


Chapter 2: Configuring Docker with Chef



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You're one step away from access to all the power and flexibility of Chef. Get ready to automate your infrastructure, accelerate your time to market, manage scale and complexity, and safeguard your systems. Just complete the form to get started.

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Company

Email

Username

I'm not a robot 
reCAPTCHA
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Start with the [Chef client and server installation](#) and check out our [extensive documentation](#).

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Nodes
Reports
Policy
Administration

🗨 Docker Org
👤
0
0

➤ Organizations

- Create
- Reset Validation Key
- Generate Knife Config
- Invite User
- Leave Organization
- Starter Kit

Users

Groups

Global Permissions

Thank you for choosing Hosted Chef!

Follow these steps to be on your way to using Hosted Chef

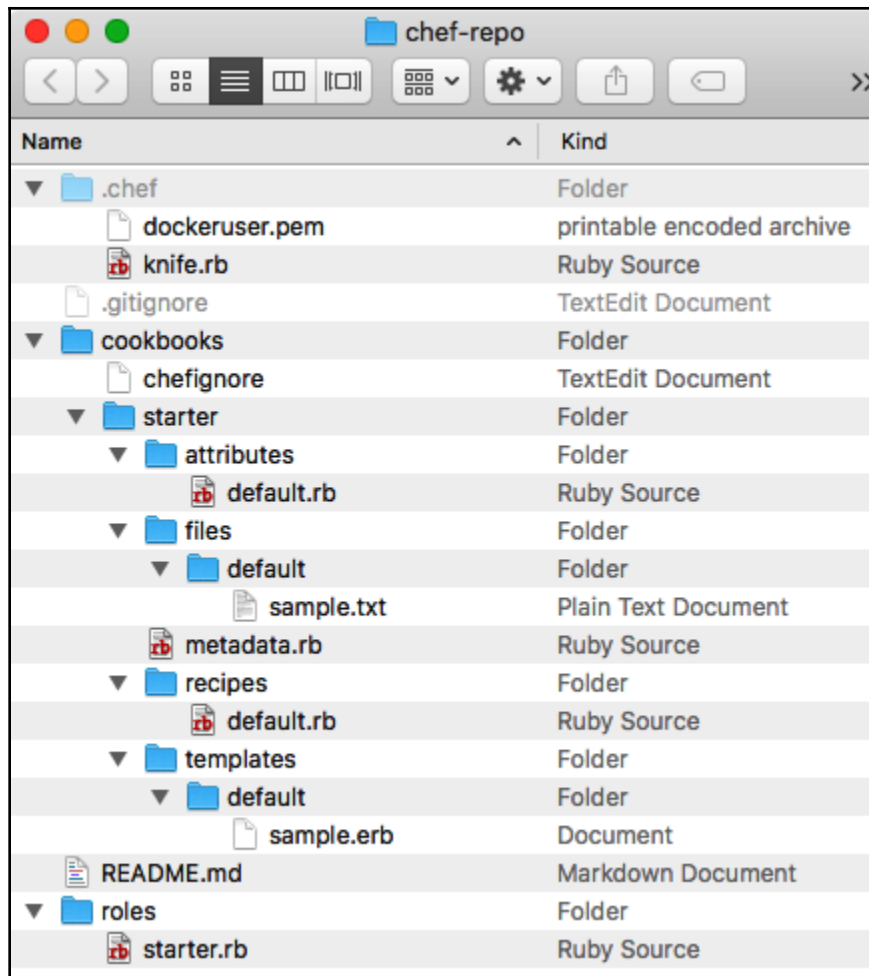
Download Starter Kit

Learn Chef

What's next?

Chef Documentation	Browse Community Cookbooks	Contact Support	More Resources
<p>The best place to start learning about Chef in general.</p>	<p>Hundreds of members of the Chef community have contributed cookbooks you can use or draw inspiration from.</p>	<p>Our support team is here to provide assistance with any issues you may have while using Hosted Chef. Learn more about support for Chef.</p>	<ul style="list-style-type: none"> • Chat With Us • Join the Mailing List • Watch the Food Fight show • Get Professional Training

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CHEF MANAGE

Nodes Reports Policy Administration Feedback Organization Docker Org Signed in as Docker User 0 0

> Nodes

Showing All Nodes Search Nodes...

Node Name	Platform	FQDN	IP Address	Uptime	Last Check-In	Environment	Actions
dockerhost	centos	dockerhost	172.16.132.198	an hour	11 minutes ago	_default	

Node: dockerhost

Details Attributes Permissions

Last Check In: **9 Minutes Ago**
2018-12-09 04:42:16 UTC

Uptime: **An Hour**
Since 2018-12-09 03:37:24 UTC

Environment:

Platforms: centos
FQDN: dockerhost
IP Address: 172.16.132.198

Tags [+ Add](#)

