

# Learning Continuous Integration With Jenkins

Book Reivew - Learning Continuous Integration with Jenkins (CICD Pipeline) CI/CD Pipeline Using Jenkins | Continuous Integration \u0026amp; Continuous Deployment | DevOps | Simplilearn Continuous Integration and Deployment with Jenkins for PCF - Andrei Krasnitski, Altoros Jenkins Explained in 3 minutes DevOps CI/CD Explained in 100 Seconds Best books on Jenkins What Is Jenkins? | What Is Jenkins And How It Works? | Jenkins Tutorial For Beginners | Simplilearn What is Continuous Integration? Continuous Integration with Maven, Jenkins, Git \u0026amp; GitHub part-1 Jenkins Tutorial for Beginners | Jenkins Tutorial | Intellipaat Jenkins Tutorial For Beginners - 1 | Continuous Integration with Jenkins | DevOps Tools | Edureka Jenkins Full course in 5 hours [2024] | Jenkins Tutorial for Beginners | DevOpsTraining | Edureka Jenkins Full Course 2023 | Jenkins Tutorial For Beginners DAY-1 | Real-Time CI CD Pipeline From Scratch with Jenkins | DevOps Shack Jenkins in Five Minutes What is Jenkins | Jenkins Tutorial for Beginners | Jenkins Continuous Integration Tutorial | Edureka Real-Time CI CD Pipeline Project | CI CD Pipeline | Jenkins CI CD Pipeline Jenkins Tutorials 6 - Continuous Delivery Pipeline (Build, Deploy, Automation Test, Release) Kubernetes CI CD Pipeline Using Jenkins DevOps Tutorial Project Learn Jenkins! Complete Jenkins Course - Zero to Hero 03 Jenkins - Continuous Integration and benefits What is Continuous Integration? | Continuous Integration with Jenkins | DevOps Tutorial | Edureka Jenkins Full Course | Jenkins Tutorial For Beginners | Jenkins Tutorial | Simplilearn CI/CD In 5 Minutes | Is It Worth The Hassle: Crash Course System Design #2 How to design a modern CI/CD Pipeline DevOps: CI/CD with Jenkins pipelines, Maven, Gradle - learn Continuous Integration Jenkins Pipeline Tutorial | Jenkins Continuous Integration Tutorial | Jenkins Tutorial | Simplilearn Jenkins Tutorial | Jenkins Installation | Continuous Integration With Jenkins | DevOps | Simplilearn CI/CD | Continuous Integration | Delivery | Deployment CI CD Pipeline Using Jenkins | Continuous Integration and Deployment | DevOps Tutorial | Edureka Integrating PHP Projects with Jenkins Continuous Delivery with Jenkins, Kubernetes, and Terraform Learning Continuous Integration with TeamCity Jenkins: The Definitive Guide Effective Jenkins How to Create World-Class Agility, Reliability, and Security in Technology Organizations Pro Continuous Delivery Proceedings of ICTIS 2020 Continuous Delivery GitOps and Kubernetes Learning DevOps Hands-On Continuous Integration and Delivery Continuous Delivery with Docker and Jenkins Build-Deploy-Test Automation for Android Mobile Apps Build and Release Quality Software at Scale with Jenkins, Travis CI, and CircleCI Pipeline as Code Jenkins 2.x Continuous Integration Cookbook Continuous Deployment with Argo CD, Jenkins X, and Flux Learn Ruthlessly Effective Automation

