Using Existing Helm Charts

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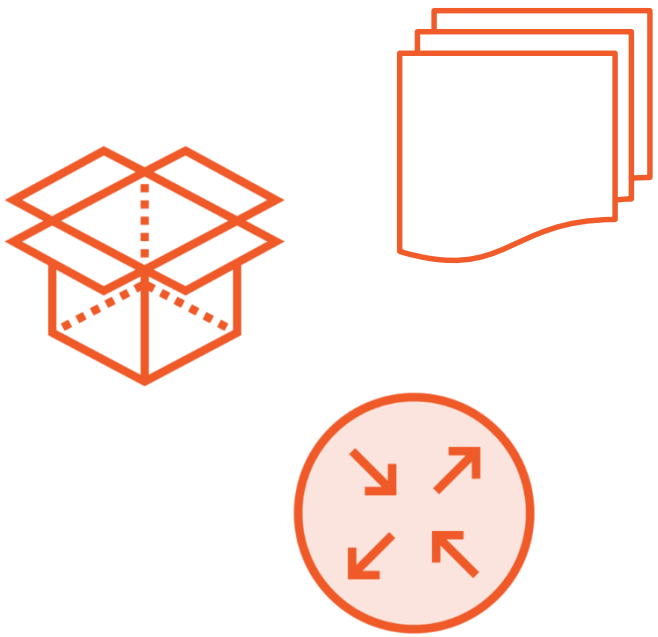
Using Existing Helm Charts

