

How to never go shopping Groceries again ..

Or, how to explain GitOps to your manager.

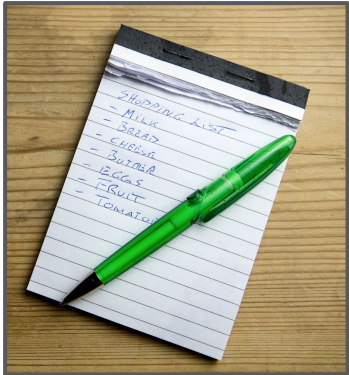
Max Dargatz

Senior Solution Architect

Red Hat

The typical weekly Shopping trip

... and its challenges.

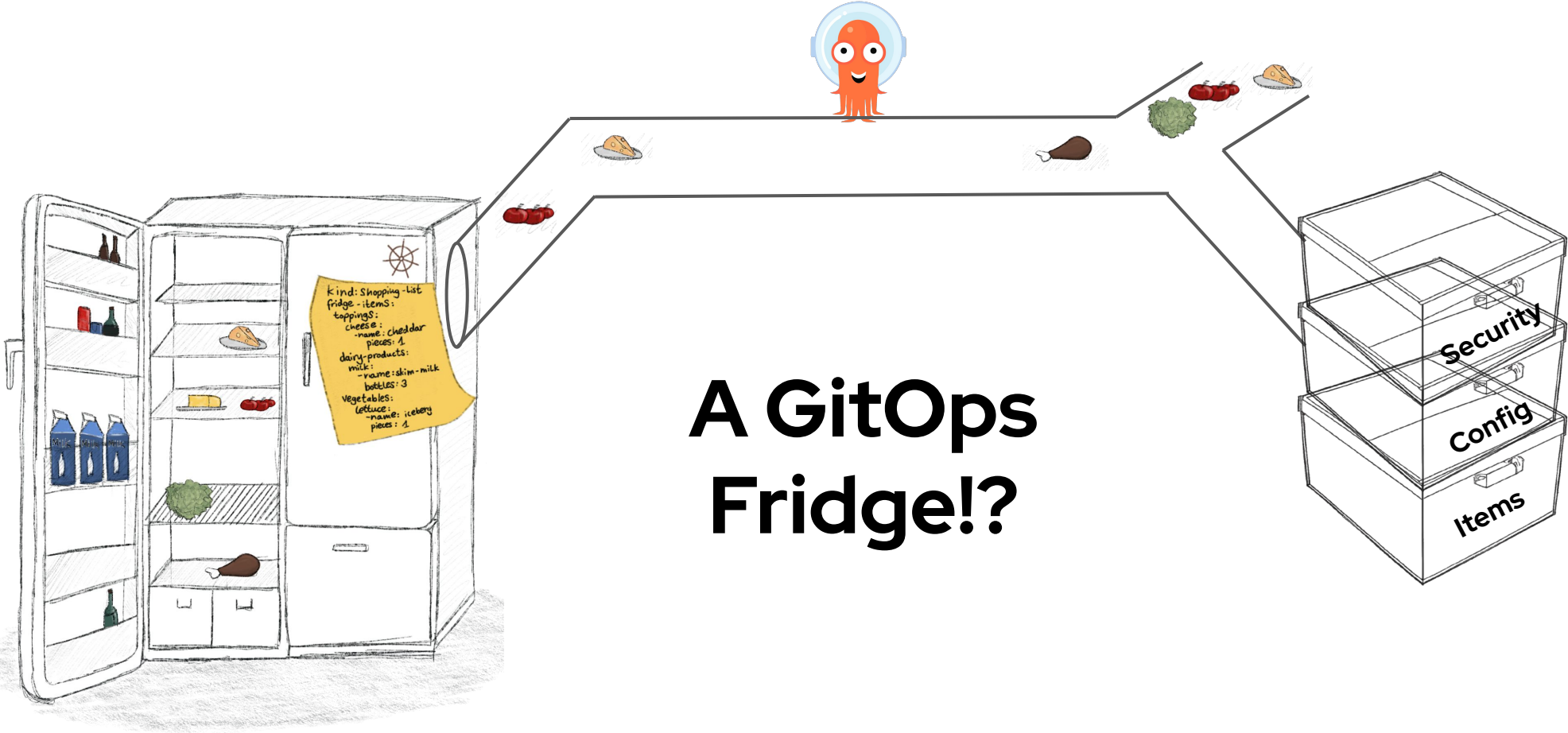


The question comes to mind ...

