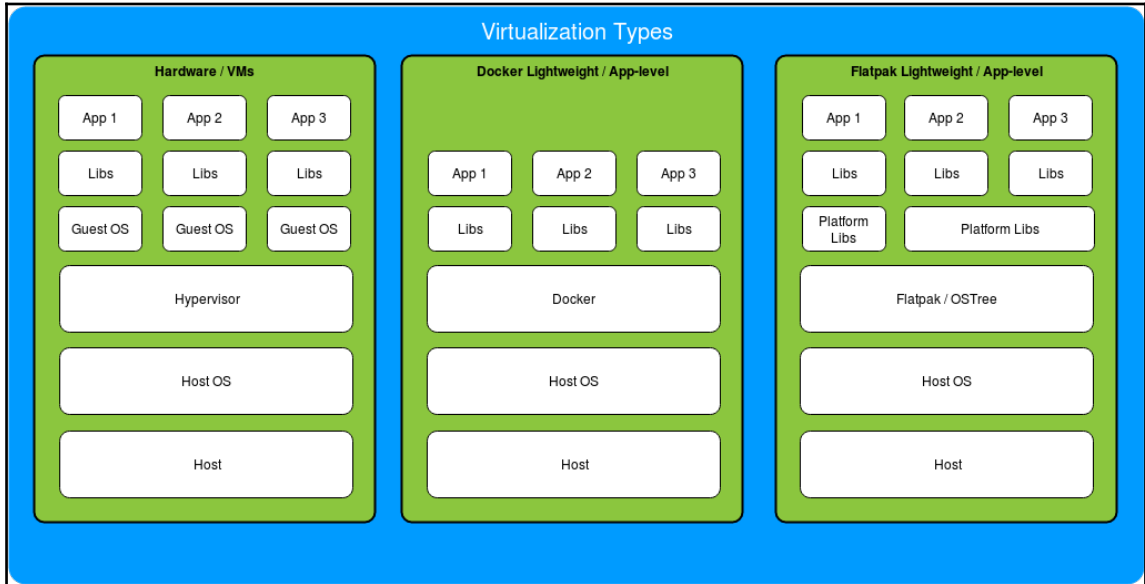
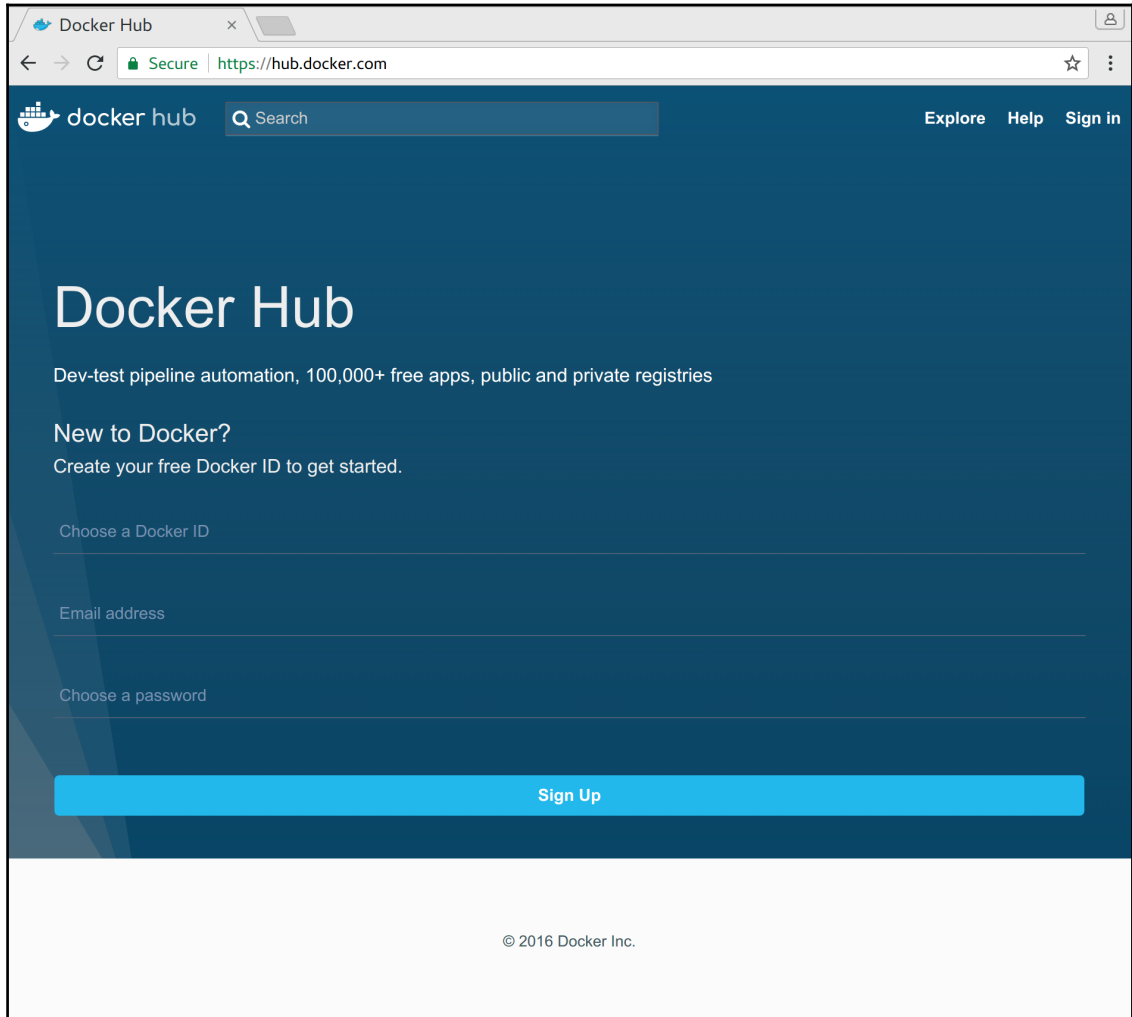


# Chapter 1: Containers - Not Just Another Buzzword



---

# Chapter 2: Rolling Up the Sleeves









Explore - Docker Hub x

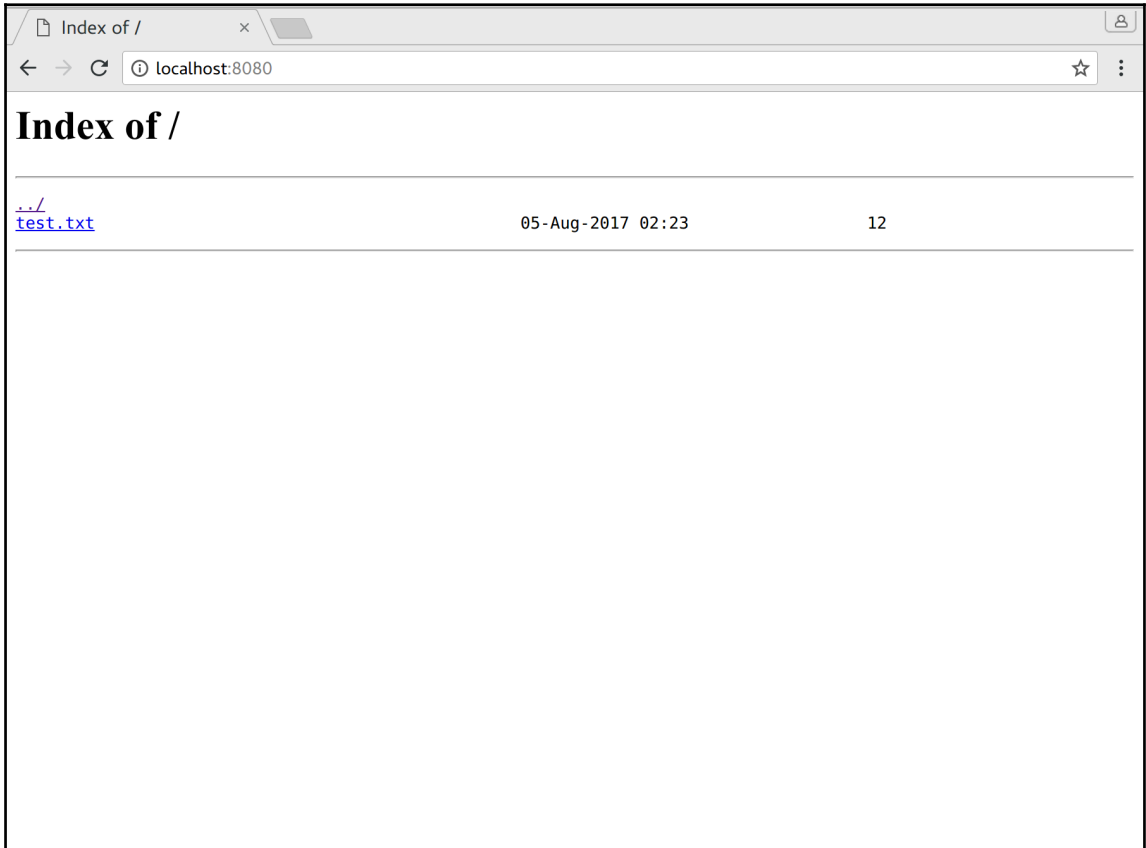
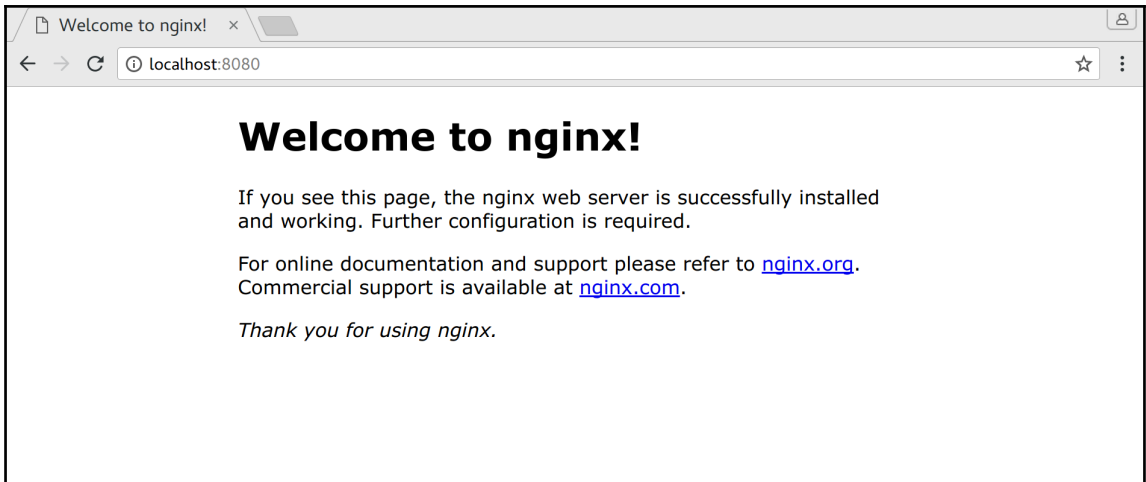
Secure | <https://hub.docker.com/explore/>