Helm Repositories

Search for exisiting charts

Use existing charts

Importing child values



From Package to Hub

Sources

⇒ Packages

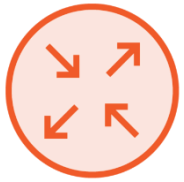
⇒ Repositories

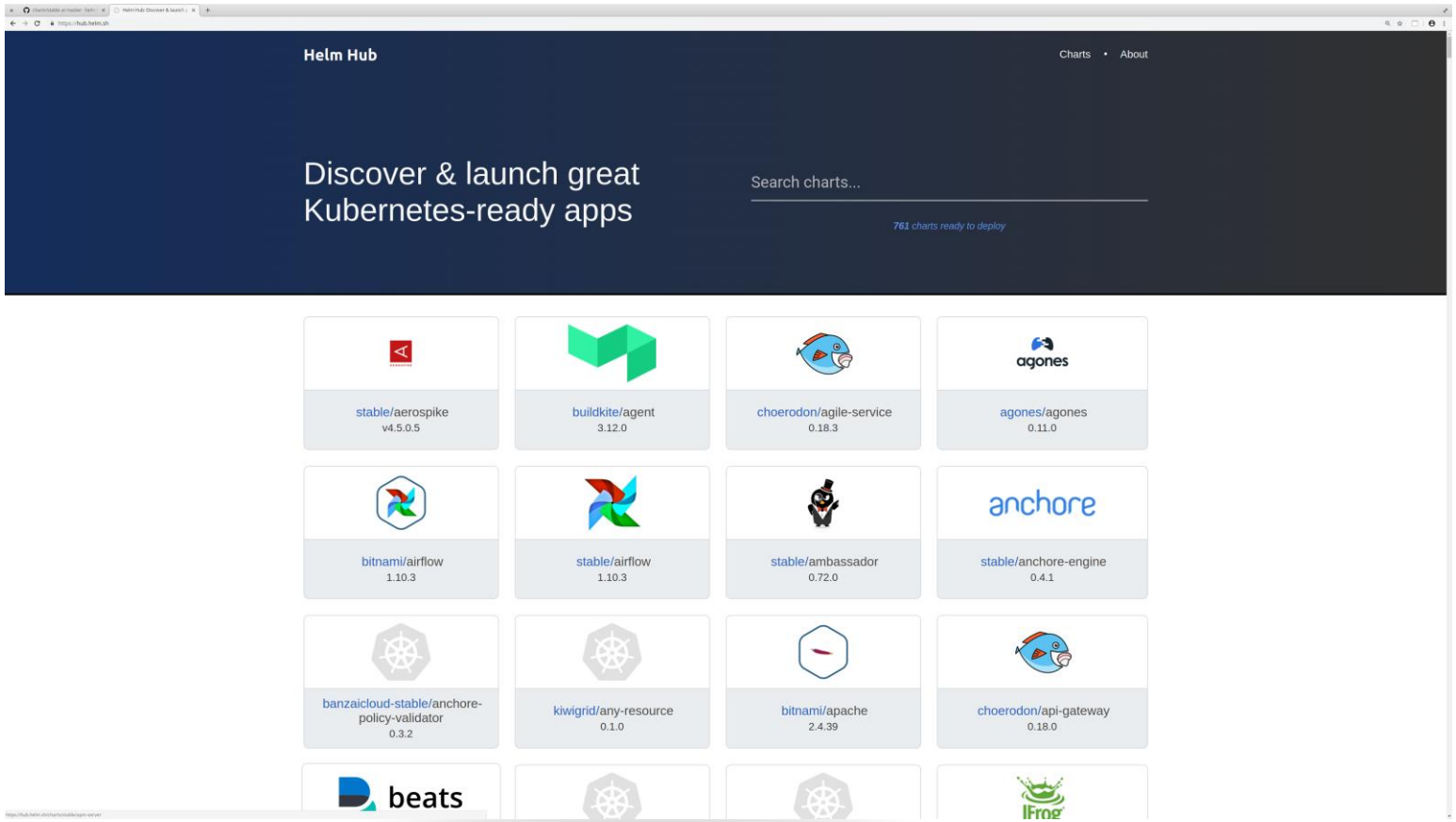
⇒ Hub

Analogies

Helm	Docker	Java	Javascript
file.yaml	Dockerfile	file.java	file.js
Chart	Image	Jar, ear ..	module
Helm	Docker	Maven	Npm
requirements.yaml	FROM	pom.xml	pakage.json
Helm repository	Docker repository	Maven repository	npmjs.com
Stable repository	Docker hub	Maven central	npmjs.com
hub.helm.sh	hub.docker.org	search.maven.org	npmjs.com

