Deckhouse
Kubernetes Platform

MetalLB (L2 mode)

Basics

There are three frontends nodes and one worker in the cluster.

front-0

nginx-0

node-role: `front`

front-1

nginx-1

node-role: `front`

front-2

nginx-2

node-role: `front`

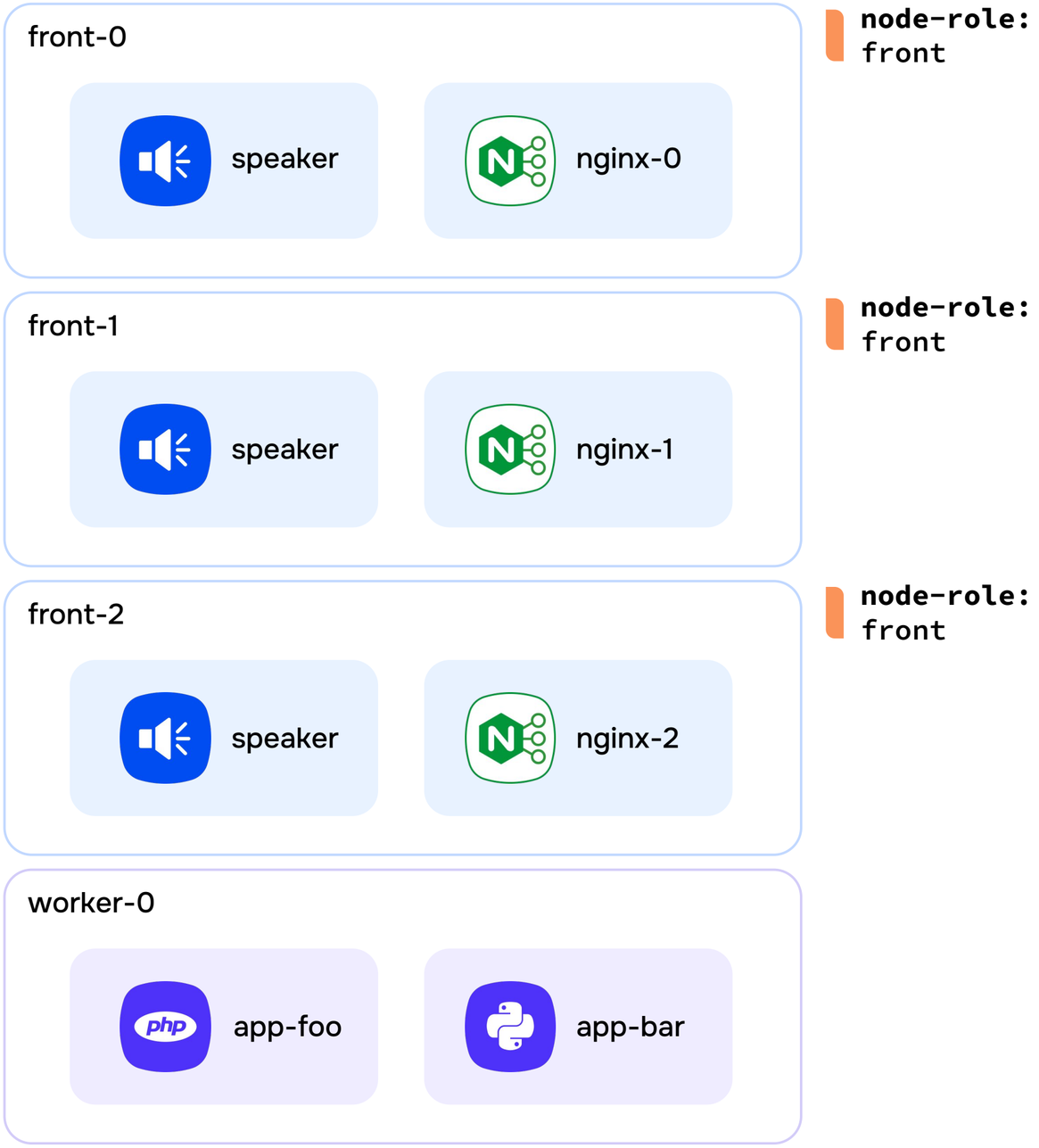
worker-0

app-foo

app-bar

```yaml
apiVersion: metallb.io/v1beta1
kind: IPAddressPool
metadata:
  name: mypool
  namespace: metallb-system
spec:
  addresses:
    - 192.168.122.100/24
---
apiVersion: metallb.io/v1beta1
kind: L2Advertisement
metadata:
  name: l2-advert
  namespace: metallb-system
spec:
  ipAddressPools:
    - mypool
  nodeSelectors:
    - matchLabels:
        node-role: front
```

We turn on standart **MetalLB** in L2 mode.
Speaker is deployed on each frontend-nodes
for address announcement.



app.example.com

A 192.168.122.**100**

front-0

speaker
192.168.122.100

nginx-0

node-role:
front

front-1

speaker

nginx-1

node-role:
front

front-2

speaker

nginx-2

node-role:
front

worker-0

app-foo

app-bar

A **Service** of type **LoadBalancer** has been created to serve the "nginx" frontend. The service has been allocated a "public" IP of **192.168.122.100**, which used in application DNS-name. The node **front-0** has been selected as the leader, and now it alone handles all requests.

app.example.com

A 192.168.122.**100**

front-0

speaker
192.168.122.100

nginx-0

node-role:
`front`

front-1

speaker

nginx-1

node-role:
`front`

front-2

speaker

nginx-2

node-role:
`front`

worker-0

app-foo

app-bar

In the event of a failure of the nginx application on the leader node or of the node itself, all requests are interrupted...

app.example.com

A 192.168.122.**100**

front-0

speaker

nginx-0

node-role:
`front`

front-1

speaker
192.168.122.100

nginx-1

node-role:
`front`

front-2

speaker

nginx-2

node-role:
`front`

worker-0

app-foo

app-bar

...and a new leader node is elected.