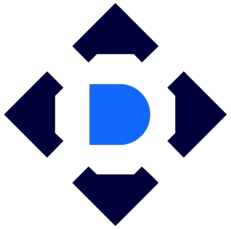
Getting started

Cloud



FLANT

Deckhouse

Kubernetes Platform

Cloud

To install Deckhouse, you will need a PC and a cloud site.
The following steps of the Getting Started guide will help you to prepare the cloud.

Cloud

config.yml

resources.yml

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

Cloud

```
apiVersion: deckhouse.io/v1
kind: ClusterConfiguration
type: Cloud
…
apiVersion: deckhouse.io/v1
kind: InitConfiguration
…
```

config.yml

resources.yml

… the first one describes cloud API access settings, master nodes parameters and initial settings for Deckhouse controller …

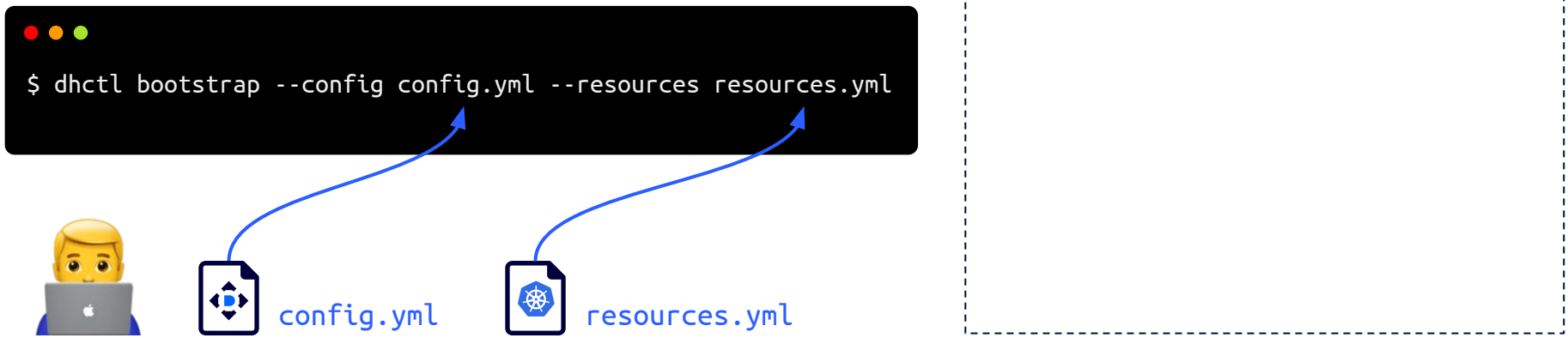
Cloud

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

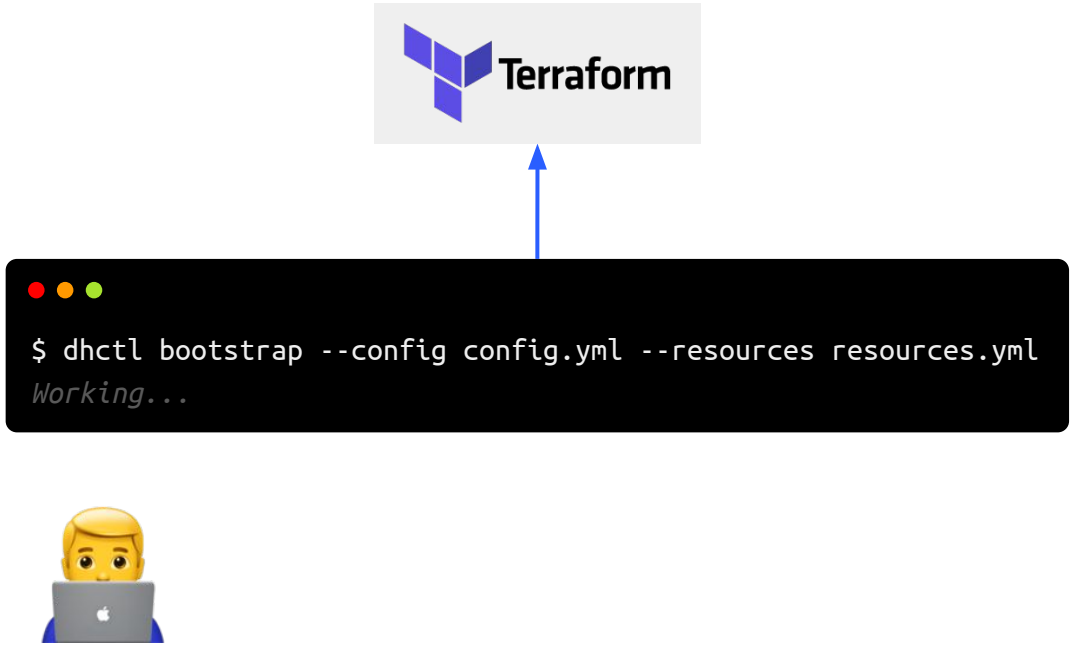
config.yml

resources.yml

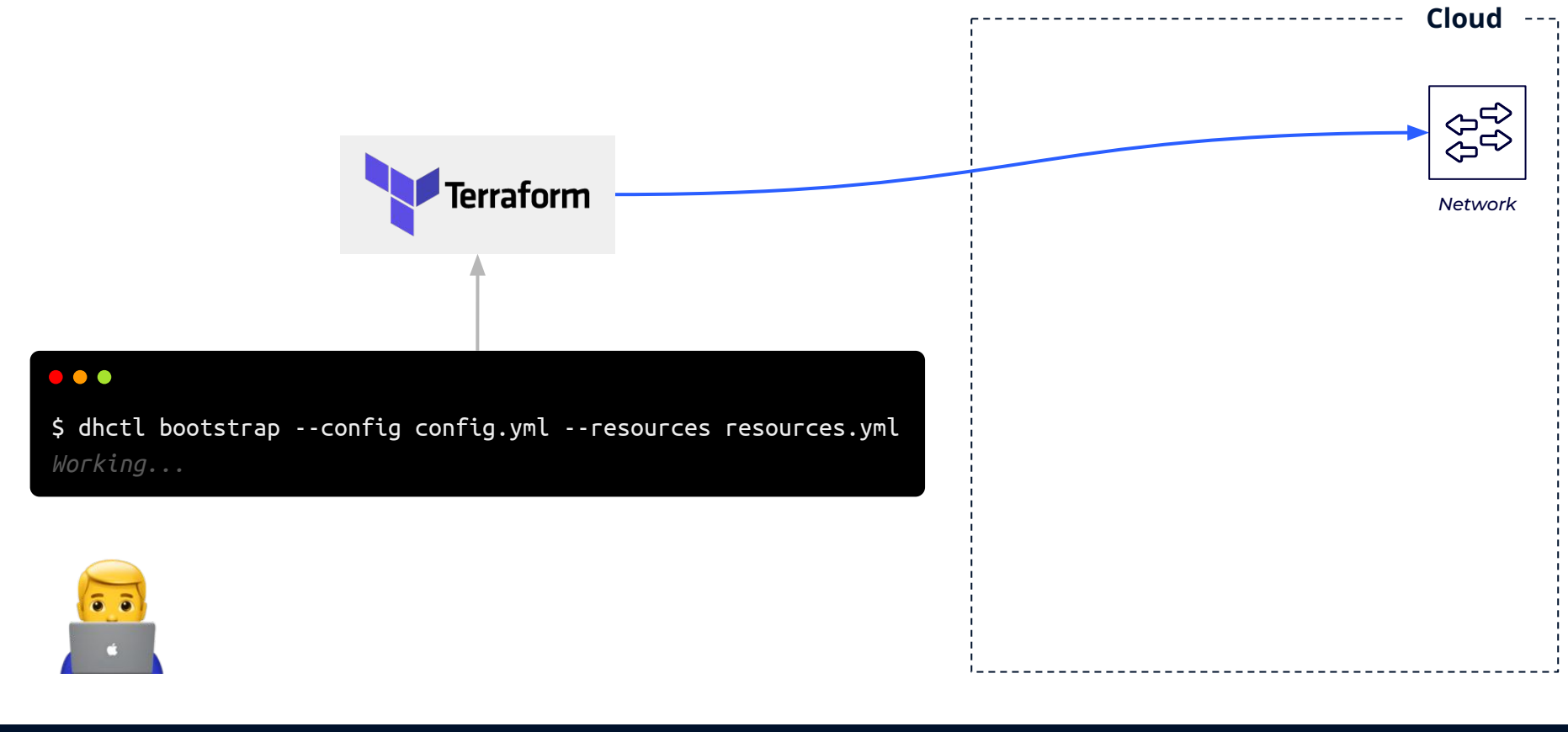
… the second file describes additional Kubernetes resources that should be created during initialization process.
These resources contain specifications for worker nodes, Ingress controller parameters
and other manifests.