Helm Stable Repository



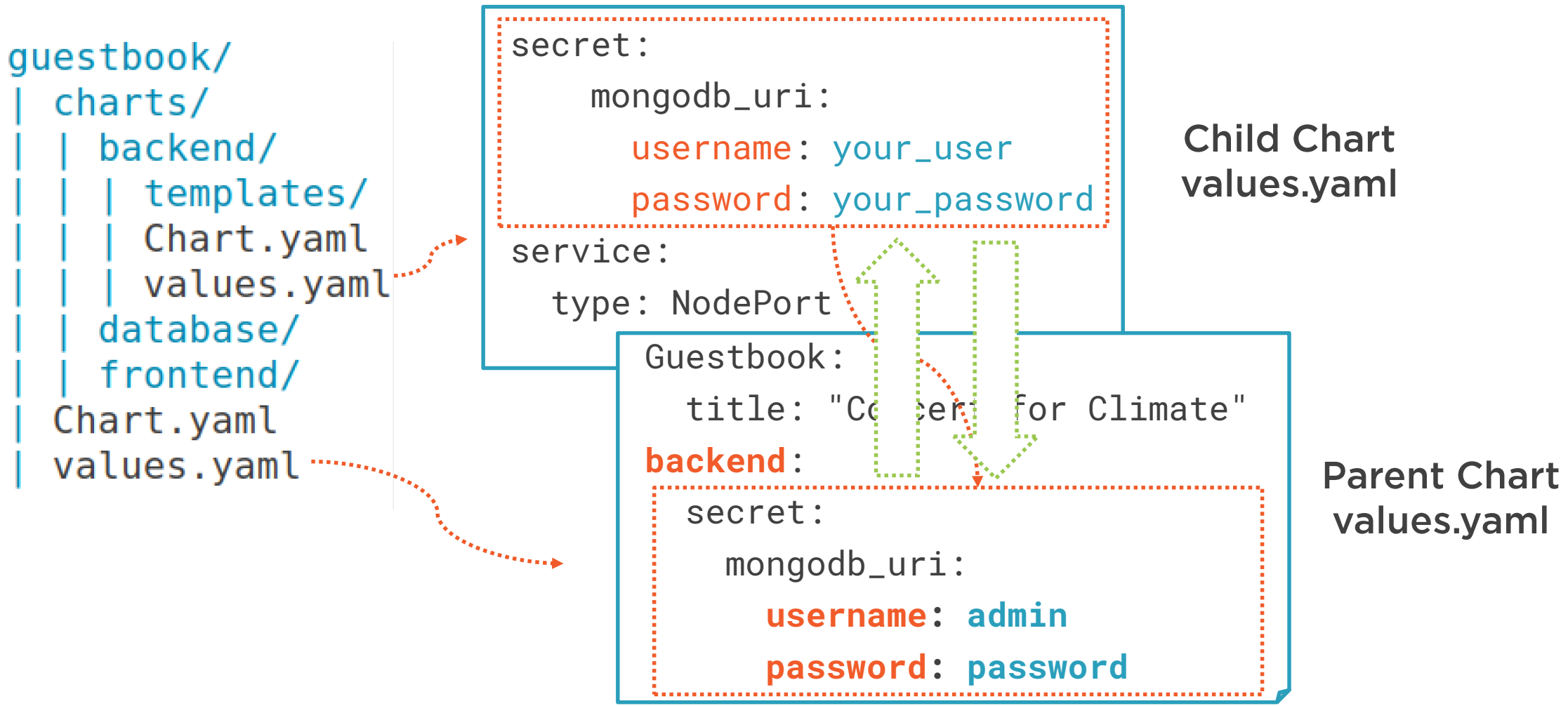


Using the Command Line

```
> helm repo list
> helm search keyword
> helm inspect chart_name
> helm inspect chart chart_name
> helm inspect values chart_name
> helm fetch chart_name
> helm dependency update chart_name
```

Customizing Existing Charts

Values and Sub-charts



Exporting Child Values : “exports:”

```
guestbook/
| charts/
| | frontend/
| | | templates/
| | | Chart.yaml
| | | values.yaml
| | backend-1.2.2.tgz
| | database-1.2.2.tgz
| templates/
| | NOTES.txt
| | ingress.yaml
| Chart.yaml
| requirements.lock
| requirements.yaml
| values.yaml
```

Child values.yaml

```
exports:
 data:
   mongodb_uri:
      username: admin
      password: password
```

requirements.yaml

```
dependencies:
 - name: frontend
   version : ~1.2.1
   repository: http://...
   import-values:
     - data
```

```
Guestbook:
  title: "Con  rt for Climate“
mongodb_uri:
  username: your_user
```

```
..username }}
```

http://github.com/phcollignon/helm/
lab10_helm_dependencies_export

Exporting Child Values : “child-parent”

Child values.yaml

```
guestbook/
| charts/
| | frontend/
| | | templates/
| | | Chart.yaml
| | | values.yaml
| | backend-1.2.2.tgz
| | database-1.2.2.tgz
| templates/
| | NOTES.txt
| | ingress.yaml
| Chart.yaml
| requirements.lock
| requirements.yaml
| values.yaml
```

```
data:
  mongodb_uri:
    username: admin
    password: password
```

requirements.yaml

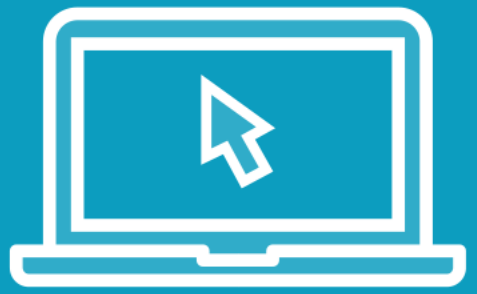
```
dependencies:
 - name: frontend
   version : ~1.2.1
   repository: http://...
   import-values:
     - child: data
       parent: frontend_data
```

```
frontend_data:
  mongodb_uri:
    username: your_user
    password: your_password
```

```
ongodb_uri.username }}
```

http://github.com/phcollignon/helm/
lab10_helm_dependencies_child-parent

Demo



Using existing stable mongodb chart

```
http://github.com/phcollignon/helm/
lab11_helm_repository_begin
lab11_helm_repository_final
```

Demo

Installing Wordpress in Kubernetes in 1 minute !

