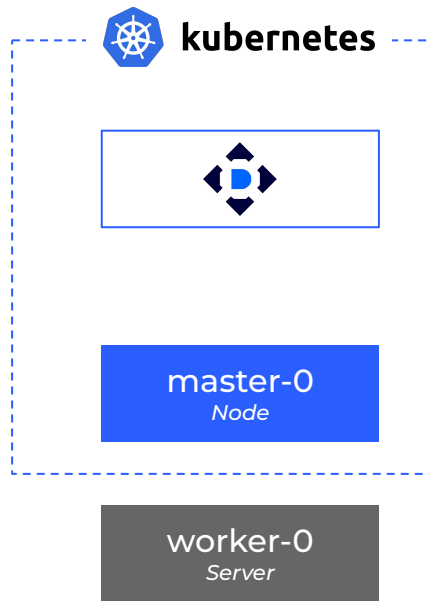


At this stage the single-master cluster is ready.
If you have additional nodes, let's join them ...

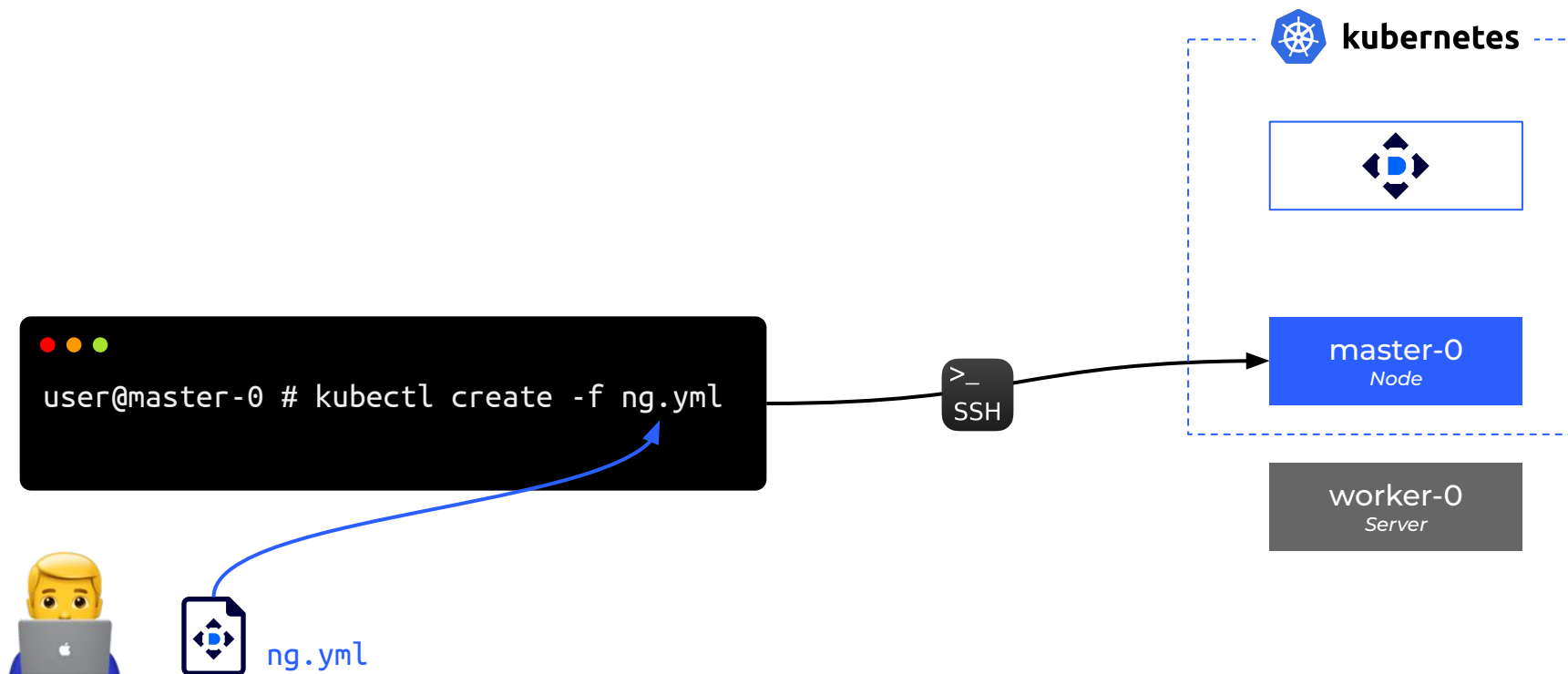
```
apiVersion: deckhouse.io/v1
kind: NodeGroup
metadata:
  name: worker
...
```



