

Using Existing Helm Charts



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Helm Repositories

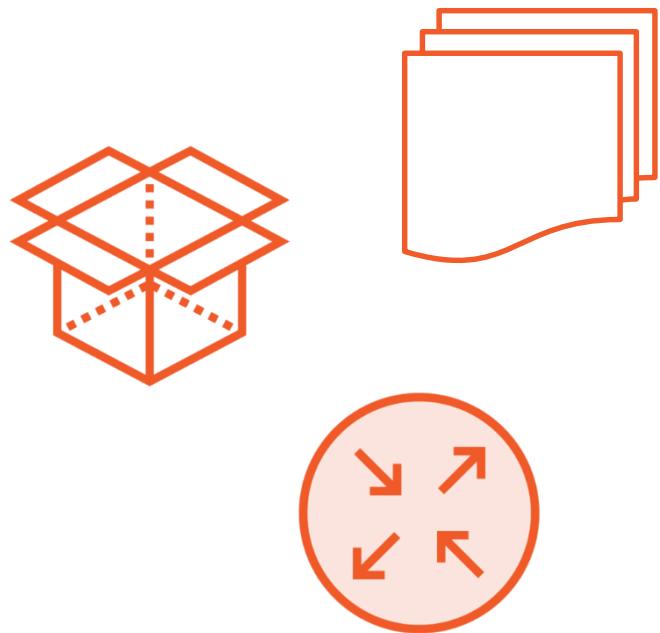
Search for existing charts

Use existing charts

Importing child values



From Package to Hub



Sources

⇒ Packages

⇒ Repositories

⇒ Hub

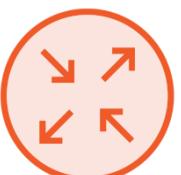


Analogies

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

A screenshot of the Helm Hub interface, showing a grid of charts ready for deployment. The interface has a dark blue header with the text "Helm Hub" and "Discover & launch great Kubernetes-ready apps". A search bar is present, and a message indicates "761 charts ready to deploy". The main area displays a 5x4 grid of charts, each with a logo, name, and version number.

stable/aerospike v4.5.0.5	buildkite/agent 3.12.0	choerodon/agile-service 0.18.3	agones/agones 0.11.0
bitnami/airflow 1.10.3	stable/airflow 1.10.3	stable/ambassador 0.72.0	anchore stable/anchore-engine 0.4.1
banzaicloud-stable/anchore-policy-validator 0.3.2	kiwigrid/any-resource 0.1.0	bitnami/apache 2.4.39	choerodon/api-gateway 0.18.0
beats			ifrost