Can we solve those problems?

(after all in IT - we did!)

I want to make a proposal ...



One-by-one: How would a GitOps Fridge Work?



#1 Fill The Fridge right

#2 The shopping list lacked stuff

#3 The potentially moldy things..

#4 The little thieves

#5 Little and big thieves

#6 It's Full - Option 1

#7 It's Full - Option 2

Let's tackle the challenges one by one.



#1 Fill The Fridge right

#2 The shopping list lacked stuff

#3 The potentially moldy things..

#4 The little thieves

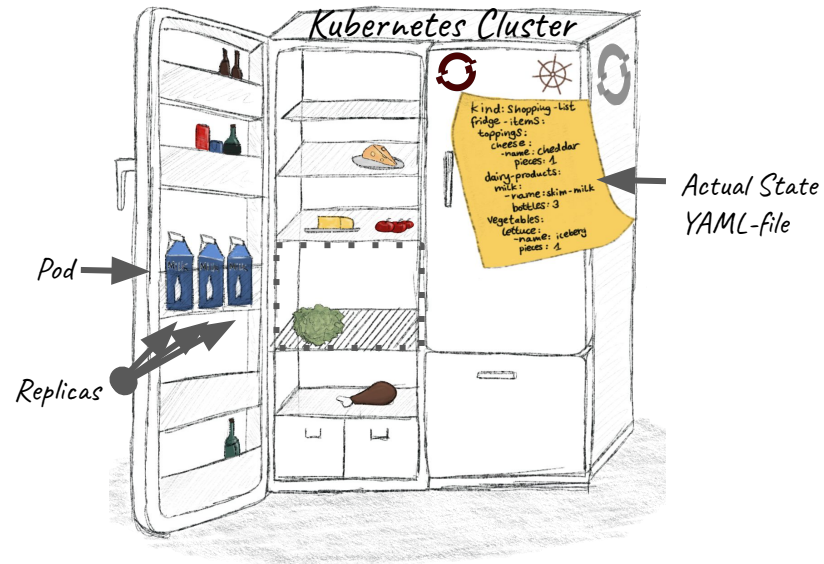
#5 Little and big thieves

#6 It's Full - Option 1

#7 It's Full - Option 2

```
apiVersion: fridge/v1
kind: FridgeItems
items:
  vegetables:
    - name: tomatoes
      replicas: 2
  candy:
    - name: chocolatebar
      replicas: 2
  dairy-products:
    - name: milk
      replicas: 3
    - name: ...
  ...
```

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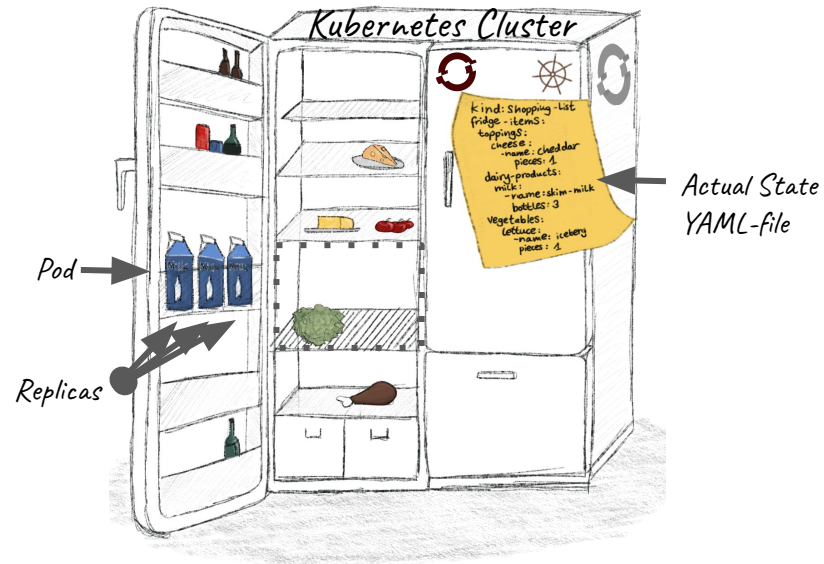
#5 Little and big thieves