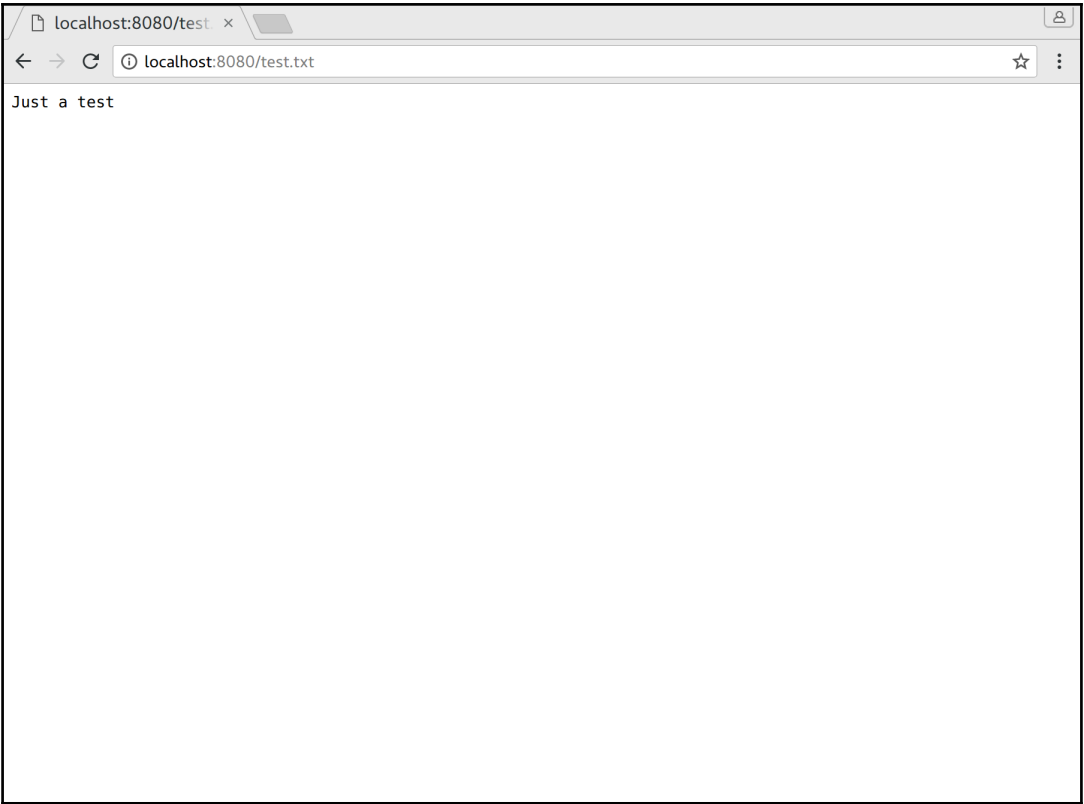
Search Explore Help Sign up Sign in

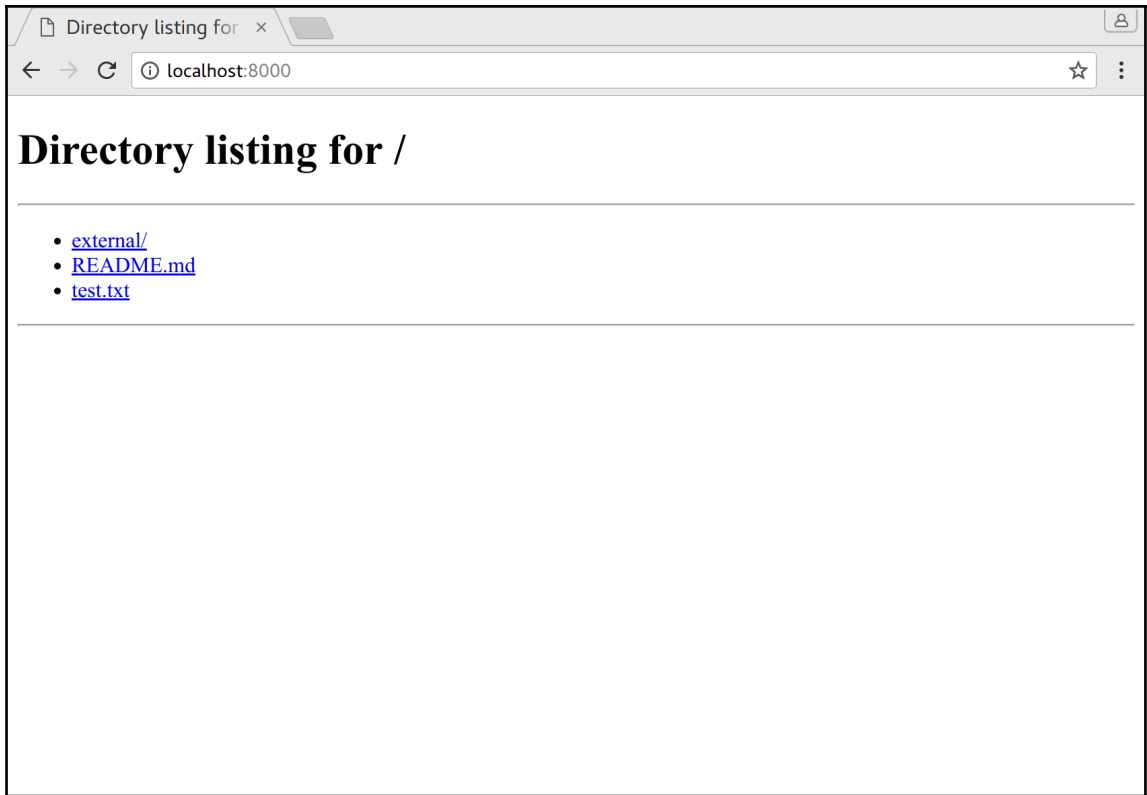
## Explore Official Repositories

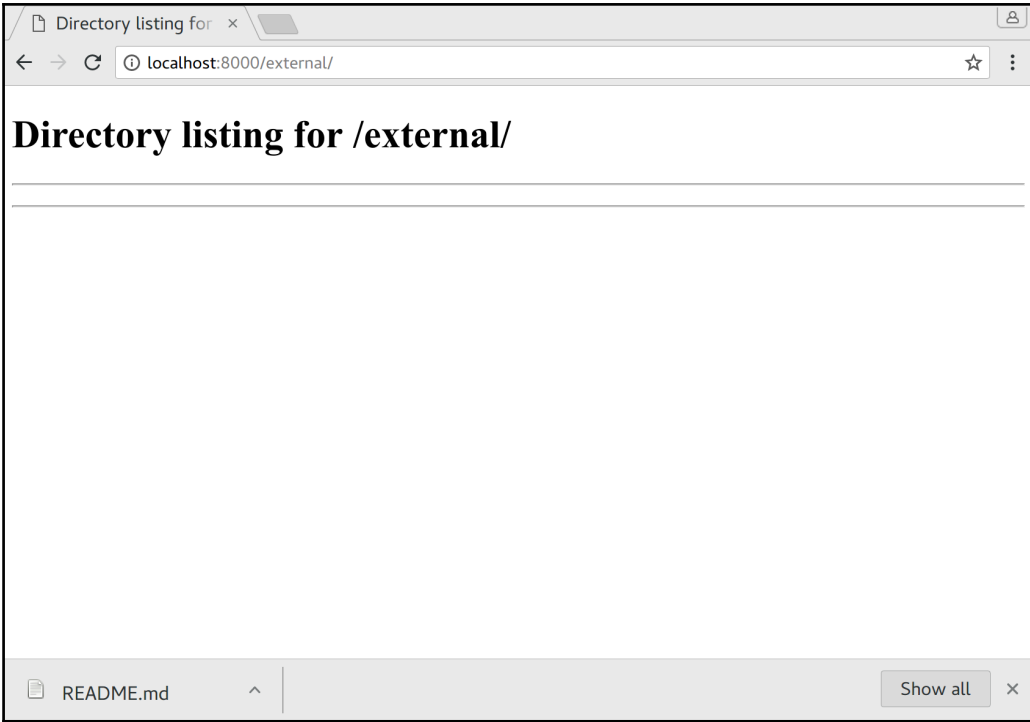
 <b>nginx</b> official	6.5K STARS	10M+ PULLS	<a href="#">DETAILS</a>
 <b>redis</b> official	4.0K STARS	10M+ PULLS	<a href="#">DETAILS</a>
 <b>busybox</b> official	1.1K STARS	10M+ PULLS	<a href="#">DETAILS</a>
 <b>ubuntu</b> official	6.3K STARS	10M+ PULLS	<a href="#">DETAILS</a>
 <b>alpine</b> official	2.4K STARS	10M+ PULLS	<a href="#">DETAILS</a>
 <b>registry</b> official	1.6K STARS	10M+ PULLS	<a href="#">DETAILS</a>

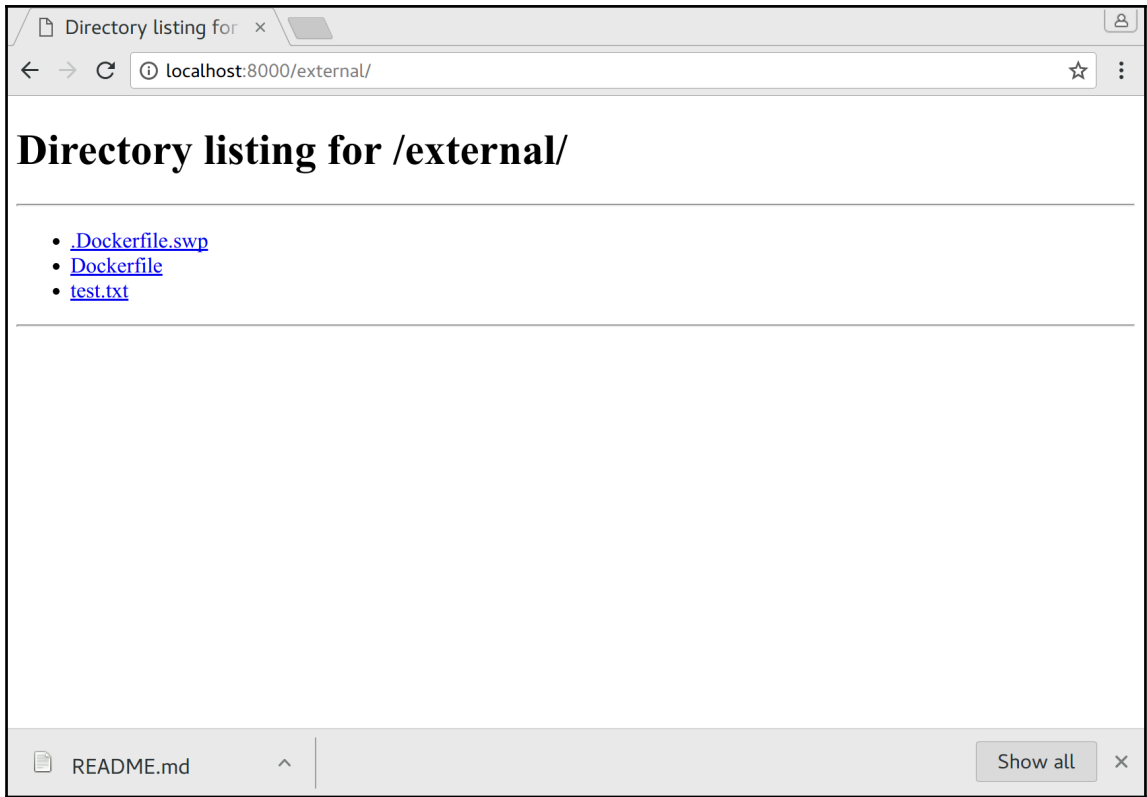
[https://hub.docker.com/\\_/nginx/](https://hub.docker.com/_/nginx/)







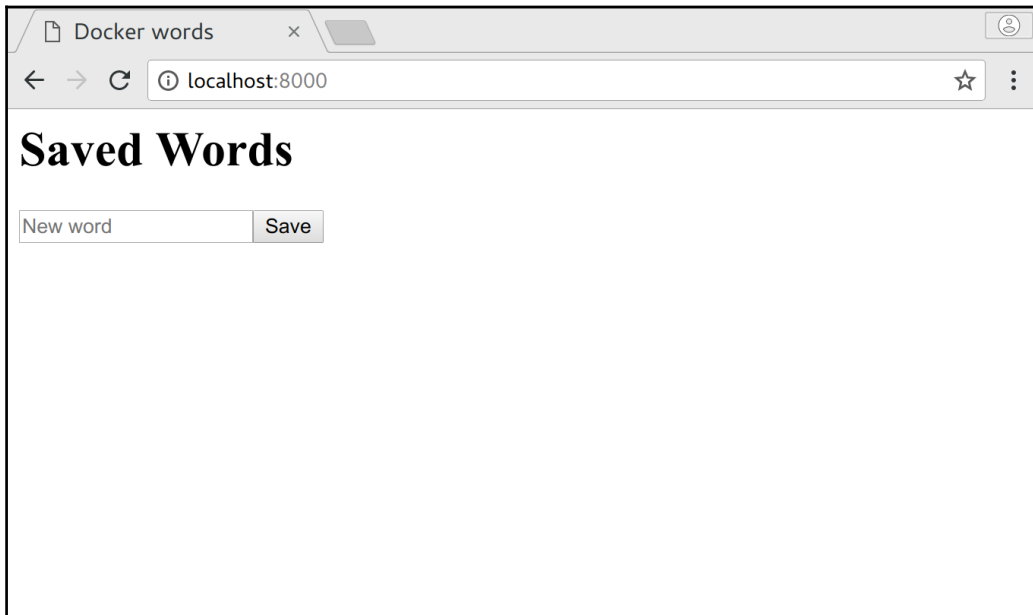
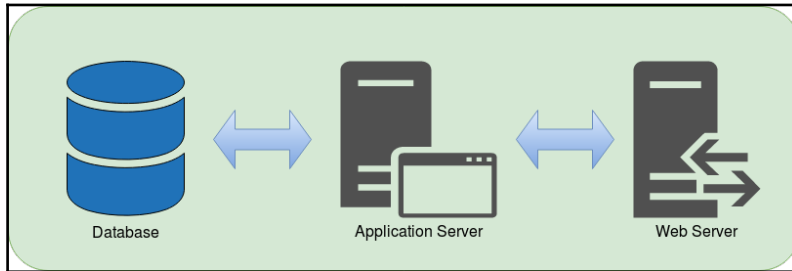