*Learning Continuous Integration With Jenkins*

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**RORY AUDRINA**

## INTEGRATING PHP PROJECTS WITH JENKINS

Packt Publishing Ltd

A step-by-step guide to implement Continuous Integration and Continuous Delivery (CI/CD) for Flutter, Ionic, Android, and Angular applications. KEY FEATURES ● This book covers all Declarative Pipelines that can be utilized in real-life scenarios with sample applications written in Android, Angular, Ionic Cordova, and Flutter. ● This book utilizes the YAML Pipeline feature of Jenkins. A step-by-step implementation of Continuous Practices of DevOps makes it easy to understand even for beginners. DESCRIPTION This book brings solid practical knowledge on how to create YAML pipelines using Jenkins for efficient and scalable CI/CD pipelines. It covers an introduction to various essential topics such as DevOps, DevOps History, Benefits of DevOps Culture, DevOps and Value Streams, DevOps Practices, different types of pipelines such as Build Pipeline, Scripted Pipeline, Declarative Pipeline, YAML Pipelines, and Blue Ocean. This book provides an easy journey to readers in creating YAML pipelines for various application systems, including Android, AngularJS, Flutter, and Ionic Cordova. You will become a skilled developer by learning how to run Static Code Analysis using SonarQube or Lint tools, Unit testing, calculating code coverage, publishing unit tests and coverage reports, verifying the threshold of code coverage, creating build/package, and distributing packages across different environments. By the end of this book, you will be able to try out some of the best practices to implement DevOps using Jenkins and YAML. WHAT YOU WILL LEARN ● Write successful YAML Pipeline codes for Continuous Integration and Continuous Delivery. ● Explore the working of CI/CD pipelines across Android, Angular, Ionic Cordova, and Flutter apps. ● Learn the importance of Continuous Code Inspection and Code Quality. ● Understand the importance of Continuous Integration and Continuous Delivery. ● Learn to publish Unit Tests and Code Coverage in Declarative Pipelines. ● Learn to deploy apps on Azure and distribute Mobile Apps to App Centers. WHO THIS BOOK IS FOR This book is suitable for beginners, DevOps consultants, DevOps evangelists, DevOps engineers, technical specialists, technical architects, and Cloud experts. Some prior basic knowledge of application development and deployment, Cloud computing, and DevOps practices will be helpful. TABLE OF CONTENTS 1.Introducing Pipelines 2.Basic Components of YAML Pipelines 3.Building CI/CD Pipelines with YAML for Flutter Applications 4.Building CI/CD Pipelines with YAML for Ionic Cordova Applications 5.Building CI/CD Pipelines with YAML for Android Apps 6.Building CI/CD Pipelines with YAML for Angular Applications 7.Pipeline Best Practices

## CONTINUOUS DELIVERY WITH JENKINS, KUBERNETES, AND TERRAFORM

O'Reilly Media

Automating the Continuous Deployment Pipeline with Containerized MicroservicesAbout This Book\* First principles of devops, Ansible, Docker, Kubernetes, microservices\* Architect your software in a better and more efficient way with microservices packed as immutable containers\* Practical guide describing an extremely modern and advanced devops toolchain that can be improved continuouslyWho This Book Is ForIf you are an intermediate-level developer who wants to master the whole microservices development and deployment lifecycle using some of the latest and greatest practices and tools, this is the book for you. Familiarity with the basics of Devops and Continuous Deployment will be useful.What You Will Learn \* Get to grips with the fundamentals of Devops\* Architect efficient software in a better and more efficient way with the help of microservices\* Use Docker, Kubernetes, Ansible, Ubuntu, Docker Swarm and more\* Implement fast, reliable and continuous deployments with zero-downtime and ability to roll-back\* Learn about centralized logging and monitoring of your cluster\* Design self-healing systems capable of recovery from both hardware and software failuresIn DetailBuilding a complete modern devops toolchain requires not only the whole microservices development and a complete deployment lifecycle, but also the latest and greatest practices and tools. Victor Farcic argues from first principles how to build a devops toolchain. This book shows you how to chain together Docker, Kubernetes, Ansible, Ubuntu, and other tools to build the complete devops toolkit.Style and approach This book follows a unique, hands-on approach familiarizing you to the Devops 2.0 toolkit in a very practical manner. Although there will be a lot of theory, you won't be able to complete this book by reading it in a metro on a way to work. You'll need to be in front of your computer and get your hands dirty.

*Learning Continuous Integration with TeamCity Apress*

"The Jenkins server or CI (continuous integration) server is a tool that allows software developers to automate many of the common tasks (testing, compiling, etc.) associated with software development. It's become a widely used software development technology (133 thousand active installs, 1 million+ users), because of its ability to dramatically speed up development while assuring code quality. This course teaches you the basics of using the Jenkins server, while explaining the core concepts that govern software automation: Continuous integration, continuous deployment, and continuous delivery."--Resource description page.

*Jenkins: The Definitive Guide* "O'Reilly Media, Inc."

Much has changed in technology over the past decade. Data is hot, the cloud is ubiquitous, and many organizations need some form of automation.

Throughout these transformations, Python has become one of the most popular languages in the world. This practical resource shows you how to use Python for everyday Linux systems administration tasks with today's most useful DevOps tools, including Docker, Kubernetes, and Terraform.

