

Rocky Linux Web Services Guide (English version)

A book from the Documentation Team

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1. Foreword

RockyLinux is part of the Enterprise Linux family, making it particularly well suited to hosting web services such as file servers (FTP, sFTP), web servers (apache, nginx), application servers (PHP, Python), database servers (MariaDB, Mysql, PostgreSQL) or more specific services such as load balancing, caching, proxyfication or reverse proxyfication (HAProxy, Varnish, Squid).

The web wouldn't be what it is without email. Web services generally make extensive use of mail servers (Postfix).

Sometimes, these services are extremely busy or require highly available services. In these cases, other services can be implemented to guarantee optimal service performance (Heartbeat, PCS).

Each chapter of this book can be consulted independently, according to your needs, and it is not compulsory to read the chapters in order.

This book is also part of a series of books dedicated to system administration under Linux (Admin Guide, Learning Bash, Learning Ansible). Where necessary, you'll be invited to review the concepts you're missing in the corresponding chapters of the above-mentioned books.

1.1 Public

The target audience for this book is system administrators already trained in the use of system administration commands (see our book Admin Guide), who want to install, configure and secure their web services.

1.2 How to use this book

This book has been designed as a training manual, so that it can be used in several ways. Either as a training aid for trainers, or as a self-training aid for administrators wishing to acquire new skills or reinforce their existing knowledge.

To implement some of the services presented in this book, you may need two (or more) servers to put the theory into practice.

2. Licence

RockyLinux offers Linux courseware for trainers or people wishing to learn how to administer a Linux system on their own.

RockyLinux materials are published under Creative Commons-BY-SA. This means you are free to share and transform the material, while respecting the author's rights.

BY: **Attribution**. You must cite the name of the original author.

SA: Share Alike.

• Creative Commons-BY-SA licence: https://creativecommons.org/licenses/by-sa/4.0/

The documents and their sources are freely downloadable from:

- https://docs.rockylinux.org
- https://github.com/rocky-linux/documentation

Our media sources are hosted at github.com. You'll find the source code repository where the version of this document was created.

From these sources, you can generate your own personalized training material using mkdocs. You will find instructions for generating your document here.

How can I contribute to the documentation project?

You'll find all the information you need to join us on our git project home page.

We wish you all a pleasant reading and hope you enjoy the content.

3. Part 1. Files Servers

| 3.1 FTP |
|---|
| In this chapter, you will learn about FTP Servers. |
| Objectives: In this chapter, you will learn how to: |
| ✓ XXX |
| ✓ XXX |
| XXX, XXX |
| Knowledge: |
| Complexity: |
| Reading time: XX minutes |
| Knowledge: Complexity: |

| 3.1.1 Generalities |
|--|
| 3.1.2 Configuration |
| 3.1.3 Security |
| 3.1.4 Workshop |
| Task 1: XXX |
| Task 2 : XXX |
| Task 3: XXX |
| Task 4: XXX |
| 3.1.5 Check your Knowledge |
| ✓ Simple question? (3 answers) |
| ✓ Question with multiple answers? |
| Answer 1 |
| Answer 2 |
| Answer 3 |
| Answer 4 |
| 3.2 sFTP |
| In this chapter, you will learn about XXXXXXX. |

| ✓ XXX |
|--------------------------------|
| ✓ XXX |
| |
| XXX, XXX |
| Knowledge: |
| Complexity: |
| Reading time: XX minutes |
| 3.2.1 Generalities |
| 3.2.2 Configuration |
| 3.2.3 Security |
| 3.2.4 Workshop |
| Task 1 : XXX |
| Task 2 : XXX |
| Task 3 : XXX |
| Task 4 : XXX |
| 3.2.5 Check your Knowledge |
| ✓ Simple question? (3 answers) |

✓

Question with multiple answers?

Answer 1

Answer 2

Answer 3

| 4. Part 2. Web Servers |
|---|
| |
| 4.1 Generalities |
| 4.1.1 HTTP Protocol |
| |
| 4.2 Apache |
| In this chapter, you will learn about XXXXXXX. |
| Objectives: In this chapter, you will learn how to: |
| ✓ XXX |
| ✓ XXX |
| |
| XXX, XXX |
| Knowledge: |
| |

Complexity:

Reading time: XX minutes

| 4.2.1 Generalities |
|---------------------------------|
| 4.2.2 Configuration |
| |
| 4.2.3 Security |
| 4.2.4 Workshop |
| Task 1 : XXX |
| Task 2 : XXX |
| Task 3: XXX |
| Task 4: XXX |
| 4.2.5 Check your Knowledge |
| |
| Simple question? (3 answers) |
| |
| Question with multiple answers? |
| Answer 1 |
| |
| Answer 2 |
| Answer 2 Answer 3 |
| |
| Answer 3 |

| ✓ XXX |
|------------------------------|
| ✓ XXX |
| XXX |
| XXX, XXX |
| Knowledge: |
| Complexity: |
| Reading time: XX minutes |
| 4.3.1 Generalities |
| 4.3.2 Configuration |
| 4.3.3 Security |
| 4.3.4 Workshop |
| Task 1 : XXX |
| Task 2 : XXX |
| Task 3 : XXX |
| Task 4 : XXX |
| 4.3.5 Check your Knowledge |
| Simple question? (3 answers) |

✓

Question with multiple answers?