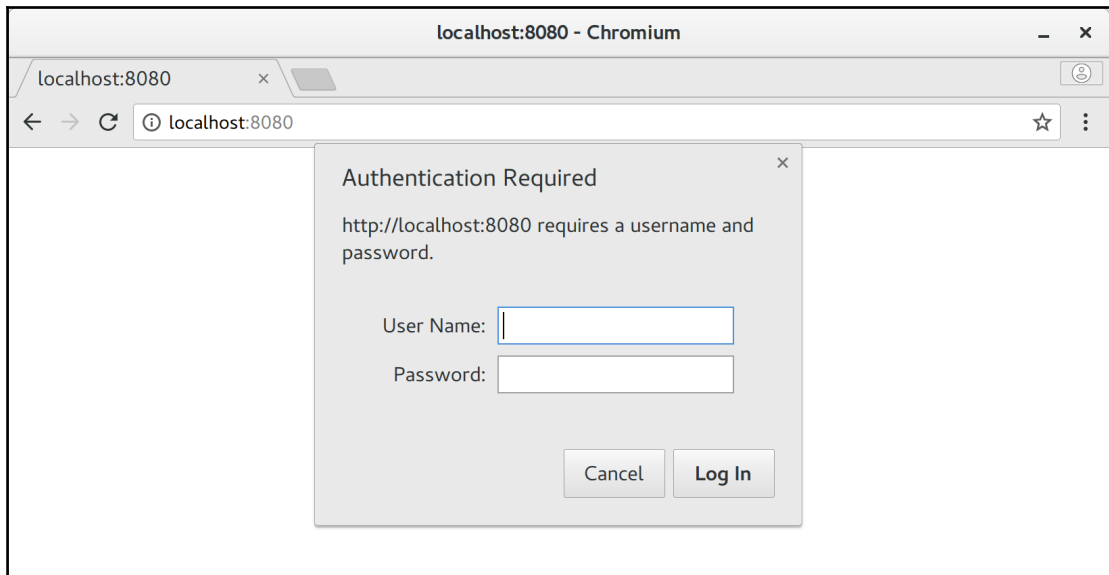
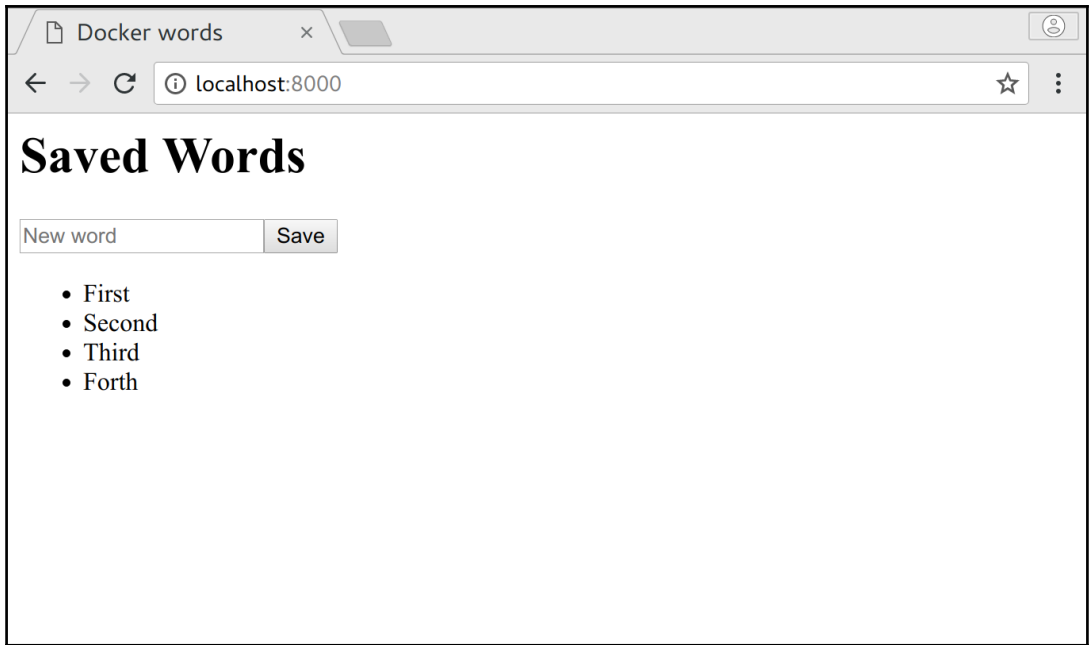


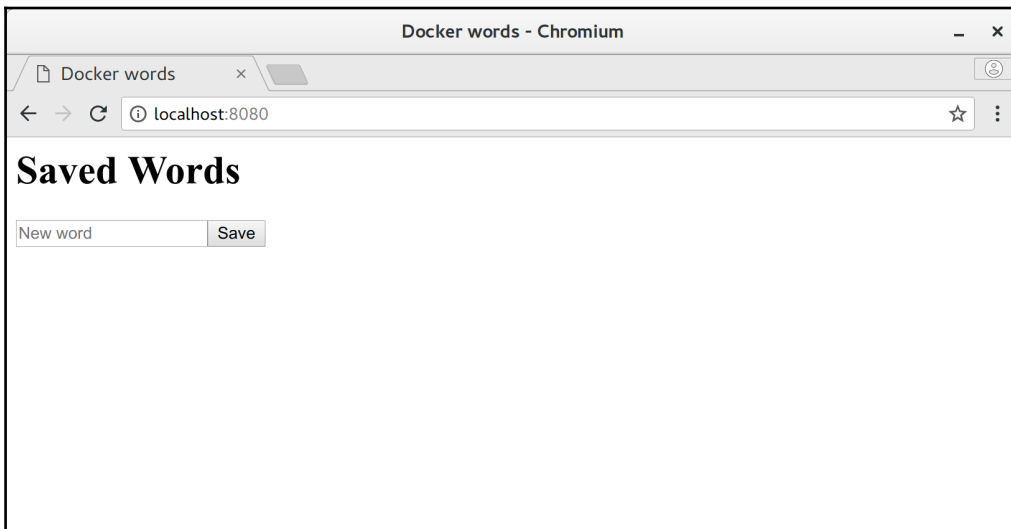
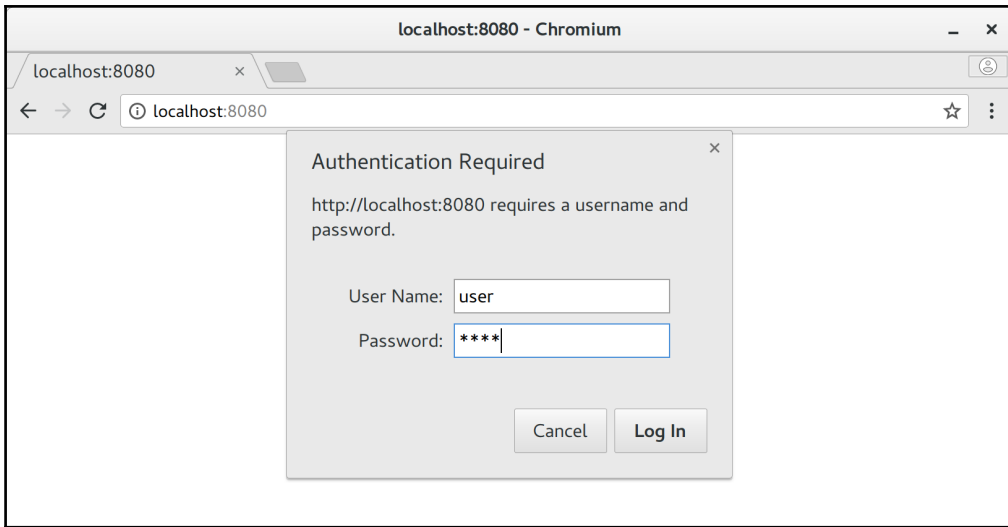


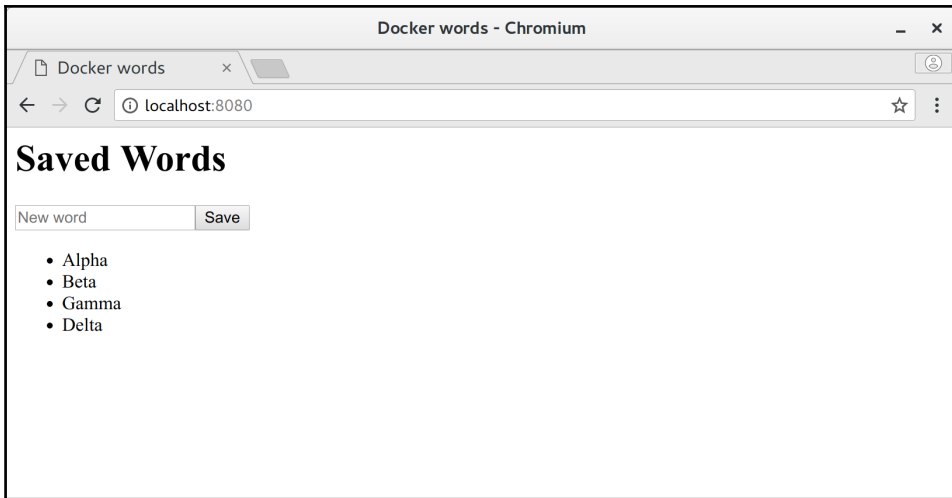
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## Chapter 3: Service Decomposition



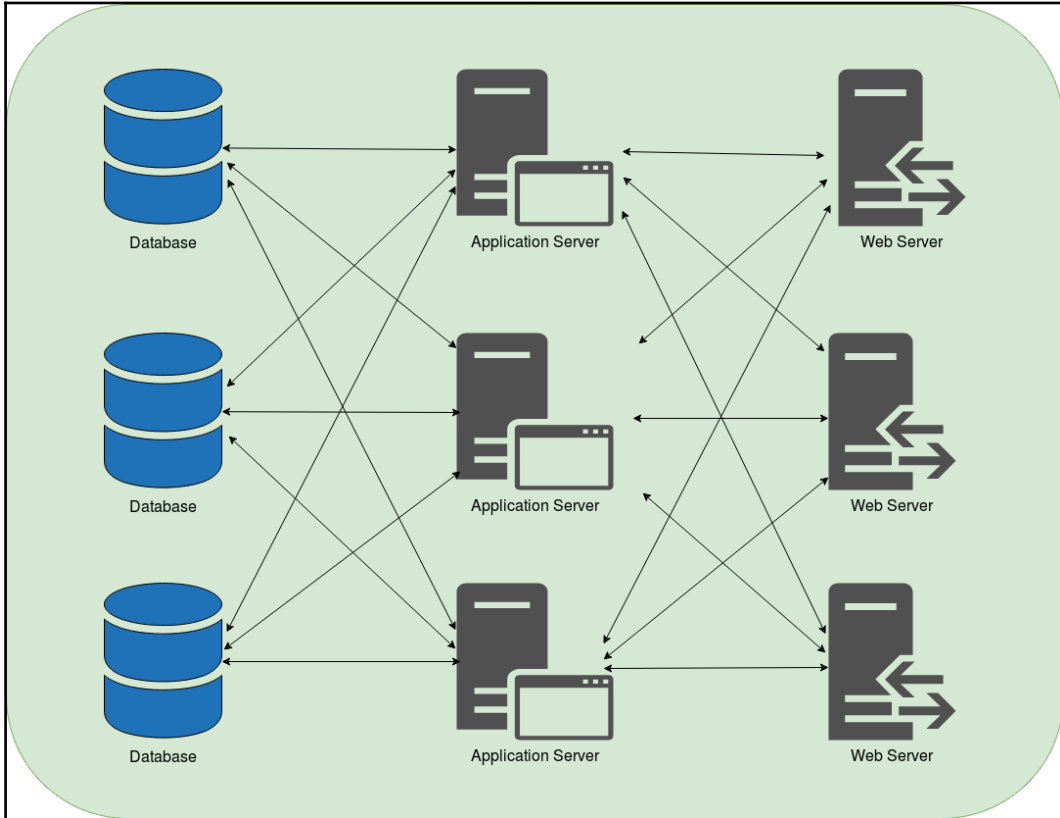


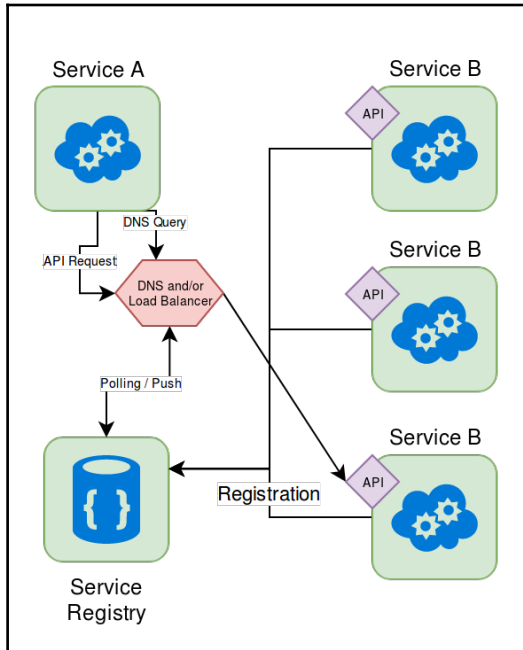
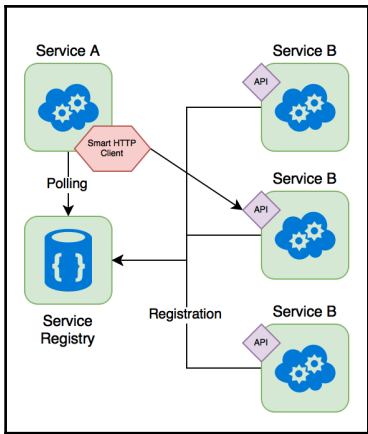