Learning how to interact and automate with Linux is essential for millions of professionals. Python makes it much easier. With this book, you'll learn how to develop software and solve problems using containers, as well as how to monitor, instrument, load-test, and operationalize your software. Looking for effective ways to "get stuff done" in Python? This is your guide. Python foundations, including a brief introduction to the language How to automate text, write command-line tools, and automate the filesystem Linux utilities, package management, build systems, monitoring and instrumentation, and automated testing Cloud computing, infrastructure as code, Kubernetes, and serverless Machine learning operations and data engineering from a DevOps perspective Building, deploying, and operationalizing a machine learning project

*Effective Jenkins* Simon and Schuster

Apply lean frameworks and other concepts of software development to the process of your game development. Resistance to Agile methodologies in the gaming industry is most often due to frustrated attempts to use lean tools and frameworks. Lean Game Development teaches you how to apply frameworks and concepts successfully to benefit you and your team. You will see how to manage, develop and coexist in a lean game development environment. You'll understand what lean is and how it helps the gaming industry. You'll see how to apply MVP concepts and why you should. The concepts taught are used not only in the design of the software code but also in all stages of the development process. Ideal for any game development company, including indie and small studios, Lean Game Development offers new opportunities for streamlining your workflow and benefiting your game development overall. What You'll Learn Discover how lean helps the gaming industry Understand the value of lean over Agile Apply MVP concepts to gaming industry Work with basic automated testing for gaming environment Who This Book Is For Game developers, artist, designers and project managers

**How to Create World-Class Agility, Reliability, and Security in Technology Organizations** Simon and Schuster

Simplify your DevOps roles with DevOps tools and techniques Key Features Learn to utilize business resources effectively to increase productivity and collaboration Leverage the ultimate open source DevOps tools to achieve continuous integration and continuous delivery (CI/CD) Ensure faster time-to-market by reducing overall lead time and deployment downtime Book Description The implementation of DevOps processes requires the efficient use of various tools, and the choice of these tools is crucial for the sustainability of projects and collaboration between development (Dev) and operations (Ops). This book presents the different patterns and tools that you can use to provision and configure an infrastructure in the cloud. You'll begin by understanding DevOps culture, the application of DevOps in cloud infrastructure, provisioning with Terraform, configuration with Ansible, and image building with Packer. You'll then be taken through source code versioning with Git and the construction of a DevOps CI/CD pipeline using Jenkins, GitLab CI, and Azure Pipelines. This DevOps handbook will also guide you in containerizing and deploying your applications with Docker and Kubernetes. You'll learn how to reduce deployment downtime with blue-green deployment and the feature flags technique, and study DevOps practices for open source projects. Finally, you'll grasp some best practices for reducing the overall application lead time to ensure faster time to market. By the end of this book, you'll have built a solid foundation in DevOps, and developed the skills necessary to enhance a traditional software delivery process using modern software delivery tools and techniques What you will learn Become well versed with DevOps culture and its practices Use Terraform and Packer for cloud infrastructure provisioning Implement Ansible for infrastructure configuration Use basic Git commands and understand the Git flow process Build a DevOps pipeline with Jenkins, Azure Pipelines, and GitLab CI Containerize your applications with Docker and Kubernetes Check application quality with SonarQube and Postman Protect DevOps processes and applications using DevSecOps tools Who this book is for If you are a developer or a system administrator interested in understanding continuous integration, continuous delivery, and containerization with DevOps tools and techniques, this book is for you.

*Pro Continuous Delivery* Packt Publishing Ltd

GitOps and Kubernetes is half reference, half practical tutorial for operating Kubernetes the GitOps way. Through fast-paced chapters, you'll unlock the benefits of GitOps for flexible configuration management, monitoring, robustness, multi-environment support, and discover tricks and tips for managing secrets in the unique GitOps fashion. GitOps and Kubernetes introduces a radical idea--managing your infrastructure with the same Git pull requests you use to manage your codebase. In this in-depth tutorial, you'll learn to operate infrastructures based on powerful-but-complex technologies with the same Git version control tools most developers use daily. GitOps and Kubernetes is half reference, half practical tutorial for operating Kubernetes the GitOps way. Through fast-paced chapters, you'll unlock the benefits of GitOps for flexible configuration management, monitoring, robustness, multi-environment support, and discover tricks and tips for managing secrets in the unique GitOps fashion. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications.