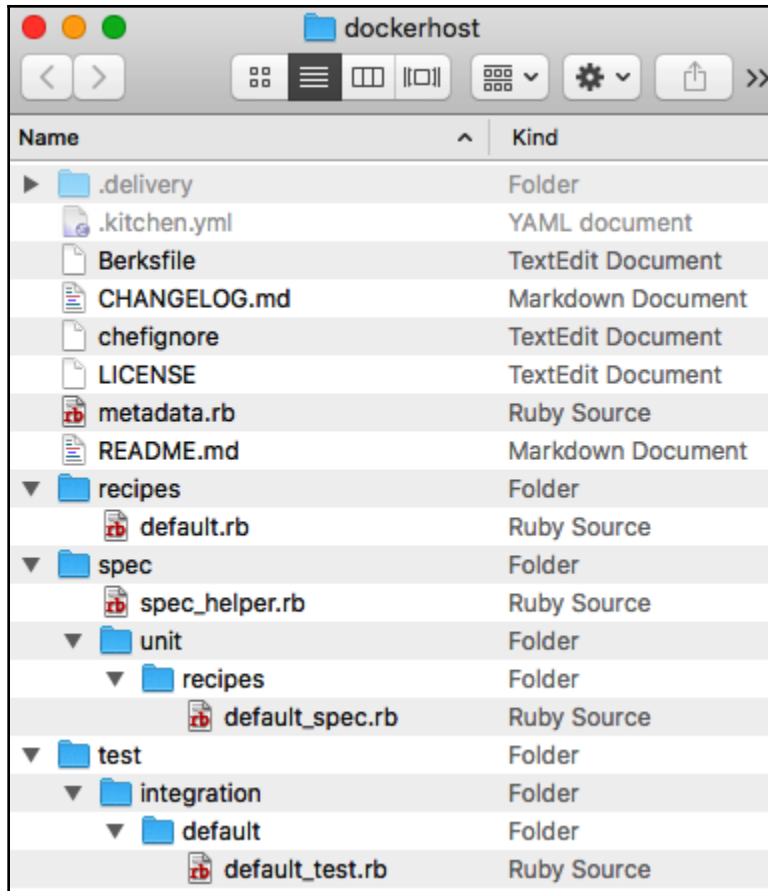
There are no items to display.

Run List [Expand All](#) [Collapse All](#) [Edit](#)

Version Position


There are no items to display.

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Chapter 3: Monitoring Docker















 **Configuration**
Organization: Main Org.

[Data Sources](#) [Users](#) [Teams](#) [Plugins](#) [Preferences](#) [API Keys](#)

Choose data source type

Filter by name or type

 CloudWatch	 Elasticsearch	 Grafana Logging
 Graphite	 InfluxDB	 Microsoft SQL Server
 MySQL	 OpenTSDB	 PostgreSQL
 Prometheus	 Stackdriver	 TestData DB

[Docs](#) | [Support Plans](#) | [Community](#) | Grafana v5.4.3 (commit: 6539180)



Data Sources / Prometheus

Type: Prometheus

Settings

Settings

Name

Prometheus



Default



HTTP

URL

http://prometheus:9090



Access

Server (Default)

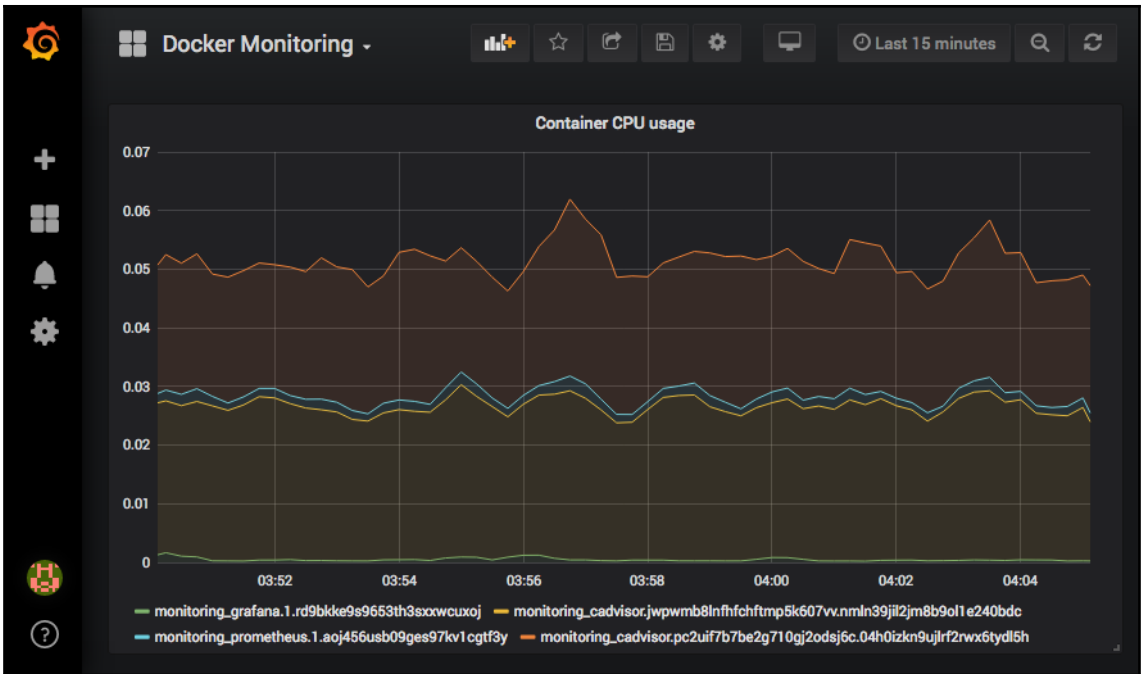


Help >

Whitelisted Cookies

Add Name

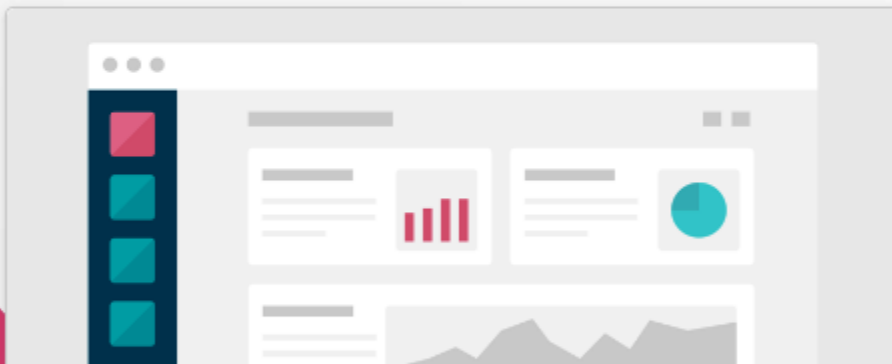






Welcome to Kibana

Your window into the Elastic Stack




Let's get started

We noticed that you don't have any data in your cluster. You can try our sample data and dashboards or jump in with your own data.

