



BIRMINGHAM—MUMBAI

# OpenShift Multi-Cluster Management Handbook

Copyright © 2022 Packt Publishing

All rights reserved. No part of this book may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, without the prior written permission of the publisher, except in the case of brief quotations embedded in critical articles or reviews.

Every effort has been made in the preparation of this book to ensure the accuracy of the information presented. However, the information contained in this book is sold without warranty, either express or implied. Neither the authors, nor Packt Publishing or its dealers and distributors, will be held liable for any damages caused or alleged to have been caused directly or indirectly by this book.

Packt Publishing has endeavored to provide trademark information about all of the companies and products mentioned in this book by the

appropriate use of capitals. However, Packt Publishing cannot guarantee the accuracy of this information.

**Group Product Manager:** Rahul Nair

**Publishing Product Manager:** Meeta Rajani

**Senior Content Development Editor:** Sayali Pingale

**Technical Editor:** Shruthi Shetty

**Copy Editor:** Safis Editing

**Book Project Manager:** Neil Dmello

**Proofreader:** Safis Editing

**Indexer:** Rekha Nair

**Production Designer:** Alishon Mendonca

**Marketing Coordinator:** Nimisha Dua

First published: October 2022

Production reference:1141022

Published by Packt Publishing Ltd.

Livery Place

35 Livery Street

Birmingham

B3 2PB, UK.

978-1-80323-528-8

[www.packt.com](http://www.packt.com)

*To my greatest treasures here on earth: my sweet and smart son, Pedro,  
and my lovely wife, Jeila, who tolerated my “good humor” after long  
nights awake writing this book! :)*

*You both gave me amazing support and motivation all the time! I wouldn't be able to accomplish this without you! Both of you are the inspiration I have to do my best every day! Love you so much!*

– *Giovanni Fontana*

*Some people leave and let a little of themselves, others come and take a little of us, but only those who are substantially part of our lives give us the strength to continue, so I dedicate this book affectionately to my smart son, Davi, to whom I dedicate unconditional love, and to my love and inspiration, my wife, Fabiana.*

– *Rafael Pecora*

# Foreword

Installing, configuring, and using OpenShift can require you to take several complex steps. Understanding all the necessary steps and acquiring knowledge so that your environment is perfectly installed can take time. With the help of our authors *Giovanni (Gigio) Fontana* and *Rafael Pecora* who know the subject, and have years of experience in everything from architecture design to implementation and support, this path can be shortened.

This book contains not only the necessary steps to install, configure, and use OpenShift, but also information and helpful tips, so that everything is perfectly installed.

Giovanni is always loved by everyone around him, and as a perfectionist who enjoys applying himself to complicated tasks; he likes things well done.

Pecora is a prodigy, a true smart guy, and at the same time he is self-taught; he learns things with a level of ease that is unique to him.

*Marcos Amorim*

*Sr. Support Engineer*

*Red Hat*

# Contributors

# About the authors



**Giovanni Fontana** is a solution architect working for large companies in the US Northeast region from different industries such as finance and the health sector. He is a Red Hat Certified Architect, owning many certificates covering RHEL, OpenShift, Ansible, and others. In the cloud and DevOps domain, he has been working with activities such as process assessment and design; pre-sales, architecture design, and implementation of container-based platforms such as Red Hat OpenShift Container Platform, hybrid/multi-cloud management tools; automation design and implementation using Ansible, and others. Before his current position, he was a principal consultant with much hands-on experience, providing services for many large companies and also acting as a technical leader for a talented team of consultants at Red Hat in Brazil. Now as an OpenShift specialist solution architect, he helps customers to solve pain points and reach their targets by adopting Red Hat's open source technologies.

At Red Hat, Giovanni has been recognized with important awards such as Red Hat President's Club, Top Gun, and Champions awards.

**Rafael Pecora** started his first journey with technology at the age of 15 and since then, he has been dedicating himself to technology. He has more than 23 years dedicated to IT, a profession that is always evolving and shaping itself on cutting-edge innovation. Passionate about IT, he has focused his entire career on IT infrastructure, from traditional data centers to current cloud technologies. Currently, he develops his professional activity as a cloud solution architect in container technology and public clouds, with the aim of bringing his knowledge and improvement to clients that work in the financial, health and insurance, mid-market, and public sector, and helping them adopt hybrid cloud infrastructure with better resiliency for their customers.

At Red Hat, Rafael has achieved more than 40 projects as an OpenShift consultant, acting on many industry projects, and has been recognized by customers and also recognized with Service Star and Champions awards.

# About the reviewers

**Rafael Aracely Delfino Sales** works at Red Hat as an engineer across Latin America. He is a specialist in the Red Hat OpenShift Container Platform and has been helping clients modernize their infrastructure since 2018.

*I am grateful to Giovanni Fontana and Rafael Pecora, who invited me to review this book and trusted my technical skills. It was an amazing experience to be part of this project.*

**Andres Sacco** is a technical leader at TravelX and he has experience with many different languages, such as Java, PHP, and Node.js. In his previous job, Andres helped find alternative ways to optimize data transfer between microservices, which reduced the infrastructure cost by 55%. Before introducing these optimizations, he investigated different testing methods for better coverage than the unit tests of the microservices. He also dictated internal courses about new technologies, and he has written articles on Medium. Andres is a co-author of the book *Beginning Scala 3*, from Apress.

Previous chapter

< [OpenShift Multi-Cluster Management Handbook](#)

Next chapter

[OpenShift Multi-Cluster Management Handbook](#) >