Using Existing Helm Charts

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Using Existing Helm Charts

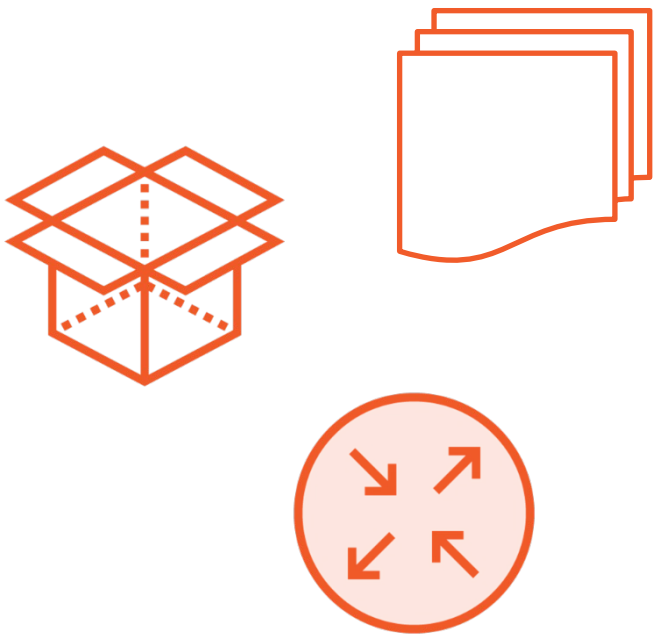
Helm Stable Repository

Search for existing charts

Use existing charts

Customizing child values

From Package to Hub



