



Quick answers to common problems

# OpenStack Cloud Computing Cookbook

*Third Edition*

Over 110 effective recipes to help you build and operate OpenStack cloud computing, storage, networking, and automation

*Foreword by Tim Bell, Infrastructure Manager, CERN*

Kevin Jackson  
Egle Sigler

Cody Bunch

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# Openstack Cloud Computing Cookbook By Jackson Kevin

## Packt Publishing2012 Paperback

**Kevin Jackson**

## **Openstack Cloud Computing Cookbook By Jackson Kevin Packt Publishing2012 Paperback:**

*OpenStack Cloud Computing Cookbook* Kevin Jackson, Cody Bunch, 2013 Over 100 recipes to successfully set up and manage your OpenStack cloud environments with complete coverage of Nova Swift Keystone Glance Horizon Neutron and Cinder

*OpenStack Cloud Computing Cookbook - Third Edition* Kevin Jackson, Cody Bunch, Egle Sigler, 2015-07-31 Over 110 effective recipes to help you build and operate OpenStack cloud computing storage networking and automation

**About This Book** Explore many new features of OpenStack's Juno and Kilo releases Install, configure, and administer core projects with the help of OpenStack Object Storage, Block Storage, and Neutron Networking services. Harness the abilities of experienced OpenStack administrators and architects and run your own private cloud successfully.

**Practical real-world examples** of each service and an accompanying Vagrant environment that helps you learn quickly.

**In Detail** OpenStack Open Source software is one of the most used cloud infrastructures to support software development and big data analysis. It is developed by a thriving community of individual developers from around the globe and backed by most of the leading players in the cloud space today. It is simple to implement, massively scalable, and can store a large pool of data and networking resources. OpenStack has a strong ecosystem that helps you provision your cloud storage needs. Add OpenStack's enterprise features to reduce the cost of your business. This book will show you the steps to build up a private cloud environment. At the beginning, you'll discover the uses of cloud services such as the identity service, image service, and compute service. You'll dive into Neutron, the OpenStack Networking service, and get your hands dirty with configuring ML2 networks, routers, and Distributed Virtual Routers. You'll then gather more expert knowledge on OpenStack cloud computing by managing your cloud's security and migration. After that, we'll delve into OpenStack Object storage and how to manage servers and work with objects, cluster, and storage functionalities. Also, as you go deeper into the realm of OpenStack, you'll learn practical examples of Block storage, LBaaS, and FWaaS installation and configuration. Covered ground up! Finally, you will learn OpenStack dashboard, Ansible, and Foreman, Keystone, and other interesting topics. What You Will Learn

- Understand, install, configure, and manage Nova, the OpenStack Cloud Compute resource.
- Configure ML2 networks, routers, and Distributed Virtual Routers with Neutron.
- Use and secure Keystone, the OpenStack Authentication service.
- Install and set up Swift and Container Replication between datacenters.
- Gain hands-on experience and familiarity with Horizon, the OpenStack Dashboard user interface.
- Automate complete solutions with our recipes on Heat, the OpenStack Orchestration service.
- Use Ansible and Foreman to automate OpenStack installations successfully.
- Follow practical advice and examples to run OpenStack in production.

**Who This Book Is For** This book is aimed at cloud system engineers, system administrators, and technical architects who are moving from a virtualized environment to cloud environments. This book assumes that you are familiar with cloud computing platforms and have knowledge of virtualization, networking, and managing Linux environments.

**Style and approach** Clear, step-by-step instructions coupled with practical and applicable recipes that will enable you to use and implement the latest features.

of OpenStack [Openstack Cloud Computing](#) Kevin Jackson,2017 **OpenStack Cloud Computing Cookbook** Kevin Jackson,Cody Bunch,Egle Sigler,James Denton,2018-01-29 The Fourth Edition of the industry acclaimed OpenStack Cloud Computing Cookbook from four recognized experts updated to the latest OpenStack build including Cinder Nova and Neutron Key Features Over 100 recipes created by a team of OpenStack experts Updated to work with the latest OpenStack builds with recipes covering the installation and use of OpenStack with Ansible It covers topics such as Keystone Glance Neutron Nova Cinder and more plus recipes for OpenStack storage networking and orchestrating workloads Test drive OpenStack using the accompanying Vagrant environment Book Description This is the fourth edition of the industry acclaimed OpenStack Cloud Computing Cookbook created by four recognized OpenStack experts It has now been updated to work with the latest OpenStack builds using tools and processes based on their collective and vast OpenStack experience OpenStack Open Source Cloud software is one of the most used cloud infrastructures to support a wide variety of use cases from software development to big data analysis It is developed by a thriving community of individual developers from around the globe and backed by most of the leading players in the cloud space today We make it simple to implement massively scalable and able to store a large pool of data and networking resources OpenStack has a strong ecosystem that helps you provision your cloud storage needs Add OpenStack s enterprise features to reduce the cost of your business This book will begin by showing you the steps to build up an OpenStack private cloud environment using Ansible You ll then discover the uses of cloud services such as the identity service image service and compute service You ll dive into Neutron the OpenStack Networking service and get your hands dirty with configuring networks routers load balancers and more You ll then gather more expert knowledge on OpenStack cloud computing by managing your cloud s security and migration After that we delve into OpenStack Object storage and you ll see how to manage servers and work with objects cluster and storage functionalities Finally you will learn about OpenStack dashboard Ansible Keystone and other interesting topics What you will learn Understand install configure and manage a complete OpenStack Cloud platform using OpenStack Ansible Configure networks routers load balancers and more with Neutron Use Keystone to setup domains roles groups and user access Learn how to use Swift and setup container access control lists Gain hands on experience and familiarity with Horizon the OpenStack Dashboard user interface Automate complete solutions with our recipes on Heat the OpenStack Orchestration service as well as using Ansible to orchestrate application workloads Follow practical advice and examples to run OpenStack in production Who this book is for This book is written for cloud system engineers system administrators and technical architects who are moving from a virtualized environment to cloud environments This book assumes that you are familiar with cloud computing platforms and have knowledge of virtualization networking and managing Linux environments