#6 It's Full - Option 1

#7 It's Full - Option 2


```
## update only
apiVersion: fridge/v1
kind: FridgeItems
items:
  vegetables:
    - name: tomatoes
      replicas: 3
```

Let's tackle the challenges one by one.



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#7 It's Full - Option 2

```
apiVersion: fridge/v1
```

```
kind: FridgeItems
```

```
items:
```

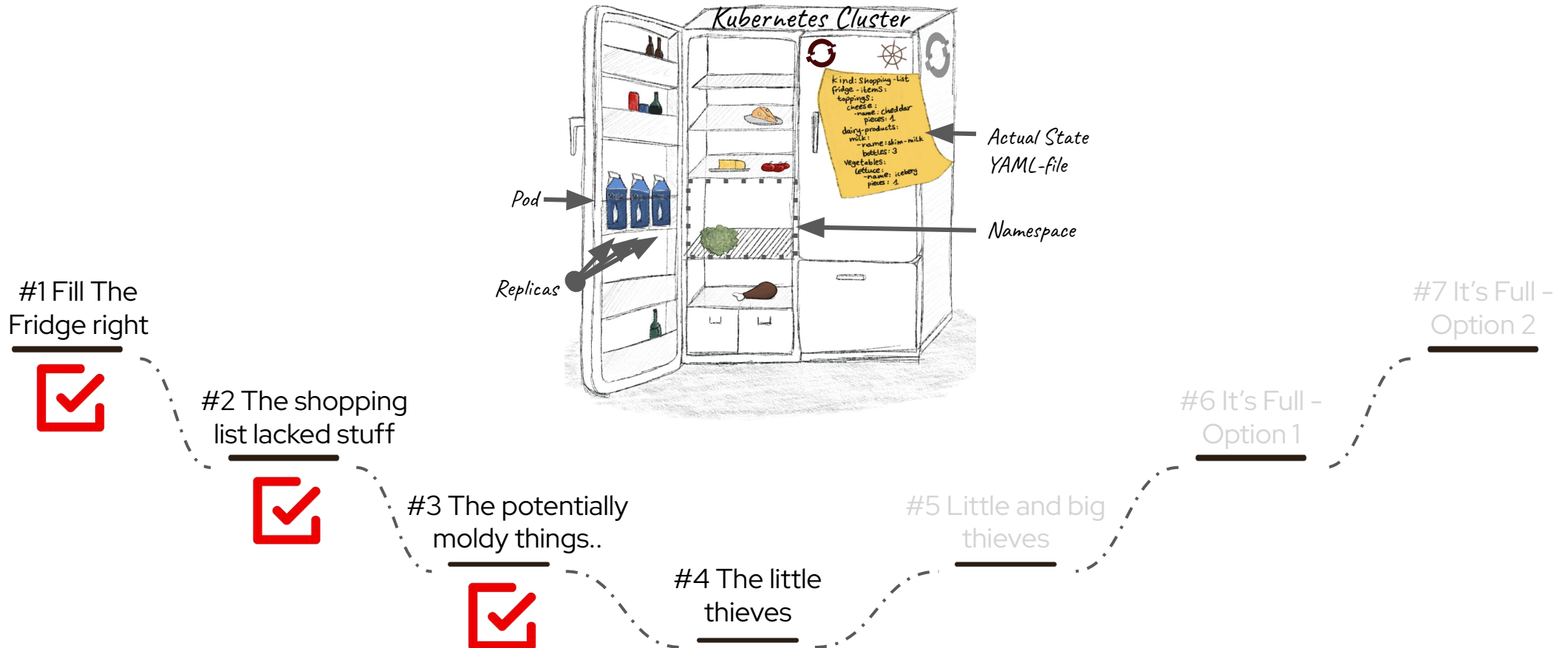
```
  fruits:
```

```
    - name: oranges
```