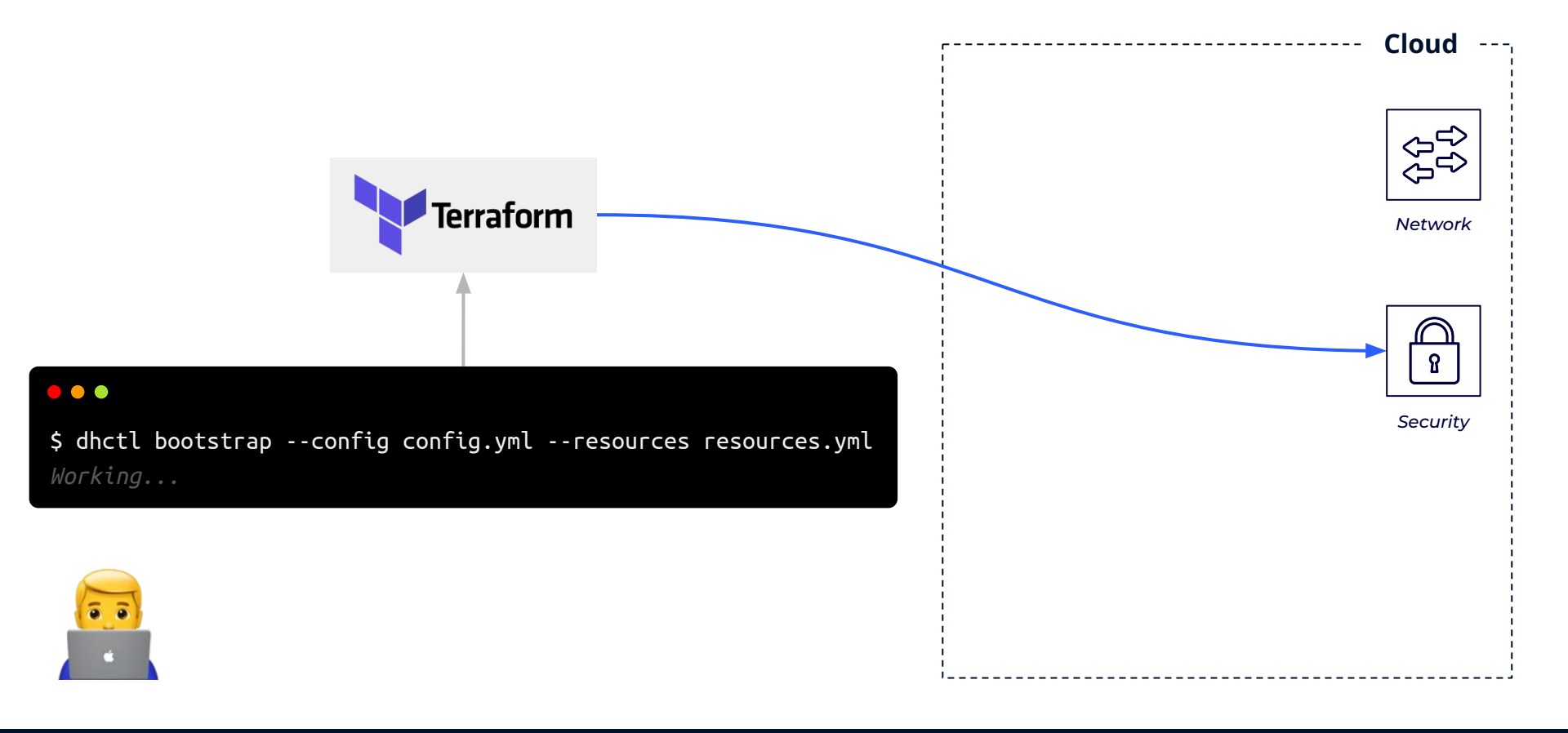
The resulting configuration files are passed to the dhctl utility
and it starts the installation.



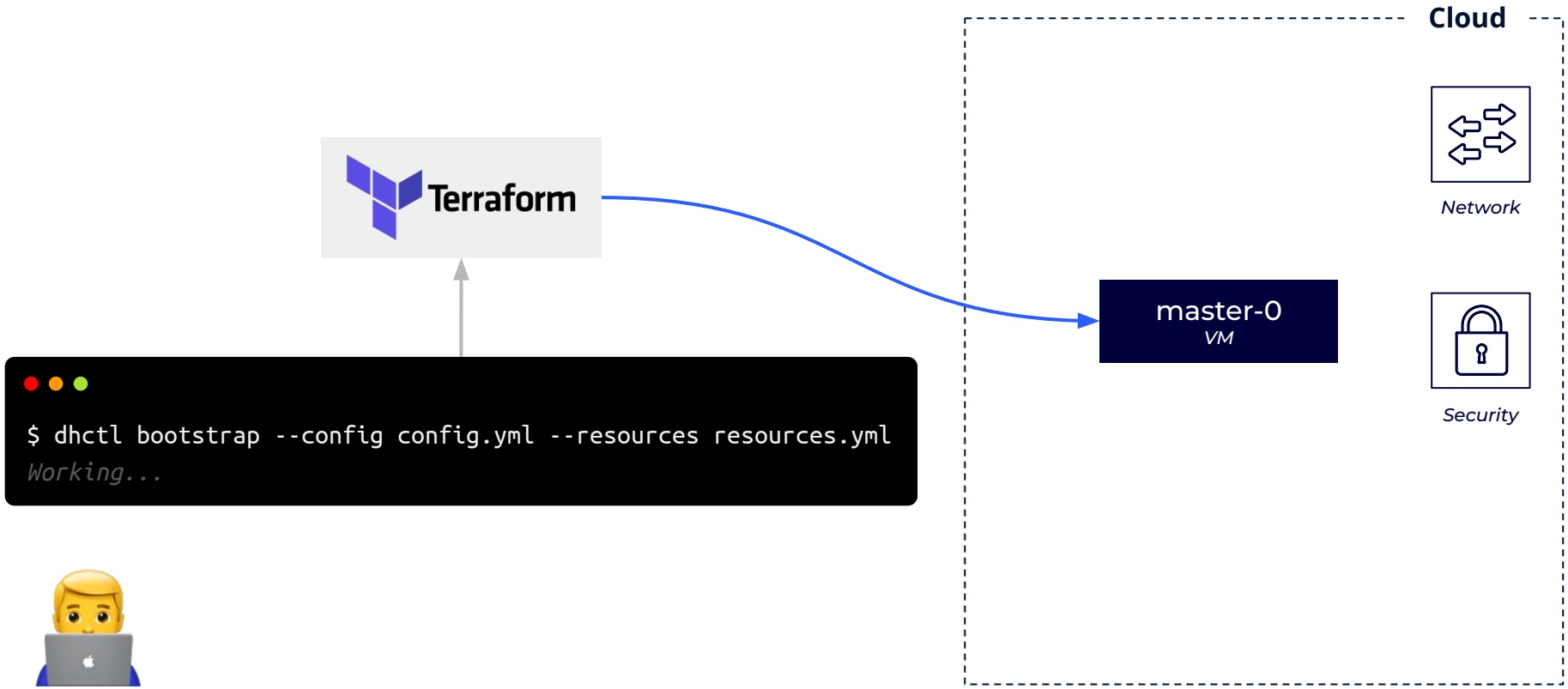
With built-in Terraform, dhctl rolls out the basic cloud infrastructure ...