**Proceedings of ICTIS 2020** Simon and Schuster

Follow this step-by-step guide for creating a continuous delivery pipeline using all of the new features in Jenkins 2.0 such as Pipeline as a Code, multi-branch pipeline, and more. You will learn three crucial elements for achieving a faster software delivery pipeline: a fungible build/test environment, manageable and reproducible pipelines, and a scalable build/test infrastructure. Pro Continuous Delivery demonstrates how to create a highly available, active/passive Jenkins server using some niche technologies. What You'll Learn Create a highly available, active/passive Jenkins server using CoreOS and Docker, and using Pacemaker and Corosync Use a Jenkins multi-branch pipeline to automatically perform continuous integration whenever there is a new branch in your source control system Describe your continuous delivery pipeline with Jenkinsfile Host Jenkins server on a cloud solution Run Jenkins inside a container using Docker Discover how the distributed nature of Git and the "merge before build" feature of Jenkins can be used to implement gated check-in Implement a scalable build farm using Docker and Kubernetes Who This Book Is For You have experience implementing continuous integration and continuous delivery using Jenkins freestyle Jobs and wish to use the new Pipeline as a Code feature introduced in Jenkins 2.0 Your source code is on a Git-like version control system (Git, GitHub, GitLab, etc.) and you wish to leverage the advantages of a multi-branch pipeline in Jenkins Your infrastructure is on a Unix-like platform and you wish to create a scalable, distributed build/test farm using Docker or Kubernetes You are in need of a highly available system for your Jenkins Server using open source tools and technologies

**Continuous Delivery Learning** Continuous Integration with Jenkins 2.X- Second EditionSpeed up the software delivery process and software productivity using the latest features of Jenkins Key Features Take advantage of a Continuous Integration and Continuous Delivery solution to speed up productivity and achieve faster software delivery See all the new features introduced in Jenkins 2.x, such as Pipeline as code, Multibranch pipeline, Docker Plugin, and more Learn to implement Continuous Integration and Continuous Delivery by orchestrating multiple DevOps tools using Jenkins Book Description In past few years, agile software development has seen tremendous growth. There is a huge demand for software delivery solutions that are fast yet flexible to numerous amendments. As a result, Continuous Integration (CI) and Continuous Delivery (CD) methodologies are gaining popularity. This book starts off by explaining the concepts of CI and its significance in the Agile. Next, you'll learn how to configure and set up Jenkins in many different ways. The book exploits the concept of "pipeline as code" and various other features introduced in the Jenkins 2.x release to their full potential. We also talk in detail about the new Jenkins Blue Ocean interface and the features that help to quickly and easily create a CI pipeline. Then we dive into the various features offered by Jenkins one by one, exploiting them for CI and CD. Jenkins' core functionality and flexibility allows it to fit in a variety of environments and can help streamline the development process for all stakeholders. Next, you'll be introduced to CD and will learn how to achieve it using Jenkins. Through this book's wealth of best practices and real-world tips, you'll discover how easy it is to implement CI and CD using Jenkins. What you will learn Get to know some of the most popular ways to set up Jenkins See all the new features introduced in the latest Jenkins, such as pipeline as code, Multibranch pipeline, and more Manage users, projects, and permissions in Jenkins to ensure better security Leverage the power of plugins in Jenkins Learn how to create a CI pipeline using Jenkins Blue Ocean Create a distributed build farm using Docker and use it with Jenkins Implement CI and CD using Jenkins See the difference between CD and Continuous Deployment Understand the concepts of CI Who this book is for The book is for those with little or no previous experience with Agile or CI and CD. It's a good starting point for anyone new to this field who wants to leverage the benefits of CI and CD to increase productivity and reduce delivery time. It's ideal for Build and Release engineers, DevOps engineers, SCM (Software Configuration Management) engineers, developers, testers, and project managers. If you're already using Jenkins for CI, you can take your project to the next level--CD.Learning Continuous Integration with Jenkins