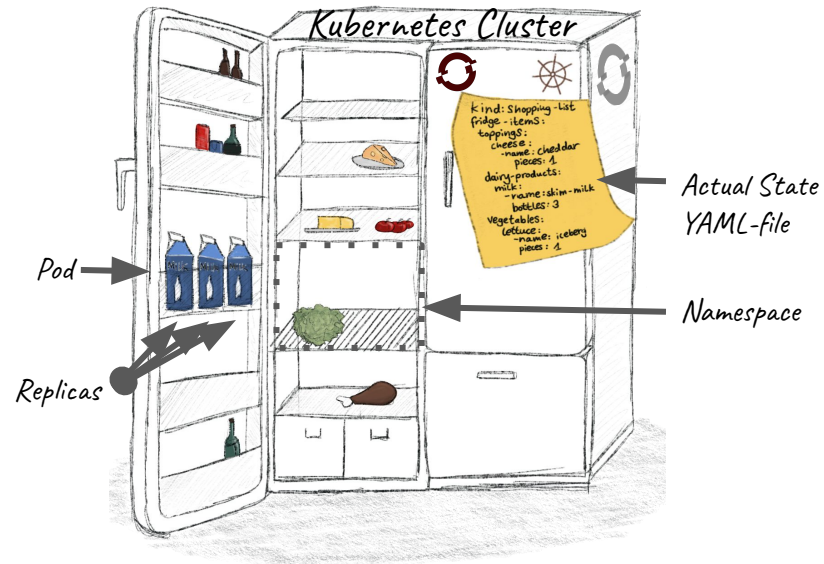
```
      replicas: 5
```

```
      compartment: potentiallymoldy
```

Let's tackle the challenges one by one.



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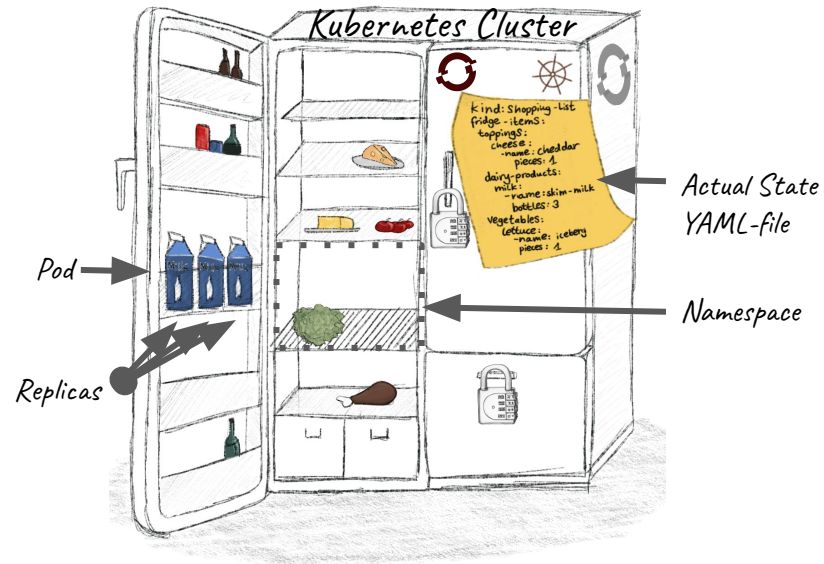
#5 Little and big thieves

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#7 It's Full - Option 2

```
apiVersion: fridge/v1
kind: FridgeAccess
accesstype:
  - name: fullfridgeaccess
    compartments: all
    famMemberRef:
      - name: parents
  - name: limited
    compartments: potentially-moldy
    famMemberRef:
      - name: kids
      - name: littleThieves
```

Let's tackle the challenges one by one.