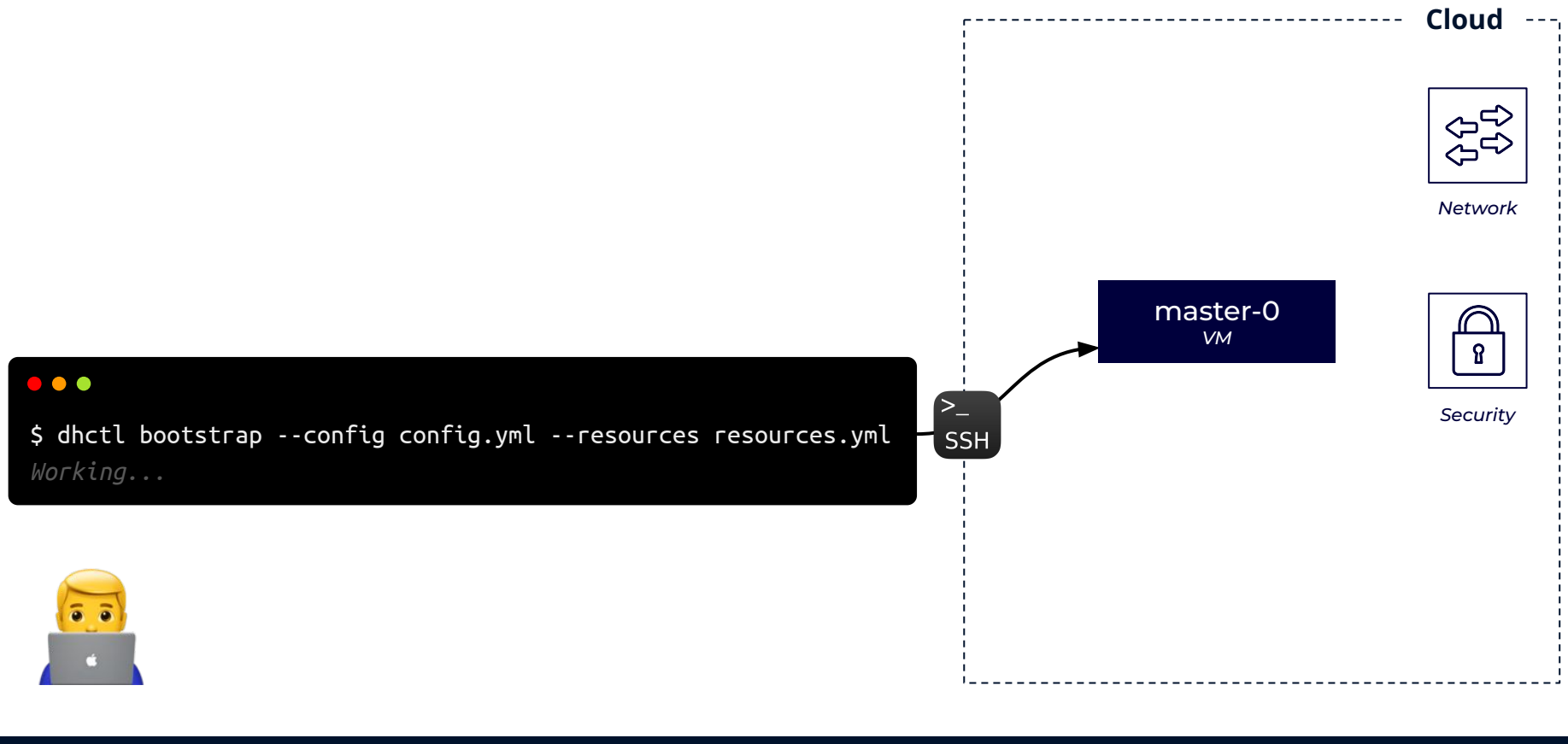
... configures the network ...