[Try our sample data](#)

[Explore on my own](#)


**kibana**

- Discover
- Visualize
- Dashboard
- Timelion
- Canvas
- Machine Learning
- Infrastructure
- Logs
- APM
- Dev Tools
- Monitoring
- Management**
- Default
- Collapse

Management / Kibana

Index Patterns Saved Objects Spaces Reporting Advanced Settings

Create index pattern

 No default index pattern. You must select or create one to continue.

Create index pattern

Kibana uses index patterns to retrieve data from Elasticsearch indices for things like visualizations. Include system indices

Step 1 of 2: Define index pattern

Index pattern

You can use a * as a wildcard in your index pattern. You can't use spaces or the characters \, /, ?, ", <, >, |.

> Next step

✓ **Success!** Your index pattern matches **1 index**.

logstash-2019.01.30

Rows per page: 10 ▾

Create index pattern

Kibana uses index patterns to retrieve data from Elasticsearch indices for things like visualizations.

Include system indices

Step 2 of 2: Configure settings

You've defined **logstash-*** as your index pattern. Now you can specify some settings before we create it.

Time Filter field name

[Refresh](#)

@timestamp



The Time Filter will use this field to filter your data by time.

You can choose not to have a time field, but you will not be able to narrow down your data by a time range.

[> Show advanced options](#)

[< Back](#)

[Create index pattern](#)

1 hit New Save Open Share Inspect Auto-refresh Last 15 minutes

>_ "message to elk" Options

Add a filter +

logstash*

Selected fields

- ? _source

Available fields

- ⊙ @timestamp
- t @version
- t _id
- t _index
- # _score
- t _type
- t command
- t container_id
- t container_n...
- ⊙ created
- t host
- t image_id
- t image_name
- # level
- t message
- t source_host
- t tag
- t version

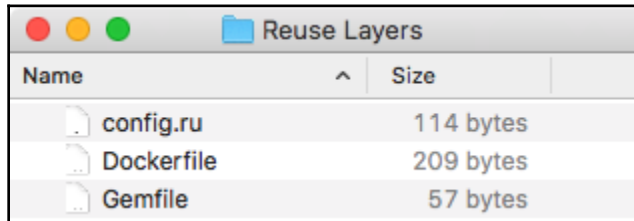
January 29th 2019, 22:50:38.149 - January 29th 2019, 23:05:38.150 —

Count

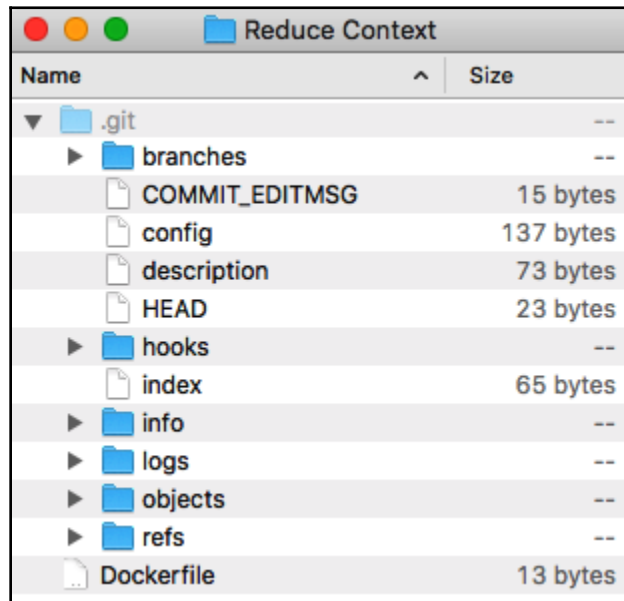
@timestamp per 30 seconds

Time	_source
January 29th 2019, 23:05:33.966	<pre> message: message to elk command: echo message to elk level: 6 @v ersion: 1 @timestamp: January 29th 2019, 23:05:33.966 host: node1 container_name: vigilant_poincare image_id: sha256:3a093384ac306cb ac30b67f1585e12b30ab1a899374dabc3170b9bca246f1444 tag: 3c4bf73e0a4e source host: 10.255.0.3 created: January 29th 2019, 23:05:31.550 </pre>

Chapter 4: Optimizing Docker Images



Name	Size
config.ru	114 bytes
Dockerfile	209 bytes
Gemfile	57 bytes



Name	Size
└─ .git	--
└─ branches	--
└─ COMMIT_EDITMSG	15 bytes
└─ config	137 bytes
└─ description	73 bytes
└─ HEAD	23 bytes
└─ hooks	--
└─ index	65 bytes
└─ info	--
└─ logs	--
└─ objects	--
└─ refs	--
└─ Dockerfile	13 bytes

Chapter 5: Deploying Containers

Getting Started

Unlock Jenkins

To ensure Jenkins is securely set up by the administrator, a password has been written to the log ([not sure where to find it?](#)) and this file on the server:

```
/var/jenkins_home/secrets/initialAdminPassword
```

Please copy the password from either location and paste it below.

Administrator password

Continue

Customize Jenkins

Plugins extend Jenkins with additional features to support many different needs.