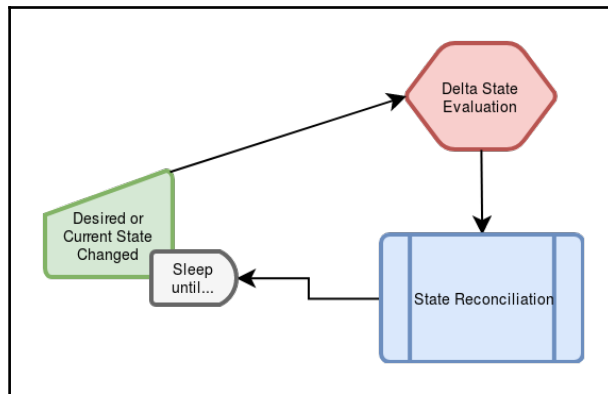
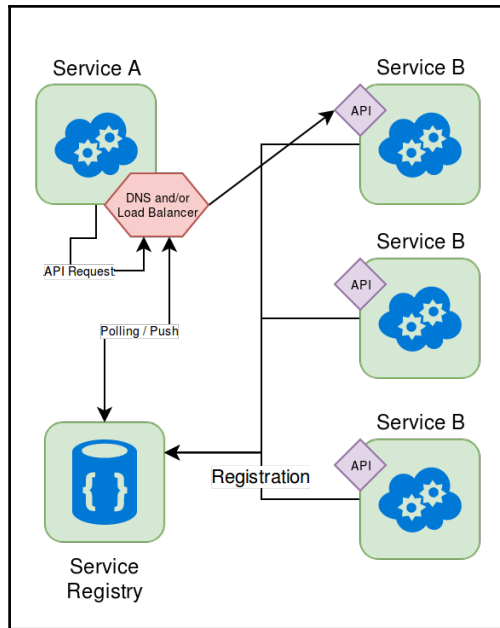


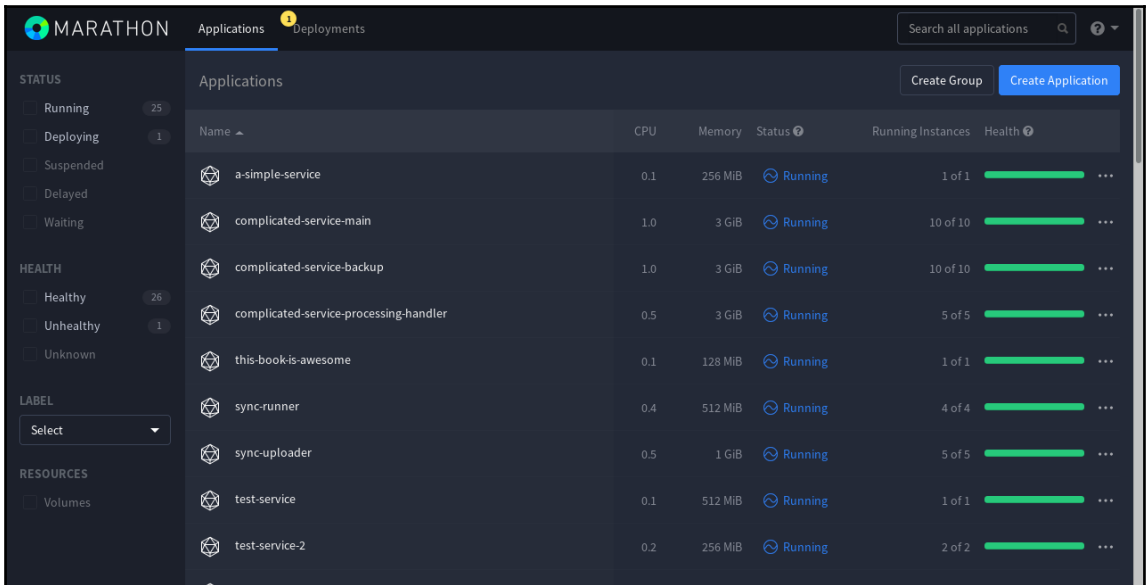
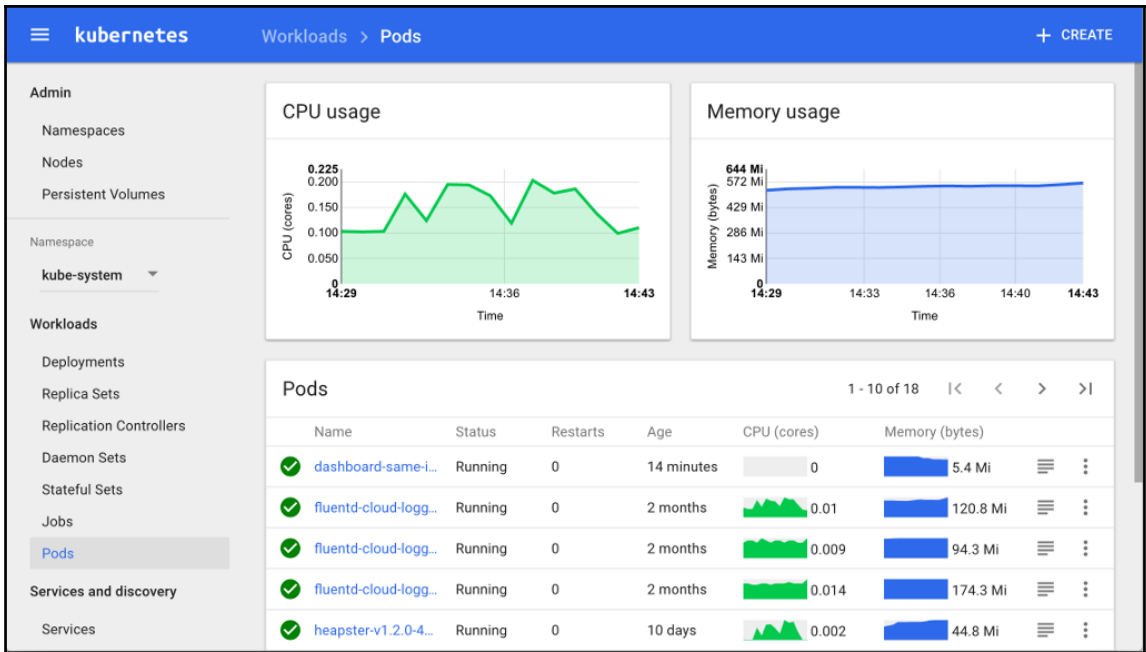
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## Chapter 4: Scaling the Containers

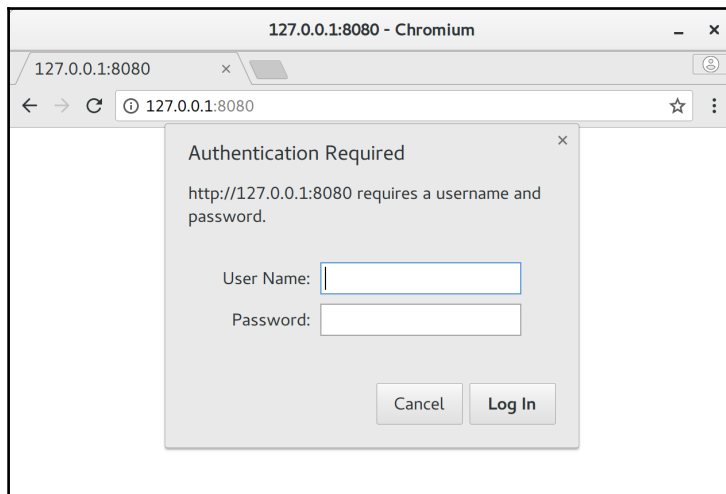
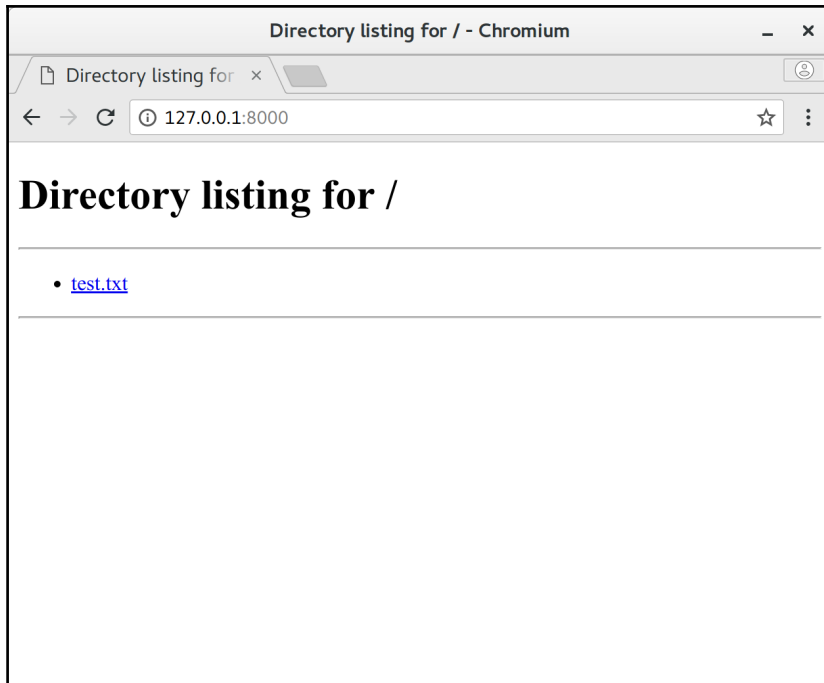


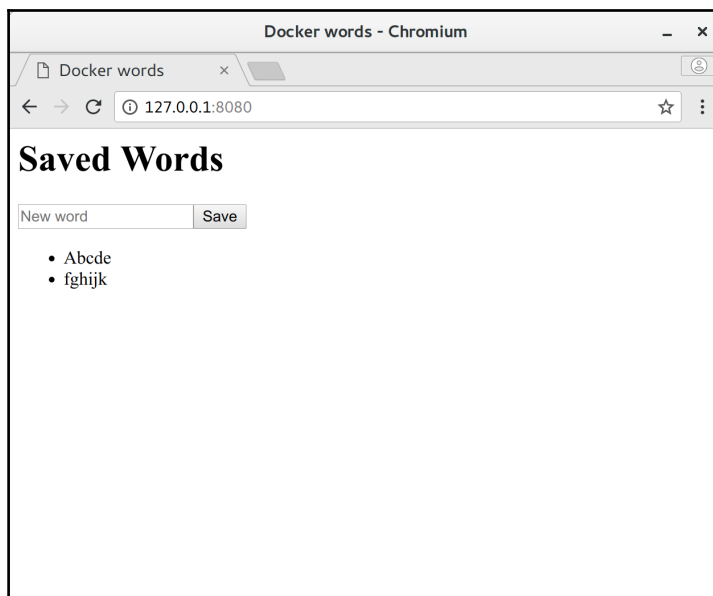
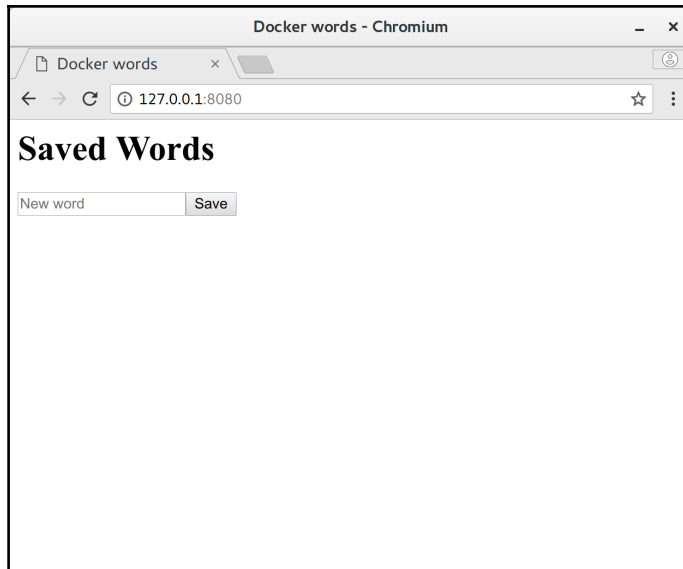






