



DECKHOUSE

**Kubernetes
Platform**

L2 Load Balancer Basics



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

L2LoadBalancer

powered by MetalLB



```
apiVersion: deckhouse.io/v1alpha1
kind: ModuleConfig
metadata:
  name: l2-load-balancer
spec:
  enabled: true
  settings:
    addressPools:
      - addresses:
          - 192.168.122.0/24
            name: mypool
  version: 1
```



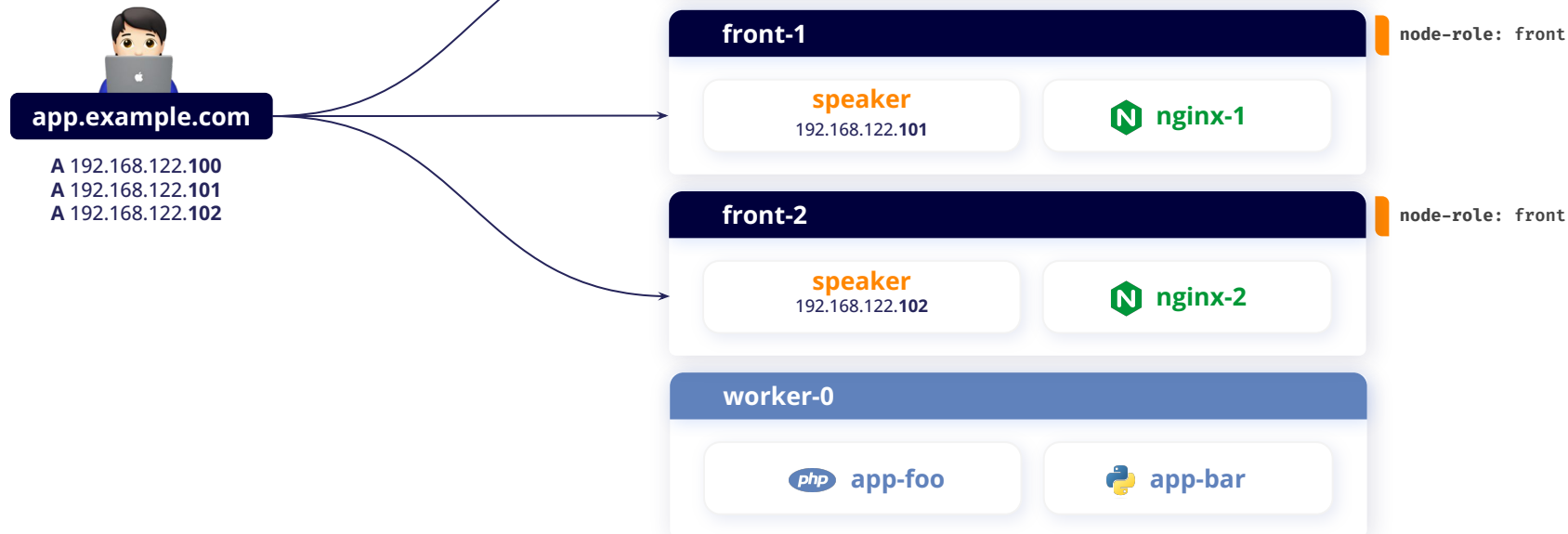
We turn on l2-load-balancer module with defined address pool.