Install suggested plugins

Install plugins the Jenkins community finds most useful.

Select plugins to install

Select and install plugins most suitable for your needs.

Getting Started
✕

All | None | Suggested

✕

Selected (0/58)

- Organization and Administration
- Build Features
- Build Tools
- Build Analysis and Reporting
- Pipelines and Continuous Delivery
- Source Code Management
- Distributed Builds
- User Management and Security
- Notifications and Publishing
- Languages

Note that the full list of plugins is not shown here. Additional plugins can be installed in the **Plugin Manager** once the initial setup is complete. [See the Wiki for more information.](#)

Organization and Administration (0/3)

- Dashboard View** 10 ⏴
Customizable dashboard that can present various views of job information.
- Folders Plugin** 6 ⏴
- OWASP Markup Formatter** 9 ⏴
Uses the [OWASP Java HTML Sanitizer](#) to allow safe-seeming HTML markup to be entered in project descriptions and the like.

Build Features (0/10)

- Build Name Setter** 11 ⏴
This plug-in sets the display name of a build to something other than #1, #2, #3, ...
- Build Timeout** 7 ⏴
This plugin allows builds to be automatically terminated after the specified amount of time has elapsed.
- Config File Provider** 9 ⏴
Ability to provide configuration files (e.g. settings.xml for maven, XML, groovy, custom files,...) loaded through the UI which will be copied to the job workspace.

Jenkins 2.164.2

Back
Install

Getting Started

Create First Admin User

Username:

Password:

Confirm password:

Full name:

E-mail address:

Jenkins 2.164.2

[Continue as admin](#)

[Save and Continue](#)

Getting Started

Instance Configuration

Jenkins URL:

The Jenkins URL is used to provide the root URL for absolute links to various Jenkins resources. That means this value is required for proper operation of many Jenkins features including email notifications, PR status updates, and the `BUILD_URL` environment variable provided to build steps.

The proposed default value shown is **not saved yet** and is generated from the current request, if possible. The best practice is to set this value to the URL that users are expected to use. This will avoid confusion when sharing or viewing links.

Jenkins 2.164.2

[Not now](#)

[Save and Finish](#)

Jenkins is ready!

You have skipped the **setup of an admin user**.

To log in, use the username: "admin" and the administrator password you used to access the setup wizard.

Your Jenkins setup is complete.

[Start using Jenkins](#)

Kind **Docker Host Certificate Authentication**

Scope **Global (Jenkins, nodes, items, all child items, etc)**

Client Key

```

-----BEGIN RSA PRIVATE KEY-----
MIIJKQIBAAKCAgEApY5a470Do8XDY0AUPK49bdCvZ1Vsz4Ps7r7w2m9Js2jeXiM6
iMvf2/gccI5Ibvc+6Q6jSwL50nAP667mGuryDb+jgxags2LJvl0ynP5zZnij4qAj
/HVPCajVkJEr8mnV5A3wlUsLgyl7pWRoqFNGxvFJHhF9UpPyOekCYp2SmqMI09Zj
JsOi80tqFIBcnMUCt4e+hwjbr0xNNyuynkMhfGVJdaNrXE3faLiv1IS/gDugsP5z
-----END PRIVATE KEY-----

```

Client Certificate

```

-----BEGIN CERTIFICATE-----
MIIBKjCCAQIBADCBgQwGCSqGSIb3QGIICqAgEApY5a470Do8XDY0AUPK49bdCvZ1Vsz4Ps7r7w2m9Js2jeXiM6iMvf2/gccI5Ibvc+6Q6jSwL50nAP667mGuryDb+jgxags2LJvl0ynP5zZnij4qAj/HVPCajVkJEr8mnV5A3wlUsLgyl7pWRoqFNGxvFJHhF9UpPyOekCYp2SmqMI09ZjJsOi80tqFIBcnMUCt4e+hwjbr0xNNyuynkMhfGVJdaNrXE3faLiv1IS/gDugsP5z-----END CERTIFICATE-----

```

Server CA Certificate

```

-----BEGIN CERTIFICATE-----
MIIBKjCCAQIBADCBgQwGCSqGSIb3QGIICqAgEApY5a470Do8XDY0AUPK49bdCvZ1Vsz4Ps7r7w2m9Js2jeXiM6iMvf2/gccI5Ibvc+6Q6jSwL50nAP667mGuryDb+jgxags2LJvl0ynP5zZnij4qAj/HVPCajVkJEr8mnV5A3wlUsLgyl7pWRoqFNGxvFJHhF9UpPyOekCYp2SmqMI09ZjJsOi80tqFIBcnMUCt4e+hwjbr0xNNyuynkMhfGVJdaNrXE3faLiv1IS/gDugsP5z-----END CERTIFICATE-----

```

ID **docker-swarm**

Description

OK

Enter an item name

» 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 agents. 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.



Multibranch Pipeline

Creates a set of Pipeline projects according to detected branches in one SCM repository.

OK

192.168.99.100

Jenkins

search admin | log out


Jenkins > application > [ENABLE AUTO REFRESH](#)

- Back to Dashboard
- Status
- Changes
- Build Now
- Delete Pipeline
- Configure
- Full Stage View
- Rename
- Pipeline Syntax

Pipeline application

[add description](#)

Disable Project

 [Recent Changes](#)

Stage View

No data available. This Pipeline has not yet run.