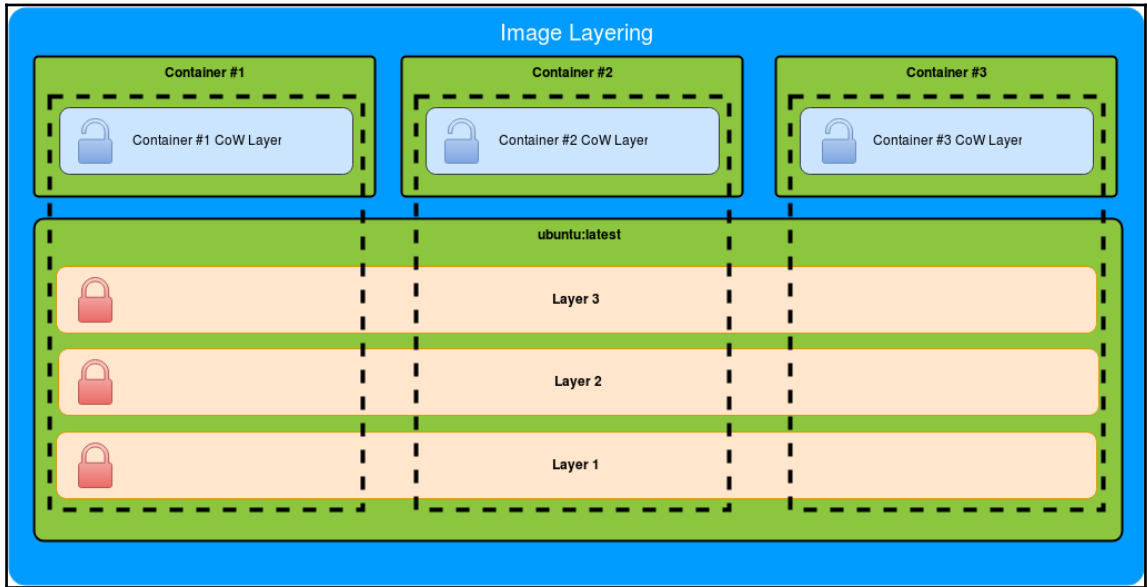


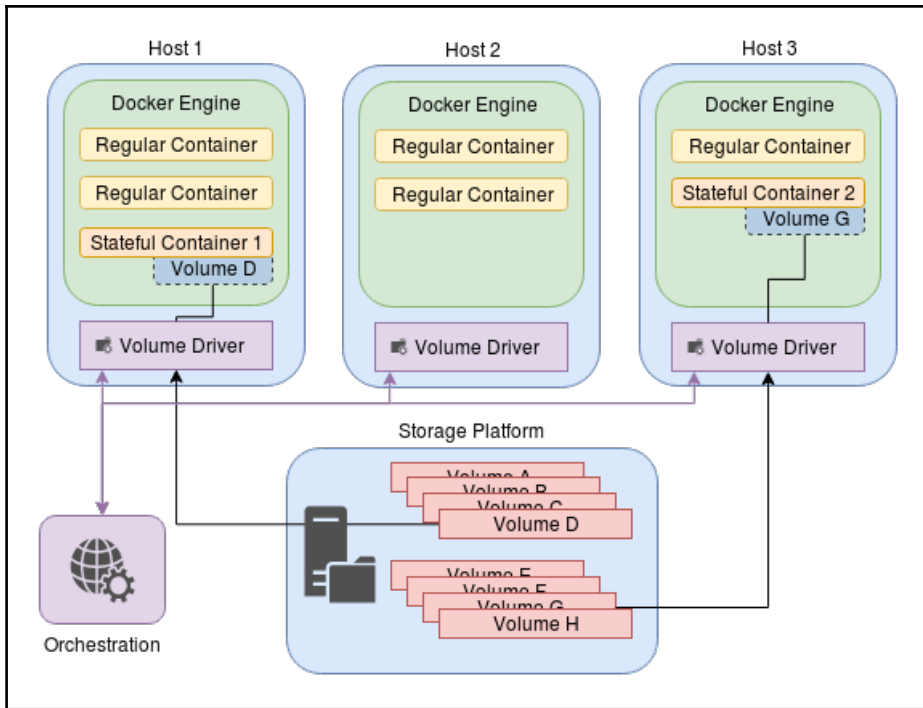


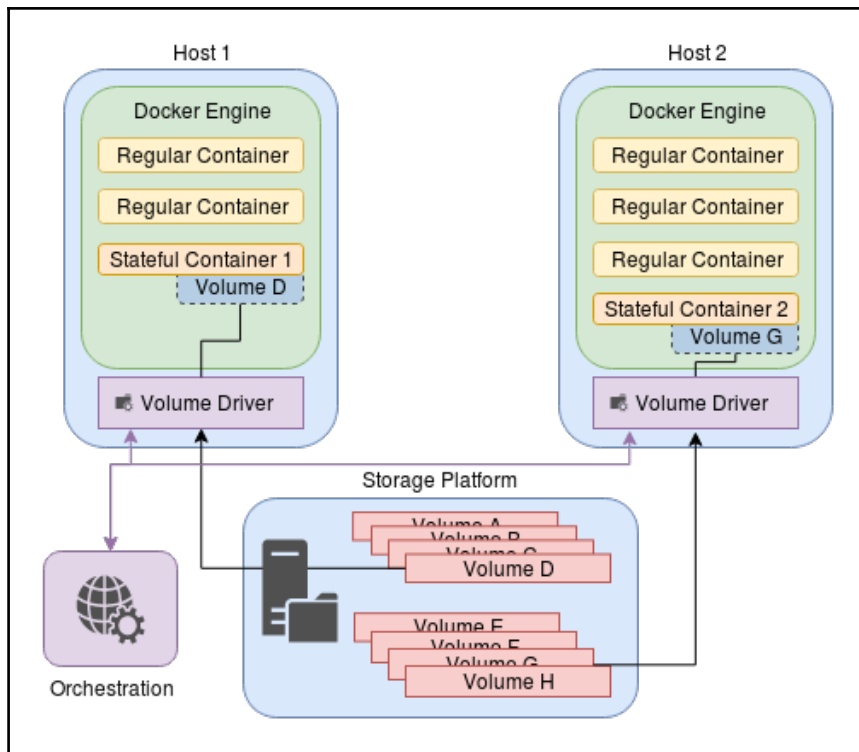


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# Chapter 5: Keeping the Data Persistent

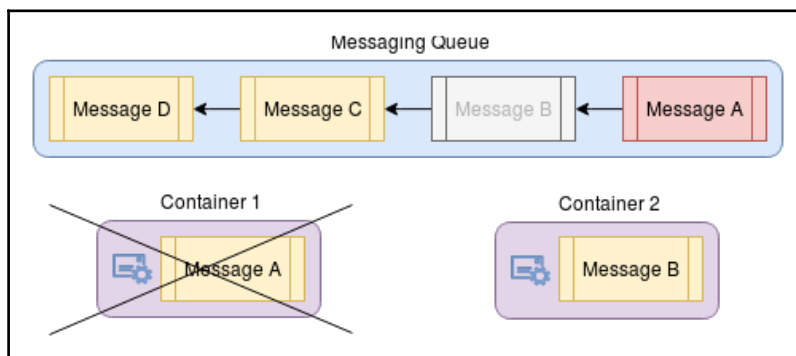
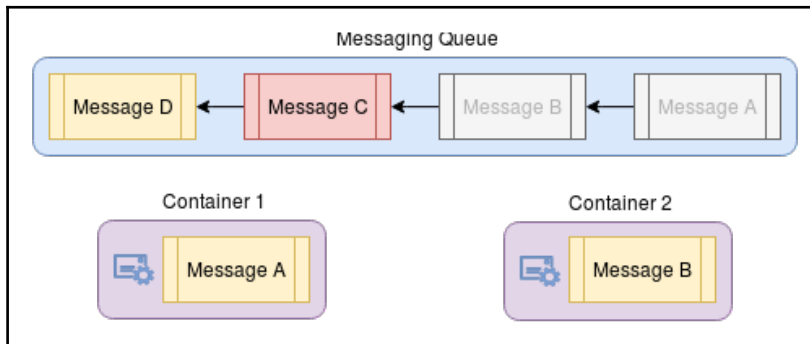
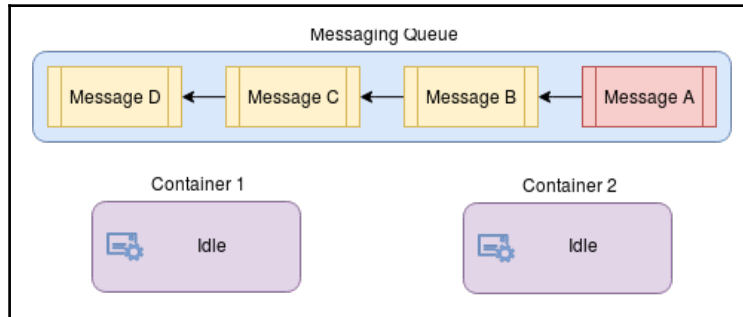


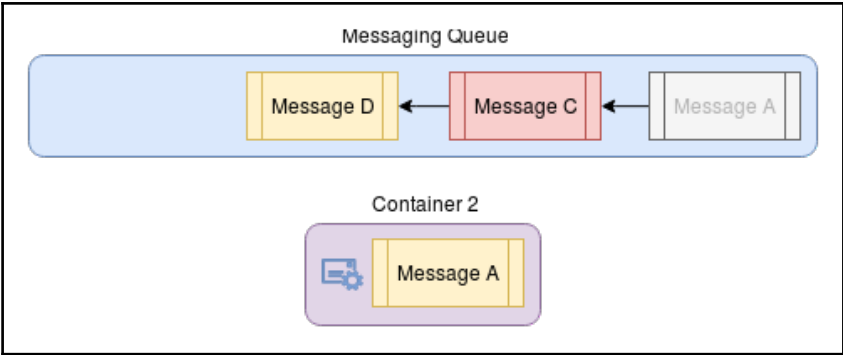




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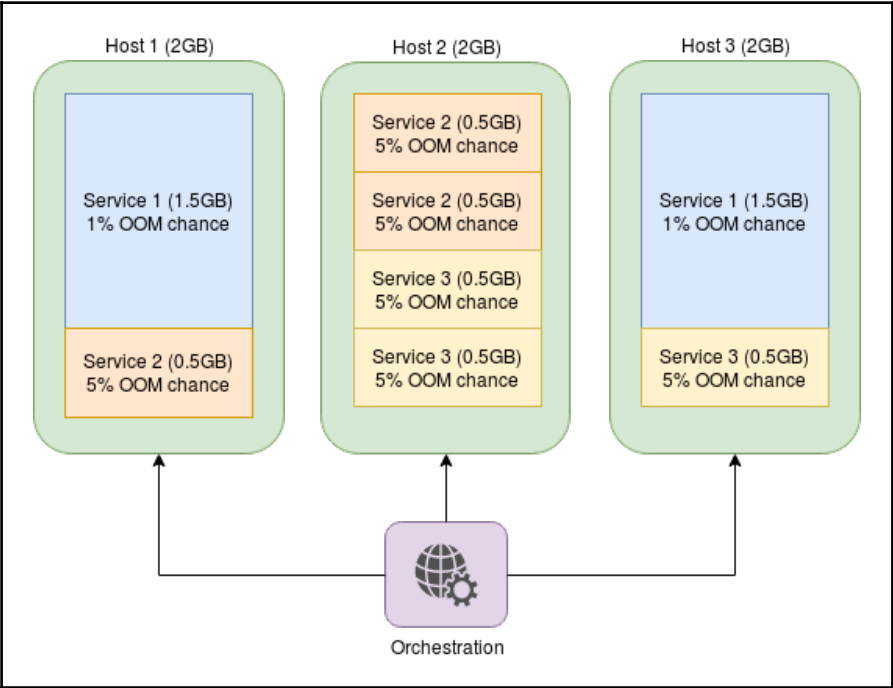
## Chapter 6: Advanced Deployment Topics



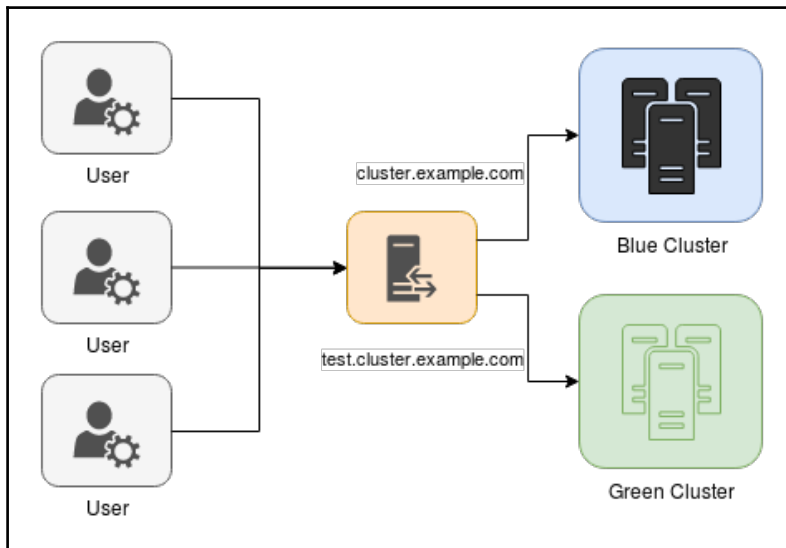
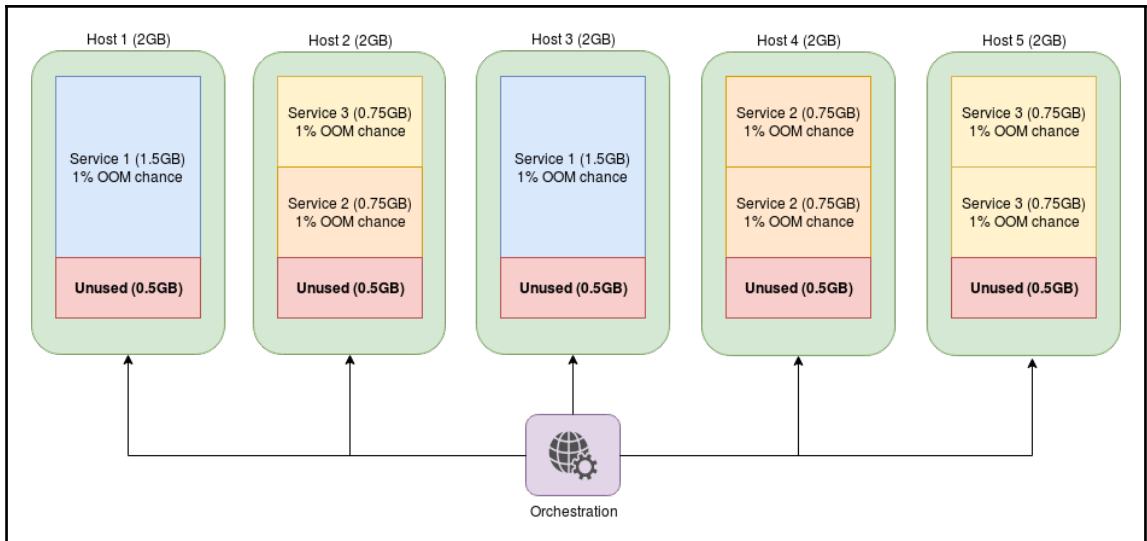