Sources

⇒ **Packages**

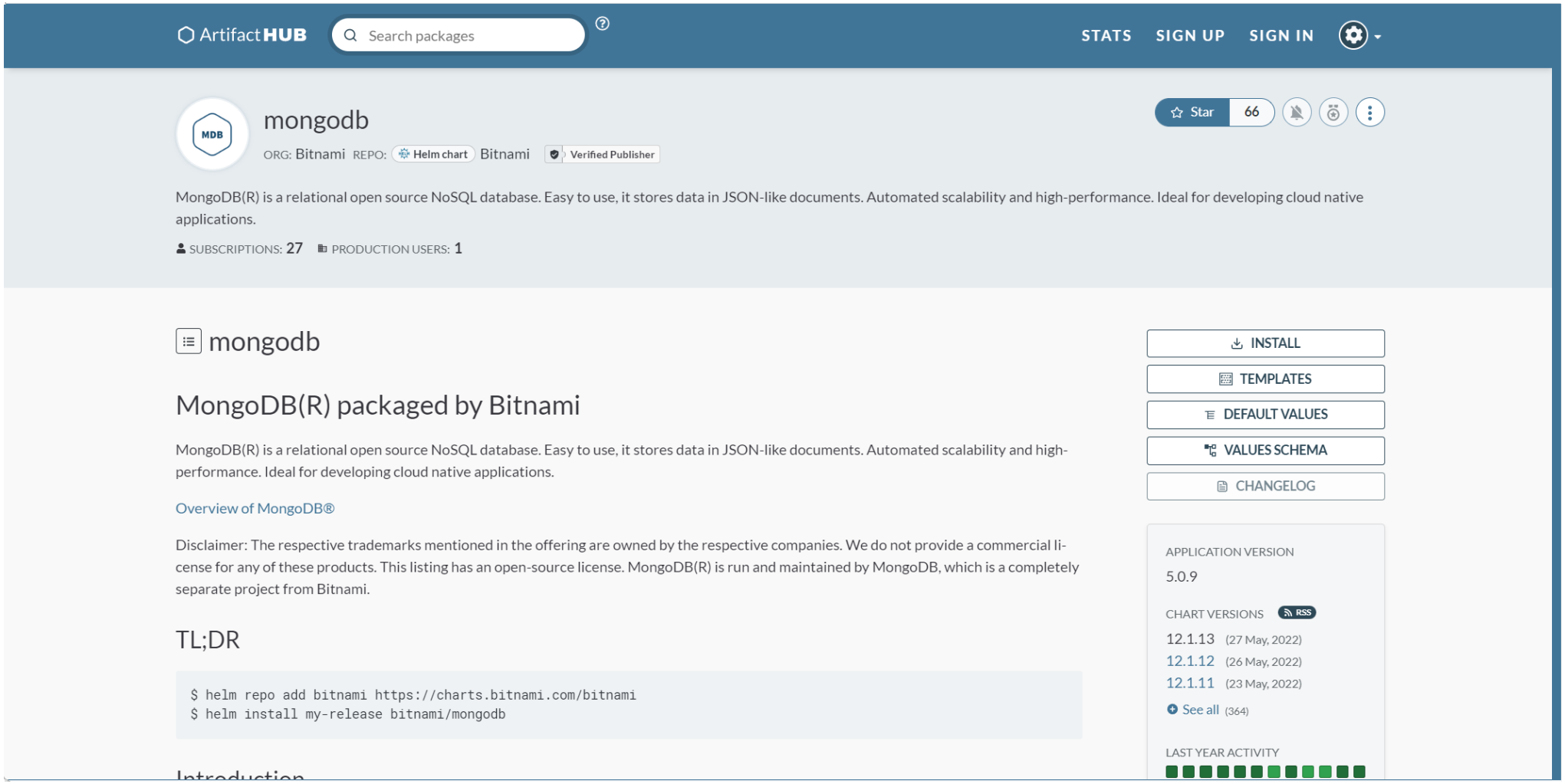
⇒ **Repositories**

⇒ **Hub**

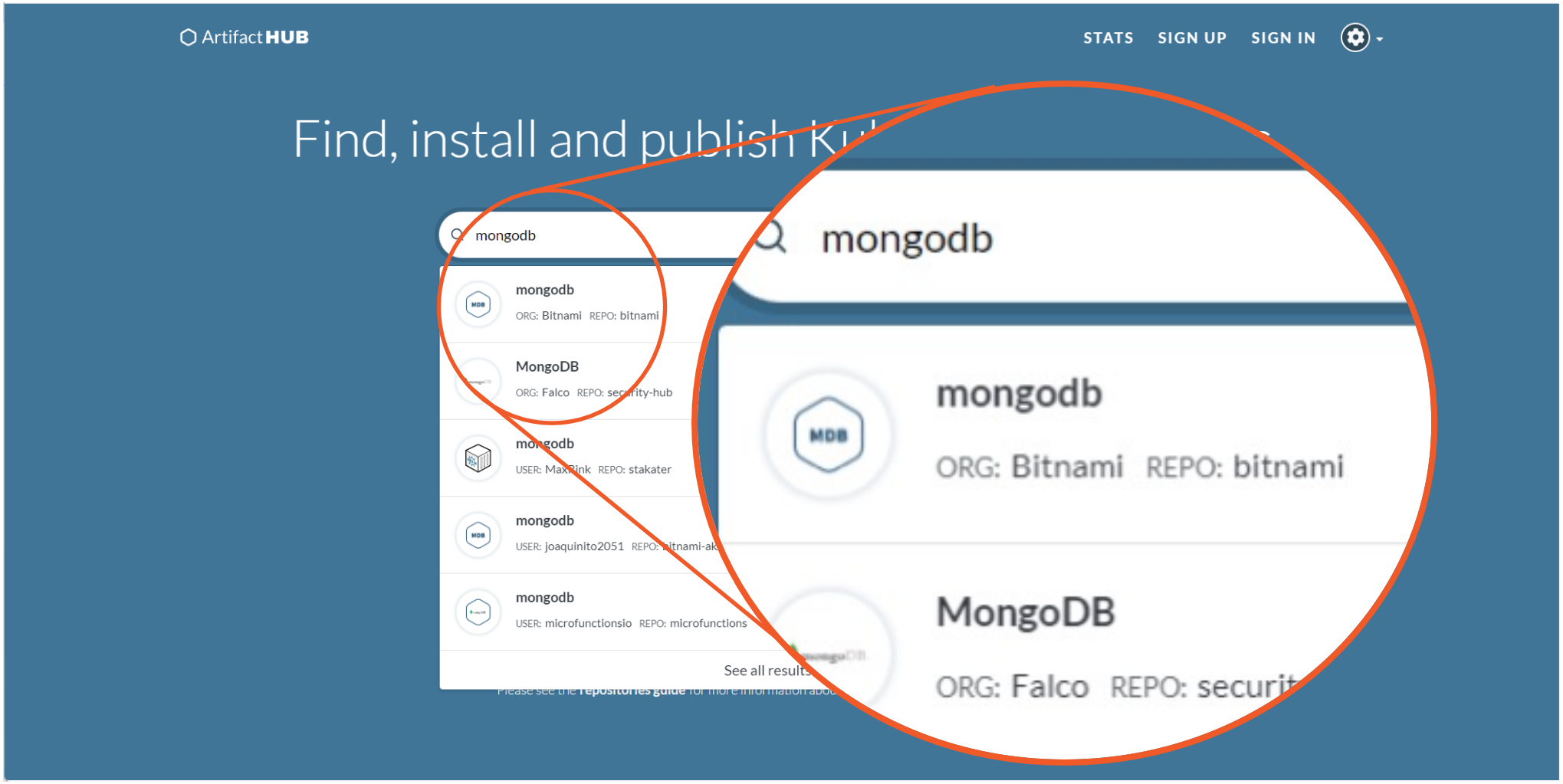
Analogies

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

Helm Repositories



Helm Repositories