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

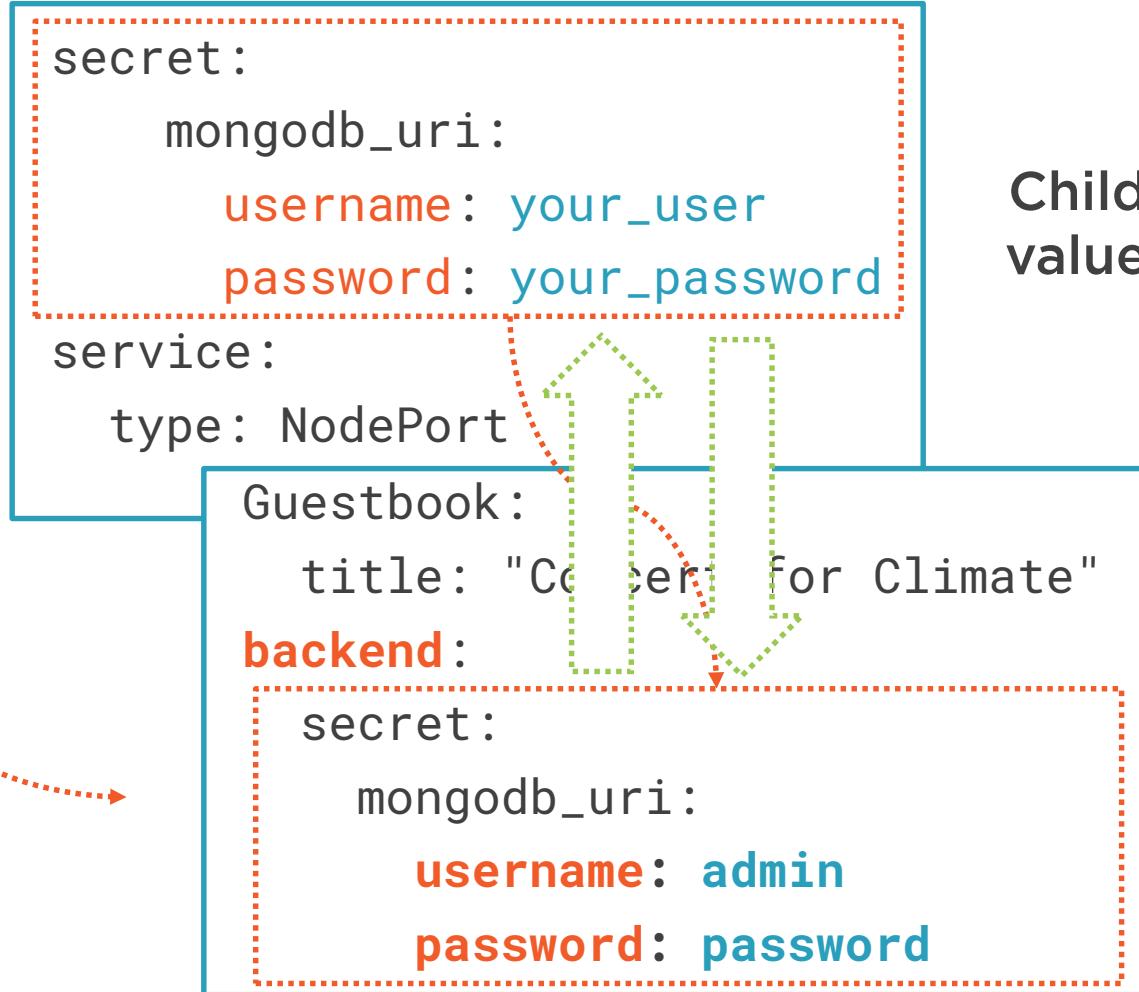


Customizing Existing Charts



Values and Sub-charts