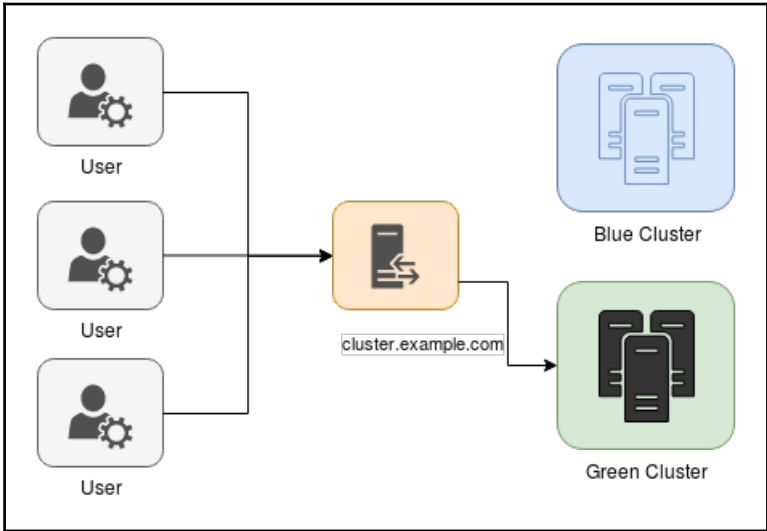
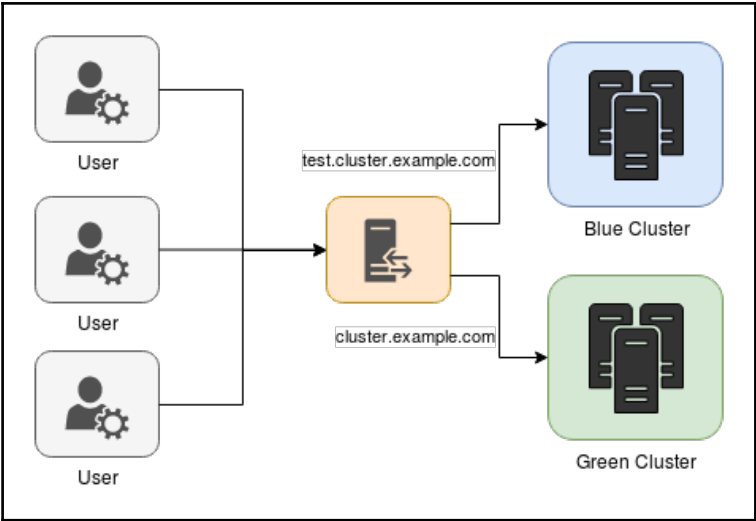
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# Chapter 7: The Limits of Scaling and the Workarounds



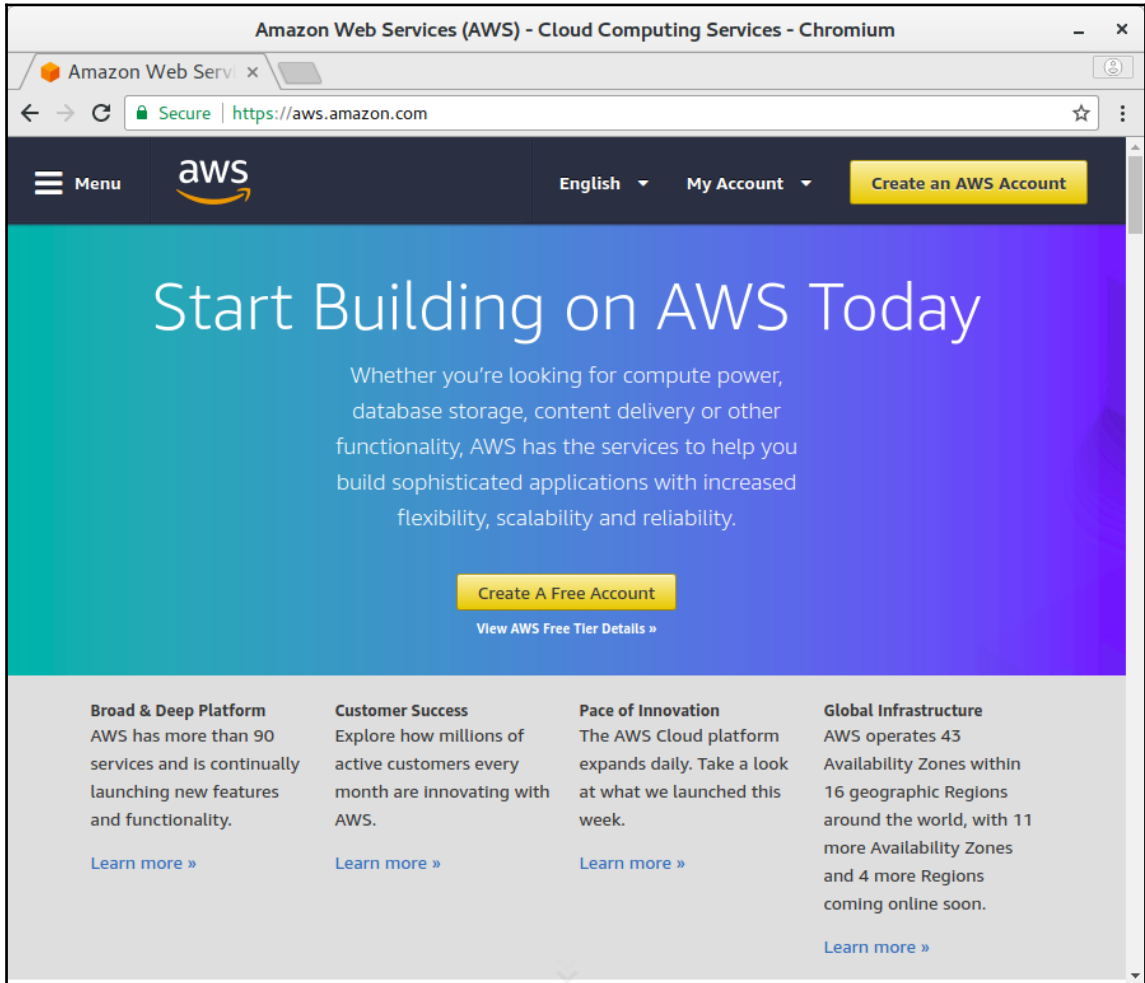






---

# Chapter 8: Building Our Own Platform





Account ID or alias

IAM user name

Password

[Sign-in using root account credentials](#)

IAM Management Console - Chromium

Secure | [https://console.aws.amazon.com/iam/home?region=us-west-1#/users\\$new?step=details](https://console.aws.amazon.com/iam/home?region=us-west-1#/users$new?step=details)

aws Services Resource Groups srdjan @ endlessm-content Global Support

## Add user

1 Details 2 Permissions 3 Review 4 Complete

### Set user details

You can add multiple users at once with the same access type and permissions. [Learn more](#)

User name\*

[Add another user](#)

### Select AWS access type

Select how these users will access AWS. Access keys and autogenerated passwords are provided in the last step. [Learn more](#)

Access type\*  **Programmatic access**  
Enables an **access key ID** and **secret access key** for the AWS API, CLI, SDK, and other development tools.

**AWS Management Console access**  
Enables a **password** that allows users to sign-in to the AWS Management Console.

2. [Feedback](#) [English \(US\)](#) © 2008–2017 Amazon Web Services, Inc. or its affiliates. All rights reserved. [Privacy Policy](#) [Terms of Service](#)

IAM Management Console - Chromium

IAM Management x


Secure | https://console.aws.amazon.com/iam/home?region=us-west-1#/users/new?step=permissions&accessKey&userNa...

aws Services Resource Groups srdjan @ endlessm-content Global Support


## Add user

- 1 Details
- 2 **Permissions**
- 3 Review
- 4 Complete


### Set permissions for test\_user



Add user to group



Copy permissions from existing user



Attach existing policies directly

Attach one or more existing policies directly to the users or create a new policy. [Learn more](#)

Create policy Refresh

Filter: Policy type Search Showing 293 results

	Policy name	Type	Attachments	Description
<input checked="" type="checkbox"/>	AdministratorAccess	Job function	4	Provides full access to AWS services and ...
<input type="checkbox"/>	AmazonAPIGatewa...	AWS managed	0	Provides full access to create/edit/delete ...

Feedback English (US) © 2008 - 2017 Amazon Web Services, Inc. or its affiliates. All rights reserved. Privacy Policy Terms of Use

## Add user

1 — 2 — 3 — 4

Details   Permissions   Review   Complete

✔ **Success**

You successfully created the users shown below. You can view and download user security credentials. You can also email users instructions for signing in to the AWS Management Console. This is the last time these credentials will be available to download. However, you can create new credentials at any time.

Users with AWS Management Console access can sign-in at: <https://endlessm-content.signin.aws.amazon.com/console>

Download .csv

	User	Access key ID	Secret access key
▶ <span style="color: green;">✔</span>	test_user	AKIABCDEFABCDEF	123456789ABCDEF123456789ABCDEF <a href="#">Hide</a>

**Ubuntu Amazon EC2 AMI Finder - Chromium**

Ubuntu Amazon EC2 x

← → ↻ <https://cloud-images.ubuntu.com/locator/ec2/> ☆

Show  entries

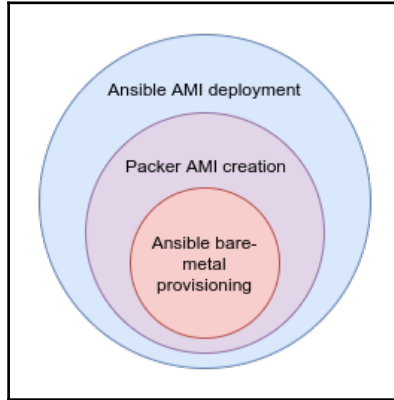
Zone	Name	Version	Arch	Instance Type	Release	AMI-ID
ap-south-1	xenial	16.04 LTS	amd64	ebs-ssd	20171026.1	ami-7e0d4011
ap-south-1	xenial	16.04 LTS	amd64	instance-store	20171026.1	ami-db0b46b4
ap-south-1	xenial	16.04 LTS	amd64	hvm:ebs-ssd	20171026.1	ami-bc0d40d3
ap-south-1	xenial	16.04 LTS	amd64	hvm:instance-store	20171026.1	ami-e409448b
us-east-1	xenial	16.04 LTS	amd64	ebs-ssd	20171026.1	ami-0309a879
us-east-1	xenial	16.04 LTS	amd64	instance-store	20171026.1	ami-af13b2d5
us-east-1	xenial	16.04 LTS	amd64	hvm:ebs-ssd	20171026.1	ami-da05a4a0
us-east-1	xenial	16.04 LTS	amd64	hvm:instance-store	20171026.1	ami-910faeeb
ap-northeast-1	xenial	16.04 LTS	amd64	ebs-ssd	20171026.1	ami-348b2b52
ap-northeast-1	xenial	16.04 LTS	amd64	instance-store	20171026.1	ami-d38525b5
ap-northeast-1	xenial	16.04 LTS	amd64	hvm:ebs-ssd	20171026.1	ami-15872773
ap-northeast-1	xenial	16.04 LTS	amd64	hvm:instance-store	20171026.1	ami-6a89290c
eu-west-1	xenial	16.04 LTS	amd64	ebs-ssd	20171026.1	ami-4dd07434
eu-west-1	xenial	16.04 LTS	amd64	instance-store	20171026.1	ami-e8dc7891
eu-west-1	xenial	16.04 LTS	amd64	hvm:ebs-ssd	20171026.1	ami-add175d4
eu-west-1	xenial	16.04 LTS	amd64	hvm:instance-store	20171026.1	ami-1bde7a62
ap-southeast-1	xenial	16.04 LTS	amd64	ebs-ssd	20171026.1	ami-f5a7e796
ap-southeast-1	xenial	16.04 LTS	amd64	instance-store	20171026.1	ami-00acec63
ap-southeast-1	xenial	16.04 LTS	amd64	hvm:ebs-ssd	20171026.1	ami-67a6e604
ap-southeast-1	xenial	16.04 LTS	amd64	hvm:instance-store	20171026.1	ami-14abe777
ca-central-1	xenial	16.04 LTS	amd64	ebs-ssd	20171026.1	ami-5670c832