Get a problem-solution approach enriched with code examples for practical and easy comprehension About This Book Explore the use of more than 40 best-of-breed plug-ins for improving efficiency Secure and maintain Jenkins 2.x by integrating it with LDAP and CAS, which is a Single Sign-on solution Efficiently build advanced pipelines with pipeline as code, thus increasing your team's productivity Who This Book Is For If you are a Java developer, a software architect, a technical project manager, a build manager, or a development or QA engineer, then this book is ideal for you. A basic understanding of the software development life cycle and Java development is needed, as well as a rudimentary understanding of Jenkins. What You Will Learn Install and Configure Jenkins 2.x on AWS and Azure Explore effective ways to manage and monitor Jenkins 2.x Secure Jenkins 2.x using Matrix-based Security Deploying a WAR file from Jenkins 2.x to Azure App Services and AWS Beanstalk Automate deployment of application on AWS and Azure PaaS Continuous Testing - Unit Test Execution, Functional Testing and Load Testing In Detail Jenkins 2.x is one of the most popular Continuous Integration servers in the market today. It was designed to maintain, secure, communicate, test, build, and improve the software development process. This book will begin by guiding you through steps for installing and configuring Jenkins 2.x on AWS and Azure. This is followed by steps that enable you to manage and monitor Jenkins 2.x. You will also explore the ways to enhance the overall security of Jenkins 2.x. You will then explore the steps involved in improving the code quality using SonarQube. Then, you will learn the ways to improve quality, followed by how to run performance and functional tests against a web application and web services. Finally, you will see what the available plugins are, concluding with best practices to improve quality. Style and approach This book provides a problem-solution approach to some common tasks and some uncommon tasks using Jenkins 2.x and is well-illustrated with practical code examples.

## GITOPS AND KUBERNETES

"O'Reilly Media, Inc."

Build and manage a production Jenkins instance, complete with CI/CD pipelines using GitHub and Docker Hub, Jenkins Configuration as Code, Shared Libraries, Script Security, and optimization guides Key Features: Set up production-grade Jenkins and CI/CD pipelines with GitHub and Docker Hub integrations Manage, protect, and upgrade a production Jenkins instance regardless of its size and the number of users Scale a Jenkins instance using advanced optimization tips, tricks, and best practices Book Description: Jenkins is a renowned name among build and release CI/CD DevOps engineers because of its usefulness in automating builds, releases, and even operations. Despite its capabilities and popularity, it's not easy to scale Jenkins in a production environment. Jenkins Administrator's Guide will not only teach you how to set up a production-grade Jenkins instance from scratch, but also cover management and scaling strategies. This book will guide you through the steps for setting up a Jenkins instance on AWS and inside a corporate firewall, while discussing design choices and configuration options, such as TLS termination points and security policies. You'll create CI/CD pipelines that are triggered through GitHub pull request events, and also understand the various Jenkinsfile syntax types to help you develop a build and release process unique to your requirements. For readers who are new to Amazon Web Services, the book has a dedicated chapter on AWS with screenshots. You'll also get to grips with Jenkins Configuration as Code, disaster recovery, upgrading plans, removing bottlenecks, and more to help you manage and scale your Jenkins instance. By the end of this book, you'll not only have a production-grade Jenkins instance with CI/CD pipelines in place, but also knowledge of best practices by industry experts. What You Will Learn: Set up a production-grade Jenkins instance on AWS and on-premises Create continuous integration and continuous delivery (CI/CD) pipelines triggered by GitHub pull request events Use Jenkins Configuration as Code to codify a Jenkins setup Backup and restore configurations and plan for disaster recovery Plan, communicate, execute, and roll back upgrade scenarios Identify and remove common bottlenecks in scaling Jenkins Use Shared Libraries to develop helper functions and create new DSLs Who this book is for: This book is for both new Jenkins administrators and advanced users who want to optimize and scale Jenkins. Jenkins beginners can follow the step-by-step directions, while advanced readers can join in-depth discussions on Script Security, removing bottlenecks, and other interesting topics. Build and release CI/CD DevOps engineers of all levels will also find new and useful information to help them run a production-grade Jenkins instance following industry best practices.