Using the Command Line

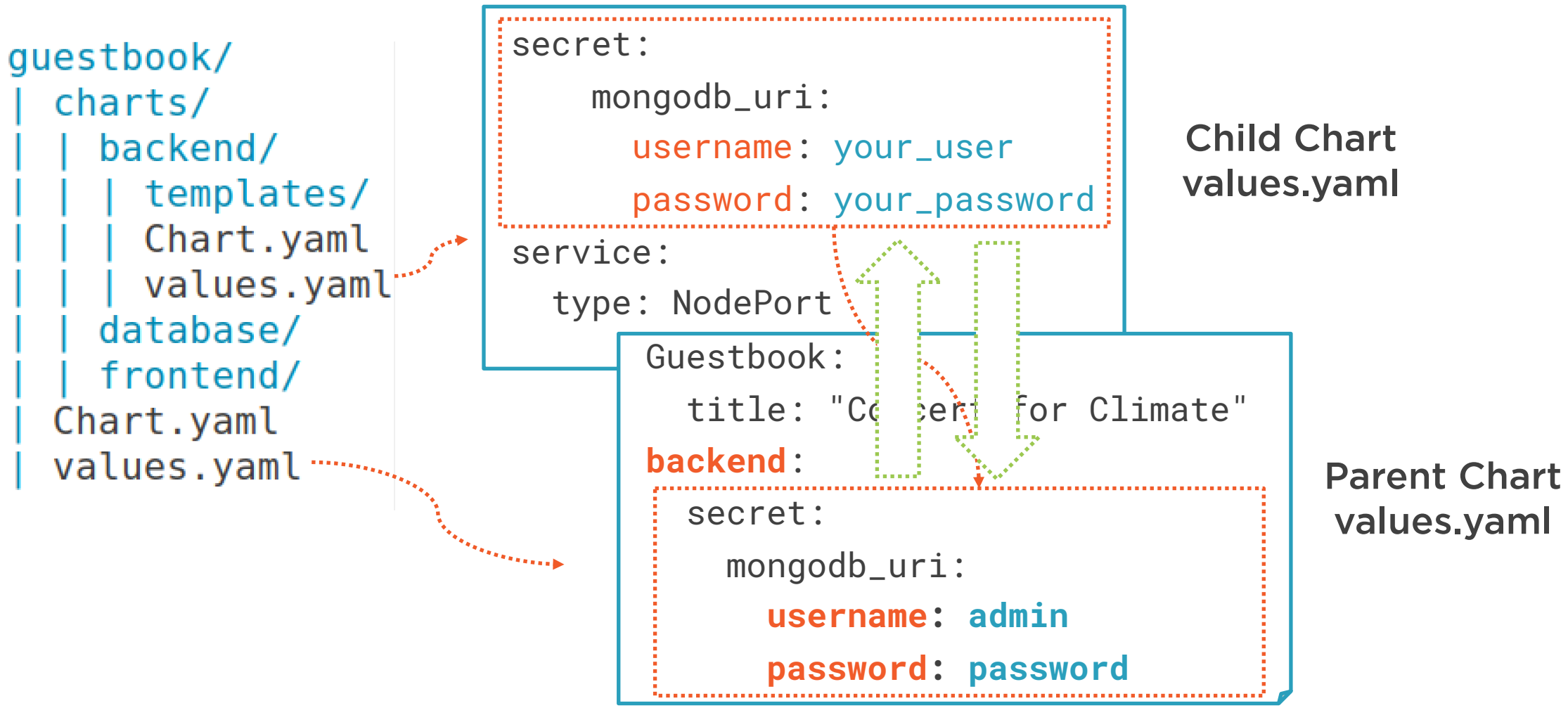
```
> helm repo list
> helm search [hub | repo] keyword
> helm inspect [all | readme | chart | values ] chart_name
> helm show values chart_name
> helm fetch chart_name
> helm dependency update chart_name
```