Show  entries

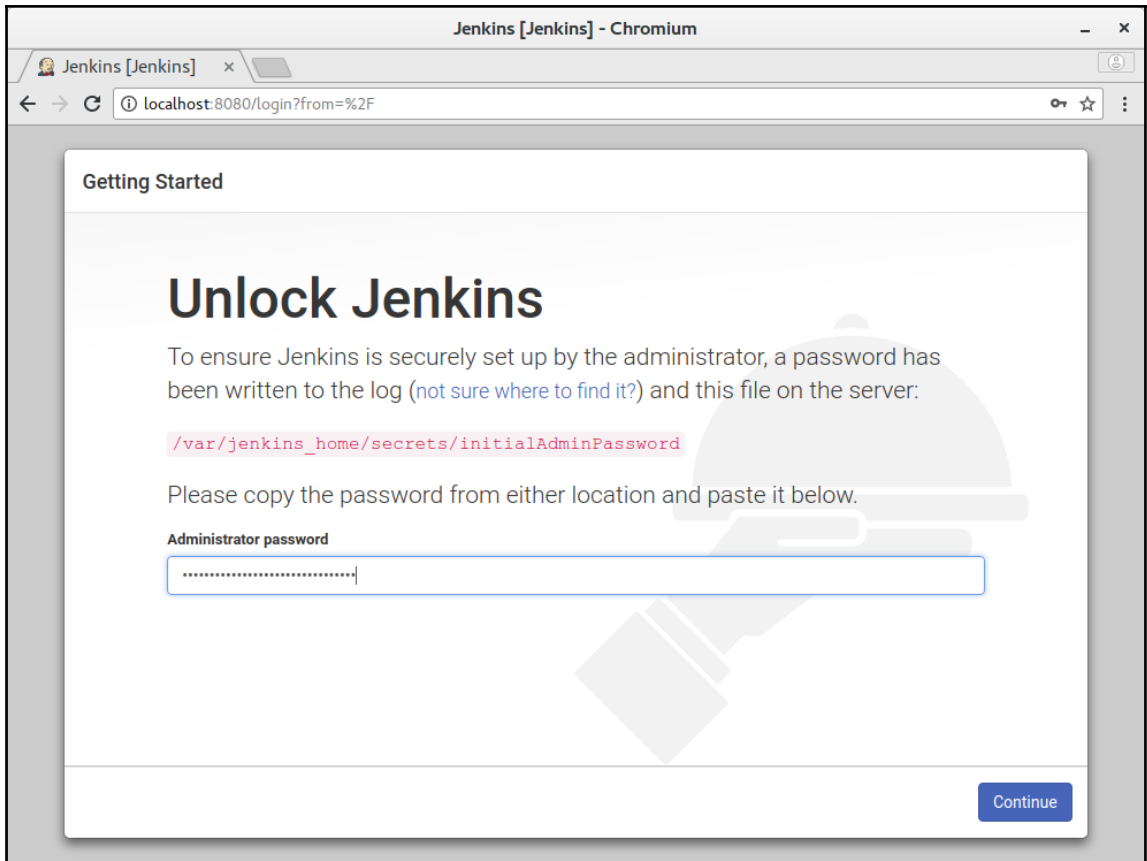
Search:

Zone	Name	Version	Arch	Instance Type	Release	AMI-ID	AKI-ID
us-west-1	xenial	16.04 LTS	amd64	hvm:ebs-ssd	20171026.1	ami-1c1d217c	hvm
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Showing 1 to 1 of 1 entries (filtered from 400 total entries)







Dashboard [Jenkins] - Chromium

Dashboard [Jenkins] x

localhost:8080

# Jenkins

2 search admin | log out

Jenkins > [ENABLE AUTO REFRESH](#)

- New Item
- People
- Build History
- Manage Jenkins
- My Views

## Welcome to Jenkins!

Please **create new jobs** to get started.

**Build Queue** -

No builds in the queue.

**Build Executor Status** -

1	Idle
2	Idle

[add description](#)

Page generated: Oct 31, 2017 11:20:43 AM UTC [REST API](#) [Jenkins ver. 2.60.3](#)

New Item [Jenkins] - Chromium

New Item [Jenkins] x

localhost:8080/newJob

Jenkins 2 search admin | log out

Enter an item name

redeploy\_infrastructure

» Required field

**Freestyle project**  
This is the central feature of Jenkins. Jenkins will build your project, combining any SCM with any build system, and this can be even used for something other than software build.

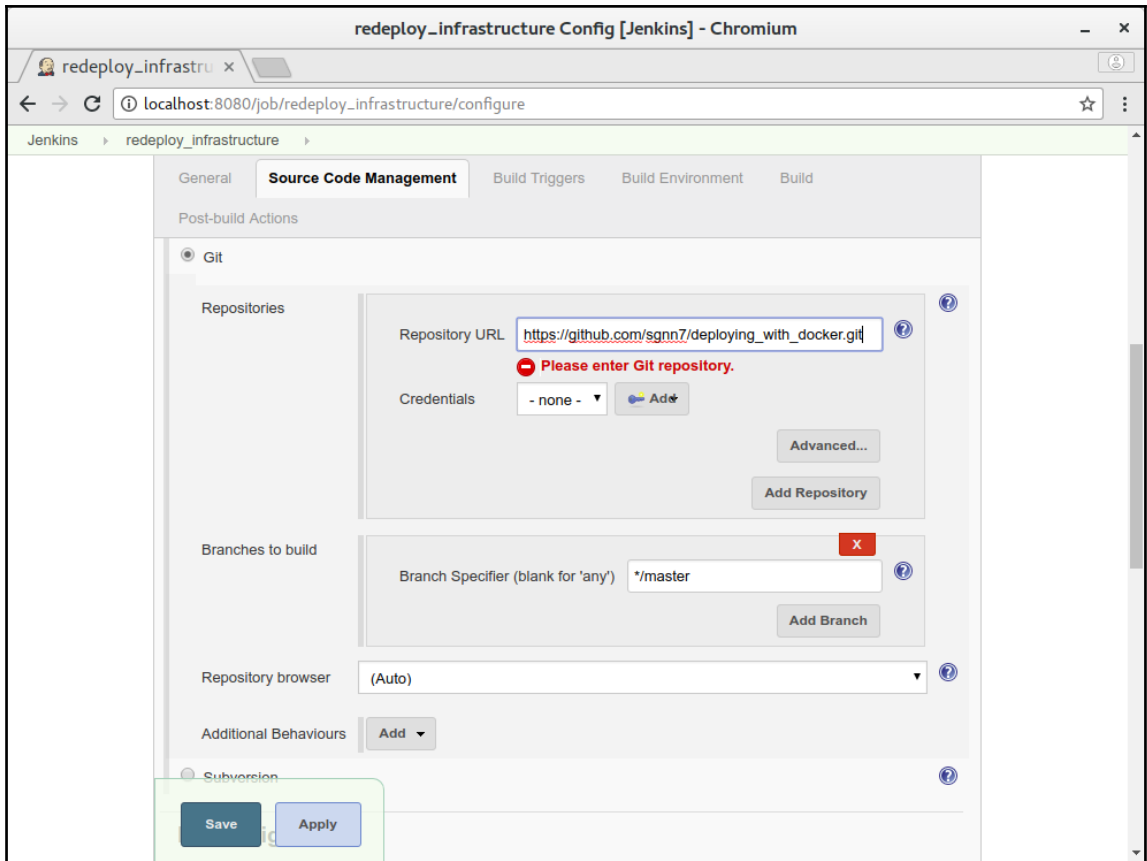
**Pipeline**  
Orchestrates long-running activities that can span multiple build slaves. Suitable for building pipelines (formerly known as workflows) and/or organizing complex activities that do not easily fit in free-style job type.

**Multi-configuration project**  
Suitable for projects that need a large number of different configurations, such as testing on multiple environments, platform-specific builds, etc.

**Folder**  
Creates a container that stores nested items in it. Useful for grouping things together. Unlike view, which is just a filter, a folder creates a separate namespace, so you can have multiple things of the same name as long as they are in different folders.

**GitHub Organization**  
Scans a GitHub organization (or user account) for all repositories matching some defined markers.

OK



redeploy\_infrastructure Config [Jenkins] - Chromium

localhost:8080/job/redeploy\_infrastructure/configure

Jenkins > redeploy\_infrastructure >

General Source Code Management Build Triggers **Build Environment** Build Post-build Actions

Add timestamps to the Console Output  
 Use secret text(s) or file(s)  
 With Ant

**Build**

**Execute shell**

Command

```
export AWS_DEFAULT_REGION="us-west-1"  
export AWS_ACCESS_KEY_ID="AKIABCDEFABCDEF"  
export AWS_SECRET_ACCESS_KEY="123456789ABCDEF123456789ABCDEF"  
  
cd chapter 8/aws deployment  
ansible-playbook destroy.yml  
ansible-playbook deploy.yml
```

See [the list of available environment variables](#)

Advanced...

Add build step ▾

**Post-build Actions**

Add post-build action ▾

Save Apply

localhost:8080/job/redeploy\_infrastructure/3/console - Chromium

redeploy\_infrastru x

localhost:8080/job/redeploy\_infrastructure/3/console

Jenkins » redeploy\_infrastructure » #3

```
TASK [Deleting route table] *****
skipping: [localhost]

TASK [Deleting VPC] *****
ok: [localhost]

PLAY RECAP *****
localhost          : ok=3  changed=0  unreachable=0  failed=0

+ ansible-playbook deploy.yml
[WARNING]: provided hosts list is empty, only localhost is available

PLAY [localhost] *****

TASK [Setting up VPC] *****
changed: [localhost]

TASK [set_fact] *****
ok: [localhost]

TASK [Setting up the subnet] *****
changed: [localhost]

TASK [Setting up the gateway] *****
changed: [localhost]

TASK [Setting up routing table] *****
changed: [localhost]

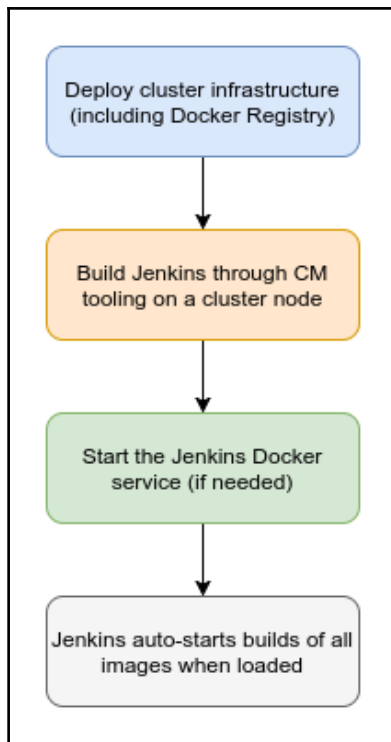
TASK [Setting up security group] *****
changed: [localhost]

TASK [Provisioning cluster node] *****
changed: [localhost]

PLAY RECAP *****
localhost          : ok=7  changed=6  unreachable=0  failed=0

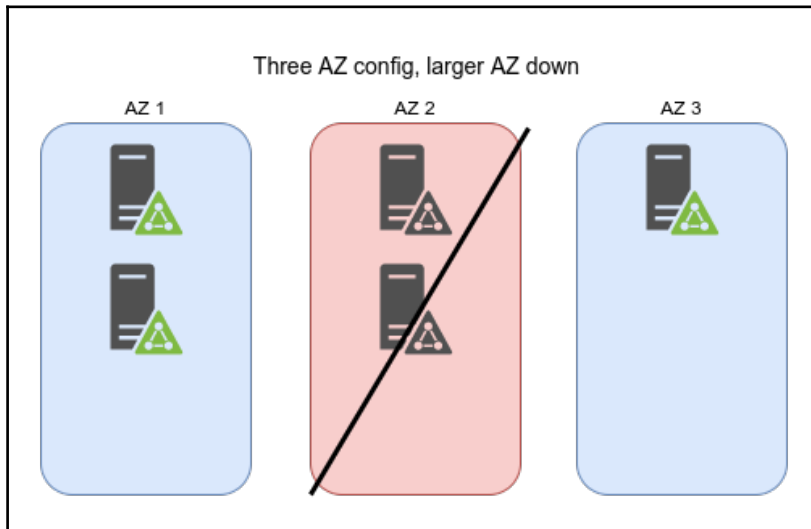
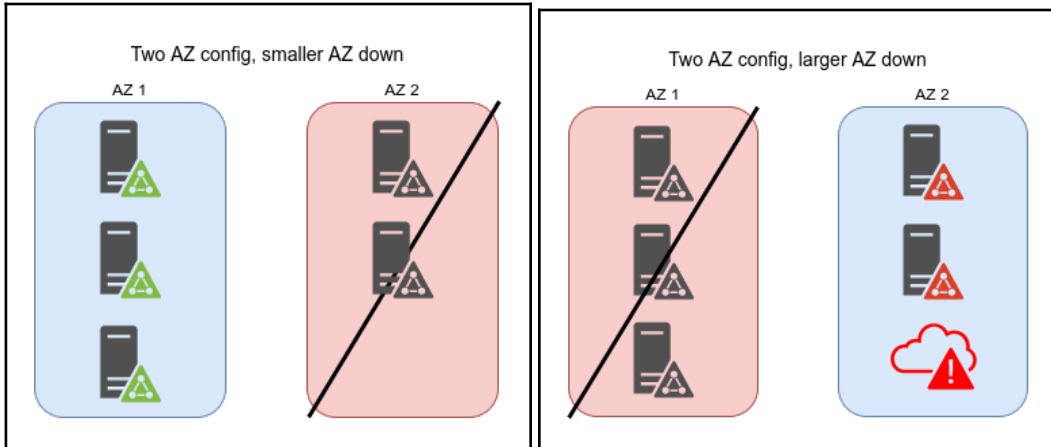
Finished: SUCCESS
```