Answer 1

Answer 2

Answer 3

5. Part 3. Application servers

| 5.1 Php |
|---|
| In this chapter, you will learn about XXXXXXX. |
| Objectives: In this chapter, you will learn how to: |
| ✓ XXX |
| ✓ XXX |
| XXX, XXX |
| Knowledge: |
| Complexity: |
| Reading time: XX minutes |
| Complexity: |

| 5.1.1 Generalities |
|--|
| 5.1.2 Configuration |
| 5.1.3 Security |
| 5.1.4 Workshop |
| Task 1: XXX |
| Task 2: XXX |
| Task 3: XXX |
| Task 4: XXX |
| 5.1.5 Check your Knowledge |
| ✓ Simple question? (3 answers) |
| ✓ Question with multiple answers? |
| Answer 1 |
| Answer 2 |
| Answer 3 |
| Answer 4 |
| 5.2 Python |
| In this chapter, you will learn about XXXXXXX. |

| ✓ XXX |
|------------------------------|
| ✓ XXX |
| |
| XXX, XXX |
| Knowledge: |
| Complexity: |
| |
| Reading time: XX minutes |
| 5.2.1 Generalities |
| |
| 5.2.2 Configuration |
| 5.2.3 Security |
| 5.2.4 Workshop |
| Task 1 : XXX |
| IASK I . AAA |
| Task 2 : XXX |
| Task 3 : XXX |
| Task 4 : XXX |
| 5.2.5 Check your Knowledge |
| Simple question? (3 answers) |

✓

Question with multiple answers?

Answer 1

Answer 2

Answer 3

6. Part 4. Databases servers

| Objectives: In this chapter, you will learn how to: XXX XXX XXX XXX Knowledge: Complexity: | In this chapter, you will learn about XXXXXXX. |
|--|---|
| XXX XXX XXX XXX Knowledge: Complexity: | Objectives : In this chapter, you will learn how to: |
| XXX, XXX Knowledge: Complexity: | |
| Knowledge: Complexity: | ✓ XXX |
| Knowledge: Complexity: | |
| Complexity: | XXX, XXX |
| | Knowledge: |
| | Complexity: |
| Reading time: XX minutes | Reading time: XX minutes |
| Reading time: XX minutes | Reading time: XX minutes |

| 6.1.1 Generalities |
|--|
| 6.1.2 Configuration |
| 6.1.3 Security |
| 6.1.4 Workshop |
| Task 1: XXX |
| Task 2: XXX |
| Task 3: XXX |
| Task 4: XXX |
| 6.1.5 Check your Knowledge |
| ✓ Simple question? (3 answers) |
| ✓ Question with multiple answers? |
| Answer 1 |
| Answer 2 |
| Answer 3 |
| Answer 4 |
| 6.2 Mysql |
| In this chapter, you will learn about XXXXXXX. |

| ✓ XXX |
|------------------------------|
| ✓ XXX |
| |
| XXX, XXX |
| Knowledge: |
| Complexity: |
| |
| Reading time: XX minutes |
| 6.2.1 Generalities |
| |
| 6.2.2 Configuration |
| 6.2.3 Security |
| 6.2.4 Workshop |
| Task 1 : XXX |
| |
| Task 2 : XXX |
| Task 3 : XXX |
| Task 4 : XXX |
| 6.2.5 Check your Knowledge |
| Simple question? (3 answers) |

| Question with multiple answers? |
|---|
| Answer 1 |
| Answer 2 |
| Answer 3 |
| Answer 4 |
| 6.3 PostgreSQL |
| In this chapter, you will learn about XXXXXXX. |
| Objectives: In this chapter, you will learn how to: |
| ✓ XXX |
| ✓ XXX |
| XXX, XXX |
| Knowledge: |
| Complexity: |
| Reading time: XX minutes |
| |

| 6 | 3 | 1 | Ger | era | lities |
|----|----|---|------|------|--------|
| U. | u. | | QCI. | ıcıa | แแนง |

6.3.2 Configuration

6.3.3 Security

6.3.4 Workshop

Task 1: XXX

Task 2: XXX

Task 3: XXX

Task 4: XXX

6.3.5 Check your Knowledge

1

Simple question? (3 answers)

1

Question with multiple answers?