[+] helm repo add

[-] helm repo remove

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
```

Chart.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/helm3/
lab10_helm_dependencies_export

Exporting Child Values : “child-parent”

```
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

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

Chart.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/helm3/
lab10_helm_dependencies_child-parent

Global Values

```
guestbook/
| charts/
| | backend/
| | | templates/
| | | Chart.yaml
| | | values.yaml
| | database/
| | frontend/
| Chart.yaml
| values.yaml
```

```
secret:
    mongodb_uri:
      username: your_user
      password: your_password
servi
  typ
```

Child Chart
values.yaml

```
global:
  id: "Id<AcB123FDx23>"
```

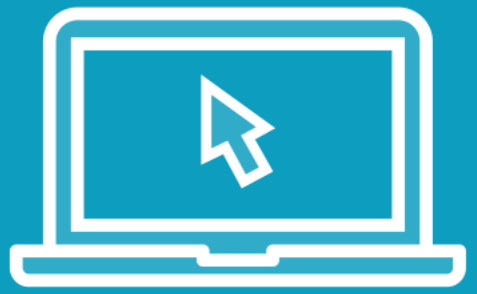
```
metadata:
  labels:
    app.id : {{ .Values.global.id}}
```

```
ate"
```

```
username: admin
password: password
```

Parent Chart
values.yaml

Demo



Using Existing Stable Mongodb Charts

http://github.com/phcollignon/helm3/
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