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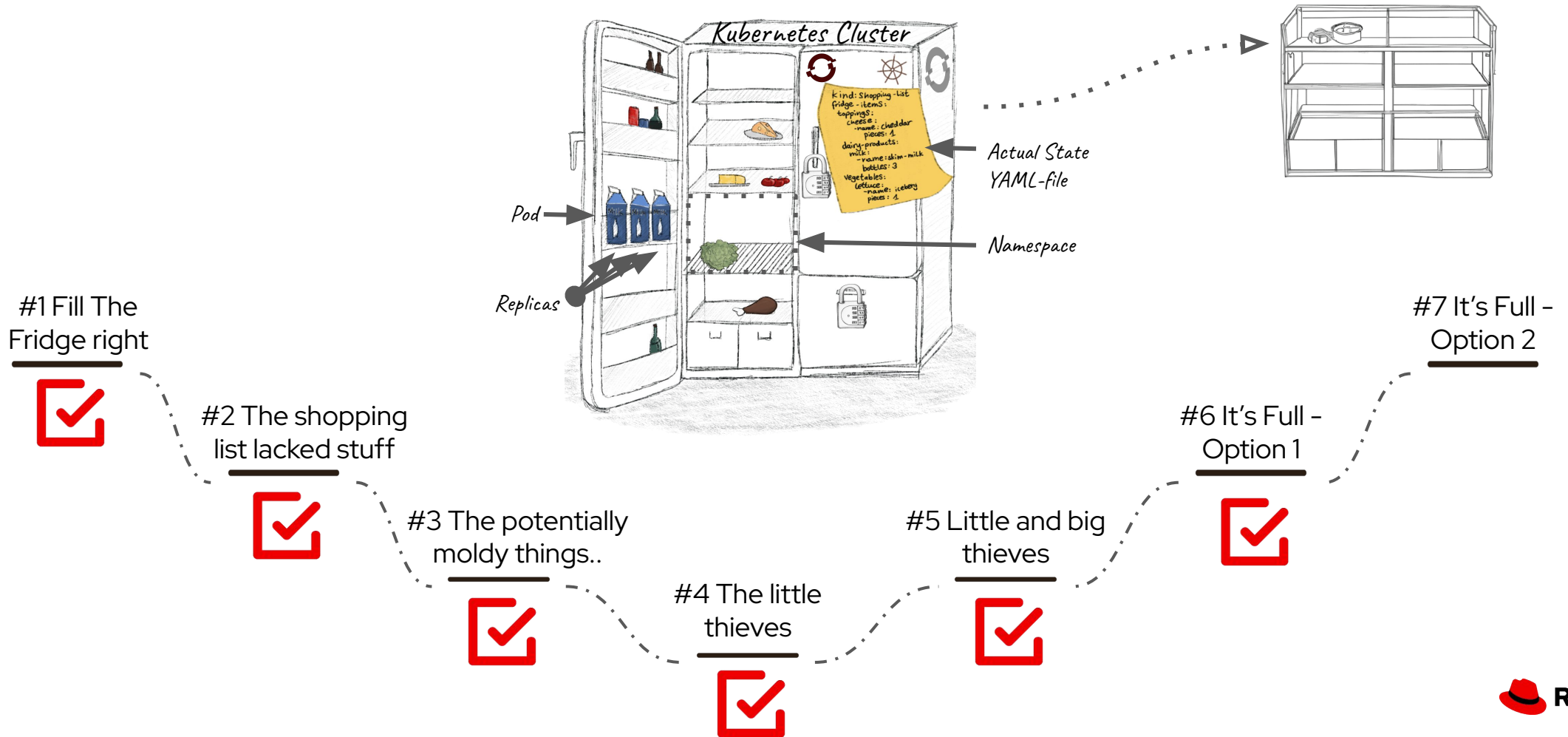
#5 Little and big thieves



#6 It's Full - Option 1

#7 It's Full - Option 2

Let's tackle the challenges one by one.




```
apiVersion: fridge/v1
```

```
kind: FridgeSize
```

```
compartments:
```

```
- name: topofthefridge
```

```
  location: top
```

