



Life in cluster

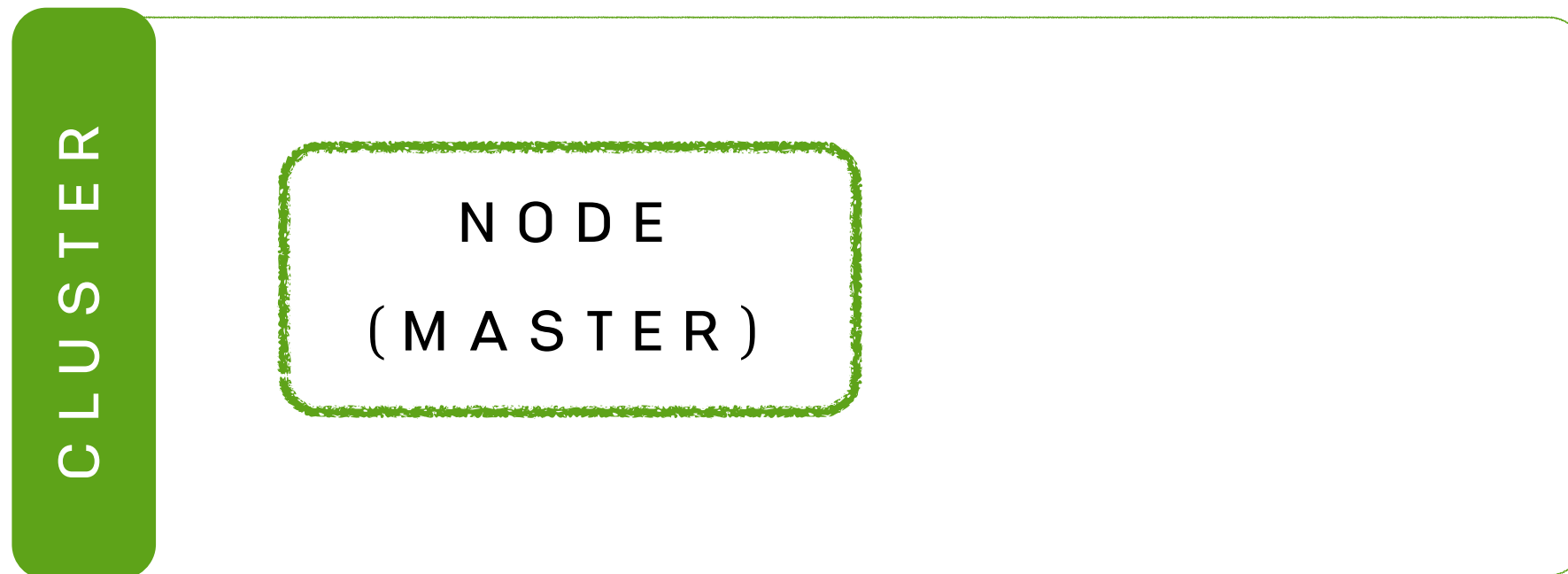
Scale as you need

- Scale up
- Scale out

คำที่ต้องเข้าใจ

- Cluster
- Node
- Shard

Empty cluster



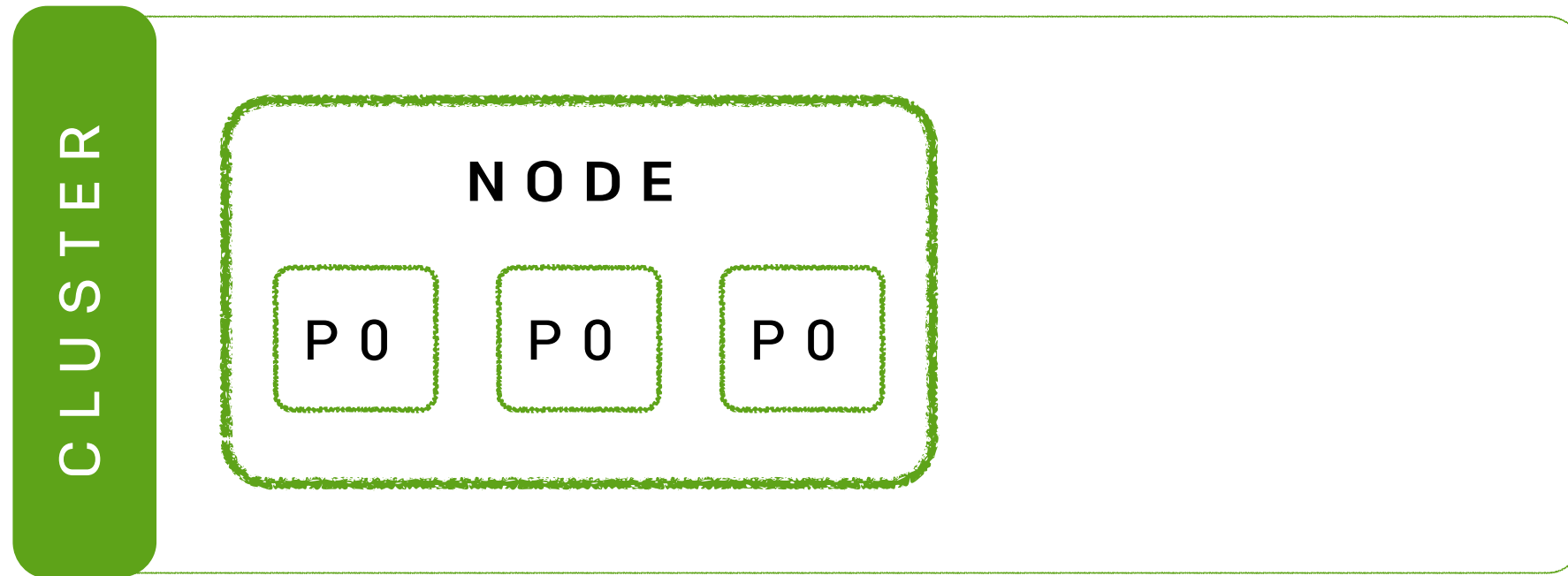
Cluster health

GET _cluster/health

GREEN, YELLOW, RED

```
{  
  "cluster_name": "elasticsearch",  
  "status": "green",  
  "timed_out": false,  
  "number_of_nodes": 1,  
  "number_of_data_nodes": 1,  
  "active_primary_shards": 0,  
  "active_shards": 0,  
  "relocating_shards": 0,  
  "initializing_shards": 0,  
  "unassigned_shards": 0  
}
```

Single node cluster + index



Create index

PUT /blog

```
{  
  "settings": {  
    "number_of_shards": 3,  
    "number_of_replicas": 1  
  }  
}
```

Cluster health

GET _cluster/health

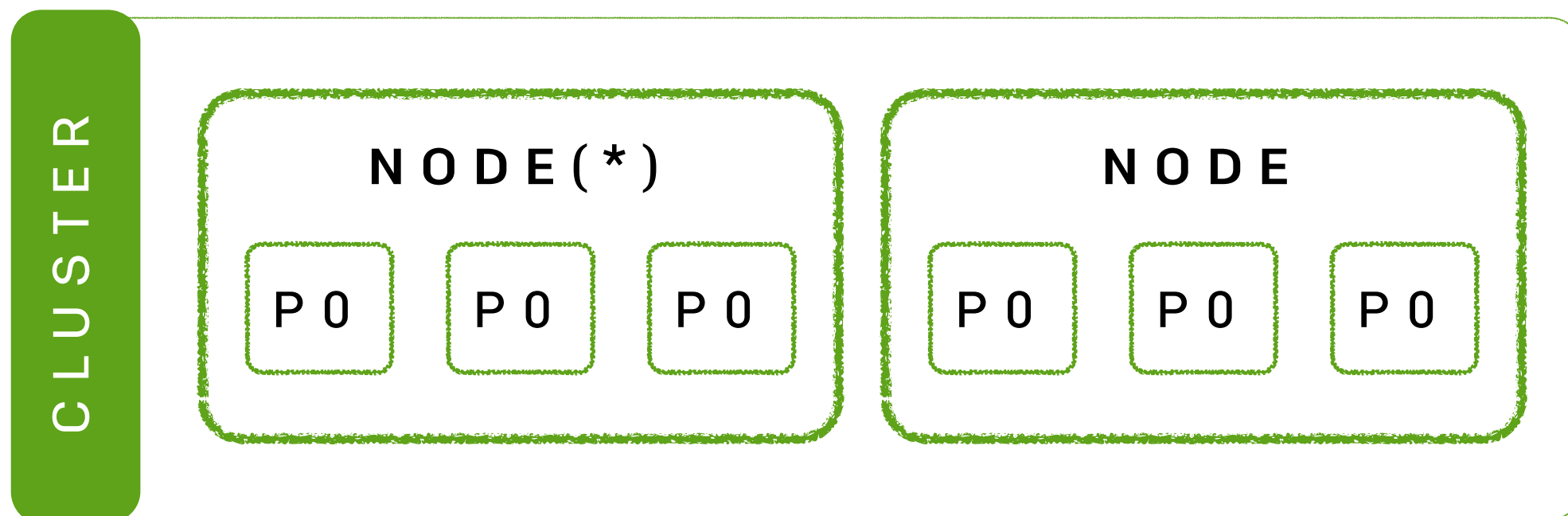
NOT REPLICATE

```
{
  "cluster_name" : "elasticsearch",
  "status" : "yellow",
  "timed_out" : false,
  "number_of_nodes" : 1,
  "number_of_data_nodes" : 1,
  "active_primary_shards" : 3,
  "active_shards" : 3,
  "relocating_shards" : 0,
  "initializing_shards" : 0,
  "unassigned_shards" : 3
}
```


Add new node

```
$bin/elasticsearch -Des.node.data=true -Des.node.master=true -Des.node.name=First
```

```
$bin/elasticsearch -Des.node.data=true -Des.node.master=false -Des.node.name=Second
```



Cluster health

GET _cluster/health

GOOD

```
{
  "cluster_name" : "elasticsearch",
  "status" : "green",
  "timed_out" : false,
  "number_of_nodes" : 2,
  "number_of_data_nodes" : 2,
  "active_primary_shards" : 4,
  "active_shards" : 8,
  "relocating_shards" : 0,
  "initializing_shards" : 0,
  "unassigned_shards" : 0
}
```

For scale