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

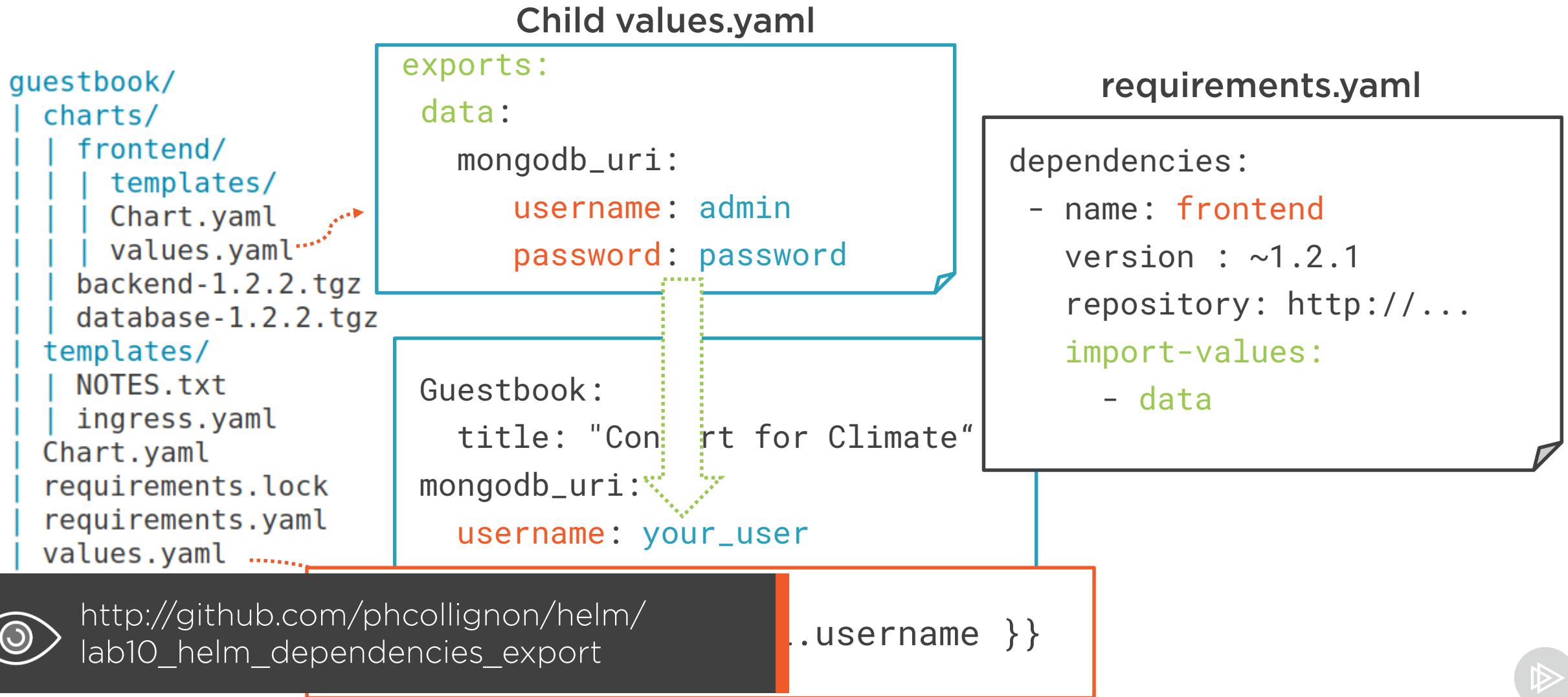


Child Chart
values.yaml

Parent Chart
values.yaml



Exporting Child Values : “exports:”