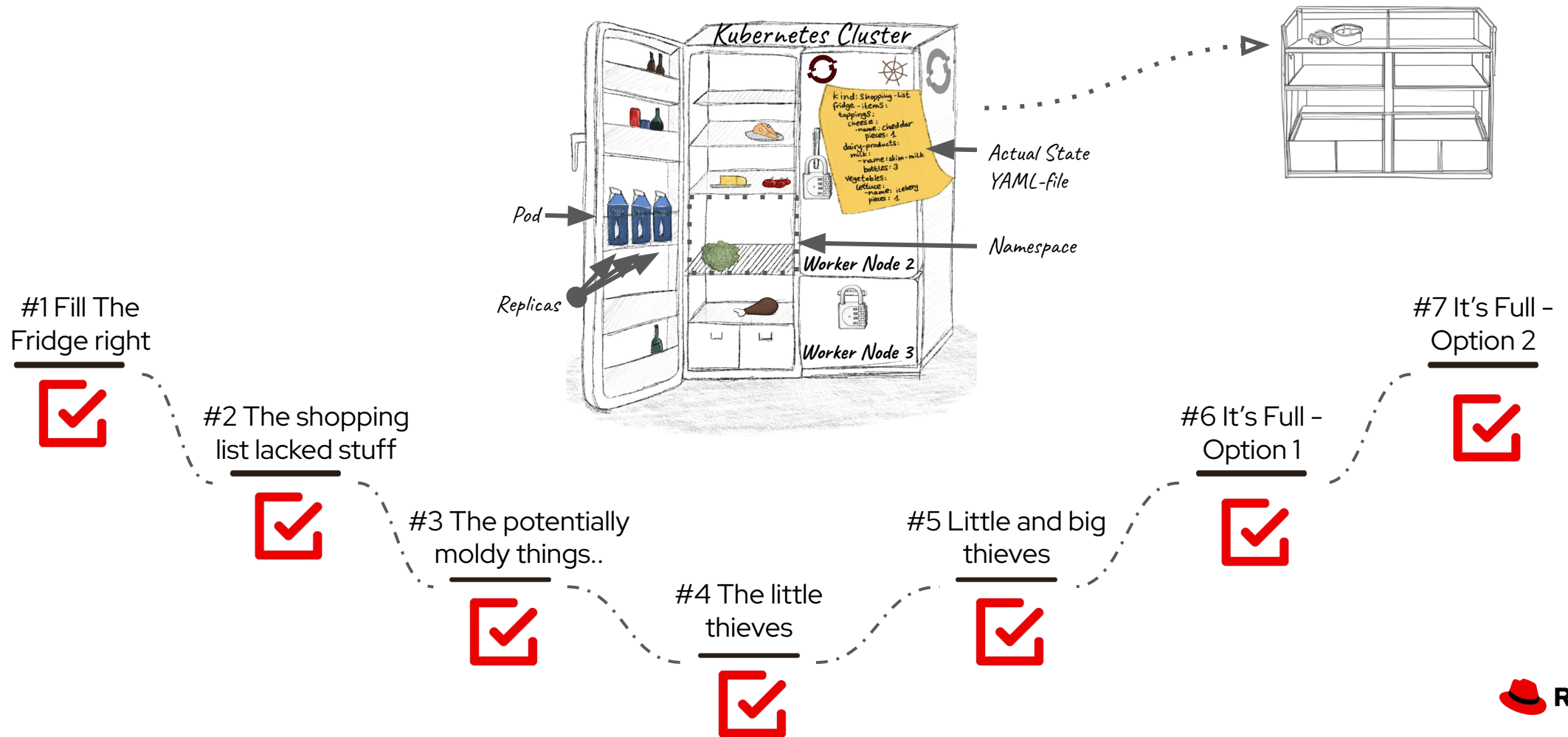
```
- name: potentially-moldy
```

```
  location: middle
```

```
- name: freezer
```

```
  location: bottom
```

Let's tackle the challenges one by one.



Wrapping it up!