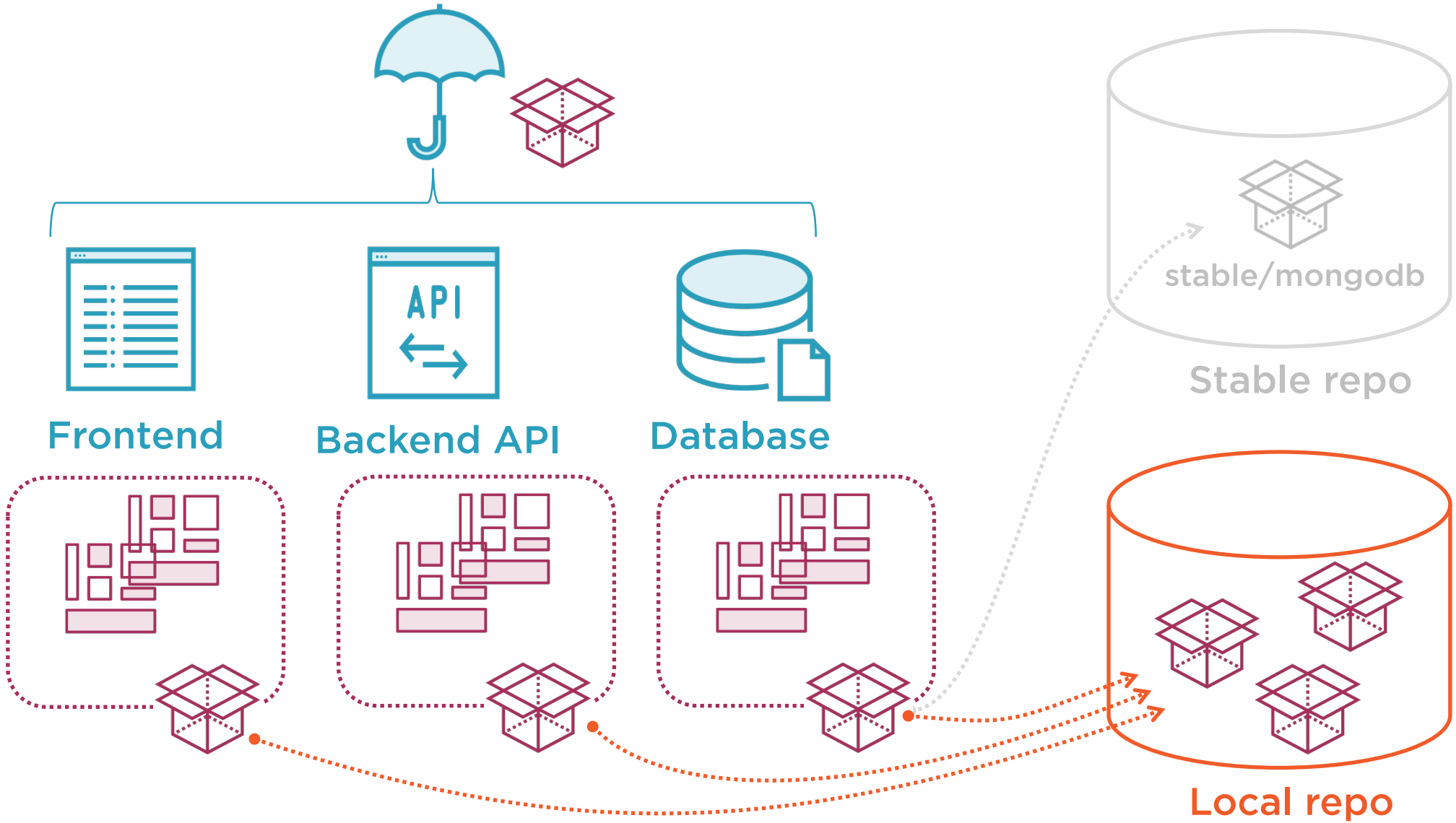
Customize existing charts

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

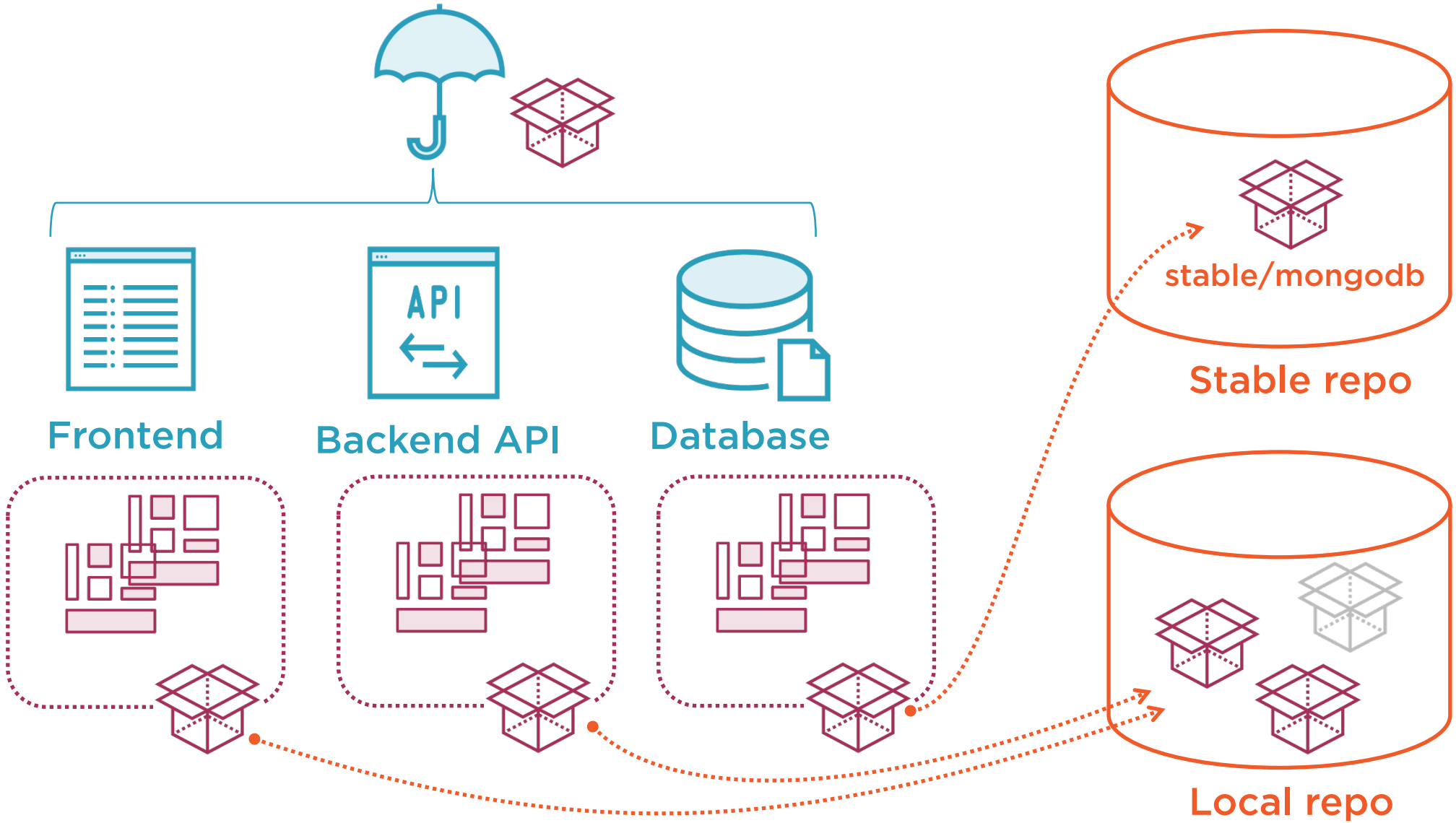
Install stable/mongodb