Permalinks

Build History [trend](#)

find x


[RSS for all](#) [RSS for failures](#)

Page generated: 23-Apr-2019 20:01:43 UTC [REST API](#) Jenkins ver. 2.164.2

Jenkins application #1

Back to Project
 Status
 Changes
Console Output
 View as plain text
 Edit Build Information
 Git Build Data
 No Tags
 Thread Dump
 Pause/resume
 Replay
 Pipeline Steps
 Workspaces

Console Output

Progress: 

```

Started by user admin
Obtained Jenkinsfile from git https://github.com/ /jenkins-app.git
Running in Durability level: MAX_SURVIVABILITY
[Pipeline] Start of Pipeline
[Pipeline] node
Running on Jenkins in /var/jenkins_home/workspace/application
[Pipeline] {
[Pipeline] stage
[Pipeline] { (Build Docker Image)
[Pipeline] checkout
No credentials specified
> git rev-parse --is-inside-work-tree # timeout=10
Fetching changes from the remote Git repository
> git config remote.origin.url https://github.com/ /jenkins-app.git # timeout=10
Fetching upstream changes from https://github.com/ /jenkins-app.git
> git --version # timeout=10
> git fetch --tags --progress https://github.com/ /jenkins-app.git
+refs/heads/*:refs/remotes/origin/*
> git rev-parse refs/remotes/origin/master^{commit} # timeout=10
> git rev-parse refs/remotes/origin/origin/master^{commit} # timeout=10
Checking out Revision 55a8809938d626c5bdee723ecd8b0ca39d0d3e42 (refs/remotes/origin/master)
> git config core.sparsecheckout # timeout=10
> git checkout -f 55a8809938d626c5bdee723ecd8b0ca39d0d3e42
Commit message: "Update Jenkinsfile"
First time build. Skipping changelog.
[Pipeline] withDockerServer
[Pipeline] {
[Pipeline] sh
+ docker build -t /jenkins-app:latest .
Sending build context to Docker daemon 76.8kB

Step 1/11 : FROM golang:1.11-stretch
1.11-stretch: Pulling from library/golang
e79bb959ec00: Already exists
d4b7902036fe: Already exists
1b2a72d4e030: Already exists
d54db43011fd: Already exists
  
```

192.168.99.100

Jenkins

admin | log out

Jenkins > application > ENABLE AUTO REFRESH

Back to Dashboard

Status

Changes

Build Now

Delete Pipeline

Configure

Full Stage View

Rename

Pipeline Syntax

Pipeline application

[add description](#)

Disable Project

[Recent Changes](#)

Stage View

Average stage times:
(Average full run time: ~1min 46s)

	Build Docker Image	Publish to Docker Hub	Deploy to Production
	1 min 11s	20s	13s
#1	1 min 11s	20s	13s

Apr 23 21:16 No Changes

Build History trend ==

find x

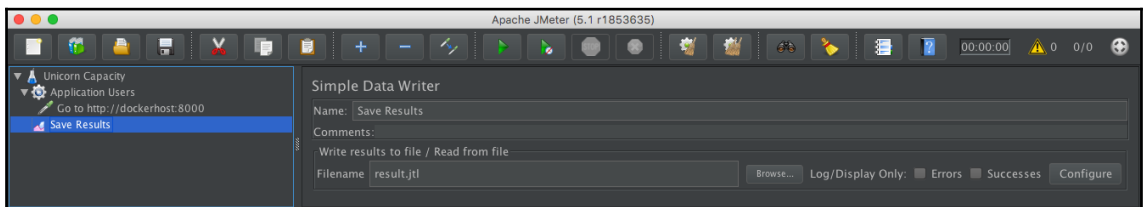
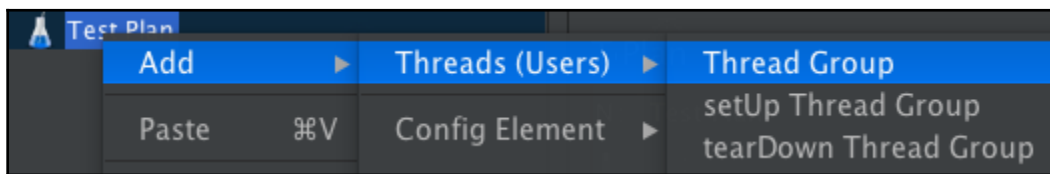
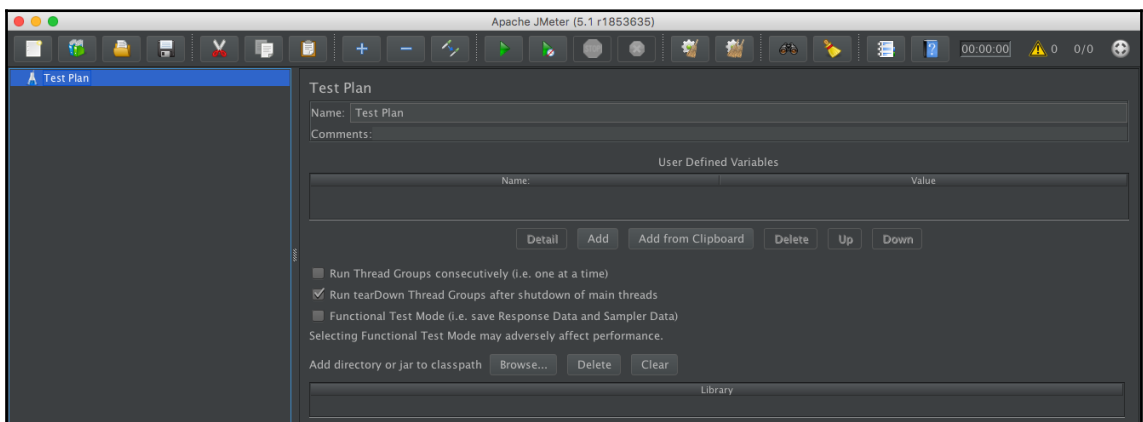
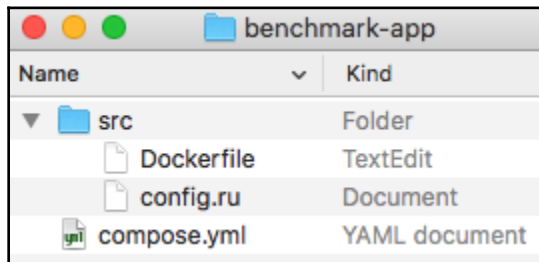
#1 23-Apr-2019 20:16