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
```

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

requirements.yaml

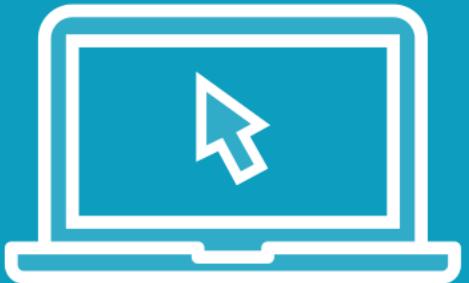
```
dependencies:  
- name: frontend  
  version : ~1.2.1  
  repository: http://...  
import-values:  
- child: data  
  parent: frontend_data
```

 [http://github.com/phcollignon/helm/
lab10_helm_dependencies_child-parent](http://github.com/phcollignon/helm/lab10_helm_dependencies_child-parent)

mongodb_uri.username }}



Demo

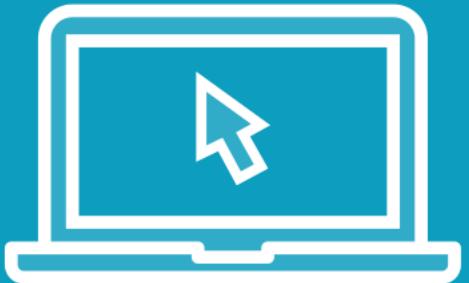


Using existing stable mongodb chart

[http://github.com/phcollignon/helm/
lab11_helm_repository_begin](http://github.com/phcollignon/helm/lab11_helm_repository_begin)