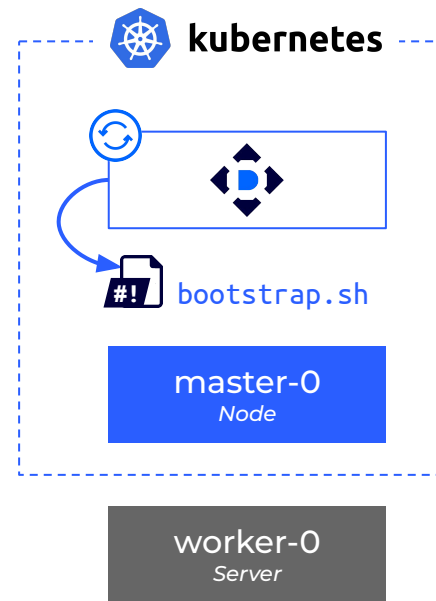
ng.yml



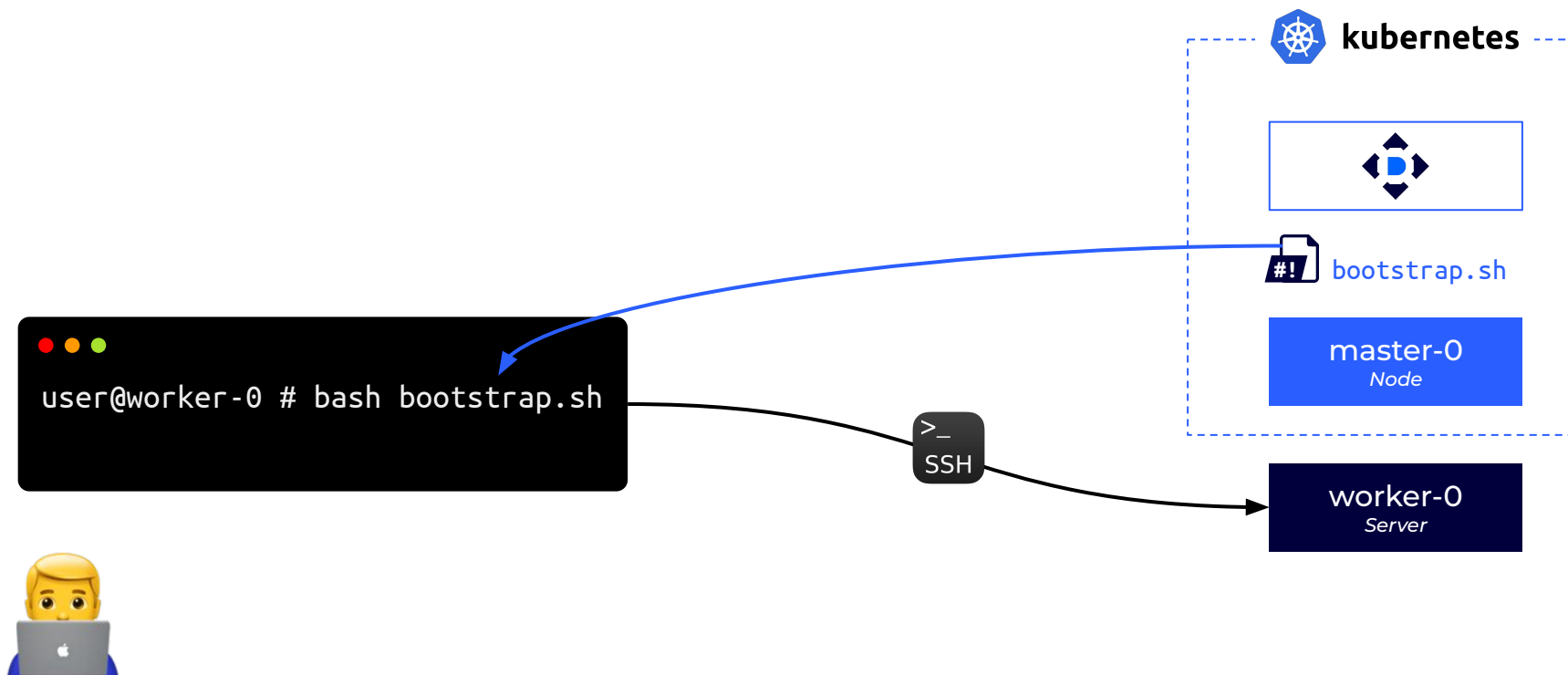
... to do this you will need to prepare a NodeGroup configuration ...
The “Node management” section of documentation will help you create the manifest.