[RSS for all](#) [RSS for failures](#)

Permalinks

- [Last build \(#1\), 2 min 59 sec ago](#)
- [Last stable build \(#1\), 2 min 59 sec ago](#)
- [Last successful build \(#1\), 2 min 59 sec ago](#)
- [Last completed build \(#1\), 2 min 59 sec ago](#)

Chapter 6: Benchmarking



Summary Report

Name:

Comments:

Write results to file / Read from file

Filename: Log/Display Only: Errors Successes

Label	# Samples	Average	Min	Max	Std. Dev.	Error %	Throughput	Received KB/...	Sent KB/sec	Avg. Bytes
Go to App	10100	107	74	1096	34.67	0.00%	7.1/sec	0.89	0.81	128.0
TOTAL	10100	107	74	1096	34.67	0.00%	7.1/sec	0.89	0.81	128.0

Include group name in label? Save Table Header

Graph Results

Name:

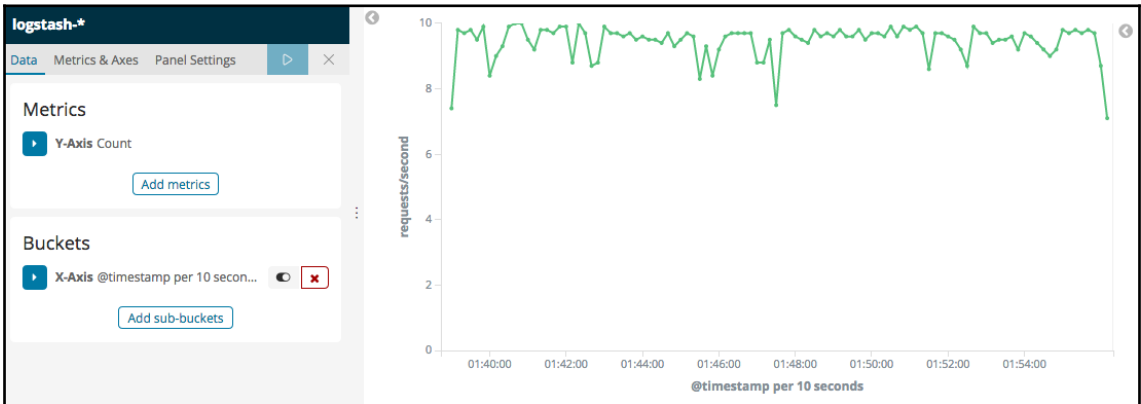
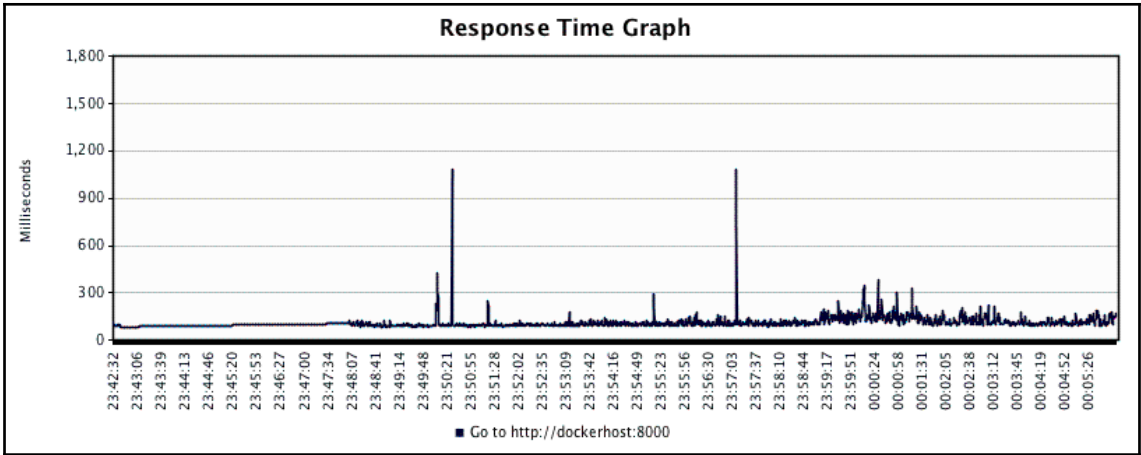
Comments:

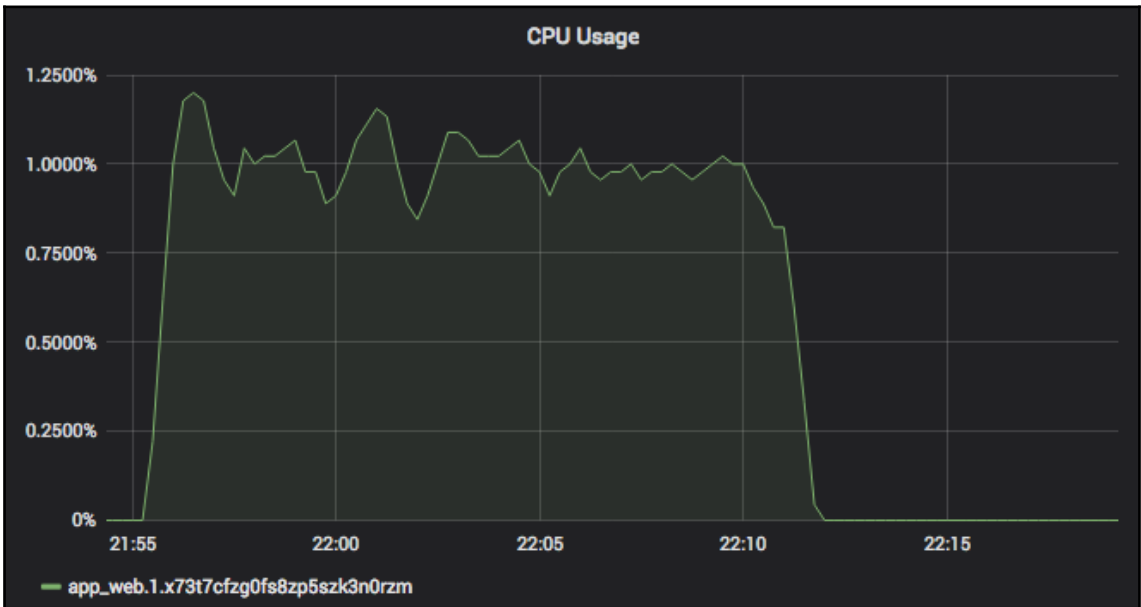
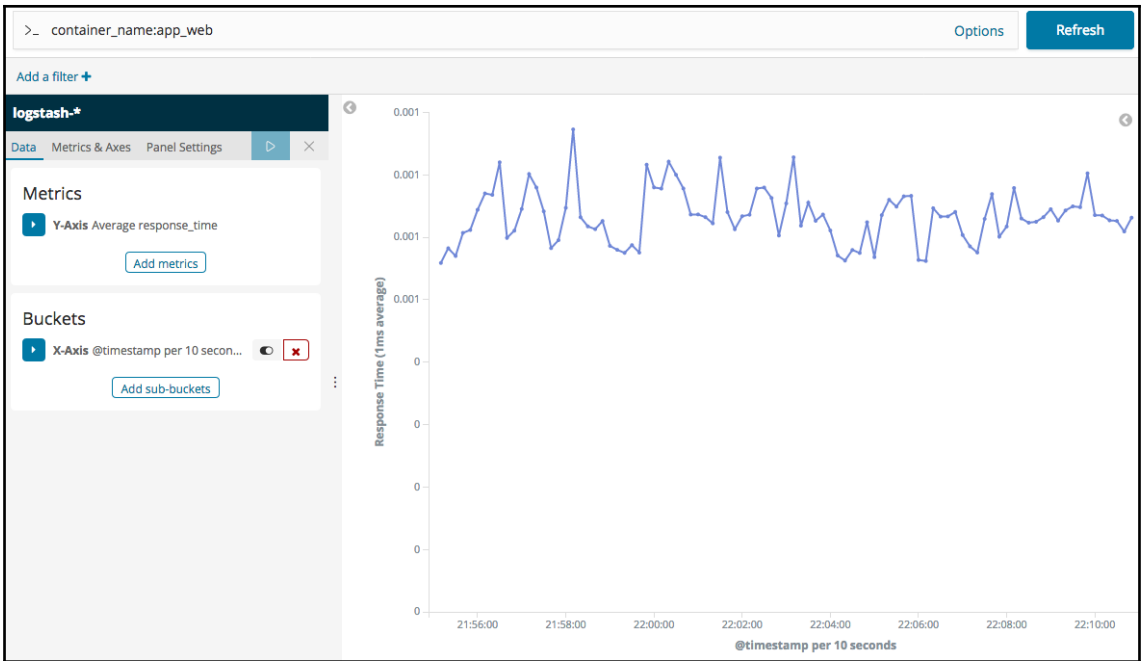
Write results to file / Read from file