App Deployment instructions

Application Configs

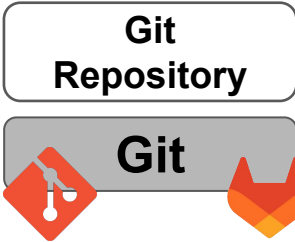
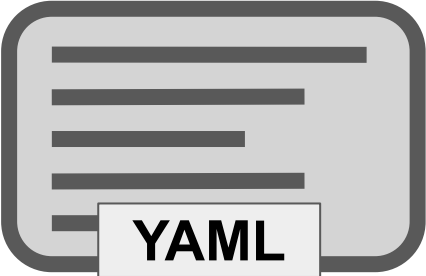
Cluster Configurations

Authentication & Authorization

CI/CD templates

....

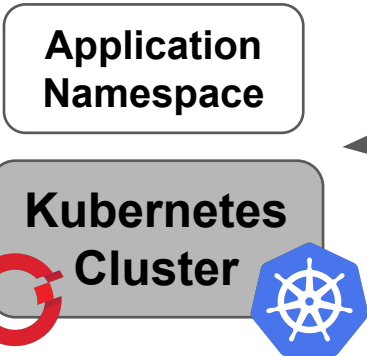
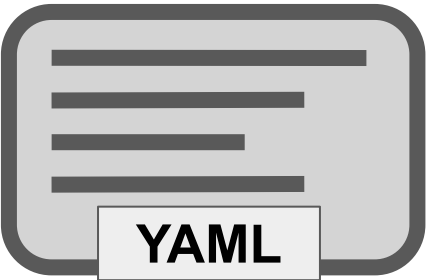
Desired State



monitors (e.g. via poll or webhook)