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better equipped to troubleshoot and solve common problems in performance availability and automation that confront production ready OpenStack environments Who This Book Is For This course is for those who are new to OpenStack who want to learn the cloud networking fundamentals and get started with OpenStack networking Basic understanding of Linux Operating System Virtualization and Networking and Storage principles will come in handy What You Will Learn Get an introduction to OpenStack and its components Store and retrieve data and images using storage components such as Cinder Swift and Glance Install and configure Swift the OpenStack Object Storage service including configuring Container Replication between datacenters Gain hands on experience and familiarity with Horizon the OpenStack Dashboard user interface Learn how to automate OpenStack installations using Ansible and Foreman Follow practical advice and examples for running OpenStack in production Fix common issues with images served through Glance and master the art of troubleshooting Neutron networking In Detail OpenStack is a collection of software projects that work together to provide a cloud fabric Learning OpenStack Cloud Computing course is an exquisite guide that you will need to build cloud environments proficiently This course will help you gain a clearer understanding of OpenStack's components and their interaction with each other to build a cloud environment The first module Learning OpenStack starts with a brief look into the need for authentication and authorization the different aspects of dashboards cloud computing fabric controllers along with Networking as a Service and Software defined Networking Then you will focus on installing configuring and troubleshooting different architectures such as Keystone Horizon Nova Neutron Cinder Swift and Glance After getting familiar with the fundamentals and application of OpenStack let's move deeper into the realm of OpenStack In the second module OpenStack Cloud Computing Cookbook preview how to build and operate OpenStack cloud computing storage networking and automation Dive into Neutron the OpenStack Networking service and get your hands dirty with configuring ML2 networks routers and distributed virtual routers Further you'll learn practical examples of Block Storage LBaaS and FBaaS The final module Troubleshooting OpenStack will help you quickly diagnose troubleshoot and correct problems in your OpenStack We will diagnose and remediate issues in Keystone Glance Neutron networking Nova Cinder block storage Swift object storage and issues caused by Heat orchestration This Learning Path combines some of the best that Packt has to offer in one complete curated package It includes content from the following Packt products Learning OpenStack by Alok Shrivastwa Sunil Sarat OpenStack Cloud Computing Cookbook Third Edition by Kevin Jackson Cody Bunch Egle Sigler Troubleshooting OpenStack by Tony Campbell Style and approach This course aims to create a smooth learning path that will teach you how to get started with setting up private and public clouds using a free and open source cloud computing platform OpenStack Through this comprehensive course you'll learn OpenStack Cloud computing from scratch to finish and more *OpenStack Cloud Computing Cookbook - Fourth Edition* ,2017 The Fourth Edition of the industry acclaimed OpenStack Cloud Computing Cookbook from four recognized experts updated to the latest OpenStack build including Cinder

Nova and Neutron About This Book Over 100 recipes created by a team of OpenStack experts Updated to work with the latest OpenStack builds with recipes covering the installation and use of OpenStack with Ansible It covers topics such as Keystone Glance Neutron Nova Cinder and more plus recipes for OpenStack storage networking and orchestrating workloads Test drive OpenStack using the accompanying Vagrant environment Who This Book Is For This book is written for cloud system engineers system administrators and technical architects who are moving from a virtualized environment to cloud environments This book assumes that you are familiar with cloud computing platforms and have knowledge of virtualization networking and managing Linux environments What You Will Learn Understand install configure and manage a complete OpenStack Cloud platform using OpenStack Ansible Configure networks routers load balancers and more with Neutron Use Keystone to setup domains roles groups and user access Learn how to use Swift and setup container access control lists Gain hands on experience and familiarity with Horizon the OpenStack Dashboard user interface Automate complete solutions with our recipes on Heat the OpenStack Orchestration service as well as using Ansible to orchestrate application workloads Follow practical advice and examples to run OpenStack in production In Detail This is the fourth edition of the industry acclaimed OpenStack Cloud Computing Cookbook created by four recognized OpenStack experts It has now been updated to work with the latest OpenStack builds using tools and processes based on their collective and vast OpenStack experience OpenStack Open Source Cloud software is one of the most used cloud infrastructures to support a wide variety of use cases from software development to big data analysis It is developed by a thriving community of individual developers from around the globe and backed by most of the leading players in the cloud space today We make it simple to implement massively scalable and able to store a large pool of data and networking resources OpenStack has a strong ecosystem that helps you provision your cloud storage needs Add OpenStack s enterprise features to reduce the cost of your business This book will begin by s

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In a global inundated with displays and the cacophony of quick communication, the profound power and psychological resonance of verbal art often disappear into obscurity, eclipsed by the continuous onslaught of sound and distractions. However, located within the lyrical pages of **Openstack Cloud Computing Cookbook By Jackson Kevin Packt Publishing2012 Paperback**, a fascinating work of literary elegance that impels with raw feelings, lies an remarkable journey waiting to be embarked upon. Written by way of a virtuoso wordsmith, that exciting opus manuals viewers on a mental odyssey, delicately exposing the latent possible and profound affect embedded within the delicate web of language. Within the heart-wrenching expanse of this evocative evaluation, we will embark upon an introspective exploration of the book's central subjects, dissect its captivating publishing style, and immerse ourselves in the indelible impression it leaves upon the depths of readers souls.

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