Filename: Log/Display Only: Errors Successes

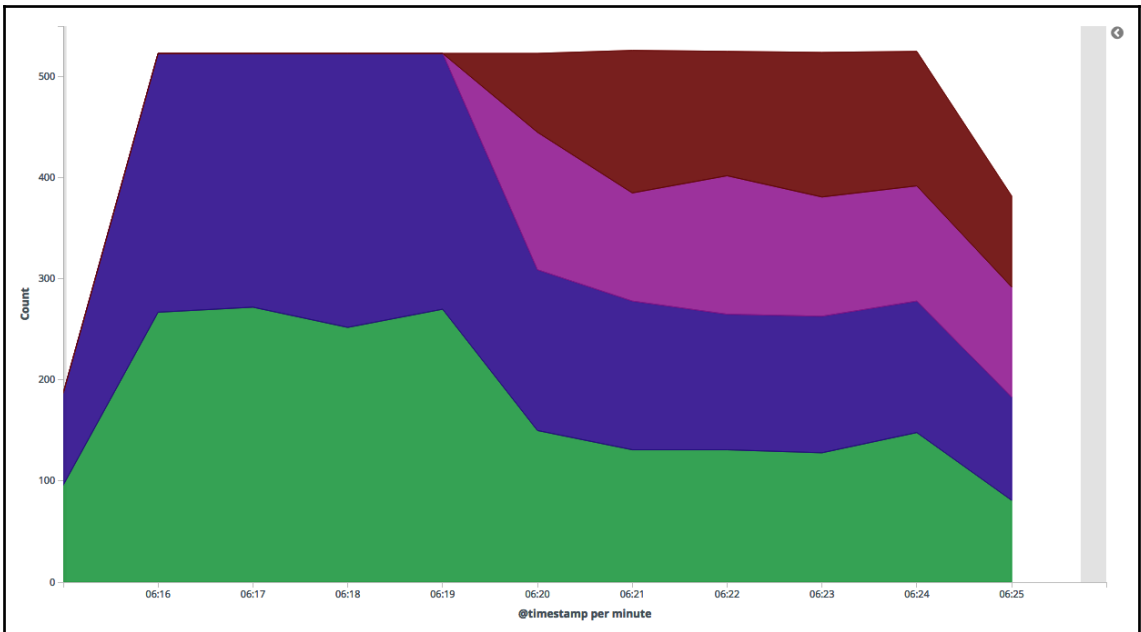
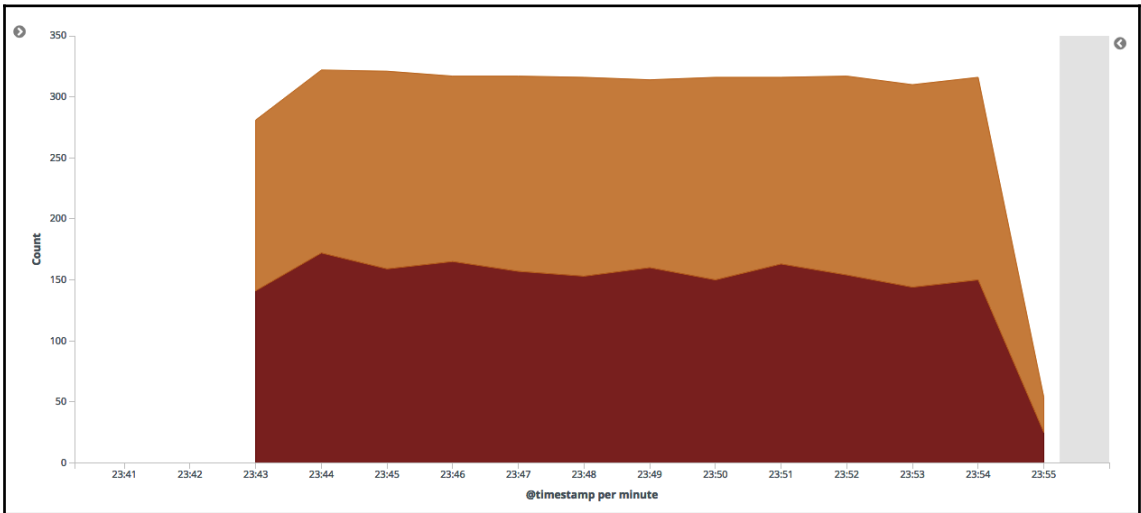
Graphs to Display Data Average Median Deviation Throughput

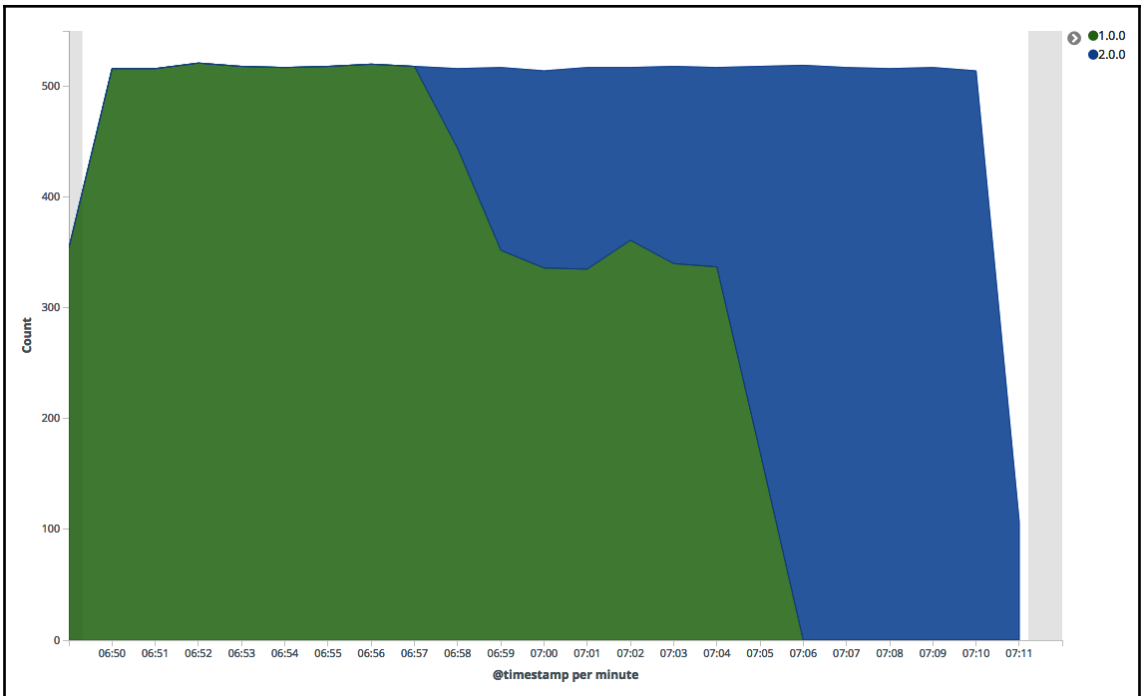
No of Samples 1999 Latest Sample 82 Average 96
 Deviation 30 Throughput 7.1139/seconds Median 92





Chapter 7: Load Balancing





Chapter 9: Onto Production