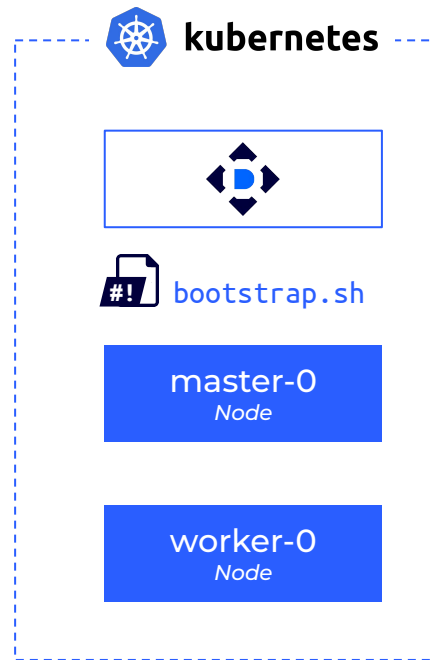
... and pass this manifest to cluster.



The Deckhouse controller reacts to the creation of the NodeGroup and compiles the shell script for manual joining nodes to the cluster.



You should execute this script on the new node ...



... and node will become the part of the cluster.



```
apiVersion: deckhouse.io/v1
kind: IngressNginxController
...
```



ingress-nginx-controller.yml



kubernetes



bootstrap.sh

master-0

Node

worker-0

Node

Now we should organize the Ingress controller. To do this, we make IngressNginxController manifest ...
The following steps of the Getting Started guide will help you to create it correctly.



ingress-nginx-controller.yml

```
user@master-0 # kubectl create -f ingress-nginx-controller.yml
```



kubernetes

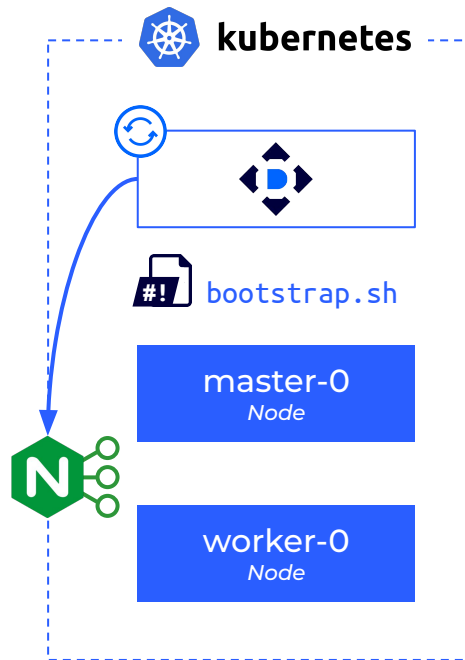


bootstrap.sh

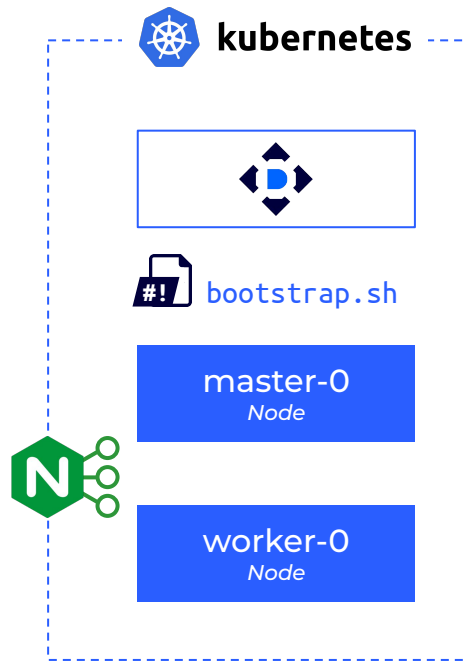
master-0
Node

worker-0
Node

... and pass this manifest to the cluster.



The Deckhouse controller reacts to the creation of the resource and configures the Ingress controller.



The cluster is ready to work!