Let’s do it !

Summary

Using existing charts

- Helm repository
- Helm commands
- Helm hub

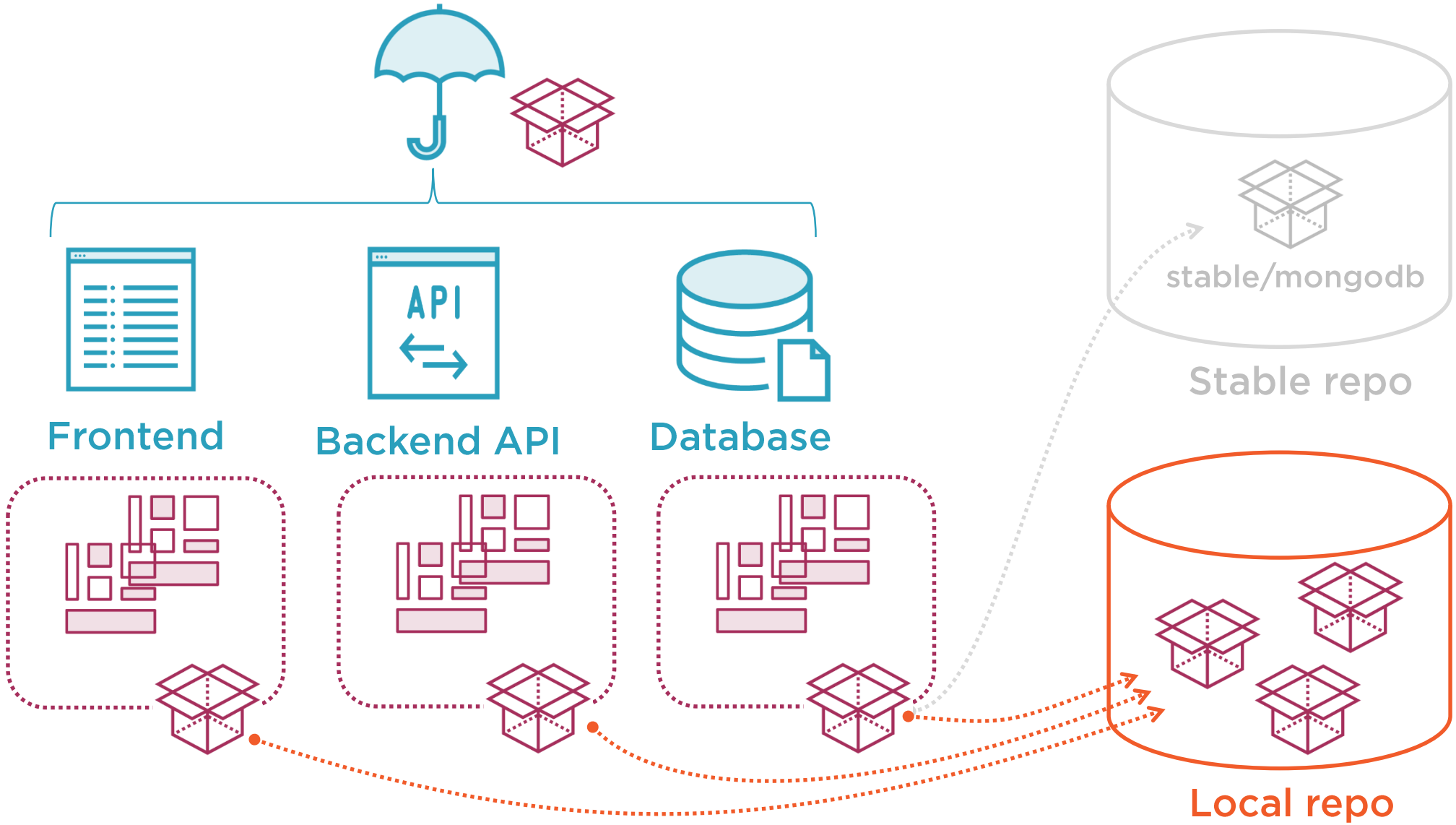
Customize existing charts