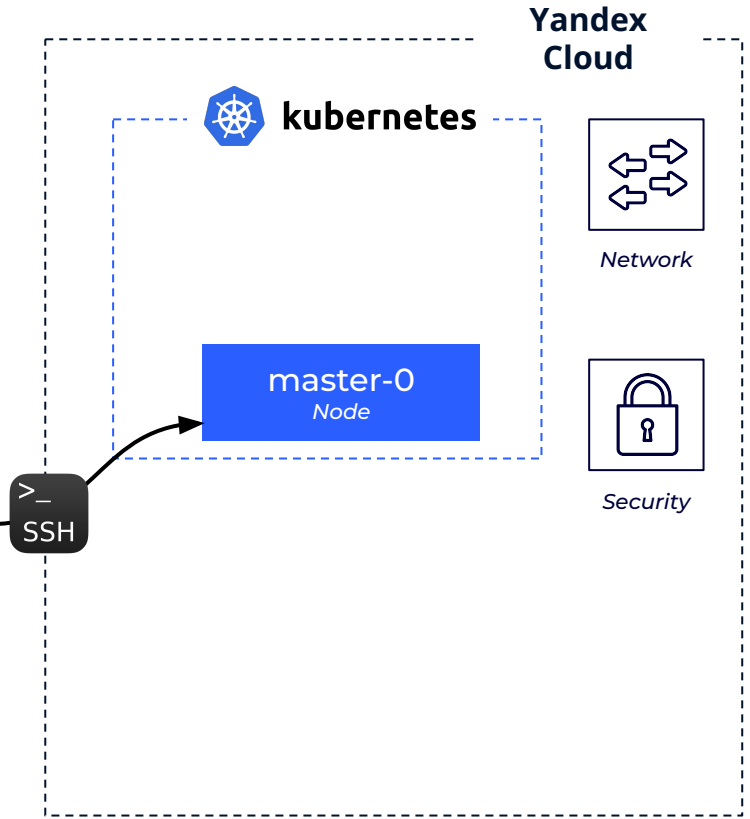
... solves basic security issues and more.
Basic infrastructure has different nature depending on the cloud type and chosen layout.
Layout types will be described in the following steps of the Getting Started guide.



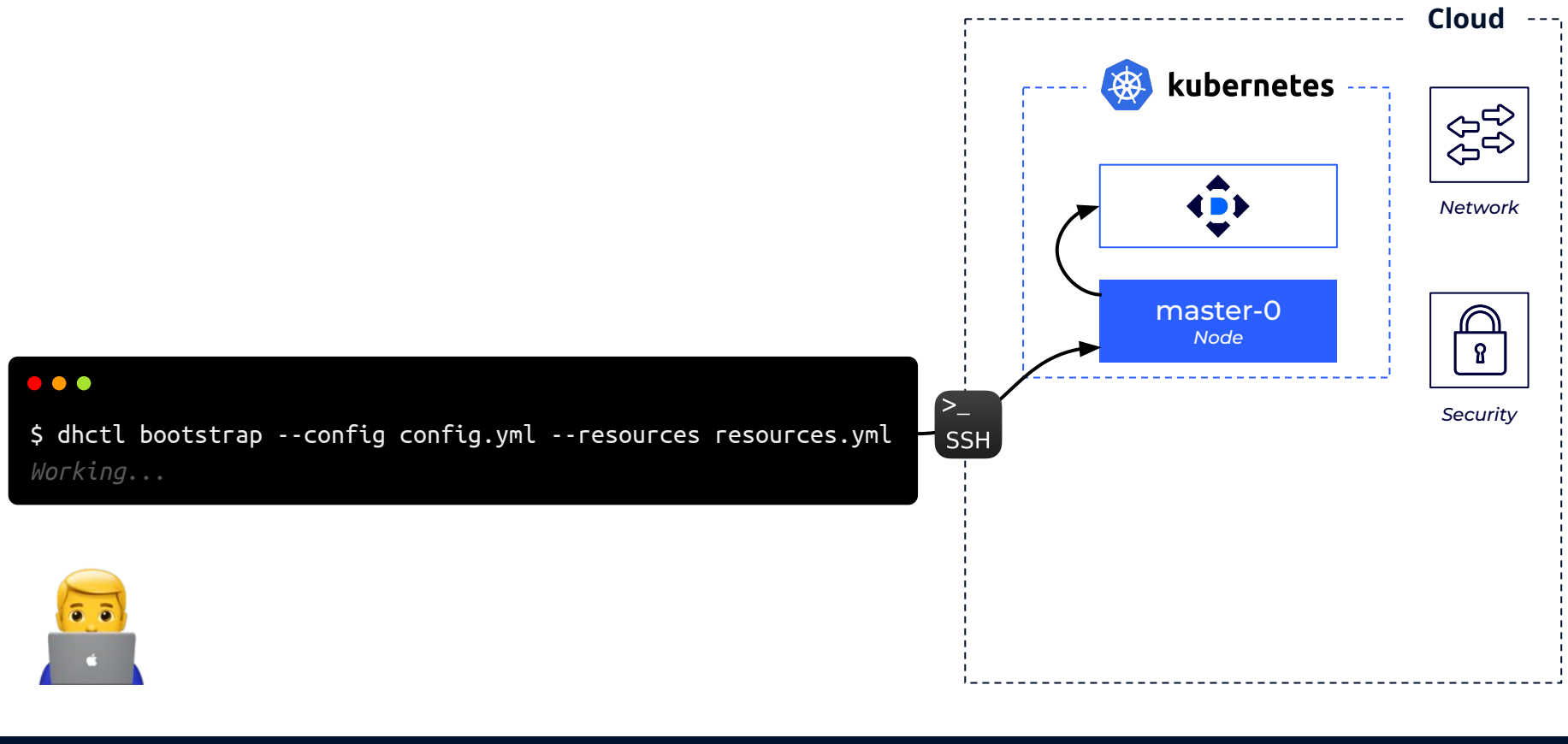
With Terraform, dhctl creates a virtual machine (or several) for the future Kubernetes master node.



Then, the utility connects to this VM via SSH ...