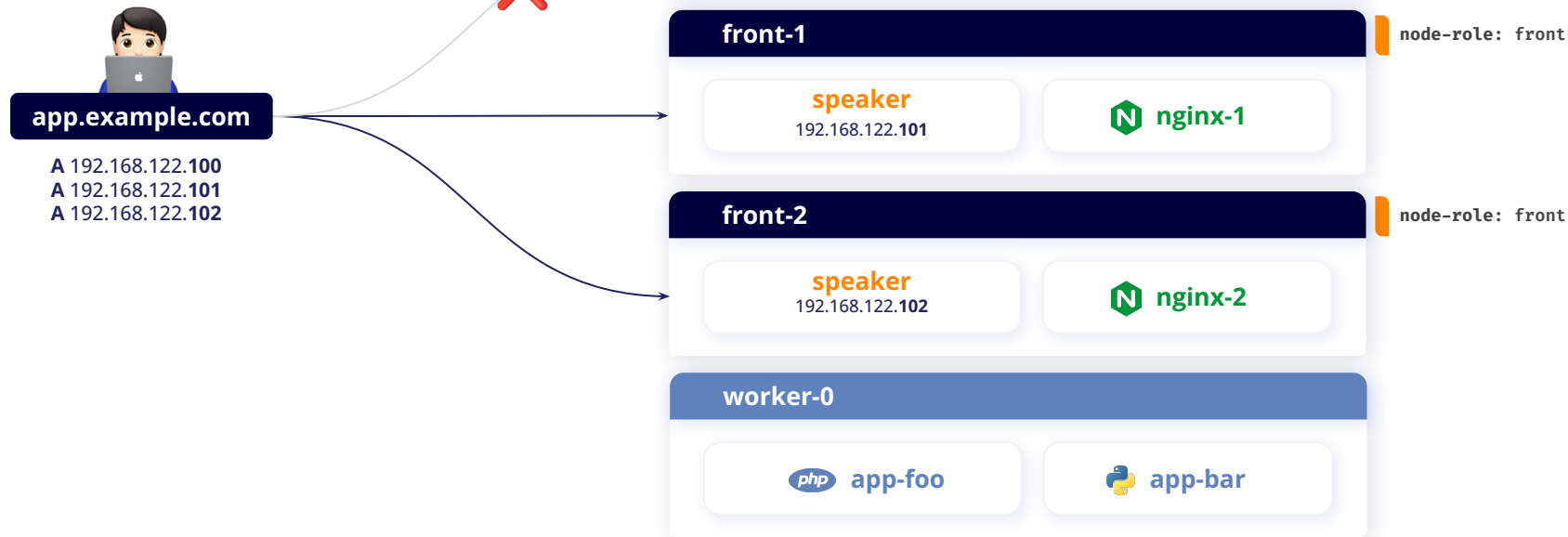
```
apiVersion: deckhouse.io/v1alpha1
kind: L2LoadBalancer
metadata:
  name: front
spec:
  addressPool: mypool
  nodeSelector:
    node-role: front
  service:
    selector:
      app: nginx
    ports:
      - name: http
        port: 80
        protocol: TCP
```



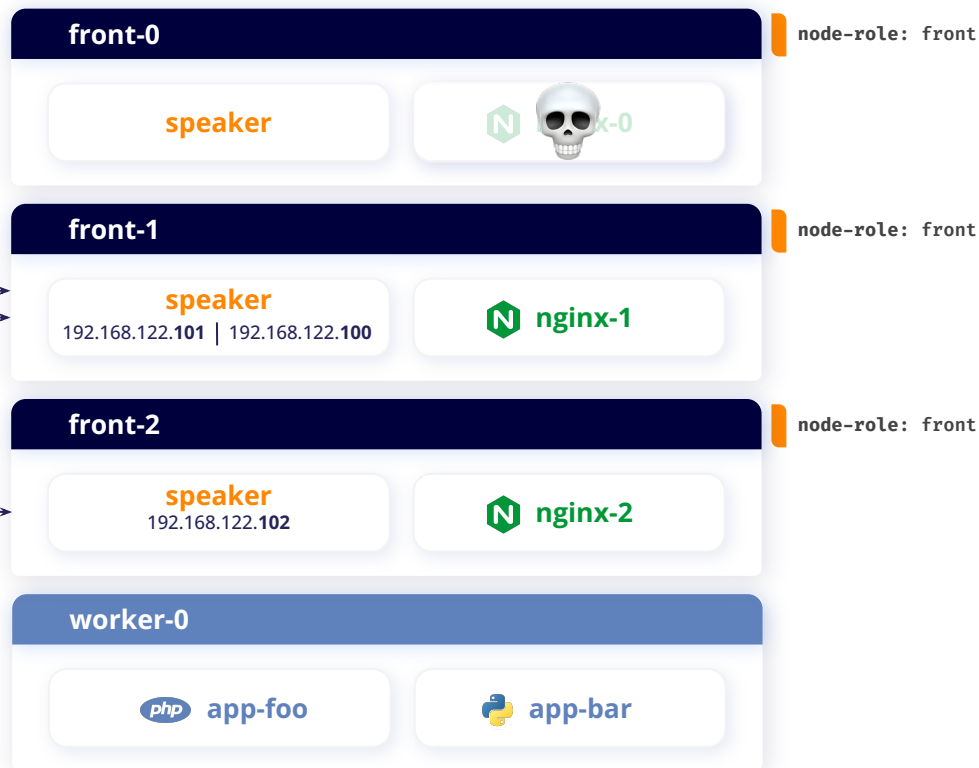
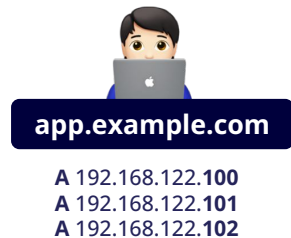
An L2LoadBalancer resource has been created specifying front-end nodes, a pool of "public" IP addresses, and service settings for the nginx application. Speakers are run on all front-end nodes. Each speaker gets a separate address from the pool.



Each front-end node participates in handling application requests.
For this, three A records are specified in the public DNS name of the application.



In the event of a failure of the nginx application on one of the front-end nodes or the node itself, a third of the requests will fail,...



...and one of the remaining front-end nodes will take over the "problematic" IP address and handle the incoming application requests.