Answer 1

Answer 2

Answer 3

7. Part 5. Load balancing, caching and proxyfication

| 7.1 HAProxy |
|---|
| In this chapter, you will learn about XXXXXXX. |
| Objectives : In this chapter, you will learn how to: |
| ✓ XXX |
| ✓ XXX |
| XXX, XXX |
| Knowledge: |
| Complexity: |
| Reading time: XX minutes |

| 7.1.1 Generalities |
|---------------------------------|
| 7.1.2 Configuration |
| |
| 7.1.3 Security |
| 7.1.4 Workshop |
| Task 1 : XXX |
| Task 2 : XXX |
| Task 3: XXX |
| Task 4: XXX |
| 7.1.5 Check your Knowledge |
| Simple question? (3 answers) |
| Question with multiple answers? |
| Answer 1 |
| Answer 2 |
| Answer 3 |
| Answer 4 |
| 7.2 Varnish |

In this chapter, you will learn about XXXXXXX.

| ✓ XXX |
|------------------------------|
| ✓ XXX |
| |
| XXX, XXX |
| Knowledge: |
| Complexity: |
| Reading time: XX minutes |
| 7.2.1 Generalities |
| 7.2.2 Configuration |
| 7.2.3 Security |
| 7.2.4 Workshop |
| Task 1 : XXX |
| Task 2 : XXX |
| Task 3 : XXX |
| Task 4 : XXX |
| 7.2.5 Check your Knowledge |
| Simple question? (3 answers) |

| Question with multiple answers? |
|---|
| Answer 1 |
| Answer 2 |
| Answer 3 |
| Answer 4 |
| 7.3 Squid |
| In this chapter, you will learn about XXXXXXX. |
| Objectives: In this chapter, you will learn how to: |
| ✓ XXX |
| ✓ XXX |
| XXX, XXX |
| Knowledge: |
| Complexity: |
| Reading time: XX minutes |

| $\overline{}$ | 0 | 4 | 0 | | 1:4: |
|---------------|-----|---|-----|------|--------|
| 1. | .ರ. | | Ger | iera | lities |

7.3.2 Configuration

7.3.3 Security

7.3.4 Workshop

Task 1: XXX

Task 2: XXX

Task 3: XXX

Task 4: XXX

7.3.5 Check your Knowledge

1

Simple question? (3 answers)

./

Question with multiple answers?

Answer 1

Answer 2

Answer 3

8. Part 6. Mail servers

| 8.1 Postfix |
|---|
| In this chapter, you will learn about XXXXXXX. |
| Objectives: In this chapter, you will learn how to: |
| ✓ XXX |
| ✓ XXX |
| XXX, XXX |
| Knowledge: |
| Complexity: |
| Reading time: XX minutes |
| |

| 8.1.1 Generalitie | 76 |
|-------------------|----|

8.1.2 Configuration

8.1.3 Security

8.1.4 Workshop

Task 1: XXX

Task 2: XXX

Task 3: XXX

Task 4: XXX

8.1.5 Check your Knowledge

1

Simple question? (3 answers)

./

Question with multiple answers?

Answer 1

Answer 2

Answer 3

9. Part 7. High availability

| 9.1 Heartbeat |
|---|
| In this chapter, you will learn about XXXXXXX. |
| Objectives: In this chapter, you will learn how to: |
| ✓ XXX |
| ✓ XXX |
| XXX, XXX |
| Knowledge: |
| Complexity: |
| Reading time: XX minutes |
| |

| 9.1.1 Generalities |
|--|
| 0.1.2 Configuration |
| 9.1.2 Configuration |
| 9.1.3 Security |
| 9.1.4 Workshop |
| Task 1 : XXX |
| Task 2 : XXX |
| Task 3: XXX |
| Task 4: XXX |
| 9.1.5 Check your Knowledge |
| ✓ Simple question? (3 answers) |
| Question with multiple answers? |
| Answer 1 |
| Answer 2 |
| Answer 3 |
| Answer 4 |
| 9.2 PCS |
| In this chapter, you will learn about XXXXXXX. |

| ✓ XXX |
|------------------------------|
| ✓ XXX |
| |
| XXX, XXX |
| Knowledge: |
| Complexity: |
| |
| Reading time: XX minutes |
| 9.2.1 Generalities |
| |
| 9.2.2 Configuration |
| 9.2.3 Security |
| 9.2.4 Workshop |
| Task 1 : XXX |
| |
| Task 2 : XXX |
| Task 3 : XXX |
| Task 4 : XXX |
| 9.2.5 Check your Knowledge |
| Simple question? (3 answers) |

✓

Question with multiple answers?

Answer 1

Answer 2

Answer 3

| https://docs.rockylinux.org/ |
|------------------------------|
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