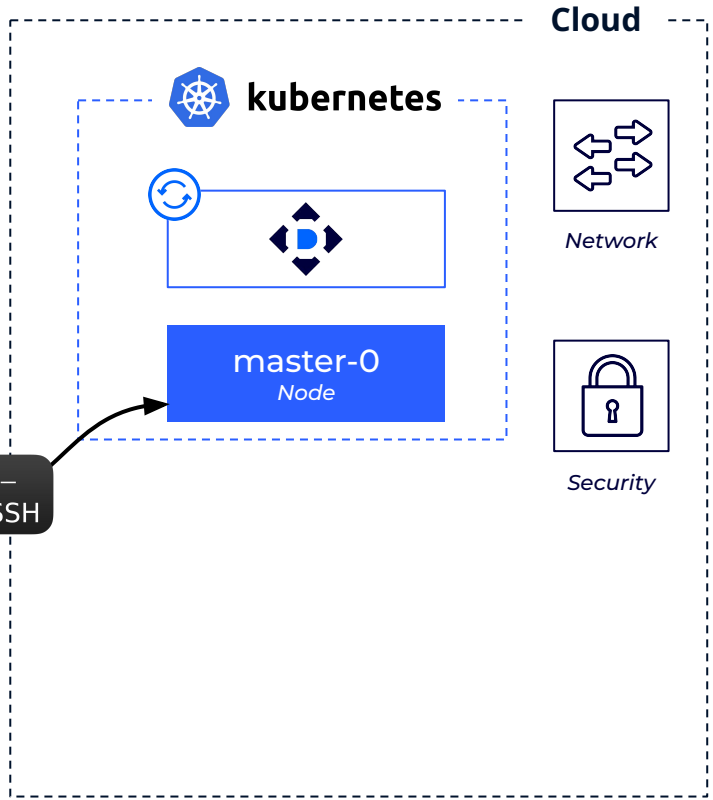


... and initializes the Kubernetes cluster.
At this stage, a minimal Kubernetes vanilla cluster is ready.

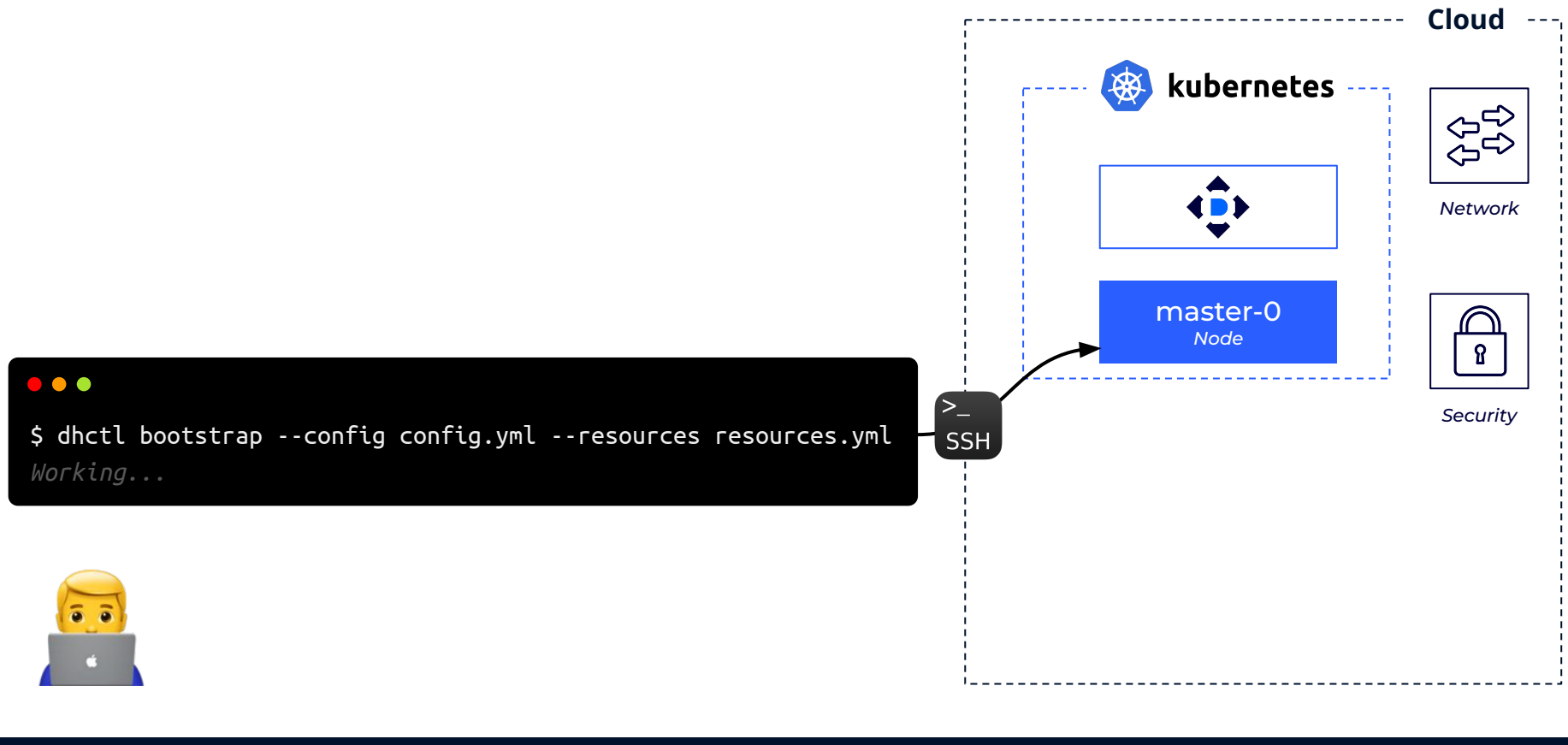


To complete the installation, dhctl installs a Deckhouse controller in the cluster.

```
$ dhctl bootstrap --config config.yml --resources resources.yml
Working...
```