Page generated: Oct 31, 2017 11:52:20 AM UTC [REST API](#) [Jenkins ver. 2.60.3](#)

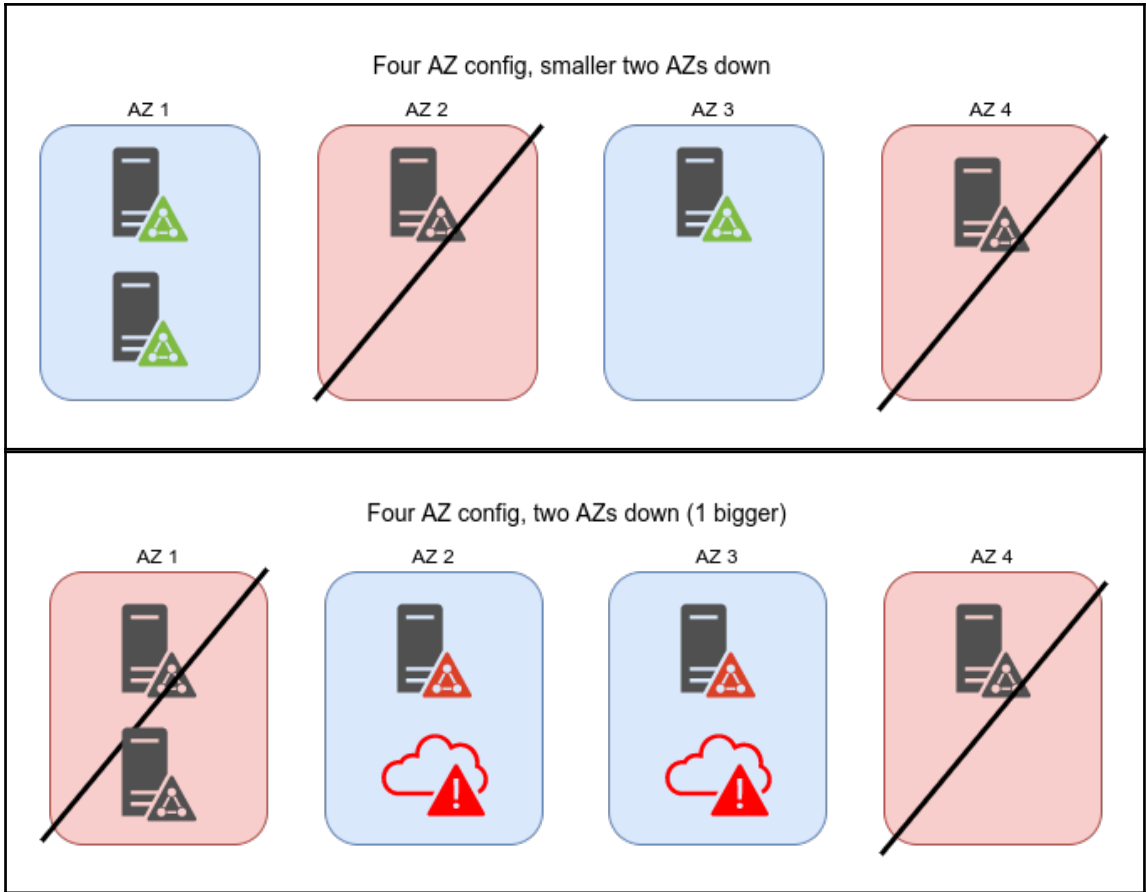


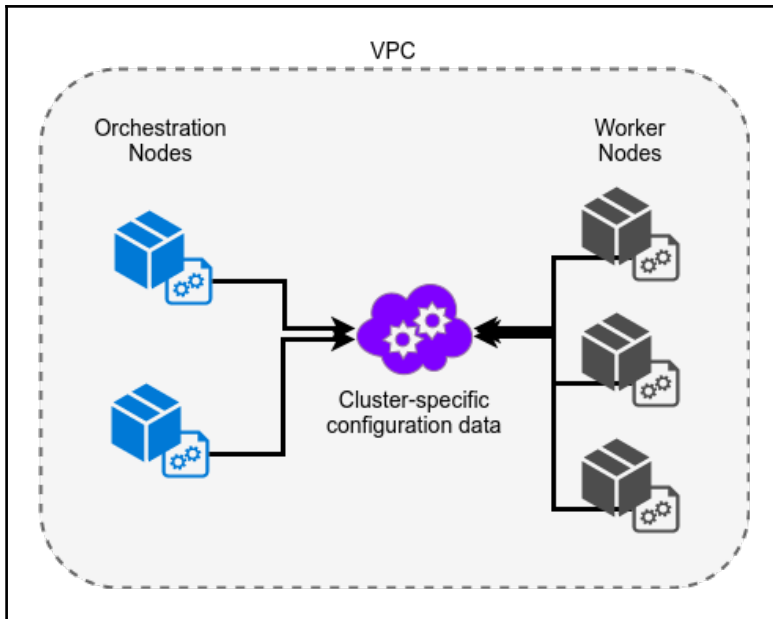
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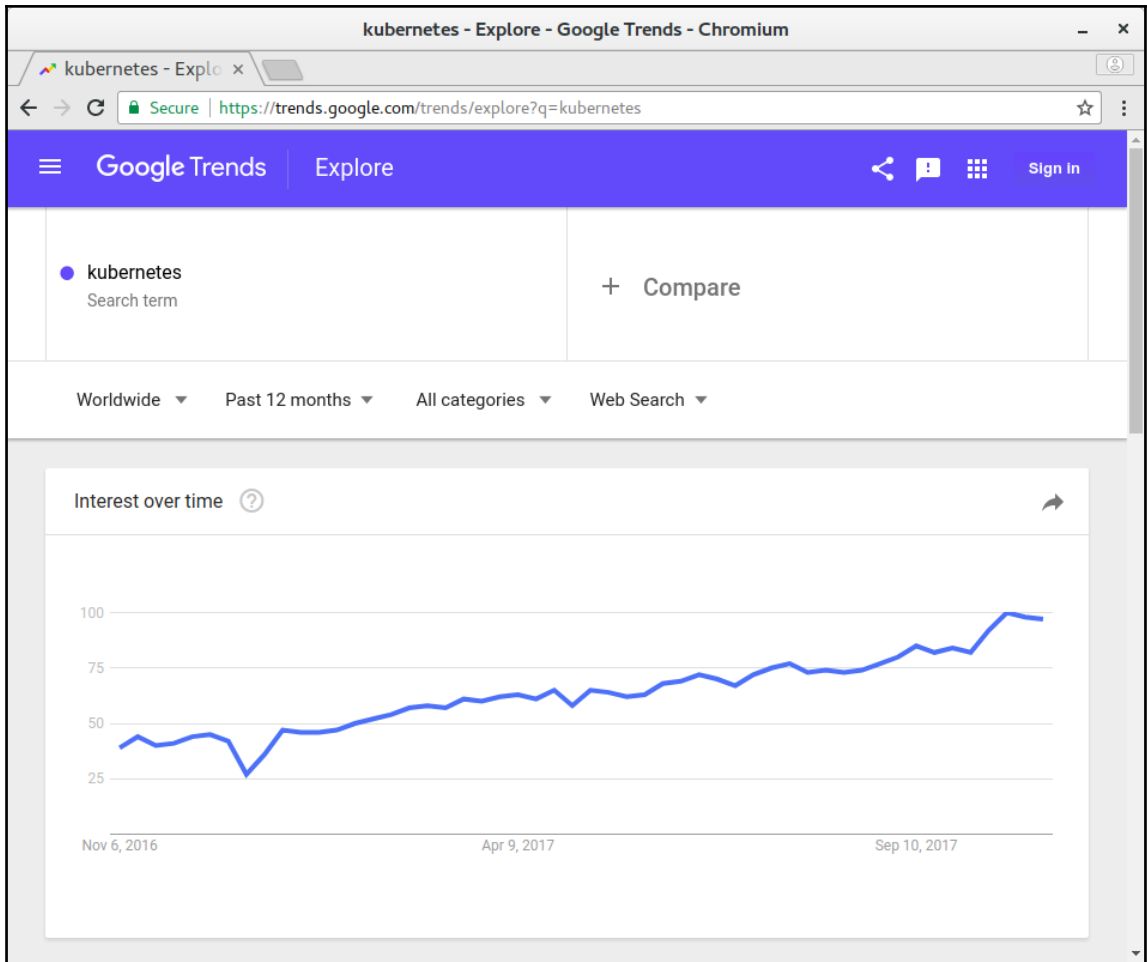
## Chapter 9: Exploring the Largest-Scale Deployments

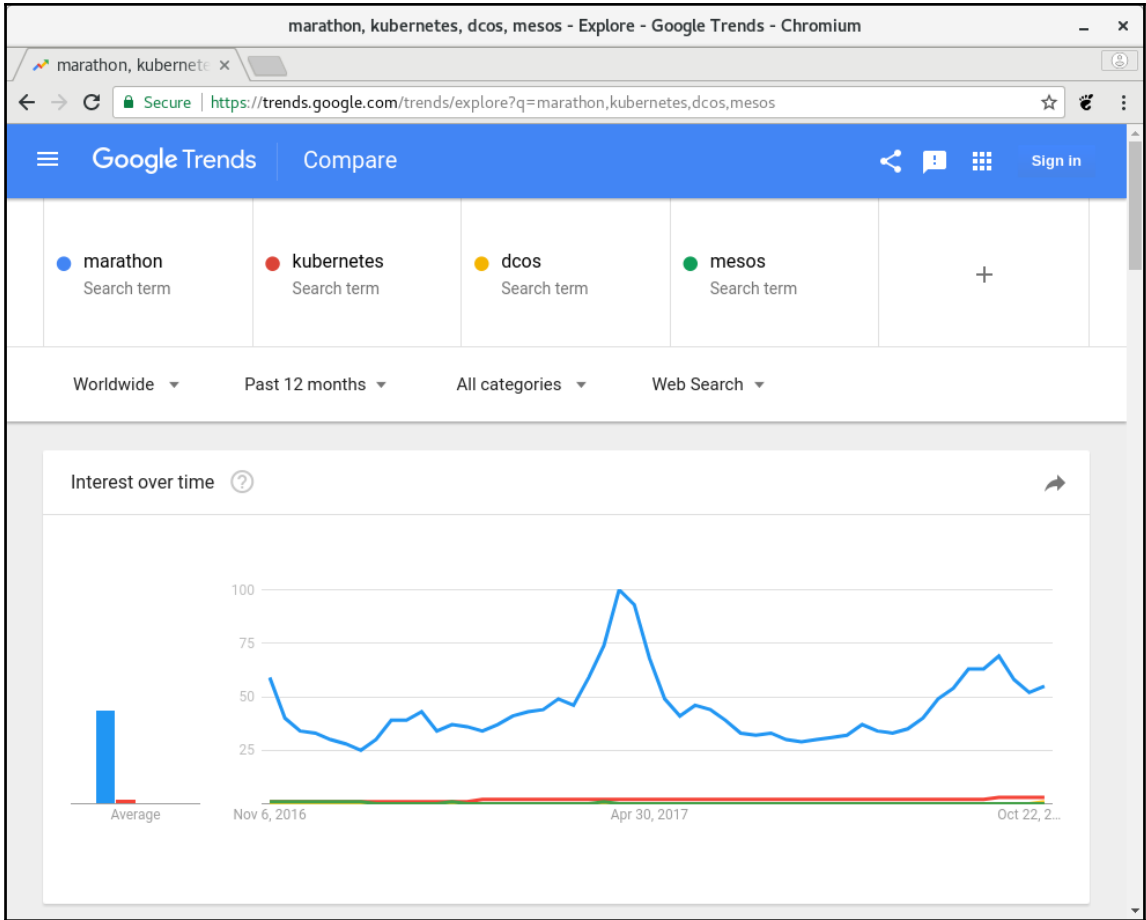












GitHub - mesosphere/marathon: Deploy and manage containers (including Docker) on top of Apache Mesos at scale. - Chromium

GitHub - mesosphere x

GitHub, Inc. [US] | https://github.com/mesosphere/marathon

Features Business Explore Marketplace Pricing This repository Search Sign in or Sign up

mesosphere / marathon

Watch 387 Star 3,483 Fork 810