## LEARNING DEVOPS

Packt Publishing Ltd

5+ Hours of Video Instruction As all companies become software companies, the reliability of software becomes an integral part of a business' success. Continuous testing is critical for delivering robust software and increasing reliability and confidence when software is released. Without constant validation, failure is imminent. Continuous integration allows developers to automate the debugging of new code as it is integrated and identify problems early in the release process. Jenkins is a widely used CI/CD platform, but the lack of a thorough understanding of best practices and scalability is pervasive. It is easy to install Jenkins, but it is difficult to get it right. This course walks you through industry standard best practices to deploy and maintain continuous testing with Jenkins. In this course, you learn how to deploy and configure a Jenkins instance with a real-world use case scenario. Description Cloud technology advancement has changed the face of the tech world, with more emphasis on continuous integration and delivery. Learn how to deploy, configure, and take advantage of Jenkins for Continuous Integration and Continuous Delivery (CI/CD) and pipeline-like workflows. This LiveLesson walks you through the industry standard best practices of deploying Jenkins in a continuous testing environment. Learn to create fully functional Jenkins servers based on Infrastructure as Code (IaC) as well as deploy Jenkins in both AWS and Google Cloud. Learn the advanced features of Jenkins, including the Jenkins Job Builder. Finally, learn several real-world Jenkins deployment case studies. The associated code can be accessed at: <https://github.com/alfredodeza/static> and <https://github.com/alfredodeza/pipeline-jobs> About the Instructor Noah Gift is a lecturer at UC Davis Graduate School of Management MSBA program, the Graduate Data Science program, MSDS, at Northwestern, the Data Science program at UC Berkeley, and the USF Health Informatics program. He is teaching and designing graduate Machine Learning, AI, Data Science courses, and consulting on Machine Learning and Cloud Architecture for students and faculty. These responsibilities include leading a multi-cloud certification initiative for students. Noah is also a Python Software Foundation Fellow, AWS Subject Matter Expert (SME) on Machine Learning, AWS Certified Solutions Architect and AWS Academy Accredited Instructor, Google Certified Professional Cloud Architect, and Microsoft MT...

[Hands-On Continuous Integration and Delivery](#) Apress

"English is so illogical!" It is generally believed that English is a language of exceptions. For many, learning to spell and read is frustrating. For some, it is impossible... especially for the 29% of Americans who are functionally illiterate. But what if the problem is not the language itself, but the rules we were taught? What if we could see the complexity of English as a powerful tool rather than a hindrance? --Denise Eide Uncovering the Logic of English challenges the notion that English is illogical by systematically explaining English spelling and answering questions like "Why is there a silent final E in have, large, and house?" and "Why is discussion spelled with -sion rather than -tion?" With easy-to-read examples and anecdotes, this book describes: - the phonograms and spelling rules which explain 98% of English words - how English words are formed and how this knowledge can revolutionize vocabulary development - how understanding the reasons behind English spelling prevents students from needing to guess The author's inspiring commentary makes a compelling case that understanding the logic of English could transform literacy education and help solve America's literacy crisis. Thorough and filled with the latest linguistic and reading research, Uncovering the Logic of English demonstrates why this systematic approach should be as foundational to our education as 1+1=2.

*Continuous Delivery with Docker and Jenkins* BPB Publications

Speed up the software delivery process and software productivity using the latest features of Jenkins Key Features Take advantage of a Continuous Integration and Continuous Delivery solution to speed up productivity and achieve faster software delivery See all the new features introduced in Jenkins 2.x, such as Pipeline as code, Multibranch pipeline, Docker Plugin, and more Learn to implement Continuous Integration and Continuous Delivery by orchestrating multiple DevOps tools using Jenkins Book Description In past few years, agile software development has seen tremendous growth. There is a huge demand for software delivery solutions that are fast yet flexible to numerous amendments. As a result, Continuous Integration (CI) and Continuous Delivery (CD) methodologies are gaining popularity. This book starts off by explaining the concepts of CI and its significance in the Agile. Next, you'll learn how to configure and set up Jenkins in many different ways. The book exploits the concept of "pipeline as code" and various other features introduced in the Jenkins 2.x release to their full potential. We also talk in detail about the new Jenkins Blue Ocean interface and the features that help to quickly and easily create a CI pipeline. Then we dive into the various features offered by Jenkins one by one, exploiting them for CI and CD. Jenkins' core functionality and flexibility allows it to fit in a variety of environments and can help streamline the development process for all stakeholders. Next, you'll be introduced to CD and will learn how to achieve it using Jenkins. Through this book's wealth of best practices and real-world tips, you'll discover how easy it is to implement CI and CD using Jenkins. What you will learn Get to know some of the most popular ways to set up Jenkins See all the new features introduced in the latest Jenkins, such as pipeline as code, Multibranch pipeline, and more Manage users, projects, and permissions in Jenkins to ensure better security Leverage the power of plugins in Jenkins Learn how to create a CI pipeline using Jenkins Blue Ocean Create a distributed build farm using Docker and use it with Jenkins Implement CI and CD using Jenkins See the difference between CD and Continuous Deployment Understand the concepts of CI Who this book is for The book is for those with little or no previous experience with Agile or CI and CD. It's a good starting point for anyone new to this field who wants to leverage the benefits of CI and CD to increase productivity and reduce delivery time. It's ideal for Build and Release engineers, DevOps engineers, SCM (Software Configuration Management) engineers, developers, testers, and project managers. If you're already using Jenkins for CI, you can take your project to the next level--CD.