- Override values
- Export values
- Map values : child-parent

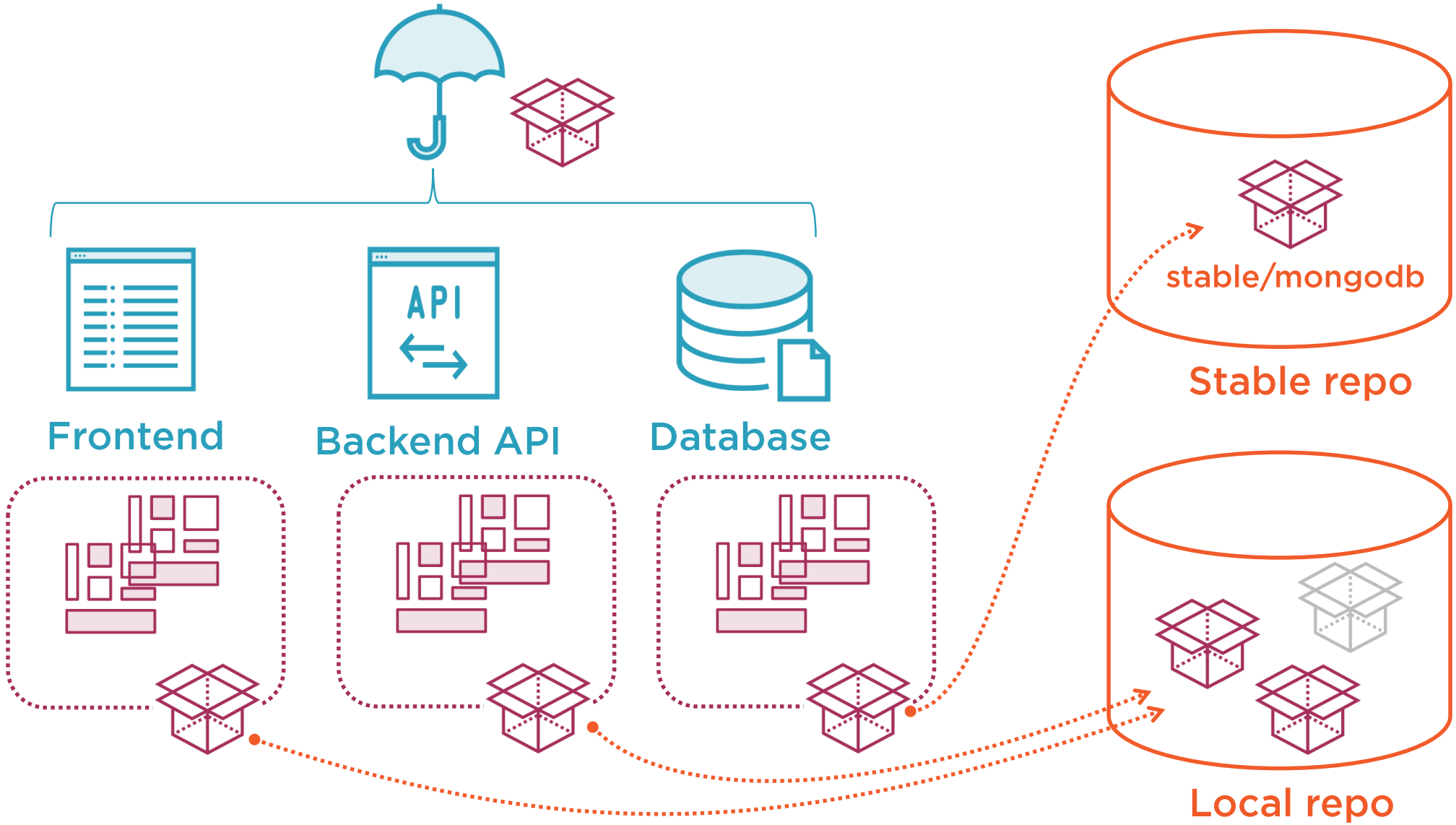
Install stable/mongodb

Install a Wordpress blog with Helm