Install a Wordpress blog with Helm

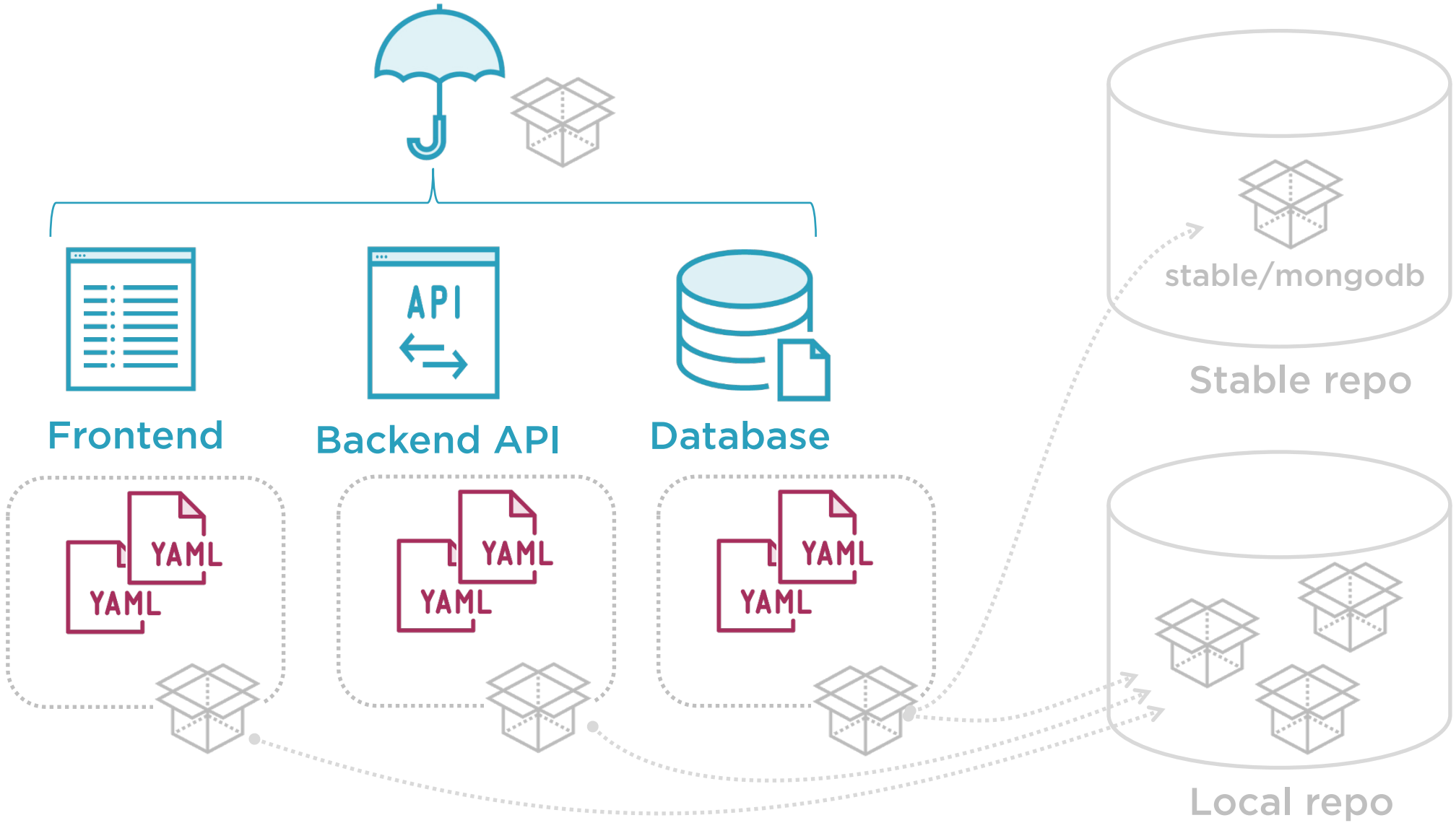
Guestbook application



Guestbook application



Guestbook application



Guestbook application