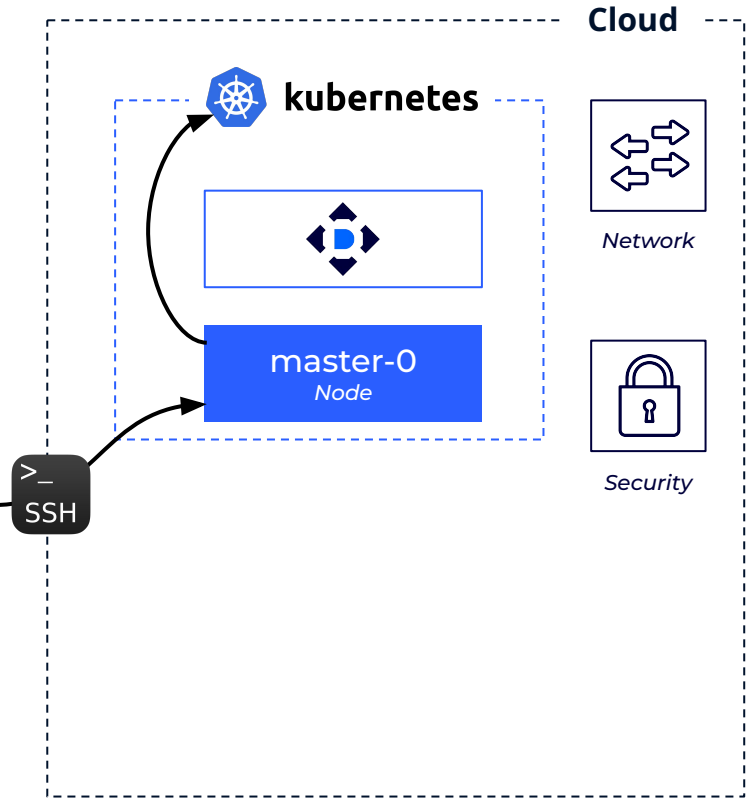


The Deckhouse controller installs the necessary modules and establishes a connection to the cloud API.

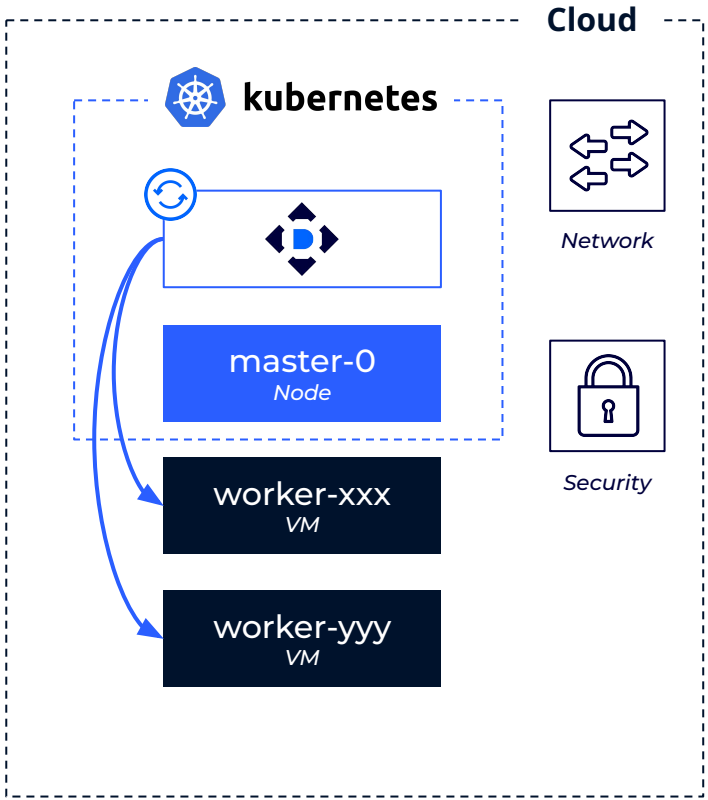


The base cluster is ready.