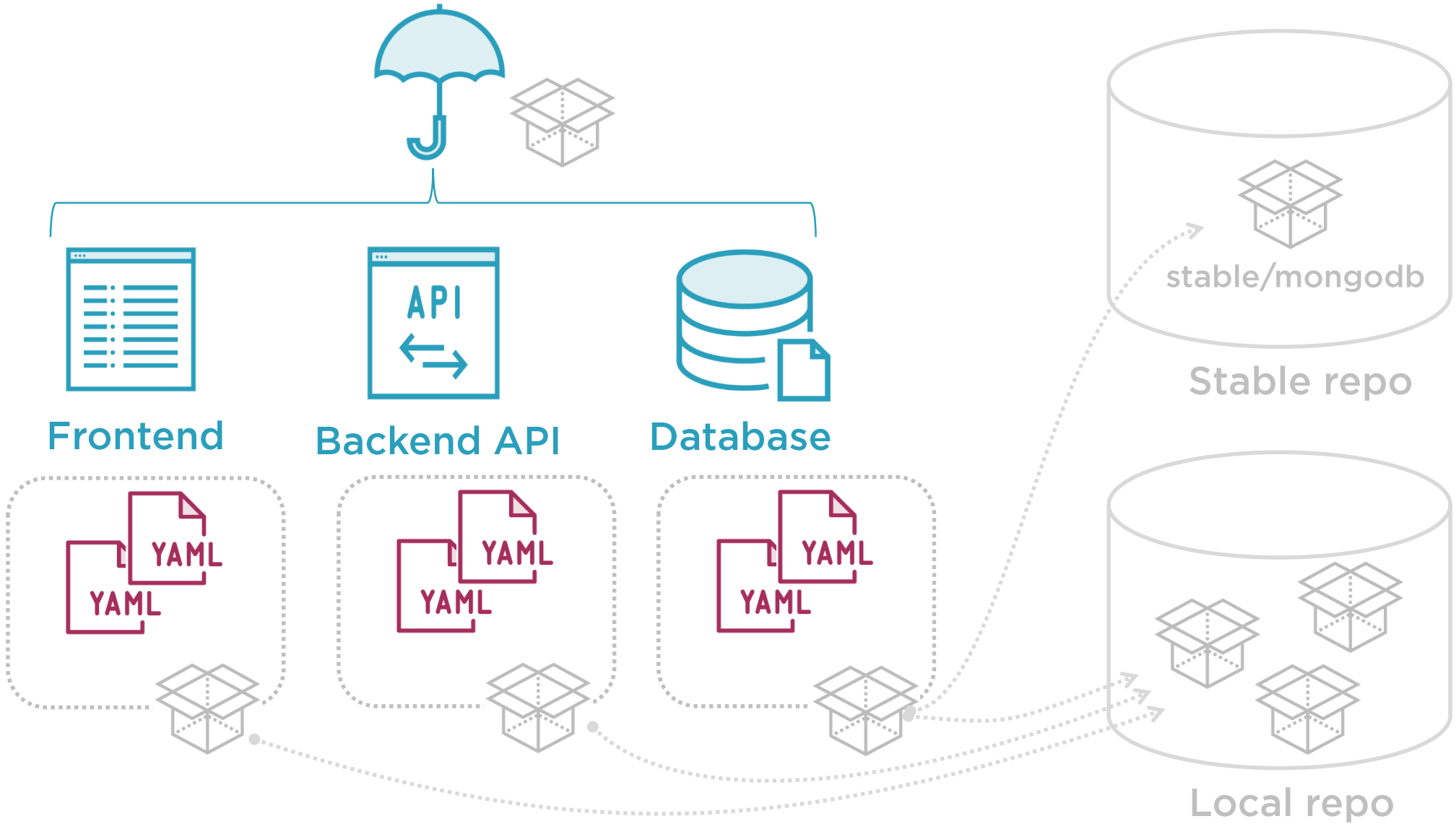
Guestbook application



Guestbook application



Guestbook application



Guestbook application