[lab11_helm_repository_final](http://github.com/phcollignon/helm/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

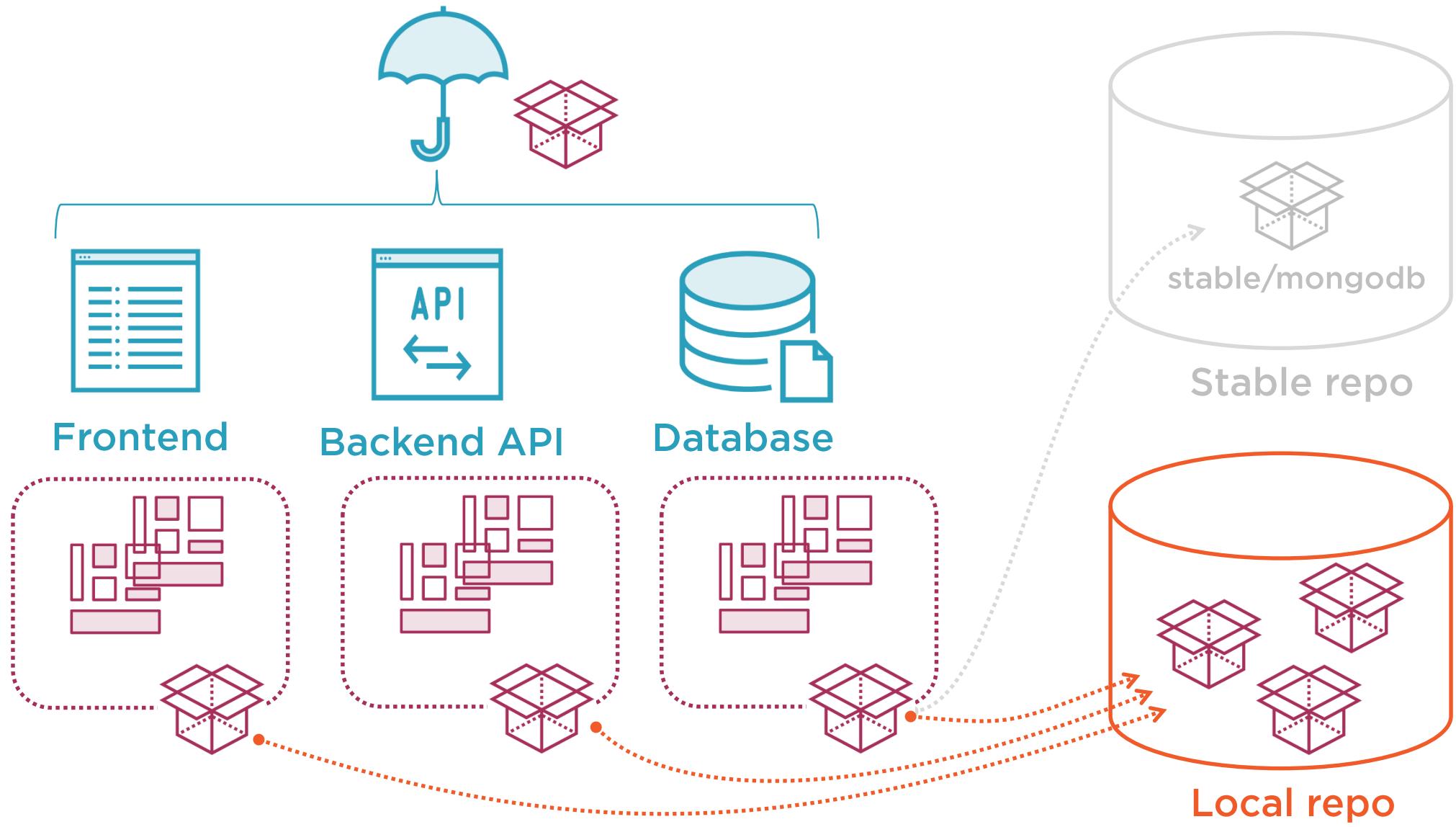
Map values : child-parent

Install stable/mongodb

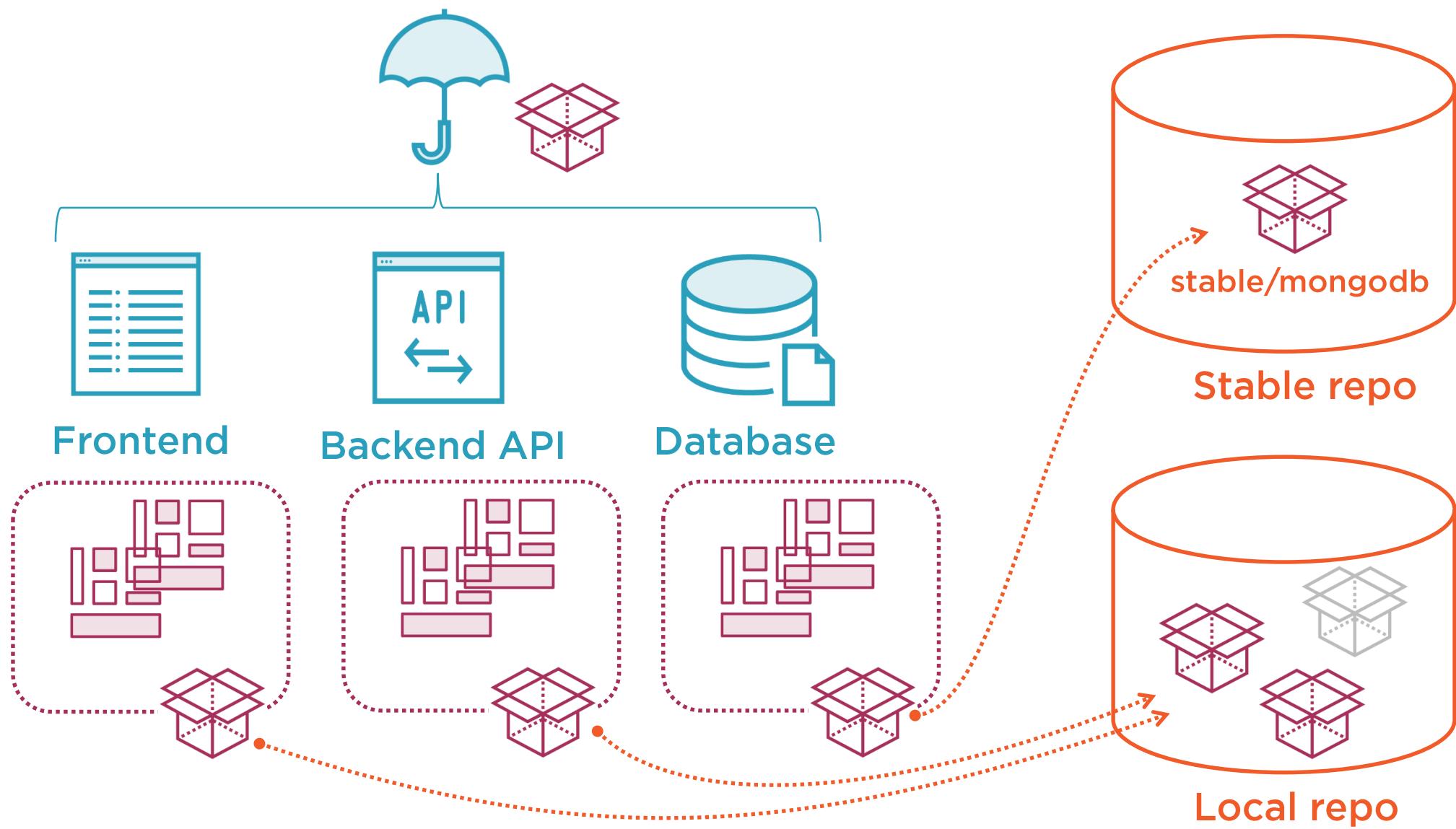
Install a Wordpress blog with Helm



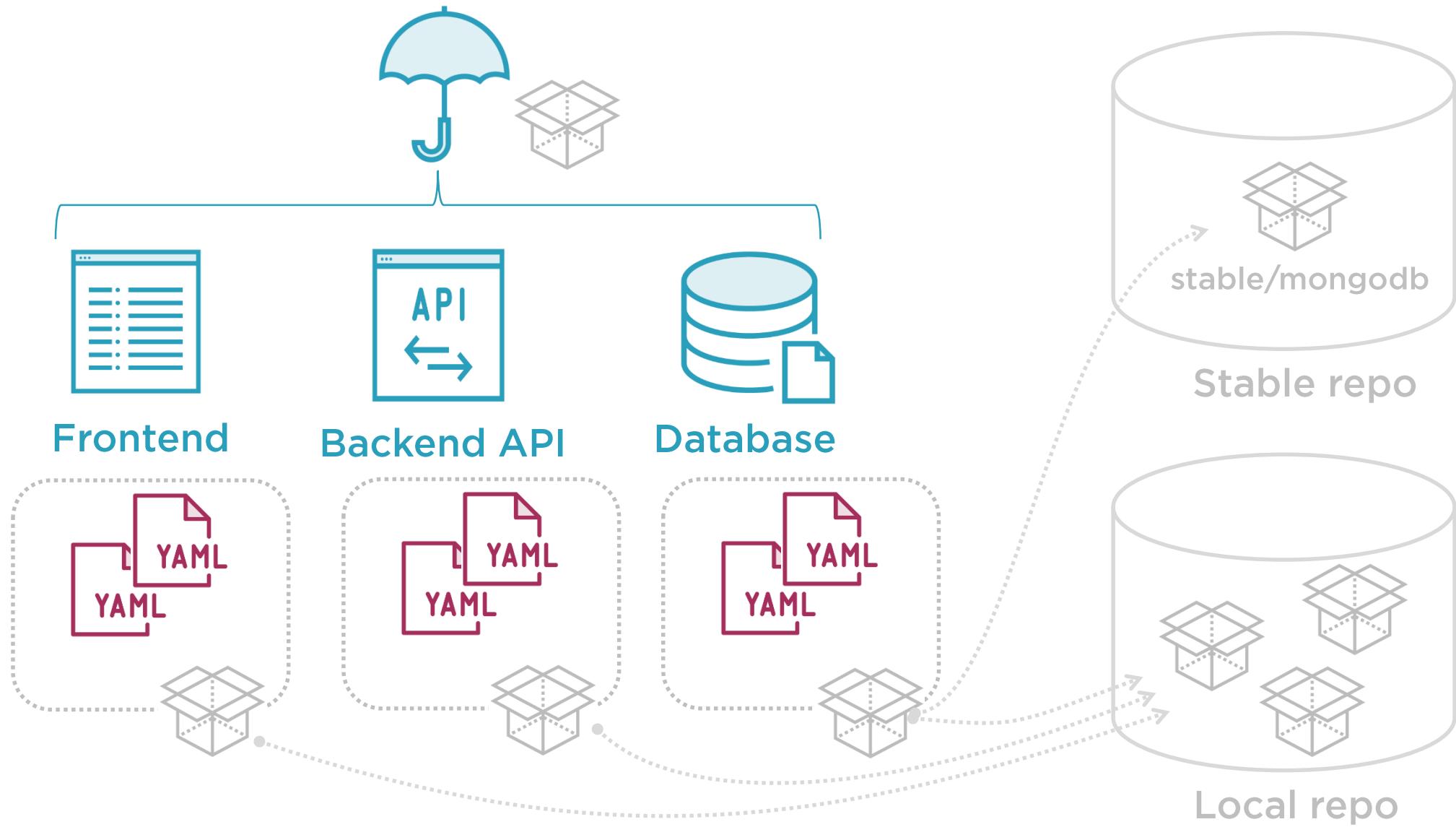
Guestbook application



Guestbook application



Guestbook application



Guestbook application