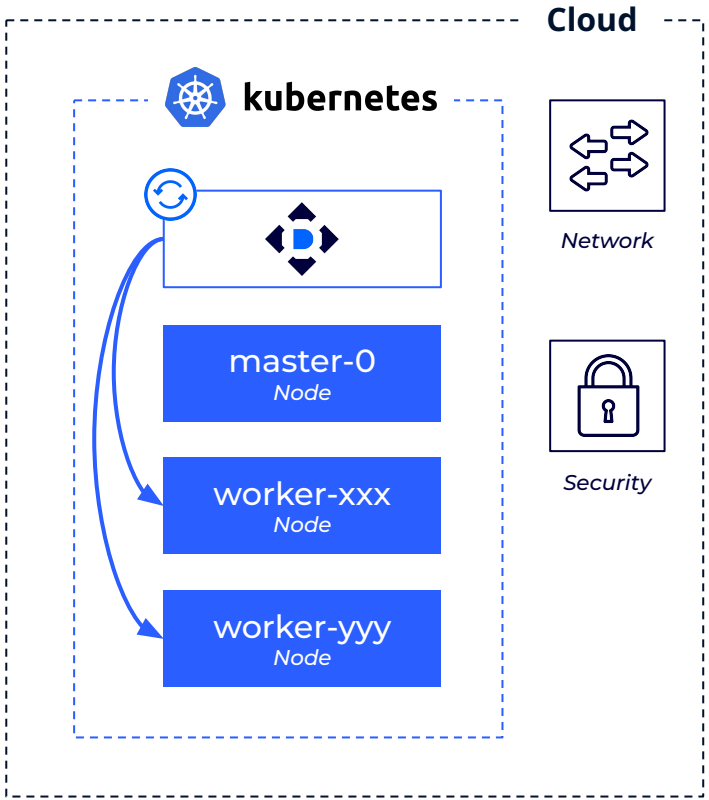
```
$ dhctl bootstrap --config config.yml --resources resources.yml
Working...
```



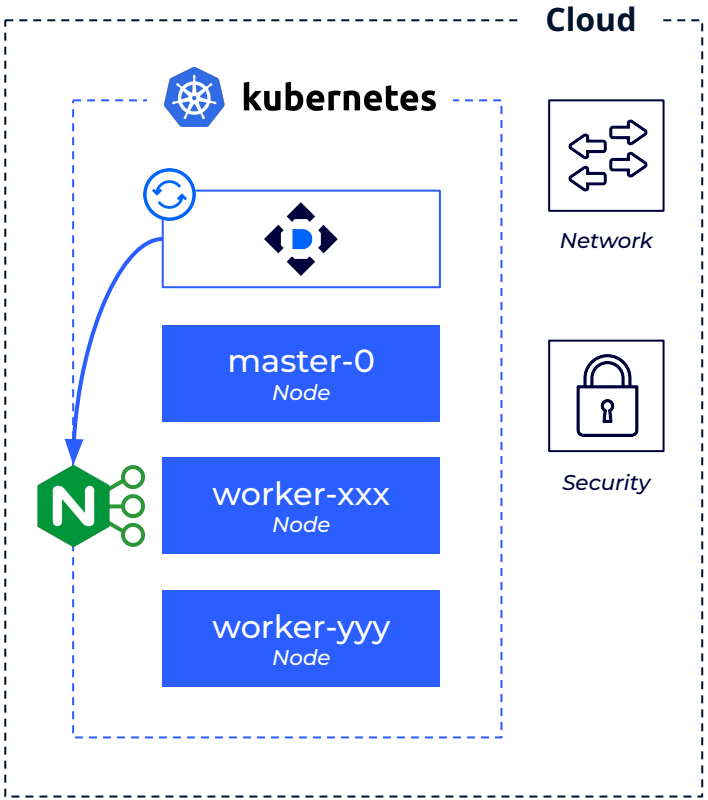
It remains to apply additional Kubernetes resources from the resources.yml file.



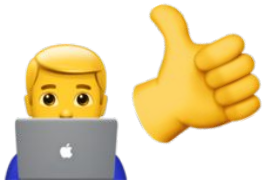
The Deckhouse controller reacts to the creation of the resources
and creates the required set of nodes ...

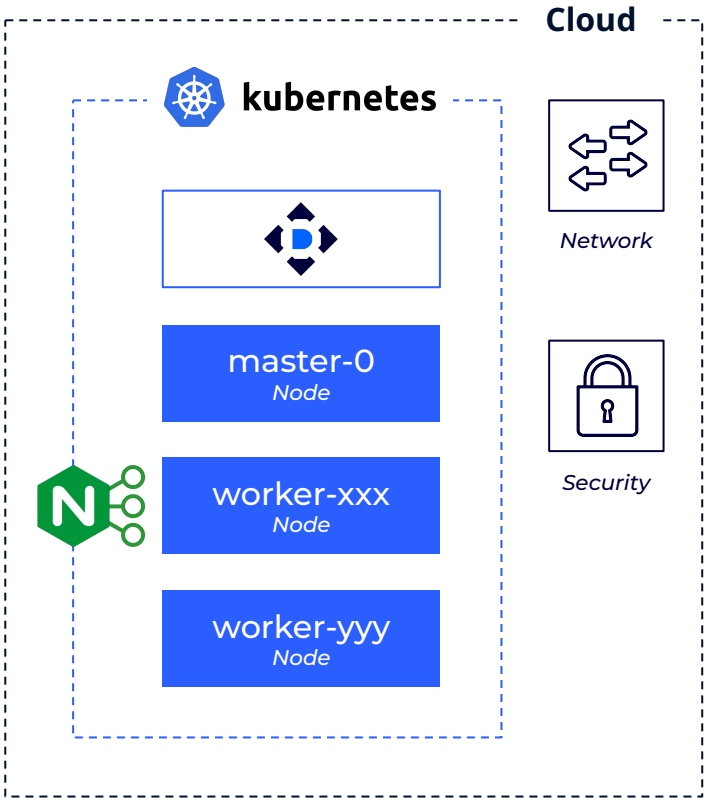


... and then joins them to the cluster.



In addition, the Deckhouse controller sets up the Ingress controller.





The cluster is ready to work!