**Build-Deploy-Test Automation for Android Mobile Apps** Packt Publishing Ltd

Most web applications are changed and adapted quite frequently and quickly. Their environment, for example the size and the behavior of the user base, are constantly changing. What was sufficient yesterday can be insufficient today. Especially in a web environment it is important to monitor and continuously improve the internal quality not only when developing, but also when maintaining the software. Jenkins is the leading open-source continuous integration server. Thanks to its thriving plugin ecosystem, it supports building and testing virtually any project. This book explains how you can leverage Jenkins to monitor the various aspects of software quality in a PHP software project.

*Build and Release Quality Software at Scale with Jenkins, Travis CI, and CircleCI* Springer Nature

A hands-on course that will guide you through the Jenkins Continuous Delivery pipeline About This Video Fully understand Jenkins Pipeline. Configure Jenkins effectively to build, test, and deploy your software using JenkinsFile. Set up an isolated build environment with Docker Description In this course you will understand the key concepts of DevOps and delve into Jenkins Pipeline, a set of plugins that provides a toolkit for designing simple-to-complex delivery pipelines as code. To design a production-ready delivery pipeline, you will start by creating a simple pipeline and understanding Jenkins Pipeline terms and its particularities. Next, you will set up Docker to create isolated build environments. To consolidate your learning, you will create a delivery pipeline to build, test, and deploy a Java web project. In this project, you will understand and implement the different stages of the pipeline towards Continuous Delivery. What you will learn Key concepts of DevOps and a Continuous Delivery pipeline Use Jenkins Pipeline and JenkinsFile, the new concept of CI as code Explore Jenkins Pipeline to build, test, and deploy projects Work with Docker containers in a Jenkins context Build and test Java web applications. Who should take this course If you are a Java developer, a software architect, a technical project manager, a build manager, or a development or QA engineer, then this tutorial is ideal for you. A basic understanding of the software development life cycle and Java development is needed, as well as a rudimentary understanding of Jenkins. About the author Rodrigo is a Certified Jenkins Engineer and has 14+ years' experience in software development with different programming languages and technologies in different countries (Brazil, US, Portugal, Germany, and Austria) and projects in companies ranging from financial institution to game and e-commerce ventures including Walmart.com, Goodgame Studios and HERE. He is an enthusiastic practitioner of Agile methodologies, Continuous Delivery, and DevOps, with large-scale adoption experience. He is always seeking to optimize the software development life cycle through automation, process improvements, and developing new tools and techniques. Rodrigo holds a B.S. in Computer Science and a post-graduate qualification in Software Engineering. About Packt Video Packt Video publishes friendly, practical video tutorials, packed with practical skills, concepts and guidance to help you succeed with...

## PIPELINE AS CODE

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Increase profitability, elevate work culture, and exceed productivity goals through DevOps practices. More than ever, the effective management of technology is critical for business competitiveness. For decades, technology leaders have struggled to balance agility, reliability, and security. The consequences of failure have never been greater—whether it's the healthcare.gov debacle, cardholder data breaches, or missing the boat with Big Data in the cloud. And yet, high performers using DevOps principles, such as Google, Amazon, Facebook, Etsy, and Netflix, are routinely and reliably deploying code into production hundreds, or even thousands, of times per day. Following in the footsteps of The Phoenix Project, The DevOps Handbook shows leaders how to replicate these incredible outcomes, by showing how to integrate Product Management, Development, QA, IT Operations, and Information Security to elevate your company and win in the marketplace.