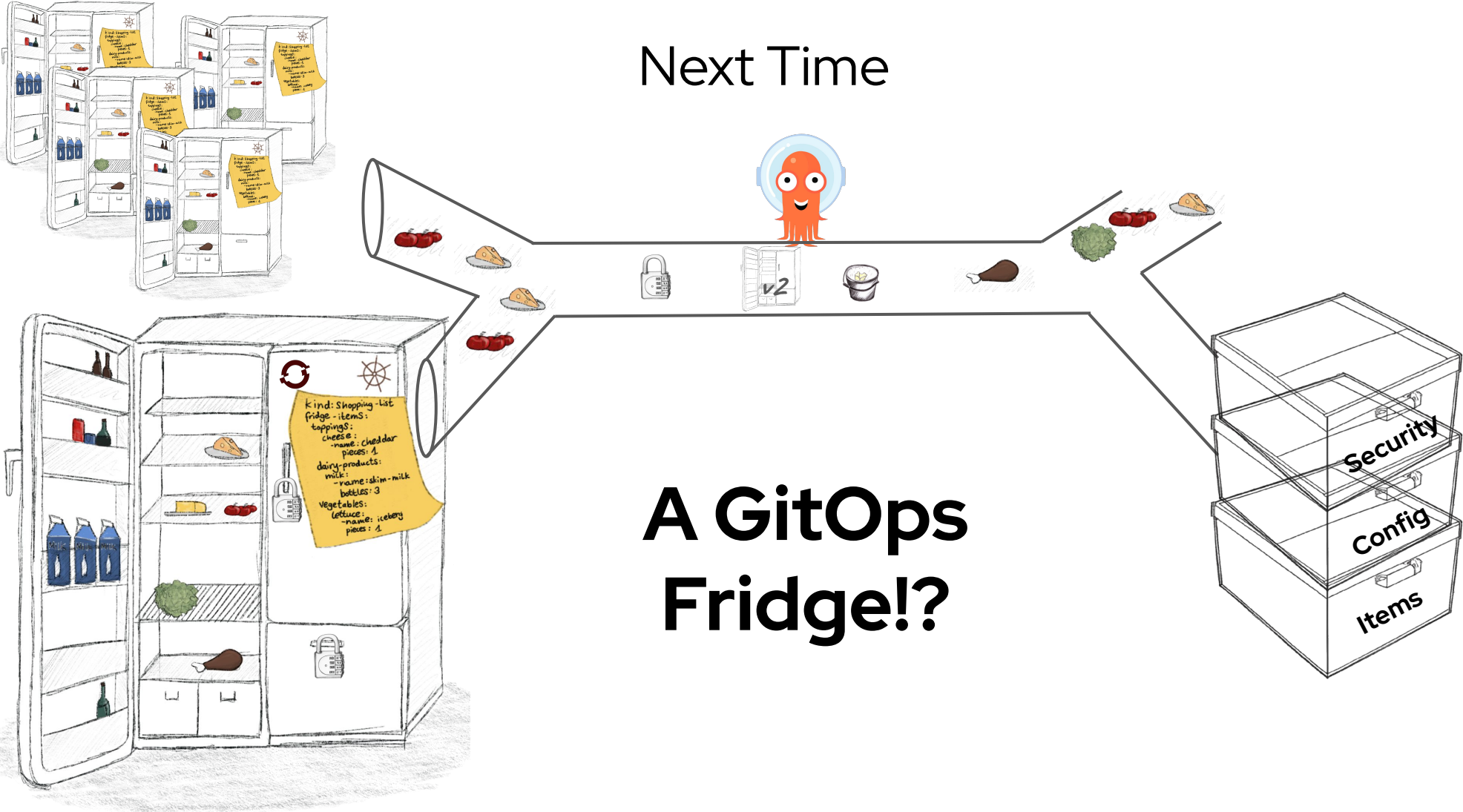


Actual State

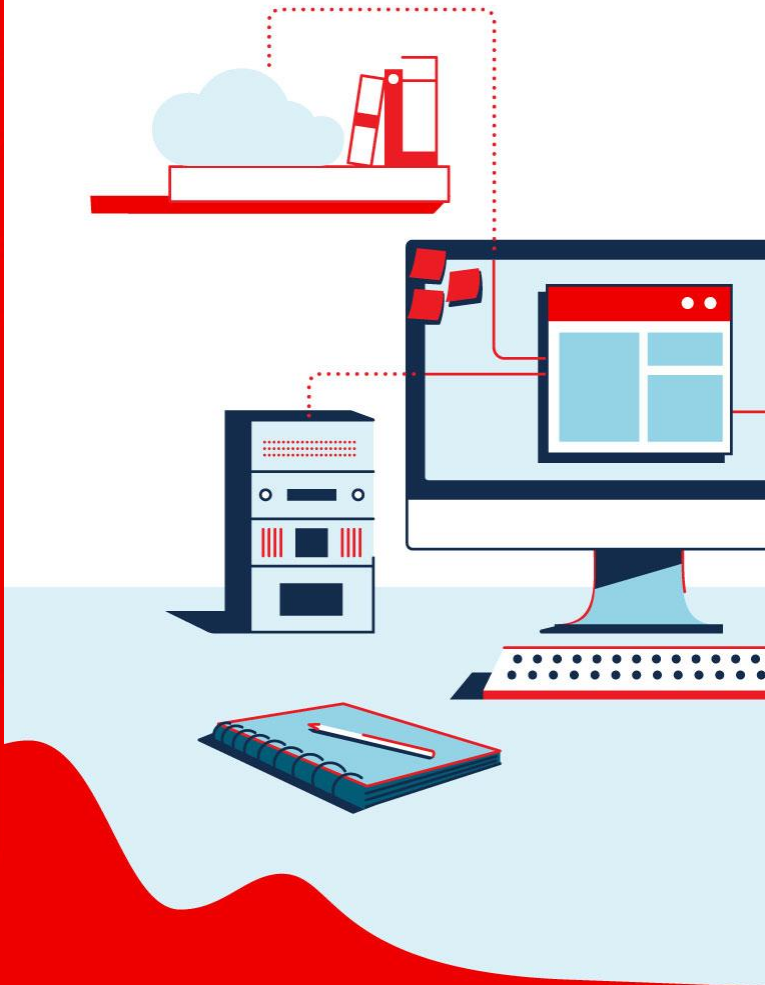


monitors & applies or remediates changes

Next Time




```
apiVersion: fridge/v1
kind: FridgeItems
items:
  beverages:
    - name: beer
      replicas: 100
    - name: wine
      replicas: ...
  ...
```




Thank you

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