**Jenkins 2.x Continuous Integration Cookbook** Logic of English, Inc

A step-by-step guide to implementing Continuous Integration and Continuous Delivery (CICD) for Mobile, Hybrid, and Web applications DESCRIPTION The main objective of the book is to create Declarative Pipeline for programming languages such as Java, Android, iOS, AngularJS, NodeJS, Flutter, Ionic Cordova, and .Net. The book starts by introducing all the areas which encompass the field of DevOps Practices. It covers definition of DevOps, DevOps history, benefits of DevOps culture, DevOps and Value Streams, DevOps practices, different Pipeline types such as Build Pipeline, Scripted Pipeline, Declarative Pipeline, and Blue Ocean. Each chapter focuses on Pipeline that includes Static Code Analysis using SonarQube or Lint tools, Unit tests, calculating code coverage, publishing unit tests and coverage reports, verifying the threshold of code coverage, creating build/package, and distributing package to a specific environment based on the type of programming language. The book will also teach you how to use different deployment distribution environments such as Azure App Services, Docker, Azure Container Services, Azure Kubernetes Service, and App Center. By the end, you will be able to implement DevOps Practices using Jenkins effectively and efficiently. KEY FEATURES ● Understand how and when Continuous Integration makes a difference ● Learn how to create Declarative Pipeline for Continuous Integration and Continuous Delivery ● Understand the importance of Continuous Code Inspection and Code Quality ● Learn to publish Unit Test and Code Coverage in Declarative Pipeline ● Understand the importance of Quality Gates and Build Quality WHAT YOU WILL LEARN ● Use Multi-Stage Pipeline (Pipeline as a Code) to implement Continuous Integration and Continuous Delivery. ● Create and configure Cloud resources using Platform as a Service Model ● Deploy apps to Azure App Services, Azure Kubernetes and containers ● Understand how to distribute Mobile Apps (APK and IPA) to App Center ● Improve Code Quality and Standards using Continuous Code Inspection WHO THIS BOOK IS FOR This book is for DevOps Consultants, DevOps Evangelists, DevOps Engineers, Technical Specialists, Technical Architects, Cloud Experts, and Beginners. Having a basics knowledge of Application development and deployment, Cloud Computing, and DevOps Practices would be an added advantage. TABLE OF CONTENTS 1. Introducing DevOps 2. Introducing Jenkins 2.0 and Blue Ocean 3. Building CICD Pipeline for Java Web Application 4. Building CICD Pipeline for Android App 5. Building CICD Pipeline for iOS App 6. Building CICD Pipeline for Angular Application 7. Building CICD Pipeline NodeJS Application 8. Building CICD Pipeline for Hybrid Mobile Application 9. Building CICD Pipeline for Python Application 10. Building CICD Pipeline for DotNet Application 11. Best Practices

**Continuous Deployment with Argo CD, Jenkins X, and Flux** Packt Publishing Ltd

Summary Gradle in Action is a comprehensive guide to end-to-end project automation with Gradle. Starting with the basics, this practical, easy-to-read book discusses how to build a full-fledged, real-world project. Along the way, it touches on advanced topics like testing, continuous integration, and monitoring code quality. You'll also explore tasks like setting up your target environment and deploying your software. About the Technology Gradle is a general-purpose build automation tool. It extends the usage patterns established by its forerunners, Ant and Maven, and allows builds that are expressive, maintainable, and easy to understand. Using a flexible Groovy-based DSL, Gradle provides declarative and extendable language elements that let you model your project's needs the way you want. About the Book Gradle in Action is a comprehensive guide to end-to-end project automation with Gradle. Starting with the basics, this practical, easy-to-read book discusses how to establish an effective build process for a full-fledged, real-world project. Along the way, it covers advanced topics like testing, continuous integration, and monitoring code quality. You'll also explore tasks like setting up your target environment and deploying your software. The book assumes a basic background in Java, but no knowledge

of Groovy. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. Whats Inside A comprehensive guide to Gradle Practical, real-world examples Transitioning from Ant and Maven In-depth plugin development Continuous delivery with Gradle About the Author Benjamin Muschko is a member of the Gradleware engineering team and the author of several popular Gradle plugins. Table of Contents PART 1 INTRODUCING GRADLE Introduction to project automation Next-generation builds with Gradle Building a Gradle project by example PART 2 MASTERING THE FUNDAMENTALS Build script essentials Dependency management Multiproject builds Testing with Gradle Extending Gradle Integration and migration PART 3 FROM BUILD TO DEPLOYMENT IDE support and tooling Building polyglot projects Code quality management and monitoring Continuous integration Artifact assembly and publishing Infrastructure provisioning and deployment

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